

[54] **VALVE FOR DISPENSING ONE OR MORE PRESSURIZED FLUIDS**

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[51] Int. Cl..... B65d 83/14

[58] Field of Search 222/135, 136, 402.24, 394,
222/402.1, 513, 514, 518, 402.17, 94

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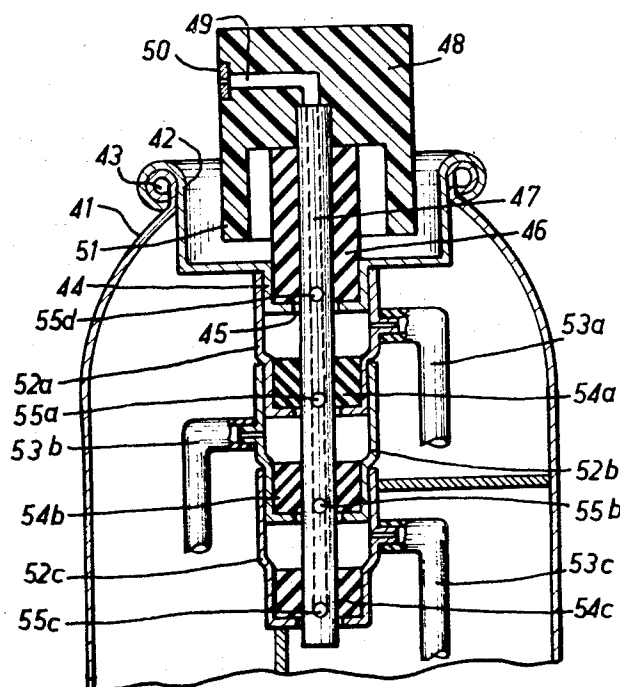
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[57] **ABSTRACT**

Valve for dispensing a variable number of pressurized fluids comprises a central tube with a lateral orifice for each fluid to be dispensed, and a separate sleeve for each orifice in which said tube is slidable to move said orifices from positions in which they are closed by said sleeves to open positions.

7 Claims, 10 Drawing Figures



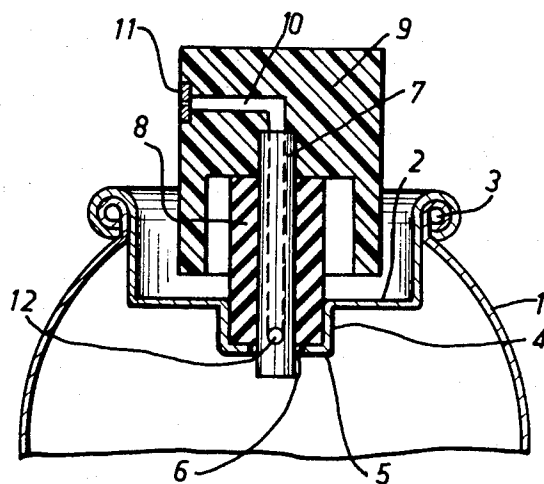


FIG. 1

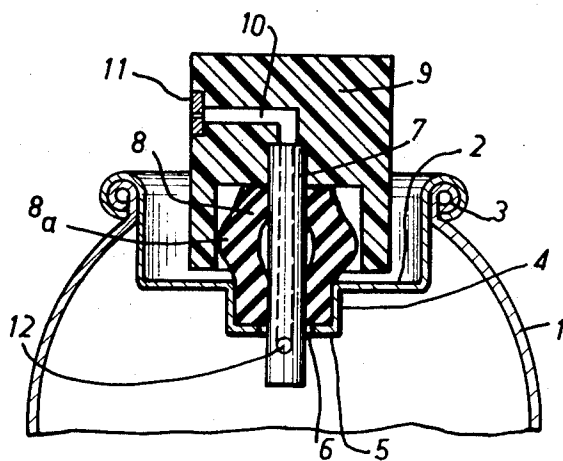


FIG. 2

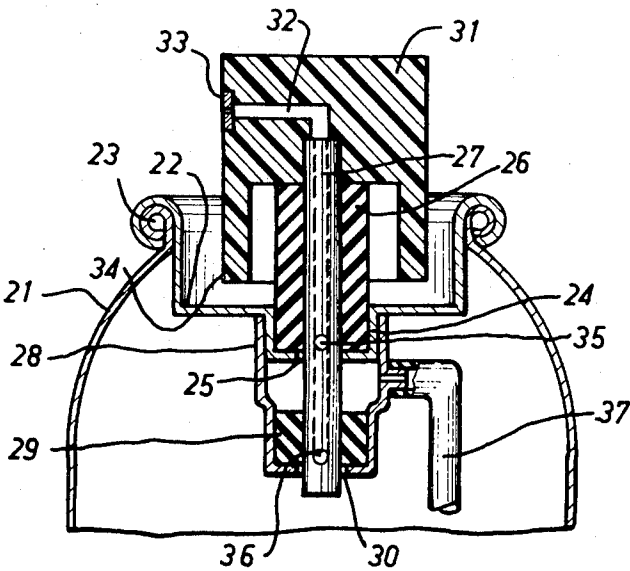


FIG. 3

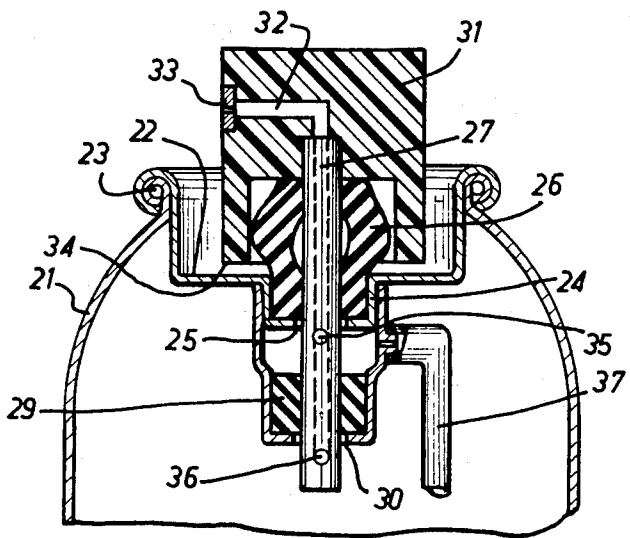
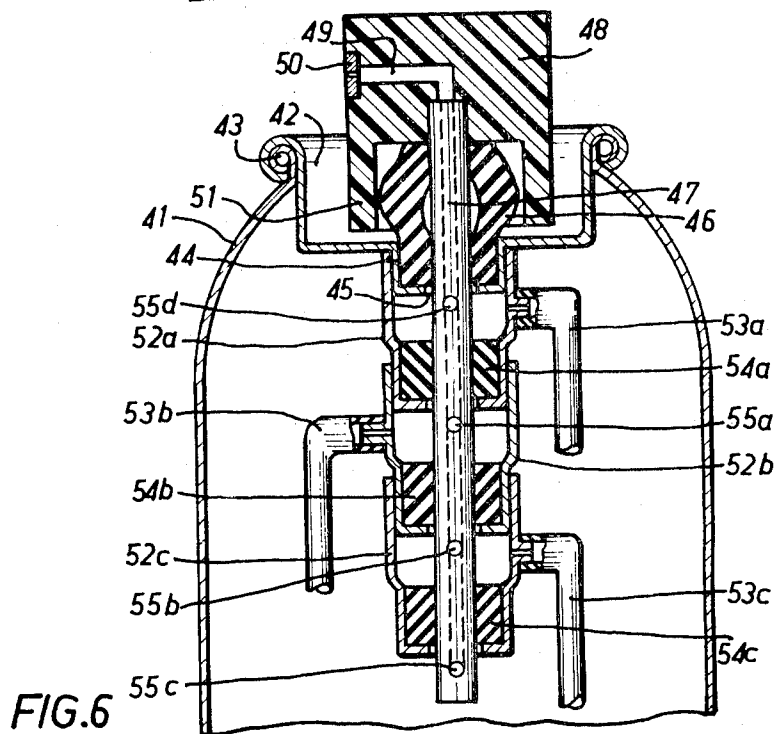
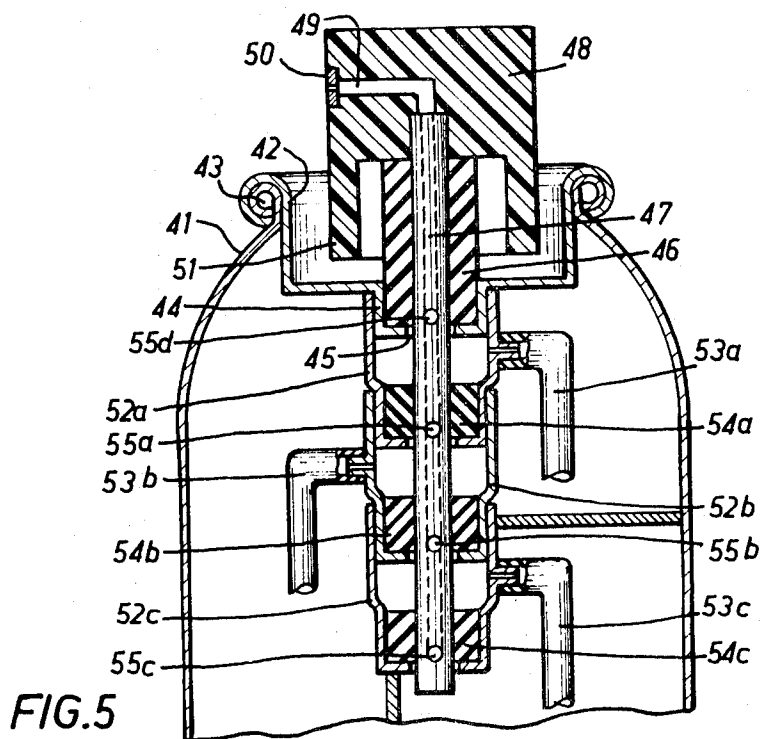
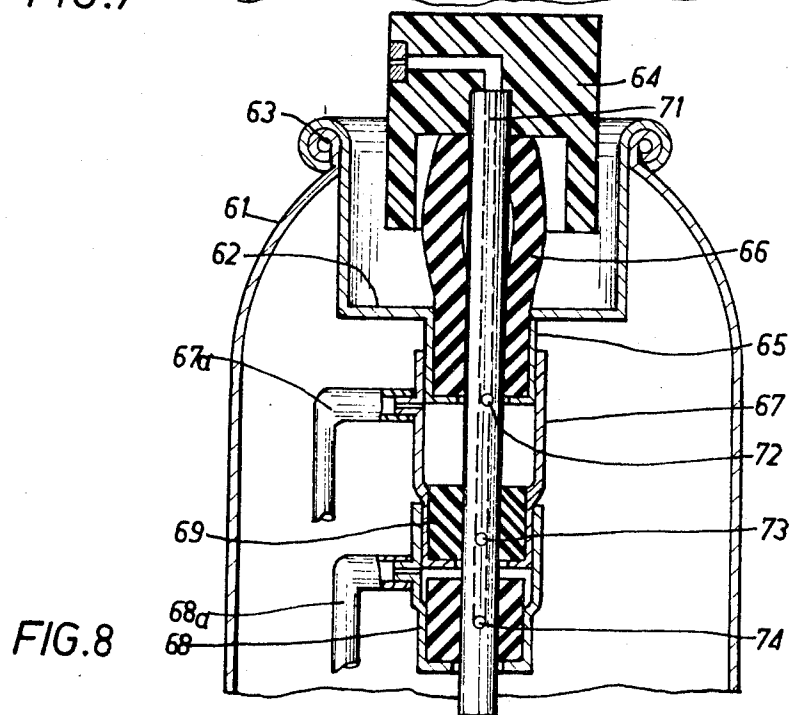
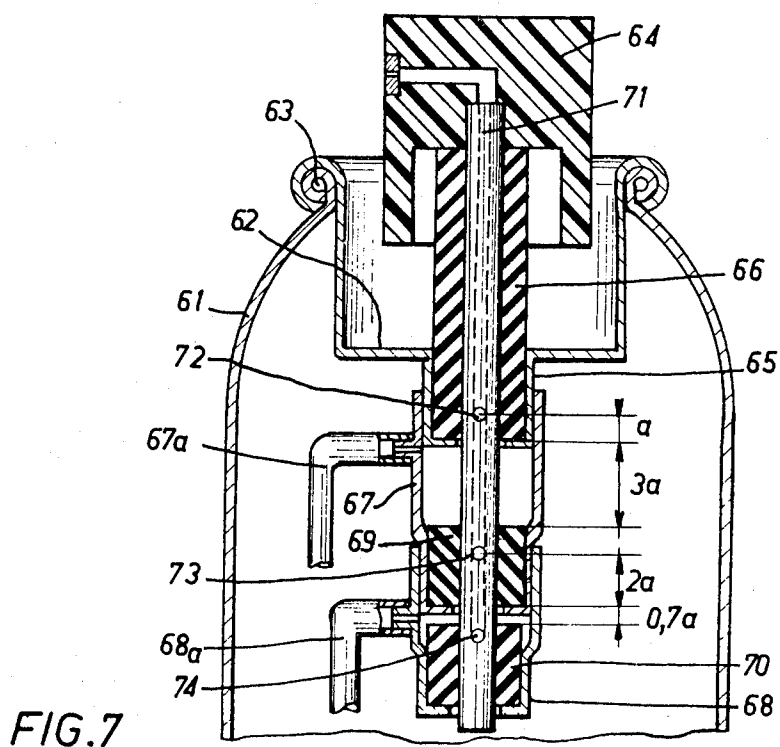
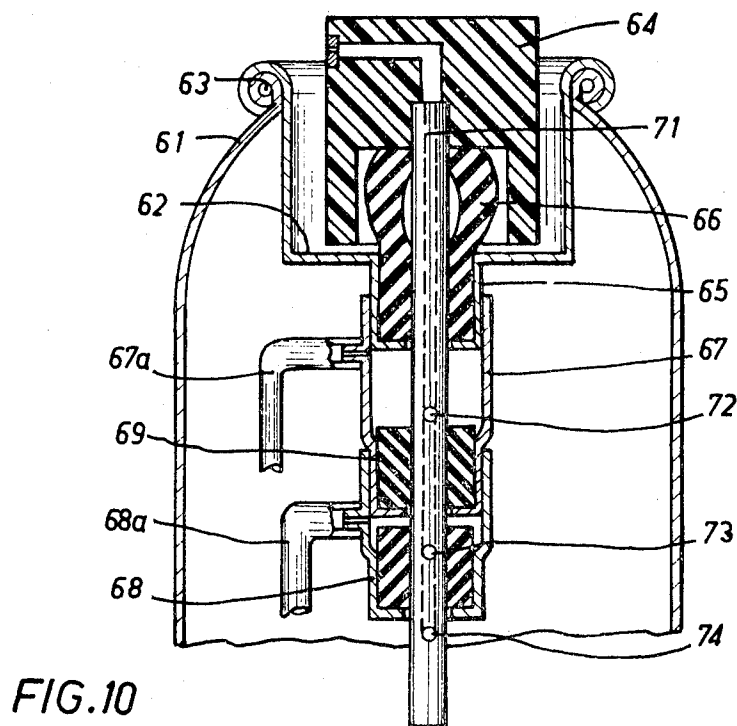
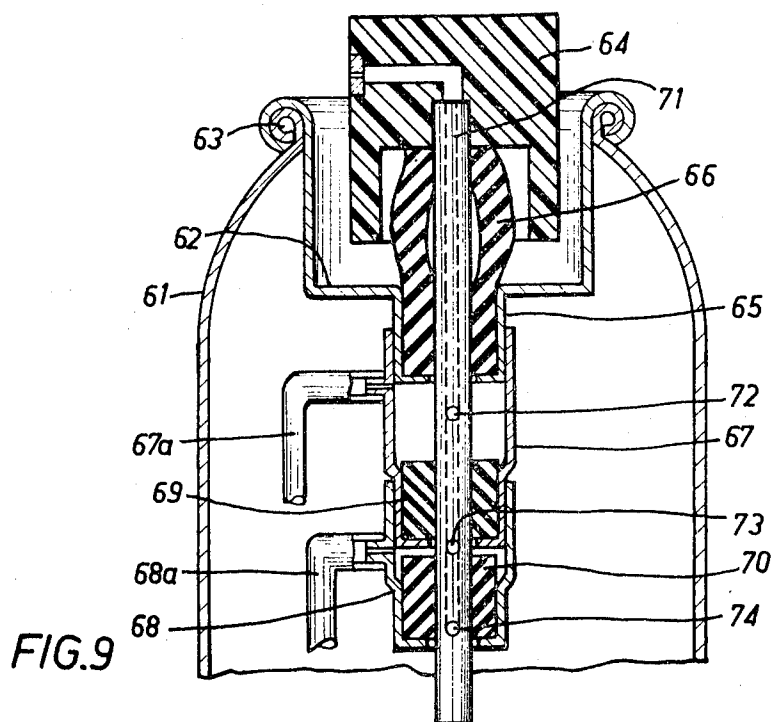


FIG. 4







VALVE FOR DISPENSING ONE OR MORE PRESSURIZED FLUIDS

It is well-known that pressurized containers adapted for the storage of products which are to be dispensed in the form of a liquid or aerosol jet are provided at their upper ends with a dispensing valve. This valve is, in general, mounted in a cup at the upper end of the container. The valve is actuated by the user by depressing a push-button or a control member forming part, for example, of a dispensing cover.

It is obvious that it is desirable to reduce to a minimum the cost of these valves, which are used in as many forms as there are embodiments of pressurized containers.

It is also known that it is frequently necessary to make simultaneous use of a plurality of products which are kept separate during storage, which products are enclosed inside the same pressurized container. In order to make simultaneous use of these products it is necessary to have available a valve which permits the simultaneous ejection of as many streams as there are products to be dispensed. For this particular application it is customary to use valves adapted for the particular purpose in question, taking into account the number of products to be simultaneously dispensed. It is therefore necessary to utilize, in the manufacture of pressurized containers, different valves for controlling single flows and plural flows.

It is the purpose of the present invention to provide a valve which may be used for a plurality of different applications regardless of whether it is to control a single stream or several streams of several different products to be simultaneously dispensed. This valve also has the advantage of being especially inexpensive. It is thus possible to use a single type of valve for all pressurized containers.

It is accordingly an object of the present invention to provide, as a new article of manufacture, a valve which is particularly adapted to be mounted at the top of a pressurized container of the aerosol bomb type, which valve is characterized by the fact that it comprises:

1. A central tube having at least one orifice in its lateral wall, which orifice is adapted to connect the inside of the tube to the inside of the container, said tube having a closed end inside the container and an open end on contact with a push button.

2. At least one sleeve made of a resilient material sealingly encircling said tube, the number of sleeves of the valve being equal to the maximum number of orifices which have been provided in the central tube, and the outlet of the valve being positioned at its upper end, with the upper sleeve being mechanically attached to the central tube by its upper end.

3. A jacket fastened to the container associated with the valve, said jacket gripping each sleeve in a fluid-tight manner along at least one part of its lateral surface and providing an abutment at the lower end of each of the sleeves of the valve, each of said abutments being positioned slightly below each of the orifices in the central tube when the valve is in closed position.

4. At least one inlet for products to be dispensed, said inlet opening into the said jacket between an abutment and the lower end of an adjacent sleeve.

In a first embodiment, the valve according to the invention is a single-flow valve comprising a single elastic sleeve, with the outer jacket gripping the elastic sleeve

only at its lower end. The outer jacket is a cylinder seated in the center of the valve-carrying cup, said cylinder having at its lower end a base perforated by a central orifice. A central tube in the valve is closed at its lower end and has a single orifice in its lateral wall, said orifice being positioned, when the valve is closed, inside the elastic sleeve, near the end of said sleeve which abuts the base of the cylinder outer jacket of the sleeve.

It will be seen that, in this first embodiment, the central tube may be a hypodermic needle closed at one of its ends and perforated by a hole in its lateral wall, with the elastic sleeve consisting of a rubber tube gripping this needle. When the valve is in the closed position, the orifice in the central tube is inside the sleeve, the sleeve being held at its lower end inside its cylindrical outer jacket. When the user desires to open the valve to dispense the product stored therein, he presses on the open end of the central tube with a push-button and thus on the free end of the sleeve which is mechanically attached thereto. Since this sleeve is held against axial movement at its lower end, it expands in the zone between the push-button and the cylindrical outer jacket, and the central tube moves simultaneously relative to the lower part of the sleeve so that the orifice in the tube is clear of the sleeve and the inside of the tube is brought into communication with the inside of the pressurized container. When the user releases this pressure on the push-button, the sleeve returns to its initial shape, due to its own elasticity and, due to the mechanical connection of its upper part to the central tube, returns the central tube to its initial position, that is to say it produces a sliding movement of the central tube with respect to the lower part of the sleeve, without any sliding of the upper part of the sleeve with respect to the central tube.

It should be noted that this valve serves as a safety device in the case of an abnormal increase in the pressure inside the container during storage. In effect, the pressure operates on the lower part of the elastic sleeve which is held in place only by its frictional engagement inside the cylindrical outer jacket. The amount of this friction may be adjusted during the manufacture of the valve by regulating the hardness of the rubber, the diameter of the sleeve, and the length of the sleeve which is inserted in the outer jacket. It is thus possible to regulate the maximum pressure which can be resisted by the sleeve, so that said sleeve is ejected in case this pressure is exceeded, thus avoiding explosion of the container.

It should be noted that it is possible, in the case of a valve according to this first embodiment, to fill the pressurized container under pressure and place the central tube and the associated sleeve in position after filling by forcefully depressing the sleeve in the cylindrical seat provided in the valve cap. It is also possible to position the complete valve in the filling head supplying the pressurizing gas for automatic insertion.

In a second embodiment of the valve according to the invention, said valve is a two-stream valve comprising two elastic sleeves and a central tube having two orifices in its lateral wall. The outer jacket of the two sleeves consists in the first place, of a central cylindrical seat in the central zone of the valve cup, which seat holds the upper sleeve of the valve, and forms an abutment at the base of this upper sleeve as has been indicated in the first variation hereinbefore described. The valve also comprises a cup mounted on the recessed seat in which the upper sleeve is located, said cup being

positioned inwardly of the container with respect to the valve cup, gripping the lower sleeve of the valve, and being traversed by the central tube of the valve which extends along the axis of the two sleeves of the valve. This cup has a lateral inlet duct for admitting one of the products to be dispensed to the tube. The distance between the two orifices in the central tube of the valve is equal to the distance between the abutments for the sleeves of the valve formed respectively by the bottom of the cylindrical seat and the bottom of the cup gripping the lower sleeve. When the valve is in closed position, the two sleeves grip the central tube of the valve in a fluid-tight manner, and the two orifices in the central tube of the valve are positioned inside the sleeve near the abutments on which these sleeves rest.

If it be supposed that the valve is positioned upwardly, when the user wants to open the valve, he presses on the central tube of the valve by means of a push-button and thereby on the upper end of the upper sleeve which is mechanically connected thereto. When such pressure is exerted on the upper end of the sleeve, the free part between the push-button and the cap of the valve deforms and expands. It follows that the central tube may slide with respect to the central part of the upper sleeve and with respect to the lower sleeve. The two orifices in the tube are then no longer closed by these sleeves. It follows that the product enclosed inside the pressurized container, on the one hand, and the product admitted through the inlet duct which is between the two sleeves, on the other hand, may penetrate into the central tube and be dispensed.

When the user releases his pressure on the push-button, the upper sleeve returns to its initial position and causes the central tube to slide in the opposite direction due to the mechanical connection between the upper part of the sleeve and the tube.

It should be noted that, in this variation, when the central tube of the valve is subjected to an abnormally high pressure from within the container, it may be displaced toward the exterior of the container which makes it possible to identify those containers the pressure in which does not conform to required storage standards.

In a third embodiment of the valve according to the invention, said valve is for multiple streams. It comprises more than two elastic sleeves, said sleeves being at least equal in number to the number of streams to be simultaneously dispensed and the central tube comprises an equal number of orifices in its wall. The cylindrical jacket of the valve consists, in the first place, of a cylindrical seat sunk into the center of the valve cap, in which seat the base of the upper sleeve of the valve is inserted. An assembly of cups, preferably all identical is provided, each mounted on the other, with the cup nearest the valve cap being mounted on the cylindrical seat in the center of said cap, each cap holding at its lower end a sleeve and being axially transversed by the central tube of the valve. An inlet for one of the products to be dispensed opens laterally into each of the cups between the sleeve enclosed in that cap and the bottom of the cup on which that cup is mounted, the distance between two successive orifices in the central tube of the valve being equal to the distance between the planes in which the corresponding sleeves abut the bottoms of the cup or the bottom of the seat in the center of the valve cap.

It should be noted that, in this embodiment, as in the second embodiment, the sleeve enclosed in each of the cups is gripped by said cup or mechanically connected by its outer surface to the cup.

When the valve is in closed position, all the sleeves grip the central tube along their entire inner surface, and the orifices in the central tube of the valve are blocked by said sleeves. When the user wants to place the valve according to the invention in open position, he presses on the central tube by means of a push-button, and thus on the free end of the elastic sleeve inside the container, which end is mechanically connected to the central tube of the valve. This movement, as previously indicated, causes the elastic sleeve to buckle outwardly, so that the push-button is depressed with respect to the cap of the valve and causes sliding movement of the central tube with respect to the lower part of the upper sleeve and with respect to all of the other sleeves in the valve. This sliding movement simultaneously brings all the orifices in the central tube outside the sleeves, which permits the inside of the central tube to be simultaneously supplied with all the products to be dispensed. When the user releases his pressure, the sleeve, which has been deformed, returns to its initial shape, and moves the central tube in the opposite direction, thus simultaneously closing all the orifices in the tube.

It should be emphasized that, in this embodiment, as in the second embodiment of the valve according to the invention, if there is an excess pressure inside the container, the central tube may be subjected to slight displacement toward the outside, which serves as an indication that the pressures inside the container are abnormal. The regulation of this safety factor is a function of the friction between the upper sleeve and its cylindrical seat in the valve cap.

It is important to note that, in all the preceding embodiments, the cylindrical jacket may be molded from plastic material, and may consequently be relatively inexpensive. Moreover, the central tube of the valve may be, in all cases, a hypodermic needle closed at one end, in which needle the desired number of radial orifices are provided. Moreover the sleeves may simply be section of rubber tubing. It will thus be seen that the different components of a valve according to the invention are very inexpensive and that the same type of valve may be used regardless of the number of products to be simultaneously dispensed. This makes it possible to envisage manufacturing processes on a large scale, a circumstance which is even more favorable for reducing the cost.

In a fourth embodiment of the valve according to the invention, which may be used if the valve is to dispense at least two fluids, the distance between two consecutive orifices in the central tube is not equal to the distance between the abutments on which the corresponding sleeves rest. In this case, during depression of the central tube, one of the orifices is opened before or after the other orifice or orifices. It is thus possible to dispense, depending upon the extent to which the central tube is depressed, either a single product, or the mixture of a certain number of products selected among those which may be dispensed. If the spacing between the two ends of two sleeves is less than the distance between the abutments on which the two sleeves rest, and the distance between the two corresponding orifices is smaller than the former, the opening of one

orifice leads to the closing of a previously opened orifice. It is thus possible to dispense singly each of a group of products separately stored in the same container, the selection of the products being dependent upon the depth of depression of the central tube. Depending upon the relative position and the length of the sleeves, any desired combination of products may be dispensed.

The present invention has as a further object the new article of manufacture which consists of a pressurized container of the aerosol bomb type, characterized by the fact that it comprises at its upper end at least one valve such as has just been described.

In order that the invention may be better understood, several embodiments will now be described, purely by way of illustration and example, with reference to the accompanying drawings in which:

FIG. 1 is an axial sectional view showing a valve for dispensing a single fluid, in closed position;

FIG. 2 shows the valve of FIG. 1 in open position;

FIG. 3 shows in axial section a valve for dispensing two fluids, in closed position;

FIG. 4 shows the valve of FIG. 3 in open position;

FIG. 5 shows in axial section in open position a valve for simultaneously dispensing four products;

FIG. 6 shows the valve of FIG. 5 in closed position; and

FIGS. 7 - 10 show the closed position (FIG. 7) and the three open positions of a valve for dispensing three fluids separately.

In the embodiments which will now be described, there is no tube extending toward the bottom of the receptacle, which presumes that the container is to be used head down at the moment of dispensing. It is obvious, however, that such a tube could be easily associated with a valve according to the invention, said tube being attached to the lower part of the cylindrical jacket so as to supply the lower orifice in the central tube of the valve.

Referring now to FIGS. 1 and 2, it will be seen that reference numeral 1 indicates the wall of a container of the aerosol bomb type and reference numeral 2 the valve-carrying cap which is mounted on the wall 1 by crimping 3. The cap 2 comprises a central cylindrical part 4, the bottom 5 of which is perforated by a recess 6 through which the tube 7 is adapted to slide, said tube being closed at its lower end.

A rubber sleeve 8 encircles the tube 7 and its lower end is gripped inside the cylindrical part 4. A push-button 9 is mounted on the top of the tube 7 and has an outlet duct 10, the end of which is partially blocked by a spray nozzle 11. The push-button 9 bears simultaneously on the end of the tube 7 and the upper end of the sleeve 8.

The tube 7 has at its lower end an orifice 12 in its lateral wall. The orifice 12 is positioned, when the valve is closed, as shown in FIG. 1, at a level such that it is blocked by the section of the sleeve 8 gripped in the cylindrical part 4.

When the user presses on the push-button 9, the sleeve 8 expands in the zone 8a which is intermediate between the section on which the push-button 9 bears and the section which is gripped in the cylindrical part 4. This produces a shortening of the sleeve and simultaneously a sliding of the tube 7 inside the sleeve. The orifice 12 slides with respect to the sleeve and enters the container 1 thus permitting the pressurized fluid inside

that container to penetrate into the tube 7 through the orifice 12 and be dispensed through the duct 10 and the spray nozzle 11.

When the user releases his pressure on the push-button 9, the sleeve 8 returns the tube 7 to its initial position, due to its elasticity, since this sleeve grips the tube 7 tightly enough at its upper end to produce sliding of the opposite end of the said tube.

Referring now to FIGS. 3 and 4, it will be seen that reference numeral 21 indicates the wall of a container of the aerosol bomb type whereas 22 indicates the cap which is attached to the upper part of said container by crimping 23. The cap has a central cylindrical seat 24, which has a bottom provided with an orifice 25. In the seat 24 is an elastic sleeve 26 which is a force fit therein. Along the axis of the sleeve 26 is a central tube 27 which passes through the sleeve 26 and the bottom of the cap 24 through the orifice 25. On the side of the cup 22 toward the jacket 21 a cylindrical cup 28 enclosing at its lower end a sleeve 29 is mounted on the cylindrical seat 24. The sleeve 29 is mechanically attached to the cup 28. It is traversed along its axis by the central tube of the valve 27, said tube passing also through the bottom of the cup 28 via an orifice 30. The sleeves 26 and 29 are sections of rubber tube. The upper part of the sleeve 26 is mechanically attached to the central tube of the valve 27. A push-button 31 bears on the free end of the central tube of the valve 27 and the inside of this tube is in communication with a dispensing duct 32 in the push-button 31. The end of the dispensing duct 32 is partially blocked by a spray nozzle 33. The push-button 31 comprises a skirt 34 which strikes the cap 22 to limit the depression of the central tube 27. Two orifices 35 and 36 are provided in the lateral wall of the central tube 27 of the valve at a distance equal to the distance between the bottom of the seat 24 and the bottom of the cup 28. The central tube of the valve is closed at its lower end, that is to say, the end inside the container 21.

When the central tube 27 is positioned in the sleeves 26 and 29 and the valve is in closed position, the orifices 35 and 36 are located at a level slightly higher than the abutments on which the lower part of the sleeves 26 and 29 rest, as shown in FIG. 3. A duct for admitting product to be dispensed 37 opens laterally into the cup 28 in the zone between sleeve 29 and the bottom of the seat 24. The container 21 holds one of the products to be dispensed and the duct 37 is connected to a pressurized container which holds a second product to be dispensed simultaneously with the first.

When the valve is in the closed position, as shown in FIG. 3, the orifices 35 and 36 are blocked by the sleeves 26 and 29 respectively. When the user wants to simultaneously dispense the two products which are separately stored in the container 21, he turns the container upside down and presses on the push-button 31. The extent of its movement is limited by the abutment of the skirt 34 against the cup 22. In this movement, the central tube 27 of the valve moves with respect to the sleeve 29, on the one hand, and with respect to the lower part of the sleeve 26 on the other hand. As has been previously explained, the sleeve 26 expands under the effect of the pressure applied by the user on the push-button 31. This expansion takes place in the section between the cap 22 and the push-button 31. The two orifices 35 and 36 are cleared, and the two prod-

ucts stored are simultaneously dispensed through the duct 32 and the nozzle 33.

When the user releases pressure on the push-button 31, the sleeve 26, due to its own elasticity, tends to return to its initial shape, which results in a sliding of the central tube 27 in the opposite direction and blocking of the two orifices 35 and 36, so that distribution ceases. It should be noted that, after dispensing has been discontinued, the only place which contains a mixture of the two products to be simultaneously dispensed is the inside of the tube 27, which has a small volume.

Referring now to FIGS. 5 and 6, it will be seen that reference numeral 41 indicates the container of the aerosol bomb type, which is provided with a four-way valve according to the invention. This valve is carried by a cap 42 mounted on the container 41 by crimping 43. The cap 42 comprises a central cylindrical depressed seat 44, the bottom of which is pierced by an orifice 45. The seat 44 grips the base of a sleeve 46 analogous to the sleeve 26 of the preceding embodiment. The sleeve 46 axially grips a central tube 47, on the free end of which is mounted a push-button 48 comprising, as has been described in connection with the second embodiment, a dispensing duct 49, a spray nozzle 50, and a skirt 51. Inside the container 41 are three valve cups 52a, 52b, and 52c which are mounted one on the other for part of their height, the cup 52a being mounted on the cylindrical seat 44. They are held firmly together in any suitable manner, for example adhesively. The cups 52a, 52b, 52c comprises a lower part which has a diameter equal to that of the outer part of the cylindrical depressed seat 44. These cups are all analogous to the cup 28 described in connection with the second embodiment of the invention. Each cup comprises, laterally, an inlet duct for admitting the product to be dispensed and designated, for the cups 52a, 52b and 52c respectively, by reference numerals 53a, 53b and 53c. Each cup also holds a sleeve which is laterally gripped by the walls of the cup. These sleeves have been assigned reference numerals 54a, 54b, and 54c. The sleeves are positioned in the parts of the cups which have the smallest diameter, that is to say the parts adjacent the cup therebeneath. A central tube 47 is mounted axially of the sleeves 46, 54a, 54b, 54c. This tube is closed at its lower end and has four orifices 55d, 55a, 55b, 55c. The four orifices in the central tube 47 are equidistant, and separated by a distance equal to the distance between the abutments on which the lower parts of the sleeves 46, 54a, 54b, 54c, rest. When pressure is exerted on the push-button 48, the central tube 47 slides in the sleeves 54a, 54b, 54c, and in the lower part of the sleeve 46, while the upper part of the sleeve 46 is attached to and moves with the central tube 47. This movement is limited by the abutment of the skirt 51 against the valve cap 42. During this movement, the section of the tube between the cap 42 and the push-button 48 is expanded. While the movement is taking place, the orifices 55a, 55b, 55c, 55d are respectively uncovered by the sleeves 54a, 54b, 54c, and 46. It is then possible to simultaneously dispense through the central tube 47 the products which reach the valve through the ducts 53a, 53b, 53c, as well as the product directly enclosed in the container 41. It is obvious that the ducts 53a, 53b, 53c are connected to pressurized containers which are themselves enclosed inside the container 41, but not shown on the drawing. As

has been previously pointed out, the illustrated embodiment does not have any tube extending to the bottom of the container, so that the container must be used upside down.

When the pressure on the push-button 48 is released, the sleeve 46 tends to return to its original shape and slides the central tube 47 in the opposite direction. Simultaneously, all the orifices in the central tube are blocked by the corresponding sleeves, which stops the dispensing action. It is obvious that it would be possible to add to the valve which has just been described as many cups as are necessary, each additional cup making it possible to simultaneously dispense an additional separately stored product.

FIGS. 7 - 10 schematically illustrate an embodiment of the valve according to the invention which may be used regardless of the number of valve cups which may be simultaneously supplied, that is to say, regardless of the number of products dispensed by the valve, so long as this number is at least equal to two. Reference numeral 61 indicates the aerosol container on which the valve according to the invention is mounted. This valve is fixed to a cap 62 mechanically connected to the container 61 by crimping 63. A push-button 64 actuates the valve. As has been indicated in connection with the previous embodiments, cap 62 comprises a central depressed seat 65 inside which the sleeve 66 is mounted. In the embodiment described, two cups 67 and 68 are mounted one beneath the other, the assembly being mounted on the projection defining the recess 65. The cups 67 and 68 hold two sleeves 69 and 70, and each of these cups is laterally supplied, as previously indicated, by inlet ducts 67a and 67b respectively. The sleeves 66, 69 and 70 are axially pierced by a central tube 71 having three orifices 72, 73, 74. The central tube of valve 71 is closed at its lower end and supplies through its upper end a dispensing duct in the push-button 64.

The general operation of this valve is as hereinbefore described. That is to say, it is dependent on the expansion of the section of the sleeve 66 between the cap 62 and the push-button 64 in response to force exerted by the user on the push-button 64. This expansion permits sliding movement of the central tube 71. When the valve is closed, that is to say in the rest position, the orifice 72 is positioned at a distance "a" above the lower end of the sleeve 66. The orifice 73 is at a distance "2a" from the lower end of the sleeve 69, and the orifice 74 is at a distance "3a" from the lower end of the sleeve 70. The upper end of the sleeve 70 is at a distance of about "0.7a" from the lower end of the sleeve 69 and the upper end of the sleeve 69 is at a distance about "3a" from the lower end of the sleeve 66. When the valve is closed, the three orifices 72, 73, 74 are blocked by the corresponding sleeves 66, 69, and 70.

If, as shown in FIG. 8, the user, by pressing on the push-button 64, depresses the central tube 71 by a distance equal to "1.2a", he opens the orifice 72 without opening the orifices 73 and 74. This results in the dispensing of the product supplied to the central tube 71 by the inlet duct 67a.

If, as shown in FIG. 9, the user depresses the tube 71 by an additional distance equal to "a", the orifice 72 remains open and the orifice 73 is positioned in the space between the sleeves 69 and 70. The valve may then simultaneously dispense those products supplied through the inlet ducts 67a and 68a.

If, as shown in FIG. 10, the user depresses the central tube 71 by yet a further distance equal to "a," the orifice 72 remains open and the orifice 74 is beneath the sleeve 70. On the contrary the orifice 73 is blocked by the sleeve 70. It follows that the valve may then simultaneously distribute the product supplied through the inlet duct 67a and the product directly enclosed in the container 61, assuming that the container has been turned upside down.

It will thus be seen that, by adjusting the height of the sleeves and the distance between the orifices in the central tube, it is possible, by using a valve according to the invention, to simultaneously dispense several different combinations of products stored separately in the same container. It is also possible, of course, to separately dispense each of the products stored under pressure. It is obvious that the adjustment to a desired depression of the central tube may be obtained by utilizing abutments cooperating with the skirt of the push-button 64, one or the other of these abutments being effective in dependence upon the orientation of the push-button with respect to the central tube of the valve.

It will be of course be appreciated that the embodiments which have been described have been given purely by way of illustration and example, and may be modified as to detail without thereby departing from the basic principles of the invention.

What is claimed is:

1. In a valve for the top of a pressurized container having a plurality n of compartments therein, which valve is adapted to dispense, either successively or in combination, a plurality n of products stored in said compartments and comprises a stationary jacket mounted on said container, and a central tube having a closed lower end which projects through the bottom of said jacket and an open upper end connected to communicate with the ambient atmosphere through a dispensing duct in a push-button, said tube being mounted for axial movement relative to said jacket at least between first and second positions, the improvement according to which

a stack of $(n-1)$ cups is suspended from the bottom of said jacket, and said tube projects through said cups, said central tube is provided with n orifices in its lat-

eral wall, one within each cup and one within said jacket,

the lower part of each cup and of said jacket holds an elastic sleeve sealingly surrounding a portion of said tube provided with one of said orifices when said tube is in its first position, but clear of said orifice when said tube is in its second position, one of said compartments encircles said tube beneath the lowermost cup,

a chamber is defined inside each of said $(n-1)$ cups above the upper face of the sleeve in that cup and each chamber is connected through one of $(n-1)$ ducts to a different one of said compartments, so that a plurality of said compartments are placed in communication with the interior of said tube when said tube is in its second position.

2. Valve as claimed in claim 1 for a two-compartment container in which said central tube has two lateral orifices, said valve comprising two elastic sleeves and a single cup suspended below the base of said jacket.

3. Valve as claimed in claim 1 in which the distance between two successive orifices in the central tube is equal to the distance between the planes in which the corresponding sleeves contact the bottoms of the cups or the bottom of the seat in the central part of the valve cap.

4. Valve as claimed in claim 1 in which the distance between two consecutive orifices in the central tube is different from the distance between the ends of said sleeves remote from the open end of the said tube.

5. Valve as claimed in claim 1 in which the space between the adjacent ends of two consecutive sleeves is less than the difference between the ends of these two sleeves remote from the open end of said tube and the distance between the corresponding orifices, with the latter distance smaller than the former.

6. Valve as claimed in claim 1 in which said push-button is rotatable into a plurality of positions and carries external abutments cooperating with corresponding abutments on said container to limit the axial movement of said push-button and valve in dependence on the rotary position of said push-button.

7. Pressurized container equipped with a valve as claimed in claim 1.

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