Jan. 22, 1924. 1,481,498

L. C. BOGGESS

UNDER HOOD LOCK FOR AUTOMOBILES

Filed Sept. 15, 1922 3 Sheets-Sheet 1

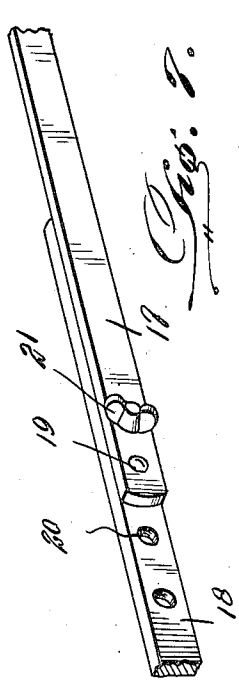


Fig. 2.

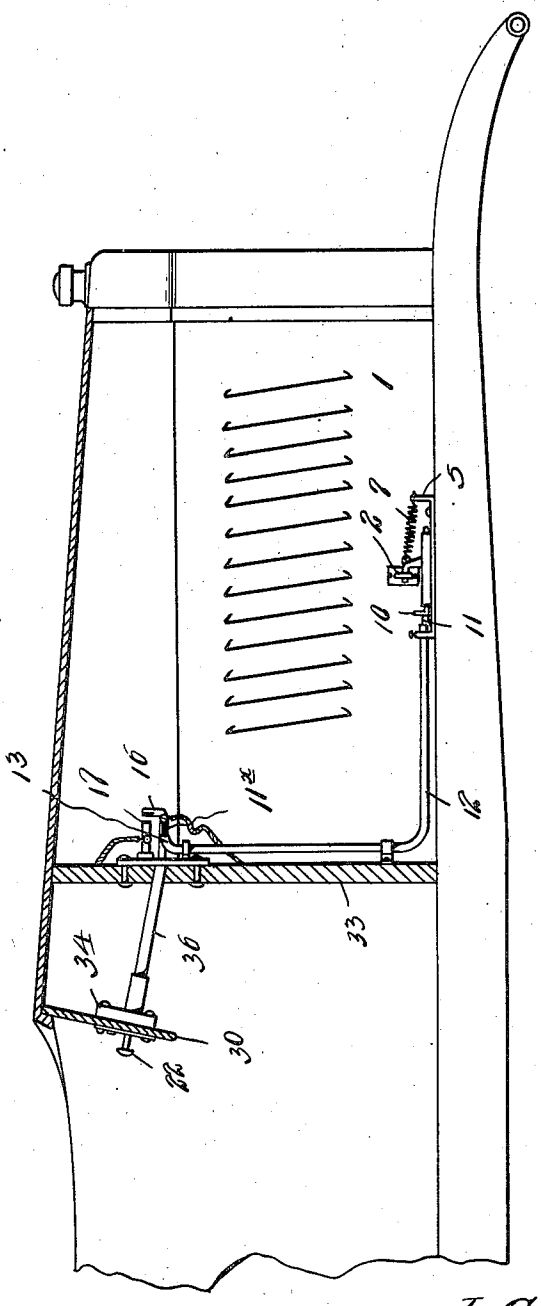


Fig. 1.

Witnesses:
F. L. Fiot.
N. Berman

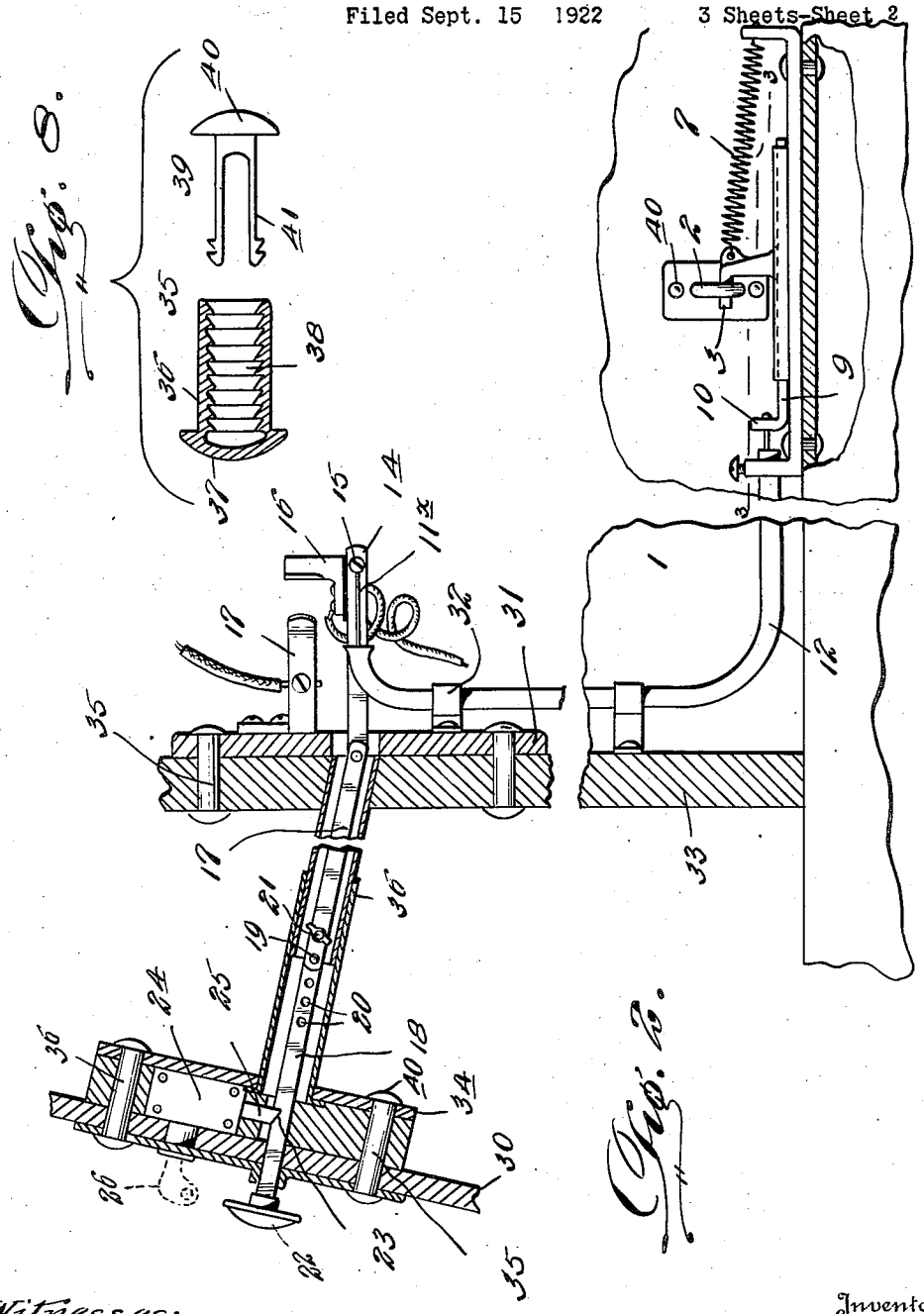
Inventor
L. C. Boggess.
By Clarence O'Brien
Attorney

Jan. 22, 1924. 1,481,498

L. C. BOGGESS

UNDER HOOD LOCK FOR AUTOMOBILES

Filed Sept. 15 1922 3 Sheets-Sheet 2



Witnesses:
J. L. Foy.
N. Berman

Inventor
L. C. Boggess,
By Clarence A. O'Brien
Attorney

Jan. 22, 1924. 1,481,498

L. C. BOGGESS

UNDER HOOD LOCK FOR AUTOMOBILES

Filed Sept. 15, 1922 3 Sheets-Sheet 3

Fig. 6.

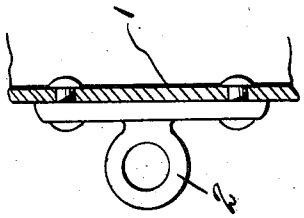


Fig. 5.

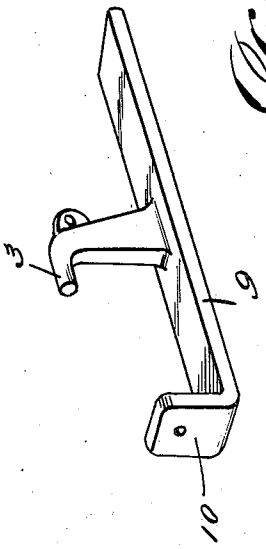
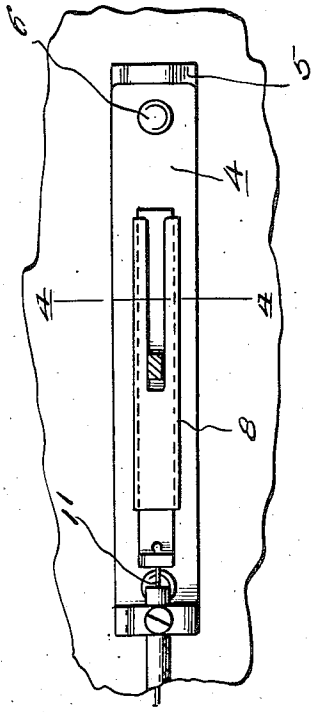


Fig. 3.



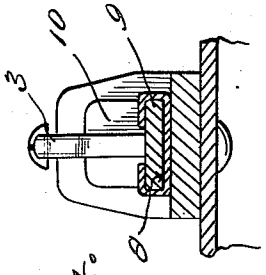


Fig. 4.

Witnesses:
F. L. Fox.
H. Berman

Inventor
L. C. Boggess

By Clarence A. O'Brien

Attorney

Patented Jan. 22, 1924. 1,481,498

UNITED STATES PATENT OFFICE.

LAWRENCE C. BOGGESS, OF FAIRVIEW, WEST VIRGINIA, ASSIGNOR OF ONE-HALF TO GAYLORD S. BASNETT, OF FAIRVIEW, WEST VIRGINIA.

UNDER-HOOD LOCK FOR AUTOMOBILES.

Application filed September 15, 1922. Serial No. 588,315.

To all whom it may concern:

Be it known that I, LAWRENCE C. BOGGESS, a citizen of the United States, residing at Fairview, in the county of Marion and State of West Virginia, have invented new and useful Improvements in Under-Hood Locks for Automobiles, of which the following is a specification.

The object of my said invention is the provision in an automobile of means whereby the owner of the automobile is enabled to lock the hood and break the ignition circuit under the hood, thereby preventing an unauthorized person from closing or completing the ignition circuit, and preventing the theft of spark plugs and other accessories located under the hood.

To the attainment of the foregoing, the invention consists in the improvement as hereinafter described and definitely claimed.

In the accompanying drawings, forming part of this specification:—

Figure 1 is a longitudinal vertical section of a portion of an automobile equipped with my improvement, the improvement being shown in elevation, and it being understood that the hood lock is duplicated at opposite sides of the hood within the same.

Figure 2 is an enlarged detail view, partly in section and partly in elevation of the improvement with the hood in locked state as in Figure 1.

Figure 3 is an enlarged horizontal section taken in the plane indicated by the line 3—3 of Figure 2.

Figure 4 is an enlarged cross section on the line 4—4 of Figure 3.

Figure 5 is an enlarged perspective of the locking bolt and its slide.

Figure 6 is an enlarged detail showing the keeper that is provided at the inner side of each movable hood skirt.

Figure 7 is a detail perspective on a large scale of the thrust bar comprised in the improvement.

Figure 8 comprises disassociated views of the peculiar and advantageous type of rivet that I prefer to employ in the application of my improvement of an automobile such as at present in use.

Similar numerals of reference designate corresponding parts in all of the views of the drawings.

In furtherance of my invention I provide each skirt or movable section 1 of a hood with a lateral keeper 2, and in association with each of the keepers 2 I provide a bolt 3, and means for controlling the bolt. The said means in the present and preferred embodiment of my invention comprises a base plate 4 with upturned ends 5, fixedly secured at 6 to the automobile frame, and a retractile spring 7 interposed between and connected to the bolt 3 and the forward upturned end 5 of the plate 4. The plate 4 is provided at 8 with a slotted guideway to receive the slidable body 9 which carries the bolt 3, and at its rear end the body 9 is provided with a flange end 10 to which is connected a fine wire 11 for use in putting the bolt 3 in engagement with the keeper 2 against the action of the spring 7 so as to securely lock at the inner side of the hood the hood section or skirt by which the keeper 2 is carried. The fine wire 11 is carried through a loose tube 12 and is movable freely in the tube. Said tube 12 is fixed within the hood and is provided at the upper end of its upright portion with a forwardly directed mouth 13 from which the wire 11 extends forwardly as indicated by 11^x in Figures 1 and 2. At its upper end the wire 11 is connected to the forward section 14 of a thrust bar, as designated by 15, and on the said section 14 is carried one terminal 16 of an ignition circuit, the said terminal 16 being opposed to a complementary terminal 17 of the circuit so that the circuit will be broken within the hood when the terminal 16 is in the relative position shown in Figures 1 and 2. In addition to the section 14 the thrust bar, in the present embodiment of my invention, comprises an intermediate section 17 and a rear section 18, said sections 17 and 18, being adjustably connected together through the medium of a pin 19 on section 17 designed to enter threaded apertures 20 in the section 18, and the screw 21 having a threaded shank to enter and engage the apertures 20. At its rear end the thrust rod section 18 is provided with a finger piece 22, and at an intermediate point of its length the said section 18 is provided with a beveled notch 23. For cooperation with the said notched section 18 I provide an ordinary key controlled lock 24 having a bolt 25 with a beveled end as best shown in Figure 2.

The key complementary to the lock 24 is designed to be carried by the owner of the

automobile, and when the owner leaves his car unattended it is his province to press forwardly on the finger piece 22 and thrust the rod forwardly, and then manipulate the lock so that the bolt 25 of the lock will engage and preclude rearward movement of the thrust bar, or if desired the bolt 25 may be spring-pressed so as to snap into the notch 23 in the thrust bar when the said bar is moved forwardly as before described. Manifestly on forward movement of the thrust bar the terminal 16 will be separated from the terminal 17 as shown in Figures 1 and 2, and the ignition circuit will be interrupted under the hood where the gap cannot be reached by an unauthorized person. The said forward thrust of the bar made up of the several sections described will also be attended by rearward movement of the spring 7 so that the hood skirt or movable section engaged by the bolt will be securely locked against opening. In virtue of this latter it will be understood that an unauthorized person will be prevented from gaining access to the interruption in the ignition circuit and at the same time theft of accessories from under the hood will be precluded. When on returning to his automobile the owner desires to operate the automobile it is simply necessary for the owner to introduce and manipulate the key 26 shown by dotted lines in Figure 2 so as to retract the bolt 25 from the thrust bar section 18, whereupon retraction of the spring 7 will withdraw the bolt 3 from engagement with its keeper 2 so as to release the hood section or skirt 1, and at the same time move the terminal 16 rearwardly into contact with the terminal 17, thereby completing the ignition circuit and at the same time thrusting the sectional bar rearwardly and placing the same in readiness for another operation.

I prefer in practice to have the lock 24 on the forward side of the instrument board 30 of the automobile, the thrust rod section 18 being carried rearwardly through said board 30; and I also prefer to arrange the terminal 17 on a plate 31, and to connect the tube 12 to the said plate, as designated by 32, the plate 31 being arranged at the forward side of the usual transverse wall 33 provided in modern automobile. I also desire it understood that I prefer to employ an auxiliary plate 34 in front of the instrument board 30 by special rivets 35. Similar rivets 35 are utilized in the connection of the plate 31 to the wall 33, and for protective purposes a telescopic tubular housing 36 is employed about the sectional thrust rod intermediate of the plate 31 and the auxiliary plate 34. Each of the rivets 35 is of the peculiar and advantageous construction best shown in Figure 8—i. e., comprises a female tubular member 36 with a head 37 and interior beveled teeth 38, and a male member 39 with a head 40 and toothed arms 41. In using the rivets in the relation clearly shown in Figure 2, the female member of each rivet is introduced through the members to be connected, and the male member is sheathed in the female member whereupon the two members will be strongly connected of themselves and against casual disconnection except by tearing the connected parts apart.

Notwithstanding the practical advantages of my novel lock, it will be apparent that the same is simple and inexpensive in construction and reliable in operation and is free of delicate parts such as are likely to get out of order after a short period of use. It will also be apparent that the embodiment of my invention as herein shown and described is susceptible of ready application to automobiles such as at present in use.

I have entered into a detailed description of the construction and relative arrangement of the parts embraced in the present and preferred embodiment of my invention in order to impart a full, clear and exact understanding of the said embodiment. I do not desire, however, to be understood as confining myself to the specific construction and relative arrangement of parts inasmuch as in the future practice of the invention various changes and modifications may be made such as fall within the scope of my invention as defined in my appended claims.

Having described my invention, what I claim and desire to secure by Letters Patent, is:—

1. In an automobile, the combination of a hood having a movable section whereby access is afforded to its interior, means within the hood and including a movable member to fasten said section in closed position, a movable exposed handle connected with said movable member of the fastening means, a spring to move said movable member in one direction, a key-controlled lock to engage and secure said handle against movement under the impulse of said spring, a terminal of an ignition circuit within the hood, and a second terminal of said circuit within the hood and connected and movable with said exposed handle and arranged to rest out of contact with the first-named terminal when said movable member of the fastening means is in position to secure the movable hood section in closed position.

2. In an automobile, the combination of a hood having a movable section whereby access is afforded to its interior, means within the hood and including a movable member to fasten said section in closed position, a movable exposed handle having a rod portion extending within the hood, a key-controlled lock to engage and secure said handle against movement, a spring to move said

movable member in a direction to thrust the rod and handle outwardly, a tube within the hood, and a flexible connection between the movable fastening member and the rod portion and extending through said tube; a terminal of an ignition circuit being also arranged in the hood, and a second terminal of said circuit being carried by the rod portion and arranged to rest away from the first terminal when the hood section is fastened in closed position, with a transverse wall at the rear end of the hood, a plate against said wall and within the hood by which said tube and said first terminal are carried, means connecting said plate to said wall, an instrument board spaced in rear of said transverse wall, a plate connected with said board and enclosing the key-controlled lock, and a telescopic housing between said plates and enclosing the rod portion, said rod portion being adjustable as to length.

In testimony whereof, I affix my signature.

LAWRENCE C. BOGGESS.