H. A. BEALL.

THEFT ALARM FOR AUTOMOBILES.

APPLICATION FILED JULY 22, 1918.

1,307,575.

Patented June 24, 1919.

Fig. I.

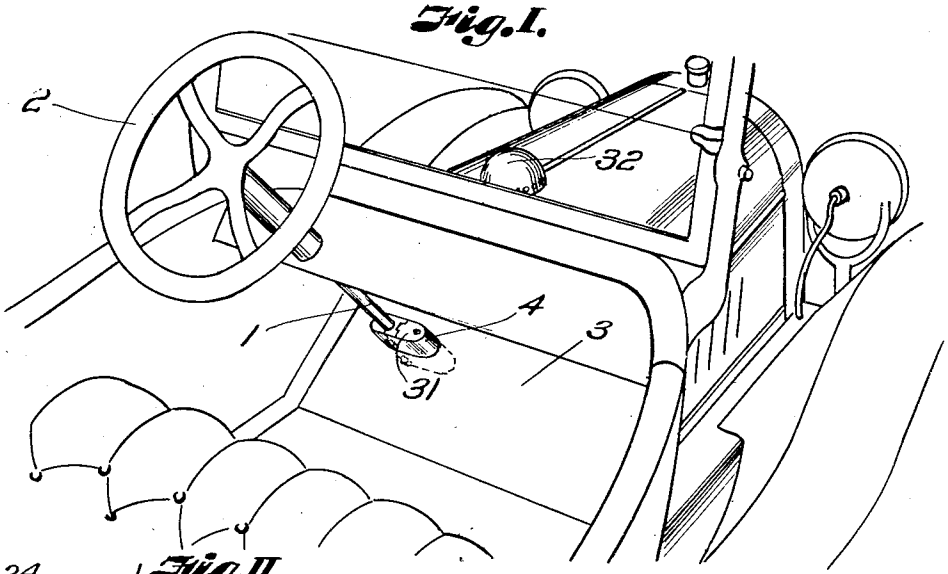


Fig. II.

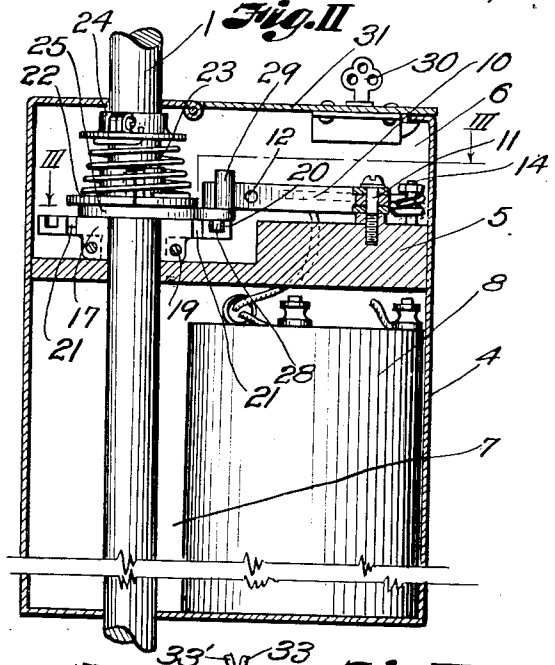


Fig. III.

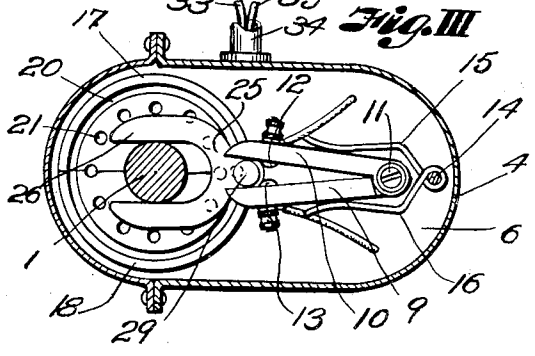


Fig. IV.

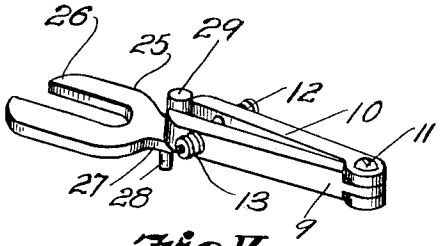


Fig. V.

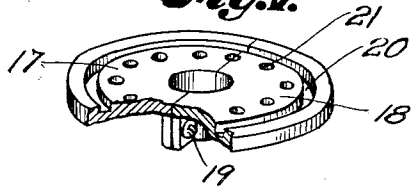
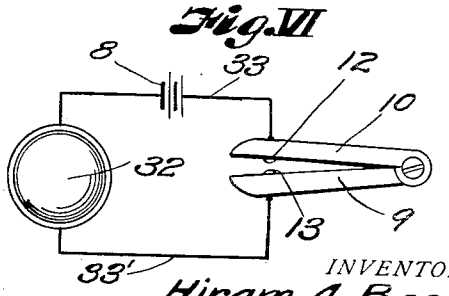


Fig. VI.



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THEFT-ALARM FOR AUTOMOBILES.

1,307,575. Specification of Letters Patent. Patented June 24, 1919.

Application filed July 22, 1918. Serial No. 245,997.

To all whom it may concern:

Be it known that I, HIRAM A. BEALL, a citizen of the United States, residing at Kansas City, in the county of Jackson and State of Missouri, have invented certain new and useful Improvements in Theft-Alarms for Automobiles; and I do 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 the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to theft alarm for automobiles and the like. One of the objects of the invention is to provide an alarm which will normally remain inoperative but which may be set for operative position at the will of an authorized person. The machine is so arranged that after having been set, the alarm will be sounded should an unauthorized person attempt to start the vehicle.

In the drawings:

Figure I is a fragmentary perspective view of a motor vehicle to which my invention is applied.

Fig. II is an enlarged vertical sectional view through the alarm operating mechanism casing, the steering post for the motor vehicle being shown in elevation.

Fig. III is a sectional view on the line 3—3 of Fig. II.

Fig. IV is a detail perspective view of a pair of contacts and the spreader therefor.

Fig. V is a fragmental perspective view of the spreader actuator.

Fig. VI is a diagrammatical view of the alarm circuit, the contacts and the alarm.

Referring now to the drawings by numerals of reference:

1 designates a steering post of a motor vehicle which may be operated by the usual hand wheel 2. Secured to the foot board 3 of the motor vehicle is a casing 4 containing a partition 5 to provide an upper chamber 6 and a subjacent chamber 7, in the latter of which is shown a secondary battery 8.

9 and 10 are contact arms pivoted to the partition 5 at 11 and these arms carry contacts 12 and 13. 14 is a support for the resilient arms 15 and 16 which bear against the outer edges of the contact arms 9 and 10, so that the tendency is for the contacts 12 and 13 to come together.

On the steering post 1 is a two part spreader actuator, consisting of the members 17 and 18 clamped to said steering post 1 by fastening devices 19. The spreader actuator is shown as comprising a disk having in its upper face a circumferential groove 20 and within the inner edge of the groove is a circular series of pockets or recesses 21. Above the spreader actuator is a yielding plunger 22 against which one end of a coil spring 23 bears, the other end bearing against a collar 24 fastened on the steering post 1.

25 designates a contact spreader having a bifurcated portion 26 adapted to straddle the steering post 1. The spreader is provided with an offset 27 having a depending pin 28 extending therefrom and an upstanding spreader finger 29 which when inserted between the arms 9 and 10 will prevent the contacts from coming together and sounding the alarm. Under ordinary conditions the pin 28 will rest in the groove 20 of the spreader actuator with the finger 29 between the arms 9 and 10. Thus the authorized person may manipulate the steering gear without in any wise affecting the alarm because the pin 28 will ride idly in the groove.

When the device is to be used for the purpose of safety so as to prevent an unauthorized person from manipulating the steering mechanism, an authorized key 30 will permit access to be had to the casing 4 by unlocking the door 31. The pin 28 may then be lifted out of the groove 20 and inserted in one of the openings 21. The door 31 is then locked and the mechanism is set for operation.

In the event that some unauthorized person attempts to move the motor vehicle, the steering mechanism will have to be operated and on account of the pin 28 affording a rigid connection between the spreader and its actuator, the turning of the steering post 1 will be effective in causing the finger 29 to move out of contact with the arms 9 and 10, so as to permit the two contacts 12 and 13 to come together and operate the alarm signal 32. The sounding of the alarm cannot be stopped until access is had into the interior of the casing 4 and this can only be accomplished through the door 31.

The conductor 33 and 33′ of the electric current will be protected by the conduit 34, thus obviating the liability of the hood being raised and the wires cut.

Having thus described my invention what I claim as new therein, and desire to secure by Letters-Patent, is:

1. In a device of the class described, a circuit closer including a pair of contacts having a normal tendency to bear one against the other, a steering post, a contact spreader having a part between the contacts and means on said steering post for removably supporting the spreader.

2. In a device of the class described, a pair of contacts for an electrical alarm circuit closer, a motor vehicle steering post, a contact spreader having a part between the contacts, a spreader support on said post and means for clamping the spreader to the support.

3. In a device of the class described, a pair of contacts for an electrical alarm circuit closer, a motor vehicle steering post, a contact spreader having a part between the contacts, a spreader support on said post and means for yieldingly clamping the spreader to the support.

4. In a device of the class described, a pair of contacts for an electrical alarm circuit closer, a motor vehicle steering post, a contact spreader having a part between the contacts, means rigid on the steering post for normally loosely supporting the spreader and means for positively connecting the spreader and supporting means.

5. In a device of the class described, a pair of contacts for an electrical alarm circuit closer, having a normal tendency to bear one against the other, a contact spreader having a part normally between the contacts, a motor vehicle steering post, a spreader support on the steering post having a circumferential groove and a plurality of recesses and a pin on the spreader to selectively engage the groove and one of the recesses.

6. In a device of the class described, a pair of contacts for an electrical alarm circuit closer having a normal tendency to bear one against the other, a steering post for motor vehicles adjacent the contacts, a disk rigidly supported by the steering post and having recesses therein, a contact spreader having one part normally between the contacts and provided with a bifurcated end straddling the post, said spreader resting upon the disk and means on the spreader for engaging a recess in the disk.

In testimony whereof I affix my signature.

HIRAM A. BEALL.