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W. MARSHALL

ATTACHMENT MEANS FOR HINGES

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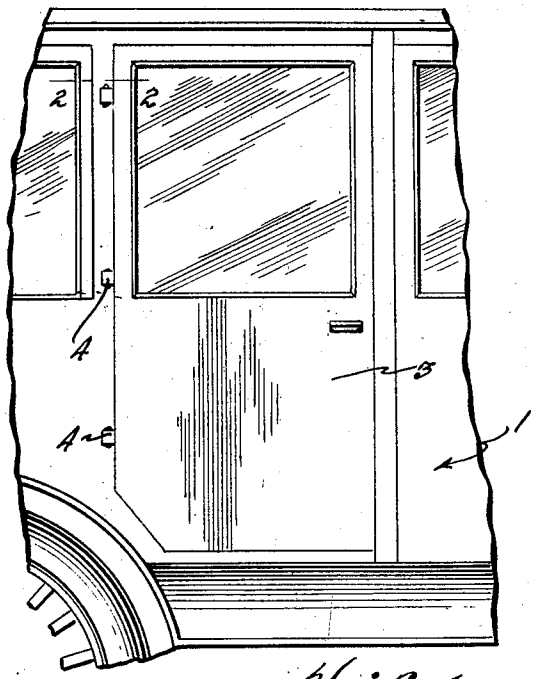


Fig. 1

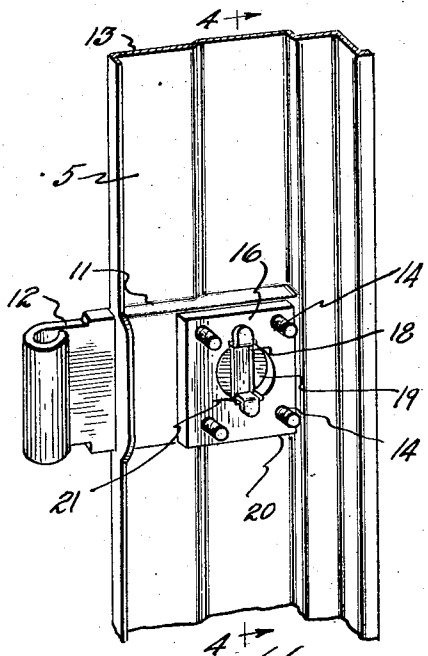


Fig. 3

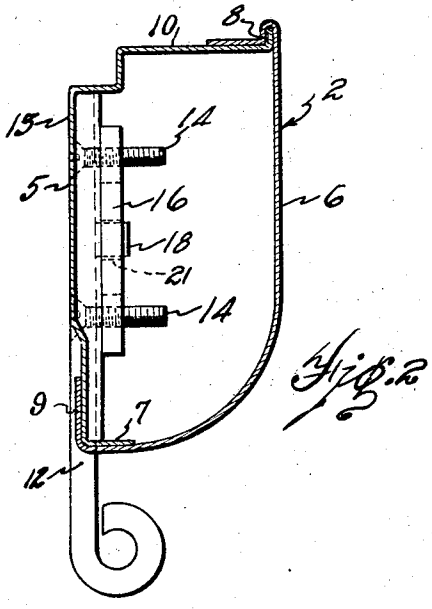


Fig. 2

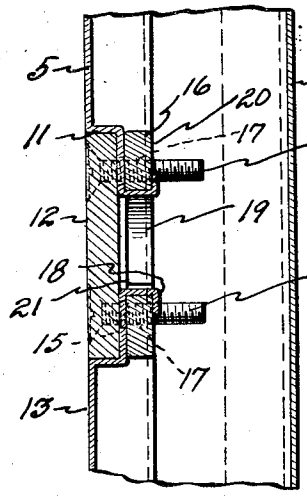


Fig. 4

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ATTACHMENT MEANS FOR HINGES.

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This invention relates generally to attachment means for hinges and refers more particularly to the means employed for attaching door hinges to metallic pillars of vehicle bodies.

One of the essential objects of the invention is to provide a light and durable pillar that is preferably provided with means for receiving the main hinge parts and has means for holding suitable attaching plates in the proper position to facilitate assembly of the hinge parts.

Another object is to provide a strong and durable post or pillar which is preferably formed of sections that are connected together so as to provide a hollow post that is sealed on all sides.

A further object is to provide attachment means of the type described that is simple in construction and can be manufactured at a comparatively low cost.

With the above and other objects in view the invention consists in certain novel features of construction, combinations and arrangements of parts as will be more fully described and particularly pointed out in the appended claims.

In the accompanying drawing:

Figure 1 is a fragmentary side elevation of a vehicle body embodying my invention.

Figure 2 is a horizontal sectional view taken on the line 2—2 of Figure 1.

Figure 3 is a perspective view of one of the pillar sections and showing a main hinge part attached thereto.

Figure 4 is a vertical sectional view taken on the line 4—4 of Figure 3.

Referring now to the drawing in which like characters of reference designate corresponding parts throughout the several views, the numeral 1 designates a motor vehicle body of the closed type having a metallic post or pillar 2 to which a suitable door 3 is preferably pivotally connected by means of suitable hinges 4.

The pillar 2 is preferably light in weight but possesses great strength and for this purpose is preferably formed of two sheet metal members 5 and 6 respectively. As shown, the member 5 is substantially L-shaped in cross section and is provided at its edges with the laterally extending flanges 7 and 8 respectively, while the member 6 is also substantially L-shaped in cross section and is provided with the marginal flanges 9 and 10 respectively that are preferably welded to the flanges 7 and 8 respectively of the member 5, thereby providing a hollow sheet metal pillar that is light in weight and is exceptionally durable.

For supporting the hinges 4 upon the pillar 2, each member 5 is preferably provided at spaced points with transversely extending depressions 11 which receive the main hinge parts 12. As shown, each depression 11 is preferably of the proper depth so that the outer faces of the main hinge parts 12 will be substantially flush with the inner face 13 of the pillar 2. For attaching the hinge parts 12 to the member 5, I preferably provide suitable screws 14 which extend through suitable openings 15 in the depressed portions 11 of the member 5 and threadedly engage relatively thick attaching plates 16. To maintain registration of the threaded screw openings 17 in the plates 16 with the openings 15 in the depressed portions 11 and thereby to facilitate assembly of the hinge parts 12 upon the pillar, the plates 16 are preferably held against the inner faces of the depressed portions 11 by means of tongues 18 that are preferably struck-out from the depressed portions 11. As shown, these tongues extend through central openings 19 in the plates 16 and are bent over and against the inner faces 20 of the plates. To prevent the plates from turning before the hinge parts 12 are secured to the pillar, I preferably provide shallow recesses 21 at diametrically opposite sides of the openings 19 in the plates 16 for receiving the tongues 18.

Thus, from the foregoing description it will be readily apparent that the plates 16 may be readily secured to the depressed portions 11 of the pillar and may be held immovable thereagainst so that the threaded openings in the plates will be held in registration with the openings 15 in the depressed portion 11 so as to facilitate the attachment of the main hinge parts 12 upon the pillars. Moreover the plates 16 are relatively thick and provide sufficient stock for receiving the screws, consequently light gauge metal may be used in the construction of the members 5 and 6 respectively of the pillar.

While it is believed that from the foregoing description the nature and advantages of the invention will be readily apparent, I desire to have it understood that I do not

limit myself to what is herein shown and described, and that such changes may be resorted to when desired as fall within the scope of what is claimed.

What I claim as my invention is:

1. The combination with a hinge part, of a hollow pillar, an attaching plate for the hinge part within the pillar, tongues projecting inwardly from the pillar holding the attaching plate, and means engaging the plate for securing the hinge part to the pillar.

2. The combination with a hinge part, and a pillar formed of a plurality of sections, one section having a depressed portion receiving the hinge part, an attaching plate located within the pillar, tongues projecting from the depressed portion of the pillar section holding the plate in a predetermined position, and headed elements extending through the depressed portion of the pillar section and engaging said plate for securing said hinge part to said pillar.

3. The combination with a hinge part, of a pillar, an attaching plate, tongues projecting from the pillar holding the attaching plate in a predetermined position, and headed elements extending through a portion of the pillar and engaging the plate for securing the hinge part to the pillar.

4. The combination with a hinge part, of a pillar having a depressed portion receiving the hinge part, and having a plurality of spaced openings therein, an attaching plate having threaded openings therein, means carried by the pillar for holding the plate in a predetermined position to maintain the threaded openings therein in registration with the openings in the depressed portion of the pillar, and means extending through the openings in the depressed portion of the pillar and engaging threaded openings in the plate for securing the hinge part to the pillar.

5. The combination with a hinge part, of a door pillar having a sheet metal wall, an attaching plate upon one side of the sheet metal wall, means for securing said plate to said wall, and means independent of the securing means aforesaid rigidly securing the hinge part to the pillar including an element engaging said attaching plate.

6. The combination with a hinge part, of a pillar having a sheet metal wall, an attaching plate, means securing the plate to the pillar including a tongue on the wall projecting through the plate, and means securing the hinge part to the pillar including a headed element engaging the plate.

7. The combination with a hinge part, of a pillar having a sheet metal wall, an attaching plate for the hinge part, a tongue projecting from the sheet metal wall of said pillar holding the attaching plate, and means engaging the plate for securing the hinge part to the pillar.

8. The combination with a hinge part, of a pillar having a sheet metal wall, an attaching plate for the hinge part having an opening therein, a tongue struck out from the sheet metal wall of the pillar projecting through the opening in the plate and holding the latter, and a headed element engaging the plate for securing the hinge part to the pillar.

9. The combination with a pillar having a sheet metal wall, of a tongue struck out from said wall, a plate held by said tongue upon one side of said wall, a hinge part upon the opposite side of said wall, and means engaging said plate for securing said hinge part to said pillar wall.

10. The combination with a hinge part, of a pillar having a plurality of spaced openings therein, an attaching plate having opening therein, means carried by the pillar for holding the plate in a predetermined position to maintain the openings therein in registration with the openings in the pillar, and elements extending through the registering openings in the pillar and plate for securing the hinge part to the pillar.

11. The combination with a pillar having an upright part, and a hinge having pivotally connected sections, one section extending transversely of said part, of means for securing said hinge to said pillar including an attaching plate secured to said part, tongues struck out from said part and holding said plate, and a headed element extending through the hinge section aforesaid and secured to said plate.

12. The combination with a hollow pillar, and a door hinge having pivotally connected sections, of an attaching plate within said pillar, means projecting inwardly from a wall of said pillar for holding said attaching plate, and means engaging said attaching plate and operable from the outside of the pillar for securing one of said hinge sections to said pillar.

13. In combination, a channel-shaped upright member, and a hinge having pivotally connected sections extending transversely of the base of said channel member and projecting laterally outwardly therefrom for attachment to a door, and attachment means for said hinge including an attaching plate fixed inside the channel of said member, and an element extending through one of said hinge sections and said plate.

In testimony whereof I affix my signature.

WILLIAM MARSHALL.