

E. C. COURTWRIGHT.
STRAINER.
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1,008,527.

Patented Nov. 14, 1911.

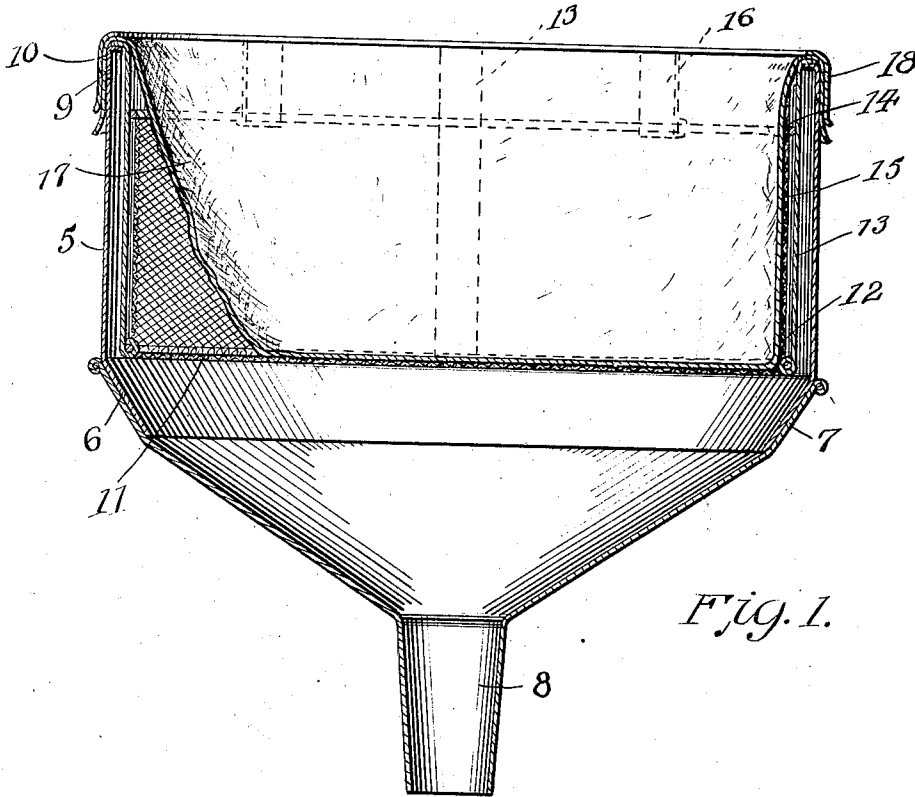
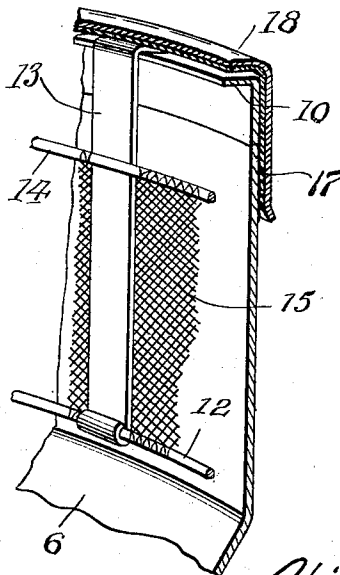


Fig. 1.

Fig. 2.



Witnesses

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STRAINER.

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To all whom it may concern:

Be it known that I, EDWIN C. COURTWRIGHT, a citizen of the United States, residing at Sedan, in the county of Chautauqua and State of Kansas, have invented new and useful Improvements in Strainers, of which the following is a specification.

This invention relates broadly to improvements in strainers, but has specific reference to strainers employed for straining liquids.

The primary object of the invention is the provision of a strainer to be employed for straining hydrocarbon fluids and including a body, a straining cloth, and means for supporting the straining cloth within the body so that the liquid may be passed through the straining cloth in an expeditious manner.

A further object of the invention is to provide a strainer including an annular body and means for removably supporting the strainer upon the upper edge thereof.

A still further object of the invention is to provide a strainer including an annular body which latter is removably supported in the flared mouth of the funnel of the strainer, and means for clamping the strainer cloth to the upper edge of the removable ring superimposed upon the body portion of the strainer.

With the above and other objects in view, which will more fully hereinafter appear, the present invention consists in certain novel details of construction and arrangement of parts, hereinafter fully described, illustrated in the accompanying drawings, and more particularly pointed out in the appended claims; it being understood that various changes in the form, proportion, size, number of parts of body, and minor details of the device may be made, within the scope of the appended claims, without departing from the spirit or sacrificing any of the advantages of the invention.

In the accompanying drawings, forming part of the specification;—Figure 1 is a vertical sectional view of the device. Fig. 2 is a detail perspective of a portion of the interior of the body with the straining cloth removed.

Similar numerals of reference are employed to designate corresponding parts throughout.

The device includes what will subsequently be termed a body preferably of metal, annular in contour and designated by the numeral 5. The lower end of the body

5 is provided with an inverted hollow frusto-conical-shaped flange 6. The funnel is shown to include a flared mouth portion 7, and a discharge spout 8, the mouth portion 7 receiving the removable flange 6 and the spout 8 serving to direct the liquid flowing into the mouth of the funnel, into a suitable receptacle.

Resting upon the upper end portion of the body 5 and in superimposed relation thereto is a ring 9, the upper edge portion of said ring being bent inwardly to provide a lateral flange 10 which extends beyond the inner surface of the body 5 for a purpose to be presently described.

What will subsequently be termed a supporting basket is shown to include a reticulated bottom portion 11, of circular contour and somewhat less in diameter than the diameter of the body 5. Secured in any preferred manner to the periphery of the bottom 11 is a wire hoop 12. Rising from the hoop 12 are a plurality of spaced hangers 13, the upper end portions of which are bent outwardly and are supported upon the flange 10 of the ring 9. Arranged above and in spaced relation to the hoop 12 is a second hoop 14, said hoop 14 being secured to the hangers 13 at points below the bent end portions of the latter. The hoops 12 and 14 are connected by a reticulated side member 15. A plurality of clips 16 have their opposite ends secured to the ring 9 and upper hoop 14. With this construction it will be manifest that the basket is supported in spaced relation to the inner surface of the body 5.

The straining cloth is designated by the numeral 17 and when in operative position is placed over the upper end of the ring 9 then bulged downwardly until it bears on the bottom and side of the basket. When so positioned the straining cloth is secured against displacement by means of a metallic band 18, of a diameter to frictionally engage and fit over the ring 9 and cooperating with the latter to clamp the edge portion of the straining cloth therebetween. The lower portion of the band 18 extends downwardly over the upper edge portion of the body 5, whereby the ring 9 is held firmly against displacement.

With this construction it will be manifest when hydrocarbon fluid is poured into the depression presented by the straining cloth and the said depression is practically filled

by virtue of the reticulated bottom and side of the basket the fluid after passing through the straining cloth will readily pass into the funnel and be directed thereby into a suitable receptacle. If at any time it is found desirable to simultaneously remove the supporting basket and strainer cloth from the body of the strainer, the metallic clamping band 18 is lifted upwardly. By this operation it will be apparent that since the upper ends of the supporting hangers of the reticulated basket together with the outer edge of the strainer cloth is held firmly clamped between the ring 9 and the metallic band 18 it will afford a ready and convenient means of attaching the strainer proper from the body portion 5.

I claim:—

1. A strainer comprising a body portion provided at its lower end with a reduced discharge opening, a ring supported upon the upper edge of the body, a reticulated basket provided with hangers supported upon the ring within the body portion, a strainer cloth arranged within the basket, the outer edges of which latter overlies the upper edge of the said ring, and means for clamping the said strainer cloth and hangers of the basket to the said ring.
2. A strainer comprising an annular body provided at its lower end with a reduced discharge opening, a ring supported upon the upper edge of the body and provided with an inwardly extending flange, a reticulated basket supported within the body and provided with hangers, the upper ends of the latter resting upon the flange of the ring to support the basket, a strainer cloth arranged within the basket, the outer edges of

which overlie the flange of the ring, and means for clamping the strainer cloth upon the flange of the ring.

3. A strainer comprising an annular body portion having its lower end provided with a discharge opening, a ring supported upon the upper edge of the body and provided with a laterally extending flange, a reticulated basket supported within the annular body upon the flange of the ring, and a strainer cloth arranged within the basket and having its outer edge portions overlying the lateral flange of the ring, and a metallic band for clamping the strainer cloth to the lateral flange of the said ring.

4. A strainer comprising an annular body portion provided at its lower end with a discharge opening, an annular ring superimposed upon the top of the body and provided with a laterally extending flange, a strainer cloth positioned within the annular body and having its outer edges overlying the lateral flange of the ring, and a metallic clamping ring frictionally engaging the outer peripheral surface of the ring whereby the strainer cloth is securely held in position upon the said ring, the lower edge of the metallic band extending down and over the upper edge of the body portion whereby the strainer cloth clamping means is prevented against lateral displacement.

In testimony whereof I affix my signature in presence of two witnesses.

EDWIN C. COURTWRIGHT.

Witnesses:

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."