

Dec. 24, 1940.

K. S. CLAPP

2,225,622

STORAGE AND DISPENSING DEVICE

Filed July 11, 1938

2 Sheets-Sheet 1

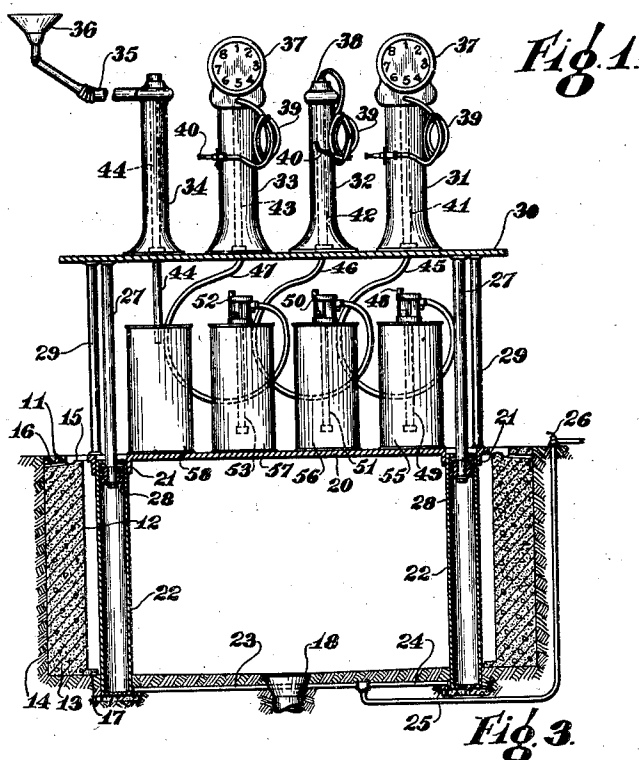


Fig. 2.

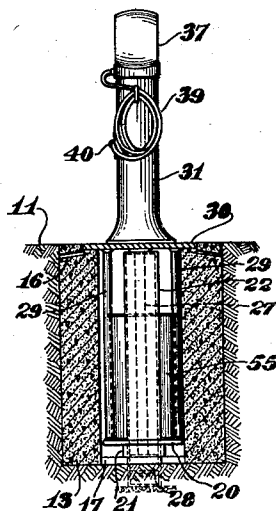
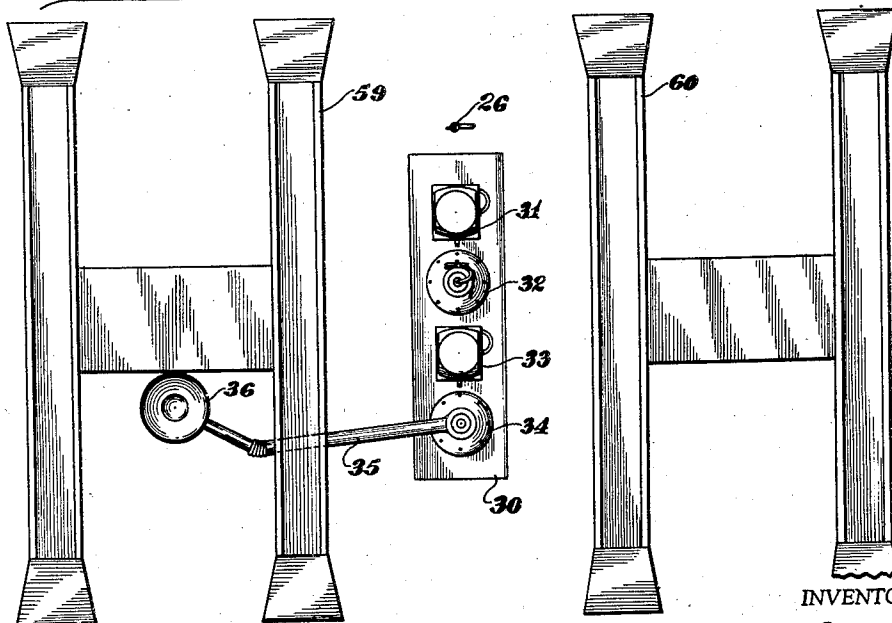


Fig. 3.



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Fig. 4.

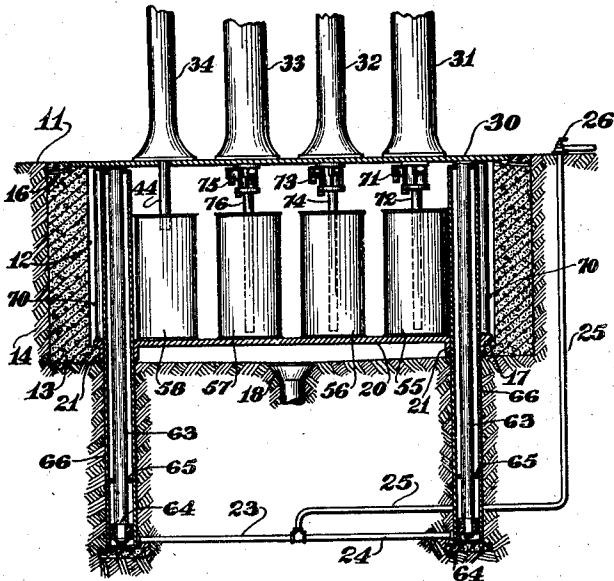


Fig. 6.

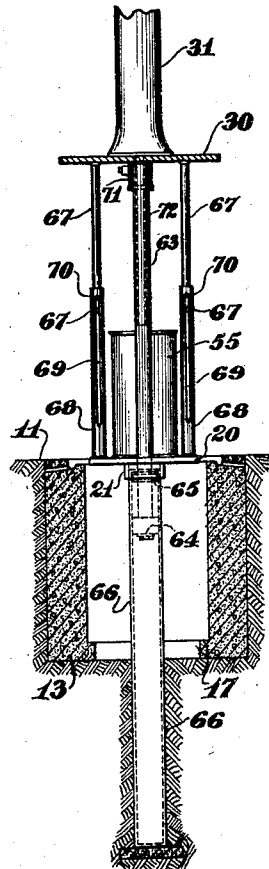


Fig. 5.

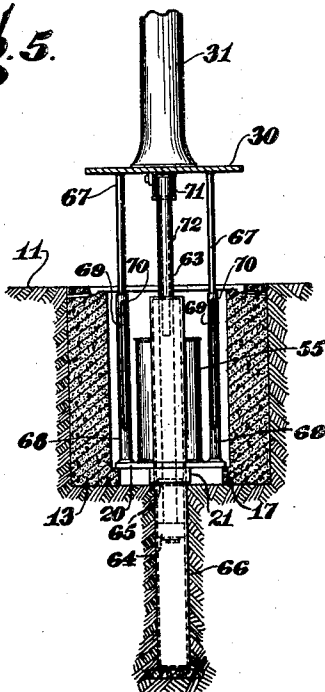
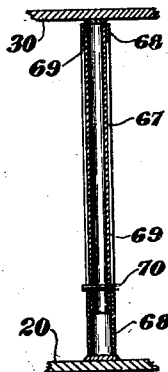


Fig. 7.



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UNITED STATES PATENT OFFICE

2,225,622

STORAGE AND DISPENSING DEVICE

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Application July 11, 1938, Serial No. 218,500

16 Claims. (Cl. 221-95)

My invention relates, in general, to storage and dispensing devices, and more particularly to devices for handling containers of fluid, such as, lubricants and the like, and for providing communication with the containers.

An object of my invention is to provide a device for storing containers within an open space in a floor surface and for providing communication with the container from above the floor surface.

Another object is to provide a housing for a fluid container beneath the level of the surrounding floor surface and in position for affording communication with the container from above the floor surface.

Another object is to provide apparatus for handling drums or containers of lubricants to permit ready communication with the container placed below the surrounding floor or ground surface.

Another object is to provide a device for dispensing fluid from a container, which device occupies a minimum of floor surface.

Another object is to provide a fluid dispensing device which may be utilized in confined quarters and for facilitating communication with the container.

Another object is to provide a device for housing a fluid container substantially below a floor or ground surface and for facilitating the insertion and removal of the container from the device and the substitution of other containers.

Another object is to provide apparatus for facilitating the placement in, and withdrawal of a fluid container from, the apparatus.

A further object is to provide a device for raising and lowering a conduit extending into the opening of a container, to facilitate the side-ward movement of the container in placing the container in and out of the device.

A still further object is to provide a system of elevating means for lowering and raising the container in a dispensing device, and a system of elevator means for raising and lowering a conduit extending into the opening in the top of the container.

Other objects and a fuller understanding of my invention may be had by referring to the following description and claims, taken in conjunction with the accompanying drawings, in which:

Figure 1 is a side elevational view of one form of my device in raised position;

Figure 2 is a right hand end elevational view of the device shown in Figure 1, and shows the device in lowered position;

Figure 3 illustrates a plan view of my device positioned between two automobile lifts;

Figure 4 is a side elevational view of another form of my invention and shows the device in lowered position;

Figure 5 is a right hand end elevational view of the right hand end of Figure 4 and shows the device in partially raised position;

Figure 6 is a view similar to Figure 5 and shows the device in fully raised position; and

Figure 7 is a detailed cross-sectional view of the connecting members extending between the upper and lower platform of the device shown in Figures 4, 5, and 6.

A particular adaptation of my invention is in the handling of drums or containers of lubricant or similar fluids in garages and service stations where such lubricants are dispensed to automobiles being serviced. Heretofore, it has been necessary, in order to have the container of lubricant handy to the location of the lubricating operation, for the container to be placed upon the floor adjacent to the automobile being serviced. In some instances, compartments or cabinets have been placed about the container and pump mechanism carried thereon in order to provide a housing therefor. In either case much valuable floor space is utilized and the operator finds it necessary in moving about the point of operation to avoid the location of the container or the compartment holding the container. Such an arrangement has proved to be awkward to the operator and to constitute an impairment of the efficiency of the operator. The container and the pump mechanism carried thereon are rather large and cumbersome and a compartment added thereto is an additional cumbersome piece of equipment in the way of the operator. The original containers may hold one hundred to five hundred pounds of lubricant. In busy garages or service stations, they may be depleted every two or three days, requiring frequent replacement of full containers. While it is necessary to have the fluid container in a close by position so that direct communication may be readily provided with the container, it is also well known to all those acquainted in the industry that a proper and an efficient disposition and handling of such containers are serious problems which have long existed without a satisfactory remedy. This problem is especially true in relatively confined quarters where considerable floor space is not available. It is even more emphatically true in those instances when it is necessary to have the container in adjacent

position to the location of the automobile and where the placing of the container or the compartment containing the container on the floor in such adjacent position is awkward and interferes with the operator in the lubricating work being done.

It has also been found that a compartment for the container and pump mechanism which set upon the floor surface or above the floor surface are in constant danger of mutilation from tools or from collision caused by automobiles. Such above ground compartments are also very susceptible of being soiled which presents an unattractive appearance. The use of such housings above the floor surface have not been satisfactory in regard to either operation or appearance.

The moving of the fluid container in and out of dispensing position has been an obstacle to efficient operation of dispensing devices. A fluid container being both heavy and large, does not lend itself to easy handling and it is a most sought for objective to handle the containers with facility and safety.

To those acquainted in the field of lubricating service and with the inadequacies of the present equipment, the advantages of my invention will be recognized. It is the problems and difficulties in the industry and here discussed to which the present embodiments of my invention disclosed herein are particularly directed. It is understood, however, that while the present embodiments have particular reference to the dispensing of lubricating fluid, they are not to be considered as confined thereto. Other uses and adaptations together with the necessary changes of arrangement or construction are included within the scope of my invention.

Referring to Figure 1, there is shown a large open space or hole 12 formed in the floor or around surface 11. For purposes of definition in the description and the claims, the term "floor" is to be understood in both a technical and general sense, as including the floor of a building, a run-way, a platform, the surface of the earth, and all other planes upon which the operator normally walks. In the particular embodiment shown in Figure 1, the open space 12 is formed by the building of a pit in the earth 14 and the construction of the surrounding walls 13 of concrete or other material. In this manner the open space 12 is provided in the earth and extends downwardly from the surface of the floor 11. There is a drain 18 positioned at the bottom of the open space 12 and any water or waste fluid will flow therein and be drained off.

Upon the upper edges of the concrete wall 13, the inner corner is depressed around the inner edge thereof to form the depressed edge portion 15. There is provided a number of small drain openings 16 which permit any water or other fluid collecting in the depressed edge portion 15 to flow through the concrete wall 13 into the surrounding earth 14 and there absorbed. The concrete wall 13 lines the open space 12 and has a ledge portion 17 extending around the inside of the open space 12 and near the bottom thereof.

The platform member 30 and the support member 20 are plates preferably made of steel and are positioned substantially parallel to each other. Four connecting members 29 in the form of steel posts or tubes are connected to both the platform member 30 and the support member 20 adjacent to their four corners, respectively. The four connecting members 29 may be secured to the members 20 and 30 by welding or any other suitable

means, so that the members 20 and 30 are securely fastened together by means of the connecting members 29, thus insuring that the vertical movement of one member is translated into movement of the other member. In effect, the platform member 30 and the support member 20 provide a double platform which may be raised and lowered together.

Two piston stems or rods 27 are rigidly secured to the underside of the platform member 30 and adjacent to the opposite ends thereof. The pistons 28 are mounted upon the lower ends of the piston stems 27, respectively. The cylinder members 22 are positioned within the open space 12 and are suitably supported in vertical position therein upon slabs of concrete laid in the earth 14. The arrangement of the cylinder members 22 with the pistons 28 and piston stems 27 constitute fluid pressure means connected to the platform member 30.

A valve member 26 is suitably connected with and in communication with a source of compressed air or other suitable fluid from a compressor (not shown) and the compressed air is introduced through the valve member 26, the pipe 25, and the pipes 23 and 24, to the bottom of the cylinders 22. Therefore, when the valve member 26 is operated in one position, the compressed air is introduced into the cylinders 22 so as to raise the pistons 28 therein, thereby raising the platform member 30. Upon turning the valve member in the other direction, the source of compressed air is shut off and the compressed air within the cylinders 22 is released to lower the pistons 28. In this manner, there is provided fluid pressure means for raising and lowering the platform member 30 and parts carried thereby. The support member 20 being connected through the connecting members 29 to the platform member 30 is raised and lowered along with the platform member 30 by the fluid pressure means. There are provided flange members 21 upon the support member 20 which flange members 21 surround and slidably engage the cylinder members 22. As the support member 20 is moved up and down the flange members 21 slide along the outside of the cylinder members 22 and are therefore guided thereby in the up and down movement of the support member 20. In the downward position of the support member 20, the flange members 21 engage the ledge 17 to provide a rest for the support member 20.

In the embodiment illustrated in Figure 1, there are shown four standards mounted upon and secured to, the upper surface of the platform member 30. Each standard may be utilized for handling a different lubricant, as for example, standard 31 may dispense a hipoid gear lubricant, standard 32 may dispense chassis lubricant, standard 33 may dispense high pressure lubricant, and standard 34 may handle waste oil and lubricants drained from automobiles. Standard 31 and 33 are constructed with meters 37 for measuring the lubricants dispensed. The standard 32 is provided with the head 38 in place of the meters 37. Each of the standards 31, 32, 33 have hoses 39 connected thereto and the valve nozzles 40 mounted upon the ends of the hoses 39. In this manner, the dispensing standards are provided with readily dispensable hoses for direct communication with the automobile being lubricated. The standard 34 is adapted to receive waste drain of oils taken from automobiles and for this purpose an extensible pipe 35 is connected to the top thereof so that the funnel 36 may be

variously placed under the automobile and communication established through the pipe 35 and through the standard 34. Each of the standards 31, 32, 33 and 34, have a pipe or conduit extending downwardly therethrough and down through suitable openings in the platform member 30. The conduit 41 communicates through the platform member 30 to the rubber hose 45, the conduit 42 communicates through the platform member 30 with the rubber hose 46, the conduit 43 communicates through the platform member 30 with the rubber hose 47, and the conduit 44 extends directly down through the platform member 30. The hoses 39 are in communication with the conduits 41, 42, and 43, respectively.

The support member 20 is adapted to support a plurality of fluid containers thereon such as the containers 55, 56, 57, and 58 shown upon the support member 20 in Figure 1. Containers 55, 56, and 57 contain a supply of the respective lubricant to be dispensed through the hoses 39 carried by the standards 31, 32, and 33. Container 58 is adapted to receive waste or other fluids withdrawn from automobiles being serviced and flowing through the funnel 36, the pipe 35, and the conduit 44. Each of the containers has an opening in the top thereof to afford communication directly with the interior of the container.

The lower end of the conduit 44 through which waste oil flows may be flexible or may be rigid and extends only a short distance into the opening in the top of the container 58. When the lower end of the conduit 44 is rigid the container may be slightly tipped to remove the container 58 sideways out from under the conduit 44. When the lower end of the conduit 44 is flexible, then the flexible end may be flexed and moved to one side to permit the container 58 to be moved sideways on and off the support member 20.

In order to pump the fluid from the containers 55, 56, and 57, there are provided suitable pump mechanisms 48, 50, and 52 which include pumps and motors, for withdrawing the fluid therefrom. A source of compressed air or other suitable operating means connected to the pump mechanisms is utilized for operating the pump in the pump cylinders. For purpose of simplicity and clarity of the drawings the means of delivering the compressed air to the several pump mechanisms 48, 50, and 52 is not shown in the drawings. A pipe connected to the source of compressor air is brought down through the earth on the outside of the pit and terminates with a hose connection entering the open space 12 at the bottom of the open space 12. Rubber hoses or other flexible conduits capable of coiling are attached to the hose connection and conduct the compressed air to the several pump mechanisms. When the support member 20 is in the downward position, the excess length of the rubber hoses may lie in the bottom of the open space 12, and when in the raised position, the rubber hoses are extended to the pump mechanisms raised upon the containers. A suitable valve controls the flow of compressed air to the pump mechanisms. The pump mechanism 48 and the pump cylinder 49 extended downwardly therefrom are supported upon the top of the container 55 in such a way that the pump cylinder 49 extends down into the opening in the top of the container 55 to pump fluid therefrom. The hose 45 is in direct communication with the pump cylinder 49 so that the fluid pumped up out of the container flows from the pump cylinder 49, through the hose 45, through the conduit

41, and out through the connecting rubber hose 39.

The pump mechanism 50 and pump cylinder 51 similarly connected and operated are mounted upon the container 56 and communication is similarly provided for pumping fluid from the container 56 up through the rubber hose 46, the conduit 42, and the hose 39 of the standard 32.

The pump mechanism 52 and pump cylinder 53 similarly connected and operated are mounted upon the container 57 and the fluid in the container 57 is pumped up through the rubber hose 47, the conduit 43, and the hose 39 of the standard 33.

The rubber hoses 45, 46, and 47 are relatively long to permit the containers 55, 56, and 57 to be first moved sideways off the support member 20 and out from under the platform member 30 and the pump mechanisms and pump cylinders 20 to be then lifted off the containers. This extensibility of the hoses 45, 46, and 47 facilitate the removal and substitution of containers on the support member when the device is in the raised position. The pump mechanisms and pump cylinders may then be mounted upon the substituted containers before they are moved sideways into position on the support member.

Figure 2 being a right hand end elevational view of Figure 1, shows the relative positioning of the parts and illustrates the position of the connecting members 29 adjacent to the four corners of the support member 20. Figure 2 illustrating the device in lowered position shows that in such position the platform member 30 rests upon the wall 13 within the depressed edge portion 15. In the lowered position the top face of the platform member 30 is flush with the floor 11 and the containers are stored below the surface of the floor 11 with communication provided up through the platform member 30 to a position above the floor surface 11.

Figure 3 illustrates a plan view of my device mounted between two automobile lifts 59 and 60. The platform member 30 is substantially parallel to the runways of the lifts 59 and 60 and is substantially intermediate the two lifts. The funnel 36 is illustrated in draining position under the lift 59 with the extensible pipe 35 in extended position. The device shown in Figure 3 in the downward position of Figure 2 so that only the standards 31, 32, 33, and 34 extend above the surrounding floor surface 11 upon which the operator walks. In this manner only a minimum of floor space is utilized by the lubrication dispensing device and the containers are positioned for direct communication adjacent to the point of the lubricating position.

When it is necessary to replace containers in the device, the valve member 26 is operated so as to raise the platform member 30 and support member 20 upwardly to the position of Figure 1. The containers may then be moved sideways off of the support member 20 out from under the platform member 30 and the pump mechanisms and pump cylinders removed. Other containers may then be substituted in their place and the pump mechanisms and pump cylinders replaced in position upon the substitute containers, and the substitute containers moved into place on the support member 20. The flexible end of the conduit 44 may be flexed to permit the sideward movement of the container 58, or if the end is rigid the container may be slightly tipped to clear

the end. After replacement of the containers the valve member 26 is again operated and the platform member 30 and support member 20 are lowered into the position of Figure 2. The containers are then clearly out of the way and the device is ready for the dispensing of fluid from the containers. The compressed air for operating the pump mechanisms 48, 50, and 52, is supplied through the described flexible conduits (not shown) so that the pump mechanisms are always connected with the source of compressed air for operation of the pump mechanisms. Different control means may be utilized for controlling the pumping operation of the pump mechanisms. A preferable manner of control is to adjust the suitable valve provided to admit compressed air to the air motors of the several pump mechanisms. A pressure of the fluid being pumped is then built up in the system and the fluid under pressure is released and dispensed only upon the opening of the appropriate valve nozzle 40. The arrangement of my device is such that the fluid containers are stored below the surface of a floor and yet maintained in ready position for direct communication from above the floor surface.

In Figures 4, 5, 6, and 7, there is illustrated a modified form of my device in which there is added an auxiliary movement of the support member 20 relative to the platform member 30. In this modified form longer pistons and cylinders are utilized, in order to obtain the additional movement. The two cylinders 66 extend from within the open space 12 down through the bottom of the open space 12 and are supported in a suitable manner upon concrete slabs positioned in the earth 14. The piston stems or rods 63 secured to the platform member 30 have the pistons 64 mounted upon the lower ends thereof. The guide members 65 are connected to the piston stems 63 at a short distance from the pistons 64 and act as guides during the up and down movement of the pistons 64 within the cylinders 66 and also act as stops to limit the upward movement of the piston 64 within the cylinders 66. The stops 65 engaging the upper end of the cylinders 66 prevent the pistons 64 from going completely to the top of the cylinders 66 and brace the piston stems 63 when in raised position against any sway or sideward movement. Since the piston stems 63 and cylinders 66 are longer than the piston stems 27 and cylinders 22 of the form shown in Figure 1, it is seen that the platform member 30 may be raised to a considerably greater height than the form of the device shown in Figure 1.

Instead of the connecting members 29 directly connecting the platform member 30 and the support member 20 as was done in the form of Figure 1, telescoping connecting members 67 and 68 are utilized in this modified form. The rod members 67 are secured to the platform member 30 adjacent to the four corners thereof. The cylindrical telescopic members 68 are secured to the support member 20 adjacent to the four corners thereof. As is better illustrated in Figure 7, the rod member 67 telescopically fits within the cylindrical member 68 to form a united extensible member connecting the platform member 30 and support member 20. To limit the telescopic movement between the rod member 67 and cylindrical member 68, longitudinal slots 69 are provided in the cylindrical member 68 and a cross pin 70 secured to the rod member 67 slidably engages within the slots 69. Therefore, by the pin 70 moving up and down within the slots 69

a limited telescopic movement is permitted within the extensible combination of the rod member 67 and cylindrical member 68.

In the modified form shown in Figures 4, 5, 6, 7 the pump mechanisms are carried directly by the platform member 30 and secured to the underside thereof. As is shown in Figure 4, the pump mechanism 71 and the depending pump cylinder 72 are carried by the platform member 30 under the standard 31. Similarly, the pump mechanism 73 and pump cylinder 74 are carried by the platform member 30 under the standard 32, and the pump mechanism 75 and the pump cylinder 76 are carried by the platform member 30 under the standard 33. The arrangement is such that, upon upward movement of the platform member 30 relative to the containers positioned below, the pump cylinders or inlets 72, 74, and 76 are raised upwardly and out of the openings in the tops of the containers, respectively, thereby clearing the containers to permit sideward movement of the containers on the support member 20. Similarly the conduit 44 is raised upwardly with the platform member 30 so as to be withdrawn from the container 59 and thus permitting sideward movement of the container 58 on the support member 20.

With the device in the downward position illustrated in Figure 4 the containers are all positioned below the surface of the floor 11 and are also in direct communication through the respective conduits in the standards 31, 32, 33 and 34 to points above the level of the floor. When it is necessary to replace the containers, the valve member 26 is operated to operate the fluid pressure means comprising the cylinders 66, piston 64, and piston stems 63. The platform member 30 is thereupon raised upwardly by the fluid pressure means to the position illustrated in Figure 5. As the telescoping members 67 and 68 are permitted to move relative to each other, the support member 20 is not raised upwardly from the ledge 17. This initial movement of the platform member 30 relative to the support member 20 withdraws the pump cylinders or inlets from the openings in the tops of the containers so as to clear the containers. The initial movement of the platform member 30 relative to the support member 20 is illustrated in Figure 5, which shows the pump cylinder or inlet 72 withdrawn from the container 55. At this point the pins 70 are at or near the top of the slots 69 but have not as yet exercised an upward pull upon the cylindrical members 68. Upon further upward movement of the platform member 30, the pins 70 engage the tops of the slots 69 and the rod members 67 pull upwardly upon the cylindrical member 68. This upward pull of the telescoping members 67 and 68 extending between the platform member 30 and support member 20 thereby raises the support member 20 upwardly. The length of the parts and arrangement thereof are such that upon the piston 64 reaching its upper limit, the device is in the position shown in Figure 6. As is seen in view of Figure 6, the containers are raised to readily accessible position at substantially the level of the floor 11. The raised containers being clear of the cylindrical pumps or inlets may be readily moved sideways on or off of the support member 20. Therefore when containers are to be substituted for those already upon the support member, the containers thereon may be readily removed and other containers placed upon the support member.

After the substitution of containers has been

effected, the valve member 26 is again operated to release the air in the cylinders 66 and thus causing the fluid pressure means to operate in the opposite direction, that is, so that the piston stem 63 moves downwardly in the cylinder 66. During the first portion of this movement, both the platform member 30 and support member 20 move downwardly until the support member 20 rests upon the ledge 17. The members 67 and 68 then telescope upon further downward movement of the platform members 30 and the platform member 30 is lowered into the position of Figure 4 and the pump cylinders or inlets are again inserted within the respective openings in the tops of the containers. The sequence of movement from the raised position to the lowered position is successively shown in Figure 6, Figure 5, and Figure 4. When in the lower position, the containers are again stored below the surface of the floor and communication is again established through the conduits extending through the platform member 30 to provide for the dispensing of fluid from the containers to points above the level of the floor.

Although I have described my invention with a certain degree of particularity, it is understood that the present disclosure has been made only by way of example and that numerous changes in the details of construction and the combination and arrangement of parts may be resorted to without departing from the spirit and the scope of the invention as hereinafter claimed.

I claim as my invention:

1. A device for holding a fluid container below the level of a floor within an open space in said floor and in position for communication with said container from above the said floor, comprising, in combination, a platform member adapted to close said open space at said floor level; a support member connected to, and positioned below, said platform member within said open space, said support member being adapted to support said fluid container below said platform member, a conduit carried by said platform member, said conduit being adapted to provide communication with said container from above the platform member, and raising means for raising and lowering said platform member, the combination of the platform member, the support member, the conduit, and the raising means being such that a container may be placed upon the support member and the conduit placed in communication with the container when the platform member and support member are in a raised position and such that the container is positioned below the floor level in the said open space closed by the platform member when the platform member and support member are in a lowered position.

2. A device for covering a fluid container below, and within an open space of, a floor surface in position for communication from above the said floor surface, comprising, in combination, a platform member adapted to close said open space, a support member positioned below the platform member for supporting said container below the platform member, connecting means connecting said platform member and said support member, a conduit carried by, and extending through, the platform member, said conduit being adapted to be placed in communication with said container, and means for raising and lowering said platform member and said support member together so that in raised position ingress is afforded to said container raised on the support member and in lowered position the said

open space is closed by the platform member and communication is provided from above the platform member through said conduit to the said container on the support member.

3. The combination of cover means for closing an open space provided in a floor, support means for supporting a fluid container within said open space below the cover means, conduit means carried by, and extending through, the cover means for providing communication with said container from above the cover means, and raising means for raising and lowering the cover means and support means for uncovering the open space and raising the container to accessible position, and for covering the open space and lowering the container below the level of the floor.

4. The combination of cover means for closing an open space provided in a floor, support means for supporting a fluid container within said open space below the cover means, conduit means carried by, and extending through the cover means for providing communication with said container from above the cover means, and raising means for raising and lowering the cover means so that the open space may be uncovered to provide access to the container and so that the open space with the container therein may be covered over.

5. A device for covering a fluid container below, and within an open space of, a floor in position for communication from above the said floor, comprising, in combination, a platform member adapted to close said open space, supporting means positioned below the platform member for supporting said container below the platform member, a conduit carried by the platform member, said conduit being adapted to extend downwardly into, and to communicate with, said container supported by the supporting means, a connecting member carried by said platform member and extended downwardly into said open space, engaging means carried by the connecting member and adapted to engage said supporting means, rest means for supporting said supporting means, and raising means for raising and lowering said platform member, the arrangement of the platform member, supporting means, connecting member, engaging means, and raising means being such that the platform member raised by the raising means first raises the conduit from within said container and next successively raises the supporting means from the rest means to raise the said container in the said open space to substantially the level of said floor.

6. A device for covering a fluid container below, and within an open space of, a floor in position for communication from above said floor, comprising, in combination, a platform member adapted to close said open space, a support member for supporting said container below the platform member, a conduit carried by, and extending downwardly through the platform member, said conduit being adapted to extend into, and to communicate with, said container supported by the support member, raising means for raising and lowering the platform member to uncover and to cover said open space, a first connecting member extending from the platform member, and a second connecting member extending from the support member, one of said connecting members having an engaging portion extended therefrom and adapted to engage the other of the said connecting members, the arrangement of the connecting members being such that the raising

means first moves the platform member relative to the support member to withdraw the conduit from the container and such that the raising means secondly moves the platform member and support member together to place the container in readily accessible position at the level of said floor.

7. In combination, cover means for covering a fluid container within an open space of a floor, conduit means carried by said cover means, said conduit means being adapted to extend downwardly into, and to communicate with, said container to provide communication with the container from above the said cover means, support means for supporting the container in the said open space below the cover means, and raising means for raising the cover means above said open space, for withdrawing the said conduit from the container, and for raising the support means in said open space.

8. In combination, a first platform member adapted to close an open space in a floor, a second platform member adapted to support a fluid container in said open space below the first platform member, a conduit carried by, and extending through, the first platform member and being adapted to extend downwardly into the fluid container to provide communication with the container from above the first platform member, and means for raising the first platform member alone to withdraw the conduit from the container supported on the second platform member and for raising the first platform member and second platform member together to raise the container in said open space into accessible position at substantially the level of the floor.

9. In combination, cover means for closing an open space within a floor, support means for supporting a fluid container within said open space below said cover means, connecting means connecting said cover means and said support means, fluid conducting means mounted upon said cover means to provide communication with the container from above the cover means, pump means in communication with the said fluid conducting means to pump fluid from the said container through said fluid conducting means, and fluid pressure means for raising said cover means and said support means to uncover said open space and to raise the said container in said open space.

10. The combination of a double platform, the upper platform being adapted to close an open space in a floor and the lower platform being adapted to support a fluid container within the open space, a standard mounted upon, and extended above, the upper platform, a fluid conduit carried by, and extended through, the said standard, said fluid conduit being adapted to extend into, and to communicate with, the said container, and fluid pressure means mounted within said open space for raising and lowering said double platform so that the container may be readily stored in said open space and the open space closed.

11. A device for dispensing above a floor surface fluid from a container within an open space in said floor, through an opening in the top of the container, comprising, in combination, a support member for supporting said container within the said open space, a cover member for covering said container within said open space, a fluid conduit carried by, and extended from above the floor surface through, said cover member,

said fluid conduit being adapted to be inserted down into the opening in the top of the container, a pump mechanism carried by the cover member for pumping fluid from the container through the fluid conduit to above said floor surface, telescoping means connecting said support member and said cover member, means for limiting the telescoping movement of said telescoping means, and fluid pressure means for raising said cover member above the said floor surface, the telescoping means being arranged so that the cover member is first raised sufficiently from the support member for the fluid conduit to clear the container and is then further raised to lift the support member and the container supported thereon to position for moving the container on and off the support member from the said floor surface.

12. A device for holding a fluid container in position for use below a surface, said surface having an open space thereon, comprising, in combination, a platform member adapted to close said open space at said surface, a support member for supporting said container below said platform, a fluid conduit carried by, and extending downwardly from, said platform, said conduit being adapted to be inserted into said container, an extension member connecting said platform member and said support member for permitting a limited vertical movement between said platform member and said support member, and fluid pressure means for moving one of said platform members and said support member, the arrangement of the platform member, the support member, and extension member being such that said limited vertical movement of the platform member and support member relative to each other clears the said fluid conduit from said container to facilitate its sideward movement on and off the support member and being such that movement of one of the platform members and support member in excess of said limited vertical movement moves the other of said platform members and support member to provide for the closing and opening of said open space and the lowering and raising of the said container on the support member.

13. In combination, housing means for housing a container within an open space in a floor, said container having an opening in its top, said housing means being arranged to be raised and lowered relative to the container, a dispensing member carried by the housing means through which fluid may be dispensed from the container, said dispensing member being extended downwardly from the housing means and being adapted to extend into the container through the said opening in the top thereof, means for raising the housing means and dispensing member above the container to cause the dispensing member to clear the container and for raising the container in the open space to substantially the level of said floor.

14. In an apparatus for handling fluids, the combination of a cover plate for closing an open space provided in a floor upon which the operations take place in utilizing the apparatus, a support member connected to, and disposed below, said cover plate for supporting a fluid container below the cover plate, a conduit carried by, and extending through, the cover plate, for providing communication with said container from above the cover plate, said conduit being extended upwardly from the cover plate to a position above said floor to provide ready access

to the conduit at said position in the handling of said fluids, and raising means for raising and lowering the cover plate and support member, the raising of the cover plate uncovering the open space and moving the cover plate and conduit out of operating position and the raising of the support member moving the container up out of said open space to a position made accessible from said floor by said movement of the cover plate and conduit, the lowering of the cover plate covering the open space and moving the cover plate and conduit into operating position and the lowering of the support member moving the container down in the said open space below the level of said floor to unobstruct said operations.

15. In an apparatus for dispensing fluid from a fluid container to a position accessible to dispensing operations combusted upon a floor, said floor having an open space for storing said container below the level of said floor, the combination of a first platform member for closing said open space, a standard mounted upon, and extended above, the said first platform member, a second platform member connected to, and disposed at a distance below, said first platform member, said second platform member being adapted to support a fluid container in dispensing position in said open space below said first platform member, a conduit carried by said standard and extended through said first platform member, said conduit being adapted to communicate with the container supported on the second platform member, and means for raising and lowering said first platform member and said second platform member relative to the

floor, the raising of the platform members uncovering said open space and moving the said container up into a position accessible from said floor to permit replacement of the container on the second platform member, the lowering of the platform members closing said open space and moving the container down in the open space away from said position accessible to dispensing operations to permit unobstructed dispensing operations through the conduit carried by the said standard.

16. The combination of cover means for closing an open space provided in a floor, support means connected to the cover means for supporting a fluid container in dispensing position within said open space and below the cover means, conduit means carried by, and extending through, the cover means for providing communication with said container within the open space from a position above the cover means, dispensing means in communication with said conduit means for dispensing through the conduit means fluid from the container within said open space and below the cover means, and raising means for raising and lowering the cover means and support means, the raising of said cover means and support means uncovering the open space and moving the container to a position accessible from the floor for replacement of the container, the lowering of said cover means and support means moving the container down into dispensing position within the open space and moving the cover means to cover the open space.

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