E. ZINNER.

HOOD.

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1,113,728.

Patented Oct. 13, 1914.

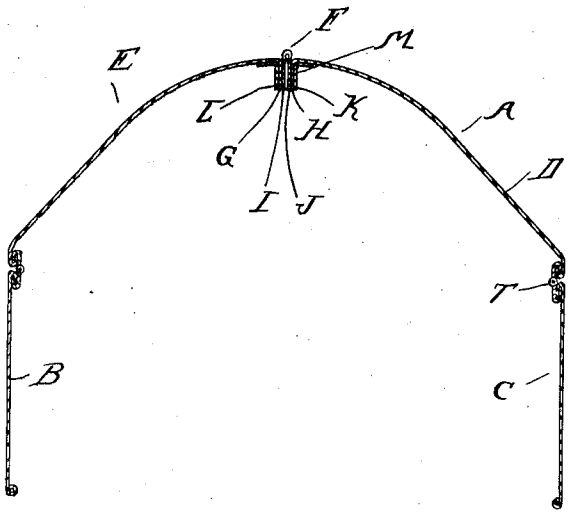
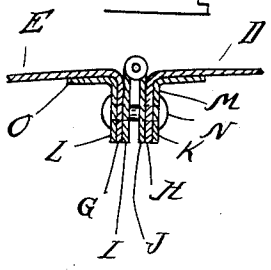


Fig. 2.

Fig. 4.



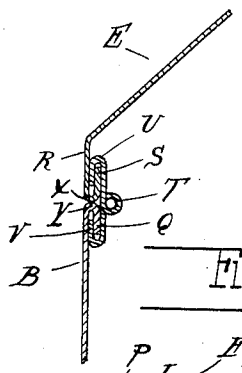


Fig. 3.

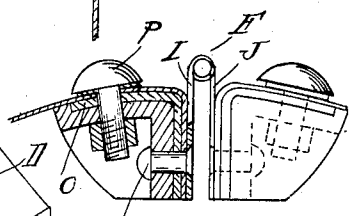


Fig. 5.

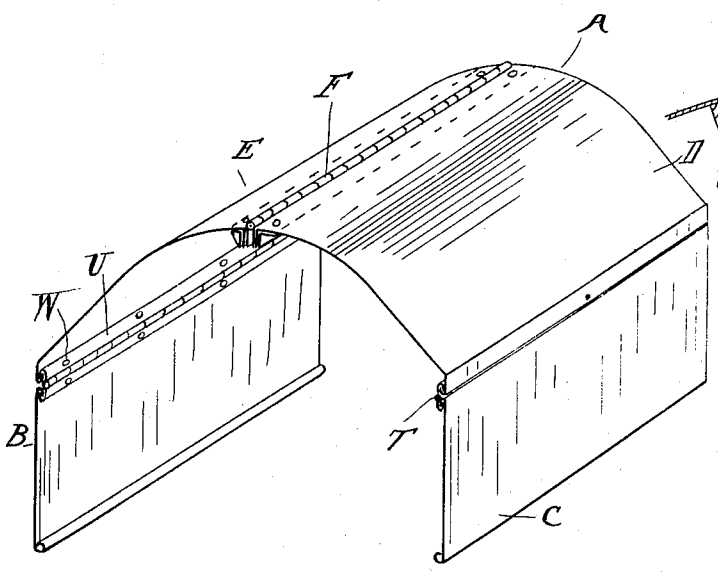


Fig. 1.

Witnesses

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UNITED STATES PATENT OFFICE.

ERNEST ZINNER, OF DETROIT, MICHIGAN, ASSIGNOR TO CHALMERS MOTOR COMPANY, OF DETROIT, MICHIGAN, A CORPORATION OF MICHIGAN.

HOOD.

1,113,728. Specification of Letters Patent. **Patented Oct. 13, 1914.**

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To all whom it may concern:

Be it known that I, ERNEST ZINNER, a citizen of the United States of America, residing at Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Hoods, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to hoods and more particularly to that type of hood employed in automobile vehicles, and composed of a plurality of sections hinged together.

The invention resides in the novel hinge connections and the manner of reinforcing the hood, and consists in the peculiar construction, arrangement and combination of parts as will more fully hereinafter appear and as pointed out in the claims.

In the drawings,—Figure 1 is a perspective view of a hood embodying the invention; Fig. 2 is a cross-section thereof; Figs. 3 and 4 illustrate certain details of construction; Fig. 5 is an end elevation partly in section, showing the hinge connection between the top sections.

Hoods for automobiles are made of sheet metal and comprise a top A and sides B C. The top in the type of hood herein shown is composed of two sections D E connected together by a hinge F which extends longitudinally of the hood and permits either section to be turned upwardly in relation to the other. As shown, the adjacent ends of the sections D E have in-turned flanges G H which extend longitudinally thereof, and to these flanges are connected the leaves I J of the hinge F.

In hoods of considerable length, as those for large four cylinder or six cylinder engines, it is very desirable to have the top reinforced against sagging, buckling or the like. This is accomplished in the specific embodiment of the invention herein illustrated, by providing stiffening members K L of angle-shaped configuration arranged beneath the top sections in the angles between the upper ends of said sections and the flanges G H thereof. The downwardly-extending flange M of each angle-shaped member, the flange of its respective top section and the leaf of the hinge, are preferably connected together by a common securing means as rivets N, while the other flange O of the angle-shaped member is attached to the inner edge of the top section by suitable securing means, as small bolts P. Such a structure forms a simple but very efficient manner of bracing or trussing the top section.

The hinge connections between the top sections and the sides are so arranged as to not only limit the outward or spreading movement of the sides in the operative relation of the hood parts, but also are so positioned as to prevent water draining from the hood top from passing through the joint between the sides and the top into the hood. Thus the upper edge of each side is provided with a re-bent flange Q and the top section terminates in a downwardly-extending vertical portion R that also has a re-bent flange S, the flanges S and Q however, extending in opposite directions. The hinge T is of the piano type and the leaves U thereof extend parallel to the flanges S Q and are provided with inwardly-extending, re-bent portions V that are arranged between the U-shaped meeting edges of the top section and the side. The flanges V may be secured within these U-shaped portions in any suitable manner, but preferably the leaves U have indentations W which serve to anchor the same to the flanges Q S. In the operative relation of the hood parts the bends X Y abut and thereby prevent outward or spreading movement of the sides beyond the normal relation of the hood parts.

As will be noted the hinge T is positioned within the hood and in the vertical portion thereof. Therefore, water will not drain from the top into the hinge connection.

What I claim as my invention is:—

1. In a hood, the combination of a sectional top, including two sections, a longitudinally extending hinge connection between said sections, and a brace extending longitudinally of the hood adjacent the hinge connection.

2. In a hood, the combination of a sectional top, including two sections, a longitudinally-extending hinge connection between said sections, and braces extending longitudinally of the hood upon opposite sides of the hinge connection.

3. In a hood, the combination of a sectional top, including two sections, a longitudinally-extending hinge connection between said sections, a brace extending longitudinally of the hood adjacent the hinge

connection, and a common means of attachment between said brace and the top and between the latter and the hinge connection.

4. In a hood, the combination of a sectional top, including two sections having laterally-extending flanges, a hinge having the leaves thereof connected to said flanges, and a brace extending longitudinally of the hood adjacent the hinge connection.

5. In a hood, the combination of a sectional top, including two sections having laterally-extending flanges, a hinge having the leaves thereof connected to said flanges, and braces extending longitudinally of the hood, arranged within the latter and secured to the sections upon opposite sides of said hinge connection.

6. In a hood, the combination of a top, including two sections having the adjacent edges thereof in-turned, angle-shaped braces arranged in the angles adjacent said in-turned flanges, a hinge, and a common means of attachment between said braces, flanges and the leaves of the hinge.

7. In a hood, the combination of a top composed of complementary sections having their inner edges arranged centrally of the top and provided with in-turned flanges, angle-shaped braces arranged in the angle adjacent the in-turned flanges and each having one flange thereof secured to the section and having the opposite turned flange thereof engaging the in-turned flange, a hinge, and a common means of attachment between each leaf of the hinge, an in-turned flange, and the flange of the angle-shaped member in engagement with said in-turned flange.

8. In a hood, the combination of a top having the outer edges terminating in downwardly-extending portions, sides forming extensions of said downwardly-extending portions, each side being arranged in the same plane as the edge of which it is an extension and a hinge connection between the latter and the sides, arranged upon the interior of the hood.

9. In a hood, the combination of a curved top terminating in downwardly-extending portions, of sides forming extensions of said downwardly-extending portions, the latter and the sides being provided with oppositely re-bent flanges, and a hinge having the leaves thereof secured to said oppositely re-bent flanges, the bends of the re-bent portions abutting in the normal relation of the hood parts.

10. In a hood, the combination with two sections having the adjacent edges thereof terminating in oppositely re-bent flanges, and a hinge connection between said sections, comprising a hinge having the leaves thereof provided with complementary oppositely re-bent portions interlocking with the re-bent flanges.

In testimony whereof I affix my signature in presence of two witnesses.

ERNEST ZINNER.

Witnesses:
D. C. BAYNE,
C. C. BRAMLEY.