

June 29, 1943.

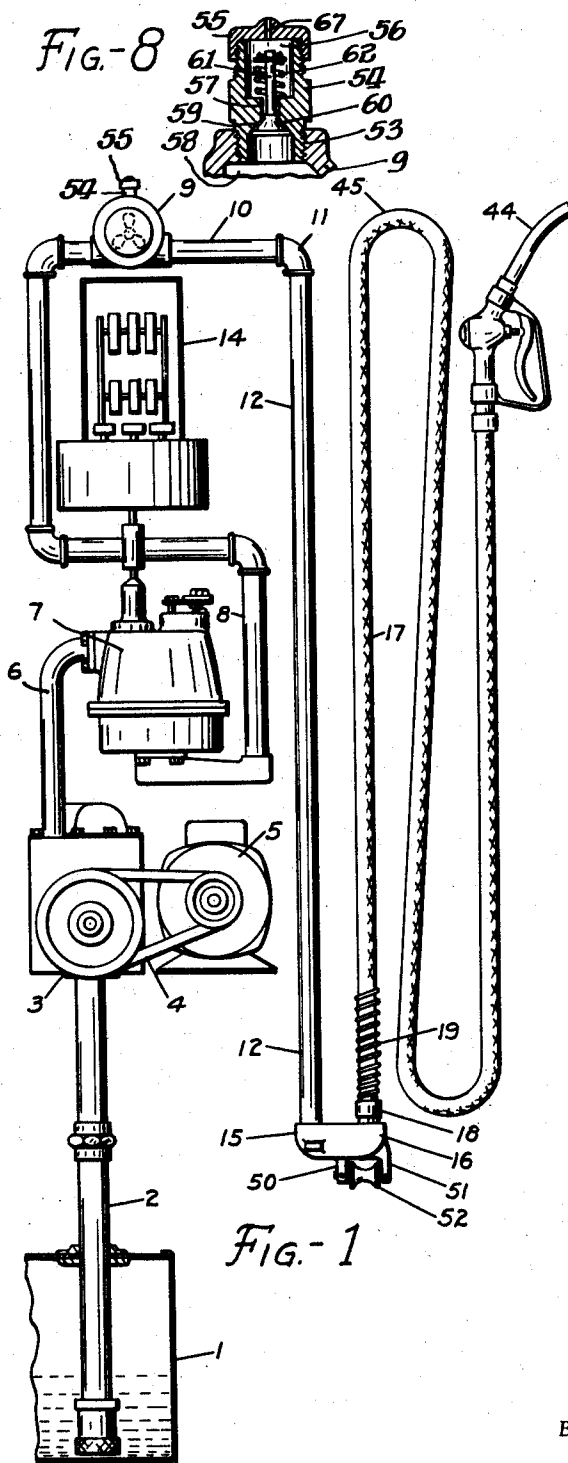
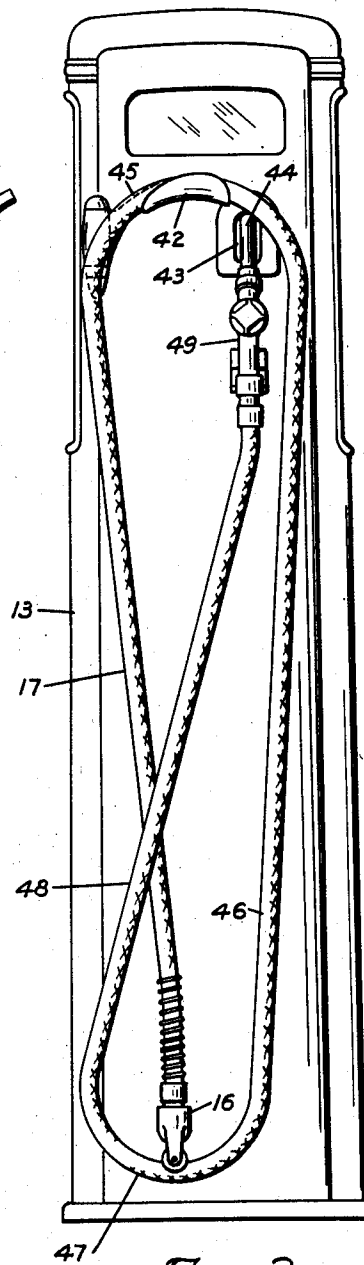
C. C. OBERLY

2,322,966

LIQUID DISPENSER

Filed Jan. 11, 1939

5 Sheets-Sheet 1



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June 29, 1943.

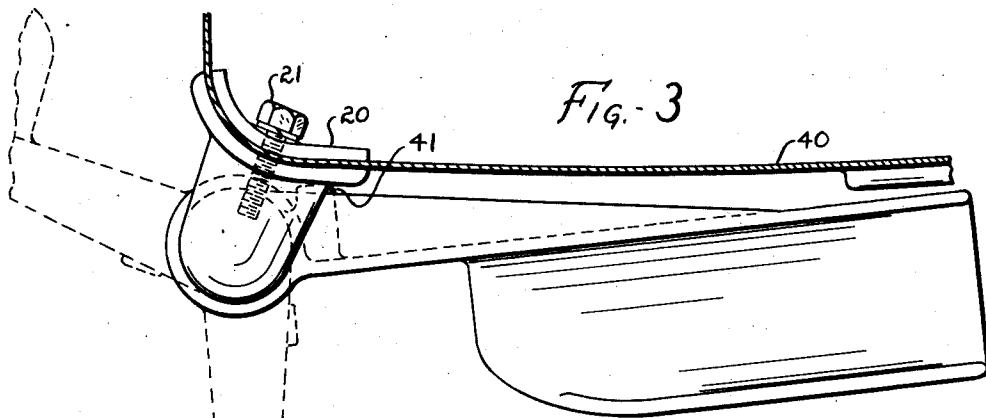
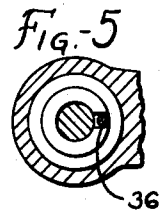
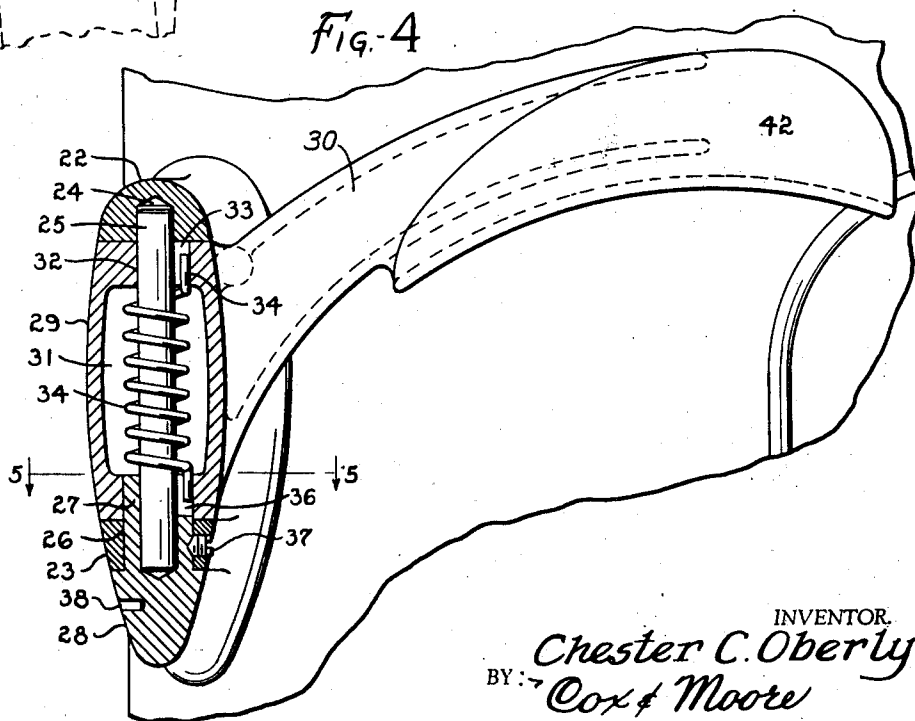
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LIQUID DISPENSER

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5 Sheets-Sheet 2



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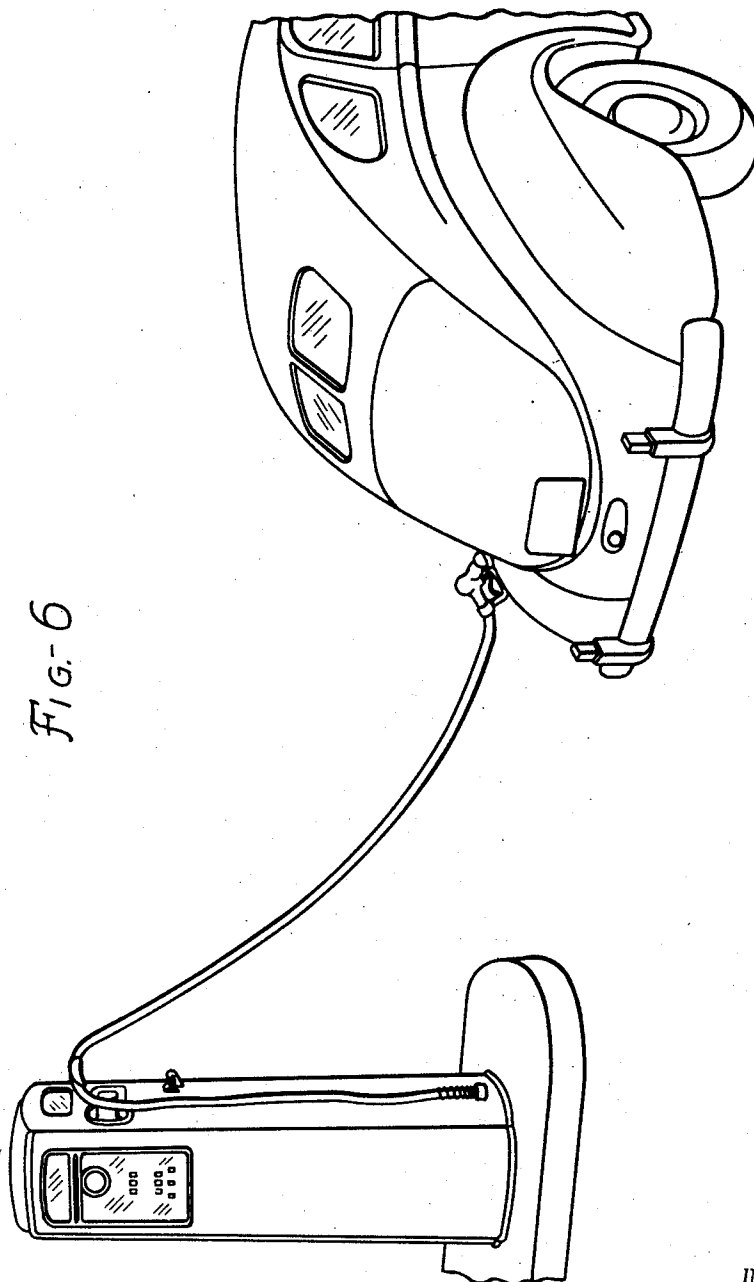
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LIQUID DISPENSER

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5 Sheets-Sheet 3



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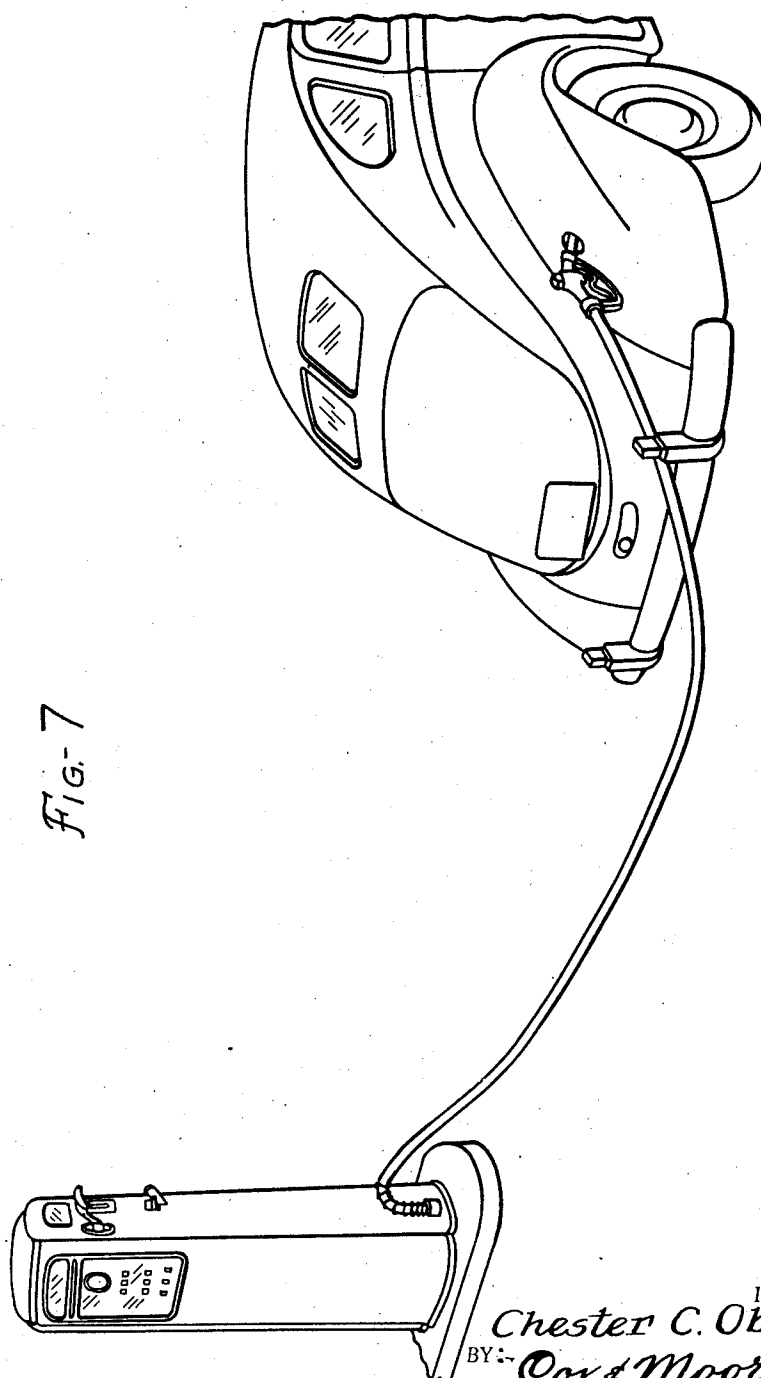
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LIQUID DISPENSER

Filed Jan. 11, 1939

5 Sheets-Sheet 4



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LIQUID DISPENSER

Filed Jan. 11, 1939

5 Sheets-Sheet 5

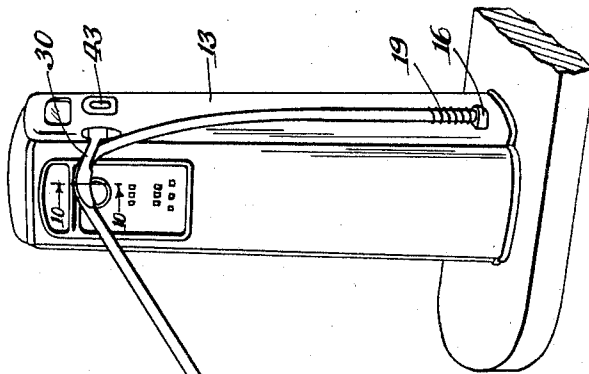


FIG. - 9.

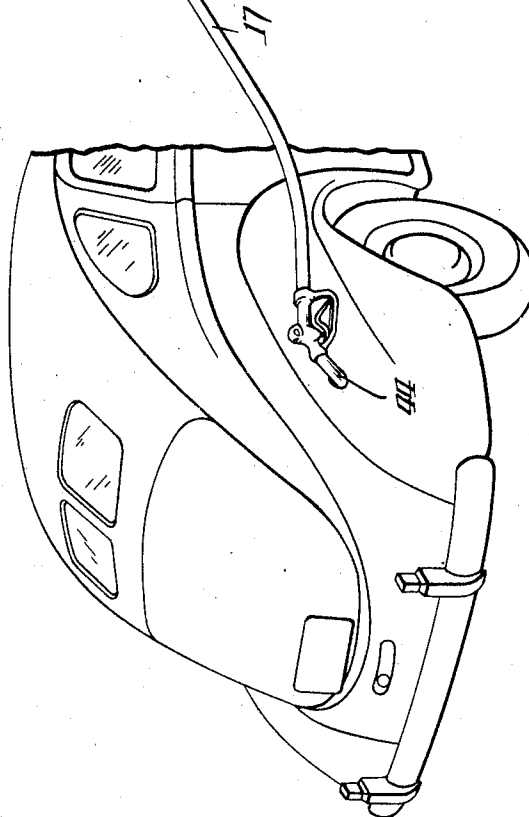
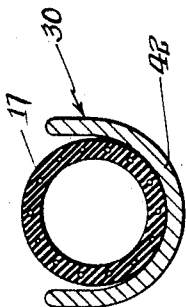


FIG. - 10

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UNITED STATES PATENT OFFICE

2,322,966

LIQUID DISPENSER

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Application January 11, 1939, Serial No. 250,388

9 Claims. (Cl. 221-95)

This invention relates to liquid dispensing mechanism and more particularly to a hose construction and mounting for a service station pump for dispensing gasoline.

Heretofore service station pumps have comprised an upstanding housing of substantial height adapted to house the operating mechanism and the rigid portion or pipe comprising the flow line through which the gasoline is pumped from the usual underground tank through the liquid displacement meter and visigauge. The visi-gauge discharged into the conventional flexible hose which, as well known in the art, terminates in a valve-controlled nozzle. In such conventional type of pump the flexible hose has heretofore been suspended from the central portion of the upstanding housing, substantially near the top of the housing, and the housing has been provided, somewhat below, but substantially adjacent, the point of hose suspension, with a support for the nozzle when the hose was not in use.

The development of the present-day design and construction of automobile has called for a longer hose than has heretofore been used. The conventional length of hose heretofore has been substantially ten feet. Many of the new designs of cars have their filling tanks arranged with the fill pipe therefor disposed in the fender, and several of the designs of cars have their tank fill pipes located on the right-hand side of the car so that when the cars are driven into a filling station on the right-hand side of the pumps, in many instances the conventional ten-foot hose will not reach these filling pipes. In addition, many of the cars having their fill pipes on the left-hand side of the car are driven in on the left-hand side of the service station pump, so that the same objection is presented. So also, many times a truck or automobile can not pull sufficiently close to a dispensing pump to permit the conventional hose to reach the filling tank.

Among the objects of the present invention are to provide a hose construction and arrangement adapted to eliminate the hereinbefore described disadvantages; to provide a flexible hose construction of conventional length pivotally suspended from the upper portion of the service station pump housing in such a manner as to permit substantially the full length of the hose to be utilized from either of the adjacent angularly disposed sides of the housing; to provide a suspension mounting at the upper portion of the housing of the service station pump, which mounting is shiftable relatively to the housing,

and in such a manner as to provide a greater radius of use for the conventional length of flexible hose; to provide a suspension mounting at the upper portion of the housing of a service station pump, which mounting is shiftable disposed at the juncture of two adjacent sides of the housing and is swingable substantially through two hundred seventy degrees to a position substantially adjacent either of said sides of the housing, from which position, and from any of the intermediate positions, the flexible hose is pivotally suspended from the housing whereby to provide maximum reach for a conventional length of such hose; to provide a flexible wet hose construction for a service station pump wherein the hose is wholly disposed on the outside of the pump housing and is considerably longer than the conventional length of hose now in use, and wherein the hose and the housing are constructed and arranged so that the hose may be selectively used as a flexible hose of conventional length, pivotally suspended from the upper portion of the housing, or as a flexible hose considerably longer than the conventional length and pivotally mounted from the lower portion of the housing, whereby to provide an extra reach of hose as the occasion demands, and wherein the housing is provided with means for supporting the hose for use in either of said selected lengths and wherein the housing is provided with means for compactly suspending or supporting the hose on the outside of the housing when not in use and in a manner such that the hose will not present an unsightly appearance and will not present a hazard for tripping attendants and others, and wherein the hose is not in danger of being run over or stepped upon when not in use; to provide a flexible hose and mounting for a service station pump, wherein the flexible hose is mounted solely on the outside of the housing and emerges from the housing of the pump at a level more closely approaching the height of the automobile filling pipe than in constructions of present-day conventional design, and whereby to permit a hose of given length to have a greater radius of filling reach; to provide a flexible hose for a service station pump, which hose is suspended wholly on the outside of the pump, and wherein the hose is of greater than conventional length, and wherein there is provided means associated with the pump housing whereby the hose when used is either selectively operatively pivotally suspended substantially near the top of the pump housing or is operatively pivotally connected from substantially the lower portion of the housing

to provide variant lengths or reaches of hose for different filling conditions; to provide a flexible wet hose construction for service station pumps, wherein the hose is suspended wholly on the outside of the pump housing and wherein the hose when not in use provides three or more connected lengths or reaches of hose, each reach being substantially equal in length to the length of the pump housing, and there being means on the housing for supporting the nozzle of the hose and for suspending the lengths of the hose substantially parallel and vertically of the housing; to provide a flexible wet hose construction for service station pumps wherein the hose is of greater length than conventional flexible hose of the modern type of service station pump, and wherein the hose is arranged to issue from the lower portion of the housing, specifically relatively close to the base of the housing, and wherein the upper portion of the housing provides a pivotally mounted saddle or support adapted to receive and suspend therefrom an intermediate portion of the length of the hose, and wherein the housing is likewise provided with a nozzle support for holding the hose nozzle when the hose is not in use; to provide, in connection with the above mounted saddle, its location substantially at one corner of the pump housing whereby the hose may be shifted, when supported thereby, to either side of the housing; to provide, in connection with such hose-supporting saddle, means associated with the housing whereby the saddle may be swung to a position adjacent to and substantially parallel to the side wall of the housing whereby the hose may be suspended in compact, out-of-the-way position when not in use; to provide a hose supporting saddle adapted automatically to shift to a position substantially parallel to and adjacent a side wall of the housing whereby said saddle is normally out of the way when the hose is not in use, but also whereby the saddle is in position adjacent the nozzle support so that the hose and nozzle may be suspended from the housing when not in use; to provide a hose-supporting saddle constructed and arranged to permit the ready disengagement therefrom of an intermediate length of hose when the longer hose construction is required; to provide, in connection with such saddle, means associated with a basal portion of the housing for holding a suspended loop of the hose in substantially taut or somewhat stretched condition, or in position whereby the longitudinal reaches of the hose are substantially parallel with the longitudinal axis of the housing, whereby to hold the suspended hose in draped position on the housing when not in use; to provide means associated with that end of the flexible hose which issues from the housing for preventing abrupt bending thereof, whereby to preserve the life of the hose and whereby also to provide a resilient, reinforced mounting for the lower end of the hose to assist the suspension of the hose and to aid in the free pivotal movement of the hose with respect to the housing; to provide a simple, compact and efficient mounting for the hose suspension saddle, including the provision of an adjustable tension device for normally swinging the saddle to predetermined position, and including an abutment member for limiting the inward swinging movement of such saddle with respect to the face of the housing; to provide a saddle support of simple and pleasing design and which will permit the intermediate length of hose supported thereon to be disengaged therefrom by a simple

flipping upward movement on the hose while the attendant is standing at a point remote therefrom, but which support will normally firmly hold such intermediate length of hose in suspended position when such extra length is not required for use and during any normal use of the shorter length of hose; to provide a novel type of fitting adapted to be secured to an opening in the housing to which the flow line within the housing is connected and to which the end of the flexible hose is connected outside of the housing, and which fitting on the outside of the housing is provided with a friction roller of suitable size and construction adapted to receive thereover a looped portion of the flexible hose whereby to cooperate with the suspension saddle on the housing for holding the reaches or lengths of hose in substantially parallel position vertically of the housing; to provide an improved design of construction for the flow line of a service station pump, wherein the rigid pipe connecting the discharge side of the visible flow gauge, which gauge is necessarily located at the highest point in the flow line of the dispensing pump, is extended vertically downwardly substantially to the base of the pump and inside of the upstanding housing, and wherein the bottom portion of said pipe is provided with a fitting or connection passing through an opening in the upstanding housing at the lower portion of the housing, and wherein such fitting is likewise connected to the flexible hose of the flow line; to provide an attachment for the conventional type of present-day pump whereby the same may be quickly, and with a minimum of change, adapted to be provided with the long hose attachment disclosed in the present application; to provide means associated with my present type of structure whereby in the event an attendant should attempt to drain the hose while the pump is not operating, in order to short measure a subsequent customer, said draining will show a void immediately in the visigauge or sight glass; to provide these and other objects of invention as will be more particularly made apparent from a perusal of the following specification when taken in connection with the accompanying drawings.

Referring now to the drawings:

Fig. 1 is a diagrammatic view of the several operating units in the dispensing system of a service station pump;

Fig. 2 is an end view of a dispensing pump showing one form of my invention as it appears when the hose is not in use;

Fig. 3 is a top plan view of the shiftable hose supporting saddle;

Fig. 4 is a corresponding side view of certain portions of the saddle arm and supporting bracket, being shown in section;

Fig. 5 is a sectional view taken on the line 5—5 of Fig. 4;

Fig. 6 is a perspective view illustrating the pivotal suspension of the conventional length of hose from the upper portion of the housing;

Fig. 7 is a similar view illustrating the use of the full length of hose pivoted from the lower portion of the housing;

Fig. 8 is a cross sectional view of the vacuum-breaking valve preferably associated with the sight glass or visi-gauge;

Fig. 9 is a perspective view similar to Fig. 6, but showing the hose saddle in a different angular position for dispensing to a vehicle on the opposite side of the pump housing; and Fig. 10 is a vertical section taken on the line 10—10 of Fig. 9,

Fig. 1 shows the diagrammatic relation of the various parts of a service station pump and includes the usual underground supply tank 1 having the usual suction pipe 2 connected to the intake of the pump 3, which in the present illustration is shown as being driven by a belt 4 from the electric motor 5. The gasoline is pumped through the conduit 6 to the meter 7, thence through the conduit 8 to the visible gauge 9. After passing through this visible gauge, the gasoline enters the conduit 10. The flexible hose is adapted normally to be filled with gasoline on the termination of the dispensing operation; hence the apparatus is known as a wet hose type of pump.

It is noted that the visible gauge is disposed at the highest part in the flow line, in accordance with standard practice, and that thus far the system is identical with conventional pump constructions. If the conventional type of flexible hose construction were used, which flexible hose is substantially ten feet in length, the pipe 10 would be provided with an elbow joint which would project through an opening in the housing at that point, and to this elbow joint the flexible hose would be attached.

However, my present invention departs from such standard practice in that I provide the extremity of the pipe 10 with an elbow pipe 11 which is disposed wholly within the housing, and to this connection 11 there is screwed a rigid pipe 12. This pipe 12 extends downwardly substantially to the bottom of the pump housing 13 which, as shown clearly in Fig. 2, encloses all of the operative parts of the pump, including all of the rigid pipe portions of the flow line.

The bottom of this housing is adapted to rest upon the usual type of concrete base. The housing may be of conventional design, provided with open opposed faces carrying the computer dials for the computer mechanism 14.

At the lower portion of the housing, as shown at 15, I provide a small casting to which the lower end of the vertical flow line pipe 12 is threadedly secured. This casting extends horizontally laterally outwardly, projecting through a hole or opening in the lower part of the housing 13. The outer portion 16 of this casting is thus disposed wholly outside of the pump housing.

One end of the flexible hose 17 is provided with a connected metallic fitting 18 which threadedly engages an opening in the outside portion 16 of the casting 15, and this fitting 18 is provided with a coiled spring 19 which extends upwardly, in the manner shown in Figs. 1 and 2, about the lower end of the flexible hose 17 whereby to provide means for permitting the lower portion of the hose pivotally to swing in all directions from the fitting 18, which is the point from which the flexible hose portion of the flow line emerges from the upright pump housing 13. This fitting 18 and the resilient spring 19 comprise means for preventing the abrupt bending of the flexible hose relatively to its socket 18, whereby to preserve the life of the hose. So also, this resilient mounting of the lower end of the hose tends to maintain it in substantially vertical direction, as hereinafter explained.

It will thus be noted that the point of emergence of the end of the flexible hose from the housing is disposed relatively low with respect to the height of the housing. In short, it is disposed adjacent the lower portion or base of the housing and relatively closer to the horizontal elevation of location of the filling tanks of auto-

mobiles as compared to the conventional construction of prior service station pumps, wherein the flexible hose emerges from the casing substantially at the top of the casing, so that substantially a length of hose equal to the height of the casing is needed to reach down to the horizontal plane of the filling tanks of automobiles. In the present invention, by providing the point of issuance of the hose at the lower level, substantially the full length of hose may be made available for reaching out laterally to the tanks of remotely disposed automobiles.

In certain instances it is within the contemplation of my invention to locate the casting on the housing 13 at that point on the housing corresponding substantially to the elevation or vertical height of the caps on the filling tanks of automobiles rather than locating the casting at the position shown in Figs. 1 and 2, which is somewhat lower than the filling tanks of automobiles. In this latter construction even a greater complete utilization of the full length of the hose may be attained for reaching out laterally or for stretching horizontally to remote filling tanks. However, the present form is preferred.

In the heretofore existing conventional types of service station pumps, the upper end of the hose was suspended from substantially the central portion of the upper part of the housing. The point of suspension was definitely fixed so that if it were necessary to service automobiles on either side of the service station pump, in some instances it was necessary substantially to wrap the hose part way about the upstanding housing in order to reach around to that particular side of the pump. This wrapping of the hose around the side of the pump seriously impaired the effective filling radius or reach of the total length of the hose.

My present invention contemplates the provision of a shiftable mounting or suspension for the conventional length of a flexible hose so that this mounting may be shifted into many positions relatively to the stationary housing, and in any of such positions the hose may be pivotally moved therefrom to fill variantly located automobile tanks. In the present invention I have proposed shiftable to mount the hose mounting at the corner or junction of two adjacent, angularly disposed sides of the housing so that it may shift, specifically pivotally swing, angularly approximately two hundred seventy degrees, in order that the mounting may lie adjacent angularly disposed sides of the housing disposed at an angle of ninety degrees, and which permits the mounting itself to swing through an angle of two hundred seventy degrees. In any of these positions the hose is pivotally supported so that the nozzle may be inserted in filling tanks located at various positions around the housing and the full length of the conventional length hose availed of at two sides of the housing disposed at ninety degrees relatively to each other.

One manner of carrying out this aspect of my invention is shown in Figs. 2, 3 and 4 of the drawings. At the top of a corner of the housing there is provided an inner backing plate 20 to which, by means of suitable screws or other fixtures 21, are secured upper and lower stationary spaced apart brackets 22 and 23. The upper bracket 22 is provided with a central vertical bore 24 to receive a pin 25. The lower bracket 23 is provided with an enlarged central bore 26 adapted to receive the bored barrel 27 of a tensioning member

28. The bore of the barrel 27 receives the lower portion of the pin 25.

The hub 29 of the saddle arm or hose support 30 is provided with a central chamber 31 and is provided with an upper bore 32 to receive the pin 25, and is provided with an enlarged lower bore to receive the hub 27 of the tension member 28. In addition, the upper portion of the saddle arm hub 29 is provided with a bore 33 adapted to receive the upper end of a coiled spring 34 which surrounds the pin 25. The lower end of this coiled spring fits into a slot 36 formed in the upper face of the barrel portion 27 of the tension member 28. It is to be noted that the lower bracket member 23 is provided with a set screw 37 and that the lower portion of the tension member 28 is provided with a laterally extending nail hole 38.

In order to assemble this construction, the saddle hub is inserted in position between the upper and lower brackets 22 and 23 with the pin in position, as shown, and with the coiled spring having its opposed ends in the slot of the hub and the barrel of the tension member 28. A nail is then inserted in the nail hole 38 of the tension member, which latter is turned to put the spring under tension. When proper tension is attained, the set screw 37 is then tightened, which holds the tension piece rigid with the stationary lower bracket 23, whereupon the tension spring 34 will automatically shift the saddle arm so that the saddle will lie substantially parallel to the wall or face 40 of the housing 13.

An abutment 41, projecting laterally from the saddle arm, is adapted to engage the adjacent stationary bracket member in order to limit the inward swing of this saddle arm, so as to prevent the saddle arm hitting against the side wall of the casing.

The dotted lines in Fig. 3 show some of the various pivotal movements of the saddle arm with respect to the housing.

The outer end of the saddle arm is formed in an upwardly curving manner in the form of a cradle 42 for the purpose of embracing the greater portion of the circumference of an intermediate looped portion of the hose, all as clearly shown in Fig. 2, the arrangement being such that in its inwardly normally swung position the saddle arm lies in such a position that the upper looped reach of the hose will lie in arcuate formation over the usual opening 43 in the housing which supports the discharge end of the nozzle 44, it being understood, of course, that the housing is provided with an associated nozzle support located immediately below this opening 43 so that the nozzle when placed thereon may be locked in position for the night.

When the intermediate loop 45 of the hose is positioned over the saddle arm, the hose is suspended downwardly therefrom, as at 46, and when not in use, the lowermost loop 47 of the hose hangs downwardly adjacent the base of the housing 13, and thence extends upwardly as at 48, the nozzle 49 resting upon the usual hose support.

In order to maintain the hose in compact, substantially stretched condition on the housing so that the lengths thereof are substantially parallel with each other and with the vertical plane of the housing, I may provide means, if desired, substantially at the bottom of the housing under which the lower loop 47 of the hose may pass. In the present instance I prefer to provide the bottom portion of the casting 15 with two depending arms 50 and 51 for supporting a fric-

tion roller 52 having a curvature adapted to receive the hose thereover so that when the lower loop 47 is placed under this roll and the nozzle is supported on the nozzle support, the hose will be held rather tautly in the position shown in Figs. 1 and 2.

In another aspect of the invention, by the utilization of the construction shown, I am enabled to use a fifteen-foot hose as distinguished from the conventional ten-foot length of hose to secure a number of advantages not present with the conventional construction and conventional length of hose. For instance, with regard to Figs. 1 and 2, when it is desired to service or fill the tank of an automobile which has driven up to the service pump, if the tank of the automobile lies sufficiently near enough when the pump is started, by means of the usual control at the nozzle support, the hose may be taken down from the support, leaving the upper loop 45 of the hose suspended from the saddle 42. This operation will provide a ten-foot length of hose which may be utilized to service automobiles which are within the practical operating radius of this length of hose, except that a greater advantage is obtained by reason of the shiftable mounting of the saddle 42 due to the fact that it may shift into any of the positions shown in Fig. 3, whereby a greater proportion of the length of the ten-foot hose may be utilized in filling remotely disposed tanks due to the ability of the support 42 to shift approximately two hundred seventy degrees. In any one of these positions the hose pivots from the free end of the saddle 42, which saddle is made sufficiently deep to embrace and hold the hose therein during this dispensing operation.

If the hose be not sufficiently long in this utilization of the invention, the operator may, by flipping upwardly on the hose, dislodge it from the open-topped cradle or saddle 42, whereupon the complete fifteen-foot length of hose extending from the lower socket 18 to the nozzle 49 may be utilized. In this operation of my device it is to be noted that the fitting 18, being at the lower end of the housing 13, is relatively much closer in elevation to the horizontal plane of the tank to be filled, so that substantially the maximum value in length of the fifteen-foot hose may be utilized for reaching out laterally horizontally.

Upon the completion of the filling operation, the hose is again suspended upon the bracket 42, the spring 34 of which has automatically restored it to position adjacent the wall 40 of the housing. The lower loop 47 of the hose may then be positioned under the holding abutment 52 and the nozzle then restored to the nozzle support.

In the installation and operation of service station pumps, the authorities require that a pump structure must be made so that in the event an attendant should attempt to drain the hose while the pump is not operating, in order to cheat or short measure the next customer, such draining will show a void immediately in the sight glass or visi-gauge 9. For instance, in the present illustrated construction, if an attendant should unscrew the nozzle from the hose, and allow the hose to lie flat on the ground, the hose would drain readily, except that the gasoline would not drain out of the vertical pipe 12 within the pump and therefore no void would show in the visi-gauge. This is due to the fact that when the hose is drained, a short column of liquid upstands in that portion of the pipe surrounded by the coiled spring 19, as shown in Fig. 8, and atmospheric pressure, acting upon this column,

supports the column of liquid in the pipe 12 and the visi-gauge, due to the fact that the visi-gauge is a chamber sealed from outside atmospheric pressure.

In order to prevent this, I have provided the system, and preferably the top of the visi-gauge, with a valve or mechanism for allowing air to enter when a vacuum is formed. The entrance of the air thus counteracts or nullifies atmospheric pressure upon the short, vertical column heretofore described and allows gravity to act upon the gasoline in the pipe 12, causing it to drain out.

The construction of the vacuum-breaking valve is shown in Fig. 8 of the drawings. This valve is adapted to be attached preferably to a threaded boss 53 provided on the upper surface of the visi-gauge, into which a correspondingly threaded valve body 54 is adapted to be screwed. This valve body 54 provides, in conjunction with a screw cap 55, an internal chamber 56. The body 54 is provided with a relatively narrow bore 57 communicating with the chamber 56 and communicating with the top chamber 58 of the visi-gauge. The inner wall of the valve body 54 is provided with a conical seat 59. A conical valve 60 is adapted to close upon the seat 59. The valve 60 is provided with an upstanding stem 61 around which a coiled spring 62 is disposed and arranged to project the valve upwardly to closed position against the usual type of washer and cotter pin on the upper end of the valve. The closure cap 55 is provided with a small vertical hole 67. The spring 62 is very light and when the liquid, because of drainage of the hose, tends to cause a vacuum within the sight glass 9, the valve 60 will open against the tension of the spring 62 and allow air to pass into the sight glass. Ordinarily, however, the pressure in the system and sight glass will hold this valve 60 closed. In the event some gasoline should leak through or past the valve 60, a slight amount of gasoline is held in the chamber 56 where it can evaporate through the small vent hole 67 to atmosphere.

One of the important advantages of the present invention resides in the capability of adapting it to the standard present-day type of service station pump. In short, the present invention provides more or less an attachment for the conventional type of present-day pump. The changes required in such adaptation would be to slightly shorten the pipe 10, shown in the drawings, removing the casting shown at 15 in Fig. 1 from its theretofore connection to pipe 10 at the upper part of the housing, replacing such casting with an elbow joint 11, adding the vertical pipe 12, which now comes within the housing 13, and thence replacing the casting 15 (modified or not modified to include the friction roll 52 as desired) at the lower portion of the housing, and thence in addition attaching the new pivotally mounted hose saddle or support to the corner of the pump in the manner shown in Figs. 3 and 4 of the drawings, whereupon any former type of pump will be converted so that it can be utilized with the new type of long or short hose and its supporting mechanism.

The term "gasoline" used in the specification and claims is to be construed broadly as covering any liquid fuel suitable for internal combustion engines.

The invention is hereby claimed as follows:

1. In a liquid dispensing device, the combination of a housing having angularly disposed, up-

standing walls, means forming a dispensing line through which liquid is adapted to be forced and including a flexible hose disposed permanently exteriorly of said housing, and a bracket swingably mounted on the exterior of said housing about a vertical axis located substantially at the junction of two adjacent angularly disposed walls, said bracket having a saddle adapted to receive a length of hose for suspending said hose therefrom.

2. In a liquid dispensing device, the combination of a housing substantially rectangular in horizontal cross section, means forming a liquid dispensing line having a portion enclosed thereby and having a connected flexible hose disposed outside said housing and provided with a dispensing nozzle, a support pivoted to swing about a vertical axis located substantially at one of the corners of said housing, said support including a hose receiving saddle arching upwardly and somewhat horizontally so as to extend partially across one of the side walls of said housing when said saddle is swung to such position, spring means for normally so swinging said saddle, and a nozzle support on said housing below and adjacent the free end of said saddle when swung to normal position by said spring.

3. In a liquid dispensing device, the combination with an upstanding housing of substantially rectangular horizontal cross section, a hose supporting saddle for said housing comprising vertically spaced brackets mounted at one of the corners of said housing, said brackets having registering bores, the bores of one of said brackets being of greater diameter than the other, a tension element having a hub mounted in the larger bore of one of said brackets, said hub having a central bore, a pivotal pin having one end in the bore of one of said brackets and having its opposite end in the bore of said tension member, a saddle hub pivotally mounted at one end upon said pin and at the other end upon the hub of said tension member, a tension spring housed by said hub, said tension spring having one end fixed in said hub and having the other end fixed to said tension member, means for angularly turning said tension member with respect to the adjacent stationary bracket, and means for fixing said tension member stationarily with respect to said bracket member after said tension member has been adjustably turned to desired angular position, said saddle hub having a laterally extending hose receiving saddle carried thereby.

4. In a liquid dispensing device, the combination with an upstanding housing of substantially rectangular horizontal cross section, a hose supporting saddle for said housing comprising vertically spaced brackets mounted at one of the corners of said housing, said brackets having registering bores, the bores of one of said brackets being of greater diameter than the other, a tension element having a hub mounted in the larger bore of one of said brackets, said hub having a central bore, a pivotal pin having one end in the bore of one of said brackets and having its opposite end in the bore of said tension member, a saddle hub pivotally mounted at one end upon said pin and at the other end upon the hub of said tension member, a tension spring housed by said hub, said tension spring having one end fixed in said hub and having the other end fixed to said tension member, means for angularly turning said tension member with respect to the adjacent stationary bracket, means for fixing said tension member stationarily with respect to said

bracket member after said tension member has been adjustably turned to desired angular position, said saddle hub having a laterally extending hose receiving saddle carried thereby, and stop means on said saddle hub adapted to engage a stationary part of the bracket to limit the inward swing of the saddle arm relatively to the housing.

5. In a liquid dispensing device, the combination of an upstanding housing, means forming a dispensing line located within said housing and through which liquid is adapted to be forced, said dispensing line terminating in a hose fitting extending outwardly through the housing at a lower portion thereof, a flexible hose connected to said fitting and extending wholly and permanently outside of said housing, said hose being substantially longer than conventional length and terminating in a dispensing nozzle, said hose when not in use extending upwardly from said fitting along the outer surface of a wall of the housing to a first loop and downwardly along said wall surface to a second loop, and then upwardly along said wall surface to said dispensing nozzle, a hose support shiftably mounted relative to the upper portion of said housing, said support having a hose embracing part receiving the first hose loop to support the hose intermediately at the highest point of the hose, means formed on the under portion of said fitting for detachably receiving the second loop of said hose to position this portion of the hose in juxtaposition to the housing when the hose is not in use, and a nozzle support on said housing for detachably receiving said nozzle when not in use.

6. In a liquid dispensing device, the combination of an upstanding housing, means forming a dispensing line located within said housing and through which liquid is adapted to be forced, said dispensing line terminating in a fitting extending outwardly through the housing at a lower portion thereof, a flexible hose connected to said fitting and extending wholly and permanently outside of said housing, said hose being substantially longer than conventional length and terminating in a dispensing nozzle, a hose supporting saddle mounted on the upper portion of said housing and adapted to receive a looped portion of the hose, a pair of depending lugs on said fitting, a friction roller rotatably mounted in said lugs, said roller having a curvature of sufficient concavity to receive a loop of the hose, and a hose of considerably greater length than the conventional hose, extending from said fitting and over said upper hose support, thence downwardly and looped around said friction roller, and thence back to said nozzle support.

7. In a liquid dispensing device, the combination of an upstanding housing, means forming a

dispensing line located within said housing, means for forcing liquid under pressure through said flow line, said flow line including a substantially vertical, downwardly extending pipe located within the housing, said pipe terminating substantially at the bottom of said housing, a hose fitting connected to the bottom portion of said pipe and passing through said housing, a flexible hose connected to the fitting on the outside of said housing, said hose terminating in a valve controlled nozzle, and vacuum operated normally closed means associated with the upper part of said flow line for automatically opening the flow line to atmosphere upon the creation of a vacuum in the upper part of the flow line to admit air thereto thereby relieving the vacuum in the upper part of said flow line in the event said flexible hose is drained when dispensing pressure is removed from the flow line.

8. In a liquid dispensing device, the combination of an upstanding housing, means forming a dispensing line located within said housing, means for forcing liquid under pressure through said flow line, a sight gauge disposed in the highest point in the flow line, said flow line including a substantially vertical, downwardly extending pipe located within the housing, said pipe terminating substantially at the bottom of said housing, a hose fitting connected to the bottom portion of said pipe and passing through said housing, a flexible hose connected to the fitting on the outside of said housing, said hose terminating in a valve controlled nozzle, said sight gauge having an air admitting port and a vacuum operated normally closed, spring pressed valve controlling said air admitting port, for admitting air into the sight gauge thereby to break the vacuum in the upper portion of the flow line when and if the flexible hose is drained when the pressure producing means for the flow line is inoperative.

9. In a service station gasoline dispensing device of the wet hose type, an upstanding housing, dispensing means in said housing and including a dispensing pipe having a hose connection passing through the housing adjacent the bottom of the housing, a flexible gasoline filled hose secured at one end to said connection and normally disposed in a loop of at least three flights along an outside wall of said housing, means detachably supporting the other end of the hose on the housing, hose embracing means shiftably mounted relative to the housing and supporting an intermediate portion of the hose at the highest point of the hose, and means for automatically retracting said hose embracing means to the housing and for yielding the hose from the housing upon a pull on the hose.

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