

No. 790,024.

PATENTED MAY 16, 1906.

S. F. BECKWITH.  
FENDER.

APPLICATION FILED SEPT. 20, 1904.

3 SHEETS—SHEET 1.

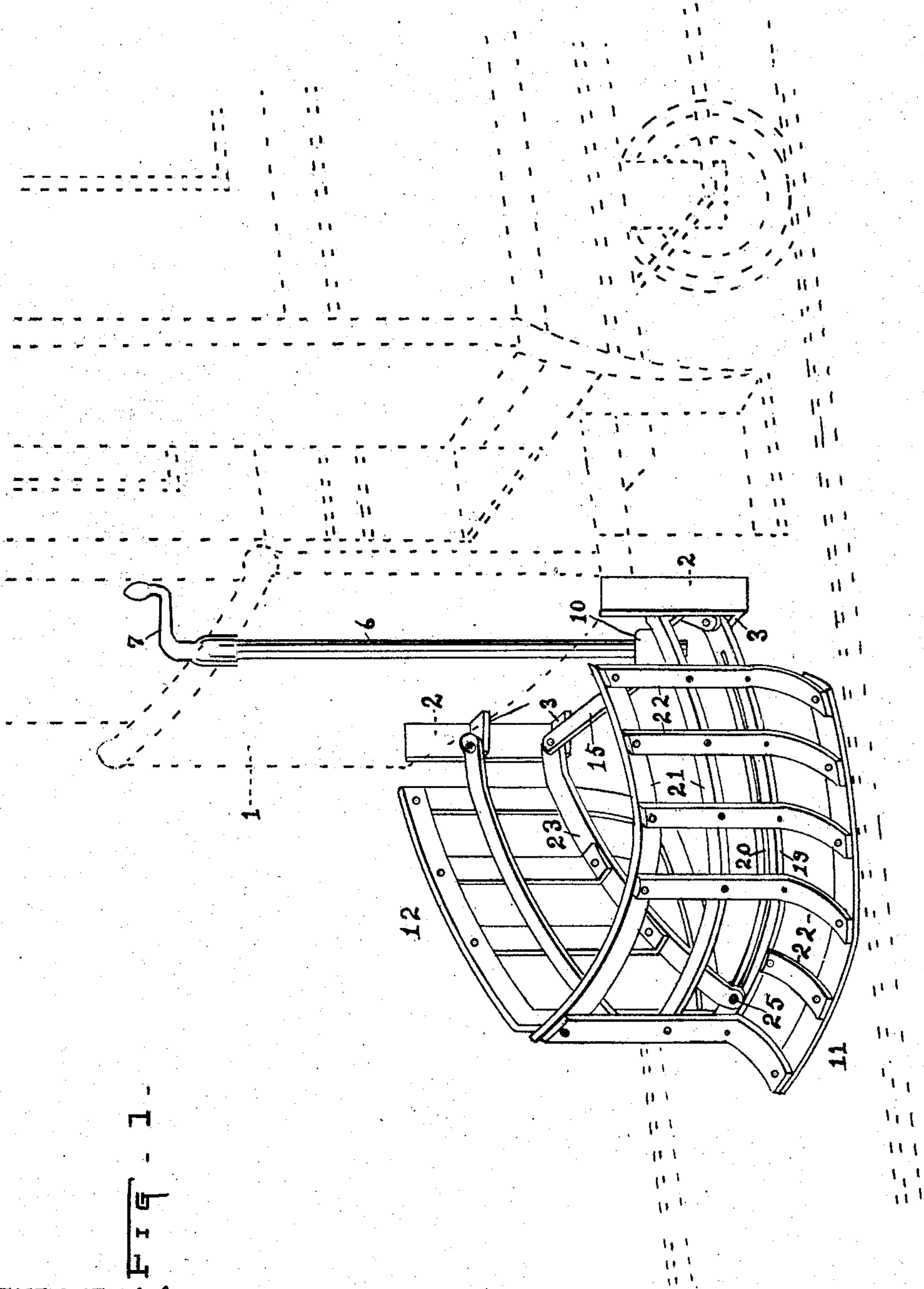


Fig. 1.

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3 SHEETS—SHEET 2.

FIG. 2.

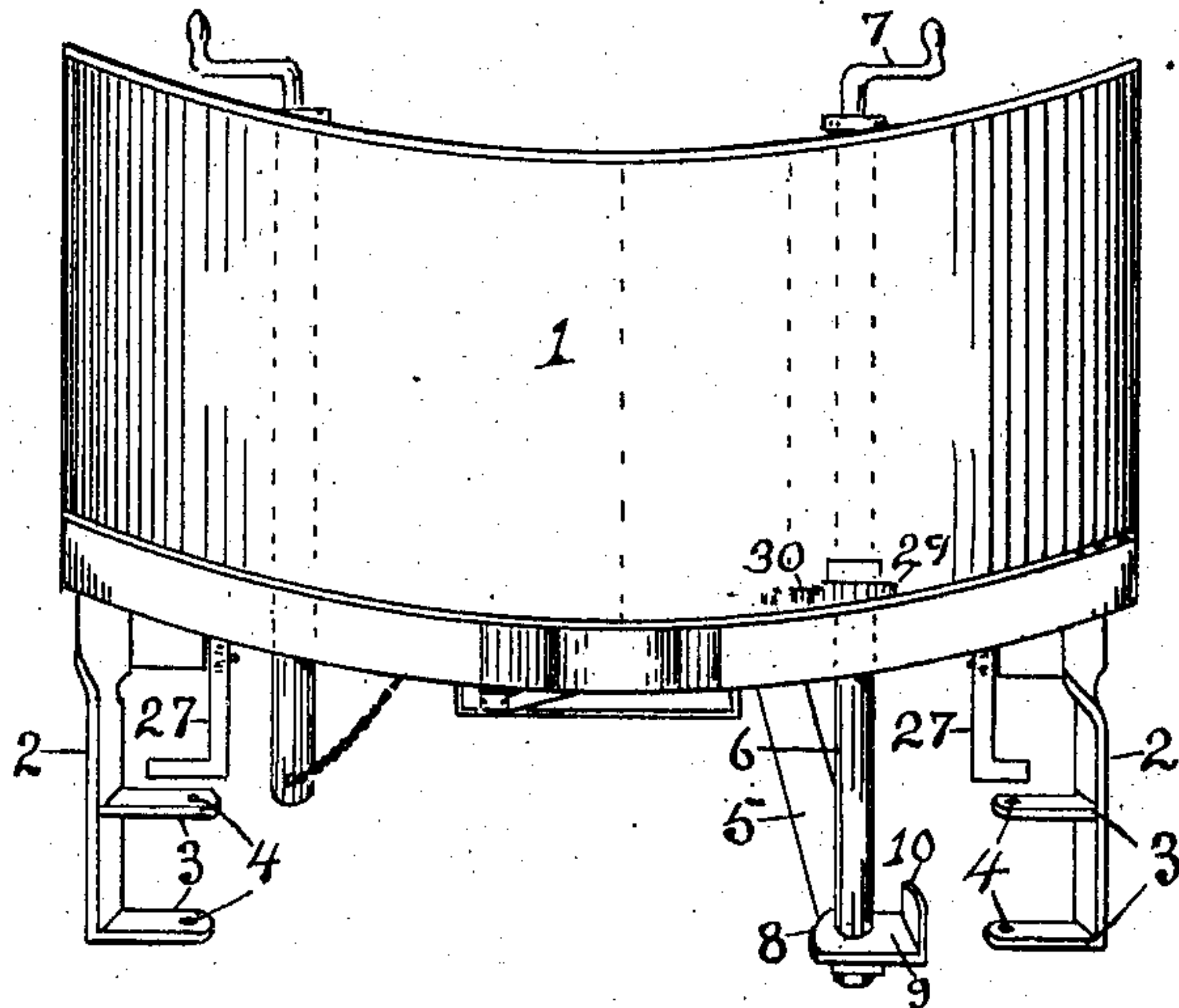
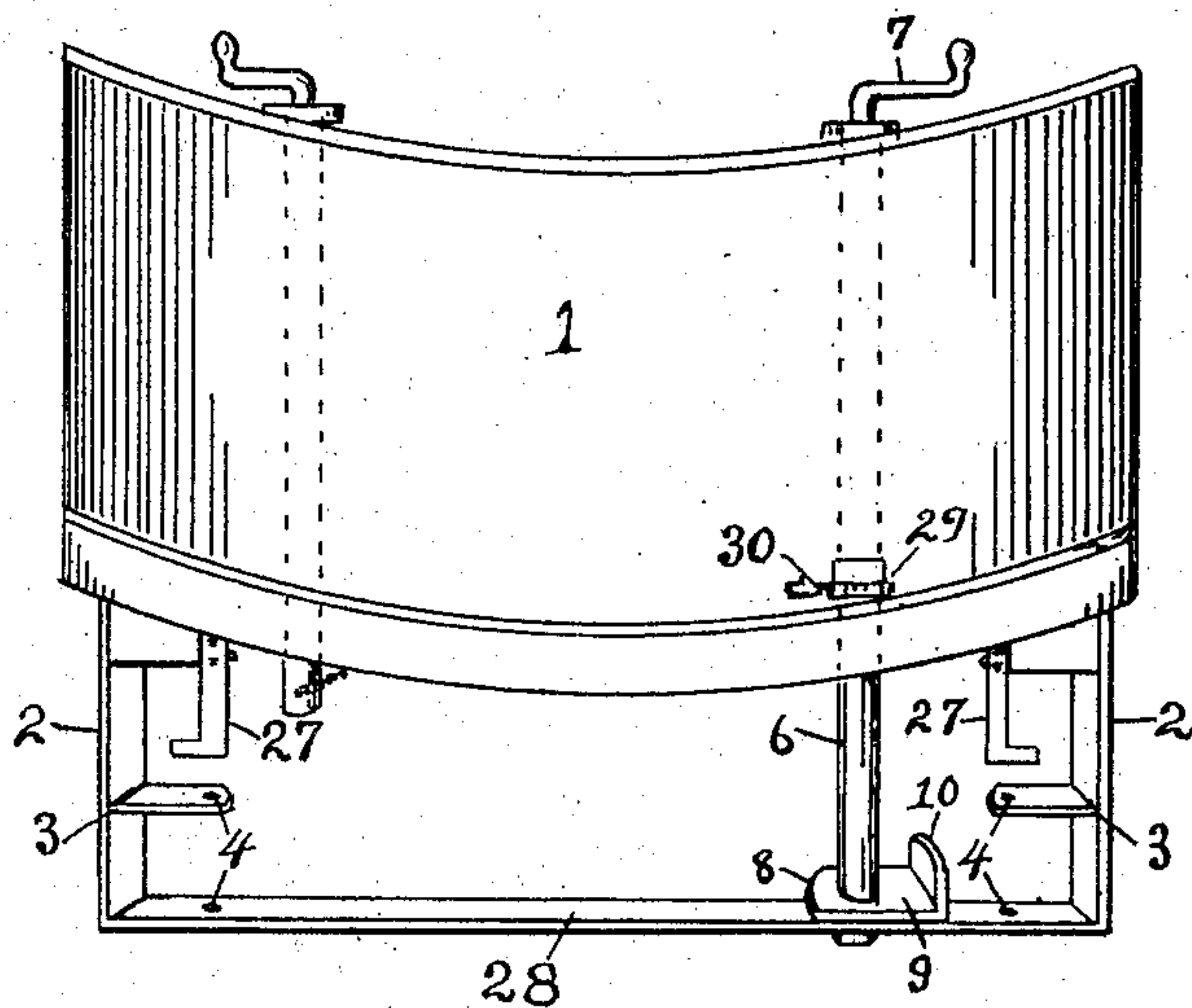


FIG. 3.



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3 SHEETS—SHEET 3.

FIG - 4 -

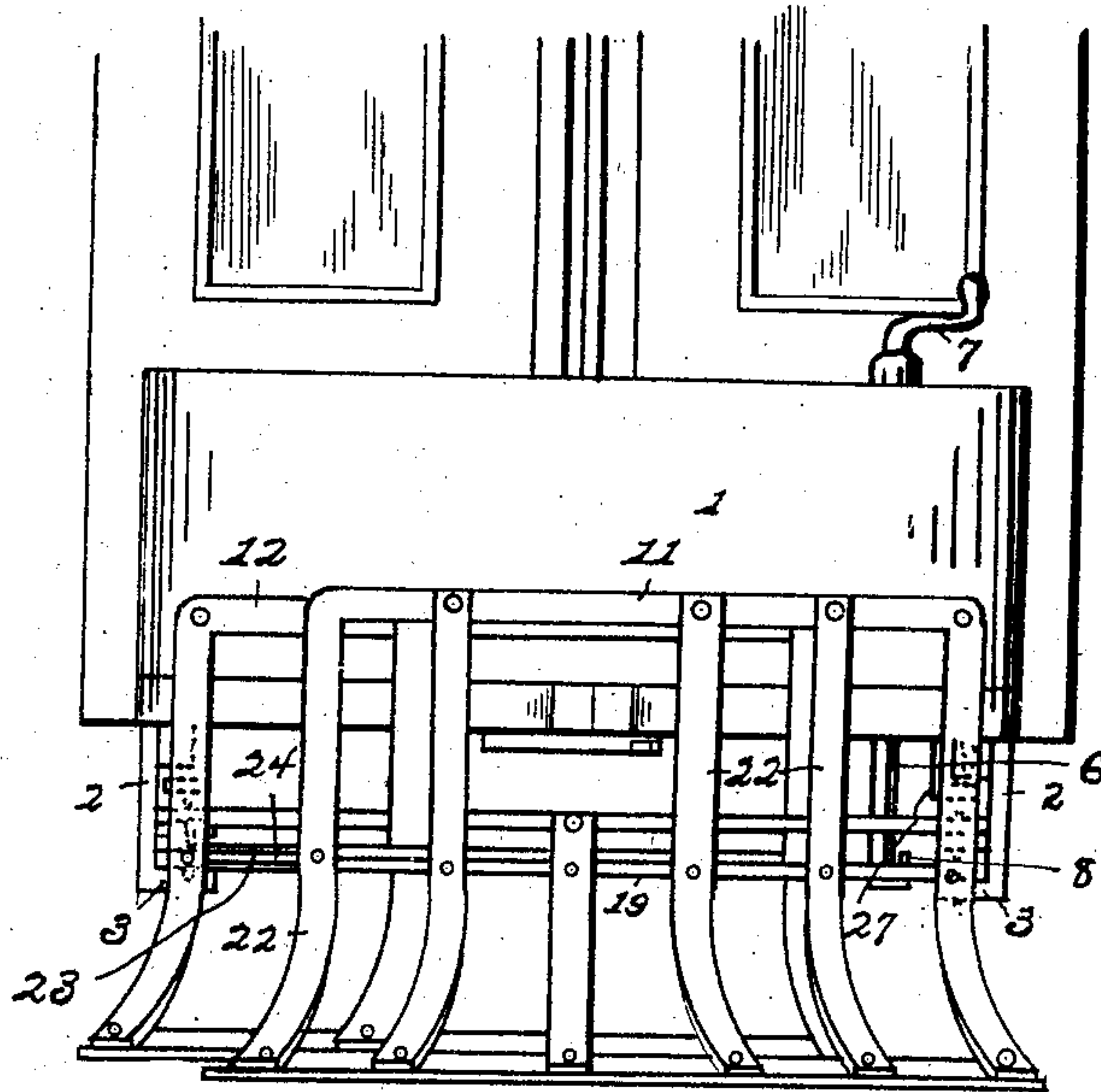
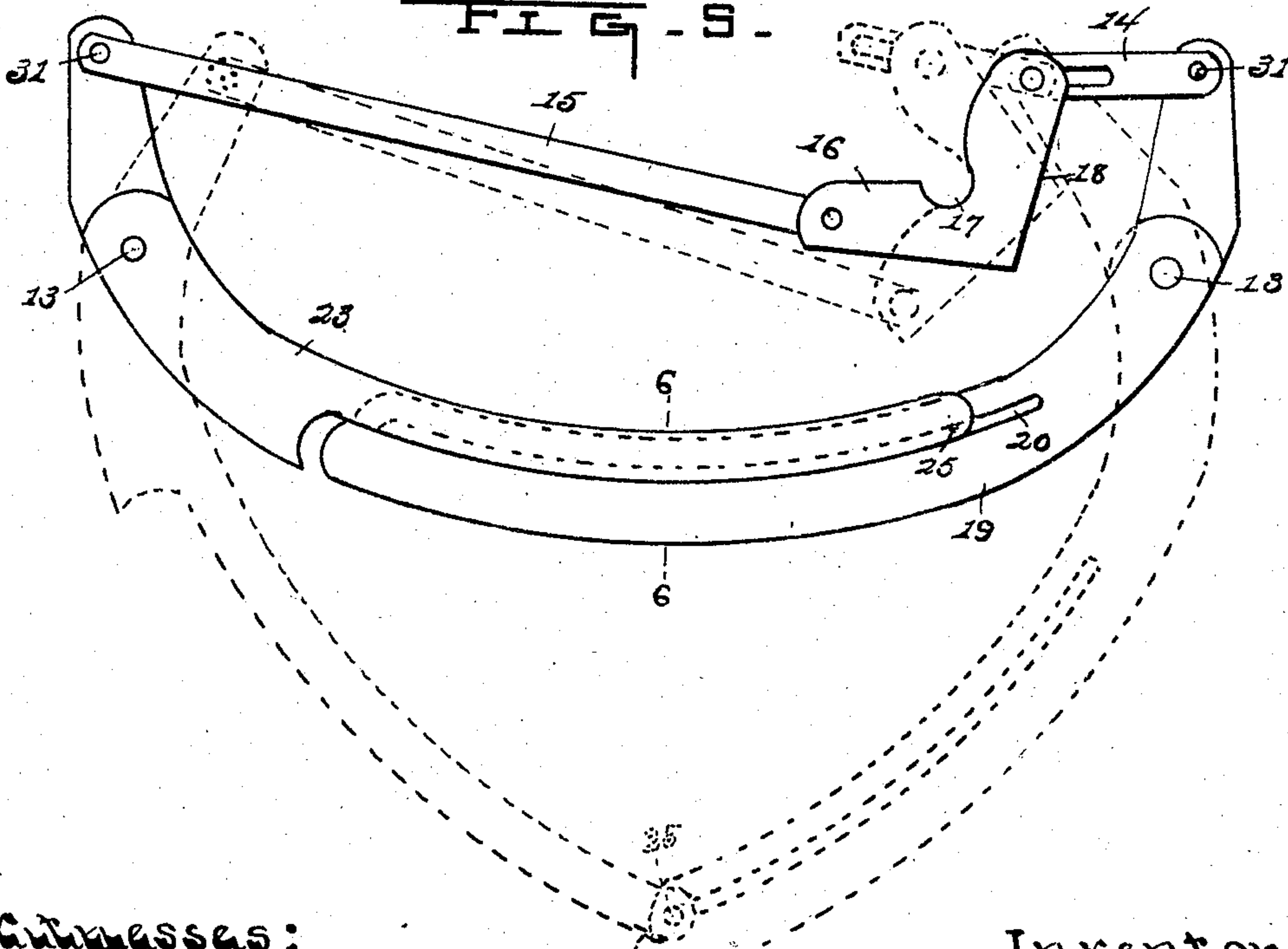


FIG - 5 -



Witnesses:

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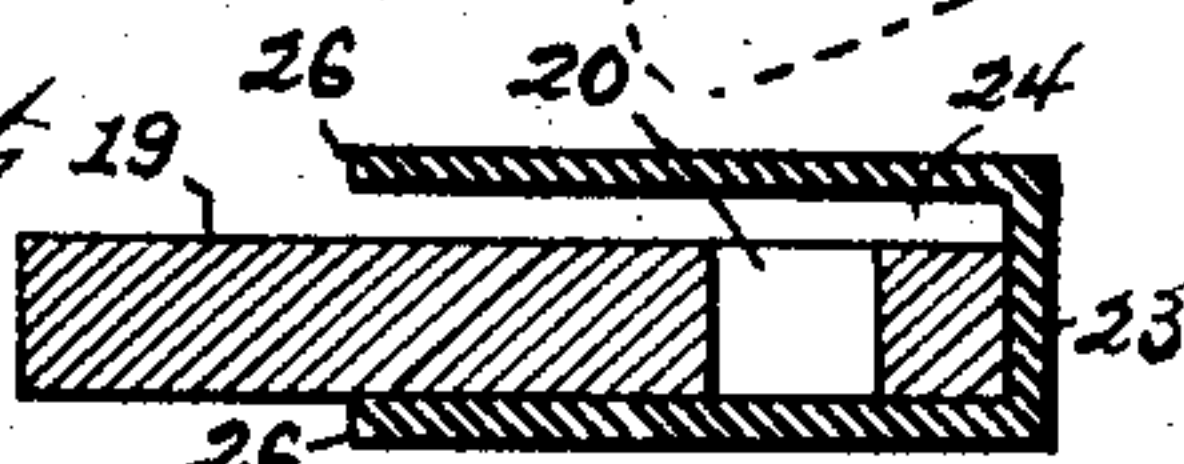


FIG - 6 -

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# UNITED STATES PATENT OFFICE.

SUMMERS F. BECKWITH, OF CHARLESTON, WEST VIRGINIA.

## FENDER.

SPECIFICATION forming part of Letters Patent No. 790,024, dated May 16, 1905.

Application filed September 20, 1904. Serial No. 225,181.

*To all whom it may concern:*

Be it known that I, SUMMERS F. BECKWITH, a citizen of the United States of America, and a resident of Charleston, county of Kanawha, and State of West Virginia, have invented certain new and useful Improvements in Fenders, of which the following is a specification.

My invention relates to new and useful improvements in fenders, and more particularly to a fender for cars and other vehicles; and it consists in the particular construction, arrangement, and combination of parts, which will hereinafter be fully described.

The object of the invention is to provide a simple and cheap fender which may be readily folded close against the car and opened or projected forward by the car operator, as occasion requires.

A further object is to provide a fender which may be adjusted by the car operator to any position between the folded and open positions and which is consequently adapted for manipulation to ease up or reduce the shock of an impact with an object on the track.

A still further object of the invention is to provide a fender which may be folded closely against the end of the car, allowing the draw-bar to project therethrough, and consequently admitting of a second car being coupled thereto without removing the fender.

In describing the invention in detail reference is herein had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a perspective view of the invention, showing the same open and applied to a car. Fig. 2 is an end elevation of a car, showing the attachments for supporting the fender. Fig. 3 is a similar view showing a modification in said attachments. Fig. 4 is a similar view showing the fender attached and in folded position. Fig. 5 is a top plan view of the fender with the bars removed, illustrating it closed or folded in full lines and open in dotted lines; and Fig. 6 is a cross-section on the line 6 6, Fig. 5.

Referring to said drawings, in which like reference-numerals designate like parts throughout the several views, 1 indicates the end of a car on which at each side are secured hang-

ers 2, with one or more horizontal lugs 3, provided with holes 4 therethrough. Having its lower end pivotally mounted in a support 5, depending from the car, is an upright rod 6, which extends through the car-platform and has a handle 7 within convenient reach of the car operator. Fixed upon said rod 6 is a plate or clip 8, having a flat horizontal surface 9 and an upturned end 10, the purpose of which will presently be explained.

The fender consists of two sections 11 and 12, each of which has its outer end pivoted in the horizontal lugs 3 of the hangers 2 with pins or pivots 13 projected through the holes 4. Toggles 14 and 15, pivoted at their outer ends on the extreme outer ends of said sections 11 and 12 at the rear of the pivots 13 by means of pins or pivots 31, have their inner ends pivoted to the opposite ends of an angular arm 16, which is adapted for fitting upon the surface 9 of the clip 8. A semicircular recess 17 in said arm is adapted for engagement with the rod 6, while the edge 18 of said arm engages the inner face of said upturned end 10. The section 11 of said fender consists of a curved horizontal cross-bar 19, having a longitudinal curved slot 20 therein and one or more plain horizontal cross-bars 21, with substantially vertical slats or bars 22 secured thereon, the lower ends of said slats being curved or flared outward, as shown. The section 12 is similar to said section 11, except that instead of the slotted cross-bar 19 it is provided with a curved bar 23 directly opposite the bar 19, having a channel 24 in its outer edge in which said cross-bar 19 is adapted to fit. In the channel 24 in the inner end of said bar 23 is a pivoted roller 25, which travels within the slot 20 in the bar 19 as said sections are being opened and closed. Said roller is placed in position by springing the parallel edges 26 of said bar 23 apart and inserting the roller in the slot and allowing said edges 26 to spring back in place upon the shaft of said roller. Pivoted lugs 27 are provided for normally hanging suspended vertically above the pivoted ends of said sections, as shown, to prevent the accidental displacement thereof with reference to the lugs 3. Said lugs 27 may, however, be conveniently



swung backward clear of said sections when it is desired to disengage the fender from said lugs 3.

As is apparent, the hangers 2 may be connected by a cross-bar 28, as shown in Fig. 3, if preferred, said bar serving not only as a brace for said hangers, but also as a support for the lower end of the rod 6, in which case the support 5 is dispensed with.

10 A ratchet 29 is fixed upon the rod 6 on the car-platform, and a foot-operated pawl 30 is provided for engaging said ratchet to hold said rod, and consequently the fender, in a stationary position.

15 To operate the fender, the car operator employs the handle 7 to turn the rod 6. The clip 8 being fixed to said rod 6 and the arm 16 being mounted upon said clip, said arm is turned when said rod is turned, thus through  
20 the toggles 14 and 15 causing the sections 11 and 12 to move one upon the other, the roller 25 traveling in said slot 20. As is apparent, when the sections of the fender are wholly opened said roller fits against the extreme  
25 outer end of said slot 20, and said sections are prevented from separating farther, and when said sections are folded together they lie flat one against the other, with the bar 19 within the channel 24 in the bar 23.

30 I have described my invention more or less in detail; but it is obvious that various slight changes and alterations may be made in the general construction and arrangement of parts comprising the invention without departing  
35 from the general spirit and scope thereof. Hence I do not wish to limit myself to the precise construction and arrangement of parts herein shown and described.

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

1. In a fender, the combination with the end of a car, of hangers fixed on said car end at each side thereof, substantially vertical fender-sections pivoted at their outer ends in said  
45 hangers, a longitudinal horizontal bar provided with a longitudinal slot therein carried by one of said sections, a longitudinal horizontal bar having a longitudinal channel in its  
50 outer face carried by the other of said sections, a pivoted roller in the channel of the last-mentioned bar and traveling in the slot of the first-mentioned bar, said last-mentioned bar adapted for embracing said first-mentioned  
55 bar when said sections are folded together, and means for operating said sections, substantially as described.

2. In a fender, the combination with the end of a car, of hangers fixed on said car end at each side thereof, substantially vertical fender-sections pivoted at their outer ends in said  
60 hangers, a longitudinal horizontal bar, having a longitudinal slot therein, carried by one of said sections, a longitudinal horizontal bar having a longitudinal channel therein carried by  
65 the other of said sections, a pivoted roller in the channel of the last-mentioned bar and traveling in the slot of the first-mentioned bar, said last-mentioned bar adapted for embracing said first-mentioned bar when said sections  
70 are folded together, a suitably-supported rod having a handle on its upper end extended vertically through the car-platform, a clip fixed on the lower end of said rod, and means intermediate said clip and said fender-sections  
75 whereby, when said vertical rod is turned, said sections are actuated to turn on their pivots, substantially as described.

3. In a fender, the combination with the end of a car, of hangers fixed on said car end at each side thereof, substantially vertical fender-sections pivoted at their outer ends in said  
80 hangers, means connecting said sections for causing them to slide one upon the other while being adjusted to different positions with relation to each other, and means for operating said sections, substantially as described.

4. In a fender, the combination with the end of a car, of hangers fixed on said car end at each side thereof, substantially vertical fender-sections pivoted at their outer ends in said  
90 hangers, a longitudinal horizontal bar provided with a longitudinal slot therein carried by one of said sections, a longitudinal horizontal bar having a longitudinal channel in its  
95 outer face carried by the other of said sections, a pivoted roller in the channel and traveling in the slot of the first-mentioned bar, a suitably-supported rod having a handle on its upper end extended vertically through the car-platform, a clip fixed on the lower end of said  
100 rod, an angular arm removably fitted upon said clip so as to turn therewith, and toggle-arms pivoted at their inner ends to the opposite ends of said angular arm and pivoted at  
105 their outer ends to the outer ends of said fender-sections, substantially as described.

Signed by me in the presence of two subscribing witnesses.

SUMMERS F. BECKWITH.

Witnesses:

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W. H. BELSCHES.