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A. STEFFEN, JR

1,704,411

DOOR CONSTRUCTION

Filed July 23, 1927

Fig. 1.

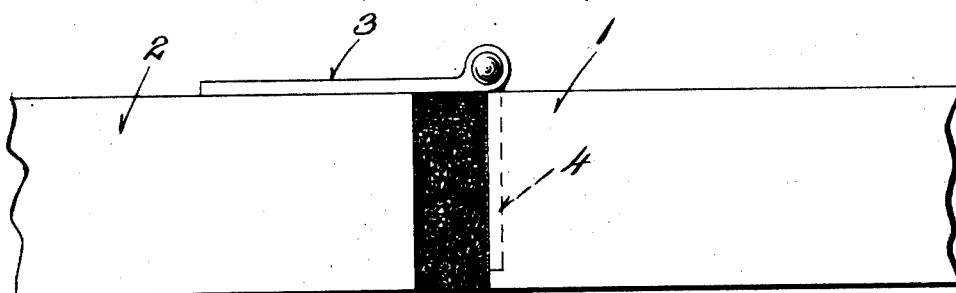
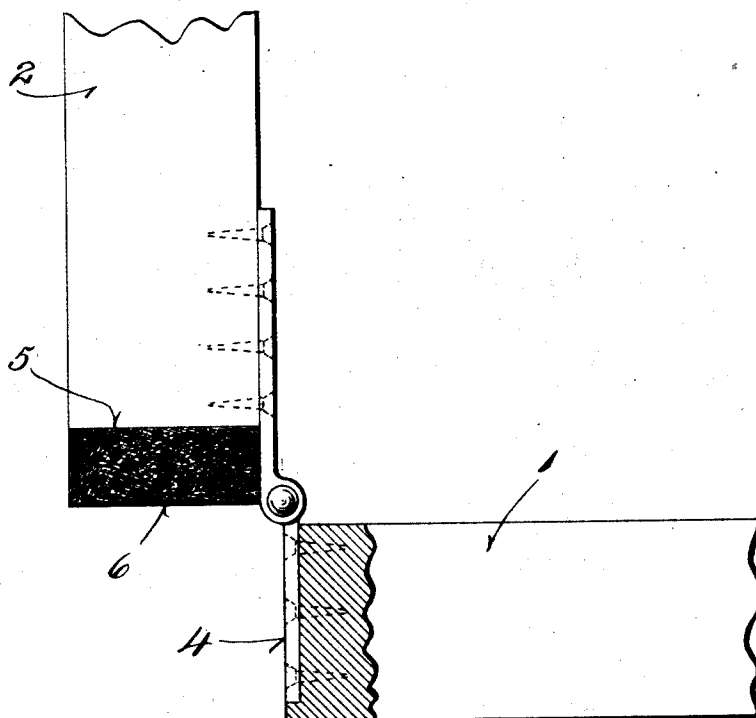


Fig. 2.



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UNITED STATES PATENT OFFICE.

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DOOR CONSTRUCTION.

Application filed July 23, 1927. Serial No. 207,900.

This invention relates to door constructions and is particularly directed to a door construction for use on automobiles.

In door constructions as heretofore made, particularly those used on automobiles, it is frequently the case that a passenger inadvertently gets his finger caught in the crack of the door particularly adjacent the hinged side. The attention of the passenger is primarily directed towards the moving end of the door and he is not conscious as a general rule of the danger of injuring his fingers adjacent the hinged side of the door with the net result that a large number of accidents occur due to this ever present menace in the usual door constructions.

This invention is designed to overcome the defects noted above and objects of this invention are to provide a novel form of door construction which is particularly adapted for automobiles, although obviously it can be used in other places, which provides absolute protection against damage to the fingers even if they are positioned in the crack of the door adjacent the hinge, as means are provided which cushion the fingers and yield to accommodate them, so that damage does not occur.

Further objects are to provide a door construction which does not leave any gap between the door and the casing although it guards against damage as has been pointed out immediately above.

Further objects are to provide a door construction having the characteristics enumerated, which nevertheless has the usual appearance of the ordinary type of door and does not have any objectionable auxiliaries or attachments, which would mar its appearance and detract from its popularity.

An embodiment of the invention is shown in the accompanying drawings in which:

Figure 1 is a fragmentary view of a portion of an automobile door adjacent the hinge showing the door closed;

Figure 2 is a similar view showing the door open with parts broken away.

Referring to the drawings, it will be seen that the usual door casing 1 for an automobile has been indicated together with a door 2. The door is carried by the wing 3 of a hinge, the other wing 4 of such hinge being set with-

in the door casing, as shown most clearly in Figure 2. It is to be noted particularly that the door stops short at the line indicated by reference character 5 in Figure 2, and that a yielding block is positioned at this point and forms a continuation of the door. This yielding block is indicated by the reference character 6 and may be of any desired construction. However, in the form shown, it is made of sponge rubber so that it will freely yield and accommodate the fingers or other objects that may be caught between the butt end of the door and the adjacent portion of the casing. This block of yielding material is relatively thick to provide the necessary room in the event that a finger is caught in the crack or the door.

It is obvious that the presence of this sponge rubber block will not ordinarily be suspected, as it may be painted to correspond to the door and as it is so shaped that it constitutes a continuation of the door. However, its yielding characteristics and the peculiar construction of door with its cut away end, avoid wholly any danger of accidents due to pinching of the fingers or other portions of the body in the crack of the door.

Although the invention has been described in considerable detail, such description is intended as illustrative rather than limiting as the invention may be variously embodied and as the scope of such invention is to be determined as claimed.

I claim:

The combination of a door casing, a door hinged to said casing and having its end spaced a material distance away from said casing, the space between said door and said casing when said door is closed being filled by a resilient freely yieldable rectangular member forming a continuation of said door and carried by said door, whereby a person's hand may be placed between the door and the casing and the door closed without injury to the hand.

In testimony that I claim the foregoing I have hereunto set my hand at Sheboygan, in the county of Sheboygan and State of Wisconsin.

ALFRED STEFFEN, JR.