

No. 894,271.

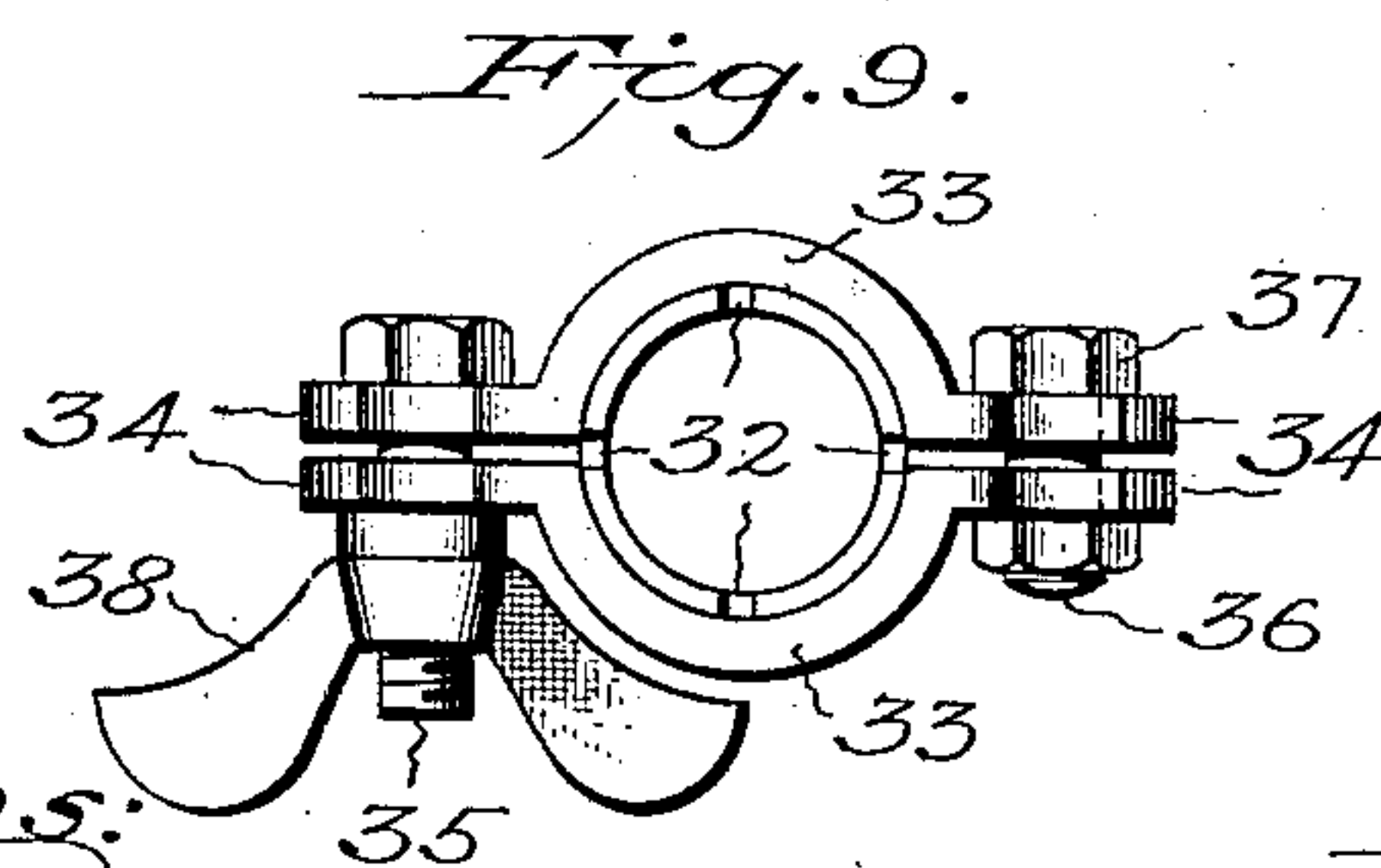
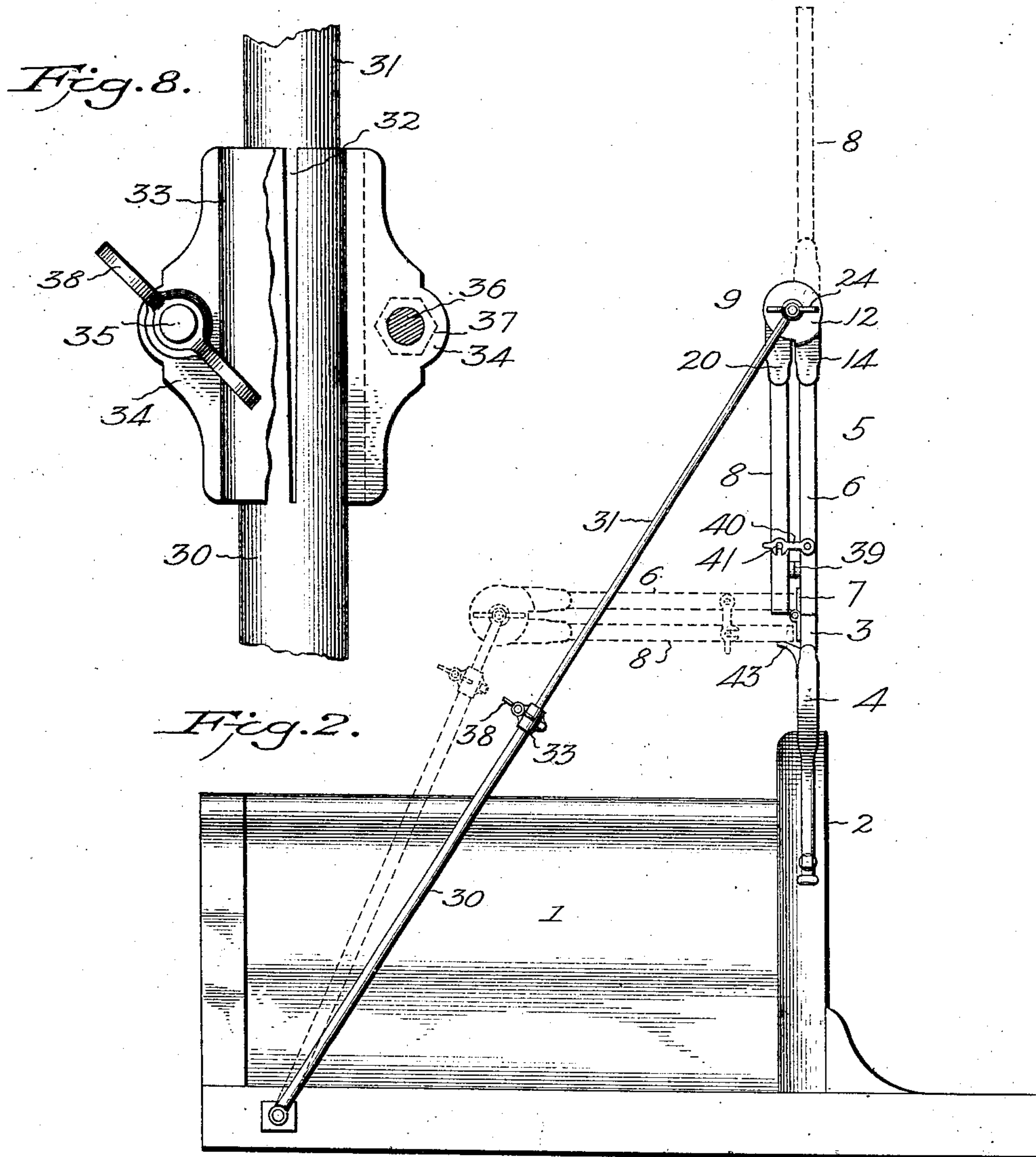
PATENTED JULY 28, 1908.

F. JACKSON.

FOLDING SHIELD FOR AUTOMOBILES AND OTHER VEHICLES.

APPLICATION FILED AUG. 28, 1907.

3 SHEETS—SHEET 2.



Witnesses:

G. Sargent Elliott.

Adella M Fowle

Inventor:

By Frank Jackson.

H. S. Bailey Attorney.

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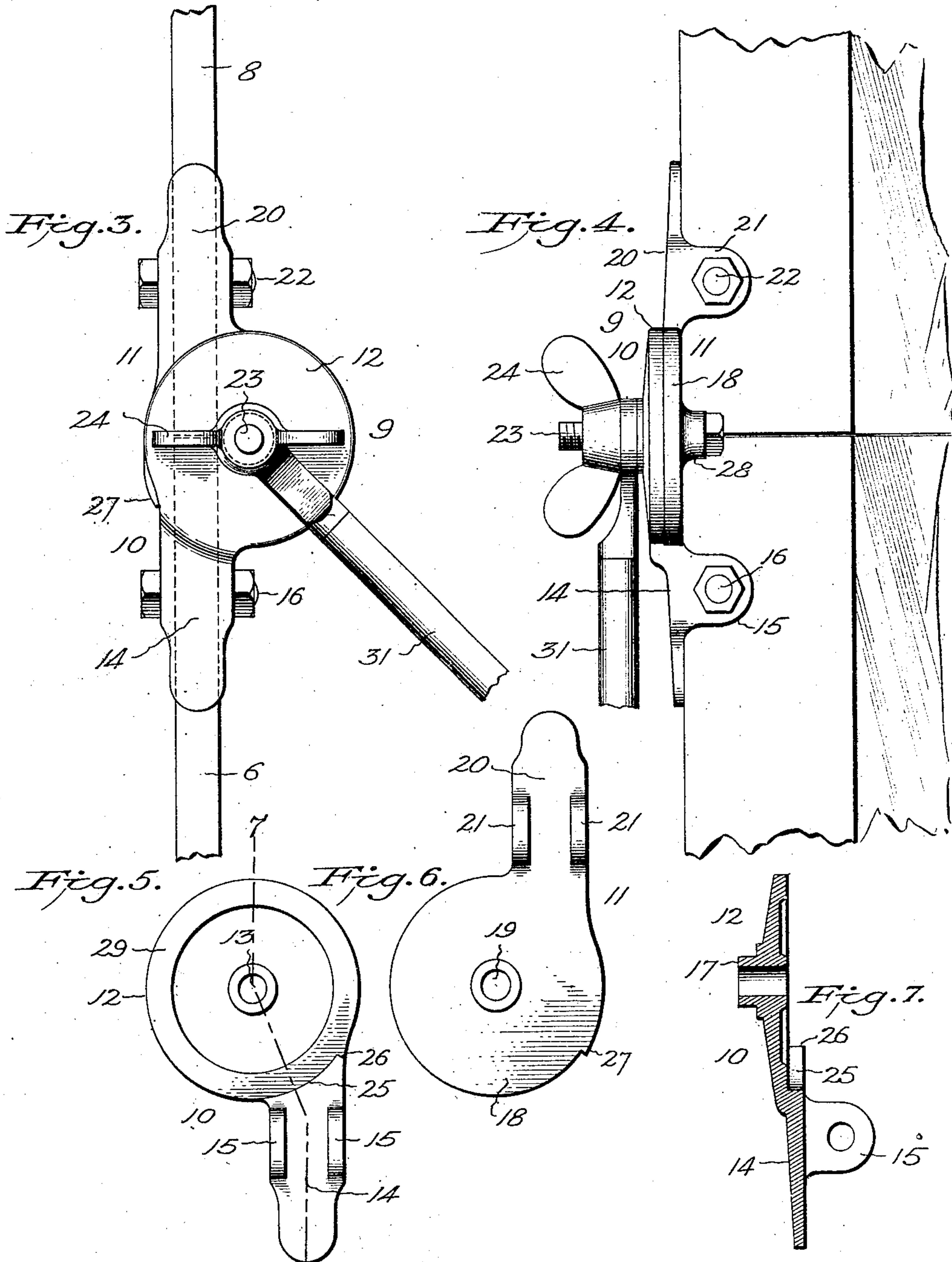
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UNITED STATES PATENT OFFICE.

FRANK JACKSON, OF DENVER, COLORADO.

FOLDING SHIELD FOR AUTOMOBILES AND OTHER VEHICLES.

No. 894,271.

Specification of Letters Patent.

Patented July 28, 1908.

Application filed August 28, 1907. Serial No. 390,468.

To all whom it may concern:

Be it known that I, FRANK JACKSON, a citizen of the United States of America, residing in the city and county of Denver and State of Colorado, have invented new and useful Folding Shields for Automobiles and other Vehicles, of which the following is a specification.

My invention relates to folding shields for motor cars and other vehicles.

The object of the invention is to provide a shield comprising upper and lower members, which are pivotally united by hand operated friction hinges, said lower member being hinged to the car; longitudinally adjustable brace rods being pivotally secured to said lower shield and to the car, which act in conjunction with the hinges to permit the shields to assume an upright vertical position, to lie parallel in a vertical position, and to lie parallel in a horizontal plane, the various details of construction being fully set forth in the accompanying specification and claims. These objects are accomplished by the mechanism illustrated in the accompanying drawings, in which:

Figure 1, is a front elevation of a portion of an automobile, showing my improved shield secured thereto. Fig. 2, is a side elevation of the same, showing the upper half of the shield folded down against the lower half in full lines, and the two halves of the shield folded in a horizontal position in dotted lines. Fig. 3, is an enlarged side elevation of the locking hinge attached to the two members of the shield, a portion of the telescoping brace rod being shown in connection therewith. Fig. 4, is a front elevation of the same. Figs. 5 and 6, are face views of the two members constituting the hinge. Fig. 7, is a vertical sectional view of one of the hinge members, taken on the line 7—7 of Fig. 5. Fig. 8, is a side elevation, partly in section, of a portion of the telescoping brace rod for the shield, showing the clamp used in connection therewith, for securing the two parts of the rod at the desired point of adjustment, and Fig. 9, is a top view of the clamp, showing the same clamped upon the split end of the fixed member of the rod.

Referring to the accompanying drawings, the numeral 1, designates the radiator, which forms the forward portion of certain styles of automobiles in general use. At the rear end of the radiator is a dash board 2, of ordinary construction, to the upper edge of which is

secured a shield support 3, consisting preferably of a board or strip of suitable dimensions, which in addition to being secured to the edge of the dash board by screws, is further held and braced by brackets 4, which are bolted to the ends of the support and to the ends of the dash board. This supporting board, which is necessarily wider than the dash board, enables my improved shield to be secured to any style of car, as the shield is hinged thereto in the manufacture, and it is only necessary to secure the support to the dash board of the car, in the manner above mentioned.

The shield 5, is of the size in general use, but is made in two parts, which are hinged together, the lower member 6 being hinged to the supporting board by hinges 7, while the upper member 8 is hinged to the member 6, by my improved locking hinge 9. These hinges are duplicates, except that they are made for the right and left sides of the shield, and each hinge is made up of members 10 and 11, which are secured respectively to the lower and upper shield members. The member 10 of each hinge comprises a circular friction plate 12, having a central aperture 13, and from the plate 12 extends an integral arm 14, having oppositely positioned and inwardly extending ears or lugs 15, which straddle the wooden frame of the shield section to which it is secured, and are secured thereto by bolts 16, which pass through the ears and through the frame, while the arm lies against the edge of the frame, as will be seen by reference to Figs. 3 and 4. An outwardly projecting hub 17, surrounds the aperture 13, of the friction plate, and upon this hub is pivotally secured one end of the sliding member of a telescoping brace rod, as will be shown hereinafter.

The member 11, of each hinge, comprises a circular friction plate 18, having a central aperture 19, and from the plate extends an arm 20, having inwardly extending lugs or ears 21, which straddle the wooden frame of the upper shield section, and are secured thereto by bolts 22, which pass through apertures in the ears and through the frame. The hinge members 10, are secured at such a position adjacent to the upper edge of the frame of the lower shield section, as will bring the axial centers of their circular friction plates on a horizontal level with the horizontal edge of the section, while the members 11, of the hinges, are secured in the same position

upon the frame of the upper shield section relatively to its lower edge. The arms 14 and 20 of the hinge sections, lie to one side of the axial centers of their respective plates, as will be seen by reference to Fig. 3, so that the shield sections, which are clamped between the ears on these arms, will also lie to one side of the axial centers of the plates, and this construction affords room for the insertion of pivot bolts 23, by which the hinge sections are secured together. The bolts 23 are provided on their outer ends with hand or butterfly nuts 24, by which the friction plates of the hinge sections can be tightly clamped together to hold the upper screen section in a vertical position.

At the union of the arms of the lower hinge sections with the friction plates 12, offsets 25 are formed, which terminate in shoulders or stops 26, and the plates of the upper hinge sections are formed with projections 27, which engage the stops 26, when the upper shield section is raised to a vertical position, and prevent the section from being moved backward beyond a vertical line. The upper hinge sections are also formed with bosses 28, through which the axial bolt apertures extend, and these bosses not only form a bearing for the bolt heads, but together with the hubs 17 afford a long bearing for the bolts.

The bearing surfaces of the lower hinge plates are concaved or cut away to form narrow circular friction faces 29, which will insure a uniform contact of the plates, and enable them to be tightly clamped together.

The lower shield section, which is hinged to the supporting board 3, is held either in a vertical or horizontal position by telescoping brace rods, comprising hollow sections 30, the lower ends of which are pivotally secured to the forward portion of the car, and sliding sections 31, the upper ends of which are formed into eyes, which are pivotally secured to the hubs 17 of the lower hinge sections, while their lower ends extend into the hollow sections 30. The upper ends of the hollow sections are formed with slits 32, which permit the ends to be contracted in diameter, and clamps are secured upon these ends, which comprise semi-circular plates 33, having apertured ears 34, projecting from each side, through which bolts 35 and 36 pass, the bolt 36 being secured by an ordinary nut 37, while the bolt 35 is provided with a hand or butterfly nut 38, by turning which the semi-circular plates can be clamped upon the split end of the hollow rod 30, to bind the sliding rod 31, or to slightly loosen the plates and permit the rod 31 to slide within the rod 30.

When there is much wind and dust, it is desirable to raise both shield sections to their full height, and in this position the lower section will be supported by the brace rods, while the upper section will be held by the

locking hinges. Now, when it is desired to drop or fold down the upper section, the hinges are released by manipulating the hand nuts 24, and the upper section may then be swung down to lie parallel with the lower section, as shown in full lines in Fig. 2. The shield frames are each provided with elastic buffer blocks 39, which contact with each other, when the upper screen is folded down, and the screen is held from swinging outward by hooks 40, which are pivoted adjacent to the lower ends of the lower shield section, and which engage pins 41, in the side edges of the frame, of the upper shield section. The buffers make it necessary to press the sections together before the hooks will engage the pins, and thus any rattling of the parts will be prevented when the car is in motion.

Should it be desired to fold the two sections of the screen to a horizontal position, as shown by dotted lines, Fig. 2, the brace rod clamps are released, and the two sections folded to the desired position. This movement causes the rods 31 to slide within the rods 30, until the horizontal position of the shield sections is reached, when the clamps are operated to bind the split end of the hollow rod, upon the sliding rod, and clamp the two securely together. In this position, the inner end of the upper shield will rest upon brackets 43, secured to the supporting board 3, which will support the weight of the said shield, which would otherwise be borne by the hooks 40.

The improved shield is simple and practical in operation and adaptable to any of the styles of cars in present use.

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

1. A folding shield for motor cars and the like, comprising upper and lower members having registering hinge plates at the corners of their adjoining edges and bolts and nuts for connecting and clamping the plates of each hinge in frictional engagement, said hinges permitting said shields to be folded to lie parallel; resilient buffers on said shields which engage when the shields lie parallel; hooks for holding said upper shield against the lower shield; a support adapted to be rigidly secured to the dash board of the car; hinge connections between said support and the lower shield; longitudinally adjustable brace rods, and clamps therefor, pivotally connected to the hinge plates of the lower shield and to the car for supporting said folded sections in either a vertical or a horizontal position; and brackets on the shield support upon which the end of the upper shield rests, when the folded members are in a horizontal position.

2. In a device as specified, the combination with a motor car or the like, of a shield

support secured to the dash board thereof; a shield hinged to said support; hinge members on the upper corners of said shield, comprising arms which are secured to the shield, 5 having circular plates provided with stop shoulders, and axial hubs; longitudinally adjustable brace rods pivotally connected to said hubs and to the car; a shield having hinge members upon its lower corners, comprising arms which are secured to the shield, 10 having circular plates provided with stop shoulders; bolts for connecting the adjoining hinge plates of each shield, and hand nuts for clamping said plates in frictional engagement, the nuts engaging the ends of the adjustable brace rods to hold them upon their 15 hubs, said hinges and rods permitting the shields to fold upon each other and lie parallel in a vertical position, and in a horizontal position, in addition to the normal upright position of both members. 20

3. In combination with a motor car or the

like, of a shield comprising upper and lower members united by manually operated friction hinge connections, the lower member 25 of the shield being hinged to the car; longitudinally adjustable brace rods pivotally connected to the car and to the lower shield, said rods being adapted to cooperate with said hinges in supporting said shields in an upright vertical position, a folded vertical 30 position, and a folded horizontal position; hooks for holding the two shields together when folded and in a vertical position; means for supporting the inner end of the upper screen, when both are in a horizontal position; and resilient buffers which engage when 35 the shields are folded.

In testimony whereof I affix my signature in presence of two witnesses.

FRANK JACKSON.

Witnesses:

G. SARGENT ELLIOTT,
ADELLA M. FOWLE.