March 12, 1929. J. G. C. MANTLE 1,705,260

AUTOMOBILE HOOD FASTENER

Filed Sept. 3, 1927

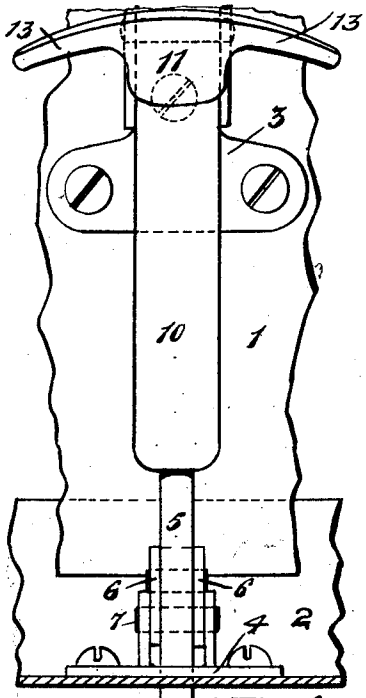


Fig.1.

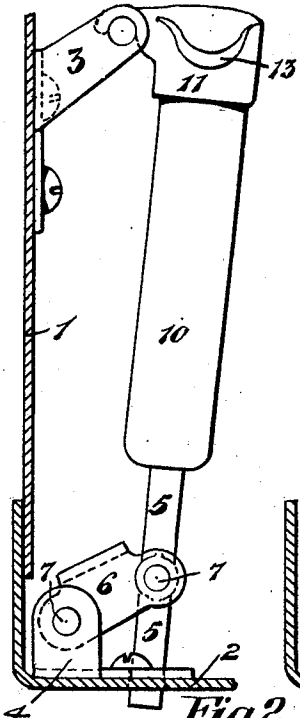


Fig.2.

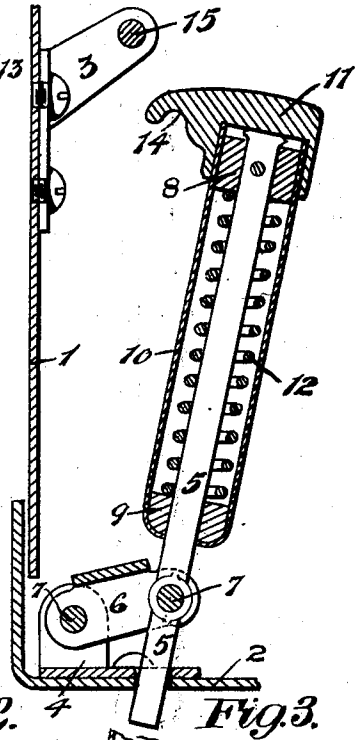


Fig.3.

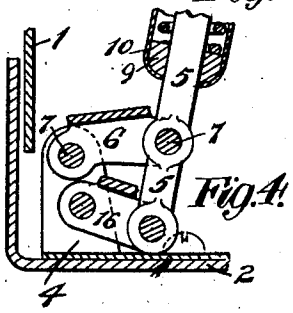


Fig.4.

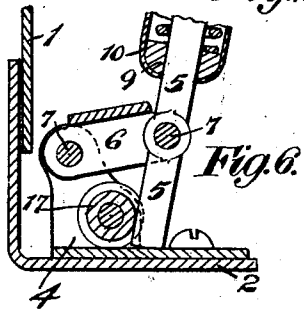


Fig.6.

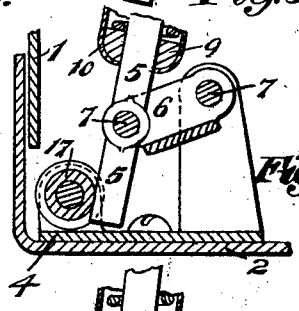


Fig.8.

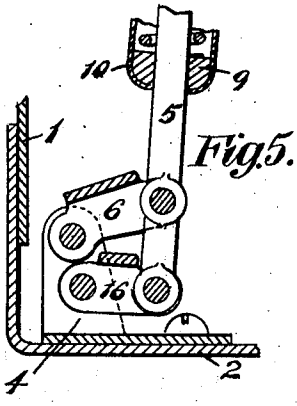


Fig.5.

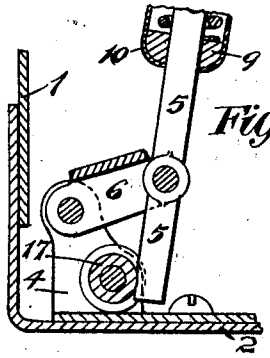


Fig.7.

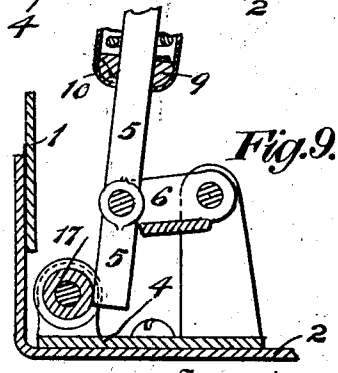


Fig.9.

Inventor

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Patented Mar. 12, 1929. 1,705,260

UNITED STATES PATENT OFFICE.

JOSEPH G. C. MANTLE, OF LEONIA, NEW JERSEY.

AUTOMOBILE HOOD FASTENER.

Application filed September 3, 1927. Serial No. 217,344.

The object of this invention is to provide a hood fastener which operates in an improved manner, and which is also simple in construction, and neat in appearance.

The hood fastener mainly consists of a flap-bracket which is secured to the flap of the hood, a base-bracket which is secured to the base extension of the hood, a swing-member attached to the base-bracket in a manner permitting its swing-like movement in direction to and from the flap-bracket, a pull-member slidably mounted on the swing-member, and spring-actuated downwardly in direction towards the base-bracket, and means whereby the spring actuating the pull-member imparts two separate pressures, at right angles to each other in direction on the same portion of the flap-bracket.

In the attached drawings;

Fig. 1 is an elevation of the hood fastener when in fastened position.

Fig. 2 is a side elevation of the same.

Fig. 3 is a sectional side elevation showing the hood fastener in unfastened position.

Fig. 4 is a sectional elevation of a modification of a portion and showing it when the hood fastener is in unfastened position.

Fig. 5 is a sectional elevation of the same modification but in fastened position.

Fig. 6 is a sectional elevation of another modification of the same portion and when in unfastened position.

Fig. 7 is a sectional elevation of the modification shown in Fig. 6 but in fastened position.

Fig. 8 is a sectional elevation of yet another modification of the same portion and when in unfastened position.

Fig. 9 is a sectional elevation of the modification shown in Fig. 8 but in fastened position.

Referring to the drawings, 1 is a portion of the flap of the hood. 2 is a portion of the base extension of the hood. 3 is the flap-bracket. 4 is the base-bracket. 5 is the swing-member which is attached to the base-bracket by means of the link 6 and the pins 7 and which permits of a swing-like movement of the swing-member in direction to and from the flap-bracket. This linking of the swing-member divides it into a longer and a shorter portion above and below, respectively, of its pin 7. 8 is a collar secured to the longer portion, and 9 is a collar slidably mounted thereon. 10 is the pull-member and is slidable on the collar 8 and supported on the collar 9, and, as the collar 8 is secured to the swing-member, and the collar 9 is slidably mounted on the swing-member, the pull-member is slidably mounted on the swing-member. 11 is a member secured to the pull-member and may be regarded as a part of it. 12 is a helical spring surrounding the swing-member and which cooperates with it by means of the collars 8 and 9 to press the pull-member towards the base-bracket. The part 11 of the pull member is provided with side prongs 13 by which the operator manipulates it to fasten and unfasten the hood. Part 11 has also a hook-shape portion 14 which hooks the pull-members to the flap-brackets to fasten the hood. The link 6 is of double form and embraces both sides of the swing-member and has two bearings on each of the pins 7. The shorter portion of the swing-member fits loosely in the hole in the base-bracket and the base extension of the hood, and the side of the shorter portion of the swing-member nearest to the flap of the hood abuts the side of the hole.

By inspection of Fig. 3 it will be seen, by reason of this abutment and the linkage of the swing-member by the link 6 to the base-bracket, that a lengthwise movement in upward direction imparted to the swing member causes a simultaneous and swing-like movement of the longer portion in direction towards the flap of the hood. The abutment in the hole serves as a fulcrum and the link, by its upward movement pulls the swing-member towards the flap of the hood. By inspection of Fig. 2 it will be seen that the pull-member not only imparts a pressure in downward direction through the top of portion 15 of the flap bracket, but also another pressure in inward direction, in respect to the flap to the side of the portion 15 farthest from the flap for the shorter portion of the swing-member is fulcrumed against the side of the hole in the base-bracket, and the spring 12 in sustaining the link 6 in its upward position, causes it to exert a pull on the swing-member in direction towards the flap of the hood.

Although the form of fulcrum shown in Figs. 2 and 3 has the merit of extreme simplicity, yet it has the defect of friction and wear, and Figs. 4 to 9 inclusive show modifications which are practically free of this defect. In the modification shown in unfastened and fastened positions, in Figs. 4 and 5 respectively, the hole in the base-bracket, or

in the base extension, a side of which served as the fulcrum, is replaced by the link 16 which is pivoted to the base-bracket and to the lower part of the swing-member. In the modification similarly shown in Figs. 6 and 7 the roller 17 pivoted in the base-bracket and having a rolling contact with the swing-member, serves as the fulcrum. The link 6 may be placed on either side of the swing-member as may be seen by inspection of Figs. 8 and 9.

What I claim is:

1. In a hood fastener, a base-bracket secured to the base extension of the hood, a swing-member attached to the base bracket in a manner permitting a swing-like movement of the swing-member, a link having one of its ends pivoted to the base-bracket and its other end pivoted to the swing-member intermediate its ends and dividing the swing-member into a longer and a shorter portion, and means cooperating with the said shorter portion whereby a movement lengthwise in one direction, imparted to the swing-member causes a simultaneous movement, swing-like in one direction, of the said longer portion.

2. In a hood fastener, a base-bracket secured to the base extension of the hood, a swing-member attached to the base-bracket in a manner permitting a swing-like movement of the swing-member, a link having one of its ends pivoted to the base-bracket and its other end pivoted to the swing-member intermediate its ends and dividing the swing-member into a longer and a shorter portion and a member pivoted to the base-bracket and cooperating with the said shorter portion whereby a movement, lengthwise in one direction, imparted to the swing-member causes a simultaneous movement, swing-like in one direction, of the said longer portion.

3. In a hood fastener, a base-bracket secured to the base extension of the hood, a swing-member attached to the base-bracket in a manner permitting a swing-like movement of the swing-member, a link having one of its ends pivoted to the base-bracket and its other end pivoted to the swing-member intermediate its ends and dividing the swing-member into a longer and a shorter portion, and a roller pivoted to the base-bracket and having a rolling contact with the said shorter portion whereby a movement, lengthwise in one direction, imparted to the swing-member causes a simultaneous movement, swing-like in one direction of the said longer portion.

4. In a hood fastener, a base-bracket secured to the base-extension of the hood, a swing-member attached to the base-bracket in a manner permitting a swing-like movement of the swing-member, a link having one of its ends pivoted to the base-bracket and its other end pivoted to the swing-member intermediate its ends and dividing the swing-member into a longer and a shorter portion, and a means cooperating with the said shorter portion whereby a lengthwise movement imparted to the swing-member causes a simultaneous swing-like movement of the said longer portion in the direction towards the hood.

5. In a hood fastener, a base-bracket secured to the base extension of the hood, a swing-member attached to the base-bracket in a manner permitting a swing-like movement of the swing-member, a link having one of its ends pivoted to the base-bracket and its other end pivoted to the swing-member intermediate its ends and dividing the swing-member into a longer and a shorter portion, and a member pivoted to the base-bracket and cooperating with the said shorter portion whereby a lengthwise movement imparted to the swing-member causes a simultaneous swing-like movement of the said longer portion in the direction towards the hood.

6. In a hood fastener, a base-bracket secured to the base extension of the hood, a swing-member attached to the base-bracket in a manner permitting a swing-like movement of the swing-member, a link having one of its ends pivoted to the base-bracket and its other end pivoted to the swing-member intermediate its end and dividing the swing-member into a longer and a shorter portion, and a roller pivoted in the base-bracket and having a rolling contact with the said shorter portion whereby a lengthwise movement imparted to the swing-member causes a simultaneous swing-like movement of the said longer portion in a direction towards the hood.

Signed at New York city, N. Y., Sept. 2, 1927.

JOSEPH G. C. MANTLE.