W. S. FOLANT.

LIQUID DISPENSING APPARATUS.

APPLICATION FILED JULY 9, 1919.

1,395,405.

Patented Nov. 1, 1921.

4 SHEETS—SHEET 3.

Fig. 8.

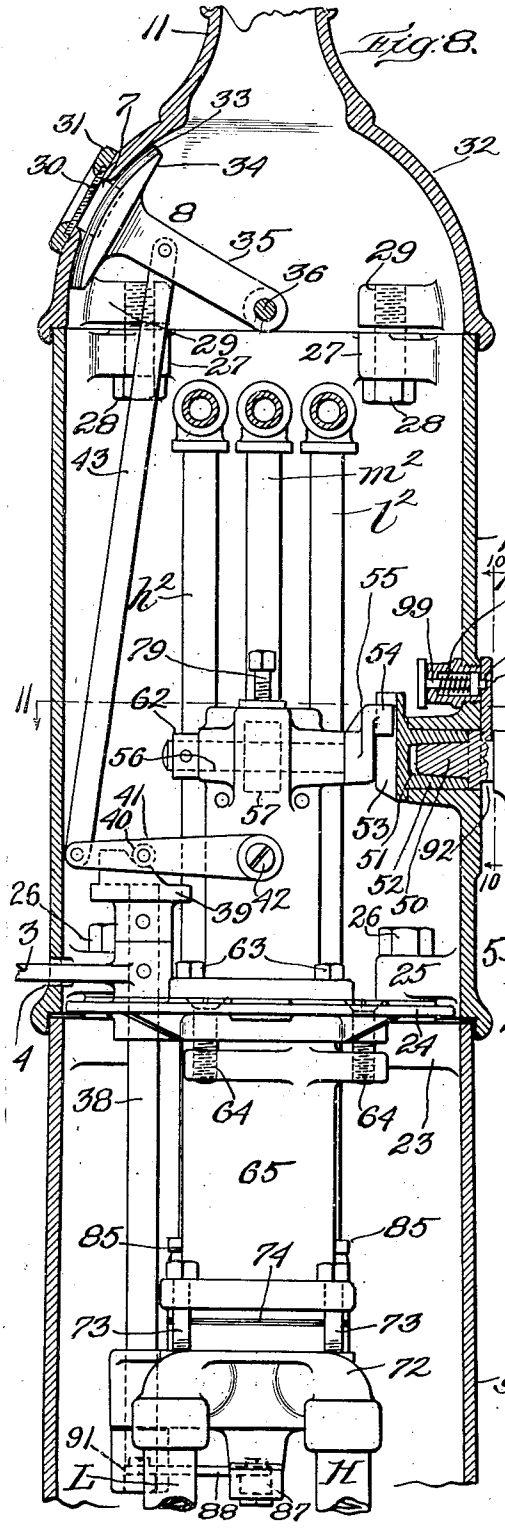


Fig. 9.

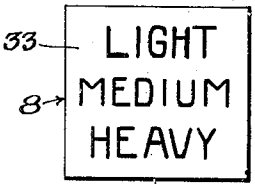
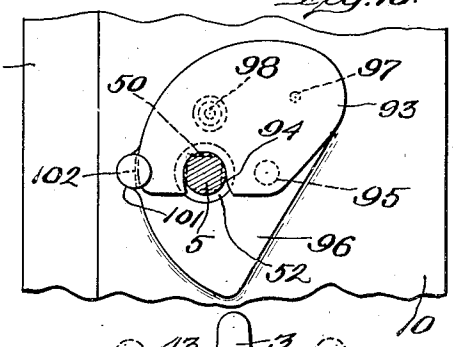


Fig. 10.



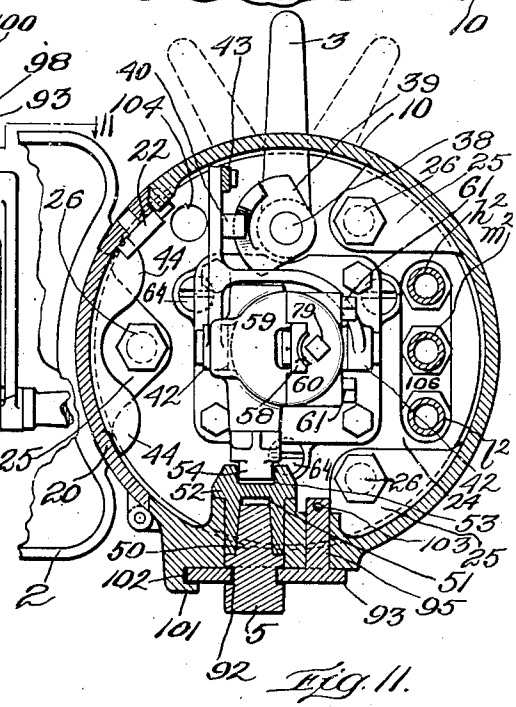


Fig. 11.

Inventor:
William S. Folant,
by Arthur F. Randall
Atty

W. S. FOLANT.

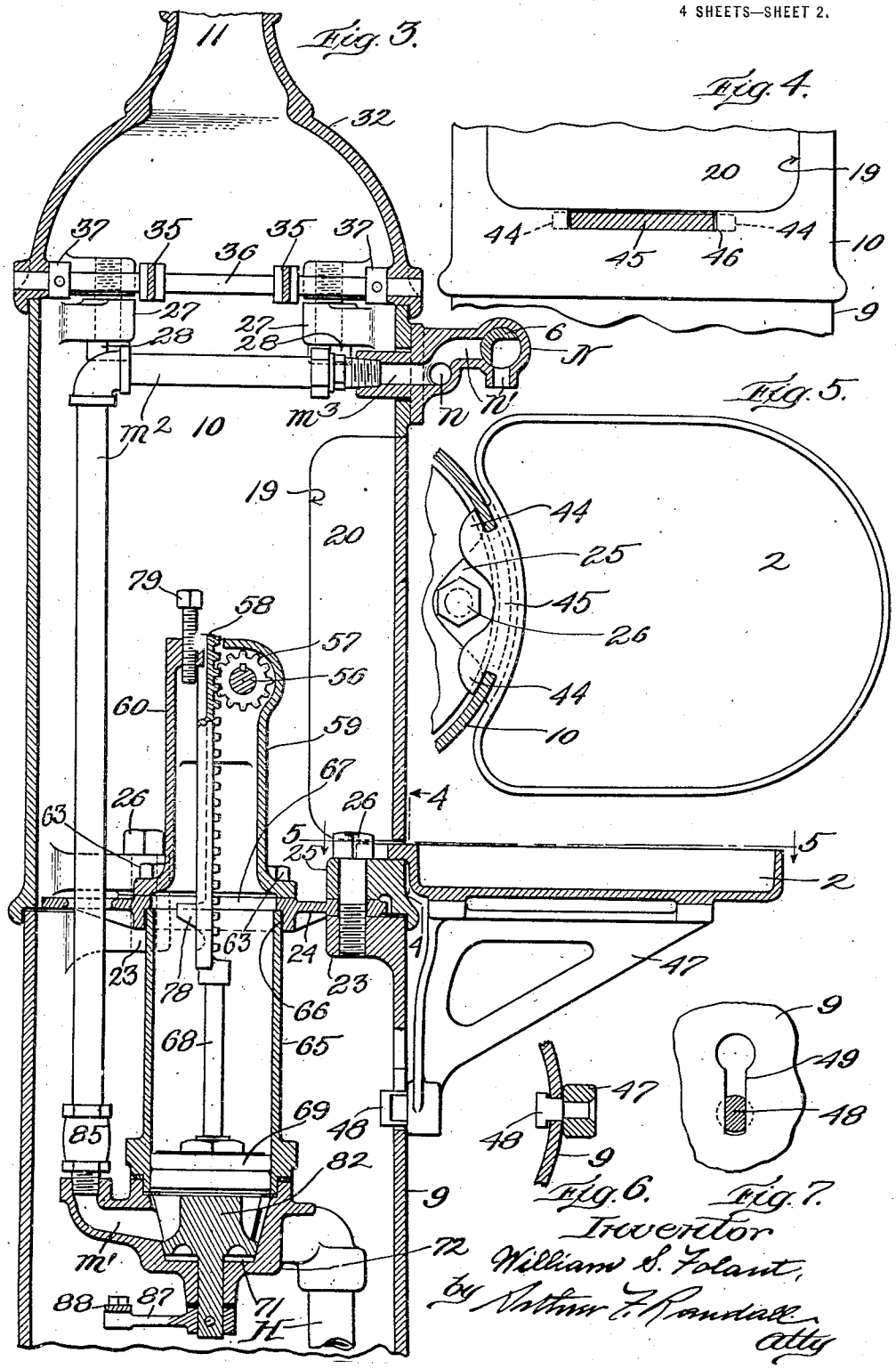
LIQUID DISPENSING APPARATUS.

APPLICATION FILED JULY 9, 1919.

1,395,405.

Patented Nov. 1, 1921.

4 SHEETS—SHEET 2.



Inventor

William S. Folant,

by Arthur F. Randall

Atty

W. S. FOLANT.

LIQUID DISPENSING APPARATUS.

APPLICATION FILED JULY 9, 1919.

1,395,405.

Patented Nov. 1, 1921.

4 SHEETS—SHEET 3.

Fig. 8.

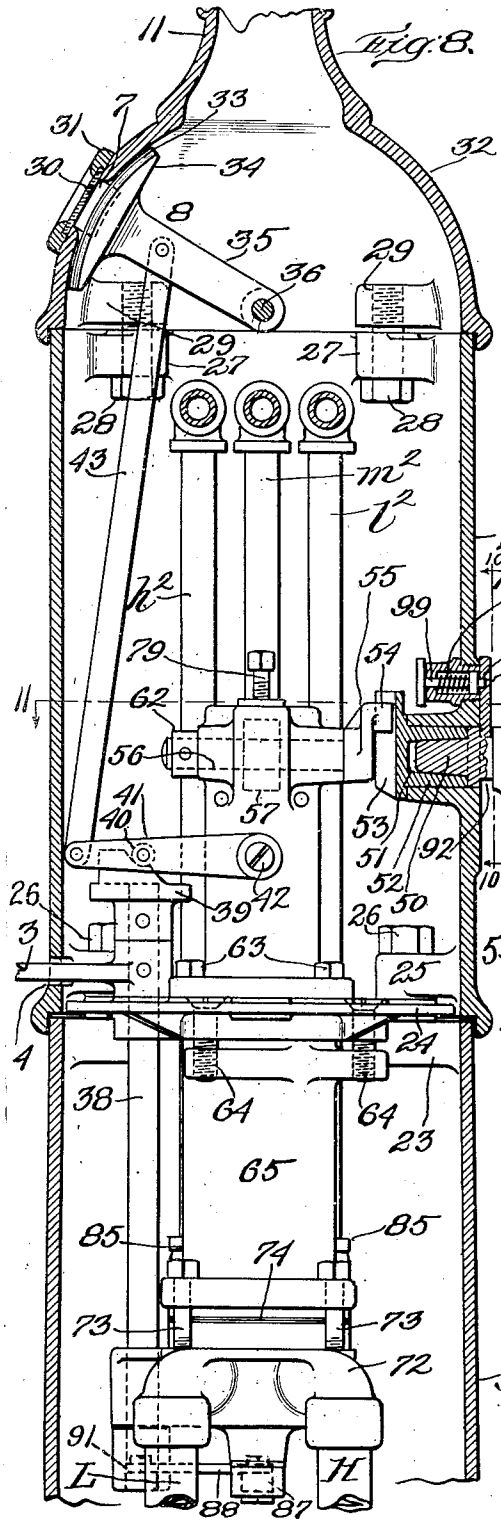


Fig. 9.

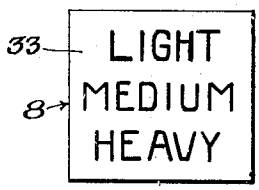
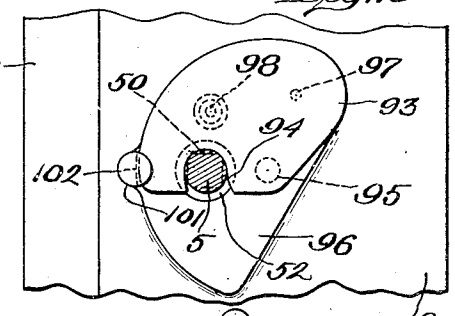


Fig. 10.



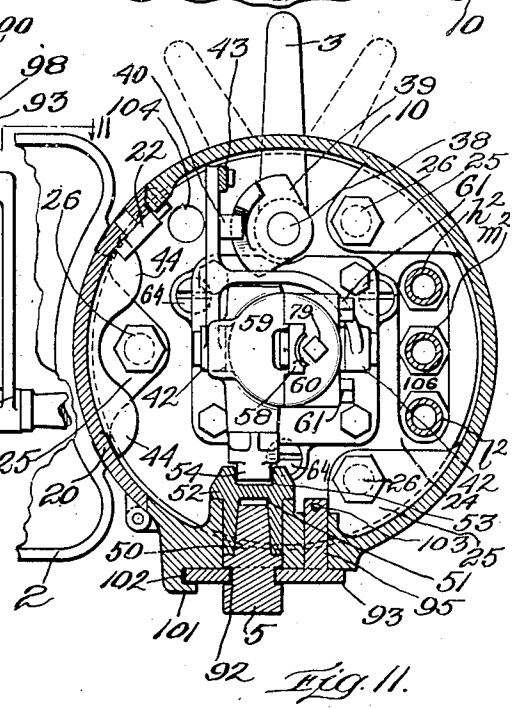


Fig. 11.

Inventor:
William S. Folant,
by Arthur F. Randall
Atty

W. S. FOLANT.

LIQUID DISPENSING APPARATUS.

APPLICATION FILED JULY 9, 1919.

1,395,405. Patented Nov. 1, 1921.

4 SHEETS—SHEET 4.

Fig. 12.

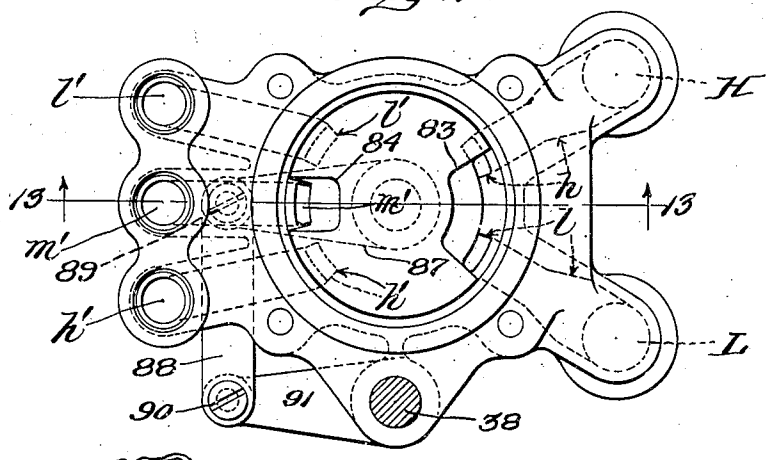


Fig. 13.

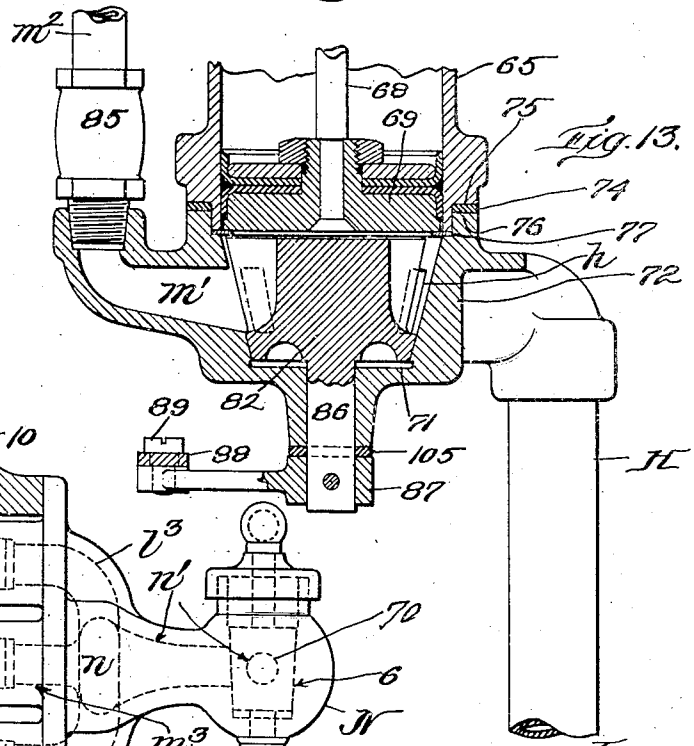
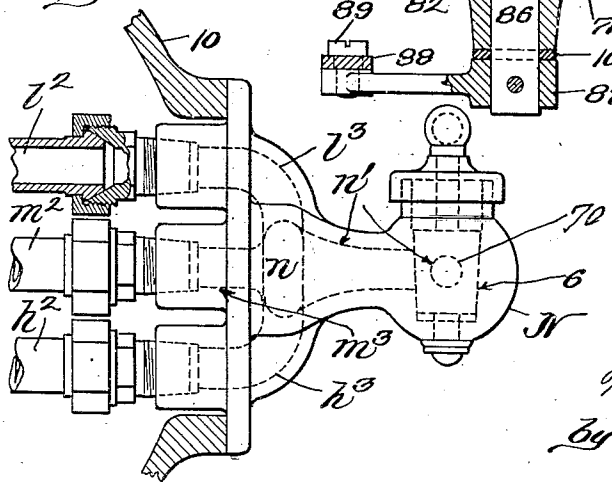


Fig. 14.



Inventor:
William S. Folant
by Arthur F. Randall
Atty.

UNITED STATES PATENT OFFICE.

WILLIAM S. FOLANT, OF STONEHAM, MASSACHUSETTS, ASSIGNOR TO STANDARD OIL COMPANY OF NEW YORK, OF NEW YORK, N. Y., A CORPORATION OF NEW YORK.

LIQUID-DISPENSING APPARATUS.

1,395,405. Specification of Letters Patent. Patented Nov. 1, 1921.

Application filed July 9, 1919. Serial No. 309,655.

To all whom it may concern:

Be it known that I, WILLIAM S. FOLANT, a citizen of the United States, residing at Stoneham, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Liquid-Dispensing Apparatus, of which the following is a specification.

This invention relates to dispensing apparatus for liquids and particularly to dispensing apparatus for lubricating oils.

Garages and other automobile supply stations usually carry in stock at least three kinds of lubricating oils, viz., heavy, light and medium, and ordinarily such stations are equipped with three separate dispensing apparatuses each of which includes a supply tank, a pump and pipes connecting the tank and pump. This equipment was objectionably elaborate and expensive and occupied considerable space. Moreover, such equipment was not adapted for use otherwise than within a building.

The object of this invention is to simplify and improve the construction of dispensing apparatus for lubricating oils, and particularly to provide improved dispensing apparatus of this kind which will require but two kinds of oil to be carried in stock, viz., heavy and light, but which may be caused to deliver either light, or heavy, or medium oil as may be desired. Another object of the invention is to provide an oil dispensing apparatus for use at automobile supply stations which will be more simple and convenient than apparatus of this class as heretofore constructed. Another object is to provide an apparatus of the character indicated which will be particularly adapted to be stationed out of doors, that is, out in the open in front of a garage or on a sidewalk adjacent the curb, for example. Other objects and advantages will hereinafter appear.

The invention consists of a dispensing apparatus for liquids, particularly lubricating oils, having the peculiar features of construction and mode of operation set forth in the following description and particularly pointed out and defined in the claims at the close thereof.

In the accompanying drawings:

Figure 1 is a side elevation of a dispensing apparatus for lubricating oils constructed in accordance with this invention.

Fig. 2 is a front elevation of the apparatus shown in Fig. 1.

Fig. 3 is a section on enlarged scale, on line 3—3 of Fig. 2.

Fig. 4 is a section on line 4—4 of Fig. 3.

Fig. 5 is a section on line 5—5 of Fig. 3.

Figs. 6 and 7 are details hereinafter described.

Fig. 8 is a section on line 8—8 of Fig. 1.

Fig. 9 is a face view of the indicator member.

Fig. 10 is a detail in elevation of a portion of the body part of the housing hereinafter described.

Fig. 11 is a section on line 11—11 of Fig. 1 but as viewed from the opposite side of the apparatus.

Fig. 12 is a plan view of the lower cylinder head hereinafter described.

Fig. 13 is a section on line 13—13 of Fig. 12, but with some parts added.

Fig. 14 is a detail in plan of the delivery nozzle hereinafter described.

Herein the invention is embodied in a dispensing apparatus for lubricating oils which, as shown in Figs. 1 and 2, is in the form of a lamp post adapted to be located out of doors in front of a garage or other automobile supply station, or upon the sidewalk adjacent the curb thereof. This lamp post apparatus is about 7 feet tall and its lower body portion about 12 inches in outside diameter. Also, it is hollow and contains most of the instrumentalities and operating parts of the structure.

Projecting from this hollow post is a delivery nozzle N beneath which is a shelf 2 adapted to support the measure, can, or other receiving vessel into which the oil is to be delivered from the nozzle N. The apparatus is adjusted, by means of a regulating handle 3, to deliver exclusively either one of three kinds of oil through the single delivery orifice or port 70 of nozzle N, said handle projecting through a slot 4, formed in the hollow post, to the exterior of the apparatus. Adjacent this slot 4 the post is marked upon its exterior with the letters L, M and H which stand for light, medium and heavy, and which are positioned so as to serve as an index by means of which the regulating handle 3 may be positioned to cause the apparatus to deliver the desired kind of oil. After positioning the regulating handle 3, the apparatus is operated by

the manual rotation of a crank handle 5 with the result that the selected kind of oil is discharged from the nozzle N downwardly into the measure or other receiving vessel that is placed on the shelf 2. The nozzle N is preferably constructed with a valve 6. The hollow post is made with a window 7 through which can be seen an indicator member 8 on which is inscribed the three words "Light," "Medium" and "Heavy" as shown in Fig. 9. This indicator member 8 is automatically controlled and operated through the adjustment of the regulating handle 3 so as to display at the window 7 the word that is appropriate to the position of the regulating handle 3. Thus, for example, when the said handle 3 is placed or positioned to cause the apparatus to deliver medium oil the indicator member 8 is automatically positioned to display the word "Medium."

The hollow lamp post referred to is made up of three tubular metal sections 9, 10 and 11, fitted one upon the other, the section 11 being constructed at its upper end to receive and support a glass globe 12 which may be illuminated at night from within by means of an electric lamp, said lamp being supplied with current through a cable, not shown, extending down through the hollow post into the ground and thence to a source of current supply. The lower base section 9 is adapted at its lower end to rest upon a suitable foundation 14 to which it may be secured by lag screws 15. The lower end of the body section 10 fits telescopically over, and is supported by, the upper end of the base section 9. So, also, the lower end of the top section 11 fits telescopically over, and is supported by, the upper end of the body section 10. The lower base section 9 is made at its front side with a doorway 16 normally closed by a panel or door 17 that is removably fastened in place by means of screws 18. The body section 10 is made at the front thereof with a doorway 19 normally closed by a door 20 connected with said body section by hinges 21. A lock 22, see Figs. 1, 2 and 11, normally fastens the door 20 in its closed position so that the interior of the body section 10 is inaccessible.

At its upper end the lower base section 9 is provided upon its interior with three inwardly projecting lugs 23, see Figs. 3 and 8, on which is seated a flange member, or spider, 24 forming part of the pump presently to be described, and on top of this spider 24 rest three inwardly projecting lugs 25 provided at the lower end of body section 10 upon the interior thereof. The lugs 23 and 25 register and are fastened together with the spider 24 clamped between them by means of screws 26. At its upper end the body section 10 is made upon its interior with four inwardly projecting lugs 27 which are fastened by screws 28 to four inwardly projecting lugs 29 provided upon the interior of the top section 11 near the lower end thereof.

By arranging the several sections of the post so that the base section 9 fits telescopically into the lower end of the body section 10 and the latter fits telescopically into the lower end of the top section 11, the joints between these sections are closed against the entrance of water.

The indicator window 7 is closed by a transparent pane of glass 30, Fig. 8, held in place over said window by a metal frame 31 fastened by screws or otherwise to the outside of the top section 11. The lower portion 32 of the top section 11 is substantially a hollow hemisphere or dome, and the indicator member 8 is made with an outer surface 33 that is curved and convex so that it is parallel with and disposed close to, but out of contact with, the inner surface of the hemispherical portion 32 of top section 11. On this surface 33 the words "Light," "Medium" and "Heavy," shown in Fig. 9, are inscribed. The surface 33 is one side of a block, or head, 34 which may be of cast iron, said head being formed with a pair of integral arms 35 fast on a rock shaft 36 journaled at its ends in bearings provided at the lower end of top section 11. This rock shaft 36 is held against endwise movement in its bearings by collars 37 fastened thereon.

The regulating handle 3 is fast on a shaft 38 which also has fixed on its upper end a cam 39 supporting a cam roll 40 carried by a lever 41, said lever being fulcrumed at 42 and connected by a link 43 with one of the arms 35 of the indicator member 8. When the regulating handle 3 is swung rearwardly into position where it registers with the index L marked on body section 10 adjacent slot 4, the cam 39 permits the indicator member 8 to swing downwardly into position where the word "Light" is opposite the window 7. When the regulating handle 3 is moved forward into its middle position where it registers with the index M on the outside of the body section 10, the cam 39 acts through lever 41, roll 40 and link 43 to raise indicator member 8 into an intermediate position where the word "Medium" occupies a position opposite the window. Further movement of the regulating handle 3 forward into position where it registers with the index H on the outside of the body section 10, causes the cam 39 to act through said parts to further raise indicator member 8 and support the latter in position where the word "Heavy" is opposite the window 7. It will thus be seen that the indicator 8 serves to inform the purchaser of the kind of oil that he is receiving.

The shelf 2 may be a casting made in the

form of a tray as shown, so that it serves not only to support the measure or other receiving vessel into which the oil is delivered, but also to catch any oil spilled from the measure, as the latter is being removed from the shelf, as well as to catch any oil that may drip from the nozzle 1. Upon its inner or rear side the shelf 2 is made with a pair of hooks 44, Figs. 5 and 11, which are part of a lug 45 projecting from shelf 2 and occupy a notch or recess 46 formed in the sill of the doorway 19. This notch 46 is formed in the wall of body 10 immediately below the door 20 and the engagement of the sides of the lug 45 with the sides of said notch prevents sidewise displacement of the shelf 2, while the engagement of the hooks 44 with the inner side of the wall of body section 10 holds said shelf against movement away from said body section. The shelf 2 includes a downwardly extending bracket, or arm, 47 provided at its lower end with a T-shaped stud 48 extending through a buttonhole slot 49 formed in the wall of the base section 9 to receive it, the wings or shoulders of this T-shaped stud normally engaging said wall to hold the shelf 2 against being swung upwardly at its outer end, while the engagement of the bracket or arm 47 with the outer side of the base section 9 supports the shelf 2 against swinging downward. When the door 20 occupies its closed position its lower edge is immediately above the lug 45 so that said door locks the shelf 2 in position and the latter cannot be removed. When, however, the door 20 is unlocked and swung into its full open position the shelf 2 can be lifted upwardly and when so lifted the hooks 44 clear the wall of the body section 10 and at the same time the T-shaped stud 48 is lifted into a position at the upper larger end of the button-hole slot 49 so that said stud can be removed from said slot. Thus only a person having a key to the door 22 can remove the shelf 2, provision for such removal being desirable, especially when the shelf needs cleaning.

The handle 5 by means of which the deliveries of oil are effected is made with a hub having a square stud portion 50 occupying a square socket 51 formed in a shaft member 52 that is rotatably supported in a bearing extending through the wall of the body section 10. At its inner end the shaft member 52 is made with a radial slot 53 occupied by a stud 54 integral with a crank arm 55. The crank arm 55 is integral with a shaft 56 on which is splined a gear or pinion 57 that meshes with a rack 58. The rack 58 is reciprocated vertically by means of the pinion 57 which latter is actuated from the handle 5 through shaft member 52, arm 55 and shaft 56, said rack being guided in its vertical movements, and held in engagement with said pinion by ways provided on a pump head consisting of two semi-cylindrical sections 59 and 60 fastened together by means of screws 61. The bearings for the shaft 56 are on the section 59 of this head, and said shaft is held against endwise movement in said bearing by the arm 55 and a collar 62. The head 59—60 is substantially cylindrical in form, its upper end being closed by an end wall except for the opening through which the rack 58 plays. At its lower end the cylindrical head 59—60 is made with an outwardly projecting flange fastened by screws 63 to the spider 24.

Screws 64 secure the upper end of a pump cylinder 65 within a socket 66 provided upon the underside of spider 24, the upper end of the bore of this cylinder registering with a circular aperture 67 formed through spider 24 which is slightly larger in diameter than said bore. The lower end of the rack 58 is connected by a rod 68 with a double acting piston 69, that is, a piston having a pair of opposed leather cups. The purpose of the central aperture 67 made slightly larger than the bore of cylinder 66 is to permit of removal of the piston 69, when necessary, it being clear that after head 59—60 is removed the piston can be withdrawn from the cylinder 66 and removed from the machine whenever it needs repair or attention.

The lower end of the cylinder 66 fits telescopically into a counterbore provided at the upper end of a valve chamber 71, see Figs. 3, 8, 12 and 13, formed within a lower cylinder head 72 that is fastened by four screws 73 to cylinder 65, a joint closing gasket 74 of leather being interposed between an annular shoulder 75 on cylinder 65 and an annular shoulder 76 on head 72. Within the counterbore of the valve chamber 71 and at the lower end of the cylinder 65 is provided a sheet metal ring 77 which serves as a stop to limit the downward movement of the piston 69, while the upward movement of the piston is limited by the engagement of a lug 78 integral with rack 58, with an adjustable stop screw 79 occupying a tapped hole in the top wall of the upper head 59–60. Preferably these two stops 77 and 79 are arranged to so limit the movement of the piston that exactly one quart of oil is drawn into the cylinder 65 during each upward stroke of the piston and just one quart of oil is discharged from the cylinder during each downward stroke of the piston.

The cylinder head 72 is made with two inlet ports l and h opening into the valve chamber 71 at one side of the latter, and with three outlet ports l', h', and m' opening into said valve chamber at the opposite side thereof. The port h is connected with a line of pipe H which leads to a tank or

reservoir holding a supply of heavy lubricating oil, a check valve 80 being provided in this line of pipe which opens toward the cylinder 65. The port l is connected with a line of pipe L which leads to another tank or reservoir holding a supply of light lubricating oil, a check valve 81 being provided in this line of pipe which also opens toward the cylinder 65.

Within the valve chamber 71 of head 72 is arranged a tapered valve 82 formed upon its periphery with a port 83 coöperating with the two inlet ports h and l of the cylinder head, and with another port 84 coöperating with the three outlet ports l', m' and h' of the cylinder head 72.

The valve 82 has capacity for rotation within the valve chamber 71 and when thus adjusted the port 84 can be placed so as to register with either one of the three outlet ports l', m' and h', the other two of said ports being closed by the valve. The ports of the valve and of the cylinder head 72 are constructed and arranged so that when the port 84 of the valve is in register with the outlet port l' of the cylinder head 72, the inlet port l at the opposite side of the head is in communication with the cylinder 65 through the port 83 of the valve, while the inlet port h is closed by said valve. Also, when the valve 82 is positioned so that its port 84 registers with the outlet port h' of the cylinder head, the inlet port l is closed by the valve while inlet port h is in communication with the cylinder 65 through the valve port 83. Further, when the valve 82 is positioned with its port 84 in register with the outlet port m', both of the inlet ports l and h are in communication with the cylinder 65 through the valve port 83. Thus, with the construction shown, there are three positions for the valve 82, viz., one where inlet l and outlet l' are in communication with the cylinder 65 to the exclusion of the other ports of the head 72, another where the two inlet ports h and l and the outlet port m' are in communication with the cylinder to the exclusion of the other ports of the cylinder head, and a third where the inlet port h and outlet port h' are in communication with the cylinder to the exclusion of the other ports of the cylinder head.

A line of pipe l^2 connects the outlet port l' of cylinder head 72 with a port l^3 formed within the nozzle N, there being a check valve 85 provided therein which opens away from cylinder 65. The outlet port m' of head 72 is connected by a line of pipe m^2 with another port m^3 formed in nozzle N, there being a check valve 85 provided in this line also which opens away from cylinder 65. Likewise the outlet port h' of head 72 is connected by a line of pipe h^2 with a third port h^3 provided in nozzle N. This line of pipe is also provided with a check valve 85 opening away from the pump cylinder. The three nozzle ports l^3, m^3 and h^3 unite at n and from this junction point a single discharge port or conduit n' leads to the delivery end of the nozzle, said port or conduit containing the valve 6 by means of which it is opened and closed. The discharge port n' is preferably made to occupy a higher plane than the three ports l^3, m^3 and h^3 and the horizontal portions of the pipes connected therewith so that at the completion of each discharge stroke of the piston 69 only the oil within the port n' can drip from the nozzle. Thus, dripping from the nozzle after a pumping operation is practically eliminated.

The valve 82 is made with an integral stem 86 extending through the bottom wall of the head 72 and this stem has pinned to its lower end portion an arm 87 to the outer end of which one end of a link 88 is pivotally connected at 89. The opposite end of the link 88 is pivotally connected at 90 to the end of an arm 91 that is mounted upon, and pinned to, the lower end of the shaft 38 to the upper end of which the regulating handle 3 is also pinned. When the regulating handle 3 is swung from one position to another as above described it not only operates or adjusts the indicator 8 as set forth, but simultaneously acts through the shaft 38, arm 91, link 88, arm 87 and stem 86, to rotatively adjust the valve 82. Thus when the handle 3 is set opposite the mark L on the exterior of body section 10, the valve 82 is positioned so as to connect ports l and l' with the pump cylinder; when the handle is set opposite the mark M the ports h, l and m' are connected with the pump cylinder, and when the handle is set opposite the mark H the ports h and h' are connected with said cylinder.

It will now be clear that when the valve 82 is positioned with its port 84 in register with outlet l' and the pump is operated, light lubricating oil exclusively will be discharged from nozzle N, that when valve 82 is positioned with its port 84 in register with outlet m' a mixture of light and heavy lubricating oils will be discharged at nozzle N, and that when said port 84 is registered with the outlet port h' heavy lubricating oil exclusively will be discharged from the nozzle. The quantity of oil of one kind remaining in the ports 83 and 84 of the valve and the port n' of the nozzle, when changing from one kind of oil to another kind, is so small that it is wholly negligible.

The usual grade of medium lubricating oil is a mixture of heavy and light oils in the proportions of one part heavy and two parts light. Therefore, the port 83 is constructed so that when the port 84 is in full register with the port m', the port l is fully

uncovered and the port h is half uncovered. The port m', however, is made of great enough capacity and separated from the ports l' and h' far enough to permit of rotative adjustment of the valve while occupying its intermediate position to vary the grade of the medium oil delivered by the pump. That is to say, the valve may be adjusted while occupying its intermediate position, one way or the other, without uncovering either port l' or h', to cause the pump to deliver a lighter or heavier grade of medium oil as desired.

As will be clear, upward movement of the piston 69 causes oil to flow from one or the other, or both, supply pipes L and H (according to the position of the valve 82) into the pump cylinder until further upward movement of the piston is stopped by the engagement of lug 78 with stop screw 79 while downward movement of said piston forces the oil out of the cylinder through one or the other of the three outlet ports l', m' or h' until further downward movement of the piston is prevented by the engagement of said piston with the stop ring 77.

The hub of the crank handle 5 is made with an annular groove 92 that is occupied by a shutter-latch 93 which serves to hold the squared portion 50 of said crank handle within the square socket 51 of the socket member 52. This shutter latch is herein shown as a metal plate formed with a notch 94 to fit around the hub of the crank handle 5 and with an integral trunnion or stud shaft 95 journaled in a bearing provided through the wall of body section 10. Shutter latch 93 fits against the outer flat face of a boss 96 provided upon the exterior of the body section 10 and is made upon its inner side with two sockets 97 and 98 to receive the outer end of a bolt 99 slidably mounted within a housing forming part of body section 10. Within this housing is a spring 100 which yieldingly urges the bolt 99 outwardly toward the shutter-latch. The inner end of the bolt projects beyond its housing and is provided with a head which can be conveniently grasped. When the crank handle is locked in position by shutter latch 93 the bolt 99 is held forward by its spring with the outer end of the bolt occupying the socket 98 of the shutter latch so that the latter is also locked in its handle locking position and said crank handle cannot be removed except by opening door 20, reaching into the body section 10 and withdrawing the bolt 99. This, of course, can be done only by a person having a key for the lock 22. When this is done, however, the shutter-latch can be swung back thus freeing the crank handle and permitting of its removal. When the crank handle is thus removed the shutter latch can be swung down until the bolt 99 enters the socket 97 which locks the shutter-latch in a position where it closes the handle opening in body section 10 and covers the socket 51. A lug 101 integral with body section 10 and disposed adjacent shutter-latch 93 is formed with a notch 102 occupied by the marginal portion of said latch. This lug 101 is located at the opposite side of socket member 52 from trunnion 95 and cooperates with a cotter pin 103 at the inner end of said trunnion in holding said shutter-latch in position against the face of the boss 96. When the crank handle 5 is removed from the socket member 52 a convenient place for storing the same is within the body section 10 whose door 20 can be opened only by a person having a key for the lock 22.

The main advantage to a pump constructed and operating as above described is that from a supply comprising but two kinds of oil or other liquid, any one of three kinds of oil or other liquid may be discharged from the pump. Another advantage is that the apparatus automatically and visually indicates the kind of oil for which it is adjusted to discharge. A further advantage is that practically all of the fastening devices, such as the screws 28, or most of them, are upon the interior of the housing. Further, the apparatus described has the advantage that separate delivery conduits for the different kinds of oils convey the latter from the pump practically up to the point of delivery at the nozzle N. This together with the fact that at the completion of the discharge stroke of piston 69 the cylinder 65 is practically completely emptied of oil and prevents mixing of one kind of oil with another.

The upper end of the cylinder 65 is vented by means of the slight opening existing in the top wall of the closed in upper pump head 59—60. This upper head 59—60 serves to prevent dust, dirt, water or the like from entering the cylinder 65.

By providing the pump shaft 66 with an arm 55 engaged with the socket member 52 as described the necessity of setting up the parts of the apparatus with the axis of the shaft 56 in alinement with the axis of socket member 52 and crank handle 5 is avoided. Also, this feature of the construction greatly facilitates assembling and disassembling the parts. Further, it will be clear that the pump head 59—60, rack 58 and piston 69 can be removed and replaced without disturbing any other parts of the apparatus except the connection between the link 43 and lever 41. Another advantage to the construction herein shown and described is that a comparatively small amount of machine work is required in its production.

What I claim is:

1. An apparatus of the character described having, in combination, pumping de-

vices including a single actuating member, means connecting said pumping devices with a plurality of supply reservoirs holding different kinds of liquids, and means for regulating the pumping devices to cause the same to pump from either reservoir exclusively or from a plurality thereof simultaneously, said pumping devices including a separate delivery conduit for each kind of liquid that is pumped.

2. An apparatus of the character described having, in combination, pumping devices; means connecting said pumping devices with a plurality of supply reservoirs holding different kinds of liquids; means for regulating said pumping devices to cause the latter to either pump liquid from either one of said reservoirs exclusively, or to pump liquid from a plurality of said reservoirs simultaneously so that a liquid is discharged from the pumping devices that is of a kind different from that in either reservoir, and a separate delivery conduit for each kind of liquid.

3. An apparatus of the character described having, in combination, pumping devices; means connecting said pumping devices with a plurality of supply reservoirs holding different kinds of liquids; means for regulating said pumping devices to cause the latter to either pump liquid from either one of said reservoirs exclusively, or to pump liquid from a plurality of said reservoirs simultaneously so that a liquid is discharged from the pumping devices that is of a kind different from that in either reservoir; a separate delivery conduit for each kind of liquid, and a nozzle with which all of said delivery conduits are connected, said nozzle being ported to unite all of said conduits and provide a single delivery orifice for all of the latter.

4. An apparatus of the character described having, in combination, pumping devices; means connecting said pmping devices with a plurality of supply reservoirs holding different kinds of liquids, and means for regulating said pumping devices to cause the latter to either pump liquid from either one of said reservoirs exclusively, or to pump liquid from a plurality of said reservoirs simultaneously so that a liquid is discharged from the pumping devices that is of a kind different from that in either reservoir; a separate delivery conduit for each kind of liquid; a nozzle with which all of said delivery conduits are connected, said nozzle being ported to unite all of said conduits and provide a single delivery orifice for all of the latter, and a valve for controlling the discharge of liquid from said nozzle.

5. An apparatus of the character described having, in combination, pumping devices; means connecting said pumping devices with a plurality of supply reservoirs holding different kinds of liquids; means for regulating said pumping devices to cause the latter to either pump liquid from either one of said reservoirs exclusively, or to pump liquid from a plurality of said reservoirs simultaneously so that a liquid is discharged from the pumping devices that is of a kind different from that in either reservoir, a separate delivery conduit for each kind of liquid, and a nozzle with which all of said discharge conduits are connected, said nozzle being ported to unite all of said conduits and provide a single delivery orifice for all of the latter that is closely adjacent the discharge ends of all of said conduits.

6. An apparatus of the character described having, in combination, a pump cylinder; a piston; means for operating said piston; two supply conduits connected with said cylinder, one for supplying heavy oil and the other for supplying light oil; three delivery conduits connected with said cylinder, one used exclusively for light oil, another used exclusively for medium oil and the third used exclusively for heavy oil, and means for controlling said conduits to cause the piston when operated to either discharge light oil through the light oil delivery conduit, or medium oil through the medium oil delivery conduit, or heavy oil through the heavy oil conduit.

7. In an apparatus of the character described, the combination with a housing including a hollow body made with a doorway; a delivery nozzle upon the exterior of said housing; pumping devices upon the interior of said housing connected with said nozzle, and a shelf supported in position beneath said nozzle by said housing, said shelf being locked against removal by said door when the latter occupies its closed position and being removable from said housing when said door occupies its open position.

8. In an apparatus of the character described, the combination with a housing including a hollow body made with a doorway; a door for said doorway; a key operated lock for securing said door in its closed position; a delivery nozzle upon the exterior of said housing; pumping devices within said housing connected with said nozzle, and a shelf supported in position beneath said nozzle by said housing, said shelf being locked against removal by said door when the latter occupies its closed position and being removable from said housing when said door occupies its open position.

9. In an apparatus of the character described the combination with a housing including a hollow body made with a door-

way; a door for said doorway; a delivery nozzle upon the exterior of said housing; pumping devices within said housing connected with said nozzle, and a shelf upon the exterior of said housing occupying a position beneath said nozzle, said shelf projecting through said doorway beneath the lower end of said door and separably interlocked with said body so that the shelf is locked against removal by the door when the latter occupies its closed position but can be disengaged from said body and removed when said door is opened.

10. An apparatus of the character described comprising a lamp post housing including in its construction a base section; a tubular body section fitting telescopically upon the upper end of said base section, said body section being made with a doorway; a closure for said doorway; a delivery nozzle upon the exterior of said housing disposed above said doorway and closure; a shelf upon the exterior of said housing separably engaged with the latter and held in position against removal by said closure when the latter occupies its closed position, said shelf being removable when said closure is removed from its closed position, and means within said housing for fastening the base section to the body section; a hollow top section fitting telescopically upon the upper end of said body section and adapted at its upper end to hold a lamp, and means within said housing for fastening said top section to said body section.

11. In an apparatus of the character described the combination of a cylinder; a piston in said cylinder; means for operating said piston; a head at one end of said cylinder formed with two inlet ports and three outlet ports, and a valve adustably mounted within said head and formed with ports cooperating, respectively, with the inlet and outlet ports of the head, said valve being adustable so as to connect one of the inlet ports with one of the outlet ports, or to connect the other inlet port with another of said outlet ports, or to connect both of said inlet ports at the same time with the third outlet port.

12. In an apparatus of the character described, a pump provided at one end with a head formed with two inlet ports and three outlet ports opening into a valve chamber, and a valve adjustably mounted within said chamber and controlling communication between said ports so that one of said inlet ports may be connected thereby with one of said outlet ports, or the other inlet port may be connected thereby with another of said outlet ports, or both of said inlet ports may be connected thereby with the third outlet port.

In testimony whereof I have affixed my signature.

WILLIAM S. FOLANT.