

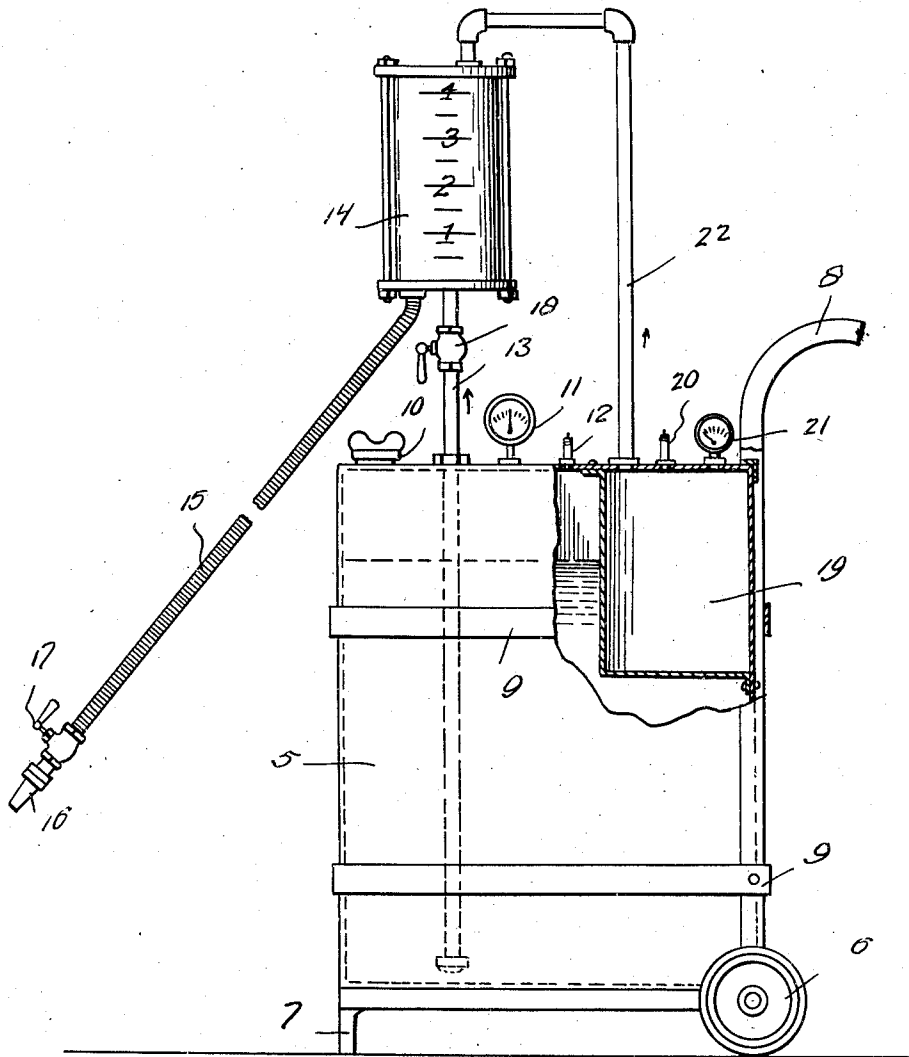
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OIL DISPENSING TANK

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OIL-DISPENSING TANK.

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This invention relates to new and useful improvements in dispensing tanks, and has for its primary object to provide a highly novel, simple, and inexpensive tank primarily, though not specifically adapted for use in the maintenance and dispensing of motor lubricating oils.

An important object of this invention is to provide means whereby the oil may be rapidly dispensed from a visible oil chamber by reason of compressed air and wherein the oil is delivered into said chamber by another air pressure with the result that the oil is properly dispensed regardless of its viscosity which is usually very heavy during cold weather.

Another important object is to provide a dispensing tank of this character that may be readily moved from place so as to facilitate the lubrication of automobile engines and the like and that will not require the hand pumping of the oil or the dispensing of the same by gravity which usually requires the use of oil cans or other receptacles.

With the foregoing and other objects in view as the nature of the invention will be better understood, the same comprises the novel form, combination and arrangement of parts hereinafter more fully described, shown in the accompanying drawing and claimed.

In the drawing:—

The figure is a view mainly in side elevation and partly in cross section of an oil dispensing tank constructed in accordance with the present invention.

Now having particular reference to the drawing, my novel device consists of a main storage tank 5 of suitable capacity and design equipped at its bottom with one or more casters 6 in opposed relation with which are depending feet 7, said feet and casters being provided for permitting the tank to be disposed stationarily in upright position, or to permit the same to be rolled from place to place when canted over upon the one or more casters 6. Directly above the casters, said tank is provided with a suitable handle 8 to permit of its easy movement from place to place, while surrounding this tank and as a means for securing the handle bar thereto, are metallic straps 9—9, preferably two in number.

The top wall of this tank 5 is provided with a normally capped filler neck 10, a pressure gage 11 having communication with

the interior of the tank and an air introduction valve 12.

Leading into this tank 5 through the top wall thereof is a discharge pipe 13 that terminates at its lower end in slightly spaced relation with the bottom wall of the tank and being preferably equipped at its lower end with a suitable strainer as suggested by the dotted lines in the drawing.

Upon the upper end of this pipe 13 and having communication therewith is a conventional visible delivery chamber 14, from the bottom of which leads a flexible hose 15 equipped at its free end with a suitable nozzle 16 directly in back of which is a suitable control valve 17. Arranged within the pipe 13 between the visible chamber 14 and the tank 5 is a similar control valve 18.

Suitably arranged within the upper end of the tank 5 remote from the filler neck 10, gage 11, and pressure air inlet valve 12 is a small air storage tank 19, certain walls of which are defined by the outer and top wall of the main tank as clearly disclosed. Leading into the tank 19 through the top wall of the main tank 5 is a pressure air inlet valve 20 and a pressure gage 21. Communicating at its opposite ends with the top of the storage tank 19 and the top of the visible feed chamber 14 is a pressure delivery pipe 22.

After the main tank 5 has been charged with a supply of oil, it being necessary that the oil level be at a point below the top wall of the tank a supply of air is injected above the level through the valve 12, the pressure thereof being registered by the gage 11. Also, a supply of air is injected into the compressed air tank 19 through the valve 20 the pressure in this tank being lower than the pressure above the oil in the main tank 5.

The valves 17 and 18 are normally closed, but obviously upon opening the valve 18, a predetermined quantity of the oil will flow into the visible chamber 14. This valve 18 is then closed, after which the nozzle 16 of the flexible hose 15 is injected into the breather pipe or other point to receive the lubricant. The valve 17 is then opened and obviously in view of the pressure of the air from the tank 19 being exerted upon the head of the fluid within the visible chamber 14 the fluid within this visible chamber is forcibly ejected therefrom and through the pipe 15 and nozzle 16, and this regardless of the viscosity of the oil. Furthermore the

fluid will be discharged in rapid manner and with little or no liability of the oil being spilled upon the ground, the running of the automobile, or other place thereon which is a frequent occurrence in the now generally followed methods of lubricating automobile motors.

It will thus be seen that I have provided a highly novel, simple, and relatively inexpensive oil dispensing tank that is well adapted for all the purposes heretofore designated, and even though I have herein shown and described the invention as consisting of certain detail structural elements, it is nevertheless to be understood that some changes may be made therein without affecting the spirit and scope of the appended claim.

Having thus described the invention, what I claim as new and desire to secure by Letters Patent is:—

In an oil dispensing device of the class described, a main storage tank, an air inlet valve arranged in the top of the tank whereby air pressure may be built up within the tank above the level of the fluid therein, a visible feed chamber arranged above the

tank, a supply pipe extending from the bottom wall of the feed chamber downwardly into the tank, the lower end of the pipe terminating adjacent the bottom of the tank, the air in the tank forcing the fluid upwardly through the supply pipe into the feed chamber, a control valve within said pipe between the chamber and the tank, a flexible hose leading from the bottom of the feed chamber, a valved nozzle on the free end of the hose, an air pressure tank arranged within the main storage tank, a portion of the side wall of the main storage tank comprising the adjacent portion of the side wall of the air pressure tank, a portion of the top of the main storage tank comprising the top of the air pressure tank, an air inlet valve arranged in the top of the air pressure tank, the pressure of the air within the main storage tank being greater than the pressure of the air in the pressure tank, and a pressure delivery pipe extending between the air pressure tank and the upper end of the visible feed chamber.

In testimony whereof I affix my signature.

WALTER HASTY.