Sept. 28, 1926. 1,601,563

H. S. DE LAND

AUTOMOBILE LOCK

Original Filed June 30, 1925

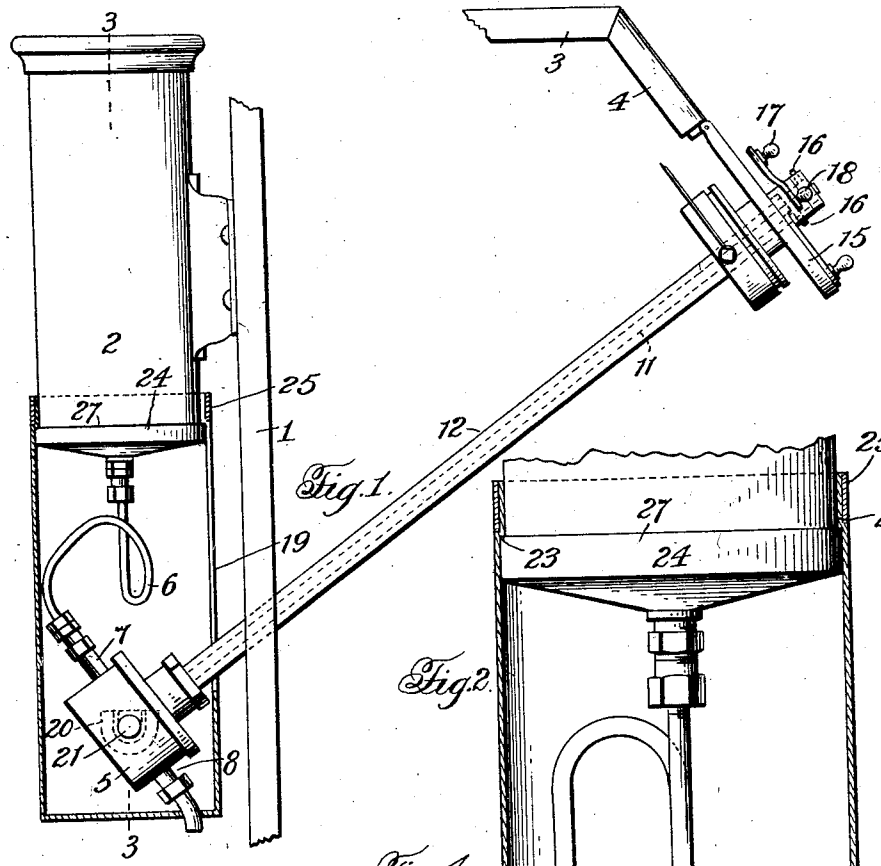


Fig. 1.

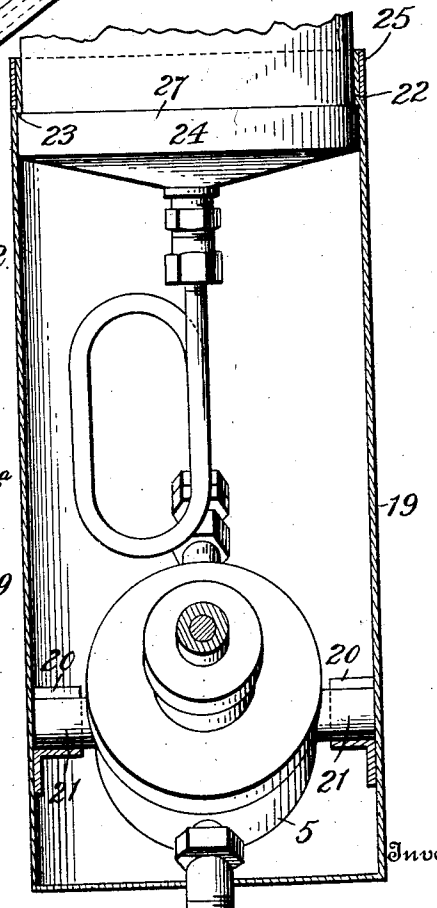


Fig. 2.

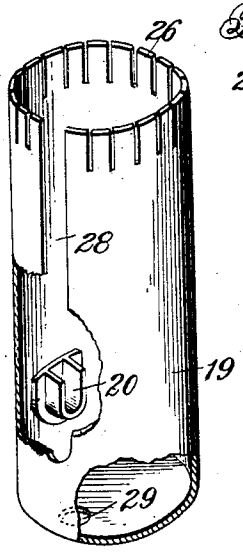


Fig. 3.

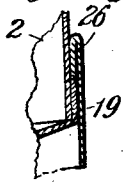


Fig. 4.

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UNITED STATES PATENT OFFICE.

HERBERT S. DE LAND, OF WASHINGTON, DISTRICT OF COLUMBIA.

AUTOMOBILE LOCK.

Original application filed June 30, 1925, Serial No. 40,602. Divided and this application filed October 6, 1925. Serial No. 60,777.

The present invention relates to controlling devices for automobiles or motor vehicles and is a division of my co-pending application Serial No. 40,602, filed June 30, 1925.

One of the principal objects is to provide a simple and efficient device of this character which may be conveniently installed at a reasonable cost so as to be within reach of all motorists and which will effectively prevent the unauthorized use of the motor vehicle.

Another and very essential feature of the present invention is the arrangement and association of the fuel lock with the vacuum tank and also in enclosing said fuel lock in such manner that it can not be tampered with or the fuel supply line from the vacuum tank uncoupled.

Where fuel locks have been employed heretofore and connected in the fuel supply line to the carburetor it was a simple matter to disconnect these locks or cut the supply line on either side thereof and connect them up with a short hose. By enclosing the lock it is impossible to tamper with the same or connect up the vacuum tank with the carburetor unless the combination is known.

Figure 1 is a vertical section taken through the dashboard and instrument board of an ordinary motor vehicle showing the control parts in side elevation;

Figure 2 is a detailed sectional view taken at right angles to the section of Figure 1.

Figure 3 is a perspective view of the housing removed from the vacuum tank and with parts broken away.

Figure 4 is a detail section showing a slight modification.

Referring more particularly to the drawings, 1 represents the dashboard of a vehicle which as usual supports the vacuum tank 2 receiving its fuel supply from a storage tank at the rear of the vehicle and which it is not necessary to illustrate herein. 3 represents the cowl of the vehicle and 4 the ordinary instrument board placed directly in front of the driver and within convenient reach.

In the present instance instead of conducting the fuel from the vacuum tank directly to the carburetor the tank is connected to a valve casing 5 by means of a pipe 6. The pipe 6 is shown connected to an intake nipple 7 and the casing is shown provided with an outlet nipple 8 arranged in a different plane so that when two valves are employed, as in Hamilton 1,528,825, one of the valves controls the inlet and the other valve controls the outlet. These valves are illustrated in the Hamilton patent and as shown therein one valve is connected to an operating rod or shaft 11 while the other valve is connected to an independently rotatable sleeve or tubular shaft 12 surrounding the rod. Each valve is provided with a lateral port and with a plurality of openings arranged in the body thereof. The lateral port of one valve is adapted to register with the inlet nipple 7 and the lateral port of the other valve is adapted to register with the outlet nipple 9 while the openings in the two valve members are adapted to register so as to put the upper and lower portions of the valve casing into communication practically at all times.

In the present construction the shaft 11 and sleeve 12 are extended on a diagonal line through the dashboard 1 and through a dial 15 mounted on the instrument board, where they have secured thereto by set screws 16 the operating handles 17 and 18 the former being secured to the shaft and the latter being secured to the sleeve. By connecting the levers to the shaft and sleeve in the manner shown the levers may be adjusted around the dial freely of the parts they operate so that any combination of numbers on the dial may be obtained, the dial being graduated, as shown, for this purpose.

All of the foregoing as it relates to the valve for controlling the fuel supply is the same as that disclosed in my co-pending application and needs no further description herein.

In order to prevent unauthorized tampering with the fuel valve and its connection with the vacuum supply I enclose the same within a housing 19 in which there are arranged diametrically opposite hangers 20 adapted to receive the laterally projecting studs 21 carried by the valve housing 5 whereby the valve is properly supported and capable of slight rotational movement so as to accommodate any relative movement between the dashboard and the instrument board.

As shown in Figures 1 and 2 the upper

end of the housing is provided with a lateral offset 22 producing a shoulder 23 which seats upon the top of the bottom flange 24 of the vacuum tank 2. The lateral offset is clamped in position with the shoulder 23 in engagement with the flange 24 by means of a clamping band 25, whose ends are preferably soldered together or otherwise secured so as to prevent ready removal of the housing and yet permit it to be disconnected from the vacuum tank in an authorized garage or machine shop when it is desired to make any necessary repairs to the lock valve.

I preferably form the upper end of the housing 19 with a plurality of longitudinally extending fingers 26 which are comparatively flexible, so as to facilitate the production of the offset 22 when the band 25 is clamped around the upper end of the housing.

If desirable I may turn the fingers 26 inwardly as shown at 26[a] in Figure 4 so that they may be sprung over the flange 24 and their inner terminals engaged with the shoulder 27 at the upper end of the flange.

As shown in Figures 1 and 3 the housing 19 is provided with a longitudinal slot 28 adapted to receive the shaft 12 and permit the placing of the housing 19 on the vacuum tank 2. The bottom of the housing is provided with an opening 29 for the passage of the outlet nipple 8 or the pipe connecting the same with the carburetor. When the housing is used in the manner shown in Figure 1, the band 25 prevents the opening of the slot 28, and a similar band may be used in the construction shown in Figure 4. If desired, however, the sides of the slot may be connected together by a short strip soldered or brazed to the housing. If the fingers 26 are held in tight engagement with the outer surface of the tank 2, they will effectively prevent the removal of the housing whether a band like 25 is used or simply a connecting piece as just described.

If desirable the slot 28 may terminate short of the upper end and the fingers 26 be made slightly resilient so as to spring over the flange 24 and engage the shoulder 27.

I have shown herein one arrangement of the parts which is effective to prevent unauthorized use of the car, but it will be understood that other arrangements may be made without departing from the scope of the invention as defined in the appended claims.

What I claim is:—

1. In a fuel lock for motor vehicles the combination with a vacuum tank and a connection therefrom to the carburetor of the motor vehicle, a valve controlling said connection, means for operating said valve, and an extension on said tank enclosing said valve and having an opening for the operating means which permits removal of the extension without disturbing the valve.

2. In a fuel lock for motor vehicles the combination with a vacuum tank and a connection therefrom to the carburetor of the motor vehicle, a valve controlling said connection, and an extension casing removably carried by the vacuum tank and enclosing said valve.

3. In a fuel lock for motor vehicles the combination with a vacuum tank and a connection therefrom to the carburetor of the motor vehicle, a valve controlling said connection, means for enclosing said valve, and means in the enclosing means for pivotally supporting the valve.

4. In a fuel lock for motor vehicles the combination with a vacuum tank and a connection therefrom to the carburetor of the motor vehicle, a valve controlling said connection, a housing supported upon the vacuum tank and enclosing the valve, and hangers arranged in the housing for supporting the valve.

In testimony whereof I affix my signature.

HERBERT S. DE LAND.