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A. P. MORAN

GASOLINE STORAGE TANK FITTING

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Fig. 1.

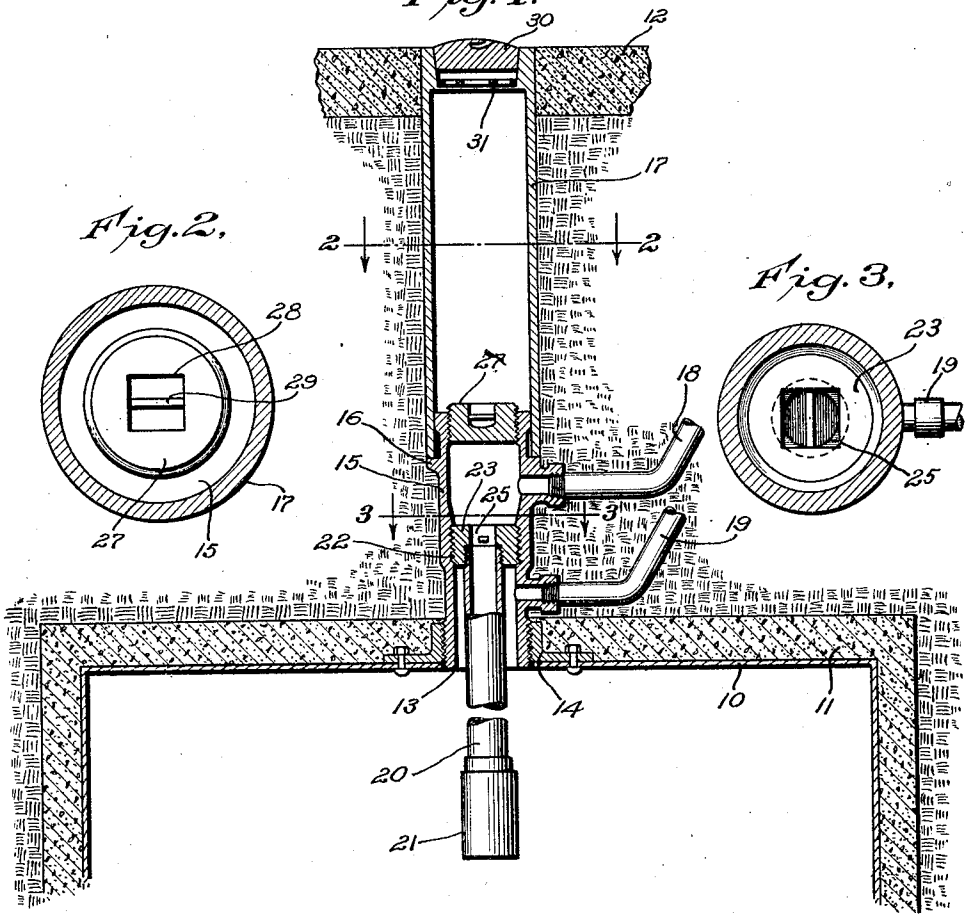


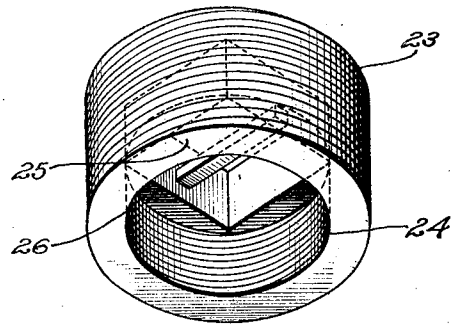

Fig. 2.




Fig. 3.




Fig. 4.




WITNESSES

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# UNITED STATES PATENT OFFICE.

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## GASOLINE-STORAGE-TANK FITTING.

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My invention relates to a fitting for storage tanks such as are employed for holding gasoline, and more particularly the invention relates to a fitting for sub-surface gasoline tanks. The usual arrangement and equipment of a subsurface gasoline tank requires the digging up of the ground or the floor surface of the garage when installed in a garage, whenever the foot valve, for example, or discharge pipe becomes disarranged or inoperative.

The general object of my invention is to provide a fitting for a sub-surface gasoline tank which when coordinated with a tank and its appurtenances will make it possible to remove the discharge pipe leading from the tank and carrying the usual foot valve so that the digging up of the ground or the disturbance of the tank or its surroundings will not be necessary whenever it is desired to gain access to the discharge pipe or foot valve for repair or otherwise.

The nature of my invention and its distinguishing features and advantages will clearly appear as the description proceeds.

Reference is to be had to the accompanying drawings forming a part of this specification, it being understood that the drawings are merely illustrative of one example of the invention.

Figure 1 is a vertical section through the upper portion of a sub-surface gasoline tank equipped with my invention.

Figures 2 and 3 are horizontal sections taken respectively on the lines 2—2 and 3—3 in Figure 1.

Figure 4 is a perspective view of the removable plug carrying the discharge pipe from the tank, said pipe having the usual foot valve.

In the illustrated example of my invention, the numeral 10 indicates the upper portion of a sub-surface gasoline tank shown as covered by concrete 11 and 12 indicates the concrete floor a distance above the tank 10. The tank 10 is formed in the top thereof with an opening 13 and provided at said opening with a flanged, internally threaded collar 14. A fitting 15 has threaded engagement with the collar 14 and has an external flange 16 on which rests a cover pipe section 17 extending through the floor 12 as well as through the earth intervening between the tank 10 and said floor. The numeral 18 indicates a discharge pipe for the outflow of the gasoline, which pipe in practice is connected with a pump not shown, and the numeral 19 indicates a vent pipe which is provided in some cases. The pipes 18 and 19 connect with the interior of the fitting 15.

The discharge pipe 20, leading from the tank 10 is equipped as usual with a foot valve 21. In order to permit the ready removal of the pipe 20 with the foot valve 21 without disturbing the floor 12, the tank 10 or the intervening earth, I provide the following arrangement: The fitting 15 is formed with an internal thread 22 and engaging said thread is a screw plug 23. The plug 23 is formed at the bottom with an internally threaded recess 24 and in register with said recess is a central outlet opening 25 so that the gasoline may pass from the discharge pipe 20 through the plug 23 and thus to the outlet pipe 18.

The opening 25 is squared or otherwise non-circular in form to receive a correspondingly formed wrench, not shown, so that the wrench when inserted through the cover pipe section 17 may be caused to unscrew the plug 23 for lifting said plug and with it the pipe 20 and its foot valve 21. For lifting plug 23 and pipe 20 I may, as shown, form the plug 23 with an interior crossbar 26 to be engaged by a hooked tool of any character, said tool not being shown.

Above the bushing or plug 23 is a plug 27, advantageously a screw plug which is spaced above the bushing 23 sufficiently to form an intervening chamber for the reception of the oil and to maintain a supply for the outlet pipe 18. The plug 27 is formed with a non-circular depression 28 to receive a wrench and with a cross-bar 29 to be engaged by a hooked tool. The top of the cover pipe section 17 or cover of the fitting 15 is closed by any suitable plug or other closure 30. Below the top of the cover pipe section 17 is a spider or grid 31 to center the wrench and lifting tool.

I would state furthermore that while the illustrated example constitutes a practical embodiment of my invention, I do not limit myself strictly to the exact details herein illustrated, since, manifestly, the same can be considerably varied without departure from the spirit of the invention, as defined in the appended claims.

What I claim is:

1. An attachment of the character de-

scribed for underground liquid tanks, comprising a fitting adapted to be secured to a tank and internally screw threaded intermediate of its ends, an externally threaded plug engaging said internal thread and formed with a vertical opening for the outflow of the liquid contents of the tank, said plug having at the under side an internally threaded counter bore and a discharge pipe engaging the threads of said counter bore and sustained by said plug.

2. An attachment of the character described for underground liquid tanks, comprising a fitting adapted to be secured to a tank and having intermediate of its ends an internal thread, a screw plug engaging said internal thread and formed with a vertical opening for the outflow of the liquid contents of the tank, said plug having at the under side an internally threaded counter bore and a discharge pipe engaging the threads of said counter bore and sustained by said plug, the opening in said plug being non-circular to accommodate a wrench and there being a member on said plug at the interior of the opening to receive a hook for lifting the plug and the depending pipe through said fitting.

3. An attachment of the character described for underground liquid tanks, comprising a fitting adapted to be secured to a tank and having an internal screw thread intermediate of its ends, a screw plug engaging said internal thread and formed with a vertical polygonal opening for the outflow of the liquid contents of the tank, said plug having at the under side an internally threaded counter bore, a discharge pipe engaging the threads of said counter bore and sustained by said plug, and a removable closure for the upper end of the fitting.

4. In an attachment for underground liquid tanks, a fitting internally screw threaded intermediate of its ends and having its upper end internally screw threaded and its lower end externally screw threaded to permit it to be secured to a tank, a screw threaded plug engaging the intermediate screw threads of the fitting and having a polygonal opening to receive a wrench and with a member adapted to receive a hooked tool, a discharge pipe secured to said plug, a screw threaded plug in the upper end of the fitting and having a polygonal opening to receive a wrench and a member adapted to be engaged by a hooked tool, a discharge pipe connected with the fitting between the plugs and a vent pipe connected with the fitting below the first plug.

5. An attachment for underground liquid tanks, comprising a fitting internally screw threaded intermediate of its ends and having its upper end internally screw threaded and its lower end externally screw threaded, the fitting being provided adjacent its upper end with an external annular flange, a screw threaded plug engaging the intermediate screw threads of the fitting and having a polygonal opening and a member adapted to be engaged by a hook to lift the plug, the plug having a screw threaded recess on its under side, a discharge pipe screwing into said recess, a screw threaded plug in the upper end of the fitting, and a pipe section resting on the flange of the fitting and provided with a closure at its upper end.

6. An attachment for underground liquid tanks, comprising a fitting adapted to be secured to a tank and having an annular external shoulder near its upper end, removable spaced plugs in the fitting, the lower plug having an opening therein and to which a discharge pipe is adapted to be secured, the fitting being provided with an outlet between the plugs and with an air vent below the apertured plug, and a pipe section on the flange of the fitting and provided at its outer end with a closure.

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