F. MATHEWS.

FASTENING DEVICE FOR AUTOMOBILE HOODS.

APPLICATION FILED DEC. 1, 1919.

1,423,773.

Patented July 25, 1922.

Fig. 1

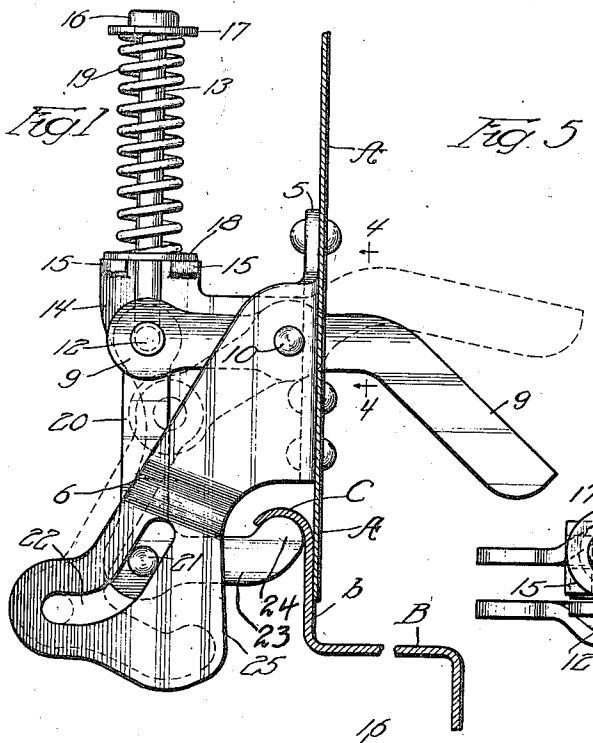


Fig. 5

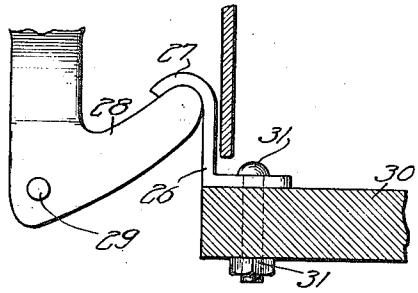


Fig. 3

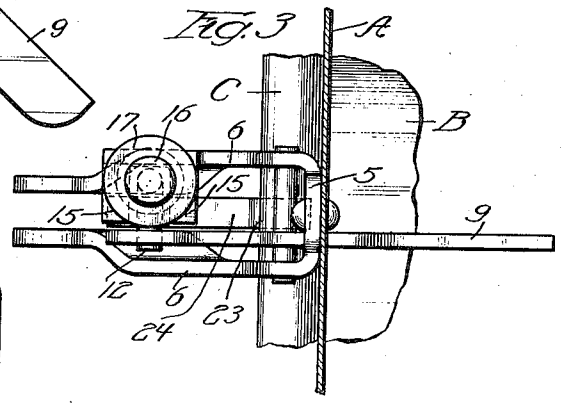


Fig. C

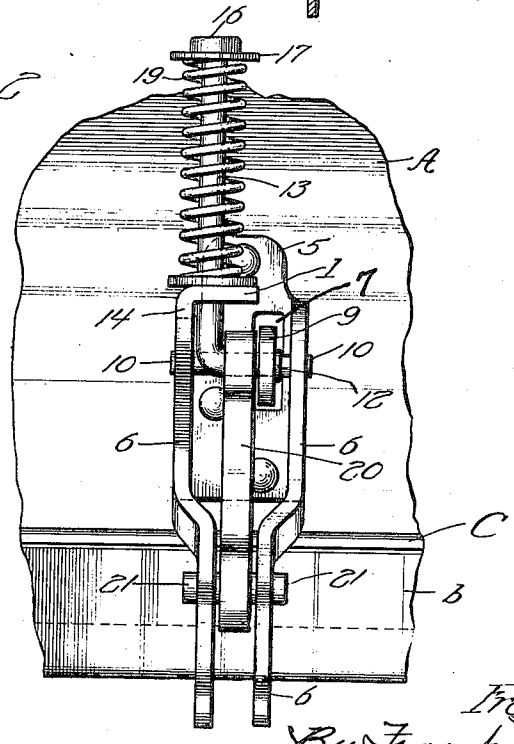
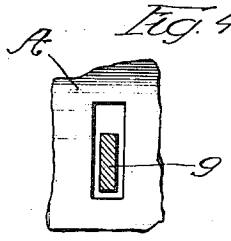


Fig. 4



Inventor.
Fred Mathews
By Frank D. Thomson Atty.

UNITED STATES PATENT OFFICE.

FRED MATHEWS, OF CHICAGO, ILLINOIS.

FASTENING DEVICE FOR AUTOMOBILE HOODS.

1,423,773. Specification of Letters Patent. Patented July 25, 1922.

Application filed December 1, 1919. Serial No. 341,646.

To all whom it may concern:

Be it known that I, FRED MATHEWS, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented new and useful Improvements in Fastening Devices for Automobile Hoods, of which the following is a full, clear, and exact description.

My invention relates to means for locking the hoods of automobiles, and particularly the type of devices that are attached to the hoods near the lower edges thereof and that are adapted to both fasten the hood down and prevent the rattling thereof.

The object of my invention is to provide a locking device that is fastened between lugs located on the inside of the hood and operated by a handle extending outside of the hood, which, when lifted unfastens the locking device and raises the hood at the same time. This I accomplish by the means hereinafter fully described and as particularly pointed out in the claims.

In the drawings:

Figure 1 is a side view of my improved locking device applied to the inner surface of a fragment of an automobile hood, which latter and the platform engaged thereby are shown in section.

Figure 2 is a rear elevation of the same.

Figure 3 is a plan view thereof.

Figure 4 is a transverse section of the handle taken on dotted line 4, 4, Figure 1, and showing a fragment of the hood.

Figure 5 is a side view of a broken away portion of a modification of the interlocking features of my invention.

In the drawings A represents a lower portion of the hood of an automobile, and B represents the adjacent portion of the body of the same (which will hereinafter be referred to as a platform) which is engaged by the lower edge of said hood and extends horizontally outwards therefrom. The inner edge of this platform B is provided with an upwardly projecting flange *b*, and the lower edge of the hood laps outside of this flange when the hood is down. Just above the plane of the lower edge of said hood, when down, the upper edge of said flange opposed to my improved locking device is rolled inwards to provide a hooked edge *c*.

My improvements comprise a bracket, the vertical elongated supporting-plate 5 of which is riveted at suitable points to the inner surface of the hood. This supporting-plate is provided with parallel lugs 6, 6, that extend downwards at an acute angle to the hood and have their lower portions curved inwardly, substantially as shown in the drawings. The supporting plate 5 has a vertically elongated opening 7 therein, which registers with a corresponding opening in the hood, out through which the handle 9, that is employed to operate my improved locking device, extends. This handle is a lever and is fulcrumed between its ends between lugs 6, 6, by means of a transverse pin 10, and it extends inwards from its fulcrum a short distance and has its inner end pivotally connected to the lower transversely bent end 12, of a vertical rod 13.

One of the lugs 6, has an arm 14 projecting rearwardly from the edge of the upper part thereof, and this arm has two fingers 15, 15, projecting laterally therefrom between which rod 13 extends upwards. This rod is provided with a head 16 on its upper end and has an upper washer 17 and a lower washer 18 surrounding it, and between these two washers it is surrounded by a coil expansion-spring 19. Thus when the handle 9 is raised rod 13 will be moved downwards and compress spring 19 and when said handle is released the expansion of the spring will automatically restore the handle to its normal position.

The upper end of the vertical branch 20 of an L-shaped latch is pivoted on the lower end of the rod 13 alongside of the rear end of the handle 9, and at the angle of said L-shaped latch it is provided with laterally projecting trunnions 21, which may be made integral with the latch or consist of a transverse pin welded or otherwise immovably fastened to the same. These trunnions extend through longitudinally extending slots 22 in the lower portions of the supporting-lugs 6, 6, and these slots have their lower portions curved inwardly in substantially the same way as the lower curved end of said lugs.

The horizontal lower portion or foot 23 of the L-shaped latch, extends forward from the trunnions 21 and has its forward extremity bent upwards to form a toe 24. When the lower edge of the hood is locked in its downward position the toe 24 will engage and lock under the hooked-shaped edge *c* of the flange *b* of platform B. When the outward-

ly projecting end of handle 9 is lifted into the position shown in dotted lines in Figure 1 of the drawings, the inner end of said handle will push the latch downwards and the trunnions 21 travelling in slots 22 will move the foot of the latch so that the toe thereof will withdraw downwards from the hook-shaped edge *c* of the flange of the platform, and unlock the hood, and as the handle is lifted still further the hood will be lifted, the latch will be held in its retracted position while the hood is being lifted, but when the operator removes his hand from the handle, the latch will return to its normal latching position, and when the hood is lowered to the position shown in Figure 1, of the drawings, will snap into engagement with the hook C again. In order to prevent the possibility of the toe of the foot of the latch from engaging the downwardly curved edge *c*, as the hood is lifted, the forward edges of the lower portion of the lugs 6, are built outward so as to form guards 25 back of which toe 24 retires when the handle is lifted.

It is obvious that the construction of the parts of my invention may be modified without departing from the spirit of my invention. All such changes I desire to be understood as coming within the scope of what I have invented.

In Figure 5 of the drawings a modification of my invention is illustrated in which the principal feature is the substitution of a fixture for the downwardly rolled edge *c* of the flange of the sheet metal platform. This fixture consists of an attaching plate 25ª from the inner end of which an integral arm 26 arises, the upper end of which is curved inwards and downwards to provide a hook 27 the underside of which is engaged by the toe of the foot 28 of the latch. Foot 28 is pivoted at 29, and is adapted to move on the axis of its pivot to engage and disengage the hook. This modification is particularly adapted for use where a sheet metal platform B, such as shown in Figures 1, 2, and 3 of the drawings, is dispensed with, and a wooden support 30 is employed to which the attaching plate 25ª of the hook 27 is secured by a bolt and nut 31, or other suitable means. The hood A when closed laps down outside of this modified fixture, and hides the same just as satisfactorily as it does the interlocking devices of the preferred form of my invention.

What I claim as new is:

1. The combination with a section of the hood of an automobile, and the body part thereof, of a handle having a fixed pivot connected to the inside of said section, a vertically reciprocal L-shaped latch, pivotally connected to the inner end of said handle, lugs projecting from the inner side of said section having slots extending at an angle to the direction of length of the vertical portion of said latch, and pivotal members projecting from the angle of said latch that extend into said slots, and direct the movement of said latch to lock with said body part in one position and unlock therefrom in another position.

2. The combination with a section of the hood of an automobile, and the body part thereof, of a vertically reciprocal L-shaped latch, lugs projecting from the inner side of said section having slots extending at an angle to the direction of length of the vertical member of said latch, pivotal members projecting from the angle of said latch that extend into said slots, and direct the movement of said latch to lock with said body part in one position and unlock therefrom in another position, and a handle fulcrumed at a fixed point between said lugs and having its inner end pivoted to said latch and the outer end extend out through said section of the hood.

3. The combination with a section of the hood of an automobile, and the body part thereof, of a vertically reciprocal L-shaped latch, lugs projecting from the inner side of said section having slots, extending at an angle to the direction of length of the vertical member of the latch, pivotal members projecting from the angle of said latch that extend into said slots, and direct the movement of said latch to lock with said body part in one position and unlock therefrom in another position, a handle fulcrumed at a fixed point between said lugs and having its inner end pivoted to said latch and its outer end extending out through said section of the hood, and a spring for returning said latch to its original position.

In witness whereof, I have hereunto set my hand this 19th day of November, 1919.

FRED MATHEWS.

Witnesses:
BEN SIBY, Jr.,
J. J. ACKER.