C. J. GAUSS.

FILLER FOR AUTOMOBILE RADIATORS.

APPLICATION FILED APR. 1, 1918.

1,316,154. Patented Sept. 16, 1919.

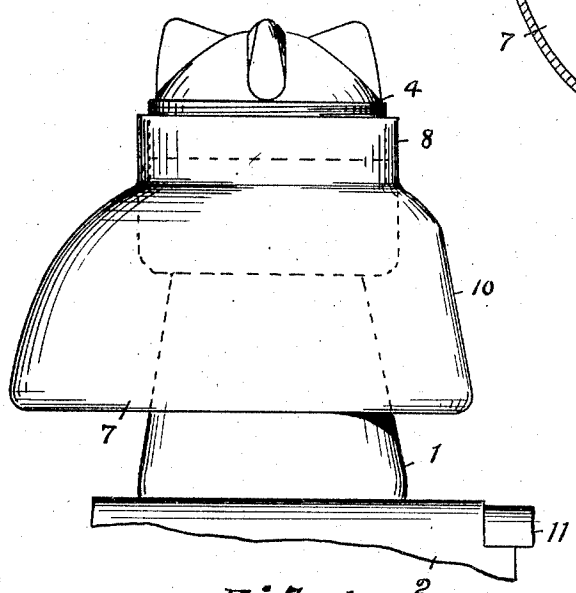


Fig. 1.

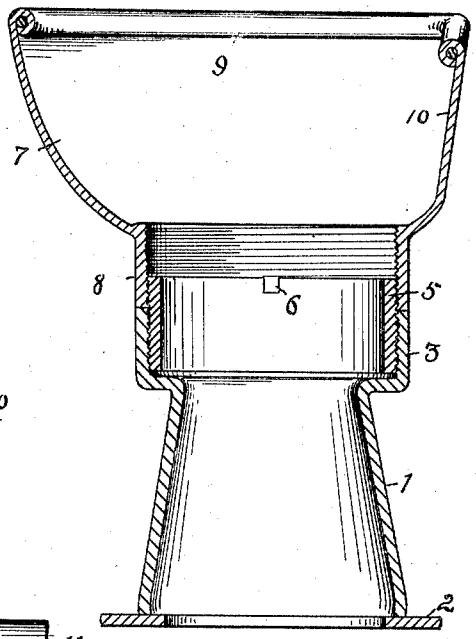


Fig. 2.

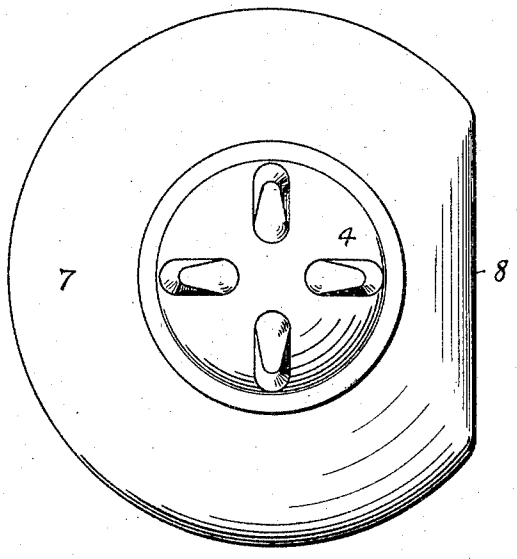


Fig. 3.

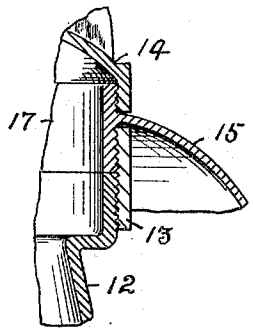


Fig. 4.

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FILLER FOR AUTOMOBILE-RADIATORS.

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To all whom it may concern:

Be it known that I, CHARLES J. GAUSS, a citizen of the United States, residing at Duluth, in the county of St. Louis and State of Minnesota, have invented certain new and useful Improvements in Fillers for Automobile-Radiators, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention consists of certain improvements in filler tubes for automobile radiators and relates particularly to a combination cap and filling funnel for such tubes.

The principal object is to provide simple and convenient means for assistance in filling the radiator with water.

Another object is to provide a device of this character which will not detract from the general appearance of the radiator, the funnel being carried, when not in use, in an inverted position and resulting in a pleasing termination of the filler tube rather than otherwise.

The ultimate practical objects of the funnel for filling purposes are obvious.

Other advantages of the peculiar construction will appear in the further description thereof.

Referring to the accompanaying drawings forming part of this application and in which like reference characters indicate like parts:—

Figure 1 is a side elevation of a practical embodiment of my invention showing the tube closed,

Fig. 2 is a central vertical section of same with the tube open and the funnel in a receptive position,

Fig. 3 is a top plan view of Fig. 1, and,

Fig. 4 is a fragmental sectional view of a modified form and application of the device.

Referring to Figs. 1, 2 and 3, 1 represents the common filler tube on the radiator 2 as found on such automobiles as the Ford, the upper end or mouth 3 of the tube being screwthreaded internally for the reception of the externally screwthreaded cap or closure 4.

An upwardly extending externally screwthreaded nipple 5 is applied to the mouth of the tube and tightly screwed therein. For this purpose the upper end of the nipple may have two opposed notches such as illustrated at 6 formed therein and in which a straight metal bar may be used as a wrench for securely applying same, such construction being common in the art.

The object of fixing the nipple in tightly is to prevent its coming loose when removing or applying the funnel.

7 represents the funnel made of any desired material, preferably noncorrosive metal such as brass or copper and having a straight internally screwthreaded neck portion 8 which is designed to be screwthreadedly attached to the upwardly extending portion of the nipple 5 either when the funnel is being used for filling purposes or in its inverted position.

The length of the neck 8 is such that when screwed down tightly on the nipple and abutting the upper edge of the mouth of the tube, an equal extent of screwthreaded portion of the neck will remain above the nipple and into which the cap 4 is screwthreaded as a closure, this occurring however, preferably when the funnel is inverted as shown in Fig. 1.

It is evident that the cap 4 may be placed within the neck of the funnel when apart from the tube and thus form a handy cup for various purposes.

The reinforcing bead 9 about the edge of the funnel is turned inwardly to form a smooth external appearance of same.

One side of the funnel is flattened and contracted as at 10 to allow for the raising of the engine hood illustrated at 11 and which occurs in many cases too close to the filler tube to permit of the fnnnel being wholly circular in form, otherwise, the funnel could as conveniently be of such form.

In view of this specific flattened shape, it becomes especially desirable to pour water, as from a pail, into the funnel from the flattened side thereof, therefore, I curve the upper edge of the flattened portion slightly downwardly as shown in Fig. 2, thus forming a convenient and inviting place to rest the rim of the pail when the radiator is being filled.

In some automobile radiators the mouth of the filler tube is screwthreaded upon the outside and the cap made to correspond. For such a combination I provide a modification of the embodiment above described

and this is shown in Fig. 4 of the drawings wherein:—

12 is the tube,

13 is the nipple though external instead of internal,

14 is the cap, and

15 is the funnel, the neck 17 however, having of necessity, to extend both inwardly and outwardly and being screwthreaded externally to enter the nipple and receive the cap.

Having thus described my invention, what I claim is,

1. The combination with a radiator having a filler tube thereupon and screw-threaded cap therefor, of a one-piece terminally reversible funnel greater in diameter than the mouth of the tube, having a reduced screw-threaded neck portion for cooperative engagement with the filler tube of the radiator and the screwthreaded cap.

2. The combination with a radiator filler tube and screw-threaded cap therefor, of a one-piece funnel greater in diameter than the filler tube and having a reduced cylindrical portion and a screw-threaded nipple for coöperatively uniting the funnel and the filler tube, substantially as described.

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

CHARLES J. GAUSS.

Witnesses:

THEODORE J. SMEDDEN,

S. GEO. STEVENS.

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