Aug. 4, 1925.

1,548,644

W. R. WILEY

HOOD LOCK

Filed June 18, 1923.

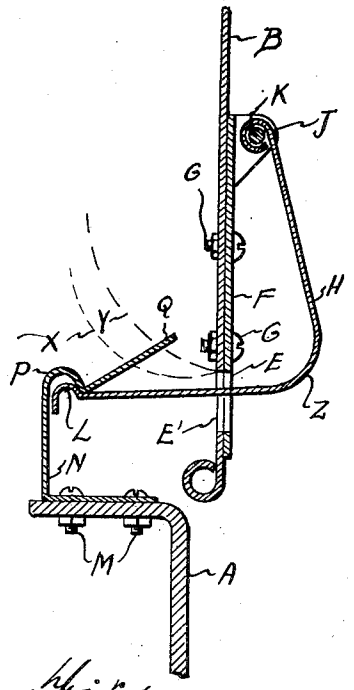


Fig. 1

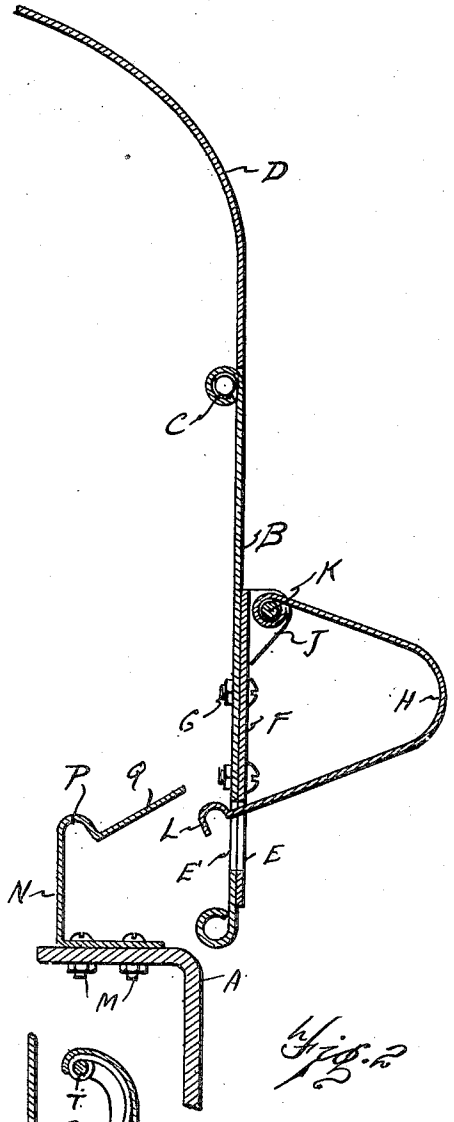


Fig. 2

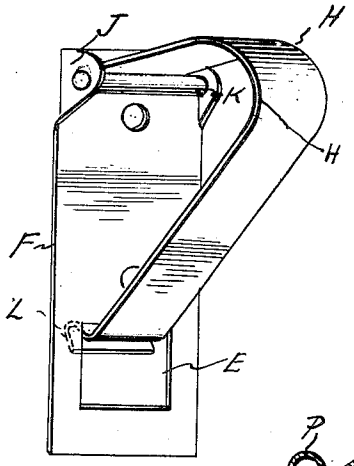


Fig. 3

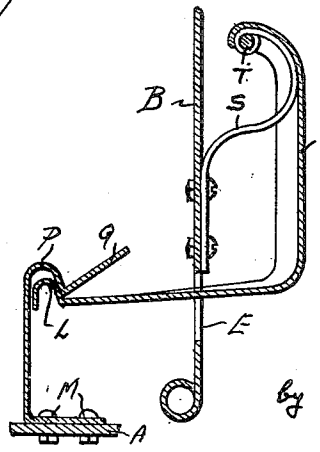


Fig. 4

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UNITED STATES PATENT OFFICE.

WILLIAM R. WILEY, OF MOUNT CLEMENS, MICHIGAN.

HOOD LOCK.

Application filed June 18, 1923. Serial No. 645,986.

To all whom it may concern:

Be it known that I, WILLIAM R. WILEY, a citizen of the United States, residing at R. F. D. #4, Mount Clemens, county of Macomb, State of Michigan, have invented a certain new and useful Improvement in Hood Locks, and declare the following to be a full, clear, and exact description of the same, such as will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to a detachable catch particularly adapted for locking the engine hood of a motor vehicle in position, and has for its object an improved device of this type which is not only of simple and relatively inexpensive construction, but which acts to resiliently hold the free lower edge of the hood wall in firm position upon the supporting portion of the vehicle frame without the necessity of relying as well upon rubber bumper or knob pieces to act either against the hood or cooperatively with a part of the hooking device now frequently used.

In the drawings:

Figure 1 is a sectional elevation of my device in position with respect to the hood and the frame of the vehicle, looking lengthwise of the latter.

Figure 2 is a similar view showing the parts in detached position.

Figure 3 is a perspective view of the outside of the catching member, its bed plate being disassociated from the hood wall.

Figure 4 is an elevational view of a slightly modified form.

A indicates a part of the vehicle frame adjacent the engine, over whose outer edge engages the vertical side wall B of the hood, the upper edge of this side wall being hinged or similarly pivotally associated, as at C, with the over-curving or top portion D of the hood. Near the lower edge of the vertical wall B is provided an aperture E which registers with an aperture E' in a detachable plate F, which is secured in suitable relation thereto by means of the screws G; the upper portion of the plate F is provided with outstanding ear pieces J which support the horizontal pin or stud K, about which is bent the upper end of the resilient strap H, which, when not under strain, is generally U-shaped and has its free end formed into the hook or catch shape shown at L in Figures 1 and 3.

Fixed in suitable relation to the aperture E, as by the screws M, is a comparatively rigid bracket piece N, whose bent or elbow portion at the top of its vertical part is curved, as at P, to a shape generally complementary to that of the hook L on the end of the strap H; this bracket extends beyond the elbow portion P, with its oblique section Q reaching toward the hood wall and the strap.

With the hood in lowered position, the strap H is pressed downwardly and inwardly, so that its hook end L is forced well within the aperture E, the adjacent straight side of the resilient strap H riding against the top edge of the aperture E. If there were no obstruction in the path of its travel when thus actuated, it would follow the course of the dotted line X shown in Figure 1, but even by following that line it would still be under some strain due to the spreading pressure upon the U-shaped strap, exerted by the upper edge of the aperture E as contrasted with the point of pivoting thereof at K; but when the strap has been swung so far inwardly that the distance from the point of pivoting to the center of the loop, that is, the base of the U which the strap H forms, is greater than the distance from this point of pivoting K to the upper edge of the aperture E, the strap would not be under the spreading strain remarked upon, and its hooked end L and the adjacent portion of the strap would occupy substantially the position indicated by the dotted line Y of Figure 1. When, however, the wall is in properly lowered position, neither of these paths of travel is open to the hooked end L of the strap, for it almost immediately engages the under surface of the oblique section Q of the bracket and slides therealong being bent slightly downwardly until the hook L interlocks with the elbow P. In this position the ultimate strain on the hook L is along the straight line from the pivot or axis K, which is in so nearly a perpendicular position relatively to the curvature of the elbow P and hook L, that pull thereon in that direction simply serves to make the engagement firmer. If, however, the now lowered central bend of the strap H closely adjacent the outer face of the hood wall be seized by one's fingers near the point Z, for example, shown in Figure 1,

the direction of disassembling strain upon the hook L as contrasted with the elbow P is so much less than even a 45 degree angle that these parts may be readily separated, and the unlocking, preparatory to raising the hood wall, needs only a slight outward pull, the resilient tendency of the hook L to slide upward along the under surface of the oblique bracket end Q, really contributing to the speed of the detaching operation.

It should be borne in mind that as between the three parts, the hood wall, the anchorage bracket, and the U-shaped strap, resiliency or a certain amount of "give" is needed in at least one of these parts in order to effect the interlocking action described. Entire uniformity in the fit or downward extent of the hood wall, for example, I have found cannot always be relied upon; this must accordingly be compensated for by some degree of resiliency on the part of either the anchorage bracket or the strap accordingly. It is, however, conceivable that the several parts could be so accurately fitted and positioned that the U-shaped strap could be made almost if not entirely rigid, without impairing the efficiency of the interlocking action described. This point is illustrated in Figure 4, in which the U-shaped member R is rigid and has its upper and outer end pivoted at T to the end of the spring S.

What I claim is:

1. In combination with an anchorage piece having an upwardly recessed portion and an obliquely disposed approaching slide theretowards, a resilient strap member pivoted at one end to an apertured hood wall whose detachable positioning is desired, the free end of said strap member being of complementary contour to that of the recessed portion of the anchorage piece and adapted to interlock therewith when said strap member is forced inwardly through said aperture in the hood wall and along said approaching slide.

2. The combination, with an anchorage piece positioned interiorly of a hood wall, the free end of said anchorage piece extending obliquely to form an approach to an angularly recessed portion thereof, of a resilient catch member having its upper end connected with the outer side of the hood wall and its angularly disposed lower end extending through an apertured portion of the hood wall the engaging tip of said lower end being of complementary contour to that of the angularly recessed portion of the anchorage member and adapted to interlock therewith when the intermediate portion of said catch member is manually pressed toward the hood wall.

3. In combination with an apertured hood wall, an anchorage bracket positioned interiorly thereof, said bracket being formed with a recessed pocket portion and an obliquely disposed free end leading theretoward, and a resilient U-shaped catch member hingedly connected at one end to said hood wall in position for its free end to engage through the aperture in said hood wall and to be manually actuated into and from locking engagement with said bracket, the tip of said free end being of complementary contour to that of said pocket portion of the anchorage bracket and being guided theretowards by said obliquely disposed end thereof.

4. In combination with an anchorage piece having a recessed locking portion and an inclined approaching surface leading theretowards, an apertured hood wall positioned externally of the free end of said approaching surface, and a curvate catch member pivotally supported at one end from said hood wall in position for its free end to engage through the aperture therein, the tip of said free end being of complementary contour to that of said recessed portion of the anchorage piece and adapted to interlock therewith and to be disengaged therefrom by manual pull upon the intermediate portion of the catch.

5. In combination with an anchorage piece whose free end is obliquely positioned and interiorly of which is communicatingly located a recessed locking portion, an apertured hood wall extending transversely of the plane of said anchorage piece externally of the free end thereof, and a curvate catch member pivotally supported at one end from said hood wall in position for its free lower end to extend through the aperture in the hood wall into position of potential engagement with said anchorage piece, being actuatable thereinto and therefrom by manual action upon its intermediate portion.

6. In a hood catch, in combination with an apertured hood wall, an anchorage piece located interiorly thereof operatively adjacent the apertured portion thereof, and a bent catch member pivotally connected at one end with said hood wall, its free end being of complementary contour to that of the anchorage piece and extending through the aperture in the hood wall into position of potential engagement therewith, being adapted to be moved into and out of engagement therewith by manual action upon the intermediate portion thereof.

In testimony whereof, I sign this specification in the presence of two witnesses.

WILLIAM R. WILEY.

Witnesses:
WILLIAM M. SWAN,
JEFFERS G. THURBER.