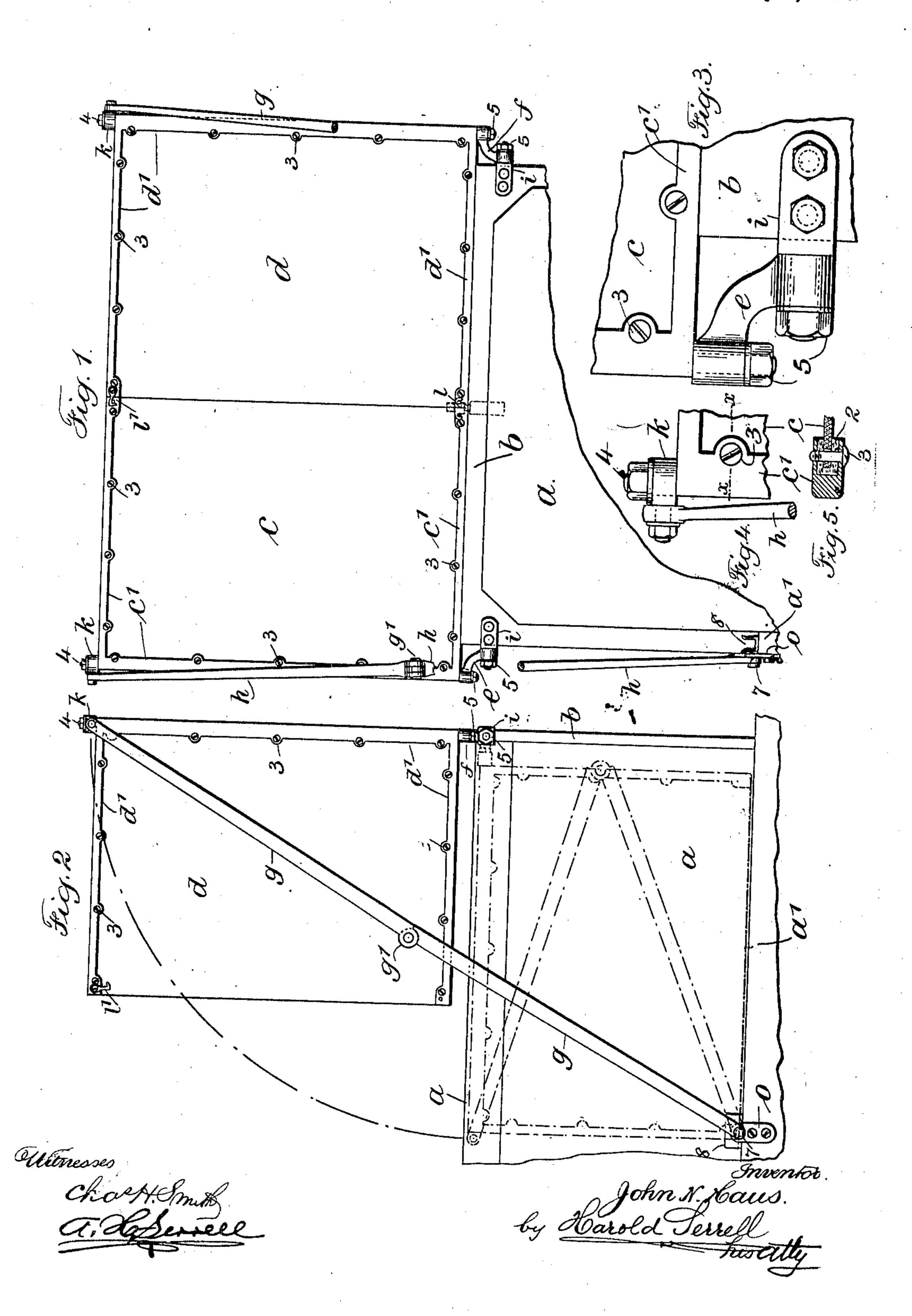
J. N. HAUS.
WIND SHIELD FOR AUTOMOBILES.
APPLICATION FILED OCT. 16, 1909.

956,964.

Patented May 3, 1910.



## UNITED STATES PATENT OFFICE.

JOHN N. HAUS, OF NEW YORK, N. Y.

WIND-SHIELD FOR AUTOMOBILES.

956,964.

Specification of Letters Patent.

Patented May 3, 1910.

Application filed October 16, 1909. Serial No. 522,926.

To all whom it may concern:

Be it known that I, John N. Haus, a citiborough of Manhattan; city, county, and 5 State of New York, have invented an Improvement in Wind-Shields for Automobiles, of which the following is a specification.

Wind-shields for automobiles as heretofore constructed have consisted of a frame 10 of metal holding a plate of glass or other substantially transparent material secured to the dash-board back of the housing or covering case of the engine. These windshields have also been made of two substan-15 tially equal parts hinged along a horizontal and substantially central line, with the upper part to fold down over the lower part. The entire wind-shield has also been hinged along its horizontal connection to the dash-20 board so as to turn down upon the housing or covering case of the engine. All of these forms of wind-shields have their special disadvantages.

The object of my invention is to remove 25 the wind-shield entirely when not needed and to so place the same as not to overlie the housing or covering case of the engine and so prevent ready access thereto.

In carrying out my invention, I employ 30 a wind-shield of two parts divided centrally and vertically and each part is pivoted to a support bracket and on a vertical axis and is movable from a transverse position above the dash-board in its two parts to longitudi-35 nal positions parallel with each other and with and outside of the housing or covering case of the engine. In both of these positions side brace arms in pairs assist in holding the two parts of the wind-shield up-10 right; said brace arms being pivoted at their lower ends to the main frame of the machine and at their upper ends to the upper corners of the shield parts. From the longitudinal position of the shield parts they may be 45 swung downward with the bending of the

50 ing vertical planes. In the drawing, Figure 1 is an elevation looking from the front of the machine and illustrating my improved wind-shield in position for use. Fig. 2 is a side elevation 55 showing one half of the wind-shield as swung around from its transverse position

said brace arms until the central edge of

each part comes into horizontal position near

parts during this movement still maintain-

the main frame of the machine; the shield

and relation to the machine to a longitudinal position on the axes thereof and without zen of the United States, residing at the interfering with the brace arms. Fig. 3 is an elevation of the device connecting each 60 member of the wind-shield at its lower corner to the corner of the dash-board. Fig. 4 is an elevation at the upper corner of the wind-shield showing the connection thereof to the brace arms and Fig. 5 is a sectional 65 plan at the dotted line x,  $\bar{x}$ , of Fig. 4.

a represents the housing or covering case of the engine.  $a^1$  the main frame of the machine and b the dash-board.

In the wind-shield c d represent the parts 70 of glass.  $c^1$   $d^1$  the metal frame parts in which the glass is set.

e f are supporting brackets for the parts of the wind-shield and on which they turn. g h are the side brace arms in pairs with 75

a hinge joint or central pivot at  $g^1$ .

In the cross section Fig. 5 of the metal frame parts  $c^1$   $d^1$ , 2 represents a rubber packing or gasket employed to surround the edge of the glass and the sides near the edge 80 and to keep the same away from actual contact with the metal frame part except for the screws or bolts 3 which pass through the curved edges of the metal frame parts  $c^1$   $d^1$ , the rubber packing and the glass, and with 85 this construction of frame, the juxtaposed edges of the glass parts c d come into substantial contact without the intervention of the frame parts obstructing the view.

The support brackets e f are formed with 90 socket ends whose axes are at right angles to one another. One of these socket ends receives the pin of a clip member i which is usually bolted to the dash-board, and the other socket end receives a pin on the lower 95 end of the vertical member of the metal frame parts  $c^1$   $d^1$ ; the ends of these pins being threaded and having nuts 5 screwing thereon and holding the support brackets to the clip members and the frame parts to 100

the support brackets. The upper end of the vertical edge portions of the frame parts  $c^1$   $d^1$  are provided with pivot pins 4 and end nuts, and sleeves ksurround these pins and are also provided. 10! with pins to receive the upper ends of the side brace arms g h; the lower end of these brace arms being connected by pivot pins 7 to brackets o secured to the main frame  $a^1$ . I also provide a clip 8 along the main frame 110 to receive the central edge of the wind-shield when the same is turned down into the dot-

ted position shown in Fig. 2, at which time the wind-shield is out of the way and the parts of the shield occupy vertical planes parallel to one another and at each side of 5 the housing or covering case of the engine.

I prefer to employ a spring catch l connected to the central and upper portion of the dash-board adapted when the parts of the wind-shield are in alinement as shown in 10 Fig. 1 to engage the rins or other projections thereon so as to hold the wind-shield in alinement and against pressure while in

use and a hook l1 at the upper end.

From Figs. 1 and 2 it will be apparent .5 that upon the release of the spring catch l or other holding device, the parts c d of the wind-shield with their metal frame parts  $c^1$ d1 may be turned from the transverse position Fig. 1 to the longitudinal position Fig. 20 2 on the vertical pivot pins of the end members of the shield in the socket parts of the support brackets e f and sleeves k without in any wise disturbing the side brace arms g h. After this movement the side brace 25, arms are bowed and gradually swung on their hinges from the straight line position Fig. 2 to the dotted line position Fig. 2, and with this movement each part of the windshield is carried downward on the pivotal 30 connection of the socket ends of the support brackets e f with the clip members i. When these wind-shield parts assume the position shown in Fig. 2 in dotted lines, the lower edge may enter and be held and confined by 35 the clip 8 or other equivalent structure in which the wind-shield parts will be out of the line of vision and below the level of the upper line of the dash-board and housing or covering case of the engine where they 40 are out of the way while not in use.

I do not herein limit myself to the pre-. cise details for pivotally mounting the two wind-shield parts or to any spring-catch de-

vice for connecting the same in their alined and transverse position of use.

I claim as my invention:.

1. A wind-shield for automobiles, comprising two similar vertically divisible parts, side hinged brace arms, means for pivoting the same at their lower ends to the main 50 frame of the machine, means for pivoting same at their upper ends to the ends of the wind-shield parts, means for pivotally connecting the lower ends of the wind-shield parts to the dash-board, whereby the wind- 55 shield parts may be swung from an alined transverse position of use to parallel positions of disuse and also with the unflexing and bowing of the brace arms said parts may be swung downward at the sides of the '6 machine.

2. A wind-shield for automobiles, comprising two similar vertically divisible parts, each part comprising a plate of glass and a metal frame, pivot pins at the respective ( ends of the side members of the metal frame parts, clip members secured to the dash-, board and having pins, support brackets having socket ends receiving the pins of the clip members and the pins at the lower ends of the upright parts of the metal frame, sleeves with pivot pins at the upper ends of the side frame parts, side hinged brace arms at their upper ends connected to the pins of said sleeves and at their lower ends to the pins of brackets secured to the main frame, whereby the wind-shield parts may swing from transverse and vertical positions of alinement into parallel vertical positions and then downward out of the way.

Signed by me this 11th day of October

1909.

JOHN N. HAUS

Witnesses: GEO. T. PINCKNEY, E. Zachariasen.