E. MELZER. STREET CAR FENDER. APPLICATION FILED JAN. 12, 1903.

NO MODEL.

Fig. 1.

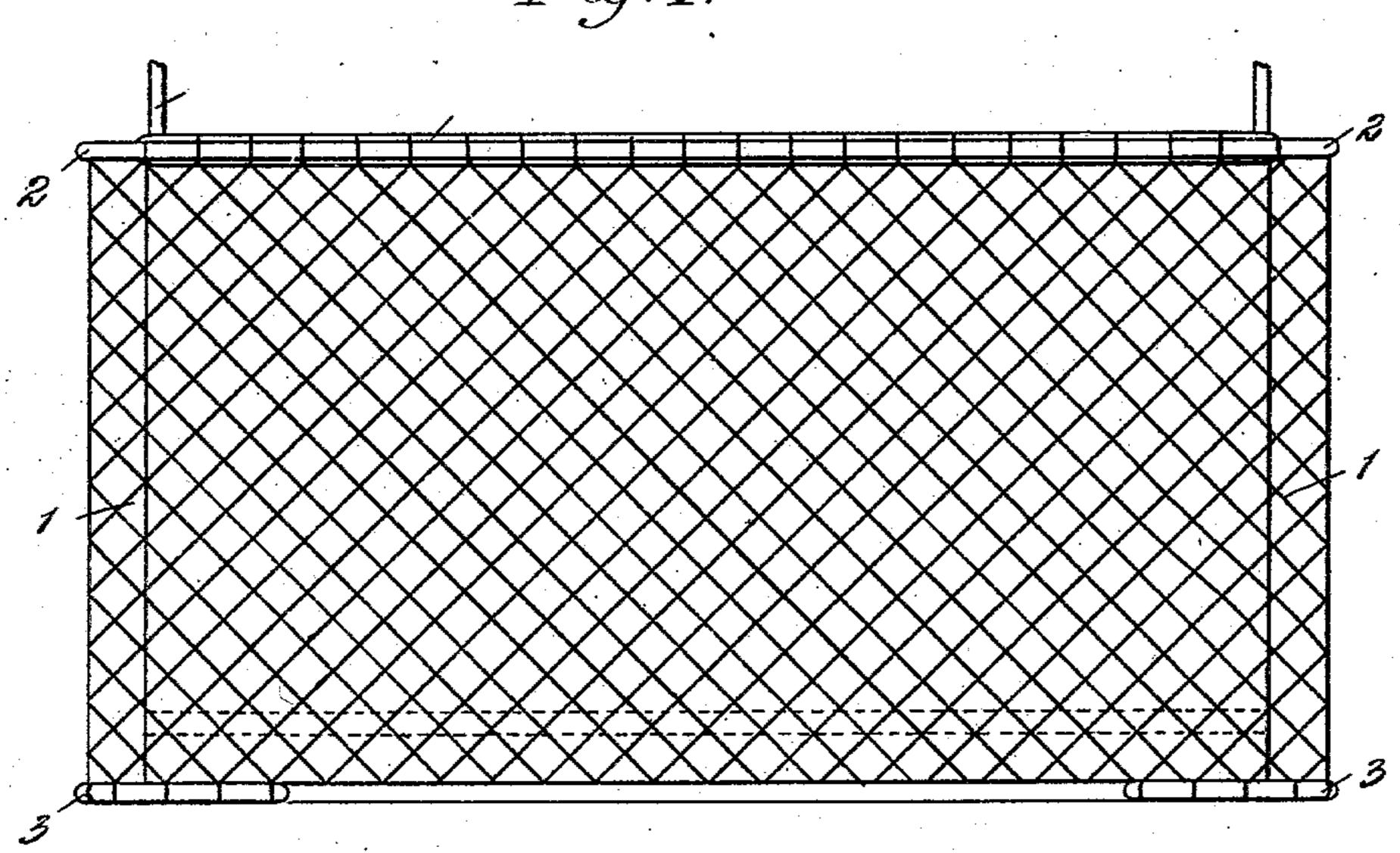
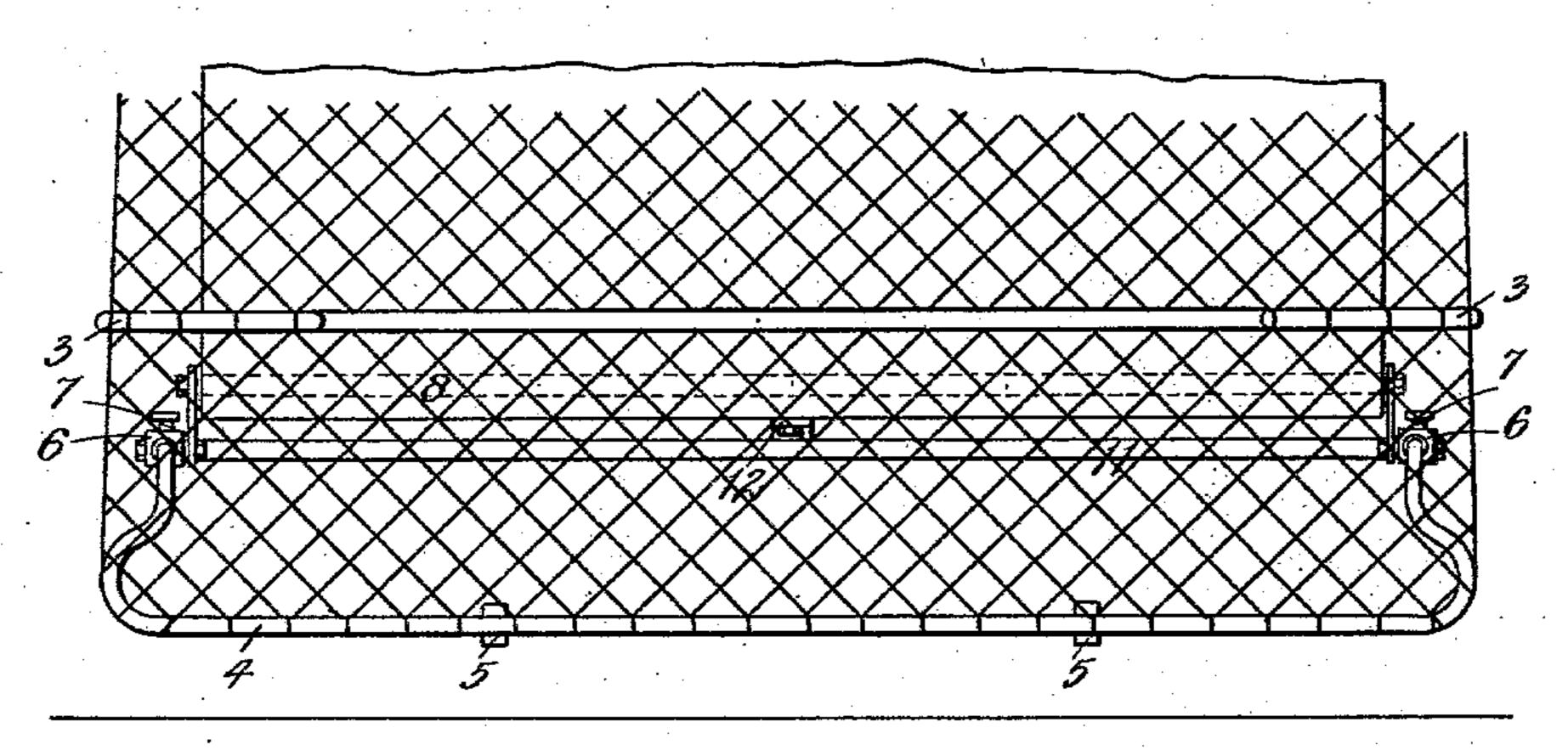
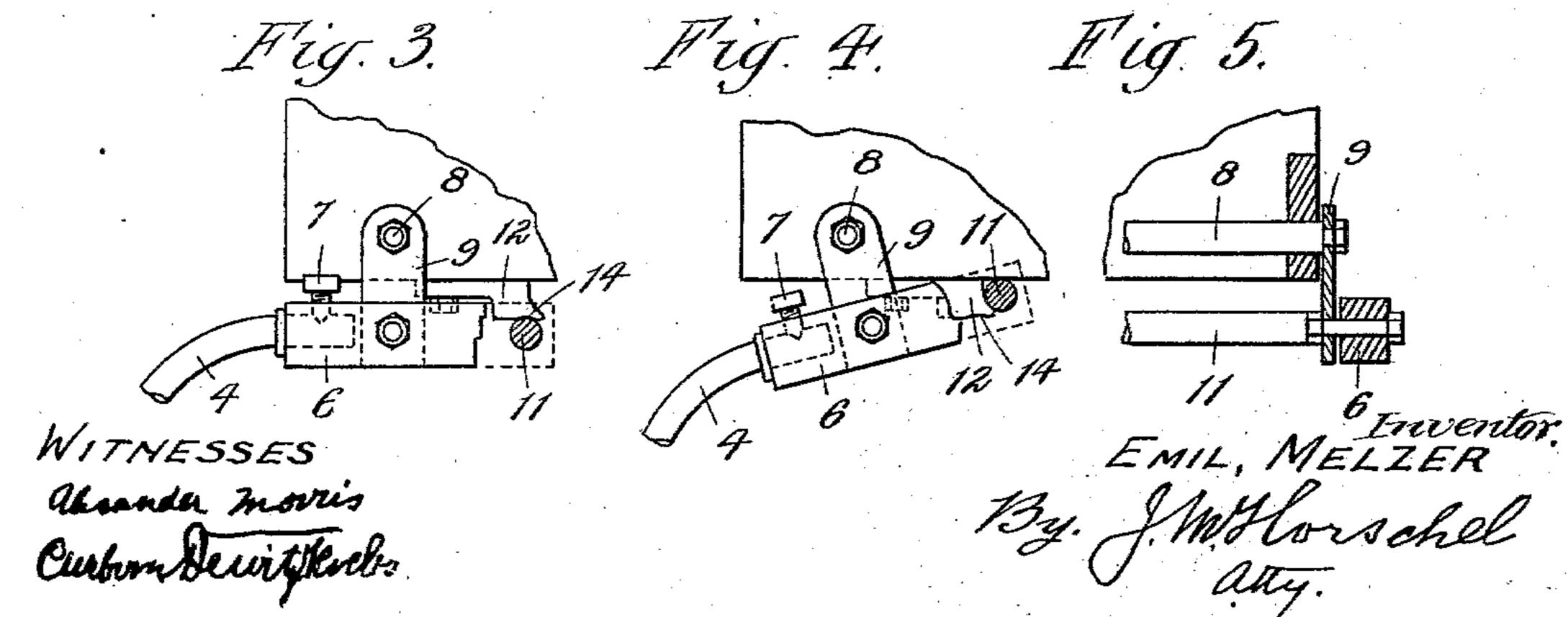


Fig. D.





United States Patent Office.

EMIL MELZER, OF ZELLA, ST. BLASH, GERMANY.

STREET-CAR FENDER.

SPECIFICATION forming part of Letters Patent No. 740,985, dated October 6, 1903.

Application filed January 12, 1903. Serial No. 138,790. (No model.)

To all whom it may concern:

Be it known that I, EMIL MELZER, manufacturer, a subject of the Emperor of Germany, residing at Zella, St. Blasii, Thuringia, in the Empire of Germany, have invented certain new and useful Improvements in Street-Car Fenders, of which the following is a specification.

My invention relates to car-fenders; and my object is to produce a device of this character which is positive and reliable in operation and embodies simplicity, strength, and characters in its manufacture.

cheapness in its manufacture.

With these general objects in view the invention consists in certain novel and peculiar features of construction and combination of parts, as will hereinafter be described and claimed, and in order that the invention may be fully understood reference is had to the accompanying drawings, in which—

Figure 1 is a front view of the upper part of the fender, which is permanently attached to the front wall of the car. Fig. 2 shows both the upper and lower part of the fender, also in a front view, while Figs. 3, 4, and 5 represent details of the disengaging or coupling

device.

With reference to the above drawings I provide at the front wall of the car a strong net-30 ting 1, made of cord, such netting being fastened onto or suspended from a bar or steel tube 2, arranged across such front wall and along part of the side walls at a small distance therefrom by means of a suitable num-35 ber of hooks, rings, or straps attached to said netting or by means of the end meshes thereof. The lower end of said netting is fastened by similar means to the bars or steel tubes 33, arranged at the bottom end of the car at a 40 similar distance therefrom. The bars or steel tubes 2 and 3 3 are at their extreme ends, at the side walls and front walls of the car, respectively bent or turned inwardly. Another netting of similar construction is fastened 45 with one end onto a bow-like steel tube or bar 4, provided with two runners or casters 5, which are adapted to run upon the rails of the tramway as soon as the said bow-like bar 4 is disengaged and drops down upon the sur-50 face of the tramway, while the other or upper end of such netting is lashed or otherwise se- l

cured onto the above-mentioned bars 3 3. The disengagement of the bow-like bar 4 will hereinafter be described. The latter is, with its two extremities, inserted into cheeks 6 and 55 secured by means of adjusting-screws 7. I arrange a cross-axle 8 at the bottom of the car, to which are solidly attached two cheeks or jaws 9, the latter being capable of swinging to and fro, so that the axle 8 will also partly 60 rotate, as such swinging motion takes place. Onto said cheeks or jaws 9 are riveted other two cheeks 6, which are firmly connected with one another below the bottom of the car by means of a cross-bar 11.

At the under side of the car is arranged a nose 12, on which rests the cross-bar 11 when the lower netting is raised or in its normal position, so that the mechanism will be as shown in Figs. 2 and 3. As soon as the least 70 impact to the bow-like bar 4 occurs the cheeks 6, with the bar 11, are pushed back, since the latter rests loosely on nose 12; but such nose 12 may preferably be provided with a slight groove 14 on that part which generally rests 75 on the bar 11 in order to prevent its slipping in consequence of the percussions to which the car is as a rule exposed. It will then not slip without a knock being imparted to the fender from the front.

The above-mentioned lower netting is attached on the one hand to the bars 3 3 and on the other to the bow-like bar 4, forms a sort of mold-shaped netting, and is adapted to catch up any person or other obstruction 85 in front of the car, and the nettings, which contain suitably wide meshes, afford to persons a sure and reliable holdfast in cases of collisions.

The action of the new device therefore is 90 as follows: When the bow-like bar or steel tube 4 at the front of the car receives an impact or strikes an obstruction in front thereof, the bar 11, with the two cheeks 6, is compelled to slip over or leave the projecting 95 nose 14, and the bow-like bar 4, with the netting attached thereto, will drop down by its own weight. The casters or runners s will drop upon and run along the rails, and any person or other obstruction in front of the 100 car will be caught up by the mold-shaped netting.

What I claim as my invention, and desire to secure by Letters Patent of the United

States, is—

5 lower netting attached to the front of the car, a bow-like bar or steel tube fastened to the lower end of the lower netting and being carried at its two extremities by two cheeks, which are movably suspended from a cross-to axle underneath the car, as and for the pur-

pose described and illustrated in the accompanying drawings.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

EMIL MELZER.

Witnesses:

GUSTAV ANDRAE, ALBERT KELBER.