March 12, 1929. F. A. STRUCK 1,704,847

GASOLINE FILTER

Filed Aug. 9, 1928

Fig. 1.

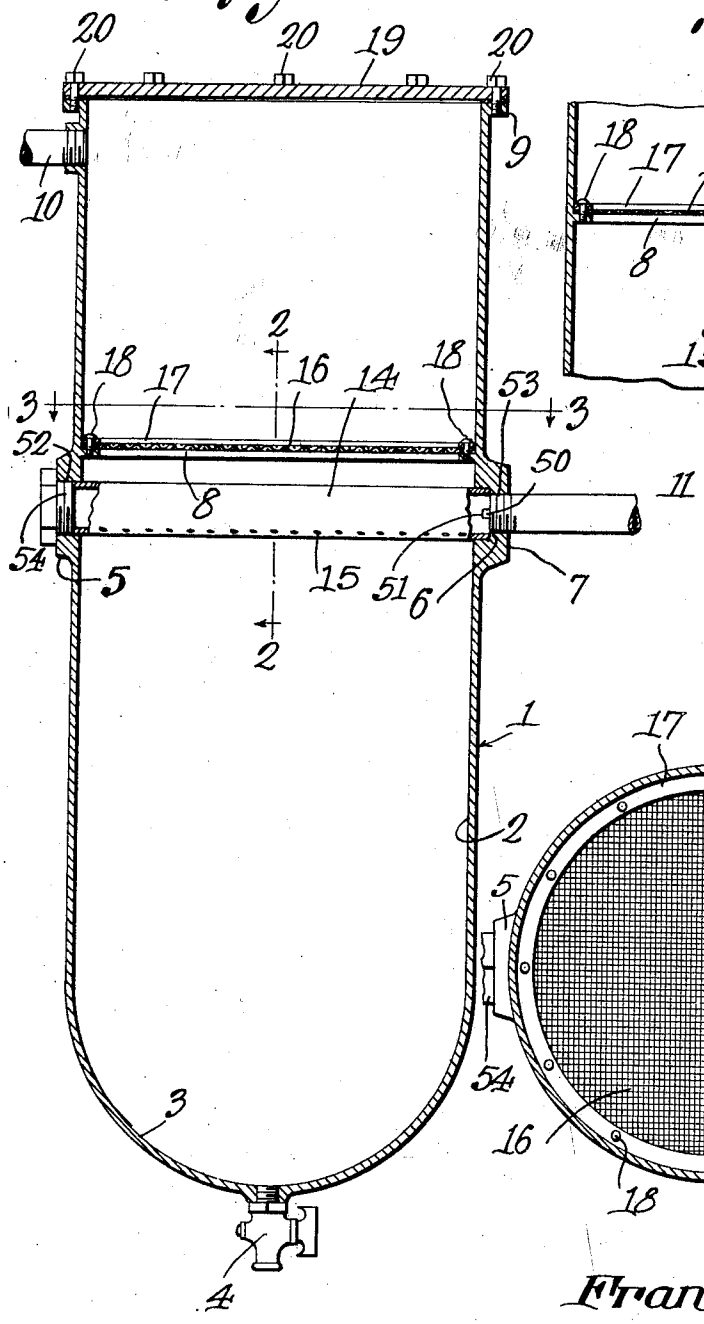


Fig. 2.

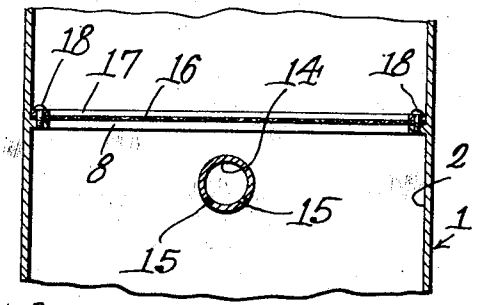
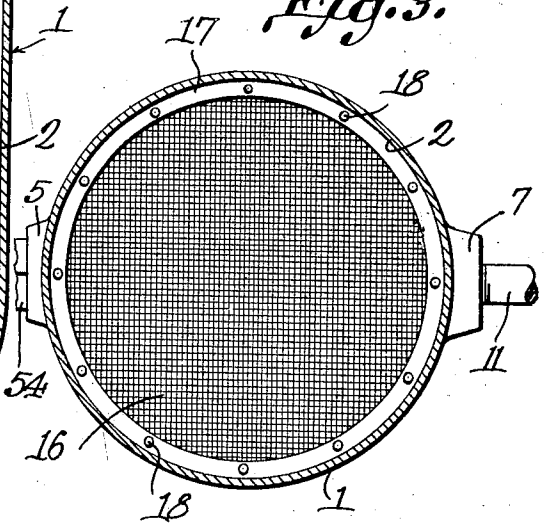


Fig. 3.



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UNITED STATES PATENT OFFICE.

FRANK AUGUST STRUCK, OF EVERETT, WASHINGTON.

GASOLINE FILTER.

Application filed August 9, 1928. Serial No. 298,547.

This invention aims to provide a simple mechanism whereby gasoline may be filtered, before it is delivered to a customer, water and foreign matter being taken out of the gasoline through the instrumentality of a simple but effective mechanism.

It is within the province of the disclosure to improve generally and to enhance the utility of devices of that type to which the invention appertains.

With the above and other objects in view, which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein disclosed, may be made within the scope of what is claimed, without departing from the spirit of the invention.

In the accompanying drawings:

Figure 1 shows in longitudinal section, a device constructed in accordance with the invention, parts being in elevation;

Figure 2 is a fragmental longitudinal section on the line 2—2 of Figure 1;

Figure 3 is a transverse section on the line 3—3 of Figure 1.

The device forming the subject matter of this application preferably is made of metal throughout, and includes a receptacle which is denoted generally by the numeral 1. The receptacle 1 includes a body 2 having a rounded bottom 3 carrying a drain cock 4. At a point intermediate its ends, the body 1 has oppositely disposed bosses 5 and 7, the boss 7 being provided with an internal seat 6. A lug 50 projects from the boss 7 into the seat 6. The boss 5 has a hole 52, and the boss 7 has a hole 53. The body 2 is provided with an internal circumferential shoulder 8 located above the socket 5. At its upper end, the body 2 is supplied with an outstanding flange 9. The body is equipped at a point adjacent to its upper end with an outlet 10. The numeral 11 indicates an inlet or supply pipe that is threaded into the hole 53 in the boss 7. A nozzle 14 is slid endwise through the hole 52 in the boss 5 until the right-hand end of the nozzle is in the seat 6. A plug 54 is threaded into the hole 52 of the boss 5, the plug stopping the left-hand end of the nozzle 14 and also holding the right-hand end of the nozzle firmly in the seat 6. The nozzle 14 is provided with two lines of openings 15, the axes of which diverge downwardly, as shown in Fig. 2. The nozzle 14 has a notch 51 in its end, to receive the lug 50, and this keeps the nozzle from rotating, so that the openings always are in the right position.

A screen 16, made of a very fine wire netting, is supported on the shoulder 8. A ring 17 rests on the screen 16, and securing elements 18 pass through the ring 17 and the screen 16 and enter the shoulder 8, to retain the screen 16 in place and to clamp the edge of the screen tightly between the ring 17 and the shoulder 8. A lid 19 is mounted on the upper end of the body 2 and is held by securing elements 20 upon the flange 9.

In practical operation, the gasoline, laden with impurities and water, enters by way of the inlet pipe 11 and passes into the nozzle 14. The gasoline, delivered under pressure, flows outwardly through the openings 15 and is discharged in a current against the wall of the body 2.

Because the bottom 3 of the body 2 is rounded, the gasoline is kept in a swirling movement, and as a result of the foregoing, the gasoline is churned and broken up. The gasoline, moving upwardly, passes through the screen 16, which holds back the impurities, the water tending to remain at the bottom of the body 2, from which place, the water can be drawn off at any time through the drain cock 4. The pure gasoline passes upwardly into the upper end of the receptacle 1 and leaves by way of the outlet 10. The screen 16 is of very fine mesh, and, as a matter of fact, is of much finer mesh than indicated in the drawings.

What is claimed is:

In a device of the class described, a receptacle provided with a screen and having an outlet, the receptacle being supplied upon one side with an internal seat and with a lug extended into the seat, the receptacle being provided with a hole communicating with the seat, the receptacle having a second hole

disposed opposite to the first-specified hole, a nozzle inserted through the second hole and engaged at one end in the seat, the said end of the nozzle having a notch receiving the lug and keeping the nozzle from rotating, and a plug threaded into the second hole and engaging the nozzle to hold the said end of the nozzle engaged in the seat and to keep the notch engaged with the lug, the nozzle having an aperture discharging into the receptacle.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature.

FRANK AUGUST STRUCK.