July 10, 1923. 1,461,654

W. J. HAESSLER

COLLAPSIBLE FUNNEL

Filed July 17, 1922

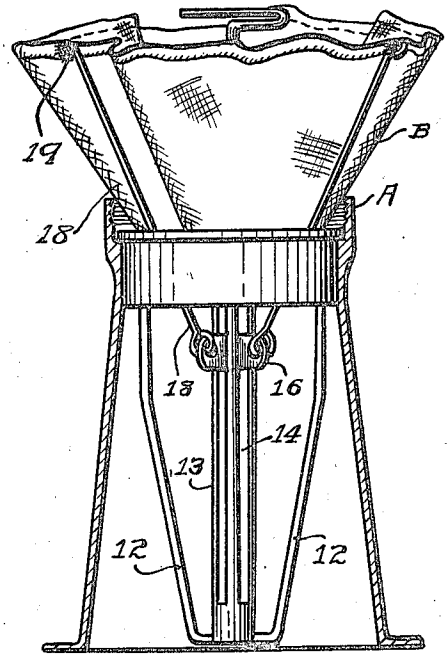


Fig. 1.

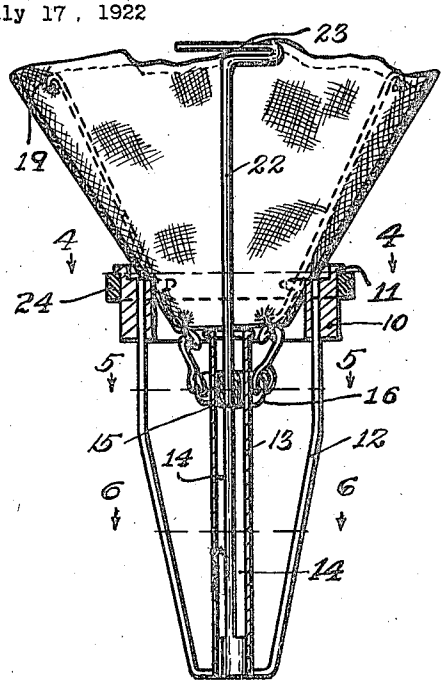


Fig. 2.

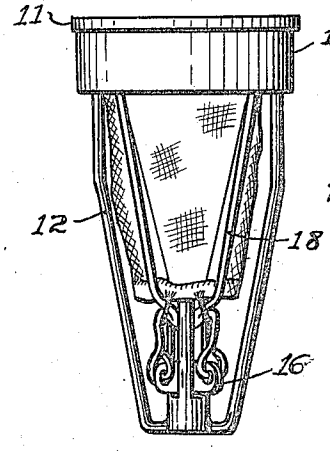


Fig. 3.

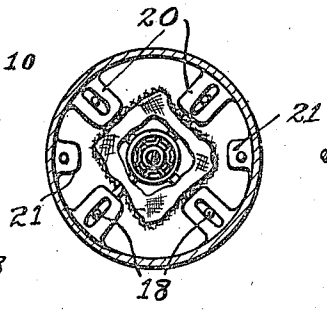


Fig. 4.

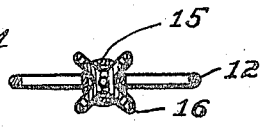


Fig. 5.

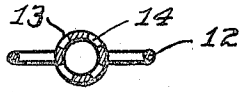


Fig. 6.

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WITNESS:

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UNITED STATES PATENT OFFICE.

WILLIAM J. HAESSLER, OF PHILADELPHIA, PENNSYLVANIA.

COLLAPSIBLE FUNNEL.

Application filed July 17, 1922. Serial No. 575,719.

To all whom it may concern:

Be it known that I, WILLIAM J. HAESSLER, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented new and useful Improvements in Collapsible Funnels, of which the following is a specification.

This invention relates to funnels, and has for its chief characteristic, the provision of a collapsible funnel primarily designed for use in conjunction with automobile radiators, and constructed whereby the funnel can be reduced to provide a comparatively small article to be conveniently carried in the radiator of the vehicle, and easily extended while associated with the radiator when its use is desired.

The nature and advantages of the invention will be better understood when the following detailed description is read in connection with the accompanying drawing, the invention residing in the construction, combination, and arrangement of parts as claimed.

In the drawing forming part of this application, like numerals of reference indicate similar parts in the several views, and wherein:—

Figure 1—is a view in elevation showing the funnel associated with the filling tube of a radiator, the said tube being illustrated in section.

Figure 2—is a similar view, showing the funnel and filling tube of the radiator in section.

Figure 3—is a view of the funnel showing the latter collapsed.

Figure 4—is a sectional view taken on line 4—4 of Figure 2, looking in the direction of the arrows.

Figure 5—is a sectional view taken on line 5—5 of Figure 2, looking in the direction of the arrows.

Figure 6—is a sectional view taken on line 6—6 of Figure 2, looking in the direction of the arrows.

Referring to the drawing in detail, A indicates the filling tube of an automobile radiator (not shown) while B indicates generally the funnel forming the subject matter of the present invention.

The funnel includes an annulus 10, which is provided with an outwardly extended flange 11, which is adapted to repose upon the filling tube A to support the funnel in its entirety in a position for use. Depending from the annulus 10 is a frame-like structure, preferably consisting of a substantially U-shaped wire member 12, the upper ends of which are embedded within the annulus or otherwise suitably secured thereto.

Supported by this frame is a hollow tubular member 13 provided with spaced longitudinal slots 14 for a purpose to be presently described. Operating within the tubular member 13 is a slide 15, which is provided with apertured ears 16 projecting through the slots 14, and each of these ears is connected with the adjacent end of a wire rod 18, the corresponding upper extremities of which are suitably secured to the adjacent end of the funnel proper indicated at 19. This funnel is constructed from flexible water proof material of any suitable character, so that the funnel can be easily extended when positioned for use in the manner shown in Figures 1 and 2, and also collapsed within the frame-like member 12 when its use is not desired, as illustrated in Figure 3. Projecting inwardly from the annulus 10 is a plurality of slotted lugs 20, which receive the rods 18, and constitute guides for the latter. Also projecting inwardly from the annulus 20 are enlarged portions 21 diametrically opposed, and provided to associate the upper ends of the frame 12 with the annulus as above described. The slide 15 is connected with the lower end of a manipulating element 22, which is in the nature of a rod arranged vertically within the funnel 19, and terminating at its upper end to provide a handle 23. Manifestly, it is only necessary to elevate the manipulating element 22 in order to arrange the funnel in position for use, or to lower the element 22 within the tubular member 13, in order to collapse the funnel and position it within the frame-like member 12. The invention is very simple in construction, and can be manufactured and sold at a very nominal cost. A gasket 24 provides means for adjusting to various size radiator filling tubes.

While it is believed that from the foregoing description, the nature and advantages of the invention will be readily ap-

parent, I desire to have it understood that I do not limit myself to what is herein shown and described, and that such changes may be resorted to when desired as fall within the scope of what is claimed.

What I claim is:

1. In combination, an annulus, a frame-like member supported thereby, a slide operating within the annulus, means for guiding the slide in its movements, a funnel constructed of flexible water proof material, rib elements connecting the funnel with said slide, slotted lugs projecting inwardly from the annulus and constituting guides for said rib elements, and means for operating said slide, whereby the funnel is extended for use when the slide is elevated, and collapsed within the frame-like member when the slide is lowered.

2. In combination, an annulus, a supporting flange projecting outwardly therefrom, a frame-like member depending from said annulus, a tubular member arranged within the frame, a slide operating within the frame and associated with the tubular member, a funnel constructed of flexible water proof material, rods terminally connected with the funnel and with said slide, means for guiding said rods in their movements, and means for operating the slide, whereby the funnel is extended for use when the slide is elevated, and collapsed within the frame-like member when the slide is lowered.

3. In combination, an annulus, a frame-like member depending therefrom, a hollow tubular member arranged centrally within the frame and having longitudinal slots, a slide operating within the tubular member, apertured lugs carried by the slide and projecting through said slots, a collapsible funnel, rods connecting the funnel with said lugs, whereby the funnel is extended for use when the slide is elevated or collapsed within the frame-like member when the slide is lowered, means for guiding said rods, and means for actuating said slide.

4. In combination, an annulus, a supporting flange projecting therefrom, a frame-like member depending from the annulus, a slide operating in said frame, means for guiding said slide, a collapsible funnel, rods connecting the funnel with said slide, whereby the funnel is extended for use when the slide is elevated or collapsed within the frame-like member when the slide is lowered, means for guiding said rods, and a manipulating element arranged centrally of the funnel and terminally connected with said slide, said element terminating at its upper end to provide a handle.

In testimony whereof I affix my signature.

WILLIAM J. HAESSLER.