To all whom it may concern:

Be it known that I, JOHN A. MARTE, a citizen of the United States, residing at Santa Ana, in the county of Orange and State of California, have invented new and useful Improvements in Safety Caps for Gasoline Tanks, of which the following is a specification.

This invention relates to a safety cap for containers and is especially adapted as a cap for gasoline tanks in automobiles.

An object of this invention is the provision of a safety cap for gasoline tanks, or the like, said cap comprising means for preventing its loss.

Another object of this invention is the provision of a safety cap for gasoline tanks, said cap comprising means by which gasoline may be conveniently entered in a tank.

With the foregoing objects in view, together with such other objects and advantages as may subsequently appear, this invention consists in the construction and arrangement of parts hereinafter described and claimed and illustrated in the accompanying drawings, in which:

Figure 1 is a vertical section of the cap, showing its application to a gasoline tank, which is shown in part

Fig. 2 is a view similar to Fig. 1, but showing the cap in raised position, and receiving a filling nozzle from which gasoline enters the gasoline tank, and

Fig. 3 is a cross section taken on the line 3-3 of Fig. 1.

Referring to the drawings for a more detailed description thereof, the numeral 5 indicates a gasoline tank having an aperture 6 through which the tank is adapted to be filled. The tank also comprises a nipple 7 adjacent the aperture 6, and the nipple 7 is outwardly threaded at its upper end portion to receive female threads formed in a cap portion 8, which holds on its lower face a washer 9. The cap portion 8 has a lateral air hole 10 and a vertical aperture 11. The aperture 11 is made square on its upper portion 12. The aperture 11 is adapted to receive a bolt 13, which is made square at its upper end portion to engage the square portion of the aperture 11.

The bolt 13 comprises a head 14 which rests on the upper end of the cap portion 8. The bolt 13 is threaded at its lower end.

A cylindrical tube 15 is adapted to contact at its upper end with the under face of a cap portion 8 and comprises a transverse member 16 provided with a central aperture through which the bolt 13 passes, and the lower end of which the bolt 13 threadedly engages. A nut 17 is screwed on the bottom of the bolt 13. The member 16 has a vertical air hole 18. The tube 15 is provided with a lateral aperture 19 adapted to receive a filling nozzle 20, as shown in Fig. 2, when the cap portion 8 is removed from the nipple 7 and the tube 15 is raised.

The lower portion of the tube 15 is provided with a plurality of springs 21, the lower ends of which are secured in any suitable manner to the sides of the tube 15. The springs 21 comprise a portion 21a disposed at an angle to the axis of the tube 15 and a horizontal portion 21b which projects into the tube 15.

Before applying a cap in its entirety to the tank 5, the parts of the cap are assembled by placing the washer 9 on the under face of the cap portion 8, placing the upper end of the tube 15 in contact with the under face of the cap portion 8 and inserting the bolt 13 through the aperture 11 and threading it through the lower part of the central aperture of the transverse member 16. The nut 17 is then screwed on to the bolt 13. In applying the cap to the tank, it will be seen that the springs 21 will yield as the tube 15 is pushed through the aperture 6, and will spring out as the lower portion of the tube 15 enters the tank.

When the cap is raised for the insertion of the filling nozzle 20 into the aperture 19, the horizontal portions 21b of the springs 21 come into contact with the upper portion of the tank, as shown in Fig. 2, and thereby prevent the entire removal, and consequent possible loss, of the cap.

My safety cap forms a simple and efficient device to prevent the splashing of gasoline in pouring it into a tank from a straight filling nozzle 20 or the spout of a filling can. Therefore a simple modification of my invention is to discard the springs 21 and substitute for the cap any device which will prevent the tube 15 from dropping into the tank when it is placed over a filling nozzle.

This invention has been described, but modifications thereof may be devised without departing from the spirit thereof, and it is to be understood that such modifications come within the scope of this invention.
What is claimed is:

1. A safety cap for gasoline tanks, comprising in combination a tank having an externally screw threaded nipple, a cap fitting thereon having an upward extension with a vertical aperture therethrough, a cylindrical tube having a transverse member at its upper end and a lateral aperture for a filling nozzle, a bolt extending through the vertical aperture in the cap and bolted to the transverse member of the tube and angular spring fingers attached to the lower end of the tube having horizontal parts engaging in the tube to allow insertion, but preventing removal of the tube from the nipple.

2. A safety cap for gasoline tanks as claimed in claim 1, having in addition an air aperture through the transverse member in the tube and a lateral air hole through the upper portion of the extension of the cap.

In testimony whereof I have signed my name to this specification.

JOHN A. MARTE.