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J. H. CRARY

STRAINER

Filed May 28, 1921

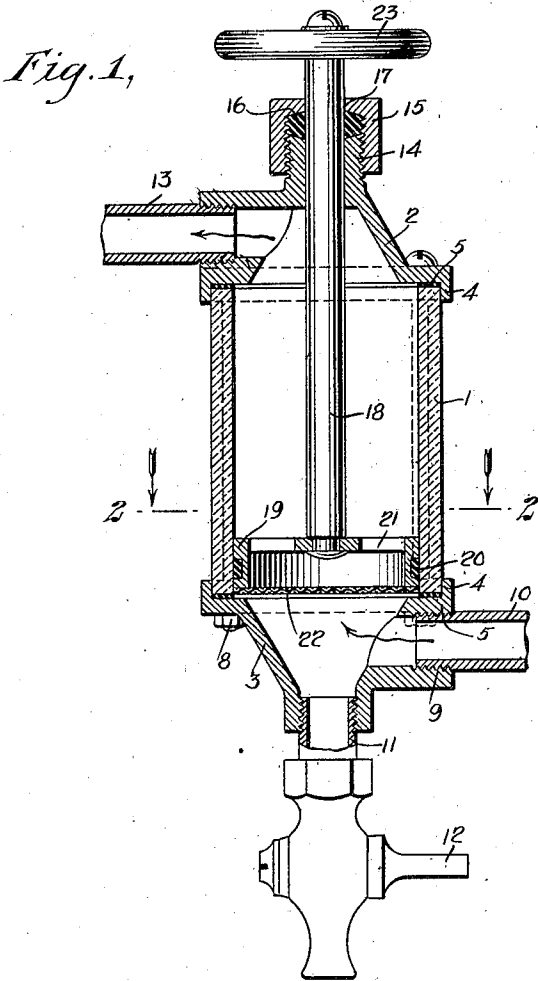
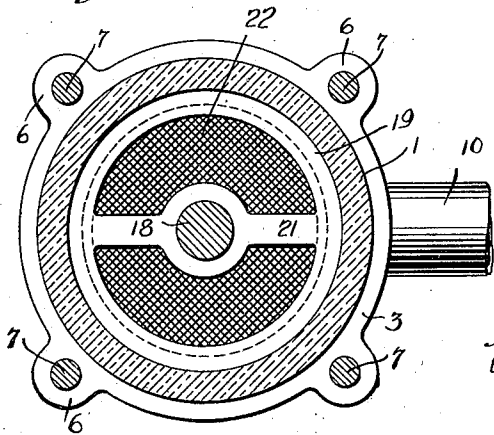


Fig. 2.



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JAMES H. CRARY, OF BROOKLYN, NEW YORK.

STRAINER.

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To all whom it may concern:

Be it known that I, JAMES H. CRARY, a citizen of the United States, and a resident of the city of New York, borough of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Strainer, of which the following is a full, clear, and exact description.

This invention relates to improvements in strainers, particularly to a strainer of the type commonly employed for preventing the entrance of dirt into the carburetor of an automobile.

The primary object of the invention is to provide a strainer which may be cleaned without being taken apart.

Another object is to provide a strainer which will be simple and practical in construction, strong, durable and efficient in use, and comparatively inexpensive to manufacture.

With these and other objects in view, the invention consists in certain novel features of construction and combinations and arrangements of parts as will be more fully hereinafter described and pointed out in the claims.

In the accompanying drawings:—

Figure 1 is a view mainly in longitudinal section, but partly in elevation illustrating the interior construction of my improved strainer; and

Figure 2 is an enlarged view in transverse section on the line 2—2 of Figure 1.

Referring in detail to the drawings, 1 represents a cylinder, which is interposed between a pair of castings 2 and 3. Both of the castings are provided with annular flanges 4 embracing the cylinder and gaskets 5 are located between the ends of the cylinder and the castings. The castings are provided with radially extending aligned perforated lugs 6. Bolts 7 passed through the lugs and nuts 8 around the bolts serve to clamp the cylinder 1 firmly between the two castings.

The lower casting 3 is provided with a threaded opening 9, which receives the threaded end of an inlet pipe 10. The inlet pipe 10 enters the side of the lower casting 3 and a drain pipe 11 is screwed into the bottom of the casting 3 and is controlled by a pet cock 12. The pipe 11 serves as a trap for dirt.

An outlet pipe 13 enters the upper casting 2 at a point diametrically opposite the pipe 10. The casting 2 includes an upwardly extending externally threaded hollow post 14 and an internally threaded cap 15 serves to clamp graphite packing or a similar substance 16 against the top of the post 14. The cap 15 is provided with an opening 17 registering with the hollow post and a plunger rod 18 is movable through the post and cap. It will be readily seen that by screwing the cap 15 more tightly down upon the post 14, the packing material 16 will be compressed and the friction between the plunger rod 18 and the packing material will be increased.

19 represents an annular member slidable vertically in the cylinder 1 and grooved to receive a packing ring 20 which engages the inner walls of the cylinder. This annular member 19 is formed with an integral transverse web 21 to which the lower end of the plunger rod is attached. A screen 22 of fine wire gauze is soldered across the lower end of the member 19. This member 19 together with the screen 22 forms in effect a piston, and any approved handle member designated by the reference numeral 23 may be secured to the upper end of the plunger rod 18, for manually reciprocating the plunger or piston in the cylinder 1.

The method of use of the strainer will be apparent. Gasoline under pressure is introduced into the pipe 10, passed through the strainer 22 and out through the pipe 13. When it is desired to clean the strainer 22, the pressure in the pipe 10 is cut off and the cylinder 1 is left full of gasoline. By manually reciprocating the screen back and forth, the gasoline in the cylinder will wash the dirt from the screen and the dirt will remain suspended in the gasoline below the screen. This dirty gasoline may then be drained off through the pet cock 12.

Although I have illustrated one of the preferred embodiments of my invention, it will be apparent that various slight changes and alterations might be made in the general form and arrangement of the parts described without departing from the invention and hence I do not wish to limit myself to the precise details set forth, but shall consider myself at liberty to make such

slight changes and alterations as fairly fall within the spirit and scope of the appended claims.

I claim:

- 5 1. A fluid strainer comprising a cylindrical body, a head at the lower end provided with an inlet and a drain, a head at the upper end provided with an outlet, and a strainer element mounted in said body and
10 having exteriorly disposed means for effecting reciprocations of the strainer between the opposite ends of the body for the purpose of cleansing the same by its movement through the liquid trapped in the body.
- 15 2. A fluid strainer comprising a cylindrical body, a head at the lower end having an inlet and a drain cock, a head at the upper end provided with an outlet, a strainer element mounted in the body for
20 reciprocations between its opposite ends, and manipulating means for the strainer element connected thereto and extending through the upper head for effecting reciprocations of the strainer element to cleanse
25 the same by its movement through the liquid, said drain cock adapted to be opened for discharging the liquid and particles removed from the strainer.
- 30 3. A device of the character described, including a pair of castings, a cylinder, flanges

on the castings embracing opposite ends of the cylinder, means clamping the cylinder between the castings, an inlet pipe communicating with the lower casting, an outlet
35 pipe communicating with the upper casting, a ring shaped member slidable vertically in the cylinder, a screen secured across the ring shaped member, a plunger rod operatively connected to the ring shaped member, a hollow post integral with the upper
40 casting and guiding the movement of the plunger rod.

4. A device of the character described, including a pair of castings, a cylinder, flanges
45 on the castings embracing opposite ends of the cylinder, means clamping the cylinder between the castings, an inlet pipe communicating with the lower casting, an outlet pipe communicating with the upper casting, a ring shaped member slidable vertically in
50 the cylinder, a screen secured across the ring shaped member, a plunger rod operatively connected to the ring shaped member, a hollow post integral with the upper casting and guiding the movement of the
55 plunger rod, and means associated with the hollow post for regulating the friction on the plunger rod.

JAMES H. CRARY.