

Oct. 18, 1932.

J. E. HEAD ET AL

1,883,787

LIQUID DISPENSING APPARATUS

Filed Oct. 6, 1930

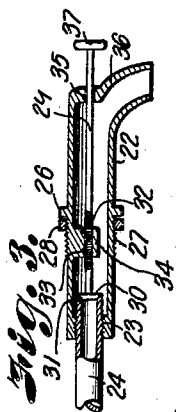


Fig. 2.

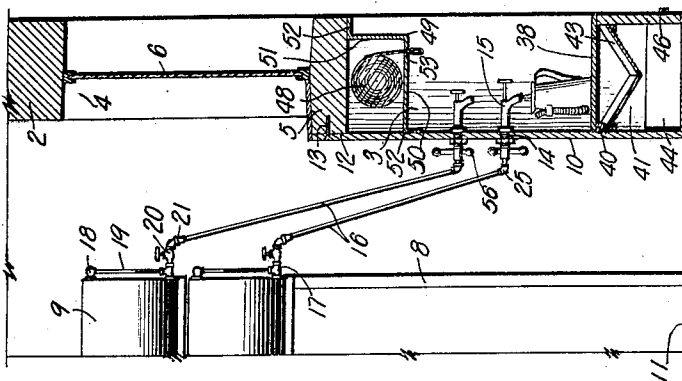
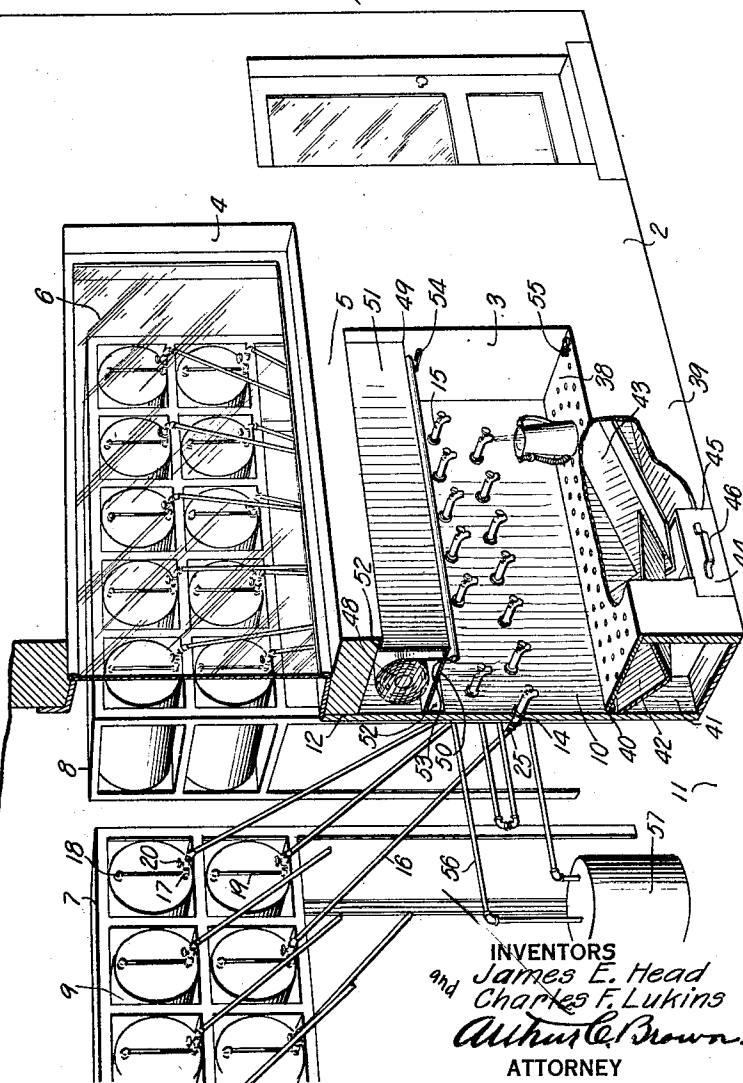


Fig. 1.



INVENTORS  
James E. Head  
and Charles F. Lukins  
Arthur C. Brown.  
ATTORNEY

## UNITED STATES PATENT OFFICE

JAMES E. HEAD AND CHARLES F. LUKINS, OF TULSA, OKLAHOMA

## LIQUID DISPENSING APPARATUS

Application filed October 6, 1930. Serial No. 486,707.

Our invention relates to liquid dispensing apparatus and more particularly to apparatus of that character for vending lubricating oils or liquids; the principal object of our invention being to provide apparatus whereby lubricant may be selectively drawn at a compact point of discharge from any one of a plurality of shipping containers arranged conveniently within the station and in clear view of the customer.

Another object of the invention is to embody means in the apparatus for preventing congealing of the oil at the point of discharge during cold weather.

A further object of our invention is to provide means for restricting the withdrawal of liquids from the containers to authorized attendants of the service station.

In accomplishing these and other objects of our invention we have provided improved details of structure the preferred form of which is illustrated in the accompanying drawing, wherein:

Fig. 1 is a perspective view of a portion of the service station equipped with apparatus embodying our invention, a part of the station being broken away to more clearly illustrate the arrangement of the apparatus.

Fig. 2 is a vertical sectional view of the front wall of the station illustrating, particularly, the relation between the containers and respective faucets.

Fig. 3 is a longitudinal section of a faucet adapted to be used in connection with our invention.

Referring more in detail to the drawing: 1 designates a service station having a front wall 2 including a lower rectangular opening 3 and an upper opening 4 spaced from the lower opening by a partition 5.

Provided in the upper opening is a window 6 for displaying rack sections 7 and 8, spaced from each other and from the front wall of the station, and supporting containers or drums 9.

The opening 3 is closed by a faucet board or panel 10 extending upwardly from the floor 11 of the station and secured to the rear face 12 of the partition 5 by screws 13 or the like.

Series of openings 14 are provided in staggered rows in the panel for receiving faucets 15 connected to relative containers on the rack by conduits 16.

Containers or drums wherein lubricating oils are commonly shipped are provided with diametrically opposite ports in one end for filling and draining liquid from the containers. In our apparatus one of these openings is utilized for mounting a T-fitting 17, the opposite opening being provided with an elbow-fitting 18 so that a glass gauge 19 may be secured in these fittings to indicate the amount of liquid in each container, the container being positioned in the rack with the T-fitting adjacent the floor of the rack. Threaded into the lower fitting 17 is a valve 20 for controlling flow of liquid from the container, and a union 21 adjacent the valve serves to connect the line 16 to the valve.

Faucets of various types may be used for draining liquid from the conduits but in order to prevent congealing of the lubricant in cold weather at the point of discharge it is desirable to provide a valve embodying means for cutting off the flow of liquid before it reaches the panel and for this purpose a faucet such as is shown in Fig. 3, is particularly adapted.

The faucet 15 comprises a cylindrical body portion 22 having a threaded inner flange 23 at its inner end for receiving a nipple 24 which may be connected to the conduit 16 by an elbow 25.

At its approximate center the valve body is provided with an outwardly extending flange 26 and with an adjacent up-set threaded portion 27 for receiving a binding nut 28 adapted to secure the valve body in the opening 14 of the panel.

A valve stem 29 carrying a valve 30 on its inner end for cooperating with a valve seat 31 in the nipple 24, is provided with a threaded portion 32 engaging a complementary threaded opening 33 formed in an inwardly directed boss 34 of the valve body. The outer end of the valve stem projects through an opening 35 in the curved forward end 36 of the valve housing and is provided with a head 37 to facilitate rotation of the stem.

In order to prevent waste of oil when filling measuring containers a drain board 38, serving also as a shelf for the measures is mounted in elevated position from the floor on a front wall section 39 of the station and on plates 40 secured to the panel 10.

Mounted in the chamber 41 provided below the drain board are troughs 42 and 43 positioned in oppositely inclined directions so that their inner ends meet at a common point and above a pan 44 slidably engaging an opening 45 in the front wall section, a handle 46 being provided on the pan to facilitate removal thereof for draining the collected oil from the pan.

The recess formed in the front wall by the opening 3 and closed rear wall 10 may be readily inclosed by a curtain 48 rotatably mounted in a cabinet 49 comprising a lower wall 50 and a front wall 51, each having an outwardly directed flange 52 suitably secured respectively to the faucet board 10 and to the partition 5. The free end of the curtain is passed through an elongated slot 53 in the lower wall of the cabinet and is provided with hooks 54 which may be secured and locked to complementary staples 55 fastened on the drain board.

To further insure free flow of oil from the faucets during cold weather a steam or hot water line 56, leading from a source of heat as indicated at 56, may be passed in the form of a coil around the inner, lower end of the conduits immediately behind the faucet board.

When employing an apparatus, constructed and assembled as described, each of the containers is filled with a lubricant, especially adapted and recommended for a specific make of automobile, and the containers are preferably stamped with the name of the car for which the lubricant is to be used. Corresponding designations are placed adjacent the faucets on the front face of the faucet board so that the motorist, in buying oil, will be assured of obtaining the proper lubricant for his vehicle.

Due to the remote position of the containers from the point of withdrawal it is possible to provide the faucets in compact relation to conserve space and to add to the convenience of the station attendants.

With the use of a faucet similar to the one shown in Fig. 3, together with a heating coil mounted behind the faucet board and adjacent the conduits, a free flow of oil from the faucets is assured in cold weather.

Lubricant which may be spilled during the course of serving cars will drain into the removable pan provided below the faucets, thus avoiding loss and waste of lubricant.

By lowering and locking the curtain to the drain board when the station is not in operation, unauthorized access to the faucets is prevented.

What we claim and desire to secure by Letters Patent is:

In combination with a housing having a side wall, series of horizontal containers in the housing, sight glasses on the front end of said containers, a window in the side wall for exposing the containers and sight glasses, a faucet panel in said wall below the window, series of faucets mounted in the panel and having outlet openings outside the housing, said faucets including body portions extending into the housing having valve means operable from the panel front for controlling flow of liquid from the faucets, and conduits for conveying liquid from the containers to respective faucets on the panel.

In testimony whereof we affix our signatures.

JAMES E. HEAD.

CHARLES F. LUKINS.

70

75

80

85

90

95

100

105

110

115

120

125

130