DISAPPEARING SHIELD FOR RUMBLE SEATS AND TONNEAUX

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The invention relates to windshields for use with boats and automobiles, for example, in connection with the rear seat or the rumble seat of the latter.

It has for an object the provision of means whereby such shield may be so mounted with respect to the seat well as to be capable of folding completely together and out of the way thereof, and being also fractionally held at all times to prevent unintentional movement thereof.

Another object of the invention resides in the provision of means for thus mounting the shield and whereby its manipulation may be readily and quickly accomplished, so that the shield may be caused to disappear below the level of the well when not required and to be brought above the level of the well and located in any desired angular position.

Still another object of the invention resides in the provision of a mounting element for the shield which will admit of readily supporting a curtain or apron, as for protection against the elements, as well as serving as a hand rail or a robe rail.

In carrying out the invention, there is combined with the seat well of an automobile, for example, a rumble seat well, supporting brackets for the shield, said brackets being rigidly secured at the forward portion of the well and carrying a rod which extends transversely of said well across its front. Upon this rod swing clamping elements constituting as terminals or a pair of arms carrying the shield; and means are provided in connection with said clamping elements to close the latter about the rod for retaining the shield in any desired angular position thehereon.

Further means are also provided to cause the clamping elements to maintain a predetermined degree of friction upon said rod but permitting angular movement of the shield upon applying suitable pressure, the degree of friction being such as normally to prevent dropping of the shield but yet not sufficient to prevent its ready manipulation to the desired position.

The nature of the invention, however, will best be understood when described in connection with the accompanying drawings, in which:

Fig. 1 is a fragmentary perspective view illustrating the rumble seat of an automobile equipped with the disappearing windshield.

Fig. 2 is a similar view illustrating the shield folded down upon the seat.

Fig. 3 is a view similar to that of Fig. 2 but illustrating the shield completely folded under the wall of the seat well to allow freedom of movement for the occupants of the seat.

Fig. 4 is a fragmentary perspective view, on an enlarged scale, illustrating one manner of securing the supporting brackets to the wall of the seat well, and illustrates also, in detail, the clamping arrangement.

Fig. 5 is a fragmentary front elevation of a modified form of shield arm with clamp.

Referring to the drawings, more particularly Fig. 1 thereof which shows the rumble seat portion of an automobile, 10 designates the well 10 thereof surrounded by the body portion 11, and 12 designates the seat. It is understood, of course, that while the invention is herein shown and described as applied to the rumble seat portion of an automobile, it is equally applicable to the tonneau portion as a protection of the occupants of the rear seat thereof.

The windshield mounting constituting the present invention is designed for installing a windshield member 15 at the upper forward portion of the wall, 10, as indicated; and, if desired, the shield may be equipped with a pair of angularly adjustable wings 16 hinged to its opposite sides.

The invention is concerned, however, more especially with means for attaching the shield 15 to the body portion 11 in such a manner that when not desired for use, it may be caused to disappear below the upper edge of the well and be stowed away within the forward portion thereof or merely caused to rest upon the seat 12.

To this end, a pair of attaching brackets 20 is secured to the underside of the well edge at the forward corners 21 thereof; and these brackets are designed to support rigidly a rod 22 located transversely of said well across its front and slightly below the edge, the brackets and rod being located entirely within the well.

Upon this rod and within the brackets is mounted a pair of shield supporting arms 23 terminating to this end in clamp elements 24 embracing the rod. It is preferred, also, to join a shield-carrying arm intermediate its clamp element and the frame 25 of the shield for the purpose hereinafter set forth—an intermediate friction joint 26 provided with winged clamping screw 27, for example, being introduced as indicated. However, as indicated in Fig. 5, the arm 23 terminating in the clamp element 24 may be continued directly to the shield frame 25 and rigidly associated therewith.

A convenient means for attaching the brackets 20 to a corner of the well body 11 is indicated in Fig. 4 of the drawings, use being made of the gutter or trough 30, usually associated with the...
rumble seat body over its entire edge, for receiving and concealing a part of the attaching means. The bracket 20 is then provided with arms 31 disposed at right angles to each other and conforming to the dimensions of the particular corner of the well. Within the gutter at this corner and resting on the bottom thereof is an angle piece 32 substantially of the dimensions of the angularly disposed arms 31 which are intended to be juxtaposed to said angle piece and immediately beneath the bottom of the gutter, both the said arms and the angle piece being perforated to receive bolts 33 for securing the brackets to the gutter member. By this expeditious, a rigid attachment of the bracket is conveniently and rapidly secured at the desired forward corners of the well and with no modification of the automobile structure being required other than the drilling of the requisite openings in the gutter bottom to pass the bolts. The details of the clamping element 24 of an arm 23 as associated with the supporting rod 22 are more clearly indicated in Fig. 4. Thus an auxiliary clamping screw 35 operates to draw the two halves of the clamp together about the rod 22 and is set to secure the required permanent friction for maintaining the arm with shield normally in any angular position on the rod so as it may not drop accidentally upon releasing the other and clamping screw 36 which is provided with the winged head 37 for manipulation. It will be understood that the friction secured by the screw 35 is such as to be readily overcome by a slight pressure exerted upon the shield or arm; and that when the desired location of the shield is secured, the clamping screw 36 will be drawn up tightly to lock for the time being the said shield in adjusted position on the rod 22, as indicated. When the shield is not required and it is desired to stow the same away within the well 10, clamping screw 36 is manipulated through its head 37 to release the friction hold of the clamp and the shield then drawn manually into the well. It will be understood, in connection with the embodiment indicated in Fig. 5 wherein the arm 23 and brackets are directly connected, that the shield is drawn into the well will not be capable of possessing a position parallel to and upon the seat 12, as indicated in Fig. 2, nor, generally, of being folded backwardly underneath the well of the well in a substantially vertical position, as indicated in Fig. 3, unless the cushion of the seat be first raised. To this end, the joints 26 are preferably introduced in the connection between the shield and the clamp so that by manipulating the winged head 27 thereof, the joints may be loosened and the shield 15 permitted to assume the horizontal position for lying directly upon the seat 12; or when it is desired to occupy the seat with the shield stowed away, to enable said shield to be swung still further back into the well and caused to assume a substantially vertical position behind the rod 22, as indicated in Fig. 3. When the shield is in such position, as well as when in the operative position, Fig. 1, rod 22 may serve as a hand or rove bar as well as providing means to which there may be attached a curtain or apron (not shown) for protection against the elements, as is well understood.

I claim:

1. The combination with a seat well of the nature set forth; of an adjustable shield member for occupants of the well, and means to mount the shield at the upper forward portion of said well and comprising a pair of brackets rigidly secured to the front wall portion thereof, a continuous strut rod fixed at its opposite ends in the respective brackets, the rod extending therebetween transversely of said well across its front, a pair of shield-carrying arms terminating in respective clamping elements fitting about the rod, a joint element introduced in each of the said arms, locking elements, and means to close the clamping elements about said rod to retain the shield in any desired angular position thereon.

2. The combination with a seat well of the nature set forth; of an adjustable shield member for occupants of the well, and means to mount the shield at the upper forward portion of said well and comprising a pair of brackets rigidly secured to the front wall portion thereof, a rod supported by the brackets transversely of said well across its front, a pair of shield-carrying arms terminating in respective clamping elements fitting about the rod, means to close partly the clamps about said rod to maintain a permanent and predetermined degree of friction between the same and the said clamps permitting angular movement of the shield upon the supporting rod, and additional and adjustable means for closing the clamping element about said rod to an extent to lock the shield in any desired angular position thereon.

3. The combination with a seat well of the nature set forth; of an adjustable shield member for occupants of the well, and means to mount the shield at the upper forward portion of said well and comprising a pair of brackets rigidly secured to the front wall portion thereof, a rod supported by the brackets transversely of said well across its front, a pair of shield-carrying arms terminating in respective clamping elements fitting about the rod, a joint element introduced in each of the said arms, means to lock the joint elements, means to close partly the clamps about said rod to maintain a permanent and predetermined degree of friction between the same and the said clamps permitting angular movement of the shield upon the supporting rod, and additional and adjustable means for closing the clamping element about said rod to an extent to lock the shield in any desired angular position thereon.

4. The combination with a seat well of the nature set forth and provided with a gutter about its edge; of an adjustable shield member for occupants of the well, and means to mount the shield at the upper forward portion of said well and comprising a pair of plates fastened in the gutter, a pair of brackets located beneath the gutter in juxtaposition to the plates, securing means passing through the plates and brackets to retain rigidly the latter to the well wall, a rod supported by the brackets transversely of said well across its front, a pair of shield-carrying arms terminating in respective clamping elements fitting about the rod, and means to close the clamping elements about said rod to retain the shield in any desired angular position thereon.

5. The combination with a seat well of the nature set forth and provided with a gutter about its edge; of an adjustable shield member for occupants of the well, and means to mount the shield at the upper forward portion of said well and comprising a pair of angle pieces seated in
the respective front corners of the gutter, a pair of brackets having angularly disposed arms located beneath the gutter and juxtaposed to the respective angle pieces, securing means passing through the angle pieces and bracket arms to retain rigidly the brackets to the well wall, a rod supported by the brackets transversely of said well across its front, a pair of shield-carrying arms terminating in respective clamping elements fitting about the rod, and means to close the clamping elements about said rod to retain the shield in any desired angular position thereon.

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