

Jan. 19, 1932.

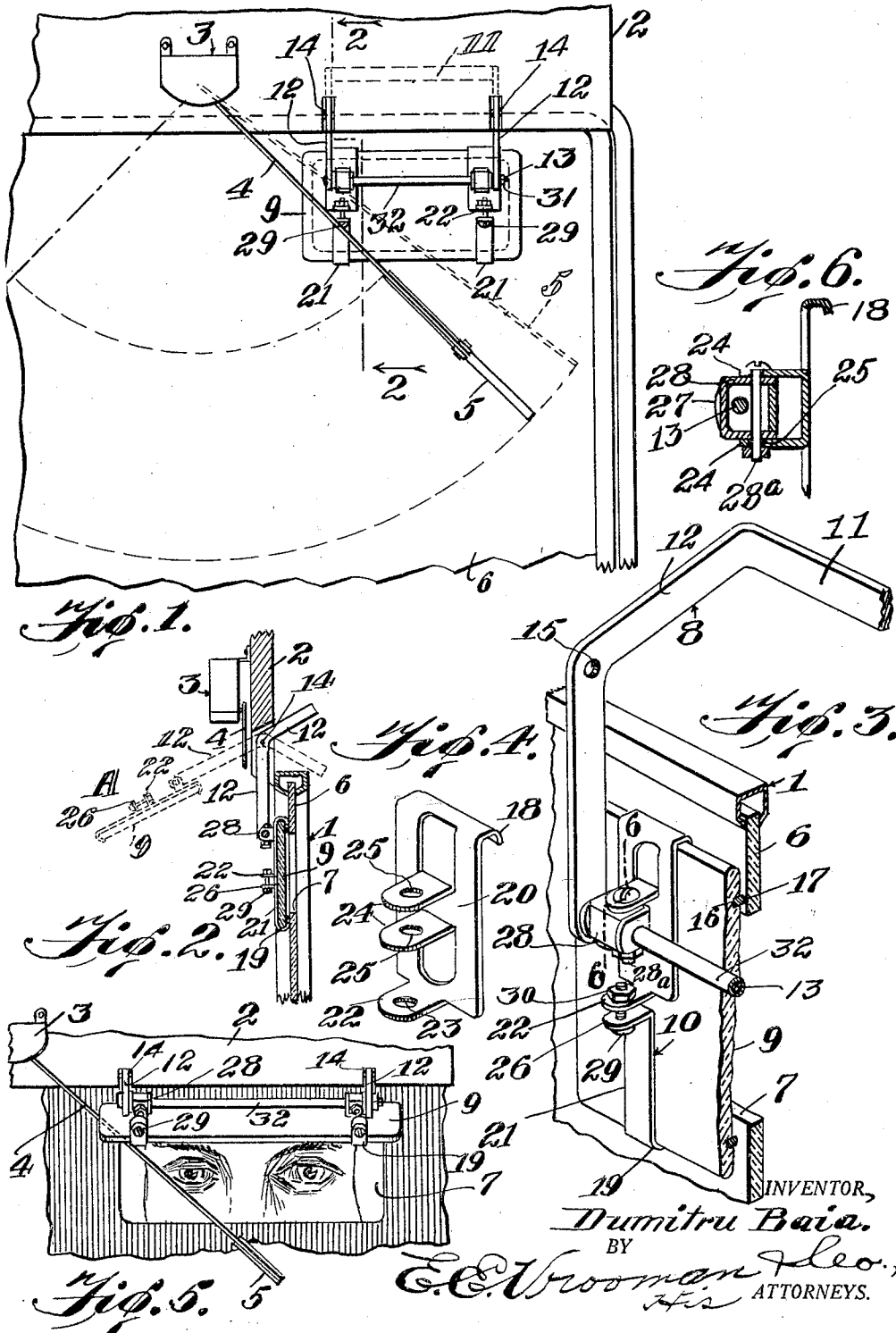
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1,842,004

SAFETY WINDOW FOR AUTOMOBILES, AIRPLANES, AND STREET CARS, ETC.

Filed June 11, 1930

2 Sheets-Sheet 1



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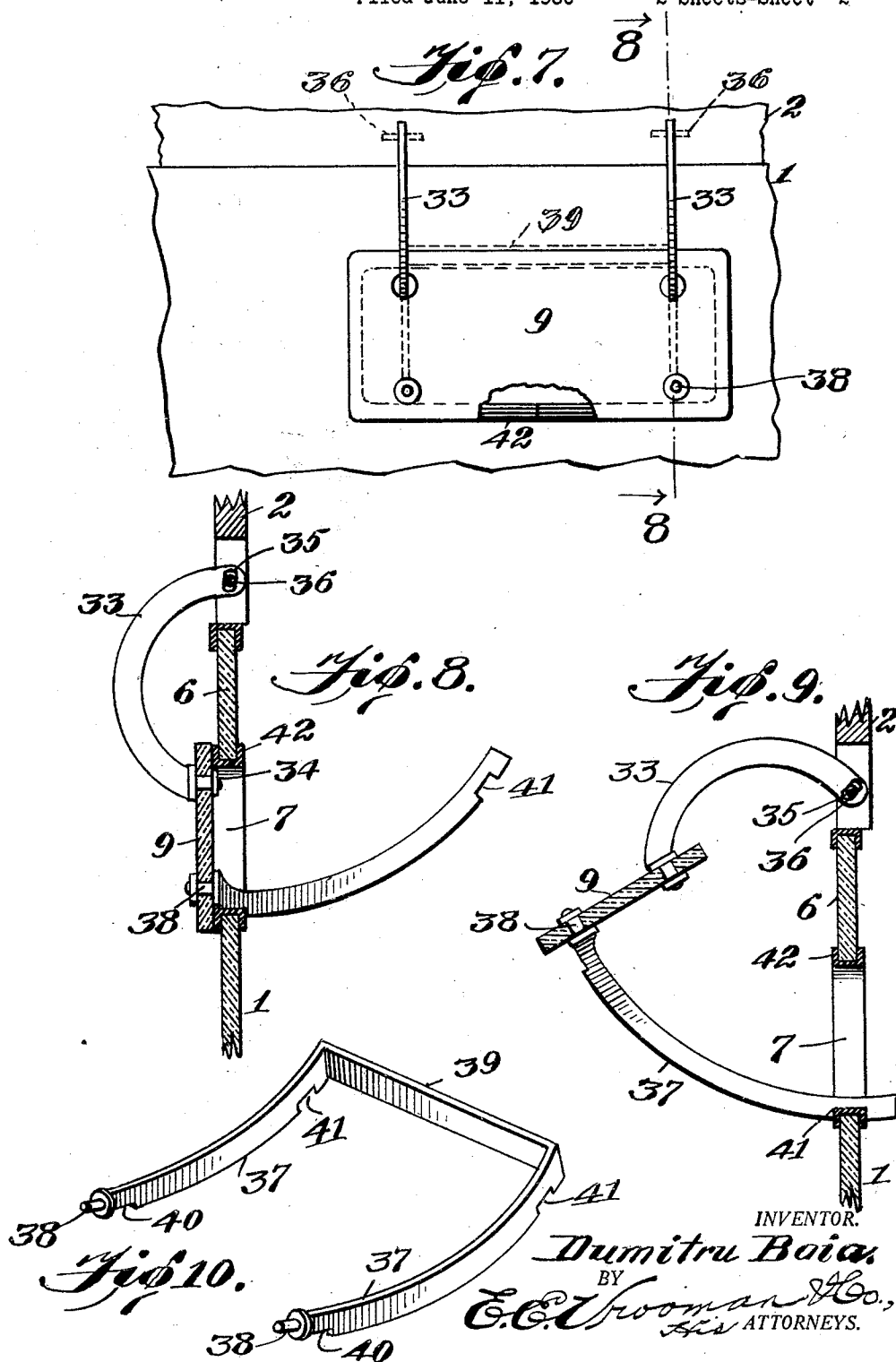
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UNITED STATES PATENT OFFICE

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SAFETY WINDOW FOR AUTOMOBILES, AIRPLANES, AND STREET CARS, ETC.

Application filed June 11, 1930. Serial No. 460,508.

This invention relates to a safety window for automobiles, street cars, and airplanes, etc.

One of the objects of my invention is the provision of simple and efficient means for permitting the operator of a motor vehicle of the classes above mentioned, to have a clear and unobstructed view when the "windshield" is covered with sleet, snow or ice.

Another object of my invention is the production of a window device for normally closing a "window" or sight opening formed in the glass of the windshield, which comprises a glass plate, novel clamping devices on said plate, and to which devices is pivotally connected a suitable supporting means for supporting the plate and clamping means upon a windshield of an automobile, airplane, street car, etc.

A still further object of my invention is the combination with a windshield, of a window device that is adapted to be moved to an open position, and a wiper device adapted to move into engagement with said window device for holding the window device in an open position.

With the foregoing and other objects in view, my invention comprises certain novel constructions, combinations and arrangements of parts as will be hereinafter fully described, illustrated in the accompanying drawings, and more particularly pointed out in the appended claim.

In the drawings:

Figure 1 is a view in front elevation of a device constructed in accordance with the present invention.

Figure 2 is a sectional view taken on line 2, 2, Figure 1, and looking in the direction of the arrows.

Figure 3 is an enlarged fragmentary, perspective view of a device constructed in accordance with the present invention.

Figure 4 is a perspective view of one of the primary clamp members.

Figure 5 is a view in front elevation of my device showing the glass windshield "obscured" as when covered by sleet or snow, with the wiper device holding my window device in an open position.

Figure 6 is a sectional view taken on line 6, 6, Figure 3.

Figure 7 is a view in front elevation of another embodiment of the present invention.

Figure 8 is an enlarged sectional view taken on line 8—8, Figure 7, and looking in the direction of the arrows, while

Figure 9 is a similar view showing the device in an open position.

Figure 10 is a perspective view of the arms and grip bar of the device shown in Figures 7 to 9.

Referring to the drawings by numerals, 1 designates the windshield and 2 is the body of the automobile. 3 is the wiper device, which is provided with the usual rod 4 and wiper 5. In the glass 6 of the windshield 1, I form a "window" or sight opening 7; this opening 7 is preferably formed near the upper right hand corner of the windshield. This window or sight opening 7 affords the chauffeur a clear vision, as shown in Figure 5, even though the glass is covered by sleet or snow or ice, with the wiper device not being able to remove same.

In ordinary weather, such as clear weather, or rain, that can be removed off the glass by the wiper device, my window device is closed down, as shown in Figures 1 and 3. This window device comprises a bracket device 8, plate 9 and the clamping devices 10. The bracket device is preferably formed in one piece and comprises grip 11, arms 12 and bolt 13. The bracket device is suitably supported at 14 (Figs. 1 and 2) upon the body 2 of the automobile, by having any suitable fastening means passing through the apertures 15 (Fig. 3) of arms 12. It may be practical to pivotally mount the bracket device 8 upon the windshield direct (not shown), and, therefore, in the following claim, I broadly designate the supporting of the bracket device as being upon a "support", meaning any suitable support therefor.

The plate 9 is the cover for the window or sight opening 7. This plate is provided with a groove 16 in its inner face, in which is suitably positioned a rubber sealing and bumper strip 17. It will be understood that

when plate 9 is against the glass 6, the rubber strip 17 will keep the water, striking the glass 6, from running into the car, and will also prevent the plate 9 from breaking, or breaking the glass 6, if shut somewhat hard against the glass, and, further, the space allowed by strip 17, between plate 9 and glass 6 also provides for the flanges 18 and 19 of the clamping devices 10 (Figs. 2 and 3).

There are two clamping devices 10 employed in the construction of my invention and as these devices are duplicates, it will only be necessary to specifically describe one. Each clamping device 10 comprises the primary clamp member 20 and an auxiliary clamp member 21. These clamp members are formed each from a single piece or sheet of material. The primary clamp member 20 is provided at its inner end with a bent-out lug 22 having an aperture 23, and cut from the body of the clamp member are two integral parallel lugs 24. Lugs 24 are provided with apertures 25 for the purpose hereinafter described. On the upper end of clamp member 20 is said flange 18 which fits over the top edge of plate 9. The auxiliary clamp member 21 is provided on its inner end with an outstanding lug 26 having an aperture registering with the aperture 23 in lug 22. On the lower or outer end of auxiliary member 21 is said flange 19, which flange 19 fits over the lower edge of glass plate 9.

Between the two parallel lugs 24 is placed a filler device comprising an outer U-shape member 27 and an inner U-shape member 28. Rod 13 extends through apertures formed in the outer U-shape member 27 while bolt 28a extends through the apertures formed in the inner U-shape member 28; this bolt 28a also extends through apertures 25 of lugs 24 (Figs. 3 and 4). A bolt 29 is passed through lugs 22 and 26 and a nut 30 is placed upon the bolt, whereby the primary and auxiliary clamp members are held together, upon plate 9. The bolt 13 extends through the outer ends of arms 12, whereby the arms are connected to the clamp devices; by tightening nut 31 (Fig. 1) upon bolt 13, the bracket device will be caused to clamp so tightly against the clamp devices 10 that no accidental pivotal movement of the plate 9 will occur, upon the bracket device 8; in other words, plate 9 and bracket device 8 will swing as a single fixed unit. A sleeve 32 is mounted upon rod 13 between the outer U-shape clamp members 27 of the filler devices; this sleeve 32 will have its ends tightly bearing against the filler devices when the nut 31 is tightly screwed upon the rod 13.

By the peculiar structure of the clamp devices 10, they can be placed upon varying size plates 9, since the length of the bolts 29 control the spanning distance of the clamp devices 10.

In the embodiment shown in Figures 7 to 10, the glass plate 9 is supported upon the

body 2 of the vehicle by means of a pair of curved brackets 33; the outer ends of these brackets 33 are suitably connected at 34 to said plate 9 and their upper or inner ends are provided with elongated slots 35, in which is positioned the suitable fastening means 36.

Arms 37 are suitably fastened at 38 to the plate 9; the outer ends of said arms 37 are integral with a grip bar 39 (Fig. 10). Each arm 37 is provided with an inner notch 40 and an outer notch 41.

The sight opening 7 has a rubber strip 42 on its edge. This rubber strip is U-shape in cross section (Figs. 8 and 9) for fitting snugly over the edge of the opening. When the plate 9 is in a closed position, as shown in Figure 8, the rubber strip 7 fits in notches 40, whereby a tight fit is accomplished, preventing any rain or dust from entering through sight opening 7 and this rubber strip also serves as a bumper to prevent breaking the glass, should the plate 9 be closed suddenly or too violently against the windshield. When the operator desires to open the device (Fig. 9) all he has to do is to grip bar 39 and slightly lift up on the device to cause the arms 37 to move sufficiently to clear the notches 40, and then by pushing out on the grip bar 39, the plate 9 will move to its open position with the rubber strip in outer notches 41. This movement is allowed by the yieldability of rubber strip 42 and the slots 35.

This device (Figs. 7 to 10) can easily be applied to the glass enclosure of an automobile or street car or the cab of an airplane.

In operation, when the chauffeur's view is obstructed through the windshield glass 6, then he quickly grips grip 11 of the bracket device, swinging the same and causing the plate 9 to move outwardly as shown in Fig. 5, and at "A", Fig. 2. To hold the window device in an open position, the motor of the wiper device is started just sufficiently to cause the rod 4 to move under the end of the window device, "propping" or holding the window device open without any other means; this combination is very valuable and efficient for I utilize the wiper device as a holding or locking means for retaining the closure means for the sight opening 7 in an open position, leaving the driver or chauffeur's hands free for the manipulation of the motor vehicle.

While I have described the preferred embodiments of my invention and illustrated the same in the accompanying drawings, certain minor changes or alterations may appear to one skilled in the art to which this invention relates during the extensive manufacture of the same, and I, therefore, reserve the right to make such changes or alterations as shall fairly fall within the scope of the appended claim.

What I claim is:

A window device for closing a sight open-

ing, comprising a pair of clamp devices, each
clamp device including a primary member,
said primary member formed from a sheet
of material and having struck-up therefrom
5 a pair of apertured lugs, a filler device be-
tween the lugs of each pair, said filler device
comprising an outer and an inner apertured
U-shape member, the apertures of the inner
U-shape member registering with the aper-
10 tures of the lugs, a bolt extending through
said registering apertures, a bolt extending
through the apertures of the lugs of the outer
members of the filler devices outside of the
bolts carried by said inner U-shape members,
15 a bracket device mounted on said bolt carried
by the outer U-shape members of the filler
devices, said bracket device abutting against
said outer U-shape members, a sleeve on said
last mentioned bolt between said outer U-
20 shape members, a nut on said last-mentioned
bolt and clamping said bracket device and
sleeve tightly against said outer U-shape
members, and a plate carried by said clamp
devices, substantially as shown and described.
25 In testimony whereof I hereunto affix my
signature.

DUMITRU BAIA.

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