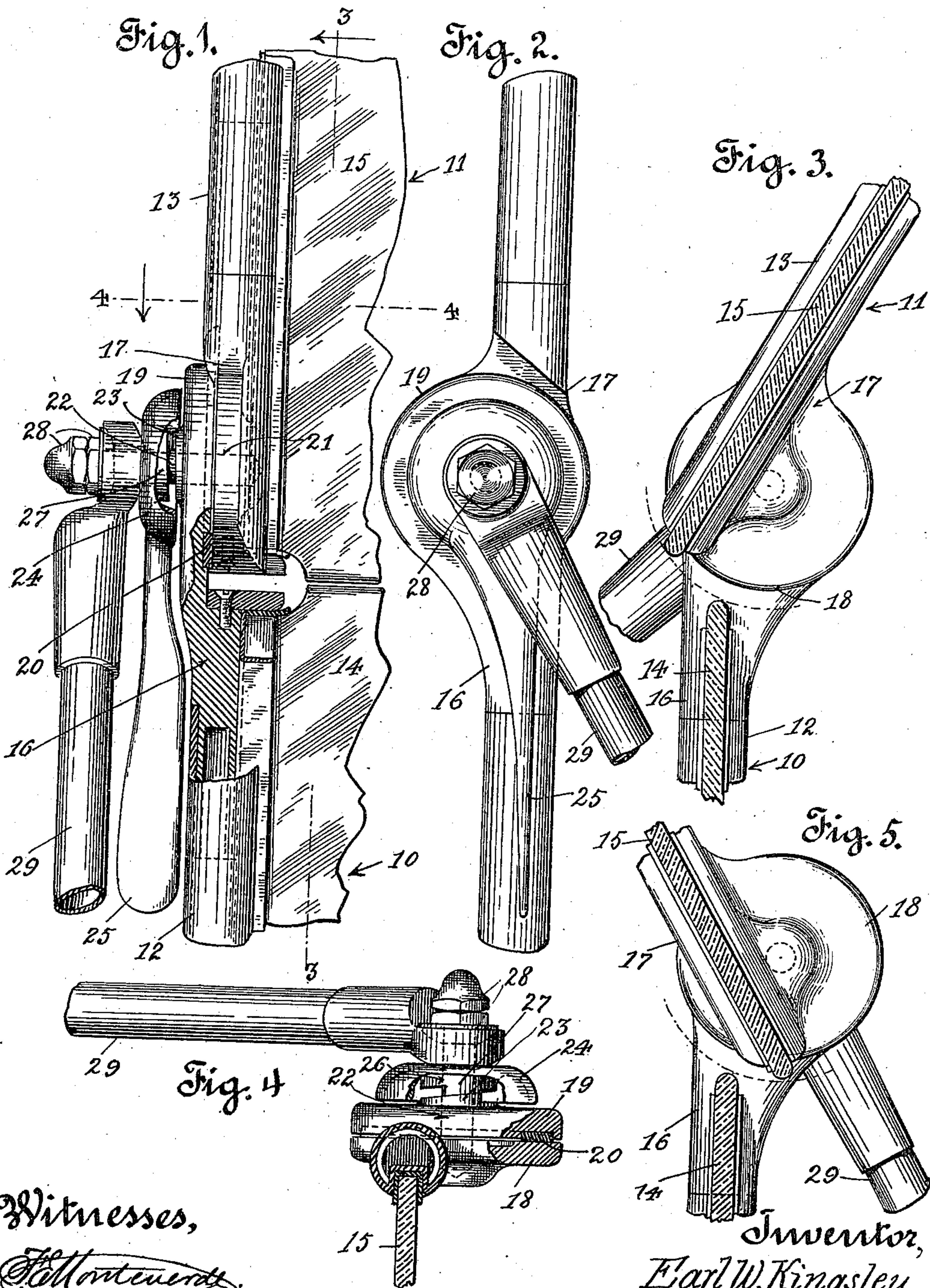


E. W. KINGSLEY.  
 AUTOMOBILE WIND SCREEN.  
 APPLICATION FILED SEPT. 2, 1909.

976,373.

Patented Nov. 22, 1910.



Witnesses,  
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# UNITED STATES PATENT OFFICE.

EARL W. KINGSLEY, OF LOS ANGELES, CALIFORNIA.

AUTOMOBILE WIND-SCREEN.

976,373.

Specification of Letters Patent. Patented Nov. 22, 1910.

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*To all whom it may concern:*

Be it known that I, EARL W. KINGSLEY, a citizen of the United States, residing at Los Angeles, in the county of Los Angeles and State of California, have invented new and useful Improvements in Automobile Wind-Screens, of which the following is a specification.

This invention relates more particularly to a means for locking the movable section of a folding wind screen in any desired position, and a main object thereof is to provide a locking device that may be mounted at the hinged junction of the two screen sections, whereby the hinged section may be rigidly secured against movement on the lower section in whatever position it may be placed.

A further object is to provide a screen construction which will prevent the entrance of water into the vehicle through the slot formed by the junction of the two sections when the upper section is moved out of its vertical position.

Another object of my invention is to provide a screen construction in which the movable section of the screen is pivotally secured to the lower section in such a manner that when the same is tilted rearwardly it will eliminate the partial vacuum that is usually formed behind screens of this type, the overhang of the lower edge of the upper screen section directing the air through the slot formed by the junction of the two screen sections upwardly against the inner face of the upper section.

In the accomplishment of the above objects I preferably employ the usual metallic tubular frames, each provided with a glass pane, the adjacent ends of the tubular frames on either side thereof terminating in a circular friction plate which are pivotally secured together, the outer face of one of the circular plates formed on the lower frame being provided with a cam faced boss formed integrally therewith and around the pivot that secures both frames together. The pivotal point of the two frames being to one side of the center of the tubular frames and above the junction of the screen sections, so that the lower edge of the upper or movable frame will project beyond the upper edge of the lower frame. A hand lever provided with a cam faced boss is mounted on the pivot of the frames, the face of the boss contacting with the boss formed on the circular member clamping the fric-

tion members together when rotated and serving to maintain the two members in a rigid adjusted relation to each other.

In the annexed drawings attached hereto and forming a part of this specification:—  
Figure 1— is an enlarged front elevation of a portion of my improved wind screen with my locking device in place thereon, portions being broken away for clarity of illustration.  
Fig. 2— is a side elevation of that portion of the screen illustrated in Fig. 1. Fig. 3— is a sectional elevation of the screen showing the upper frame locked in a tilted position taken on line 3—3 of Fig. 1. Fig. 4— is a sectional plan view through a portion of the screen taken on line 4—4 of Fig. 1. Fig. 5— is a sectional view similar to that illustrated in Fig. 3, but showing the screen in a reversed position.

Referring more specifically to the drawings 10 designates a lower screen section and 11 an upper section. The frames 12, 13 of both sections being preferably formed of metal tubing, and each being provided with glass plates or panes 14, 15, suitably secured therein. Rigidly secured in each of the adjacent ends of the tubular frames, are castings 16, 17, the ends terminating in circular friction plates 18, 19, the inner face of plate 19 being provided with a circular friction ring 20 preferably formed of fiber and seated therein. Plate 19 is provided with a centrally disposed aperture 21 through which passes when the plates are brought together a centrally disposed stud 22 secured to plate 18, the centers of the plates being offset from the vertical center line of the tubular frames. The outer face of plate 19 is provided with a circular cam faced boss 23 formed integrally therewith and disposed around the aperture formed therein. Pivotaly mounted on stud 22 is a locking cam 24 provided with an operating handle 25, formed integral therewith. Cam 24 is preferably circular in form and slightly smaller than the diameter of the friction plates formed on the frame castings. The inner face of this cam is cupped shaped and provided with a centrally disposed aperture 26 through which passes the stud 22. A boss 27 is formed around the edge of this aperture, the face thereof being cam shaped the highest point of the cam contacting with the lowest point of the cam formed on plate 18, so that when cam 24 is rotated the two friction plates will be drawn tightly to-



gether, locking the upper section securely to the lower. The outer end of stud 22 is screw threaded for the reception of lock nuts 28, a brace bar 29 being interposed between the  
 5 nuts and cam 24. By adjusting lock nuts 28, the friction of the two plates against each other may be increased or diminished.

In Figs. 1, 2 and 3 of the drawings I have shown the screen as mounted on a vehicle so  
 10 that the pivotal point of connection of the two sections is on the inside of the dash, this form of mounting being preferable in fair weather, the pivotal point being on the inside permits the upper section to lie flatly  
 15 against the lower section when the upper section is not in use.

In Fig. 5 of the drawings I have shown the same screen as that shown in the preceding figures, but in a reversed position,  
 20 that is with the pivotal point projecting over the outer face of the dash of the vehicle to which the screen is attached. By this arrangement the lower horizontal edge of the upper section will project over the  
 25 upper horizontal edge of the lower section in such a manner as to completely prevent water from entering through the slot formed by the junction of the two sections when the upper section is tilted rearwardly. This  
 30 disposition of the screen being essential in stormy weather in certain sections of the country where the rain falls are copious. By this reversal of the screen the upper section will not lie flatly against the inner face  
 35 of the lower section, as the pivotal point is beyond the outer face of the lower section, but as the upper section is seldom lowered in stormy weather, the reversal would not constitute a disadvantage.

It will be observed from the foregoing description that I have provided a novel locking device which will securely hold the upper section of the screen in any desired position in which it may be placed without  
 45 resorting to adjusting nuts, thumb screws, or other complicated mechanisms. It will be further observed that by forming the screen so that it may be reversed on a machine and also pivoting the sections above  
 50 their junction point, I am enabled to produce a sufficient overhang of the lower edge of the upper screen section, so that the water which is shed by the upper section when in a rearwardly tilted position will not be  
 55 blown through the slot formed by the two sections.

What I claim is:—

1. A wind screen comprising a lower section having a plate, an upper section also  
 60 having a plate, said second named plate be-

ing normally disposed directly over said first plate and in the same plane therewith, the lower edge of said second plate substantially abutting the upper edge of said first plate, and pivot connection between said  
 65 sections disposed to one side of the plane of said plates and being above the plate of the lower section, and means for clamping said upper section in an inclined position with respect to said lower section. 70

2. A wind screen comprising a lower section having a plate, an upper section also having a plate normally disposed directly over said first plate and in the same plane therewith, the lower edge of the upper plate  
 75 normally substantially abutting the upper edge of the lower plate, and pivotal connections between said sections having its axis removed in a vertical direction from the meeting edges of said plates and being  
 80 above the plate of the lower section, and means for clamping said upper section in an inclined position.

3. A wind screen having a lower section with a lower plate, an upper section with  
 85 an upper plate, said upper plate being normally disposed directly over said lower plate and in the same plane therewith, the lower edge of said upper plate substantially abutting the upper edge of said lower plate, and  
 90 pivotal connections between said sections having its axis disposed to one side of the plane of said plates and removed in a vertical direction from said abutting edges of said plates and being above the plate of the  
 95 lower section, and means for clamping said upper section in an inclined position.

4. A wind screen comprising a lower section and an upper section movably mounted thereupon, said sections having side bars  
 100 with substantially circular friction plates forming a joint between said sections, one of said friction plates having a central opening therein, the other of said friction plates having a stud passing through said opening,  
 105 and brace bars mounted on said stud and a cam lever between said bars and said friction plates rotating in a plane at right angles to the axis of said stud and adapted to clamp  
 110 said friction plates together to hold said upper section fixed with respect to said lower section.

In witness that I claim the foregoing I have hereunto subscribed my name this 26th day of August, 1909.

E. W. KINGSLEY.

Witnesses:

EDMUND A. STRAUSE,  
 ETHEL COLEMAN.