July 17, 1923. 1,462,438

G. C. APPLE

CAP

Filed Nov. 29, 1921

Fig. 1.

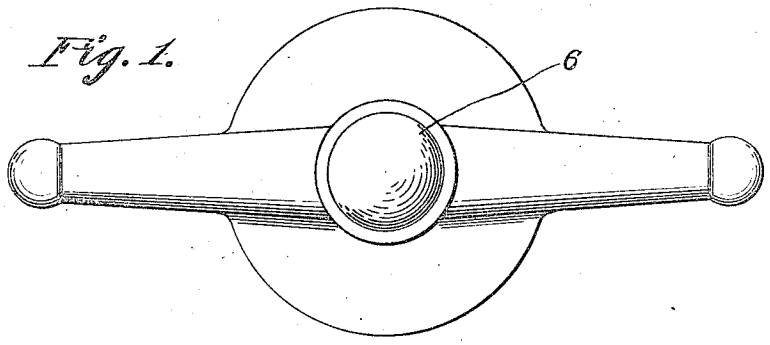


Fig. 2.

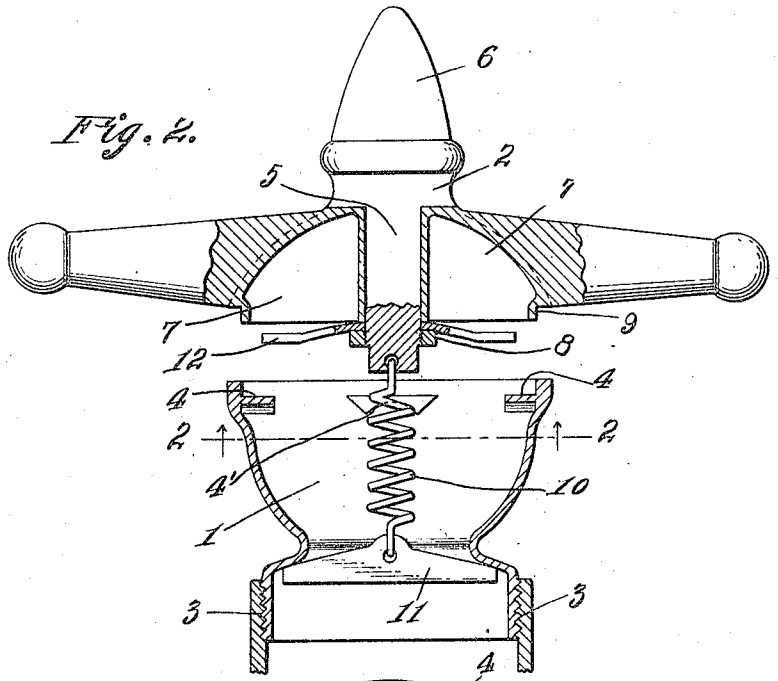
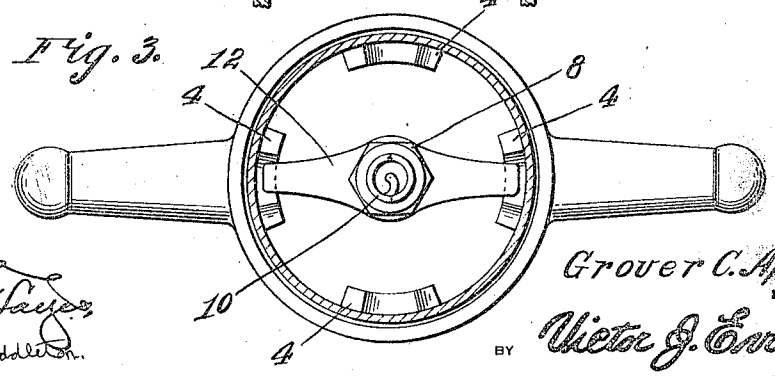


Fig. 3.



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WITNESS:

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UNITED STATES PATENT OFFICE.

GROVER C. APPLE, OF GREENSBORO, NORTH CAROLINA.

CAP.

Application filed November 29, 1921. Serial No. 518,633.

To all whom it may concern:

Be it known that I, GROVER C. APPLE, a citizen of the United States, residing at Greensboro, in the county of Guilford and State of North Carolina, have invented new and useful Improvements in Caps, of which the following is a specification.

This invention relates to a cap for radiators of internal combustion engines, the general object of the invention being to facilitate filling of the radiator and also to prevent loss, by theft or otherwise of the cap.

Another object of the invention is to provide means whereby a motor meter can be attached to the cap when desired.

This invention also consists in certain other features of construction and in the combination and arrangement of the several parts, to be hereinafter fully described, illustrated in the accompanying drawings and specifically pointed out in the appended claim.

In describing my invention in detail, reference will be had to the accompanying drawings wherein like characters denote like or corresponding parts throughout the several views, and in which:—

Figure 1 is a plan view of a cap constructed in accordance with my invention.

Figure 2 is a longitudinal section thereof with the parts separated.

Figure 3 is a horizontal sectional view.

In these views 1 indicates the lower part of the cap and 2 the upper part thereof. The lower part is provided with the screw threaded lower end 3 for engaging the filling spout of the radiator. This lower part is of substantially bowl-shape and is provided with the inwardly extending lugs 4 adjacent its upper end. The part 2 is formed of the stem 5 having the head 6 thereon and the part 7 which engages the stem and is held thereon by the nut 8. This part 7 is provided with the annular flange 9 which is adapted to fit in the upper end of part 1. A spring 10 has one end connected with a spider 11 in the part 1 and its upper end connected with the lower end of the stem 5 so that the parts 1 and 2 are connected together in a flexible manner, by said spring. This spring is sufficiently flexible to permit the part 2 to be lifted off the part 1 so that the radiator can be filled by pouring water into the part 1. When in normal position, however, the spring will hold the part 2 upon the part 1. I also provide means for locking the part 2 upon the part 1, such means consisting of the spring bars 12 on the stem which engage recesses 4' in the lugs 4, the lugs being beveled upon their lower faces to direct the ends of the spring bars 12 into said recesses when the part 2 is turned to place the bars 12 in engagement with the lugs.

By removing the nut 8 the part 7 may be taken off the stem and a motor meter or the like substituted.

From the above it will be seen that my invention will facilitate the filling of the radiator as the upper part of the cap can be quickly and easily removed from the lower part to permit water to be poured into the lower part. The spring, however, holds the upper part in connection with the lower part so that there is no danger of the said upper part being lost, through failure to replace it, or of being stolen.

It is thought from the foregoing description that the advantages and novel features of my invention will be readily apparent.

I desire it to be understood that I may make changes in the construction and in the combination and arrangement of the several parts, provided that such changes fall within the scope of the appended claim.

What I claim is:—

A radiator cap consisting of a bowl-shaped lower part, a headed stem, means for flexibly connecting the lower end of the stem with the lower part, an upper part having a central bore through which the stem passes, a nut for holding said part on the stem, spring arms held on the stem by the nut, recessed lugs on the bowl-shaped part for receiving the ends of the arms so as to lock the two parts together and a flange on the upper part for entering the bowl-shaped part.

In testimony whereof I affix my signature.

GROVER C. his × mark APPLE.

Witness:
SUE APPLE.