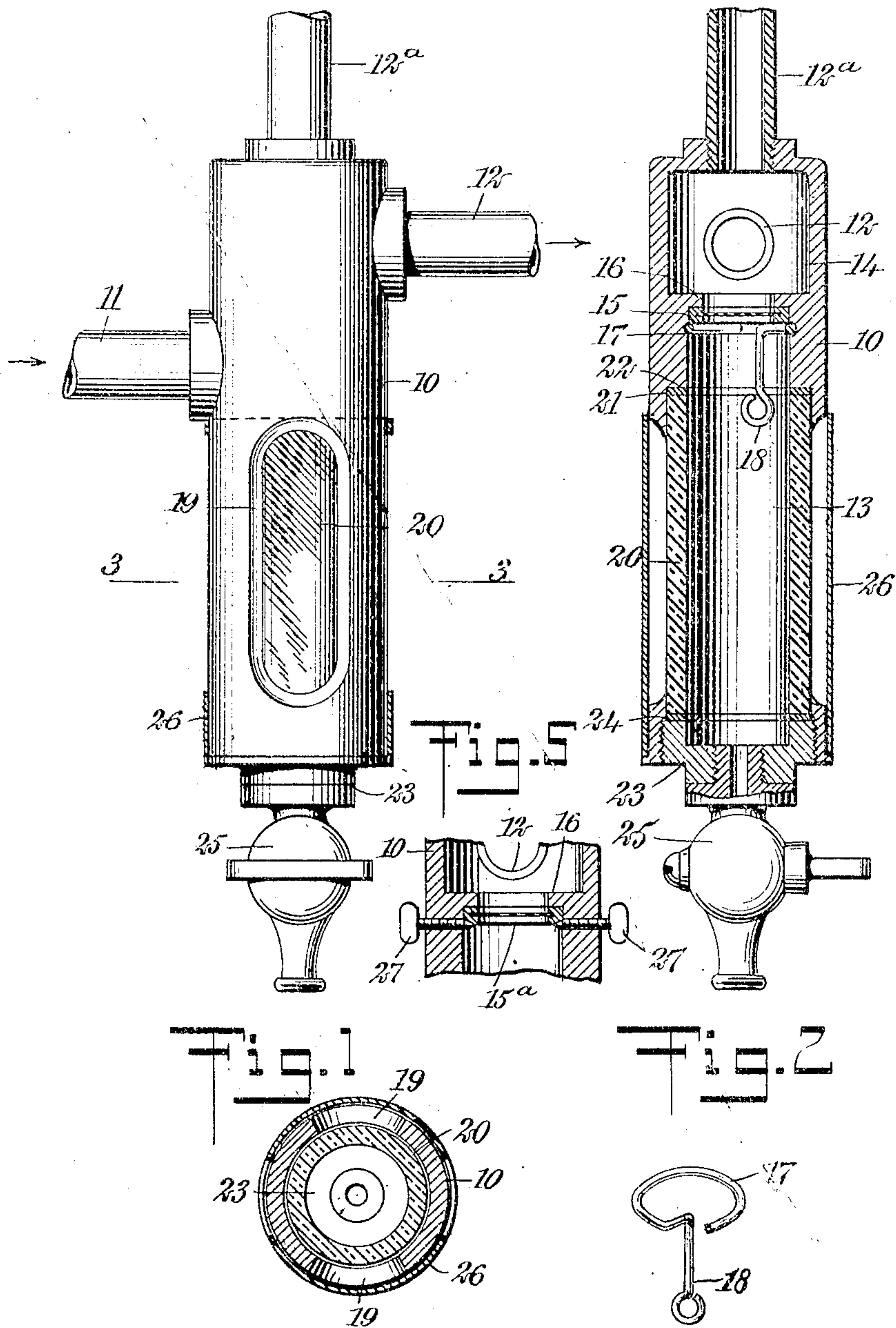


No. 882,393.

PATENTED MAR. 17, 1908.

W. J. KRAMER.  
GASOLINE TRAP.

APPLICATION FILED NOV. 14, 1907



WITNESSES

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# UNITED STATES PATENT OFFICE.

WILLIAM J. KRAMER, OF NEW YORK, N. Y.

## GASOLENE-TRAP.

No. 882,393.

Specification of Letters Patent.

Patented March 17, 1908.

Application filed November 14, 1907. Serial No. 402,115.

*To all whom it may concern:*

Be it known that I, WILLIAM J. KRAMER, a citizen of the United States, and a resident of the city of New York, Long Island City, borough of Queens, in the county of Queens and State of New York, have invented a new and Improved Gasolene-Trap, of which the following is a full, clear, and exact description.

This invention relates to certain improvements in traps adapted to be used in connection with gasolene supply pipes or carbureters, and designed to facilitate the separation of sediment, water, and other impurities in the gasolene before the latter is vaporized in the carbureter or engine.

The device is so constructed that solid impurities are strained out of the gasolene and collect at the bottom of a special chamber, the sides of which are transparent, so that the amount of water and sediment which has been collected may be readily ascertained and drawn off through a stop-cock at the bottom.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures, and in which

Figure 1 is a side elevation of a trap constructed in accordance with my invention; Fig. 2 is a central longitudinal section through the device shown in Fig. 1; Fig. 3 is a transverse section on the line 3—3 of Fig. 1; Fig. 4 is a perspective view of the clip preferably employed for holding the screen in place, and Fig. 5 is a detail showing in longitudinal section a modified form of means for securing the screen in place.

The trap includes in its construction, a body portion 10, adapted to be connected to an inlet pipe 11 and an outlet pipe 12 or 12<sup>a</sup>. The inlet pipe is at a lower level than the outlet pipe, and the latter may either extend from the side of the body or from the top thereof, as is found most convenient in the use. If the outlet pipe 12 be employed, then a suitable bracket or support may be threaded into the opening in place of the pipe 12<sup>a</sup> to support the body portion, while if the pipe 12<sup>a</sup> is employed from the top of the body, then a suitable plug or bracket may be threaded into the opening in the side. The body is preferably formed of a casting of brass or other suitable metal, and is subdivided into a sediment chamber 13 and a

purified gasolene chamber 14, by a transverse screen 15. The screen is preferably of fine wire mesh secured in a frame which is removable from the body. The screen preferably engages with the under surface of a shoulder 16 and is held against downward movement by a spring clip 17 formed of wire and extending outward into a groove in the body just below the screen frame. One end 18 of the wire clip preferably extends downward a short distance, whereby it may be engaged by a suitable tool to remove it and permit the removal of the screen. The lower portion of the body is bored out to slightly larger diameter than the intermediate portion and is provided with two sight openings 19 in opposite sides thereof.

Disposed within the body and of a greater length than said sight openings, is a glass tube 20, the upper end of which engages with a packing 21 placed beneath the shoulder 22 in the body. The tube is of substantially the same diameter as the lower portion of the body, and is inserted in place through the lower open end of the body. A threaded plug 23 serves to close the lower end of the body and also to force a packing 24 against the lower end of the tube, the insertion of the plug also serving to force the tube against the upper packing 21. The plug carries a small pet-cock 25, whereby the contents of the body may be drawn off independently without necessitating the removal of the plug 23.

For preventing the glass from being accidentally broken and to prevent the collection of dust and dirt upon the outside thereof, so as to obscure the vision, I preferably provide a sleeve 26, inclosing the body and having sight openings corresponding to the sight openings in said body. The sleeve is freely rotatable and is normally held so that the sight openings of the sleeve and the body are out of registry. When it is desired to examine the device to ascertain the amount of water or sediment collected in the body, the sleeve is readily rotated to bring the sight openings into alinement. The screen 15 is, as previously stated, removable from the lower end of the body, but other means than that illustrated in Figs. 2 and 4 may, if desired, be employed, as, for instance, that shown in Fig. 5. In this figure, I have shown the frame of the screen 15<sup>a</sup> beveled at its under side and held in place by two set screws 27, threaded through the walls of the



body and having tapered inner ends engaging with the beveled under surface of the frame. By inserting the set screws to their limiting position, the screen is forced into firm engagement with the under side of the flange or seat 16. As shown, the screen is formed of reticulated metal, but, if desired, a piece of chamois skin may be substituted in place thereof, as the latter will serve equally well in preventing the passage of sediment and also of water, while permitting the free passage of gasolene.

In the use of my improved device, the pipe 11 is connected to the gasolene supply either adjacent the carbureter or at any suitable point in the supply conduit, and the outlet pipe 12 or 12<sup>a</sup> from the device is connected to the carbureter. The inlet pipe being disposed beneath the screen delivers the gasolene, together with any impurities contained therein to the chamber 13, in which all of the heavier impurities and the water settle to the bottom. Any impurities which are lighter than the gasolene are separated by means of the screen, which also tends to prevent the momentum of the fluid from carrying along heavier impurities. The glass tube permits an inspection of the interior of the chamber to ascertain when it is necessary to open the pet-cock 25 to draw off the impurities. If such a quantity of solid matter collects that it cannot readily pass through the pet-cock, the bottom plug 23 may be removed. The spring clip 17 and the screen 15 may be removed from the under side without removing the glass tube or affecting the connections between the trap and the supply and discharge conduits. The glass is thoroughly protected on all sides, save at the sight openings, whereby the liability of injuring the same is greatly reduced, if not eliminated.

Having thus described my invention, I

claim as new and desire to secure by Letters Patent:

1. A trap, comprising a body having an inlet, an outlet above said inlet, and a draw-off beneath said inlet, a screen intermediate the inlet and the outlet, a glass tube within said body, said body having sight openings intermediate the ends of the tube, and means closing the lower end of said body and retaining said tube in position, said screen being removable through the lower end of said tube when said means is removed.

2. A trap having an inlet, an outlet, a glass tube communicating with said inlet and serving as a sediment chamber, a screen above said tube and intermediate said inlet and outlet, a detachable bottom, and means whereby said screen may be detached and removed through said tube.

3. A trap, comprising a body presenting a downwardly-facing shoulder intermediate the ends thereof and having an inlet and sight openings below said shoulder, and an outlet above said shoulder, a screen within said body, detachable means for holding said screen in engagement with the under surface of said shoulder, a glass tube within said body, covering said sight openings and having an interior diameter greater than the diameter of said screen, and a removable plug closing the lower end of said body and retaining said tube in position, said screen being removable through said tube upon the removal of said plug.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WILLIAM J. KRAMER.

Witnesses:

HENRY L. KASSEBAUM  
CHARLES KRAMER.