

P. HENRY.
CLOSURE PLUG FOR TANKS.
APPLICATION FILED JUNE 22, 1920

1,399,345.

Patented Dec. 6, 1921.

2 SHEETS—SHEET 1.

Fig. 1

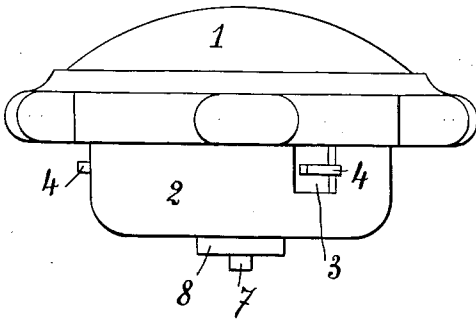


Fig. 2

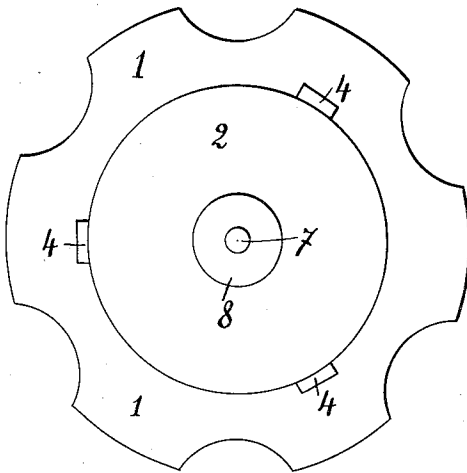


Fig. 3

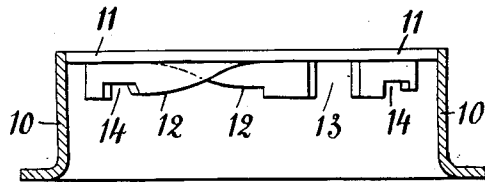


Fig. 4

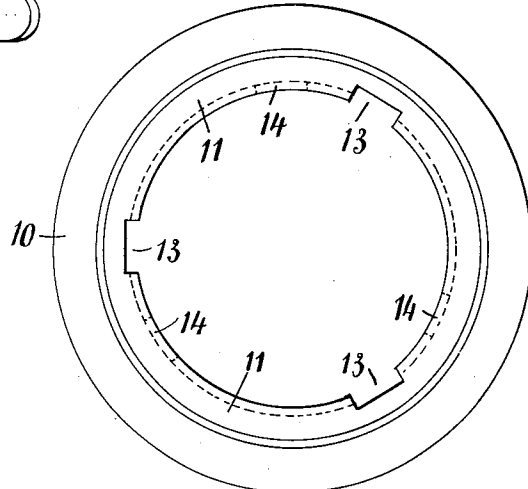
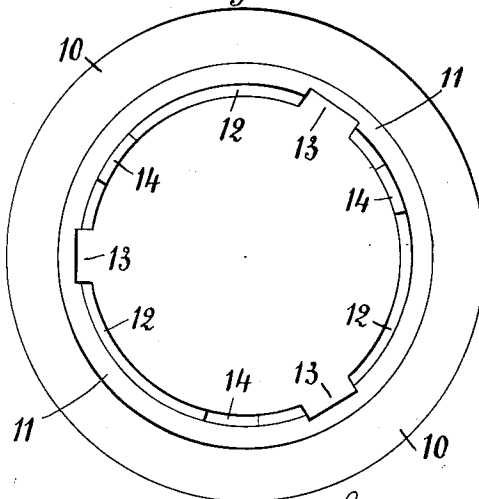


Fig. 5



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2 SHEETS—SHEET 2.

Fig. 6

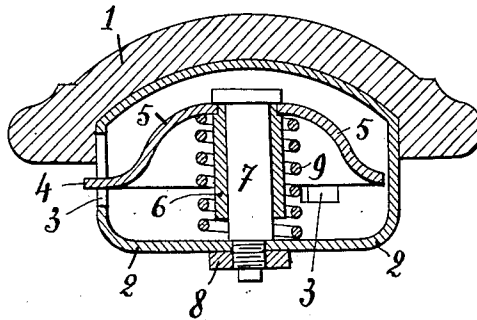
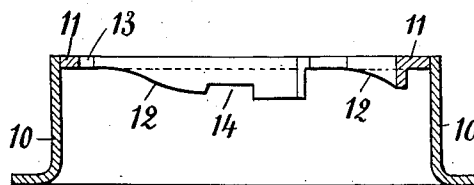


Fig. 7



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UNITED STATES PATENT OFFICE.

PAUL HENRY, OF NEUILLY-SUR-SEINE, FRANCE.

CLOSURE-PLUG FOR TANKS.

1,399,345.

Specification of Letters Patent.

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(GRANTED UNDER THE PROVISIONS OF THE ACT OF MARCH 3, 1921, 41 STAT. L., 1313.)

To all whom it may concern:

Be it known that I, PAUL HENRY, citizen of the Republic of France, residing at Neuilly-sur-Seine, Seine, France, 47 Boulevard de Levallois, have invented certain new and useful Improvements in Closure-Plugs for Tanks. (for which I have filed an application in France, Feb. 21, 1919, Patent No. 497,020;) and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

This invention relates to bayonet plugs for motor cars' water and petrol tanks and the like.

This invention has for its object a plug of the type which is easily operated and does not come loose with vibrations.

According to this invention, the pins of the plug properly so called, which engage the sloping guides provided in the fixed neck, are mobile and acted upon by a spring which renders them elastic in action when they slide on the sloping guides, the said spring fulfilling the further purpose of maintaining the said pins in the notches provided at the end of the said guides; thereby limiting the rotation of the plug, and preventing it from becoming loose owing to the jolting.

Referring to the accompanying drawings representing one manner of carrying out this invention:

Figure 1 is a side view of the plug itself;

Fig. 2 is a view of the plug from underneath;

Fig. 3 is a vertical section of the fixed part or neck, the sloping guides being shown in elevation;

Fig. 4 is a plan of said neck;

Fig. 5 is an underneath view of said neck;

Fig. 6 is a vertical section of the plug itself;

Fig. 7 is a vertical section of the neck.

In the example represented by the drawings, in which there are three pins and three sloping guides, the plug is constituted by the piece 1 in the lower part of which is fixed a cap 2 provided with three openings

3 through which protrude the pins 4, which are integral with a head 5 secured to a tubular element or stem 6 which can slide with friction on a central rod 7 fixed on the cap 2 by a nut 8. Within the head 5 presses a spiral spring 9 which rests against the bottom of the cap 2. At the outer end of the rod 7, a small chain preferably permanently connects the plug to the tank. The fixed part or neck 10 comprises, on its upper portion a ring 11 provided on its lower face with three sloping guiding surfaces 12 on which slide the pins 4 when the plug 1 is rotated, after having caused said pins to enter the apertures 13. The stoppage of the rotation of the plug is obtained when the pins 4, after having passed over the sloping guides 12 in an elastic fashion, due to the spring 9, arrive at the arresting notches 14, in which the pins enter under the action of the same spring 9. These arresting notches 14 prevent the plug from coming off under the action of vibrations, but their little depth and also an inclined plane (Fig. 7) allow the pins to ride over them easily when it is required to withdraw the plug to free the opening.

Having now particularly described the nature of my invention and in what manner the same is to be used, I declare that what I claim is:—

1. A closure plug for tanks comprising a cylindrical cap closed at its ends and having a plurality of peripheral openings, a rod axially fixed in the cap, a head slidable on the rod and provided with projections extending through the peripheral openings, and a spiral spring surrounding the rod between the head and one end of the cap.

2. A closure plug for tanks comprising a sheet metal cylindrical cap closed at both ends and having a plurality of peripheral openings, a rod axially fixed in one end of the cap, a sleeve slidable on the rod, a dished sheet metal head fixed on the sleeve and formed with integral extensions projecting through the peripheral openings, a spiral spring surrounding the sleeve and bearing against the head and one end of the cap, said rod having a headed end to limit the upward movement of the sleeve and head.

In testimony that I claim the foregoing as my invention, I have signed my name.

PAUL HENRY.