

Dec. 28, 1926.

1,612,526

E. H. MUELLER

GASOLINE FILTER

Filed July 12, 1926

Fig. 1.

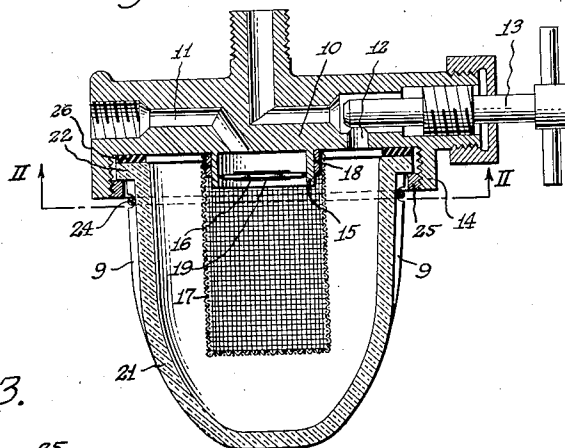


Fig. 6.

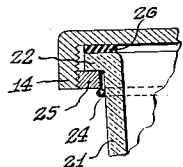


Fig. 3.

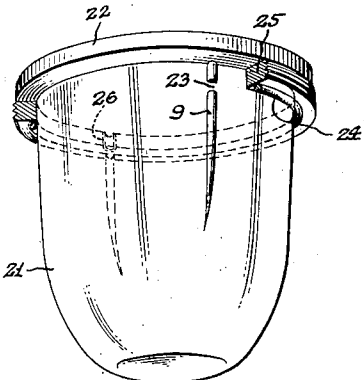


Fig. 2.

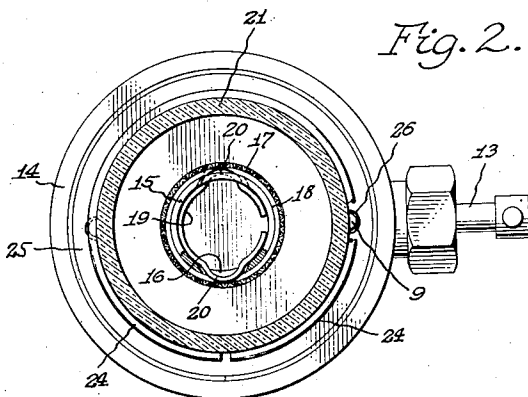


Fig. 4.

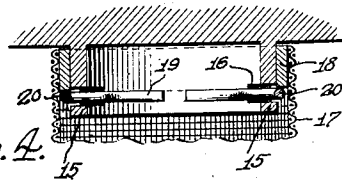
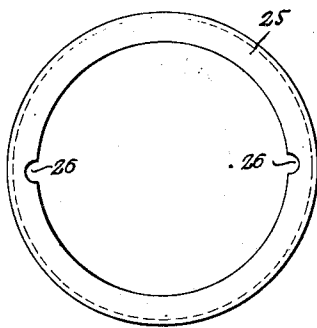


Fig. 5.



Inventor

Ervin H. Mueller

By *Robert A. Ruland*

Attorneys

Patented Dec. 28, 1926.

1,612,526

UNITED STATES PATENT OFFICE.

ERVIN H. MUELLER, OF DETROIT, MICHIGAN.

GASOLINE FILTER.

Application filed July 12, 1926. Serial No. 121,843.

This invention relates to new and useful improvements in strainers for vacuum gasoline systems.

One of the objects of the present invention is to provide novel and practical and inexpensive connective means for attaching the strainer screen and strainer receptacle to the strainer frame.

The invention consists essentially in a novel arrangement and construction of various parts more fully described in the following specification and pointed out in the annexed claims.

In the accompanying drawings:—

Figure 1 is a longitudinal section of the strainer;

Fig. 2 is a cross sectional view of the same taken on line 2—2 of Fig. 1;

Fig. 3 is an elevation view of the strainer receptacle and fittings therefor;

Fig. 4 is a detail view of the screen securing means;

Fig. 5 is a plan view of the securing ring for the strainer receptacle; and

Fig. 6 is an enlarged fragmentary sectional view of the upper end of the strainer, showing the manner of suspending the receptacle from the strainer body.

Like numerals of reference in the drawing designate corresponding parts.

Referring now to the drawing:—Reference character 10 indicates a strainer body provided with an inlet passage 12, and an outlet passage 11, the latter having a suitable controlling valve 13. The bottom of the body 10 is formed with an internally threaded downward extending flange 14, and inside the latter is another flange 15 having diametrically opposite horizontal slots 16. There is provided a screen 17 suitably secured to a ring frame 18 which is adapted to fit over said flange 15, being secured thereto by a C shaped locking ring 19, having outwardly extending lobes 20, which protrude through slots 16 and engage with the lower edge of the screen frame 18, thus removably securing the screen 17, to the strainer body.

The strainer receptacle comprises a cup like member 21 made preferably of a suitable light sheet metal, and having its upper end formed with an outside flange 22, and adapted to fit within said flange 14, of the strainer body, and enclose screen 17. The side of the receptacle near the top thereof is formed with one or more vertical ribs 9,

which are cut away, as indicated at 23, for the reception of a locking wire 24 (see Fig. 3): Fitted about the top of the receptacle and abutting the underside of the flange 22 and held in place by said locking wire 24, is an annular exteriorly threaded member 25 for securing said receptacle in position within the flange 14. Between the flange 22 and the strainer body, a gasket 26 is fitted whereby leakage is prevented at said connection.

Member 25 is preferably provided with one or more internal circular recesses 26 for preventing a relative movement between it and the receptacle as the same is screwed home compressing said gasket and effecting a liquid tight connection around said flange of receptacle.

From the foregoing, it will be seen that there is provided a novel and practical means of securing a metal receptacle to the strainer body without involving the process of forming screw threads on the wall thereof, whereby thinner metal for the receptacle may be utilized and which includes a simple and inexpensive device for holding the said means in position upon said receptacle; and furthermore, a simple and inexpensive means for removably attaching the strainer screen to the strainer frame is provided.

Modification of the above may be made within the spirit and scope of the invention.

What I claim is:—

1. A strainer receptacle formed with an open, flanged upper end, and having vertical ribs about the wall of the receptacle, said ribs provided with transverse cutaway portions.

2. A strainer receptacle formed with an open, flanged upper end, having vertical ribs about the wall of the receptacle, said ribs provided with transverse cutaway portions, and an exteriorly threaded ring having internal circular recesses to adapt the same to fit about said ribs and under flange of said receptacle.

3. A strainer receptacle formed with an open, flanged upper end, having vertical ribs about the wall of the receptacle, said ribs provided with transverse cutaway portions, an exteriorly threaded ring having internal circular recesses to adapt the same to fit about said ribs and under flange of said receptacle, and means to removably secure said ring under said flange.

4. The combination with a strainer recep-

tacle having an open flanged upper end, and the upper wall provided with broken vertical ribs extending upward to said flange, of an annular extension threaded member of an
5 internal diameter corresponding to the external diameter of the top of said receptacle, and provided with circular recesses for adapting the same to fit over the upper portions of said ribs, and a locking wire to lie
10 in the broken sections of said ribs for holding said member in engagement with the underside of said flange.

5. In a strainer for gasoline vacuum systems, the combination with a strainer
15 body having inlet and outlet passageways and ports, a flange surrounding the inlet port formed with diametrically opposite transverse slots, a spring within said flange having lobes extending outward from said
20 slots, and a screen frame arranged about said flange and resting upon said lobes whereby the same is removably secured to said strainer body.

6. A strainer body having a flange surrounding the inlet port provided with horizontal slots, a screen mounted on said flange,
25 and a spring arranged in said slots for re-

movably holding said screen on to said flange.

7. In a strainer for liquids the combination with a strainer frame having inlet and outlet ports and passageways, a depending flange surrounding inlet port and formed with diametrically opposite transverse slots, and an exteriorly threaded depending flange
35 about said inner flange and including said outlet port, of a screen fitted about said inner flange having an upper securing frame, a C-shaped locking wire disposed within the flange having projecting lobes extending
40 through said slots in the flange and adapted to engage with said screen frame and removably support said screen about the inlet port, an open flanged receptacle adapted to fit
45 within said outer flange, a gasket interposed between the flange and strainer body, an exteriorly threaded ring adapted to engage with said threaded flange of strainer body and receptacle flange whereby the receptacle
50 is held in position in a liquid tight connection, and means for making said annular member rigid with the receptacle.

In testimony whereof I affix my signature.

ERVIN H. MUELLER.