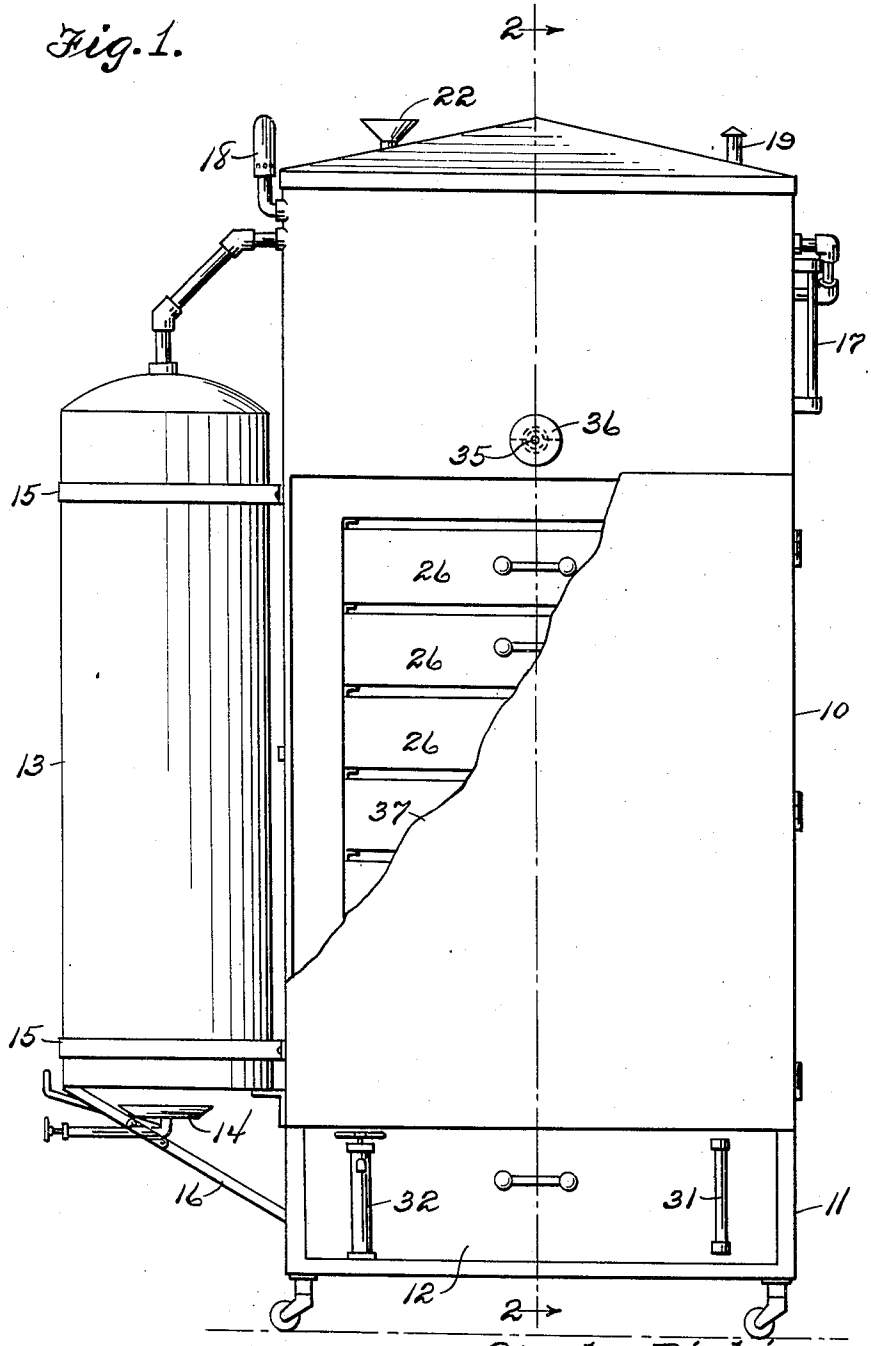
March 24, 1931. S. PIPKIN 1,798,031

APPARATUS FOR RECLAIMING WASTE LUBRICATING OILS

Filed July 12, 1929 2 Sheets-Sheet 1

Fig. 1.



Stanley Pipkin INVENTOR

BY Victor J. Evans

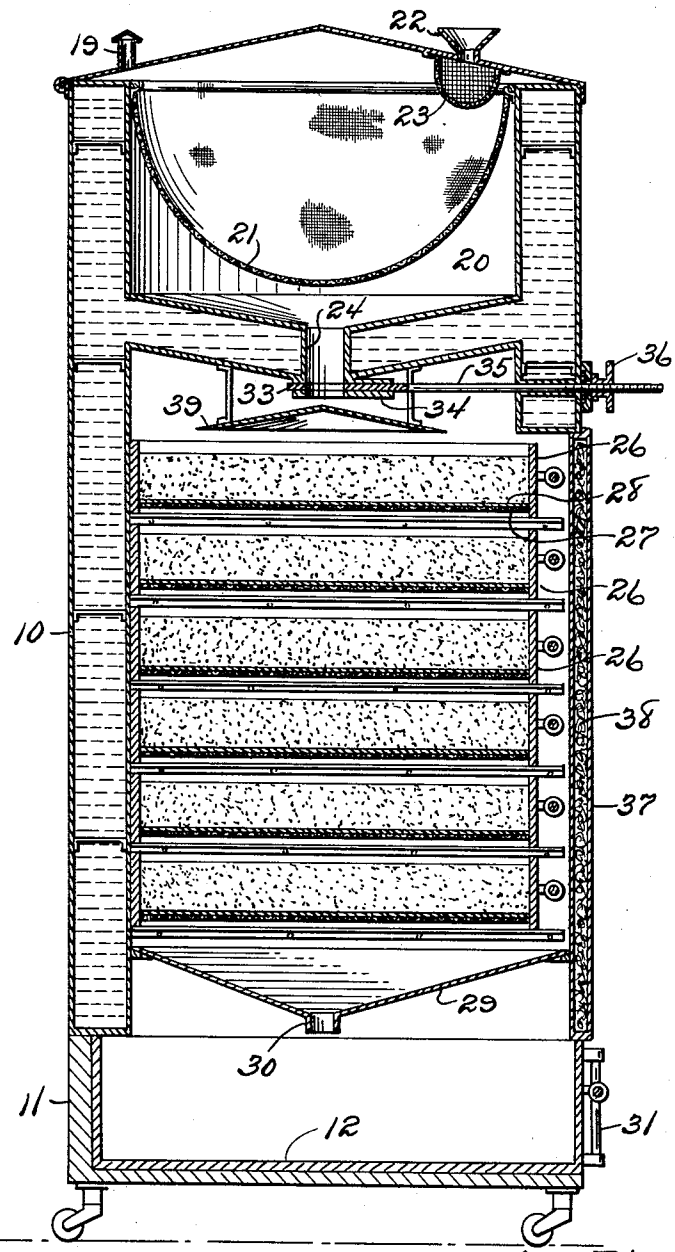
ATTORNEY

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APPARATUS FOR RECLAIMING WASTE LUBRICATING OILS

Filed July 12, 1929 2 Sheets-Sheet 2

Fig. 2.



Stanley Pipkin INVENTOR

BY Victor J. Evans

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Patented Mar. 24, 1931

1,798,031

UNITED STATES PATENT OFFICE

STANLEY PIPKIN, OF LUTESVILLE, MISSOURI, ASSIGNOR OF FORTY-NINE PER CENT TO JAMES HIGGINS, OF LUTESVILLE, MISSOURI

APPARATUS FOR RECLAIMING WASTE LUBRICATING OILS

Application filed July 12, 1929. Serial No. 377,751.

The present invention contemplates the provision of a filter, primarily designed for reclaiming lubricant oils, the invention residing in the construction, combination and arrangement of parts as claimed.

In the drawings forming part of this application like numerals of reference indicate similar parts in the several views, and wherein:

Figure 1 is a view in elevation partly broken away of the filter forming the subject matter of the present invention.

Figure 2 is a vertical sectional view on line 2—2 of Figure 1.

The apparatus constituting the subject matter of the present invention comprises a double walled tank indicated at 10 and supported on a suitable base 11 adapted to slidably receive a container 12 which receives the clean oil after it passes through the apparatus. A water heater 13, beneath which is arranged a suitable burner 14 is supported on one side of the tank in any suitable manner, preferably by means of a band 15 encircling the heater adjacent its upper end and by means of a bracket arm 16 arranged at the bottom thereof. This water heater is suitably piped with the tank 10 to promote a circulation of hot water through the spaced walls of the tank as clearly illustrated, a water gauge being indicated at 17. A safety valve 18 is associated with the tank, while rising from the top thereof is a vent tube or pipe 19.

The tank 10 is constructed to provide an oil receiving compartment 20 directly beneath the cover, while arranged within the compartment is a filtering cloth 21 which may be supported on the tank in any suitable manner. The compartment is filled with oil through a filling tube 22 rising from the top of the tank, while arranged directly beneath the filling tube is a screen 23 to catch any machine chips or waste that might be in the oil as it is poured through the funnel 22. As clearly illustrated in Figure 2 the bottom of the compartment 20 inclines toward the center, and is provided with an opening from which depends a short pipe extension 24 which establishes communication between the compartment 20 and a larger compartment 25.

Slidably arranged within the compartment 25 is a plurality of spaced superimposed drawers 26, each of which includes a foraminated bottom preferably heavy screening indicated at 27, which is covered by a piece of cotton flannel or some other suitable filtering material, while each drawer is filled with a mixture of filtering material, preferably bicarbonate of soda mixed with sawdust in proper proportions. Manifestly the construction is such that any one of the drawers can be readily removed and refilled as the occasion may require, without disturbing any of the other drawers. The tank 10 is provided with an inclined bottom 29 located beneath the lowermost drawer and characterized by a centrally located outlet opening 30 through which the oil is deposited in the receiving container or receptacle 12 after it has passed through the filter.

This receiving receptacle 12 is provided with an oil gauge 31 and also equipped with a pump 32, whereby the clean oil may be pumped from the container if so desired.

Communication between the compartments 20 and 25 is controlled by a suitable slide valve 33 operating in a suitable guide 34, and equipped with a stem 35, a portion of which is threaded to accommodate an adjusting nut 36. The tank 10 is also provided with a door 37 which can be opened to permit the removal of the drawers 26, and this door is preferably hollow and packed with suitable heat retaining material 38.

In practice, the waste lubricant oil is poured into the compartment 20 through the funnel 22, and is first screened by passing through the foraminated element 23, and also filtered by passing through the cloth 21. After the oil has been received in the compartment 20, the valve 33 is actuated or adjusted to control the passage of the oil from the compartment 20 into the compartment 25, the oil striking a distributing plate 39 arranged directly above the uppermost drawer 26. The oil is then allowed to filter through the drawers, while the circulation of hot water is promoted through the tank 10,

the clean oil finally passing through the opening 30 at the top of the tank into the clean oil receiving receptacle 12.

The entire apparatus is comparatively small, and is admirably advantageous for use in garages and engine rooms, where there is continuous waste of lubricant oil, as much of this oil can be profitably reclaimed for further use.

While it is believed that from the foregoing description the nature and advantages of the invention will be readily apparent, I desire to have it understood that I do not limit myself to what is herein illustrated and described, and that such changes may be resorted to when desired as fall within the scope of what is claimed.

What I claim is:—

A filter comprising an inner tank, an outer tank surrounding said inner tank and having the walls thereof spaced from the walls of the inner tank to provide a space for heating fluid therebetween, the walls of said outer tank extending above the walls of said inner tank, a top on said inner tank, a top on said outer tank spaced above the top on said inner tank, an oil receiving container carried by the under side of the top of the outer tank with the bottom thereof spaced from the top of said inner tank, a discharge tube connecting the bottom of said oil receiving container with the top of said inner tank, adapted to conduct oil from said container to said inner tank, means in said discharge tube for controlling the flow of oil therethrough, filtering drawers in said inner tank arranged one above the other, a deflector carried by the top of said inner tank and disposed under the discharge tube for directing the oil into the upper filtering drawer, and a receiving receptacle disposed under the lower filtering drawer.

In testimony whereof I affix my signature.

STANLEY PIPKIN.