Feb. 14, 1928. 1,658,857

J. A. QUATHAMER

GUARD FOR SELF STARTER PLUNGERS

Filed May 11, 1926

Fig. 1.

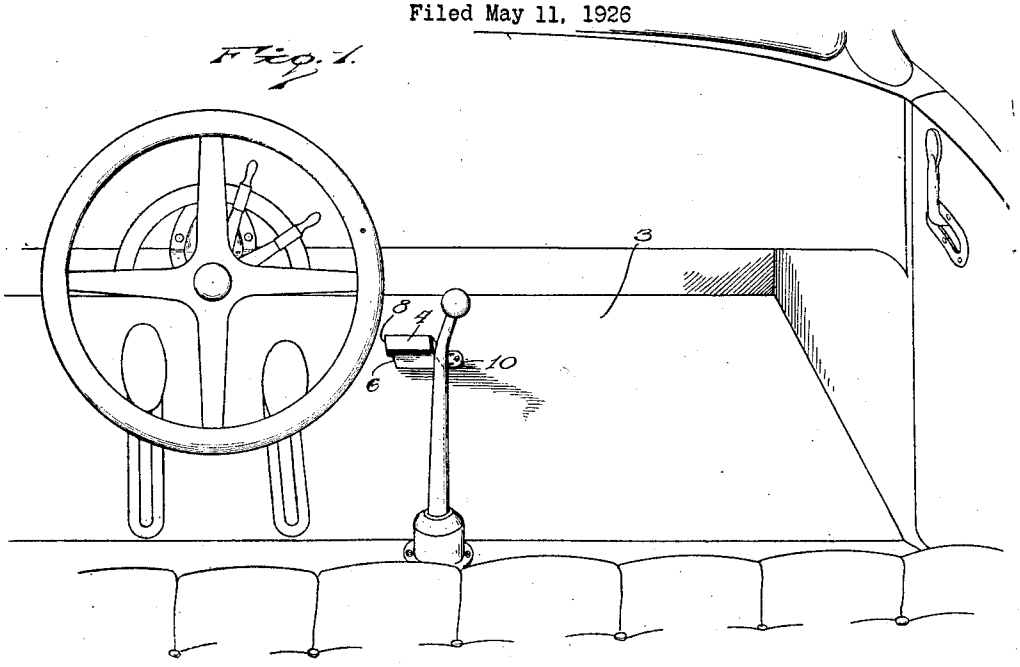


Fig. 2.

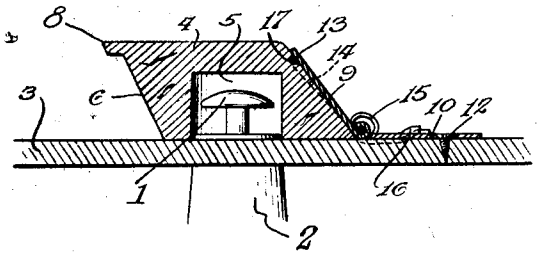
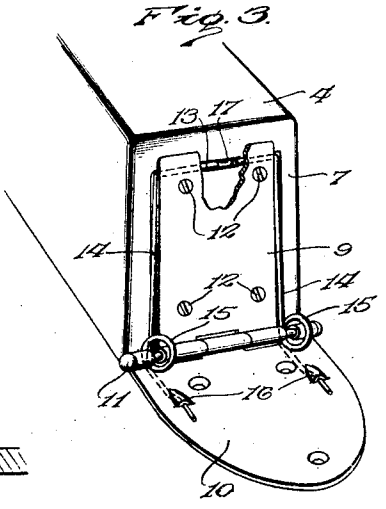


Fig. 3.



Inventor

J. A. Quathamer

By Lacey & Lacey, Attorneys

Patented Feb. 14, 1928. 1,658,857

UNITED STATES PATENT OFFICE.

JANN A. QUATHAMER, OF WASHBURN, ILLINOIS.

GUARD FOR SELF-STARTER PLUNGERS.

Application filed May 11, 1926. Serial No. 108,444.

This invention relates to automobile accessories and more particularly to a guard for the actuating plunger of a self-starter of an automobile.

One object of the invention is to provide a guard which may be hingedly connected with the foot board of an automobile and normally disposed in covering relation to the actuating plunger of a self-starter.

Another object of the invention is to so connect the hinge with the body of the guard that a spring forming part of the hinge will be firmly secured in engagement with the body by one leaf of the hinge.

This invention is illustrated in the accompanying drawing, wherein

Figure 1 is a perspective view of a portion of an automobile with the guard applied to the foot board;

Fig. 2 is a longitudinal sectional view through the guard and foot board;

Fig. 3 is an enlarged perspective view of the rear portion of the guard.

The guard is primarily intended for use in connection with the actuating plunger 1 of a self-starter 2 but may be employed as a guard for switches and other instruments. The self-starter is normally disposed beneath the foot board 3 of the automobile and has its actuating plunger projected upwardly from the foot board so that the operator of the automobile may place his foot upon the plunger and force it downwardly to actuate the starter. Occasionally the operator of an automobile will accidentally place his foot upon the starter plunger while the motor is running and also children are apt to press upon the starter plunger. This is detrimental to the starter.

The guard which forms the subject-matter of this invention and is intended to prevent accidental operation of the starter is provided with a body portion 4 which is preferably formed of wood but may be metal or any other material desired. The body portion is of a block-like formation and in the form illustrated is rectangular in cross section. A socket 5 is formed in the block or body portion 4 and opens through its under face so that when the guard is in its normal position the plunger 1 may be received in the socket and completely covered. Referring to Fig. 2, it will be seen that the front and rear end faces 6 and 7 of the body extend upwardly at a forward incline and that a lip 8 projects forwardly from the upper portion of the front face 6. By having the front face inclined, as shown, the body is caused to have an under cut forward end and, therefore, the lip 8 may be readily engaged by the driver's foot and the guard swung upwardly out of covering relation to the starter plunger. The rear face of the body has been inclined forwardly so that if accidentally struck a glancing blow will be received and the body portion will not be liable to be loosened or entirely detached from the hinge which connects the guard with the floor board.

The hinge is provided with companion leaves 9 and 10 which are preferably formed of strong sheet metal and have their adjacent ends provided with bearing sleeves through which a hinge pin 11 passes and pivotally connects the leaves. An appropriate number of openings are formed in the leaves to receive fastener screws 12, by means of which the leaves are secured to the floor board of the automobile and rear end face of the block or body portion 4. In order to normally retain the body portion of the guard in covering relation to the starter plunger, there has been provided a spring which is formed of resilient wire. The spring is substantially U shaped and provided with a bridge portion 13 from which arms 14 extend. The arms 14 are coiled one or more times about the hinge pin 11 between certain of the bearing sleeves of the leaves to provide coiled springs 15 and the free end portions of the arms are extended beneath the leaf 10 and passed outwardly through openings 16 formed adjacent the sides of the leaf. It should be noted that the rear end face of the block 4 is formed with a groove 17 in which the bridge and arms of the spring are seated and that the leaf 9 of the hinge extends in overlapping relation to the bridge portion of the spring. Therefore, the spring will be firmly secured in its seat when the securing screws are passed through the leaf 9 and screwed into the end face of the block. It will be readily understood that the spring will serve to yieldably retain the block or body of the guard in covering relation to the plunger and that the guard may be readily swung rearwardly out of covering relation to the plunger by engaging the lip 8 with the heel of a shoe and exerting a pulling action. As soon as the engine has been started and the foot is removed from the plunger, the spring

will return the guard to its normal position and the plunger will be covered. Therefore, the operator of the automobile cannot accidentally step upon the starter plunger and the plunger will be hidden from children who might be liable to step on it while the engine is in operation.

Having thus described the invention, I claim:

A device of the character described comprising a body having a face formed with a U-shaped groove constituting a spring seat, the intermediate portion of the groove extending transversely across the face and the end portions of the groove extending longitudinally thereof in spaced relation to its side edges, a hinge having pivotally connected leaves, one leaf being adapted to be secured against a support and the other secured against the said face of said body between the end portions of the groove with a portion extending across the intermediate portion of said groove, and a U-shaped spring seated in said groove with its bridge portion overlapped by the last mentioned leaf of said hinge and its arms projecting therefrom and anchored to the support engaging leaf of the hinge.

In testimony whereof I affix my signature.

JANN A. QUATHAMER. [L. S.]