

H. A. DOUGLAS.

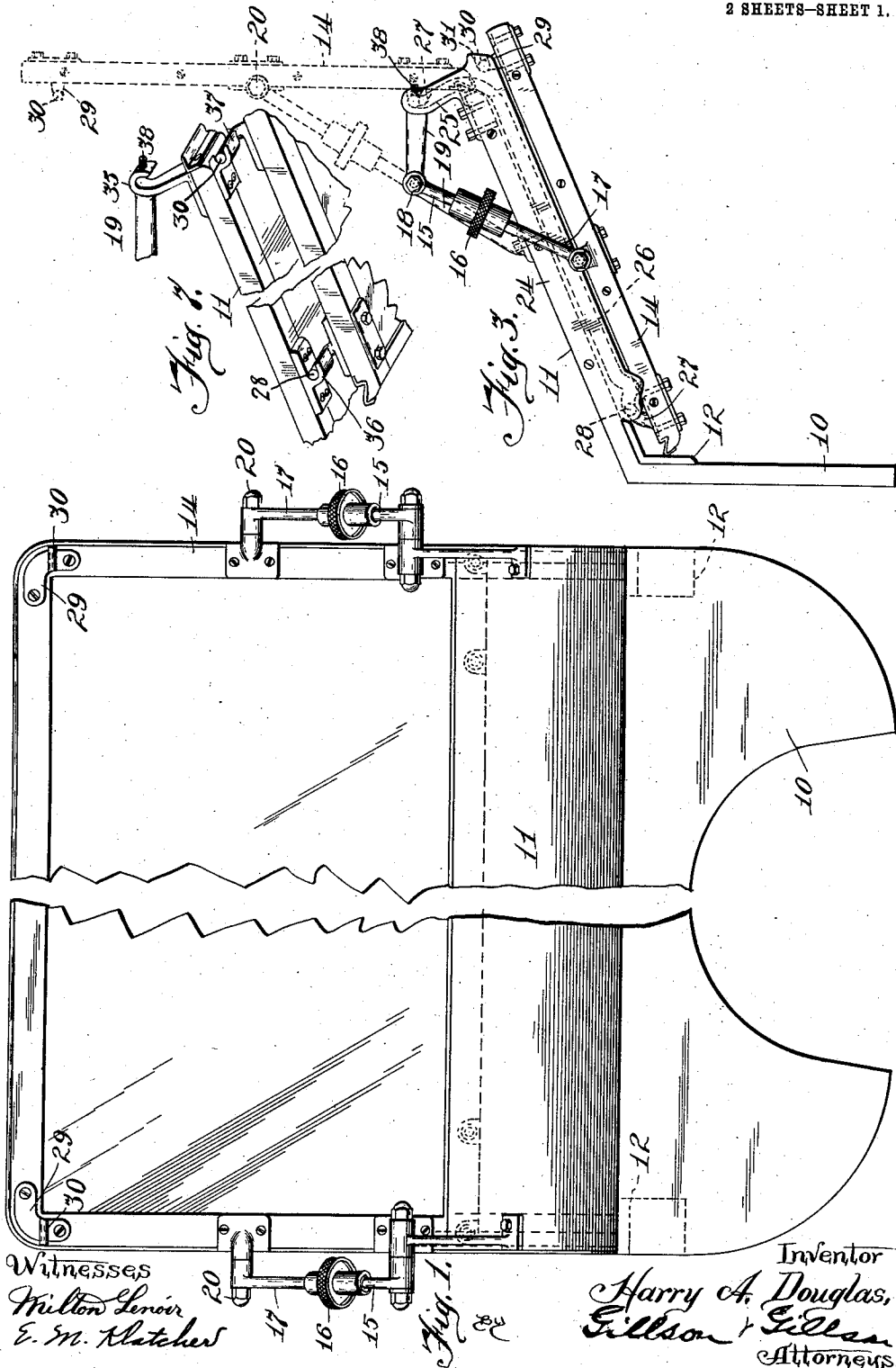
WIND SHIELD.

APPLICATION FILED NOV. 22, 1909.

1,027,528.

Patented May 28, 1912.

2 SHEETS—SHEET 1.



Witnesses
Milton Lenoir
E. M. Klatchers

Fig. 1.

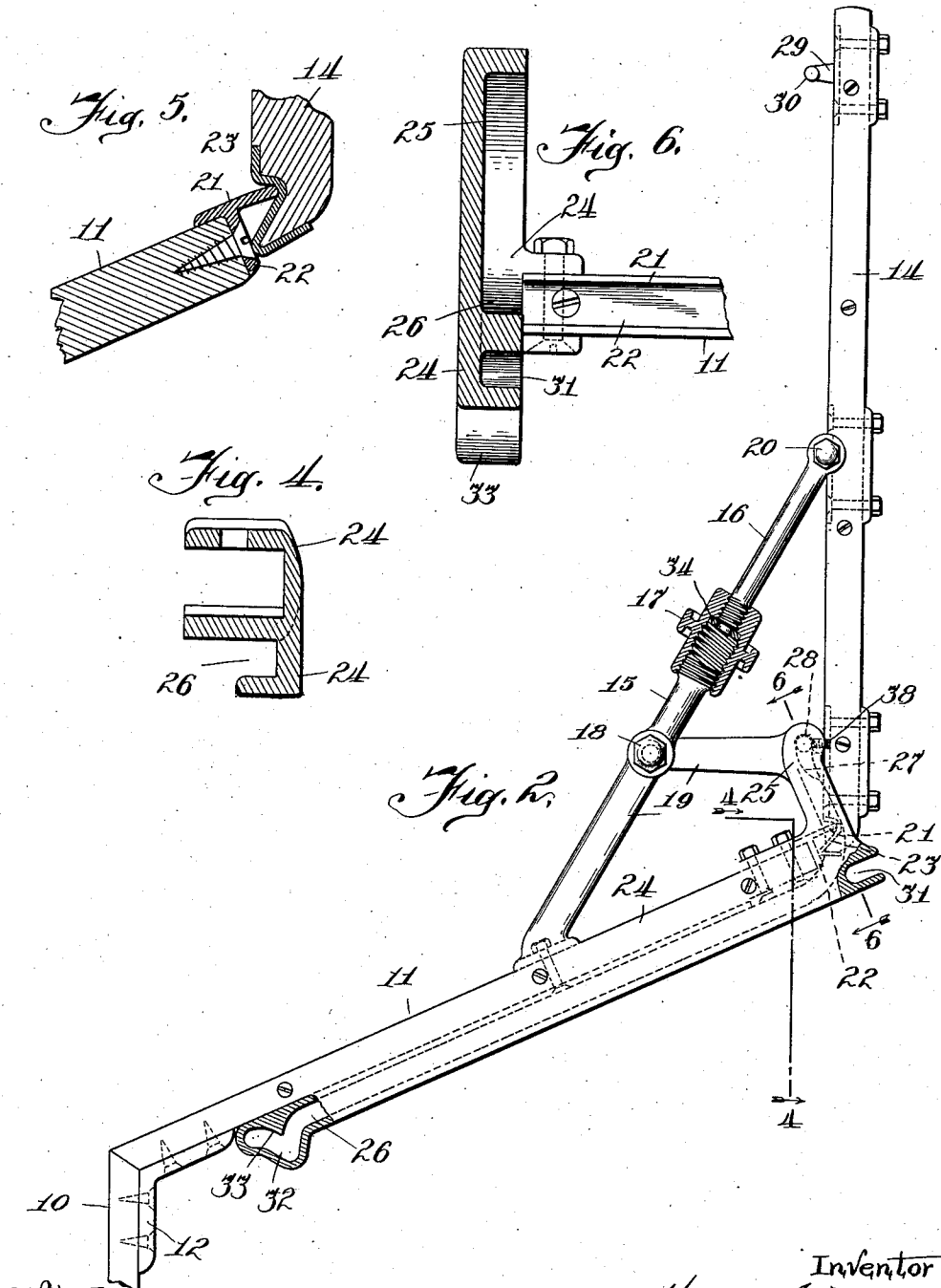
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UNITED STATES PATENT OFFICE.

HARRY A. DOUGLAS, OF CHICAGO, ILLINOIS, ASSIGNOR TO THE ADAMS & WESTLAKE COMPANY, A CORPORATION OF ILLINOIS.

WIND-SHIELD.

1,027,528.

Specification of Letters Patent.

Patented May 28, 1912.

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To all whom it may concern:

Be it known that I, HARRY A. DOUGLAS, a citizen of the United States, and resident of Chicago, county of Cook, and State of Illinois, have invented certain new and useful Improvements in Wind-Shields, of which the following is a specification, and which are illustrated in the accompanying drawings, forming a part thereof.

The invention relates to wind shields for vehicles, such as automobiles, and is especially adapted for use in connection with that type of automobiles commonly known as roadsters, in which the shield comprises two sections, one of which inclines backwardly from the top of the dash-board, the other section rising from the upper and rearward end of the lower section.

The object of the invention is to provide a sectional and foldable shield having its upper and movable section so attached to the lower section that it may be firmly secured in either the position of service or in the folded position, the upper section when not in use being housed below the lower section and parallel therewith.

The invention consists in a structure such as is hereinafter described and as illustrated in the accompanying drawings, in which—

Figure 1 is a front elevation of the shield; Fig. 2 is a side elevation thereof, some of the parts being shown in section; Fig. 3 is a side elevation showing the shield folded; Fig. 4 is a detail section on the line 4—4 of Fig. 2; and Fig. 5 is a detail section on the line 5—5 of Fig. 2.

The base 10 of the shield is a plate adapted to fit upon the upper edge of the dash-board of an automobile. The lower section of the shield proper, represented at 11, is secured to the upper edge of the base plate 10, as by means of angle brackets 12, and inclined backwardly with reference to the vehicle and upwardly, the rearward end of this section preferably being supported by means of stay rods not shown, which may rise from the frame of the vehicle. The upper section 14 is secured to the lower section by means of a double jointed hinge, comprising a pair of extensible arms each consisting of the two elements 15, 16, united by a turn buckle 17, the element 15 being pivoted at 18 to a bracket 19 secured to the

shield section 11, and the element 16 being pivoted at 20 to the shield section 14. The pivot pins 18, 20, project beyond the end of the shield sections, thus so locating the hinge arms that they will not interfere with the fixed parts of the shield in their movement. This form of hinge being duplicated, one hinge being located at each end of the shield, but one need be described.

A plate 21 is secured to and projects backwardly from the upper end of the shield section 11, its outer edge constituting a rest for the upper section 14, this plate being provided with a depending flange 22 fitting against the end of the shield section and affording convenient means for securing the parts together by the use of screws. A wear-plate 23 is attached to the lower edge of the shield section 14, and is recessed to receive the outer edge of the plate 21, its lower end bearing against the depending flange 22.

A plate 24, secured to the edge of the shield section 11 and projecting below the same, has at its upper end an upstanding arm 25 and is channeled in its inner face, as shown at 26, this channel terminating adjacent the end of the arm and the lower end of the plate. As shown, the plate 24 is formed integral with the bracket 19. A bracket 27, secured to the outer face of the shield section 14 adjacent its lower end, is provided with a stud 28, which projects into and slides in the channel 26 and is so positioned that when the upper shield section is in the position of use, as shown in Fig. 2, it is at the upper end of this channel.

The extension of the arm, consisting of the elements 15, 16, by the manipulation of the turn-buckle 17, tends to tilt the shield section 14 backward about the stud 28 as a pivot, thereby forcing the wear plate 23 firmly against the plate 21 and thus securing the section rigidly in the position for service. In order to lower the upper shield section, the hinge-arm is shortened by the manipulation of the turn-buckle 17, permitting the section to be tilted to disengage the plate 23 from the plate 21, whereupon the stud 28 will slide down the channel 26 to its lower end, carrying the upper shield section under the lower section.

At the upper end of the upper section 14 there is mounted a bracket 29, provided with

a laterally-projecting stud 30, adapted to enter a recess 31 in the upper and rearward end of the plate 24, when the upper shield section is lowered. The extension of the hinge arm by means of the turn-buckle forces the stud 28 firmly against the end wall of the channel 26 and the stud 30 firmly against the bottom of the recess 31, thus securely holding the section in place. Preferably the channel 26 is offset downwardly, as shown at 32, adjacent its lower end. As the stud 28 drops into this offset portion of the channel, the upper end of the shield section 14 is tilted upwardly, bringing the stud 30 into line with the recess 31. For the purpose of limiting the extension of the pivoted arm, the aperture of the turn-buckle 17 is of two diameters, being shown as counterbored from its lower end. The section 16 of the arm, after being entered into the nut, receives a head 34 which is secured thereto by upsetting the end of the rod. The length of this section of the arm is sufficient to insure ample extension of the arm to securely lock the shield section 14, but the head 34 prevents a careless or ignorant user from forcing the section 14 beyond the perpendicular, and also from separating the two sections of the arm without first disconnecting it from one of its pivots.

An adjusting screw 38 is set through the arm 25 into the channel 26 and constitutes the bearing for the stud 28, and is to be so set that when the shield section 14 is perpendicular it will be securely locked by the action of the turn-buckle.

In the modification shown in Fig. 7, the plate 11 is dispensed with, and in lieu of the channel 26 there is provided a pair of hooks which perform the functions of the ends of the channel, the upper hook 35 being formed on the bracket 19 and engaging the stud 28 when the upper wind-shield section is in service position and is provided with the adjusting screw 38. The lower hook 36 is secured to the under face of the shield section 11 and receives the stud 28 when the movable shield section 14 is out of service. The bracket casting 19 extends downwardly below the section 11, and is recessed, as shown at 37, to receive the stud 30. When this form of construction is used the locking action is the same as in that illustrated in the remaining figures, but the advantage of the continuous guide channel is lost, and it becomes necessary to guide the movable section by hand as it is shifted from one position to the other.

The upper shield section is glazed. The lower section is shown as opaque, but it may, of course, be glazed if desired.

While the lower section 11 is shown as being inclined, for the reason that present practice in building automobiles provides for such positioning, it will be understood

that the shield may be so constructed that this section will be horizontal, without departing from the scope of the invention.

I claim as my invention—

1. In a wind shield for vehicles, in combination, an inclined lower section having adjacent each of its sides a channel having shoulders adjacent its ends, an upper section having a stud at each side and adjacent its lower edge slidably engaging the corresponding channel, a pair of extensible arms pivotally connected to both sections and means for engaging with the lower section the upper edge of the upper section when in its lower position.

2. In a wind shield for vehicles, in combination, an inclined lower section having adjacent each of its sides a channel having shoulders adjacent its ends, an upper section having a stud at each side and adjacent its lower edge slidably engaging the corresponding channel, a pair of extensible arms pivotally connected to both sections, the points of attachment of each of the arms to each section being intermediate of the upper and lower edges thereof and means for engaging with the lower section the upper edge of the upper section when in its lower position.

3. In a wind shield for vehicles, in combination, an inclined lower section having adjacent its sides a channel having shoulders adjacent its ends and having at each upper corner an upwardly-opening recess, an upper section having a stud adjacent each corner, the lower studs slidably engaging the corresponding channel and the upper studs being engageable with the recesses, and a pair of extensible arms pivotally connected to both sections.

4. In a wind shield for vehicles, in combination, an inclined lower section having adjacent its sides a channel having shoulders adjacent its ends and having at each upper corner an upwardly-opening recess, an upper section having a stud adjacent each corner, the lower studs slidably engaging a corresponding channel and the upper studs being engageable with the recesses, and a pair of extensible arms pivotally connected to both sections, the points of attachment of each of the arms to each section being intermediate of the upper and lower edges thereof.

5. In a wind shield for vehicles, in combination, an inclined lower section having adjacent each of its sides a channel having shoulders adjacent its ends, an upper section having studs adjacent its lower edge slidably engaging the corresponding channels, a pair of arms each comprising two members united by a turn buckle and being pivotally connected with both sections and means for engaging with the lower section the upper edge of the upper section when in its lower position.

6. In a wind shield for vehicles, in combination, an inclined lower section having adjacent each of its sides a channel having shoulders adjacent its ends, an upper section 5 having studs adjacent its lower edge slid- ingly engaging the corresponding channels, a pair of arms each comprising two mem- 10 bers united by a turn buckle and being pivot- ally connected with both sections, the points of attachment of each of the arms to each section being intermediate of the upper and lower edges thereof and means for engaging with the lower section the upper edge of the upper section when in its lower position.

7. In a wind shield for vehicles, in combination, an inclined lower section having ad- 15 jacent its sides a channel having shoulders adjacent its ends and having at each upper corner an upwardly-opening recess, an upper section having a stud adjacent each corner, 20 the lower studs slidably engaging the cor- responding channel and the upper studs be- ing engageable with the recesses, and a pair of arms each comprising two members united 25 by a turn buckle and being pivotally con- nected with both sections.

8. In a wind shield for vehicles, in combi- 30 nation, an inclined lower section having ad- jacent its sides a channel having shoulders adjacent its ends and having at each upper corner an upwardly-opening recess, an upper section having a stud adjacent each corner, 35 the lower studs slidably engaging a cor- responding channel and the upper studs being engageable with the recesses, and a pair of arms each comprising two members united by a turn buckle and being pivotally con- 40 nected with both sections, the points of at- tachment of each of the arms to each section being intermediate of the upper and lower edges thereof.

9. In a wind shield for vehicles, in combi- 45 nation, an inclined lower section, a pair of channeled plates attached to the sides of such section and projecting above the same, the channels thereof having shoulders ad-

jacent their ends, an upper section adapted to bear laterally against the upper edge of the lower section and having at each side ad- 50 jacent its lower edge a stud slidably en- gaging the corresponding channel, and an extensible arm pivotally connected with each section, the point of attachment of such arm to the lower section being offset from the plane thereof. 55

10. In a wind shield for vehicles, in com- 60 bination, an inclined lower section, a pair of channeled plates attached to the sides of such section and projecting above the same, the channels thereof having shoulders ad- 65 jacent their ends, each of such plates having an upwardly-opening recess adjacent the upper edge of the shield section, an upper section adapted to bear laterally against the upper edge of the lower section and having 70 at each side a stud adjacent its lower edge slidably engaging the corresponding chan- nel and having at each upper corner a stud engageable with the corresponding recess, and an extensible arm pivotally connected 75 with each section, the point of attachment of such arm to the lower section being offset from the plane thereof.

11. In a wind shield for vehicles, in com- 80 bination, an inclined lower section having adjacent each of its sides a channel having shoulders adjacent its ends, an upper sec- 85 tion the lower edge of which is adapted to engage and interlock with the upper edge of the lower section, such upper section hav- ing a stud at each side slidably engaging the corresponding channel, and an extensible arm pivotally connected with both sections, the point of attachment of the arm to each section being intermediate of the upper and 90 lower edges thereof, and an adjusting screw set through the shoulder at the upper end of the channel.

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Witnesses:

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