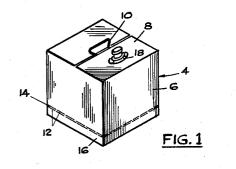
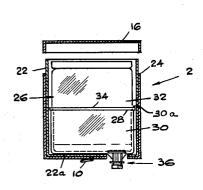
# March 29, 1966 D. M. STEGNER 3,243,084

PRESSURE DISPENSER FOR VISCOUS MATERIALS

Filed May 17, 1965

3 Sheets-Sheet 1







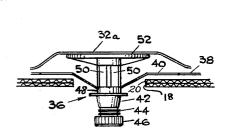


FIG. 4

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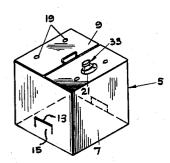
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D. M. STEGNER

PRESSURE DISPENSER FOR VISCOUS MATERIALS

Filed May 17, 1965





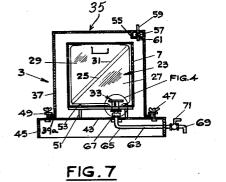
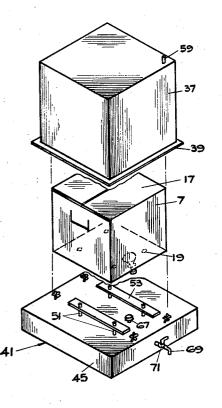


FIG.5





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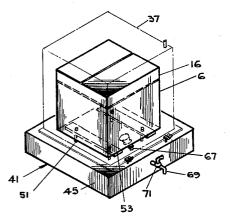


FIG. 9

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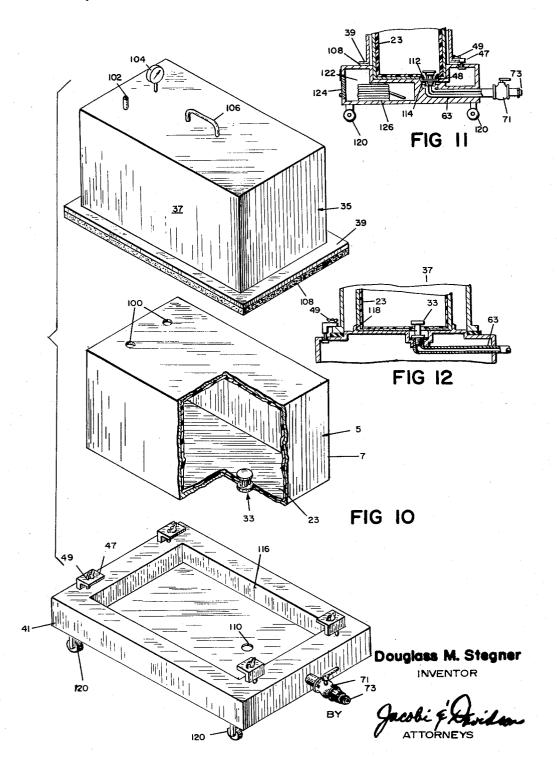
BY Jacobis Davidson

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PRESSURE DISPENSER FOR VISCOUS MATERIALS

Filed May 17, 1965

3 Sheets-Sheet 3



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# **United States Patent Office**

## 3,243,084

### Patented Mar. 29, 1966

## 1

#### 3,243,084 PRESSURE DISPENSER FOR VISCOUS MATERIALS Douglass M. Stegner, 1301 Covington St., Baltimore, Md. Filed May 17, 1965, Ser. No. 472,378 25 Claims. (Cl. 222-95)

This application is a continuation-in-part of my copending application Serial No. 265,460, filed March 15, 1963, and now abandoned.

The present invention relates generally to dispensing techniques, and is particularly concerned with the provision of a method of, and means for, dispensing relatively highly viscous materials from conveniently handleable and conveniently storable containers. 15

There are presently available shipping units which comprise, generally, an outer carton fabricated of conventional corrugated paperboard and an inner container fabricated of a flexible inert plastic material, such as, for example, polyethylene. These containers have proved 20 particularly useful in handling fluids of low viscosity, but notwithstanding the convenience afforded thereby, such containers have generally not been usable for handling highly viscous materials due to the inability to pour the latter-type materials therefrom. 25

Specifically, with a container of the above prescribed type, when it is desired to dispense the contents thereof, a cap is removed from a filler neck or spout forming part of the inner container, and projectable through the outer carton portion of the unit. The container is then inverted, and the material within the container flows therefrom, just as normal liquids, such as milk, are poured from a bottle. With liquids of comparatively low viscosity, there are generally no problems in emptying the container. 35

However, when an attempt is made to use such units for highly viscous materials, then certain dispensing problems are experienced. For example, if a material of generally medium viscosity is packaged in the container, then it may be possible to pour a certain quantity of 40 such material from the container initially. The hydrostatic pressure of the material above the pouring neck or spout is sufficient to cause a flow of material through the neck or spout initially, and the material may be 45 such as to allow for entry of at least some air within the inner container. Eventually, though, as the contents of the container are dispensed, the hydrostatic pressure decreases and/or a partial vacuum is experienced above the material, and an equilibrium is reached where the 50 hydrostatic pressure is insufficient to overcome the other pressures exerted on the material, whereupon the contents of medium viscosity can no longer be dispensed. There remains, in this instance, a wasted portion of the contents which, depending on the viscosity, can be quite 55 substantial. Similarly, under the circumstances described in this paragraph, if a material of high viscosity is packaged in a unit as prescribed above, then it may not be possible to initially dispense any of the contents therefrom by a mere inversion operation. In essence, the viscosity of the material is, in this instance, so high that the hydrostatic pressure of the material above the pouring spout neck area is insufficient to cause even an initial flow of the material from the container.

Another important consideration is the need for a 65 portable dispenser which is capable of dispensing a viscous material under pressure. While it is, of course, apparent that small aerosol containers do broadly fall within this category, such aerosol containers are not altogether satisfactory for many types of application. 70 That is, aerosol containers are generally quite costly, contain only a small volume of material, and are not

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refillable. Also, they are generally heavy when carried in any quantity and are somewhat sensitive to high temperatures and rough handling. Thus, there still exists the need for a pressure dispenser which can carry a large volume of material to be dispensed, which can withstand rough handling and extreme temperature conditions, which need not be pressurized until actually ready for use, and which has a replaceable container for the contents so that when the contents of one container have been dispensed, another container can be quickly and easily replaced and utilized.

Typical of the applications to which such a portable pressure dispenser could be put would be field lubrication of vehicles. During military maneuvers and other similar circumstances, automotive vehicles are often located in remote sites, far from any service area where lubrication could be performed, if necessary. The present invention could be utilized under such circumstances to provide a pressurized dispenser which enables such lubrication to be conducted right in the field. Another possible application for the present invention is in accomplishing caulking operations so often performed at remote construction sites. Instead of merely utilizing caulking guns with cartridges that must be consistently replaced and in which the caulking is accomplished by manual pressure on the caulking gun trigger, the present invention can be utilized to provide a pressurized means which automatically can dispense the caulking compound and which can supply an extensive amount of such compound before the container contents are exhausted and a new container is needed.

Bearing in mind the foregoing, a primary object of the present invention is to provide a dispenser apparatus, assembly, or means which is readily adapted to be cooperatively associated with a shipping unit of the above prescribed type, whereby such unit can be conveniently used for the handling, storage, and shipment of medium and high viscosity materials, such as oils, inks, creams and the like, and whereby highly viscous contents can be conveniently dispensed therefrom as desired.

Being more specific in certain respects, and more general in other respects, it is a further important primary object of the present invention to provide means cooperable and usable in combination with a shipping unit including a convenient to handle outer carton and an at least partially flexible inner container housed within the outer carton, whereby non-readily flowable materials can be stored and shipped within the unit, and then conveniently dispensed therefrom substantially in their entirety.

Relating the invention to specific exemplary uses, it is an object hereof to provide means cooperatively associable with a shipping unit of the above prescribed type, which means are operative to permit the pressure dispensing of highly viscous oils, greases, shampoos, printing inks or the like. Consistent with this object, for example, the invention permits using a shipping unit as prescribed above for delivery of grease to a grease gun, or for selective or controllable delivery of printing inks, shampoos, or other highly viscous materials to an outlet spout. The uses set forth in this paragraph, as noted, are but exemplary, and yet they serve to illustrate the wide utility of the invention.

Another object of the present invention is to provide a dispenser for viscous material, which dispenser is capable of being pressurized to thereby assure that the viscous material can be properly selectively discharged.

Another object of the present invention is to provide a pressurized dispenser for viscous materials, which dispenser: (a) is disassemblable to permit used material containers to be removed and new material containers to be inserted; (b) can accommodate a large bulk supply

of the material to be dispensed; (c) can withstand rough handling conditions and high temperatures encountered during handling and transit; (d) can be initially pressurized or pressurized on site; (e) is ready transportable to permit uses at remote areas; and (f) is capable of being 5 pressurized by a gas station air pump, a bicycle pump, or any other suitable pressurizing means.

Aside from the general and more basic objects of the invention discussed above, there are certain specific objects, including the following: (a) the provision of a dispensing apparatus into which a shipping unit of the above prescribed type can be easily inserted and with which the outlet of such unit can be easily connected whereby when the shipping unit is cooperatively associated with the dispenser, the contents within the inner 15 of the outlet connection illustrated in FIGURE 3; container of the unit can be dispensed selectively; (b) the provision of such a dispenser which can be conveniently charged with a pressurized gas or fluid initially, and then transported from place to place, or alternatively placed in particular position, as desired, for the selective dispensing thereafter of the contents in question; (c) the provision of such a dispenser which incorporates means for readily aligning a shipping unit as prescribed above in proper alignment therein whereby an operator can easily associate the shipping unit with the dispenser assembly, and (d) the provision of such a dispenser which is adapted to be used repeatedly with shipping unit after shipping unit as sucessive shipping units have the contents dispensed therefrom.

Still further, it is an important and specific object of 30 the present invention to provide in a shipping unit of the above prescribed type, an improved spout assembly or arrangement which insures maximum discharge of the contents from the inner container portion thereof and collapse during a dispensing operation.

As suggested above, and as will become apparent from the following detailed description of illustrative and preferred embodiments of the invention, the assembly and component parts thereof constructed in accordance here- 40 with permits widespread use of shipping units of the type in question for multiple purposes. By way of specific further examples, with the assembly of the invention, it is completely practical and feasible to ship grease in the shipping unit comprising an outer paperboard corrugated 45 carton and an inner flexible plastic container, to thereafter insert such shipping unit in a dispenser constructed in accordance herewith, to thereafter charge such dispenser with gas under pressure, such as for example, compressed air, to thereafter connect the dispenser with a grease gun 50 or the like, and to then transport the entire unit, as a small and conveniently handleable package, from place to place for the application of grease as desired. Similarly, without using a particular dispensing means such as a grease gun, it is entirely feasible with the invention to 55 follow the above steps, exclusive of the connection with the grease gun, and to then place the unit at a convenient location, whereby through operation of a control valve or handle, particular contents, such as cream, shampoo, printing ink or the like can be selectively dispensed as 60 the operator requires. In other words, the invention permits achieving simple and efficient dispensing of highly viscous materials from a shipping unit of the prescribed type, and in turn the invention permits using such a shipping unit for the transportation, handling and storage 65 of materials of high viscosity.

The invention is explained and presented in connection with a generally cube-shape unit, but it will be readily apparent that the invention is not limited to the particular shape of the container. Instead, the invention is appli-70 cable to containers of various shapes, including, for example, generally rectangular shapes, such as may conveniently be used for the handling and shipping of caulking compounds. The invention will be better understood, and objects other than those set forth above will become 75 gram shape. It is to be understood, however, that a

apparent when consideration is given to the following detailed description. Such description refers to the annexed drawings wherein:

FIGURE 1 is a perspective view of a container constructed in accordance with one embodiment of the present invention;

FIGURE 2 is an exploded view of the container of FIGURE 1, illustrating further the means associated therewith for dispensing the contents therefrom in accordance with one embodiment hereof;

FIGURE 3 is a cross-sectional elevational view of a partially assembled dispenser arranged in accordance herewith:

FIGURE 4 is an enlarged fragmentary sectional view

FIGURE 5 is a perspective view of a container, similar to that of FIGURE 1, but adapted particularly for use in a second embodiment of the present invention;

FIGURE 6 is an exploded view of the container of 20 FIGURE 5 illustrating further dispenser means associated therewith for dispensing the contents in accordance with another and second embodiment hereof;

FIGURE 7 is a cross-sectional elevational view of the assembled container and dispenser of FIGURES 5 25 and 6;

FIGURE 8 is a fragmentary sectional view of another form of outlet connection which can be used in accordance with the second embodiment hereof;

FIGURE 9 is a perspective view, partially in phantom, and presenting the container of FIGURE 1 within the

dispenser utilized in the second embodiment hereof; FIGURE 10 is an exploded view of a modification of the second embodiment hereof;

FIGURE 11 is a fragmentary sectional view of the operates to prevent trapping of contents upon container 35 lower portion of the assembled modification of FIGURE 10; and

> FIGURE 12 is a fragmentary sectional view, similar to FIGURE 11, but showing an alternate construction for the lower portion.

In general, and in accordance with the principles of the present invention, there are provided two embodi-ments of pressure dispenser for viscous materials. In the first embodiment hereof, illustrated in FIGURES 1-4, a weighted element is utilized to assist in dispensing of the viscous materials. In the second embodiment hereof, illustrated in FIGURES 5-12, pressurized fluid is utilized' to assist in dispensing of the viscous materials.

Referring now to the first embodiment of invention, shown in FIGURES 1 to 4, a dispenser constructed in accordance with the present invention is generally designated by the numeral 2. The dispenser 2 is comprised of a container 4 for shipping or otherwise transporting, storing and dispensing various viscous materials, such as oils, inks and the like, and of means associated with the container to facilitate dispensing contents therefrom. The container 4 comprises an outer carton 6 fabricated generally of conventional corrugated paperboard and an inner container 26. The carton 6 has usual flaps 8 at both ends thereof which cooperate with one another in such a manner as to close that end of the carton 6 with which they are associated. Connected to at least one of the flaps 8 at one end of the carton 6, in any suitable and conventional manner, is a handle 10 whereby the container 4 may be carried manually or otherwise and thus moved from one position to another. The handle 10 may be fabricated of metal and preferably is connected to the flap or flaps 8 so that the same is foldable or pivotable from an extended position as shown in FIGURE 1 to a position in which the handle lies flat against the flaps, as seen in FIGURE 3.

The container 4, and thus the carton 6, preferably is substantially in the shape of a cube, such shape having been found to be the shape which provides the greatest volume for the minimum surface area of any parallelo-

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cubic shape is not necessary, and that any desired shape may be used.

One end of the carton 6 is provided with two slightly spaced rows of perforations 12 extending completely peripherally thereabout thereby alone providing the car-5 ton with a tear strip 14. However, for convenience, if desired, a tear cord can be fixed within the carton and between the rows so as to permit easy severing of the carton along the rows of perforations. By virtue of the provision of the detaching means in the form of perfo- 10 rated rows and/or tear cord, the carton 6 is provided with a removable portion 16 at one end thereof, the said portion 16 comprising a cover, whereby that end of the container with which the portion 16 is associated can be selectively opened and then closed to accidental dispensing 15 and tampering in general.

One of the flaps 8, at least, is provided with an aperture 18 for a purpose to be presently described. A liner 22 is positioned within the outer carton 6, the said liner having external dimensions generally equal to the internal 20 dimensions of the carton 6 whereby the liner will have a snug fit therewithin. The liner 22 is fabricated in a manner similar to that of the carton 6 and, thus, has flaps 22a at the ends thereof adjacent the ends of the carton having the flaps 8. One of the flaps 22a, at least, has an 25 aperture 20 disposed in alignment with the aperture 18 in the ultimate carton. It is to be understood that the tear strip 14 is positioned peripherally about the carton 6 so that the liner 22 will extend above the peripheral edge 24 of the carton 6 when the portion 16 has been 30 the screw threads 44 is an annular collar 52, the purpose removed therefrom.

The inner container 26 is particularly adapted to be inserted within the carton 6. The container 26 has the same general configuration as the carton 6, namely, that of a cube, although, as pointed out above, any desired 35 shape may be used. The container 26 preferably is formed of a suitable inert flexible thermoplastic material, such as, for example, polyethylene. However, any flexible material can be used which is impervious to the transmission of the particular contents therethrough. 40 Polyethylene is preferred only because of its unusual combination of properties including freedom from taste, odor, toxicity; flexibility at extremely low temperatures; low moisture-vapor transmission; resistance to chemicals, solvents, greases; and good characteristics from the tensile, 45 impact and other physical points of view.

The inner container 26, as shown, is formed, preferably by heat sealing together, along the seam 28, two symmetrical halves 30 and 32. Additionally, a fold line 34 is provided whereby one half of the container 26 may be 50 folded within the other half, to facilitate substantially completely dispensing the contents thereof. As particularly shown in FIGURE 4 of the drawings, the seam 28 and the fold line 34 are positioned in parallel relationship midway of the container 26, and are generally hori-55zontally disposed. In this particular embodiment of the present invention, the seam 28 and fold line 34 are preferably horizontally disposed, although, as explained below, the seam and fold line may be positioned peripherally diagonally of the container 26.

Though the two symmetrical halves 30 and 34 of the container 26 may be fabricated so that the walls thereof are of the same thickness throughout, in certain instances, it can be found expedient to fabricate the half 32 so that the walls thereof are of less thickness than those of the 65 half 30, whereby to facilitate folding of one half into the other half.

Still further to facilitate folding of one half of the container 26 within the other half thereof, the half 32 of the container can be, as shown, slightly inwardly off- 70 set with respect to the half 30, as indicated at 30a in FIGURE 3. However, it is to be understood that while this feature is important, it is not essential and the walls of both of the halves 30 and 32 of the container 26 can lie in the same place.

The inner container 26 further comprises a filler neck and pouring spout 36 in one wall 38 of the lower half The neck and spout 36 can be connected to the wall 38 in any suitable manner, but, preferably, is connected to a thin-walled thermoplastic annulus 40 which, in turn, is connected to the wall 38 by heat sealing. The neck and spout 36 itself is connected to the annulus 40 in the same manner. This particular construction is advantageous in that the flexibility of the annulus 40 will enable the neck and spout 36 to be folded, during shipping, within the confines of carton 6. It is to be understood that in use, the neck and spout 36 is extended to a position outside the carton 6 through the aligned apertures 20

in the liner 22 and 18 in the flaps 8 of the carton. The neck and spout 36 can be fabricated of any suitable material and, preferably, is fabricated of a substantially rigid plastic. The spout 36 is comprised of a tubular portion 42 having screw threads 44 at one end thereof, whereby a cap 46 can be connected to the spout when the dispenser 2 is not in use to preclude inadvertent loss of the contents of the container 26. The tubular portion 42 is preferably tapered from the screw threads 44 to an annulus 48. Thereafter, the spout 36 is generally

cylindrical and has longitudinally extensive openings or elongated perforations 50 positioned annularly thereabout and extending radially thereof, whereby, fluid communication exists between the interior of the container 26 and the exterior thereof through spout 36. Connected to the end of the tubular portion 42 opposite of which is two-fold, namely, (1) to prevent the wall 32aof the half 32 from closing the openings 50 when the half 32 is in a collapsed position within the half 30; (2) to maintain a raised position about the spout openings 50 so that the container contents are not trapped laterally of the spout area during dispensing.

Specifically, the elongated tubular portion of spout 36 with openings 50 therein and the collar 52 cooperate to provide a means juxtaposed the spout ultimate opening for maintaining the inner container in spaced relation to the spout opening area when the walls of the inner container collapse. Such means, however, can take other forms so long as it functions to permit dispensing of substantially all of the contents of the container 26. With the preferred construction, the collar 52, has a diameter greater than that of the tubular portion 42, and is connected to the latter in any suitable manner, as for example, by fabricating the tubular portion 42 and the collar 52 by means of a molding process, whereby the latter is integrally connected to the former.

In order to remove substantially completely the contents of the container 26, a pressure applying element 54 in the form of a weight, is provided. The element 54 may be fabricated of any suitable material and in any suitable manner. The transverse dimensions of the element 56 are generally equal to the transverse dimensions of the half 32 of the container 26 and, more specifically, equal to the transverse distances between opposed walls of the half 32 when the latter is in an inverted position within the half 30 of the container, as illustrated in dotted lines in FIGURE 3. It is within the scope of this invention that the pressure applying element 56 be fabricated so as to be of substantial weight whereby when the cap 46 is removed from the threaded end of the neck and spout 36, the contents of the container 26 can be automatically dispensed therefrom if the viscosity of the contents is within a medium range, without the aid of any other external means. Further, this simple embodiment can be used with a manual force being applied generally centrally of the pressure applying element 56, so that such force will be distributed uniformly to the half 32, whereby substantially completely all of the contents of the container 26 will be dispensed therefrom. However, this embodiment can also be used advantageously with

75 the dispensing apparatus discussed more fully below.

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In the use of this embodiment of the present invention, the tear strip 14 is severed from the carton 6 in any suitable manner as, for example, by beginning to sever the strip with some handy implement, such as a pocketknife. Alternatively, if a cord is incorporated as indicated above, the cord can be used for this purpose. Thereafter, in either event, the tear strip 14 is completely severed manually, thereby separating the cover portion 16 from the remainder of the carton 6. The portion 16 is saved whereby the same provides a cover for that end of the carton 6 from which it has been removed. The flaps 22a of the liner 22 adjacent the portion 16 are opened and removed from the remainder of the liner in any suitable manner, as illustrated in FIGURE 3.

The pressure applying element or weight 56 is then 15 positioned upon the half 32 of the container 26. When it is desired to use the dispenser 2, assuming that the element 56 is not a weighted element, the cap 46 is removed from the neck and spout 36, the portion 16 removed from the carton 6, and a force applied generally centrally to the said element 56. It will be obvious as pointed out supra, that pressure will then be distributed substantially uniformly to the half 32 thus emptying the contents of the container 26 in a uniform manner. In view of the relative dimensions of the halves 30 and 32, the latter will fold easily within the former and the element 56 will readily follow the half 32 as it is inverted into position within the half 30. The liner 22 will act as a guide for the element 56 as it follows the half 32.

The provision of the collar 52 provides an abutment or stop means for the wall 32a of the half 32 in its inverted position, shown in dotted lines in FIGURE 3, whereby the half 32 is precluded from closing the performations 50. Still almost all of the contents of the container 26 will be removed therefrom.

Assuming that the pressure applying element 56 is a weighted element, then the portion 16 can be left in position upon the peripheral edge 25 at all times with contents of medium viscosity. In this instance, when it is desired to dispense the contents of the container 26, 40 it is necessary merely to remove the cap 46 from the neck and spout 36. The differential pressure between the weighted element 56 and atmosphere will enable the element 56 to apply sufficient pressure to the contents of the container and thus dispense the same therefrom. 45 By leaving the portion 16 in position as just described, the same comprises a cover for the dispenser 2 whereby tampering and accidental dispensing of its contents is prevented.

Referring now to FIGURES 5 to 8 inclusive of the 50 drawings, another embodiment of a dispenser constructed in accordance with the present invention, is illustrated and generally designated by numeral 3.

In this embodiment of the present invention, the dispenser 3, as used, comprises generally a container, designated by numeral 5, and a housing and outlet means cooperatively associated with the container. The container 5 comprises, in turn, an outer carton 7 fabricated generally of conventional corrugated paperboard, which carton 7 has the usual flaps 9 cooperating with one 60 another in such a manner as to close that end of the carton with which they are associated. Connected with at least one of the flaps 9 is a handle 11, the same being connected in any suitable manner, but preferably in such a manner as to be extendable without the carton 7 65 whereby the latter may be carried manually or otherwise translated from one position to another. Additionally, the connection of the handle 11 to the flap or flaps 9 preferably is such as to render the handle pivotable, whereby it may be pivoted to a position lying flat against 70 the flaps.

The carton 7 preferably is a one-piece carton, as opposed to the carton 6 described above in which a liner is provided. However, like the carton 6, the carton 7 can comprise a liner (not shown) and preferably is substantially in the shape of a cube. As pointed out above, however, a cube-shape is not necessary in the practice of the present invention, and any desired shape may be utilized.

The carton 7, if desired, can be provided with perforations 13 which permit separation from the carton of generally rectangularly shaped portions 15. The portions 15 are adapted to be severed from the remainder of the carton 7 at and by the perforations 13 whereby the portions may be positioned inwardly of the carton, thus providing a means whereby the carton may be manually carried or otherwise translated from one position to another. That end of the carton most adjacent the portions 15, or opposite the spout outlet, is closed by flaps

17, which flaps are generally identical to the flaps 9.
However, each of the flaps 9 is provided with a plurality of perforations 19. As illustrated, each such flap is provided with two perforations, whereby the container 5 may properly be located with reference to its dispensing location, as described more particularly hereinafter. Additionally, one of the flaps 9 is provided with an aperture 21 the purpose of which will be described hereinafter.

The container 5 of the dispenser 3 comprises, further, 25 an inner container 23, which container is particularly adapted to be inserted within the carton 7. The container 23 has the same general configuration as the carton 7, namely, that of cube, although as pointed out supra, any desired shape may be used. The container 30 23 preferably is formed of any suitable flexible thermoplastic material, such as for example, polyethylene, as

pointed out above in conjunction with the container 6. The inner container 23 is formed, generally, by heat sealing together along the seam 25 two symmetrical halves 27 and 29. Additionally, a fold line 31 is pro-

vided in spaced parallel reationship with respect to the seam 25 whereby one half of the container 23 may be folded within the other half, to permit substantially complete dispensing of the contents. In this embodiment of the present invention, the seam 25 and fold line 31 are positioned diagonally of the inner container 23. However, it is to be understood that the same may be positioned as the seam 28 and fold line 34, described above in conjunction with the container 26. Additionally, it is to be understood that the seams 25 and 28, and the fold lines 31 and 34 of the containers 23 and 26 respectively, may be positioned in any suitable directional relationship with respect to said containers, the only criteria

being that the fold lines be directionally positioned as to facilitate folding of the respective halves within one another.

The walls of the halves 27 and 29 may be fabricated of the same thickness. However, it is within the scope of this invention to fabricate the walls of the half 29 of less thickness than the wall of the half 27, whereby to facilitate folding of the latter within the former.

The inner container 23 comprises, further, a filler neck and pouring spout 33, the same being generally identical to the neck and spout 36 comprising a component of the container 26 described above also in conjunction with the dispenser 9. No further description of the neck and spout 33 is deemed necessary, therefore, it being understood that like reference characters are used to indicate like parts throughout.

The dispenser 3 comprises, further, a housing or enclosure, generally indicated by the numeral 35, within which the container 5 is particularly adapted to be positioned. The enclosure 35 comprises, in turn, a cover portion 37 fabricated of any suitable material, such as metal, and in any suitable manner. The cover portion 37 is provided with a peripheral outwardly extending ledge or flange 39 at the base thereof whereby the cover portion may be securely positioned with respect to a base portion 41.

liner is provided. However, like the carton 6, the carton The base portion 41 preferably is fabricated of the 7 can comprise a liner (not shown) and preferably is 75 same material as the cover portion 37 and may be con-

structed in any suitable manner. The said base portion 41 is comprised of a positioning wall 43 which, in use, is generally horizontally disposed, and supporting walls 45 integrally connected to each peripheral edge 43a of the wall 43. Each of the walls 45 are positioned generally at right angles to the wall 43 and, in use, are generally vertically positioned, whereby the enclosure 35 in toto may be supported upon a planar surface, such as a shelf, workbench, or the like. It is to be noted that the dimensional extent of the wall 43 is, in every 10direction, greater than the largest dimensional extent of the cover portion 37, that is, greater than the dimensional extent of the ledge 39. The wall 43 is provided with a plurality of, as illustrated, four, conventional wing-nut and bolt arrangements 47 whereby the ledge 39, and thus 15 the cover portion 37, may be securely positioned with respect to the base 41. In this connection, planar bracket elements 49 are cooperatively associated with the wingnut and bolt arrangements in such a manner as to overlie the ledge 39 and thus securely position the cover with 20 respect to the base. Further, there is provided a sealing gasket 39a carried by ledge 39 and extending thereunder completely thereabout. Such gasket permits sealing the enclosure 35 to the base portion 41 so that pressure can be maintained within the enclosure. Other closing 25 arrangements are within the scope of this invention, the arrangement illustrated being merely preferred. Fixedly positioned upon the wall 43 and extending

generally upwardly therefrom are a plurality of locating pins 51. Four such pins are illustrated, it being noted 30 that they are located so as to form, in effect, a rectangle. Each pair of pins located at the longer side of the rectangle has fixed thereto a supporting plate 53 disposed in spaced parallel relation to wall 43. The pins 51 extend through the plates 53 whereby they are particu-35 larly adapted to be positioned within the perforations 19 provided in the flaps 9. In this manner, as will be described more fully hereinbelow, the container 5 is properly located with respect to the base portion 41 and thus the enclosure 35. 40

The cover portion 37 is provided with a recess 55 within which a conventional air valve and pressure gauge 57 are particularly adapted to be positioned. Preferably, the air valve may take the form of any suitable, well known "check" valve which, as well understood in the art, per- 45 ingly compressed. mits flow in one direction but precludes flow in a reverse direction. Further description of this type of valve, well known to those skilled in the art, is not, therefore, deemed necessary. The pressure gauge may be of conventional form, being suitable for present purposes, namely, en- 50 abling one to determine the amount of pressure existent within the enclosure. Alternatively, the air valve may take the form of a conventional regulating valve which, as is well known to those skilled in the art, is constructed to admit and maintain a constant amount of pressure. 55 As is the case with the check valve, further description of the regulating valve is not deemed necessary.

A tube 59 extends upwardly of the recess 55 and without the cover portion 37 whereby connection may be made to a suitable source of pressure, as for example, a 60 compressor, or a charging CO<sub>2</sub> capsule. To supply the pressure within the cover portion 37, a tube 61 similar to the tube 59 extends downwardly of the recess 55. The connection between tubes and the walls through which they project is air tight to insure pressure maintenance. 65

Positioned within the space provided beneath the wall 43 and between the walls 45 is an outlet connection 63. The outlet connection 63 can be fabricated of small diameter copper tubing or other similar material having a bend 65 at one end whereby the connection 63 extends 70 sufficient force to dispense the contents of the inner conthrough and upwardly of the wall 43. A threaded coupling 67 is provided whereby the outlet connection 63 may be connected to the neck and spout 33. A bend 69 is provided at the other end of the connection 63 whereby to provide a discharge spout for the dispenser 3. An on- 75 the surface of the container 23. As the contents thereof

off valve 71 of any suitable and conventional configuration is provided between the spout 69 and the wall 45 with which the spout 69 is associated to permit the contents of the container 5 to be dispensed therefrom. Connection 63 is sealed to wall 43 as by soldering again to permit maintaining pressure within the enclosure.

With reference now to FIGURE 8, a modification of the outlet connection 63 is illustrated therein. Simply, rather than the spout 69, that end of the connection 63 is threaded whereby to provide a connection 73 for a grease gun or the like. In all respects, the outlet con-nection 63 of FIGURE 9 is the same as that in FIG-**URE 8.** 

In the use of the dispenser 3, the wing-nut and bolt arrangement 47 are loosened and the bracket elements 49 pivoted outwardly of the ledge 39 whereby the cover portion 37 may be removed from the base portion 41. The portions 15 of the carton 7, if provided, are severed from the remainder thereof by means of the perforations 13, the same being accomplished by any suitable and handy implement, such as a pocket knife. Once severed, the portions 15 are pushed inwardly of the carton 7 whereby the same may manually be grasped and inverted from

its position as shown in FIGURE 5, which position is that in which the container 5 will be shipped. Alternatively, the carton is merely inserted. The neck and spout 33 which is foldable within the outer carton 7, as described above in conjunction with the spout 36 of the dispenser 2, and which may remain generally so positioned during shipment of the container 5, is then extended outwardly of the carton 7.

In its inverted position, as shown in FIGURE 6, the container 5 is positioned upon the supporting plates 53, the same being properly located thereupon by positioning the perforations 19 to cooperate with the locating pins 51. Having now positioned the container 5 with respect to the base portion 41, the cap 46 of the neck and spout 33 is removed therefrom and connection made to the outlet 63 by means of the threaded coupling 67.

This accomplished, the cover portion 37 is positioned about the container 5 and secured to the base portion 41 by means of the wing-nut and bolt arrangement 47 and the planar bracket elements 49 in a manner considered readily apparent whereby the sealing gasket 39a is seal-

Having properly positioned the container 5 within the enclosure 35, the tube 59 can be connected to a suitable source of pressure. Assuming that the air valve 57 is of the check value type, the dispenser 3 is particularly adapted to be connected to a source of pressure manually or otherwise selectively operable to provide charges of pressure of short duration, the same being selectable at the will of the user. If the air valve 57 is of the pressure regulating type, the dispenser 3 is particularly adapted to be connected to a source of pressure that is constantly being supplied thereto, the valve 57 being so constructed and arranged as to regulate the pressure and thus provide a constant pressure within the enclosure 35.

The pressure enters the enclosure 35 by way of the tube 61 and is communicated to the area immediately surrounding the inner container 23 through the inherent openings or passages existent in the carton 7 as well as through the aperture 21 provided in the outer carton 7. To dispense the contents of the inner container 23, the valve 71 is opened. The pressure differential between the pressure as applied to the surface of the container 23 and atmosphere, as it exists at the discharge spout 69 or at the exit end of a grease gun connected to the outlet 63 by means of the threaded connection 73, will provide tainer 23 therefrom.

It is to be understood that in accordance with the above described arrangement of component parts of the dispenser 3, the pressure will be uniformly distributed about

are dispensed, the half 29 will gradually fold within the half 27, or the container can otherwise collapse. The neck and spout 33 is, as described above in conjunction with the neck and spout 36, constructed so as to prevent premature closing of the openings 50 thereof (see FIG-URE 4), whereby almost all of the contents of the container 23 will be dispensed therefrom.

It will be understod that the dispenser 2, illustrated in FIGURES 1 to 4 inclusive, is equally well adapted to be used with the enclosure 35 of the dispenser 3. In this 10 instance, the only change that need be made in the dispenser 2 is to provide the flaps 8 having the handle 10 with perforations 19, which perforations 19 cooperate with the locating pins 51. In all other respects, the dispenser 2 is prepared for use exactly in the manner de- 15 scribed supra in conjunction therewith. When the dispenser 2 is used in conjunction with the enclosure 35, the element 54 preferably is a weighted element whereby, once the dispenser is positioned within the enclosure, to dispense medium viscosity contents of the container 4, it 20 is necessary merely to remove the cap 46. Alternatively, for high viscosity contents, pressure technique described above can be used with the weight. In either instance, to dispense the contents from the container 26, the valve 71 need only be opened. The pressure differential between 25 the pressure as applied by the weighted element and atmosphere, as it exists at the discharge spout 69 or at the exit end of a grease gun connected to the outlet 63 by means of the threaded connection 73, will provide sufficient force to dispense the contents of the inner container 30 25. As indicated in FIGURE 9, when the element 54 is used, the cover 37 need not be used, as indicated by the dotted lines in that figure. The container 4 will properly be located on the base portion 41 and the cover portion 16 will serve to enclose the inner container 26. Of 35 course, the element 54 need not be weighted, since without the cover 37, the cover portion 16 can be removed and manual pressure applied to the element 54, as described supra. If it is desired not to use the weight 54, 40 the container 4 can be used as is the container 5. In this instance, connection can be made to the tube 59 from a suitable source of pressure and the container 4 of the dispenser 2 has pressure applied to the inner container 26 thereof, in the same manner as pressure is applied to the 45 inner container 23 of the dispenser 3.

While the containers discussed above have been considered as having handles associated therewith for easy transporting, it should be apparent that the handle can be eliminated, although with some inconvenience. Moreover, the perforations 13 of the embodiment of FIGURE 505 may be eliminated, together with the handle, and the container in these instances would merely be handled through manipulation, and without the aid of the auxiliary means in question. An additional factor to be noted is that it is not essential that the inner container comprise halves which are foldable respectively one within the other. So long as the container is made of a flexible material impervious to the contents placed therein whereby the same may be collapsed under pressure, the require-60 ments for operation of the invention are generally satisfied. Notwithstanding these factors, the embodiments discussed are preferred because they facilitate the operation and have been found to be most efficient.

Referring now to the modification of the second embodiment, as shown in FIGURE 10, it will be seen that the container means 5 corresponds with the container means previously discussed and illustrated in FIGURES 5–7, that is, the container means includes an outer container or carton 7 having an inner collapsible container 23 disposed therewithin. The inner container 23 has a spout means or pouring spout 33 which can project through an aperture 21 in the carton. The carton may also be provided with additional openings or apertures 100, for a purpose to be presently described. 75

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The housing itself, designated 35, includes a first or base portion 41 and a second or cover portion 37 which can be secured thereto in the manner previously described. As was described in FIGURE 7, the cover portion 37 can be provided with a conventional check valve and pressure gauge. In FIGURE 7, these elements were combined and identified by reference numeral 57. In FIGURE 10, there is shown an embodiment wherein a valve means 102 and a pressure valve 104 are separated from one another. Naturally, the valve means 102 is a unidirectional check valve permitting pressurized fluid to be introduced into the interior of the housing, and the pressure valve 104 is utilized to provide an indication of the pressure existing within the housing. The cover portion 37 may also be provided with a handle 106, if desired.

The cover portion 37 is provided with a lateral flange 39 which rests upon the top of the base portion 41, and means 47, 49, previously described, can be utilized for securing the portions 37 and 41 together. Resilient gasket means 108 can be provided beneath the flange 39 to assure that an airtight or hermetic seal is provided when the portions 37 and 41 are assembled or secured together. In this manner, it is assured that the pressurized fluid introduced into the interior of the housing 35 will not leak out at the interface between the portions 37 and 41.

In the construction described in FIGURES 5-7, the base was provided with an outlet conduit 63 having a valve means 71 at the outer end thereof. The inner end of the conduit 63 was provided with a threaded coupling 67 with which the spout means 33 could be mated. However, it is not essential that such a threaded coupling be provided, and instead, in the modification of FIGURES 10-12, a socket means generally designated 110 can be provided. This socket means can merely be a threaded aperture into which the threaded neck of the pouring spout can be screwed, or alternatively, such socket can merely be a recess into which the pouring spout 33 projects. If this latter expedient is used, the socket may include an enlarged counterbore portion 112 having a gasket 114 disposed therein. The flange 48 of the pouring spout 33 can rest upon this gasket 114, particularly under the influence of the pressure exerted by the viscous material within the container 23, thereby assuring that no pressurized fluid from the housing can escape around the spout means 33 and into the outlet conduit 63.

Naturally, as previously described, it is important that when the container means 5 is inserted within the interior of the housing, the spout means 33 be aligned with the coupling or socket in the base portion of the housing to thus assure that the viscous material from the container means will properly dispense through the outlet conduit 63. In the construction described in FIGURES 5-7, the guide means utilized to accomplish the alignment between the spout means 33 and the coupling 67 was a set of rectangularly arranged locating pins 51, which were spaced to fit within apertures 19 of the container. However, as should be apparent, the guide means need not be limited to this particular arrangement, and instead, can be any suitable form of guiding arrangement which accomplishes the necessary function, i.e., proper alignment of the spout means 33 with the socket 110, when the container 5 is inserted into the housing 35. To this end, there is shown in FIGURES 10 and 11, a modified form of guide means in the nature of a recess 116 having a size and a configuration corresponding to that of the container means 5. Thus, instead of resorting to the use of locating pins, the dispenser shown in FIGURES 10 and 11 accomplishes the necessary guiding function merely by providing a recessed seat for the container means 5. When the container is disposed within this seat, the spout means 33 is necessarily in alignment with the socket 110.

Alternatively, as shown in FIGURE 12, the guide means can be provided by an upstanding flange means 118 75 formed on the upper surface of the base portion 41. This

flange means, whether continuous or discontinuous, provides a surrounding border having a size and configuration corresponding to that of the container means. Thus, when the container means is inserted within the flange means 118, it serves as a guide to necessarily align the spout means 33 with the socket 110. As will be apparent, still other diverse forms of guide means may be utilized to accomplish the functions stated hereinabove.

The second embodiment of invention described herein, i.e., the embodiment shown in FIGURES 5-12, is partic- 10 ularly useful as a portable pressurized bulk dispenser for viscous material. For example, as set forth in the introduction hereof, such a dispenser can be utilized for accomplishing field lubrication of automotive vehicles in remote locations, where no ordinary servicing facilities are avail- 15 able. Similarly, such a dispenser may be utilized at construction projects for pressurized dispensing of caulking compound. Other similar uses will, of course, be obvious to those skilled in the art. To facilitate transportability of the dispenser, the base 41 may be provided with a set 20 of wheels 120, as shown in FIGURES 10 and 11, so that the dispenser may be grasped by the handle 106 and rolled along during transit or during usage. Also, if desired, the base portion may be provided with at least one storage chamber 122 having an access door 124 thereon. The storage chamber 122 can be utilized to store various accessories useful in conjunction with the dispenser, such as an elongated length of flexible tubing 126 which can be attached to the threaded end 73 of the outlet conduit 30 means. It is also within the purview of the present invention to provide a transportable source of pressurized fluid, such as, for example, a cylinder of compressed air. Such a cylinder might be stored within the chamber 122, and thus when it is desired to pressurize the housing 35, such 35 an air cylinder could merely be connected to the valve means 102. Other similar accessories and modifications can be utilized in conjunction with the dispenser described herein without departing from the spirit and scope of the present invention.

After reading the foregoing detailed description, it should be apparent that the objects set forth at the outset of the specification have been successfully achieved by the present invention.

What is claimed is:

45 1. A pressure dispenser for dispensing various materials of relatively high viscosity, such as oils, inks, and the like, comprising, in combination, a positioning wall, a plurality of supporting walls juxtaposed to said positioning wall and extending generally at right angles thereto whereby the positioning wall may be supported upon a planar surface and a space is provided between said supporting walls and said positioning wall, a cover portion positioned upon said positioning wall, means for releasably securing said cover portion upon said positioning wall, whereby said cover portion may be removed from said positioning wall, locating pins positioned upon said positioning wall and extending therefrom, said pins being so positioned as to form, in effect, a rectangle, more than one of said plurality of pins being located on each 60 of the longer sides of the rectangle, said more than one of said locating pins on each side of the rectangle supporting a supporting plate, said locating pins extending from both sides of said supporting plates, a container means positioned upon said supporting plates, said con-65 tainer being provided with perforations, said perforations being cooperable with said locating pins, whereby the container is properly located upon said supporting plates, said container means comprising an outer carton and an inner container, said inner container being fabricated of a flexible thermoplastic material and being comprised of, in turn, a plurality of symmetrical halves structurally connected to one another along a seam, a fold line positioned peripherally about said inner container and in spaced parallel relationship with respect to said seam, 75 ripherally about said inner container and in spaced paral-

whereby one of the plurality of halves will readily fold with another of said plurality of halves, a filler neck and pouring spout structurally connected to said inner container, said structural connection of said filler neck and pouring spout to said inner container being so constituted and arranged as to enable said neck and spout to be folded within said outer carton, said filler neck and pouring spout being extendable to without said outer carton, a perforation provided in said outer carton, whereby said filler neck and pouring spout may extend therethrough to a position without said outer carton, said filler neck and pouring spout comprising a tubular portion having a threaded end cooperable with a threaded cap, said tubular portion extending to a position within said inner container and having longitudinally extending perforations spaced peripherally thereabout for providing a flow passage for a material within said inner container, and collar means connected to said tubular portion at the end thereof opposite said threaded end and within said inner container for precluding at least one of said plurality of halves from closing said perforations when substantially all of the material within said inner container has been dispensed therefrom, an outlet connection positioned within the space provided between said positioning wall and said supporting walls, said outlet connection extending through said positioning wall, whereby said connection is adapted to be connected to said filler neck and pouring spout, a threaded annular coupling for connect-

ing said outlet connection to said filler neck and pouring spout, said outlet connection extending through at least one of said supporting walls, a valve positioned along said outlet connection and without said supporting wall for enabling and precluding flow of a material within said inner container, and means for applying pressure externally of said inner container, said pressure applying means being so constituted and arranged as to uniformly apply pressure to said inner container, whereby, as a material disposed therein is dispensed, one of the halves of said inner container will gradually be positioned within another of said halves and all of the material disposed therein will efficiently be dispensed therefrom.

2. A pressure dispenser for dispensing various materials of relatively high viscosity, such as oils, inks, and the like, comprising, in combination, an enclosure having a cover portion and a base portion, positioning and supporting means positioned upon a positioning wall of said base portion for supporting a container, a container positioned upon said positioning and supporting means, said container being particularly adapted to contain a material of relatively high viscosity to be dispensed therefrom, outlet means connected to said container and extending without said enclosure, means for applying pressure exteriorly of said container, said means for applying pressure being so constituted and arranged as to uniformly apply said pressure, whereby all of the contents of said container are dispensed therefrom, said positioning and supporting means including locating pins positioned upon said positioning wall and extending therefrom, said pins being so positioned as to form, in effect, a rectangle, more than one of said plurality of pins being located on each of the longer sides of the rectangle, said more than one of said locating pins on each side of the rectangle supporting a supporting plate, said supporting plates being so located along the supporting pins that the pins extend from both sides thereof, and perforations provided in said container, said perforations being cooperable with said locating pins, whereby said container is properly locatable within said enclosure.

3. A pressure dispenser as defined in claim 2, wherein 70 said container comprises an outer carton and inner container, said inner container being fabricated of a flexible thermoplastic material and being comprised of, in turn, a plurality of symmetrical halves structurally connected to one another along a seam, a fold line positioned pe-

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lel relationship with respect to said seam, whereby one of the plurality of halves will readily be positioned within another of said plurality of halves.

4. A pressure dispenser as defined in claim 3, wherein said inner container comprises further a filler neck and pouring spout connected to said outlet means, said filler neck and pouring spout comprising, in turn, a tubular portion having a threaded end cooperable with a threaded cap and adapted to be connected to a threaded coupling, said tubular portion extending to a position within said 10 inner container and having longitudinally extending openings spaced peripherally thereabout for providing a flow passage for a material within said inner container, and collar means connected to said tubular portion at the end thereof opposite said threaded end and within said inner container for precluding at least one of said plurality of halves from closing said openings when substantially all of the material within said inner container has been dispensed therefrom, and said outer carton having an aperture through which said filler neck and pouring spout may extend outwardly to be connected to said threaded coupling.

5. A pressure dispenser as defined in claim 4, wherein said outer carton comprises a tear strip positioned peripherally thereabout, whereby said outer carton may be 25 separated from a cover portion, a liner positioned within said outer carton and exteriorly of said inner container, said liner extending beyond said outer carton when said cover portion is removed, one end of said liner adjacent said cover portion being removed, and said means for applying a uniform pressure is comprised of, in turn, a pressure applying element, said pressure applying element having the same general configuration as said inner container.

6. A pressure dispenser as defined in claim 5, wherein one of said plurality of halves of said inner container has walls which are of lesser thickness than another of said plurality of halves, said one of said plurality of halves being offset, whereby to facilitate positioning of said one of said plurality of halves within another of said plurality of halves.

7. A pressure dispenser as defined in claim 6, wherein said pressure applying element is of substantial weight, whereby when said outlet means is opened to the atmosphere, the pressure differential between said pressure applying element and the pressure of atmosphere will cause a material disposed within said inner container to be completely dispensed therefrom, said pressure applying element being guided in this movement, as said one of said plurality of halves is gradually positioned within another 50 of said plurality of halves, by said liner.

8. A pressure dispenser as defined in claim 4, wherein said enclosure includes a recess positioned therewithin, and said means for applying a uniform pressure is comprised of a valve positioned within said recess, a tube extending from said recess and without said enclosure, said tube being connectable to a source of pressure, and another tube extending from said recess to within said enclosure, said means for applying a uniform pressure, applying pressure exteriorly of said inner container and interiorly of said outer carton through said aperture in said outer carton.

9. A pressure for dispensing various materials of relatively high viscosity, such as oils, inks and the like, comprising, in combination, a positioning wall, a plurality of supporting walls structurally connected to said positioning wall and extending angularly therefrom, whereby said positioning wall may be supported upon a planar surface and a space is provided between said supporting walls and said positioning wall, locating pins positioned upon 70 said positioning wall and extending therefrom, said pins being so positioned as to form, in effect, a rectangle, more than one of said plurality of pins being located on each of the longer sides of the rectangle, said more than one of said locating pins on each side of the rectangle sup-

porting a supporting plate, said locating pins extending from both sides of said supporting plate, a container positioned upon said supporting plate, said container being provided with perforations, said perforations being cooperable with said locating pins, whereby the container is properly located upon said supporting plate, said container comprising an outer carton and an inner container, said inner container being fabricated of a flexible thermoplastic material, a filler neck and pouring spout connected to said inner container and extending without said outer carton through a perforation positioned therein, an outlet connection positioned within said space provided between said positioning wall and said supporting walls, said outlet means having one end extending through said positioning wall and being connected to said filler neck and pouring spout, said outlet connection having another end extending without at least one of said supporting walls, a valve

positioned along said outlet connection and without said supporting wall, and means for applying pressure exteriorly of said inner container, said means being so con-20 stituted and arranged as to uniformly apply said pressure, whereby all of the contents of said container are capable of being unusually efficiently dispensed therefrom.

10. A pressure dispenser as defined in claim 9, wherein said outer carton comprises a tear strip positioned peripherally thereabout, whereby said outer carton may be separated from a cover portion, a liner positioned within said outer carton and exteriorly of said inner container, said liner extending beyond said outer carton when said cover 30 portion is removed, one end of said liner adjacent said cover portion being removed, and said means for applying a uniform pressure is comprised of, in turn, a pressure applying element, said pressure applying element having the same general configuration as said inner container, 35 and being guided in its movement by said liner.

11. A pressure dispenser as defined in claim 10, wherein another cover portion is positioned upon said positioning wall, and means for releasably securing said other cover portion upon said positioning wall, whereby said other cover portion may be removed from said positioning wall 40 and completely encloses said container when positioned thereupon and secured thereto.

12. A pressure dispenser for dispensing various materials of relatively high viscosity, such as oils, inks, and the like, comprising, in combination, a positioning wall, a 45 plurality of supporting walls structurally connected to said positioning wall and extending angularly therefrom, whereby the positioning wall may be supported upon a planar surface and a space is provided between said supporting walls and said positioning wall, a cover portion positioned upon said positioning wall, means for releasably securing said cover portion upon said positioning wall, whereby said cover portion may be removed from said positioning wall, locating pins positioned upon said positioning wall and extending therefrom, said pins being 55 so positioned as to form, in effect, a rectangle, more than one of said plurality of pins being located on each of the longer sides of the rectangle, said more than one of said locating pins on each side of the rectangle supporting a supporting plate, said locating pins extending from both 60 sides of said supporting plates, an outlet connection positioned within the space provided between said positioning wall and said supporting walls, said outlet connection extending through said positioning wall, whereby said connection is adapted to be connected to a container, said 65outlet connection extending through at least one of said supporting walls, a valve positioned along said outlet connection and without said supporting wall, and means for applying pressure to within said cover portion.

13. A pressure dispenser as defined in claim 12, wherein a container is positioned upon said supporting plates, said container being provided with perforations, said perforations being cooperable with said locating pins, whereby said container is properly located upon said supporting plates, said container having a filler neck and pouring 75

spout, and a threaded coupling connected to said outlet connection, said threaded coupling connecting said outlet connection to said filler neck and pouring spout of said container.

14. A pressure dispenser as defined in claim 13, wherein 5 said means for applying pressure to within said cover portion comprises a recess positioned therewithin, a valve positioned within said recess, a tube extending from said recess and without said enclosure, said tube being connectable to a source of pressure, and another tube extend-10ing from said recess to within said cover portion, whereby pressure is applied to said container and a material disposed therewithin is capable of being unusually efficiently completely dispensed therefrom.

15. A pressure dispenser as defined in claim 14, wherein 15 said outlet connection beyond said valve positioned along said connection and without said supporting wall is provided with a discharge spout.

16. A pressure dispenser as defined in claim 14, wherein said outlet connection beyond said valve positioned along 20 said connection and without said supporting wall is provided with a threaded end.

17. A pressure dispenser for dispensing a highly viscous material comprising, in combination, a carton having side walls, a cover portion and a base portion, a flexible con- 25 tainer being positioned within said carton and being adapted to house said material, said container being formed of two symmetrical halves joined together by a structural seam, said lowermost half having a bottom wall resting upon said carton base portion, said base portion 30 having an aperture therein, a filler neck and pouring spout disposed within said aperture, said filler neck and pouring spout having a laterally extending annulus formed thereon and secured to said lowermost half bottom wall to 35thus position said filler neck and pouring spout with a first end disposed within said flexible container and a second end projecting through said aperture and beyond said carton base portion, said first end having an enlarged collar thereon, said second end having a closure removably secured thereto, said filler neck and pouring spout having a plurality of openings therein between said annulus and said collar to thus permit entry of said material from said container, said uppermost half having an upper wall which defines the top of said container, said 45 carton cover portion being removable to permit insertion of a weighted pressure applying means which can be placed upon said upper wall to collapse said uppermost container half downward toward said lowermost container half, said closure being removable to permit said material  $_{50}$  receiving said container means. to be dispensed from said container through said openings in said filler neck and pouring spout and out through said second end as said weighted pressure applying means collapses said container, said collar serving to support said upper wall when said container is completely collapsed to 55 thus prevent said upper wall from closing said openings in said filler neck and pouring spout.

18. A pressure dispenser as defined in claim 17 wherein said second end is provided with screw threads and said closure is provided with complemental threads for 60 removable engagement with said second end threads.

19. A pressure dispenser for viscous materials comprising:

- a housing including first and second portions separable with respect to one another to permit access to said 65 housing:
- said first and second portions, when assembled in closed position, defining a completely enclosed chamber;

- means for selectively hermetically sealing said first and second portions to render said chamber hermetic:
- said housing having valve means for admitting pressurized fluid into said chamber;
- one of said housing portions having outlet conduit means for dispensing viscous materials;
- container means having a size and configuration permitting complete insertion thereof into said chamber;
- said container means including a relatively rigid outer container and an inner collapsible container having a viscous material therein;
- said inner collapsible container having a dispensing spout;
- said outer container having an aperture therein through which said dispensing spout can project;
- said outlet conduit means having a socket at one end thereof for receiving the projected portion of said dispensing spout;
- one of said housing portions having guide means thereon for properly positioning said container means to position said dispensing spout in said socket;
- said outer container having at least one opening therein, thereby establishing a passage therethrough whereby when pressurized fluid is introduced through said valve means and into said chamber, said pressurized fluid can pass through said opening to collapse said innter container and thereby dispense the viscous material therein through said dispensing spout and through said outlet conduit means.

20. A pressure dispenser as defined in claim 19 wherein said housing includes pressure gauge means for indicating the pressure present in said housing interior.

21. A pressure dispenser as defined in claim 19 wherein said housing includes wheels which permit said dispenser to be readily transported.

22. A pressure dispenser as defined in claim 19 wherein 40 said outlet conduit means and said guide means are each provided in said first housing portion.

23. A pressure dispenser as defined in claim 22 wherein said guide means includes a recessed area in said first housing portion of a size and configuration for receiving said container means.

24. A pressure dispenser as defined in claim 22 wherein said guide means includes an upstanding flange means on said first housing portion of a size and configuration for

25. A pressure dispenser as defined in claim 22 wherein said valve means is provided in said second housing portion.

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