T. J. KEHOE.

MOTOR VEHICLE HOOD SIDE HINGE.

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1,316,579.

Patented Sept. 23, 1919.

FIG. 1

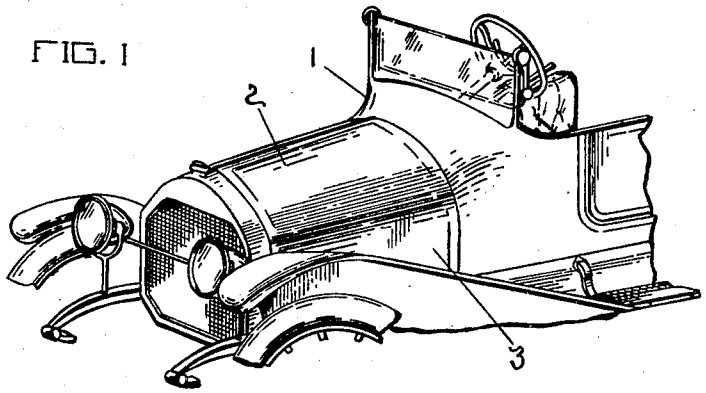
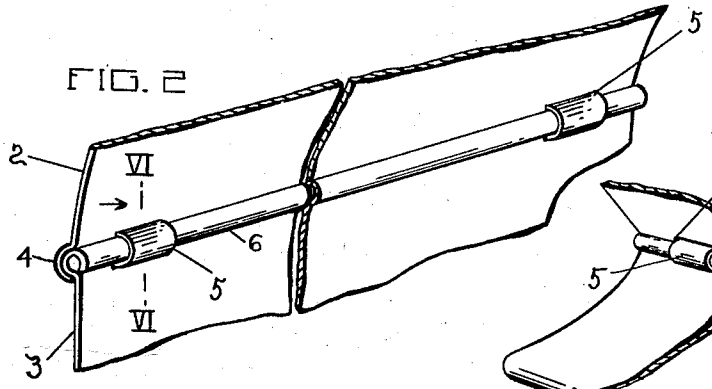


FIG. 2



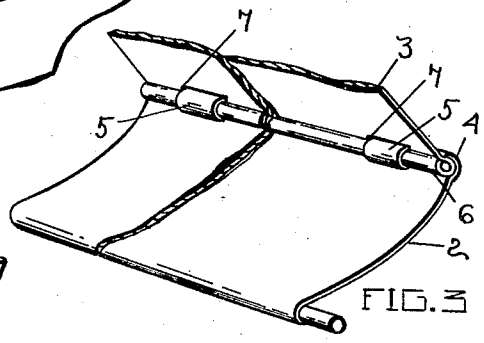


FIG. 3

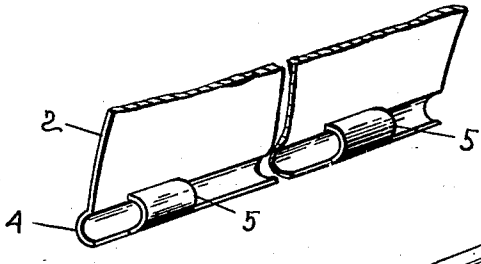


FIG. 4

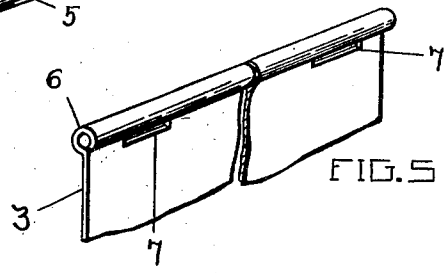


FIG. 5

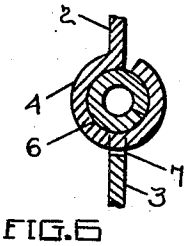


FIG. 6

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MOTOR-VEHICLE-HOOD SIDE HINGE.

1,316,579. Specification of Letters Patent. Patented Sept. 23, 1919.

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To all whom it may concern:

Be it known that I, THOMAS J. KEHOE, a citizen of the United States of America, residing at Toledo, Lucas county, Ohio, have invented new and useful Motor-Vehicle-Hood Side Hinges, of which the following is a specification.

This invention relates to housing or inclosing structures and particularly to means for hinging together the parts of a motor vehicle hood.

The principal object of this invention is to provide a motor vehicle hinge of few parts and one which can be very economically produced. A further object of this invention is to provide a motor vehicle hood hinge construction in which the hinge members are integrally formed on the hood members, which are to be hinged together, and avoid the necessity of a separate pintle. A further object of the invention is to provide a hood hinge construction of such a nature that the integral formation of the hinge members on the hood members to be hinged together presents a stiffening reinforcement for the hood members and assists in holding the shape of the hood even when the latter is built of light gage metal. Another important object of the invention is to provide a hood hinge construction which presents a smooth joint affording a sightly hood exterior and having its upper surface continuous so as to present a joint which is weather-proof and will prevent water leaking through to the interior of the hood at the hinge joint. In the present invention this weather-proof joint is produced without any flanging extension or abutments which overhang the hinge.

Referring to the drawings:

Figure 1 is a fragmentary perspective view of an embodiment of the invention in a hood for an internal combustion engine in a motor vehicle;

Fig. 2 is a view, with parts broken away, of the inside of the housing members adjacent the joint therebetween;

Fig. 3 is a perspective view, with parts broken away, of the joint with the housing members partially folded;

Fig. 4 is a fragmentary perspective view of the upper housing member adjacent the joint;

Fig. 5 is a fragmentary view of the lower housing member adjacent the joint of the hood, and

Fig. 6 is a section on the line VI—VI, Fig. 2.

The motor vehicle 1 is provided with the hood having a top member 2 and a lower side member 3. The upper member 2 has continuously along its lower edge an integral half round bead 4 forming a hinge seat. A plurality of grooved tongues 5 extend at intervals from the free edge of bead 4, and said tongues 5 together with the bead 4 form a substantially cylindrical bearing for the inner hinge member which is integrally formed on the lower side member 3 of the hood or housing.

The upper edge of the lower housing member 3 is rolled upon itself to form a substantial cylindrical bead 6 which forms the inner hinge member and is nested within the half round bead 4, formed on the member 2. Perforations or slots 7 are formed in the member 3, close to the bead 6, at intervals to correspond with the tongues 5 formed on the upper housing member 2, and when the housing members 2 and 3 are assembled the tongues 5 pass through the slots 7 and hold the parts in assembled relation with the bead 6, nested in the half round bead 4. In reality, the bead 4, with the tongues 5, provide a knuckle member which is formed integrally on the lower edge of the housing member 2, while the bead 6 constitutes a pintle member which is formed integrally on the upper edge of the housing member 3. It will be seen that there are no separable parts to this hinge joint, the hinge joint being produced entirely by the construction and configuration of the abutting edges of the housing members.

A hood hinge constructed in accordance with my invention is of such a nature as to

permit the ready folding of the housing members, upon each other, in opening the hood, and it has this advantage, among others, that all the parts of the hinge joint are integral with the housing members which are thus hinged together. Furthermore, the formation of the bead portions 4 and 6 upon the edges of the housing members 2 and 3, respectively, reinforces the housing members, and assists materially in holding the hood in shape, even when it is built of light gage metal. The material required to construct this hinge joint is reduced to a minimum, and since the bead 4, which is the only part of the hinge exposed, is continuous, this hinge joint presents a smooth and uninterrupted exterior and will effectively shed water and prevent its leaking through to the interior of the hood at the joint. This water shedding action is produced without using any overhanging flange or abutment and there is a consequent saving of material which is of considerable importance.

I am aware that the embodiment of my invention here shown and described is susceptible of considerable variation without departing from the spirit thereof and, therefore, I would wish to claim the same broadly, as indicated by the appended claims. I have found, however, that this particular embodiment is desirable from many standpoints and, therefore, I desire to claim it specifically as well as broadly.

What is claimed and it is desired to secure by Letters Patent is:

1. In a motor vehicle hood, the combination of a top portion having a half round continuous bead formed along the lower edge thereof, and provided at intervals with curved integral tongues extending from the free edge of said bead, and a side portion having its upper edge rolled upon itself to form a substantially cylindrical bead nested in said half round bead, and provided with a plurality of slots adjacent said bead, in which said curved tongues work.

2. A device of the class described, comprising the combination of a pair of housing members to be hinged together, one of said housing members having one edge rolled upon itself to form a cylindrical bead and provided with a plurality of slots adjacent said bead, and the other of said members having a continuous integral half round bead formed at the edge adjacent the first mentioned member and provided with a plurality of curved tongues extending from the free edge of said bead disposed in and working in said slots.

3. A device of the class described, comprising the combination of a pair of sheet metal members to be hinged together, one of said members having a pintle formed integrally along one edge thereof, the other of said members having a continuous integral half round channel receiving said pintle, and provided with integral members formed upon the free edge of the channel portion and coacting with said pintle to prevent the separation of said members.

4. In a motor vehicle hood, the combination of a top portion, and a side portion hinged at its upper edge to said top portion, said side portion being provided with a pintle integral therewith, and said top portion being provided with a plurality of knuckle members integral therewith and coacting with said pintle to form a hinge.

5. In a motor vehicle hood, the combination of a top portion and a side portion, said side portion having its upper edge rolled upon itself to form a pintle, said top portion having its lower edge provided with a continuous integral bead in which said pintle is disposed, and having a plurality of curved tongues extending from the free edge of said bead and coacting with said pintle to form a hinge joint.

6. A two part hinge comprising a member having one edge rolled upon itself to form a pintle, and provided with a plurality of openings adjacent said pintle, and a second member having a continuous half round bead formed along one edge thereof in which said pintle is disposed, and provided with a plurality of curved tongues extending from the free edge of said bead through said openings and embracing said pintle.

7. A motor vehicle hood comprising a top portion and a side portion, a pintle formed integrally with one of said portions and knuckle members formed integrally with the other of said portions, said knuckle members and pintle coacting together to form a two-part hinge joint.

8. A motor vehicle hood, comprising a top portion and a side portion; a pintle formed integrally with one of said portions; and knuckle members formed integrally with the other of said portions, said knuckle members and pintle coacting together to form a two-part hinge joint presenting a continuous unbroken upper surface.

9. In a motor vehicle, the combination with a body; of a hood, comprising top portions pivotally supported from said body, the free edges of said top portions being provided with knuckle members formed integrally thereon and spaced from each other; and side portions, each having a pintle formed integrally along its upper edge, the knuckle members of said top portion coacting with said pintles to form hinge joints.

10. In a motor vehicle, the combination of a body; and a hood, comprising top portions

pivotally supported from said body, each of said top portions having its lower edge provided with a half round continuous bead, having curved integral tongues extending at intervals from the free edge of said bead, and side portions, each having its upper edge rolled upon itself to form a substantially cylindrical bead, nested in the half round bead of the adjacent top portion, and provided with a plurality of slots adjacent said cylindrical bead in which said curved tongues work.

In witness whereof I affix my signature.

THOMAS J. KEHOE.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."