E. E. MAZZULLO.

RADIATOR CAP.

APPLICATION FILED DEC 27, 1920.

1,429,751. Patented Sept. 19, 1922.

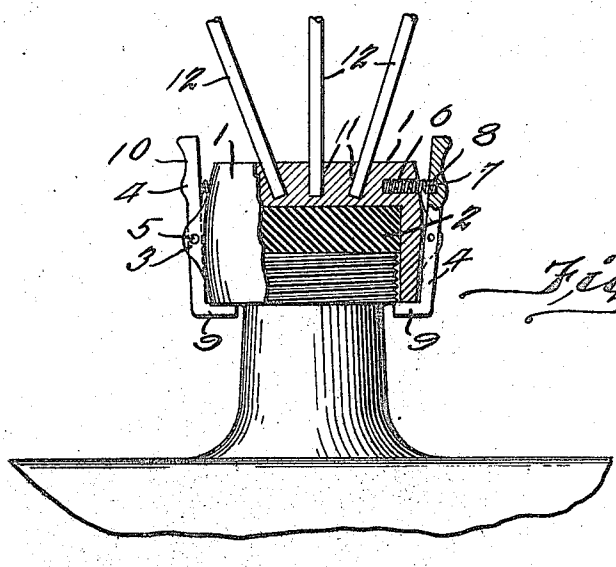


Fig. 1.

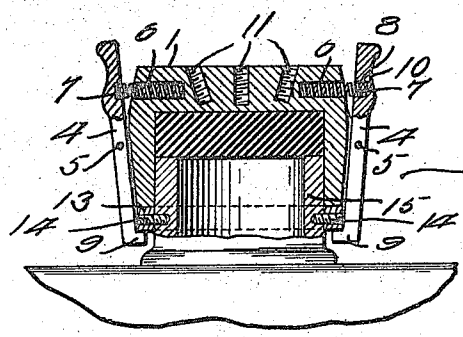


Fig. 2.

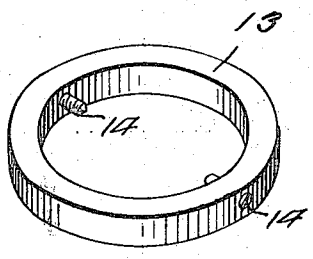


Fig. 3.

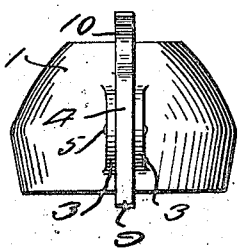


Fig. 4.

Inventor

Edward E. Mazzullo

By Lester L Sargent

Attorney.

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UNITED STATES PATENT OFFICE.

EDWARD E. MAZZULLO, OF WASHINGTON, DISTRICT OF COLUMBIA.

RADIATOR CAP.

Application filed December 27, 1920. Serial No. 433,503.

To all whom it may concern:

Be it known that I, EDWARD E. MAZZULLO, a citizen of the United States, residing at Washington, in the District of Columbia, have invented a new and useful Radiator Cap, of which the following is a specification.

The object of my invention is to provide a radiator cap which can be readily removed from and applied on the radiator nozzle under all conditions of weather and temperature and which will afford a more efficient covering for the nozzle of the radiator. I attain these and other objects of my invention by the device illustrated in the accompanying drawings, in which—

Figure 1 is a vertical section of my device, partly in elevation, applied to a radiator nozzle;

Fig. 2 is vertical section of a modification of the invention applied to other radiator nozzles than the one on the well known car illustrated in Fig. 1;

Fig. 3 is a perspective view of ring 13; and

Fig. 4 is an elevational view of my radiator cap.

Like numerals designate like parts in each of the several views.

Referring to the accompanying drawings illustrating my invention, I provide a suitable cap 1, preferably of aluminum, within which is a thick rubber disk 2 which seats tightly on the radiator nozzle. Cap 1 is provided with opposite spaced ears 3 in which is mounted a pin 5 on which is pivoted, at opposite sides of the radiator cap as shown, an L-shaped arm 9, a similar arm being similarly mounted on the opposite side of the cap 1. The inturned ends 9 of the arms 4 are of sufficient length to engage under the annular projecting portion of the radiator nozzle as shown in Fig. 1, which illustrates the form of nozzle in most general use. I provide opposite openings 6 in cap 1 and openings 8 opposite to the openings 6 in each of the two L-shaped arms 4, in which openings are mounted the opposite springs 7, which normally hold the inturned ends 9 of arms 4 in their innermost or locking position engaging under the annular flange of the radiator nozzle.

For automobiles of other makes which are not provided with the above mentioned annular flange, I provide a suitable ring 13, which is fastened on the radiator nozzle, as shown in Fig. 2, by suitable set screws 14 or in any other appropriate manner, and under which the ends 9 of arms 4 may engage to secure the radiator cap 1 on the radiator nozzle.

Referring to Figs. 1 and 2, I prefer to provide one or more suitable and preferably threaded openings 11 of suitable size to receive the stems or poles of suitable small flags or banners 12. These openings are preferably arranged with the central one vertically disposed and the others disposed in oppositely slanting directions, as shown.

It will be observed that the arms 4 are provided with suitable cupped portions or fingerholes 1 near their upper ends, and that these portions of the device are practically insulated from the rest of the cap and normally held in spaced relation by the springs 7. In consequence of this construction, as well as of the provision of the third rubber disk 2, the cap may be lifted off at all times without danger of burning the fingers as with the ordinary threaded cap; and by reason of the elimination of any threading in the cap there is not the difficulty of its freezing on the nozzle so tightly as to make it difficult to remove, as with the ordinary radiator cap, or to cause the driver to use any instrument to hit the cap to loosen it and thus run the danger of loosening the radiator nozzle and require its re-soldering, as sometimes has occurred with the ordinary threaded radiator cap.

In case of overheating of a radiator, my radiator cap permits of release of the steam without the danger of bursting of the tubes or nozzle of the radiator, inasmuch as there is no threaded or corrugated portion interposed in the path of escaping steam under pressure.

What I claim is:

1. In a radiator cap, the combination of an aluminum metal cap having the annular sides thereof removably engageable over a radiator nozzle, releasable locking arms pivotally mounted on the metal cap and having inturned ends, resilient means normally holding the locking arms in locking position to engage a flange or ring on the radiator nozzle, the cap having a thick resilient disk seated within the cap and adapted to engage

and seal the mouth of the radiator cap, said disk being of considerable thickness, for the purposes described.

2. In a radiator cap, the combination of a cap of relatively light material, said cap having its annular sides of suitable size to encircle a radiator nozzle, substantially L-shaped arms pivotally mounted on the cap, the inturned ends of same being adapted to engage under a ring or flange on the radiator nozzle to tightly hold the cap thereon, a thick rubber disk within the radiator cap, springs engaging the arms, the top portion of the cap having a plurality of threaded sockets to receive the staffs of suitable display elements, substantially as shown.

EDWARD E. MAZZULLO.