F. GINGLE.

WINDSHIELD.

APPLICATION FILED OCT. 6, 1919.

1,369,741. Patented Feb. 22, 1921.

2 SHEETS—SHEET 1.

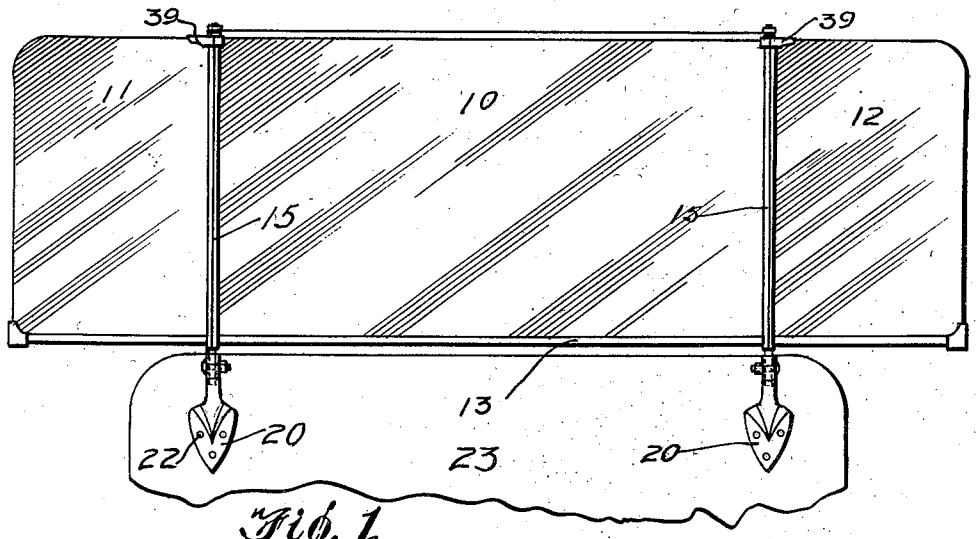


Fig. 1

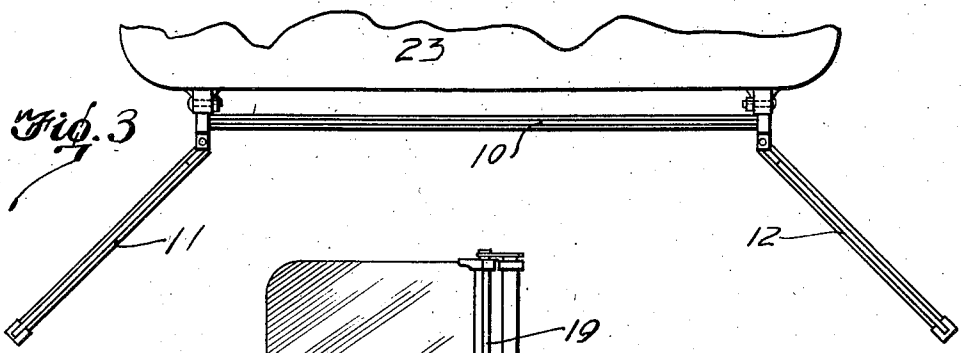


Fig. 3

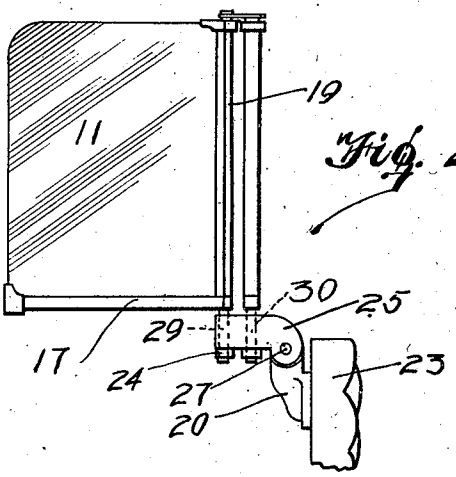


Fig. 2

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2 SHEETS—SHEET 2.

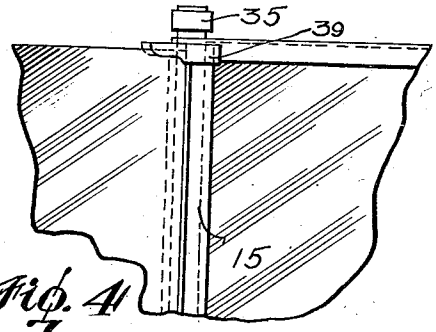


Fig. 4

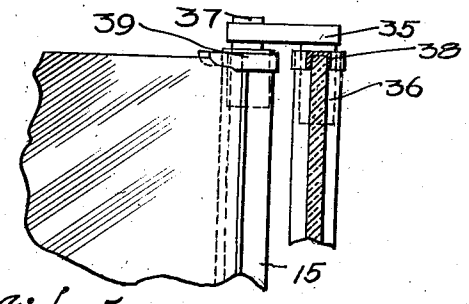
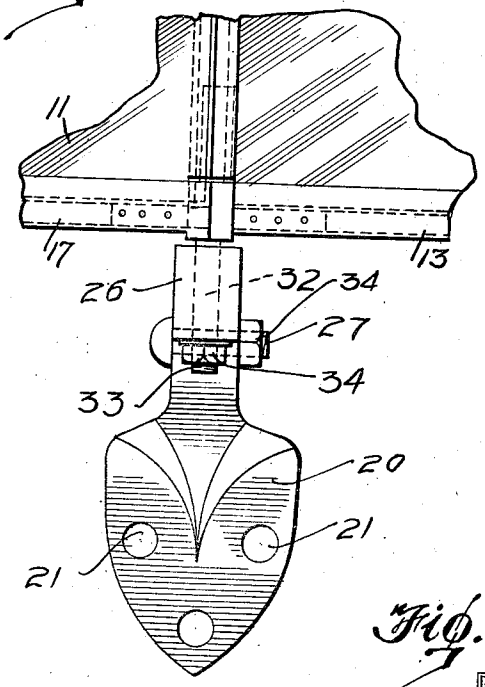


Fig. 5



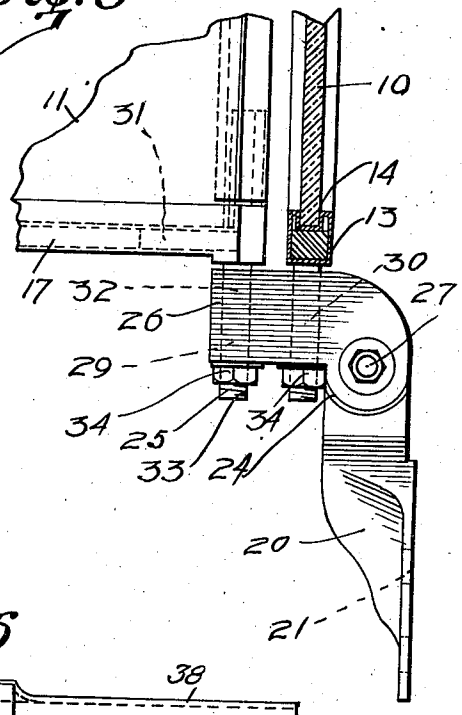
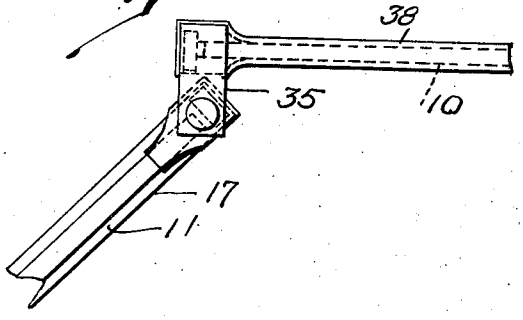


Fig. 6



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UNITED STATES PATENT OFFICE.

FRANK GINGLE, OF SAN FRANCISCO, CALIFORNIA.

WINDSHIELD.

1,369,741. Specification of Letters Patent. Patented Feb. 22, 1921.

Application filed October 6, 1919. Serial No. 328,624.

To all whom it may concern:

Be it known that I, FRANK GINGLE, a citizen of the United States, residing at San Francisco, in the county of San Francisco and State of California, have invented new and useful Improvements in Windshields, of which the following is a specification.

This invention relates to wind shields and comprehends a construction primarily designed for use on touring cars and adapted to be mounted upon the back of the rear seat; the invention embodying a main section and wings or end sections, mounted to be swung in a plane parallel with the main section or in planes at right angles thereto.

The nature and advantages of the invention will be better understood when the following detail description is taken in connection with the accompanying drawings, the invention residing in the construction, combination and arrangement of parts as claimed.

In the drawings forming part of this specification like numerals of reference indicate similar parts in the several views and wherein:

Figure 1 is a rear elevation showing the wind shield mounted upon the rear of the seat and the wings parallel with the main section.

Fig. 2 is a side elevation showing a portion of the seat and one of the wings arranged at right angles to the main section.

Fig. 3 is a plan view.

Fig. 4 is an enlarged fragmentary detail view of the pivotal connection between the main section and one of the wings, certain parts being in section.

Fig. 5 is an enlarged detail view similar to Fig. 2, certain parts being in section.

Fig. 6 is an enlarged fragmentary plan view of the pivotal connection between the main section and one of the wings.

The wind shield comprises a main section 10 and wing or end sections 11 and 12 respectively, all of which may be constructed of glass or any other suitable transparent material. The main section 10 is mounted in a frame including a lower horizontal bar 13 having a longitudinal groove 14 in which the adjacent edge of the main section is seated, and end bars 15 also provided with grooves 16 for the reception of the adjacent edges of the main section. All of these bars are hollow and of substantially rectangular formation in cross section. Each of the end sections or wings is mounted in a frame including a lower horizontally disposed bar 17 having a groove 18 for the reception of the adjacent edge of the section, and a vertically disposed bar 19 having a groove 20 for the reception of the adjacent vertical edge of the section. The bars 17 and 19 are of similar design as the bars constituting the frame for the main section.

As hereinabove stated, the wind shield is primarily designed for use on touring cars, and adapted to be mounted upon the back of the front seat. For this purpose I make use of a pair of brackets, each including an attaching plate or member 20, having a plurality of openings 21 for the reception of suitable fastening elements 22 which secure the attaching member to the back of the seat 23. The attaching member is formed with an apertured lug 24 which is received by the bifurcated extremity 25 of a casting 26. A bolt 27 is passed through the apertured lug 24 and the bifurcated extremity of the casting 26 for holding the parts fixed relatively, it of course being understood that a nut 27 is associated with the bolt for this purpose. By loosening the nut 27, pivotal movement is permitted between the attaching plate 20 and the casting 26, thus allowing the attaching plate to be secured to an inclined surface with the respective sections of the wind shield in a true vertical position, or to allow the wind shield as an entirety to be set at any desired angle. When the nut 27 is tightened, the parts will be held fixed in their adjusted positions. The casting 26 is provided with spaced parallel bores 29 and 30 respectively. In each of the horizontally disposed bars 13 and 17 respectively is fitted a horizontally disposed portion 31 consisting of a pair of castings, each including a depending portion 32 which is fitted in one of the bores of the casting 26. The depending portions 32 are threaded as at 33 to accommodate nuts 34 which can be adjusted to take up the play as will be readily understood. The depending portions 32 of the wing or end sections 11 and 12 respectively constitute pivots for the latter and are positioned in the bores 30 of the castings 26, while the depending portions 32 of the main section which remains stationary are positioned in the bores 29 of the castings 26. As clearly illustrated in Figs. 2, 3 and 4 of the

drawings, the bores 29 and 30 of the castings are disposed one in advance of the other.

A link 35 overlies the adjacent upper corners of the respective sections of the wind shield, and each link is provided with a stud 36 fitted within the hollow end bars 15 of the frame of the main section 10. A similar stud 37 is fitted within the hollow bars 19 of the frame of each wing or end section, and the studs 37 provide pivots upon which the wing or end sections may be swung to lie in a plane parallel with the main section 10 or in planes at right angles thereto.

A strip of channel-like material 38 embraces the upper edge of the main section 10 and connects the parallel bars 15 of the frame. Clips 39 of channel formation slide over the bars 17 and 19 of the frames of the wing sections and embrace the adjacent edges of said sections as illustrated, making a nice finish and adding to the general appearance of the wind shield. In addition to this fact, the strip 38 together with the clips tend to strengthen and reinforce the wind shield. It is manifest, that the construction permits the end or wing sections to be readily and easily swung to any angular position with respect to the main section, and frictionally held in this position.

While I have shown and described what I consider the preferred embodiment of the invention, I desire to have it understood that the same is merely illustrative, and that I do not limit myself to this exact construction and arrangement of parts, inasmuch as such changes may be resorted to when desired as fall within the scope of what is claimed.

What is claimed is:

1. The combination with a wind shield including a main section and end sections, of brackets each including an attaching plate, and a casting pivotally associated with said plate, each of said sections comprising a frame, studs depending from the adjacent lower corners of said frames, said casting having bores arranged to receive said studs and support the end sections in advance of the main section, and a connection between the adjacent upper corners of said sections whereby the main section is held stationary and the end sections permitted pivotal movement with respect to the main section.

2. The combination with a wind shield including a main section and end sections, of a frame for each of the sections, the frame comprising hollow members, castings associated with the lower corners of each frame, and including depending portions, brackets designed to receive the said depending portions, and a connection between the adjacent upper corners of said sections, whereby the main section is held stationary and the end sections permitted pivotal movement with respect to the main section.

3. The combination with a wind shield including a main section and end sections, of a frame for each section, the frame comprising hollow members, a bracket designed to support the adjacent lower corners of said sections, a stud fitted within the hollow members of the main section at the upper corners thereof, a link carried by each stud, and a pivotal connection between the adjacent upper corners of the end sections and said links, whereby said sections may be swung upon the brackets to different angular positions with respect to the main section.

In testimony whereof I affix my signature.

FRANK GINGLE.