Nov. 28, 1950 M. BURRESS 2,531,765

PORTABLE OIL DRAINING DEVICE

Filed June 7, 1947

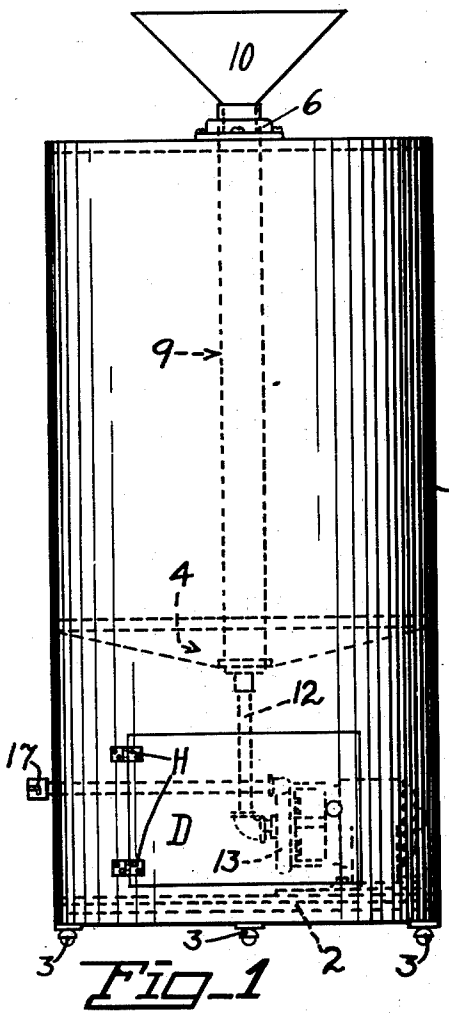


Fig. 1

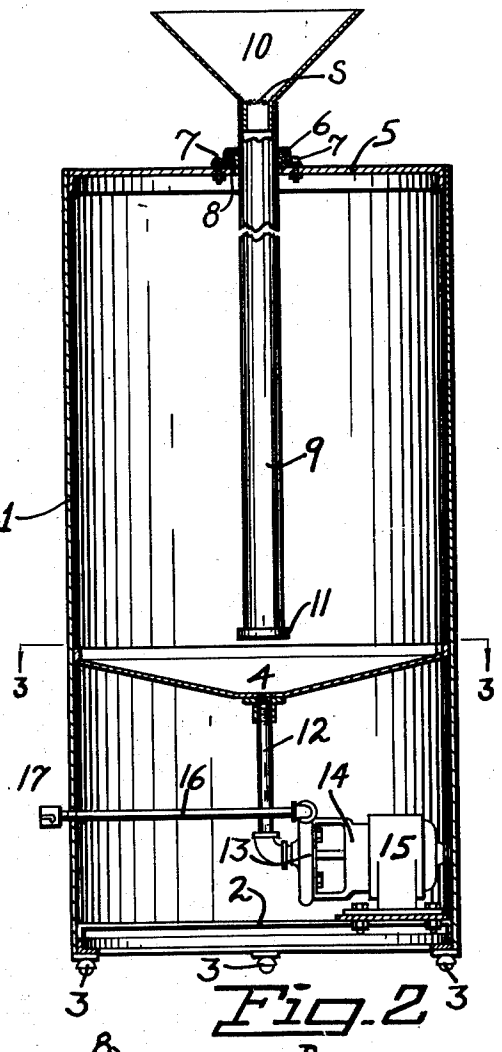


Fig. 2

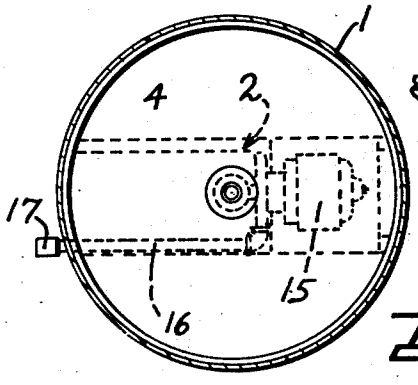


Fig. 3

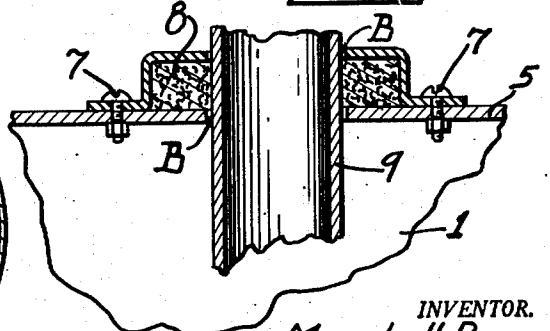


Fig. 4

INVENTOR.
Marshall Burress
BY
Glenn L. Fish
ATTORNEY

Patented Nov. 28, 1950

2,531,765

UNITED STATES PATENT OFFICE

2,531,765

PORTABLE OIL DRAINING DEVICE

Marshall Burress, Moses Lake, Wash.

Application June 7, 1947, Serial No. 753,259

1 Claim. (Cl. 184—1.5)

1

The present invention relates to the general class of liquid separation and purification, and more specifically to an improved portable oil draining appliance which while adapted for various purposes, is especially designed for use in garages, gas stations, and similar places, to drain oil from the crank case of automotive vehicles, and transfer the drained oil to a desired receptacle.

The portable appliance includes means for filtering or screening the drained oil, and pumping mechanism for transferring the filtered oil from a receptacle or receiving reservoir to a desired destination; and the portable appliance may be handled and maneuvered with convenience in preparation for a draining operation, as well as for conveying the collected oil to its place of disposal.

To this end the invention consists in certain novel features of construction and combinations and arrangements of parts as will hereinafter be described and more particularly set forth in the appended claim.

In the accompanying drawings I have illustrated a complete example of a physical embodiment of my invention wherein the parts are combined and arranged in accord with a mode I have devised for the practical application of the principles of my invention. It will however, be understood that changes and alterations are contemplated and may be made in these exemplifying drawings and mechanical structures, within the scope of my claims, without departing from the principles of the invention.

Figure 1 is a view in elevation of an appliance in which my invention is embodied; and

Figure 2 is a vertical sectional view of the structure in Fig. 1.

Figure 3 is a horizontal transverse sectional view as at line 3—3 of Fig. 1.

Figure 4 is an enlarged detail fragmentary view showing the slide bearing for the draining tube of the appliance.

In the preferred form of the appliance as illustrated in the drawings I employ an upright cylindrical metallic container or casing 1 having an open bottom and slightly elevated bottom-frame 2, which is provided with ball casters as 3, 3, by means of which the appliance may be trundled to position beneath an elevated automobile from which the crank case oil is to be drained.

Within the cylinder or drum 1 is mounted an inverted frusto-conical partition 4 that forms an elevated bottom wall for an oil receptacle or reservoir having closed top wall 5, which is provided with a central bearing hole or opening B,

2

and a flanged cap 6 also having a bearing opening B, is mounted on the exterior of the top wall 5 and secured by bolts 7 and nuts. Within the flanged cap is confined a suitable packing material to form a gasket 8, and the two spaced bearings B, B, thus provide a substantial packed slide bearing in the top wall 5 for a vertically slidable and adjustable draining tube 9, that is mounted in the bearing.

The upper, outer, end of the tube is fashioned with an intake or funnel 10 which is adapted to be adjusted beneath the draining or outlet port of a crank case of an automobile to receive oil therefrom, and a filter or screen S is mounted in the apex of the funnel to separate solids from the drained oil and assist in purifying the crank-case oil. The lower end of the drain tube is provided with a ring or collar 11, which acts as a stop for the extensible draining tube; and it will be apparent that the tube may be manually adjusted with facility to bring the funnel directly beneath the draining port, and after the draining operation the tube may be slid downwardly into the drum or casing to facilitate removal of the appliance from beneath the elevated automobile.

The elevated and tapered bottom 4 forms an upper receptacle or receiving reservoir for filtered oil from the draining tube, and the lower compartment beneath the bottom 4 provides space for the pumping apparatus, which space is readily accessible through an opening in the wall of the casing that is closed by door D hinged at H as indicated in Fig. 1.

At the apex of the inverted frusto-conical bottom 4 an outlet or discharge pipe 12 is connected, and this pipe forms the intake to a rotary pump 13 which is connected by a suitable frame 14 with a conventional electric motor 15; the pumping unit, as best seen in Fig. 2 being mounted on the slightly elevated bottom frame 2 of the drum or casing.

A horizontally disposed delivery pipe 16 from the rotary pump extends through the wall of the casing, and the exterior end of the delivery pipe is equipped with a nozzle or nipple 17, of the bayonet slot type, to which a flexible hose may be attached for transferring the oil, under pressure from the pump, to a desired receptacle.

From this description taken in connection with my drawings it will be apparent that I have provided an appliance that is composed of a minimum number of parts which may with facility by manufactured at low cost of production; and the parts may be assembled with convenience to constitute an appliance that is simple in con-

struction and operation, and efficient in the performance of its required functions.

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

In a portable oil-draining appliance, the combination with a casing having a transverse partition forming an elevated bottom, and a closed top having a slide bearing, of an upright frictionally held drain tube adjustably mounted in the bearing and provided with an exterior funnel, a pump and operation means therefor mounted in the casing below said partition, a discharge pipe axially alined with the drain tube and connecting the elevated bottom with the intake of the pump, a delivery pipe from the pump, and an exterior attaching nipple mounted on the end of the delivery pipe.

MARSHALL BURRESS.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
1,994,844	Winger	Mar. 19, 1935
2,158,914	Rinehart	May 16, 1939
2,385,393	Wilson	Sept. 25, 1945