

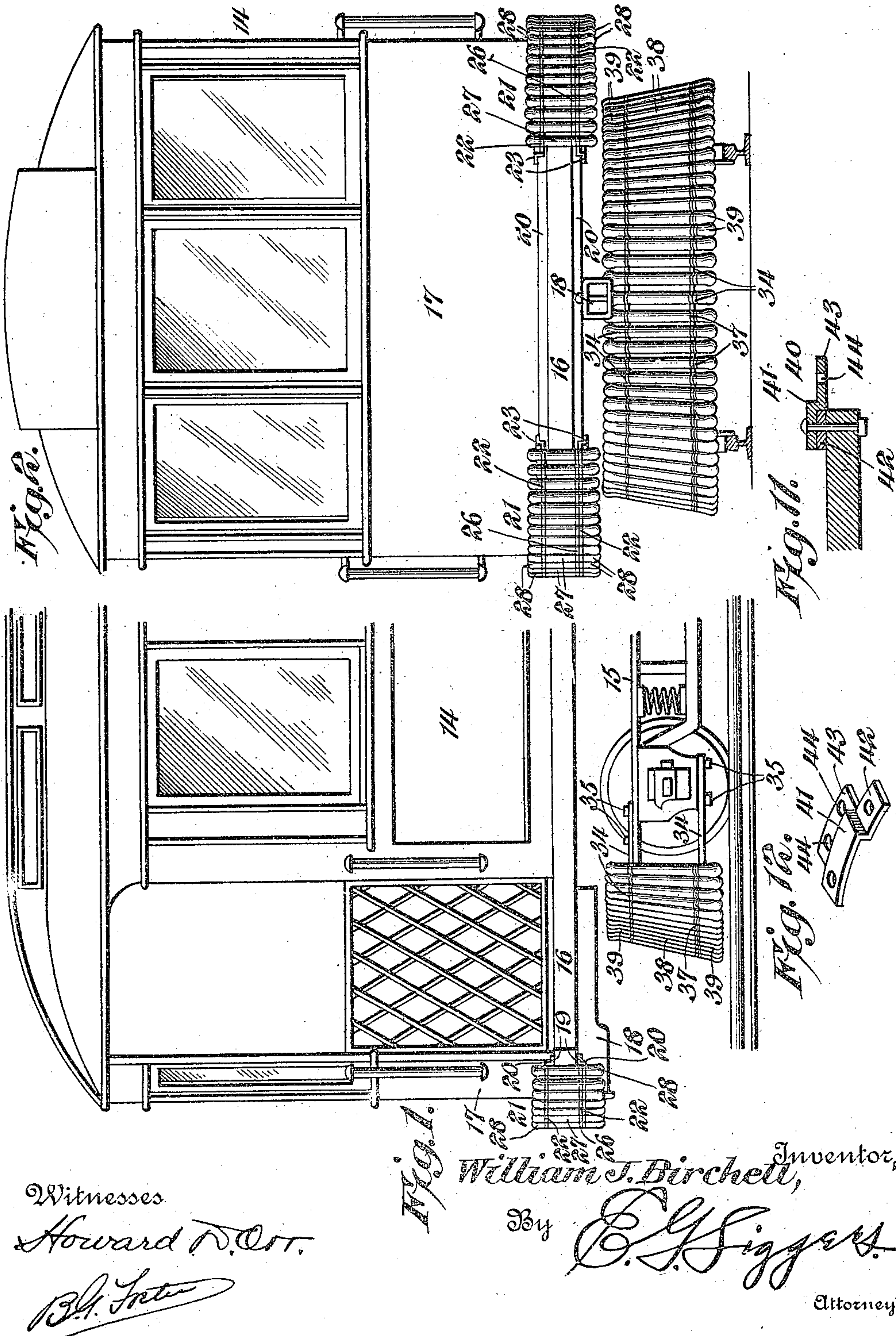
No. 896,351.

W. J. BIRCHELL.
FENDER.

PATENTED AUG. 18, 1908.

APPLICATION FILED DEC. 28, 1907

3 SHEETS—SHEET 1.



Witnesses
Howard D. Ott.
B. H. Finner

Fig. 1
William J. Birchell, Inventor,
By E. J. Finner, Attorney

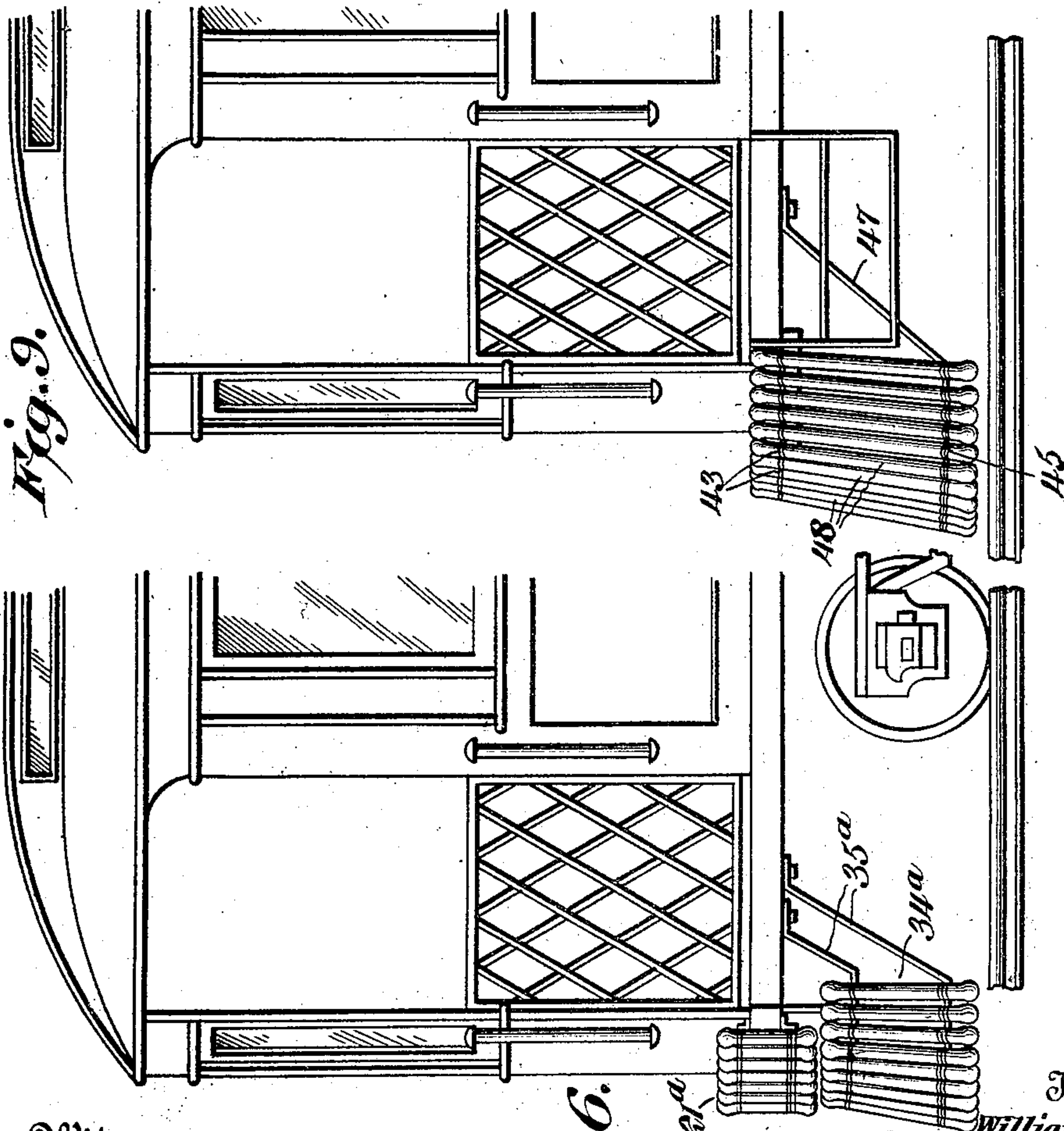
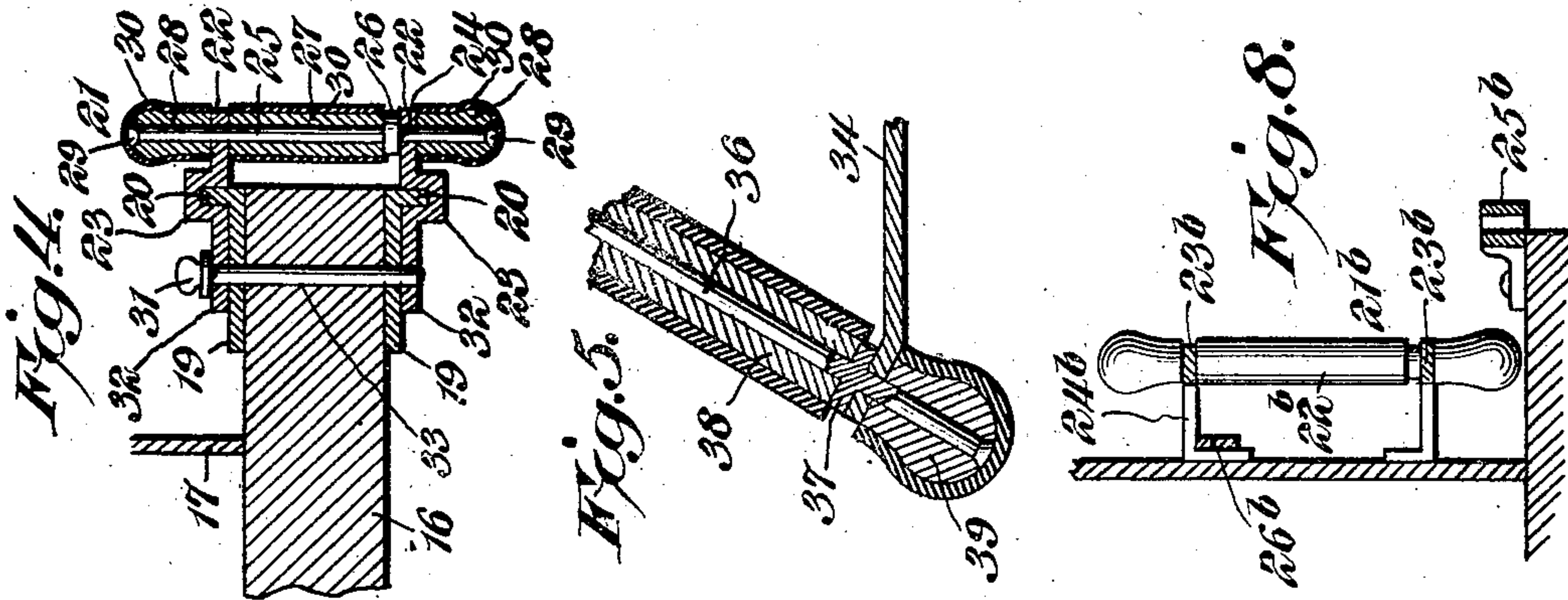
No. 896,351.

W. J. BIRCHELL.
FENDER.

PATENTED AUG. 18, 1908.

APPLICATION FILED DEC. 28, 1907.

3 SHEETS—SHEET 3.



Witnesses
Howard D. Orr
B. J. [Signature]

Fig. 6.

Inventor,
William J. Birchell
By E. J. Siggel
Attorney

UNITED STATES PATENT OFFICE.

WILLIAM JAMES BIRCHELL, OF LOS ANGELES, CALIFORNIA.

FENDER.

No. 896,351.

Specification of Letters Patent.

Patented Aug. 18, 1908.

Application filed December 28, 1907. Serial No. 408,377.

To all whom it may concern:

Be it known that I, WILLIAM JAMES BIRCHELL, a citizen of the United States, residing at Los Angeles, in the county of Los Angeles and State of California, have invented a new and useful Fender, of which the following is a specification.

The present invention relates to improvements in car fenders or pilots, and in one aspect is an improvement on the structure disclosed in the Patent No. 798,593, granted to me on September 5, 1905, but there are features however, not limited to the particular type of structure therein disclosed.

The principal object of the present invention is to provide a novel and improved roller mounting which can be cheaply manufactured, readily assembled, and is applicable to any well known type of car. As is well known, couplers are supplied upon many of the well known types of motor cars, and these cars can be used alone or may form part of a train.

Another and very important object of the present invention is to provide a fender, which, when the coupler is not in use, will extend in advance of the same, and thus constitute a guard thereover, said coupler being constructed, however, so that in case the car is coupled to another, the fender can be displaced to permit the coupling to be used without interference.

Several embodiments of the invention are disclosed in the accompanying drawings, wherein:—

Figure 1 is a side elevation of the preferred form of construction. Fig. 2 is a front elevation of the same. Fig. 3 is a top plan view. Fig. 4 is a sectional view on the line 4—4 of Fig. 3. Fig. 5 is a detail sectional view through a portion of the lower fender member. Fig. 6 is a side elevation of a slightly modified form of construction. Fig. 7 is a front elevation of still another embodiment of the invention. Fig. 8 is a vertical sectional view therethrough substantially on the line 8—8 of Fig. 7. Fig. 9 is a side elevation of another form of the fender, and is more particularly an improvement on the structure disclosed in the former patent, to which attention has been called. Fig. 10 is a top plan view of the upper frame bar of this embodiment of the invention. Fig. 11 is a sectional view therethrough and through the platform to which it is applied. Fig. 12 is a detail perspective view of one of the sec-

tions of said frame bar. Fig. 13 is a plan view of the lower frame bar.

Similar reference numerals designate corresponding parts in all the figures of the drawings.

Referring first to the embodiment disclosed in Figs. 1-5 inclusive, the car body, which is designated generally by the reference numeral 14, is supported on trucks, a portion of one of which is shown and is designated 15, said car body having the usual platform 16 and dash 17, the dash being disposed in rear of the front edge of said platform. A coupler 18 of any suitable construction is located below the platform.

Curved upper and lower guides or tracks 19 are secured to the front end of the platform in advance of the dash, and have offset guide flanges 20 at their outer edges. Slidably mounted on these tracks or guides and movable toward and from each other, are fender sections 21. Each of these fender sections comprises upper and lower frame bars 22 having guideways 23 that receive the flanges 20. The frame bars project beyond the platform and the tracks and have journal bearings 24 in which are rotatably mounted upright shafts 25 that project above and below the frame. Each of these shafts has a flange 26 that rests upon the lower frame bar, and thus prevents the downward movement of the shaft. A roller section 27 is located on each shaft between the frame bars, and upper and lower roller sections 28 are located on the projecting ends of the shafts, being held in place by heads 29 formed on the ends of the shafts by upsetting the same. It will be observed that the end roller sections are preferably enlarged or in the form of knobs. These various roller sections may be covered with cushioning material 30, such as rubber or the like. In order to hold the fender sections in different positions, pins 31 are employed that pass downwardly through ears 32 carried by the frame bars 22. These pins are arranged to engage in openings 33 formed in the platform, and tracks 19. With this construction, it will be evident that when the car is used alone, the sections of the fender member can be abutted, in which case, a continuous roller fender is formed around the front end of the platform in advance of said platform, and in advance of the coupler. If, however, it is desired to couple the car to another, the fender sections can be separated, thus exposing the coupler and permitting its

use without interference. A lower fender member is also employed, which comprises upper and lower frame bars 34 secured to the truck 15, as shown at 35 and located below the platform in advance of the truck. The frame bars 34 have bearings in which shafts 36 are located, and said shafts, as shown in Fig. 5, are each provided with a flange 37 resting on the lower bar and constituting a support for the shaft. An intermediate roller 38 is located on the shaft between the upper and lower bars, and upper and lower roller sections 39 are mounted on the ends of the shaft. These various sections can be cushioned, as shown. With this construction therefore, not only is a fender provided in advance of the platform and the coupler, but another fender or fender member is disposed beneath the platform in advance of the truck.

Instead of locating the lower fender member in rear of the upper member, as illustrated in Fig. 1, said lower fender member can be arranged directly below the front end of the platform, as shown in Fig. 6. In this embodiment of the invention, the upper fender member 21^a is formed of sections and corresponds in all respects to the corresponding fender member before described. The lower member 34^a is constructed to correspond with the above described lower member, but the frame bars instead of being secured to the truck may be connected by suitable braces 35^a to the under side of the car.

A slightly different embodiment of the invention is shown in Figs. 7 and 8. In this form of construction, the upper fender member is composed of sections 21^b, comprising rollers 22^b, constructed in the manner already described and journaled in upper and lower frame bars 23^b. Instead of being slidably mounted, the sections are detachably supported on the front end of the platform, the upper frame bars 23^b having rearwardly and downwardly extending hooks 24^b that engage in keepers 25^b secured to the platform. Other keepers 26^b, located on the dash, are arranged to receive the hooks 24^b when they are detached from the keepers 25^b. Thus as illustrated in Fig. 7, the sections can be placed in advance of the platform, in which case, they are in front of the coupler or may be detached from said platform, and mounted upon the dash, where they are out of the way and will not interfere with the coupling of the car to another. In this type of construction, a lower fender member 27^b is employed that may be arranged as shown either in Figs. 1 or 6.

Still another modification of the invention is disclosed in Figs. 9-13 inclusive. In this modification, but one fender member is employed that is mounted directly on the front end of the car. A support is employed comprising an upper frame bar 40 that is mount-

ed on the platform and comprises sections 41. Each of these sections, as shown in Figs. 10, 11 and 12, has one end 42 that underlaps the adjacent end of the next section so that the fasteners passing through the upper section, also pass through the end of the adjacent section. The sections furthermore have outstanding flanges 43 in which are formed bearings 44. The lower frame bar 45 may be of any suitable construction, and is provided with bearings 46. This lower bar is suitably reinforced by braces 47 extending to the under side of the car body. Rollers 48, constructed in the manner already described, are journaled on the frame bars and extend from the platform of the car to positions slightly above the track and road-bed.

From the above, it will be evident that a simple and comparatively inexpensive fender is produced which can be readily applied to practically any type of motor car, and in this connection, it is to be understood that while the fenders have been disclosed herein as curved, they may be made V-shaped or of any other suitable contour desired.

From the foregoing, it is thought that the construction, operation and many advantages of the herein described invention will be apparent to those skilled in the art, without further description, and it will be understood that various changes in the size, shape, proportion, and minor details of construction, may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

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

1. In a fender, the combination with a frame having upper and lower bearings, of a shaft journaled in the bearings and having integral terminal portions projecting above and below the same, and separate roller sections mounted on the shaft between and above and below the bearings.

2. In a fender, the combination with a frame having upper and lower bearings, of a rotatable shaft journaled in the bearings and having end portions rotatable therewith and projecting above and below the bearings, a roller section mounted on the shaft between the bearings, and separate upper and lower roller sections mounted on the upper and lower ends of the shaft, said shaft having means for retaining said sections in place.

3. In a fender, the combination with upper and lower frame bars having a plurality of bearings, of shafts journaled in the bearings and having flanges that rest upon the lower frame bar, and roller sections located on the shafts between the bars and above and below the same, said shafts having their ends upset to retain the upper and lower roller sections in place.

4. In a fender, the combination with a car having a coupler located at one end thereof, of a fender mounted on the car and comprising relatively movable frames that are separately carried by the car and are normally held by their connections with the car in advance of the coupler, and rollers journaled solely on the frames, said frames with the rollers thereon being movable to positions to expose the coupler.

5. In a fender, the combination with a car having a platform, of tracks or guides mounted on the ends of the platform transversely of the car, and a fender comprising sections slidable longitudinally on said tracks or guides and movable thereon transversely of the car.

6. In a fender, the combination with a car having a track or guide, of a fender comprising sections movable longitudinally toward and from each other on said track or guide.

7. In a fender, the combination with a car having a track or guide, of a fender comprising frames longitudinally slidably mounted on the track or guide and movable toward and from each other thereon, and rollers journaled on said frames.

8. In a fender, the combination with a car

having a platform, of upper and lower tracks carried thereby transversely thereof, and fender sections slidably mounted on the tracks.

9. In a fender, the combination with a car having a platform at one end and a coupler located beneath the platform, of upper and lower tracks carried by the platform, and fender sections slidable toward and from each other on the tracks, said sections being movable between positions in advance of the coupler and positions that expose said coupler.

10. In a fender, the combination with a car having a platform at one end and a coupler located beneath the platform, of tracks arranged on the front end of the platform, frame bars slidably mounted on the tracks and movable toward and from each other, means for holding the frame bars in different positions, rollers journaled on the frame bars, a lower frame disposed below the platform, and rollers journaled thereon.

In testimony, that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

WILLIAM JAMES BIRCHELL.

Witnesses:

GEORGE R. FINCH,
PRICE WICKLIFFE.