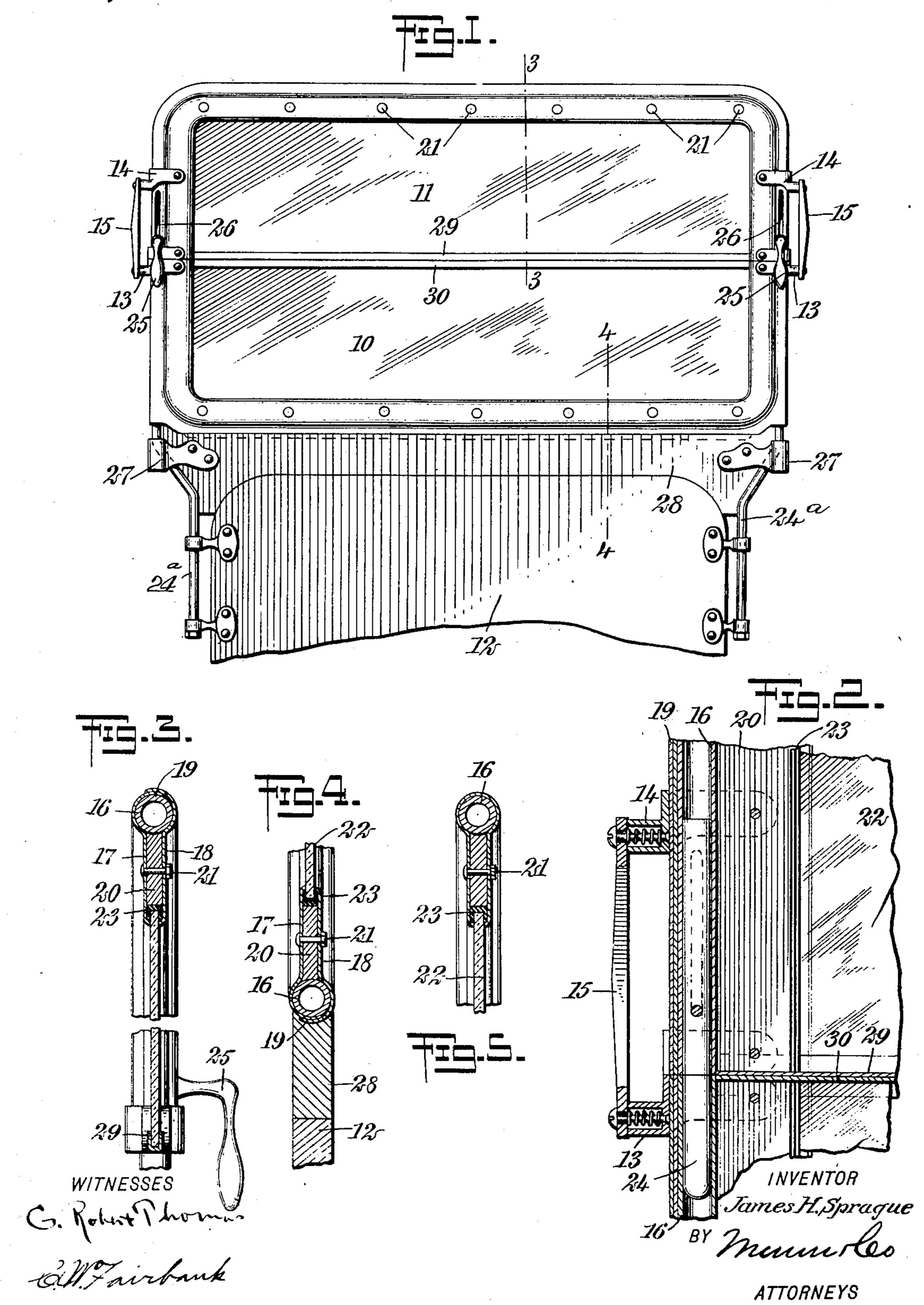
J. H. SPRAGUE. WIND SHIELD. APPLICATION FILED APR. 9, 1908.

912,911.

Patented Feb. 16, 1909.



UNITED STATES PATENT OFFICE.

JAMES H. SPRAGUE, OF NORWALK, OHIO.

WIND-SHIELD.

No. 912,911.

Specification of Letters Patent.

Patented Feb. 16, 1909.

Original application filed January 3, 1907, Serial No. 350,596. Divided and this application filed April 9, 1908. Serial No. 426,041.

To all whom it may concern:

Be it known that I, JAMES H. SPRAGUE, a citizen of the United States, and a resident of Norwalk, in the county of Huron and State 5 of Ohio, have invented a new and Improved Wind-Shield, of which the following is a full, clear, and exact description.

This invention relates to certain improvements in wind shields for use upon vehicles, o and relates more particularly to the construction of the frame of the shield and the method of holding the glass in place.

The invention involves a construction of frame in which the glass is resiliently held 15 between oppositely-disposed plates spaced apart, so that the glass will not be broken by undue pressure, yet will be securely held against movement in the frame.

This application is a division of my pre-20 vious application, Serial Number 350,596,

filed January 3, 1907.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of refer-25 ence indicate corresponding parts in all the

figures, and in which--

Figure 1 is a front elevation of a wind shield constructed in accordance with my invention; Fig. 2 is a vertical section taken in a 30 plane parallel to the plane of Fig. 1; Fig. 3 is a vertical section on the line 3-3 of Fig. 1; Fig. 4 is a vertical section on the line 4-4 of Fig. 1; and Fig. 5 is a section similar to Fig. 3 but showing a slightly modified form.

35 The improved wind shield illustrated is made up of two sections 10 and 11, the former adapted to be rigidly secured to the dashboard of a vehicle, substantially in alinement with said dashboard, while the 40 other section 11 is secured to the section 10 and adapted to be rigidly secured in alinement with the section 10, or supported adjacent to and substantially parallel with said section. As illustrated, the lower stationary 45 section 10 is provided with brackets 13, extending outwardly substantially in the plane thereof, and adjacent the upper edge, and the upper movable section 11 is provided with brackets 14, extending outwardly 50 therefrom at the ends intermediate the top and bottom edges. Each end bracket 13 on the lower section is connected to the corresponding bracket 14 on the upper section by a connecting rod or bar 15, of such a length 55 that the adjacent edges of the sections will be | portions of the frame of the other section. 110

in engagement with each other when the sections are in the same plane, as illustrated in Fig. 1, but also of such length that the upper section may be moved to a position substantially parallel with the lower section 60 and with the upper edge of the frame adjacent the upper edge of the latter. As this mechanism is fully set forth in my previous application above referred to, a full detailed description thereof is not necessary in this 65 case.

The specific frame illustrated, and which embodies my invention, is preferably formed of a metal tube 16 or a plurality of short pieces of tubing, inclosed by two oppositely- 70 disposed side members or plates 17 and 18. Each of these members or plates is provided with a longitudinal groove, and the members are so disposed in respect to each other that the tube 16 is held between the two plates in 75 the two grooves. The outer edges of the two plates or members, as illustrated in Figs. 3 and 4, are overlapped, to form a lapped seam 19. If desired, the two plates may be made integral, so as to eliminate this lapped seam, 80 as shown in Fig. 5. Opposite the lapped seam, the two plates extend substantially parallel a short distance, and are held apart by a strip 20 of wood or other suitable material. The plates are held in engagement 85 with the wood and substantially rigid in respect to each other by means of bolts 21, or other suitable fastening means. The free edges of the two plates opposite to the tube, are bent toward each other, so as to form 90 flanges in resilient engagement with the sides of the glass 22 held by the frame. Intermediate the wooden strip and the edge of the glass, there is preferably inserted a rubber packing 23, serving to hold the glass against 95 lateral movement and insure it against rattling. The tube 16 serves to form a rigid border for the frame, and to prevent the sheet metal plates 17 and 18 from being accidentally bent or twisted. If desired, 100 the tube may be omitted in case the sheet metal plates are of sufficient rigidity to retain their form.

The frame, as above described, extends across the top and the two ends of the upper 105 section and across the bottom and the two ends of the lower section, the end portions of the frame of one section being adapted to be brought into alinement with the end

When they are in alinement, any suitable means may be employed for locking them in position. For instance, a longitudinallymovable locking bolt 24 may be employed, 5 said bolt being mounted within the tube 16 of the end portions of the frame of the upper section, and movable downwardly into the tube 16 of the end portions of the frame of the lower section. The bolts may be oper-

10 ated by suitable handles 25, connected to the bolts through slots 26: The handles serve not only for the raising and lowering of the locking bolts, but also serve for the moving of the upper section to the lowered

15 position, in which case the lower ends of the locking bolts will enter sockets in suitable brackets 27. carried by the dashboard 12 or by an intermediate board or plate 28 inserted between the upper edge of the dash-

20 board and the lower edge of the stationary wind shield section 10. The shield is secured to the dashboard preferably by means of rods 24a, of substantially the same diameter as the reinforcing tube 16 and extending

25 up into the ends of the frame substantially in alinement with portions of said tube. The lower ends of these rods may be clamped to the ends of the dashboard by any suitable form of brackets. The glass at the upper

30 edge of the lower section and the lower edge of the upper section, may be covered by any suitable form of binding strip or frame portion, to protect the glass. As shown, I employ two substantially U-shaped or chan-

35 nel-shaped strips 29 and 30, the former extending along the lower edge of the glass of the upper section, and the latter extending along the upper edge of the glass of the lower section. Each of these strips extends

40 across the ends of the rubber strips 23 and the wooden strips 20, and terminates adjacent the inner tube 16, substantially as illustrated in Fig. 2.

Having thus described my invention, I 45 claim as new and desire to secure by Letters Patent:

1. A folding front for vehicles, comprising

an upper section, a lower section, means for supporting the upper section in alinement with or substantially parallel to the lower section, each of said sections comprising a frame having a tube, oppositely-disposed members inclosing said tube, a strip of resilient material intermediate said members and spaced from said tube, and a pane of glass held between said members and in engagement with said resilient material.

2. An automobile wind shield, including a frame, comprising two oppositely-disposed sheet metal members, each having a (groove therein, a cylindrical tube intermediate said members and disposed within said grooves, and a strip of resilient material intermediate said members, rods extending between said members and in alinement with & said tube at opposite ends of the frame, and means for securing said rods to the automobile.

3. An automobile wind shield, including a tubular reinforcement, a sheet metal cov-7 ering for said reinforcement, a sheet of transparent material, means for supporting the edge of said sheet between the adjacent edges of said sheet metal covering, and supporting means for said shield and extending 7 into said covering and in alinement with said tubular reinforcement.

4. An automobile wind shield, comprising two sections, each section having a frame including a tubular reinforcement, a sheet 30 metal covering, and a resilient strip intermediate the adjacent edges of said covering, and means for holding one of said sections in alinement with the other, said means operating in conjunction with said tubular 8t reinforcement.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JAMES H. SPRAGUE.

Witnesses:

JOHN A. STRUTTON, GEO. H. EMSLIE.