

E. C. COURTWRIGHT.
GASOLENE STRAINER.
APPLICATION FILED OCT. 28, 1913.

1,111,249.

Patented Sept. 22, 1914.

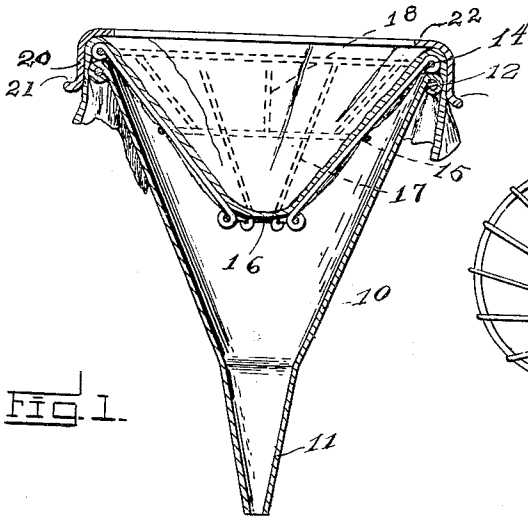


FIG. 1.

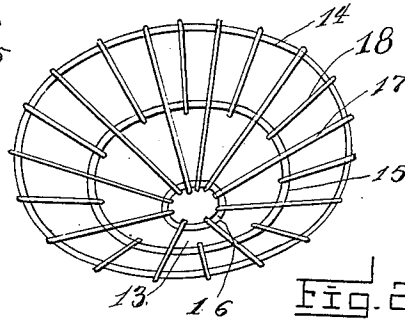


FIG. 2.

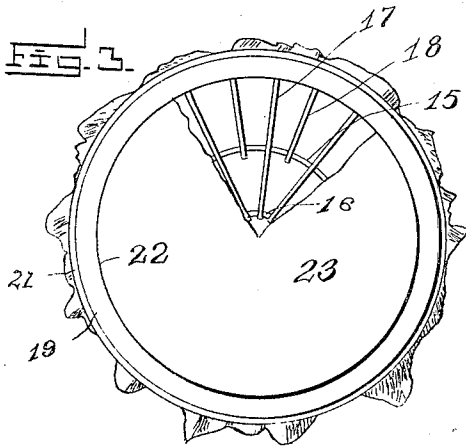


FIG. 3.

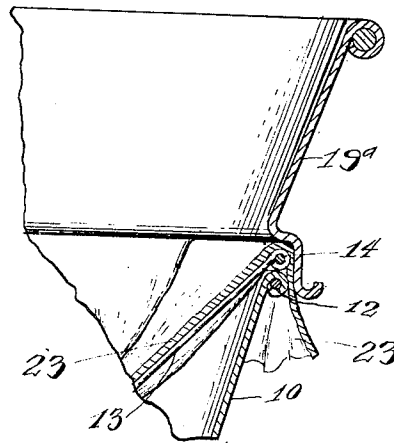


FIG. 4.

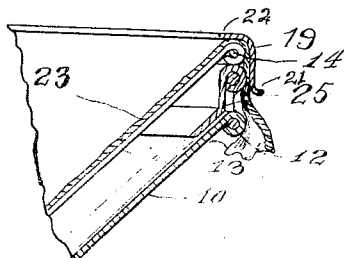


FIG. 5.

Witnesses
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EDWIN C. COURTWRIGHT, OF SEDAN, KANSAS.

GASOLENE-STRAINER.

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Specification of Letters Patent.

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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 Gasolene-Strainers, of which the following is a specification.

The invention has for an important object the simplification of construction of a funnel and strainer receptacle utilizing a fabric such as chamois and a device to support the chamois to keep its under side clear from surfaces tending to impede the passage of fluid therethrough.

Another important object is to make the device compact.

A further aim is to simplify the construction of the device for supporting the strainer fabric.

Another object is to combine the parts in such relation that the strainer and its support will be independent of the funnel and of each other, and yet enable their retention in place securely against loose movement by means of but one plain hoop-like clamping ring.

Additional objects and advantages will appear, some of which will be apparent from the following description, and from the drawings, in which,

Figure 1 is a sectional view of the device assembled, Fig. 2 is a perspective view of the basket, Fig. 3 is a top view of the device with part of the strainer cloth removed. Figs. 4 and 5 are detail sectional views of strainer devices, illustrating partly the scope of application of my invention.

There is illustrated a receptacle body or funnel body 10, of ordinary form, having the spout 11 tapered more gradually and is adapted for engagement in the filling opening of an auto gasolene tank. The body 10 is formed from a sheet metal blank of segmental form, and has a lip 12 formed at its upper edge, by being recurved over a piece of wire in the wellknown manner. There is provided a wire basket 13, in the form of a cone of lesser altitude than the body 10 of the funnel. This basket comprises three annuli of wire, the upper 14 being nearly or quite the same size as the rim of the funnel, and being located at the top of the basket. The other two 16 and 15 are located at the bottom and intermediately of the height of the basket respectively, being of the proper sizes to permit the proper shaping of the

basket, as will be described—the smaller one in practice being made about one and a half inches in diameter. Connected to the small annulus there are ten rectilinear wires 17 extending the full height of the basket, and secured at their upper ends to the large annulus, being also attached in any suitable way to the annulus 16. Alternated with these wires there are short ones 18, extending only between the middle and upper annuli, their ends being attached to the respective rings. It is found unnecessary, and in fact preferable not to have any transverse connections between these wires other than the rings mentioned, for a reason to be subsequently explained. The wires 17 and 18 are equally spaced, and are disposed inwardly of the rings, their ends being bent outwardly around the rings, so that continuous rectilinear parts are presented at their inner sides. The attachment of the wires 17 to the intermediate ring is not believed essential, as this ring is securely held at the proper height by the wires 18 and will support those 17 as well as if secured thereto. However, as it is customary to dip the basket after formation into a bath for coating the device with a non-corrodible metal when iron wire is used, this treatment would naturally result in joining the intermediate ring 16 and wires 17.

It is thought best to form the upper edge of the basket of such diameter that the outwardly turned end portions of the wires 17 and 18 will come on or within the major diameter of the funnel. There is also provided a hoop or clamping ring 19 comprising a central slightly conical portion 20 which may be made almost or quite cylindrical, an outwardly curved bottom edge portion 21 and an upper inwardly turned flange 22 adapted to project inwardly over the funnel when in engaged position. There is also provided a cloth 23 of chamois or other water-absorbent fabric, which may be of any convenient shape, but should have sufficient area to allow it to be depressed into the basket fully while its edge portions project over the edge portions of the funnel when the basket is set therein.

In use, the basket is simply set in the upper end of the funnel and the cloth 23 laid thereover and pressed inward with the hand until it rests as snugly as possible in the basket with the edge portions of the cloth projecting slightly beyond the rim of the

funnel. The clamping ring 19 is then presented over the funnel with its flared edge downward, and pressed downwardly on to the funnel until the flange 22 is checked by the basket. The basket and funnel are thereby held securely in place without rattling and the strainer may be used in the customary way without liability of tearing of the cloth under distension by liquids and it is held properly away from the sides of the funnel to allow free percolation of liquids notwithstanding that it is extended so far into the funnel as to give a much greater area of straining material than would be practicable under the ordinary method of stretching the cloth across a funnel without support.

It is obvious that modifications in the funnel construction may be made without modifying the function of my invention and enabling its use in substantially the form described. The receptacle may comprise two or more parts, as suggested in Fig. 4, where the funnel is provided with a cylindrical extension 25, upon the upper edge of which the basket and fabric may be secured in the same manner as on the funnel before described. Or, as in Fig. 5, the equivalent of the ring 19 may be formed as at 19^a, whereby a large receiving basin is formed thereby over the strainer cloth.

It is thought better to use a minimum number of connections between the wires 17 and 18 in order that the fabric may sag slightly therethrough and compression of any folded portions be thus avoided to a

large extent, increasing the capacity of the strainer.

What is claimed is:

1. In a strainer funnel for the uses described, a conical funnel having a rim shaped to allow clamping of a cloth thereon, a cloth clamped thereon, means conforming to the shape and size of the funnel in binding engagement with the cloth therearound, and a basket in form of a cone and including a rim conforming approximately in size and shape to that of the funnel held under the cloth, elemental wires extending downwardly from the rim divergently from the funnel sides converging to a minimum at their lower parts, and stopping short of the funnel body at their lower ends, and means connecting the lower ends of the wires.

2. In a device of the character indicated, a funnel, a basket therein and having an edge portion conforming to the size and shape of the edge of the funnel, a cloth over the basket and projecting there beyond, and a member conformed to the funnel edge fitting tightly over the cloth edges around the funnel, its upper part extending upwardly to form a stop and then upwardly forming a flared funnel extension.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

EDWIN C. COURTWRIGHT.

Witnesses:

PEARL M. REED,

EDITH B. COURTWRIGHT.