Nov. 4 , 1924. 1,514,507

A. DREICHLINGER

DEVICE FOR PREVENTING THE UNAUTHORIZED REMOVAL OF COVERS

Filed Aug. 11, 1924

Fig.1

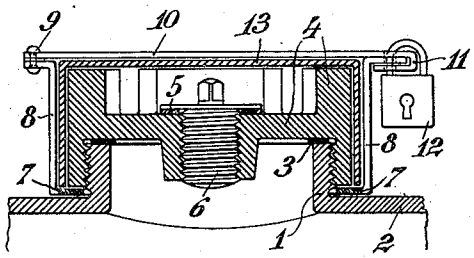


Fig.4

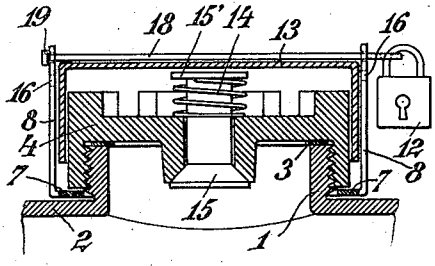
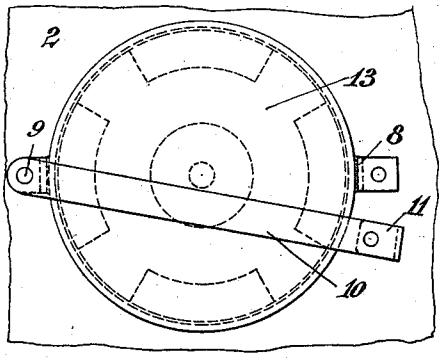


Fig.3

Fig.2



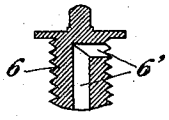


Fig.6

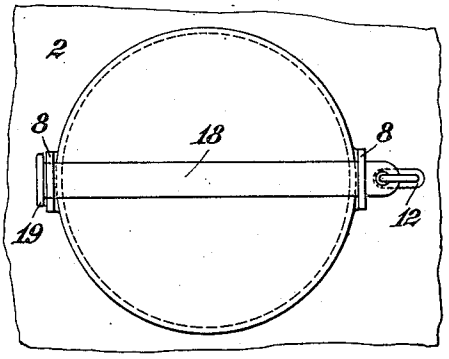
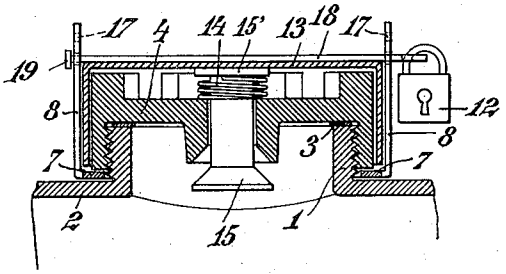


Fig.5



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UNITED STATES PATENT OFFICE.

ARTHUR DREICHLINGER, OF VIENNA, AUSTRIA.

DEVICE FOR PREVENTING THE UNAUTHORIZED REMOVAL OF COVERS.

Application filed August 11, 1924. Serial No. 731,477.

To all whom it may concern:

Be it known that I, ARTHUR DREICHLINGER, a citizen of the Republic of Austria, residing at Vienna, Austria, have invented certain new and useful Improvements in a Device for Preventing the Unauthorized Removal of Covers, of which the following is a specification.

This invention relates to improvements in devices for preventing the unauthorized removal of the cover or stopper which is adapted to close-up the inlet, opening or discharge opening of a vessel, tank, bottle or the like and it relates more particularly to that kind of vessels or tanks in which a screw-threaded inlet flange or screw-threaded discharge flange may be closed-up by a cover, plug or stopper adapted to be screwed onto the said flange and whereby the plug or the like is made inaccessible by a protective cover which is adapted to be placed over the same and locked in this position but which is freely rotatable about the plug or the like in the locked condition.

The device according to the present invention comprises a casing or frame-like member which is adapted to be arranged between the tank or the like and the plug or the like, to embrace the protective cover and to extend inwardly underneath the plug if the latter is screwed down and which is freely rotatable but secured against removal by means of the said plug, the said frame-like member being provided with a locking member, which in the locking position extends across the protective cover and is adapted to be locked with the frame-like member or with the said cover.

Several modes of carrying out the present invention are illustrated by way of example on the accompanying sheet of drawings in which.

Fig. 1 is a sectional elevation, and

Fig. 2 is a plan view of the device according to the present invention attached to the petrol tank of a motor vehicle.

Fig. 3 shows a detail in section.

Figs. 4 and 5 illustrate in section a modified construction of the device according to the present invention and

Fig. 6 shows the device illustrated in Figs. 4 and 5 in plan view.

A cylindrically shaped, screw-threaded plug 4 is screwed onto the correspondingly screw-threaded flange 1 of a tank 2 (in the illustrated embodiment the petrol tank of a motor vehicle), whereby a packing ring 3 is interposed between the upper end of the said flange 1 and the plug 4. In the centre the plug 4 is provided with a screw-threaded hole and a closing member (screw 6), provided with a packing ring 5, is screwed into the said hole. Preferably the screw 6 is furnished with holes 6′ (Fig. 3). A freely rotatable frame-like member is placed onto the screw-threaded flange 1, which consists of an annular disc 7, disposed between the outside of the tank 2 and the bottom face of the plug 4 and provided with two upwardly extending arms 8, the free ends of which are bent outwards. A bar 10 is pivotally secured at 9 to the outwardly bent end of one of the arms 8 and the free end 11 of this bar is bent down and inwardly, so as to be pushed over the outwardly bent end of the other arm 8. The end 11 of the bar 10 and the corresponding end of the arm 8 are furnished with holes for fixing a padlock 12. A cover or cap 13 is placed over the plug 4, the said cover entirely enclosing the outside of the plug.

If the screw 6 is screwed down as shown in Fig. 1, the fuel contained in the tank 2 can be placed under pressure by means of the pressure pump or of the running engine of the motor vehicle, but the screw 6 and the plug 4 are inaccessible as the protective cover 13 cannot be removed because the bar 10 is locked with the arm 8 by means of the padlock 12. However if it is desired to prevent the fuel, contained in the tank 2, to be placed under pressure, the padlock 12 is removed and the connection between the arm 8 and the bar 10 is interrupted by swinging or turning outwardly the latter. Now the protective cover 13 is removed and the screw 6 is screwed-up slightly or, if desired, removed entirely. After this has been accomplished the protective cover 13 is again placed onto the plug 4 and the former is secured against removal by turning the bar 10 inwards into engagement with the arm 8 and fixing the padlock 12 to the said bar and arm. Now the interior of the tank 2 is in communication with the atmosphere, as there remains a sufficient clearance between the plug 4 and the protective cover 13 for the escape of the air, which may be pumped into the tank 2. Now it is impossible to start the engine, as the fuel contained in the tank 2 cannot be placed under pressure and therefore cannot be sup-

plied to the carburetor, and further it is quite impossible to pump petrol out of the tank at or in the neighborhood of the carburetor. It is also impossible to remove petrol directly out of the tank, as in the locked condition the protective cover 13 and the frame-like member 7, 8 are freely rotatable but not removable, and therefore the plug is inaccessible.

In the modified construction illustrated in Figs. 4, 5 and 6, the closing member consists of a valve 15 which is under the action of a spring 14 and preferably is provided with a head 15', adapted to cooperate with the protective cover 13. Further each of the two arms 8 is furnished with two holes 16 and 17 for the insertion of a bar 18, one end of which is provided with a head 19, while the other end thereof is in the shape of an eye or ring 20 for fixing a padlock 12.

In the position illustrated in Fig. 4 the fuel contained in the tank 2 can be placed under pressure as the valve 15 is firmly forced onto its seat by the action of the spring 14 and therefore the interior of the vessel is not in communication with the atmosphere. However if it is desired to prevent that the engine can be started, the bar 18 is removed and against the action of the spring 14 the valve is lifted off its seat and forced into the open position shown in Fig. 5, by pressing down the protective cover 13. Now the bar 18 is inserted through the holes 16, 16 of the arms 8, 8 and secured against removal by means of the padlock 12.

The invention is not limited to the constructions as illustrated, as various modifications may be made without departing from the spirit of the present invention. For instance the locking member may fully enclose all sides of the protective cover 13, e. g. the arms 8 may be replaced by an entirely closed or by a partly perforated cylindrical member, or the bar 10 may be hinged to one of the arms 8, in order that it may be folded up and down, or the locking member may be provided with one arm 8 only, which can be locked to an eye or ring riveted to the protective cover 13, or if desired the bar 10 may be pivotally attached to the protective cover 13 and locked to the arms 8 of the locking member. In place of the padlock 12, a lock may be riveted or otherwise secured to one of the arms 8 (or if desired a lock may be fixed to each arm 8) and a catch, attached to the bar 10 or 18, may be adapted to cooperate with the said lock.

Further the closing member 6 or 15 may be attached to any other construction of locking device without departing from the spirit of the present invention.

Without altering the constructions above described the closing member 6 or 15 can be used for performing the opposite effect in case the authorized removal of the fuel from the tank takes place at atmospheric pressure or by suction. In this event the fuel can be discharged from the tank in case the closing member is in the open position, e. g. if the interior of the tank is in communication with the atmosphere, while if it is desired to prevent the unauthorized removal of the fuel from the tank, the closing member 6 or 15 is adjusted in the closed position, so that the interior of the tank is not in communication with the atmosphere.

Of course the device according to the invention is not limited to the petrol tanks of motor vehicles only, as it is just as well adapted for all kinds of vessels, the inlet or outlet opening of which is closed by a plug or the like a part of which latter extends or projects somewhat over the outer circumference of the said opening.

I claim—

1. A device for preventing the unauthorized removal of the cover for the opening of a container comprising in combination a cup-shaped protective member adapted to be placed over the said cover, and a casing adapted to be partly arranged and held between the container and cover and to embrace the said cup-shaped member and to extend inwardly underneath the cover when the latter is fixed to the container, the said casing being freely rotatable but secured against removal by means of the said cover and provided with a locking member which in the locking position extends across the protective member and is adapted to be locked with the casing.

2. A device for preventing the unauthorized removal of the cover for the opening of a container, comprising in combination a cup-shaped protective member adapted to be placed over the said cover, and a casing adapted to be partly arranged and held between the container and cover and to embrace the said cup-shaped member and to extend inwardly underneath the cover when the latter is fixed to the container, the said casing being freely rotatable but secured against removal by means of the said cover and provided with a locking member which in the locking position extends across the protective member and is adapted to be locked with the said casing.

3. A device for preventing the unauthorized removal of the cover for the opening of a container, comprising in combination a cup-shaped protective member adapted to be placed over the said cover, and a frame-like member consisting of an annular disc provided with two upwardly extending arms and of a locking member pivotally secured to one of the said arms and adapted to be locked to the other arm.

4. A device for preventing the unauthor-

ized removal of the cover for the opening of a container, comprising in combination a cup-shaped protective member adapted to be placed over the said cover, and a frame-like member consisting of an annular disc provided with two upwardly extending arms and of a locking member adapted to be pushed through holes in the said arms and to be secured in the locking position by means of a lock.

5. A device for preventing the unauthorized removal of the cover, for the opening of a container, comprising in combination a cup-shaped protective member adapted to be placed over the said cover, a valve arranged in the said cover, and a casing adapted to be partly arranged and held between the container and cover and to embrace the said cup-shaped member and to extend inwardly underneath the cover when the latter is fixed to the container, the said casing being freely rotatable but secured against removal by means of the said cover and provided with a locking member which in the locking position extends across the protective member and is adapted to be locked with the casing.

6. A device for preventing the unauthorized removal of the cover for the opening of a container, comprising in combination a cup-shaped protective member adapted to be placed over the said cover, a valve arranged in the said cover, and a frame-like member consisting of an annular disc provided with two upwardly extending arms and of a locking member pivotally secured to one of the said arms and adapted to be locked to the other arm.

7. A device for preventing the unauthorized removal of the cover, for the opening of a container, comprising in combination a cup-shaped protective member adapted to be placed over the said cover, a frame-like member adapted to be secured to the container between the latter and cover and embracing the said cover, the said frame-like member consisting of an annular disc provided with two upwardly extending arms and of a locking member adapted to be pushed through one pair of holes arranged near the end of each arm and to be secured in the locking position by means of a lock, and a valve which is under the action of a spring arranged in the said cover for the purpose specified.

In testimony whereof I hereunto affix my signature.

ARTHUR DREICHLINGER.

Witnesses:
CARL CONDENHOVE,
ADOLF UNBAUTSCHITISCH.