

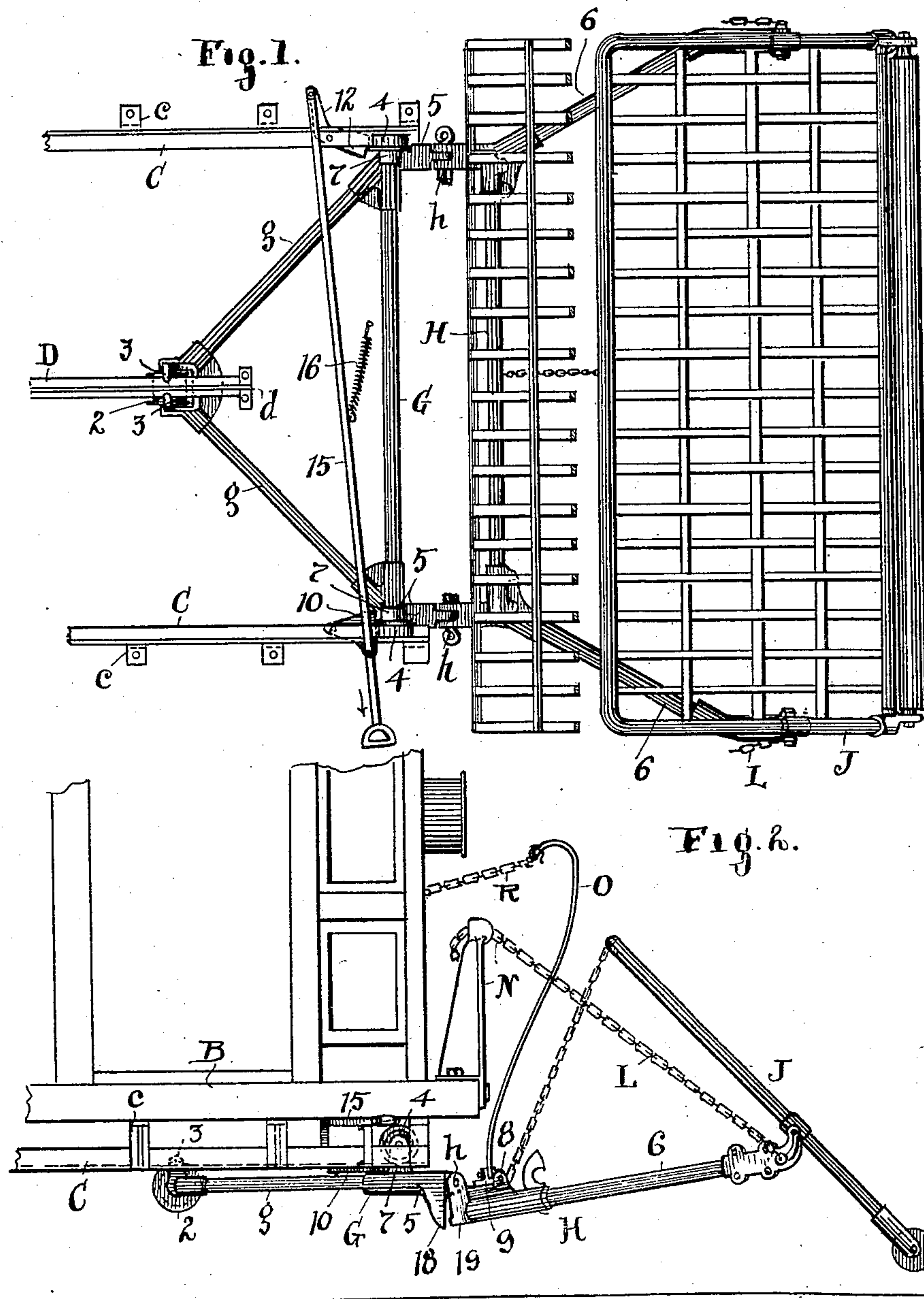
No. 868,103.

PATENTED OCT. 15, 1907.

B. LEV.
CAR FENDER.

APPLICATION FILED JAN. 23, 1907.

2 SHEETS—SHEET 1.



WITNESSES:
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J. C. Musser.

INVENTOR.
Benjamin Lev.
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ATTORNEYS

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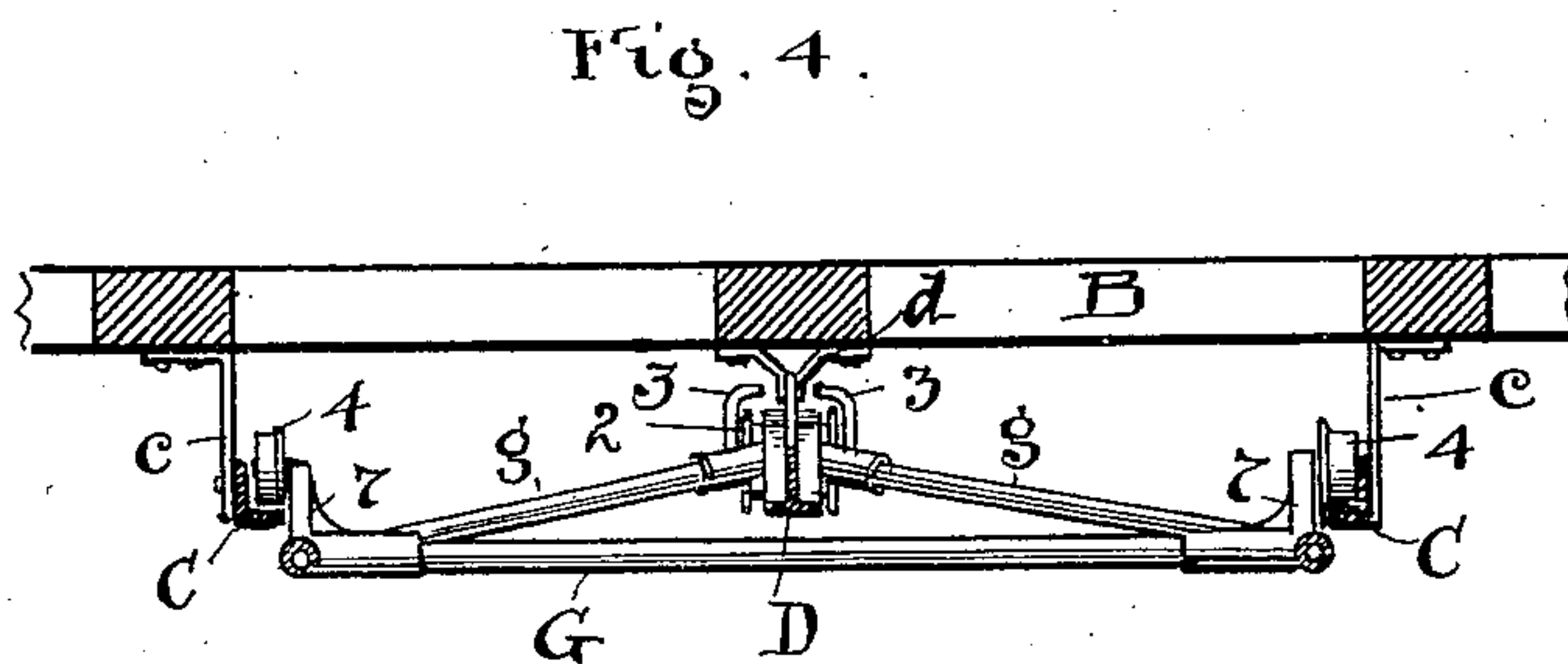
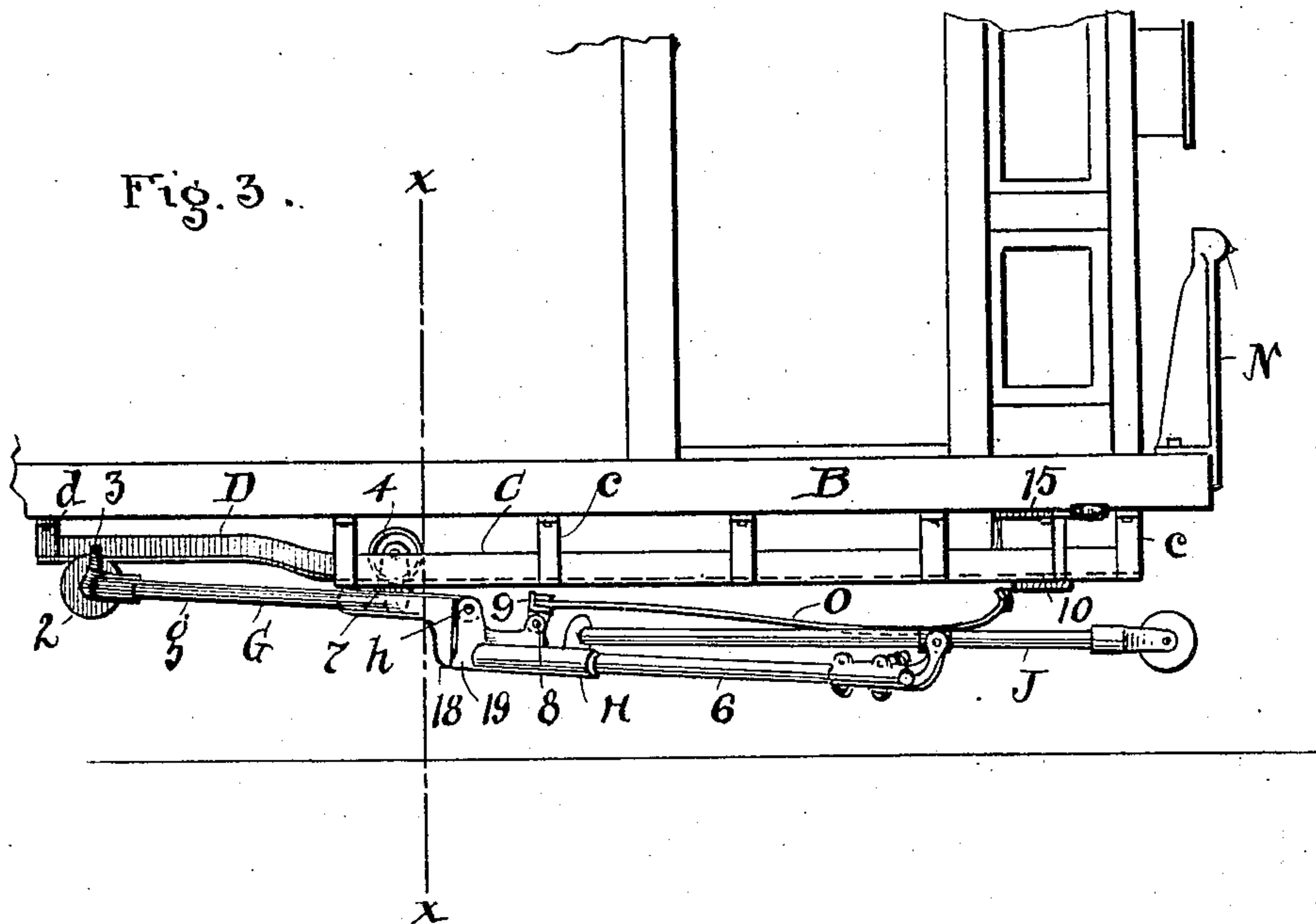
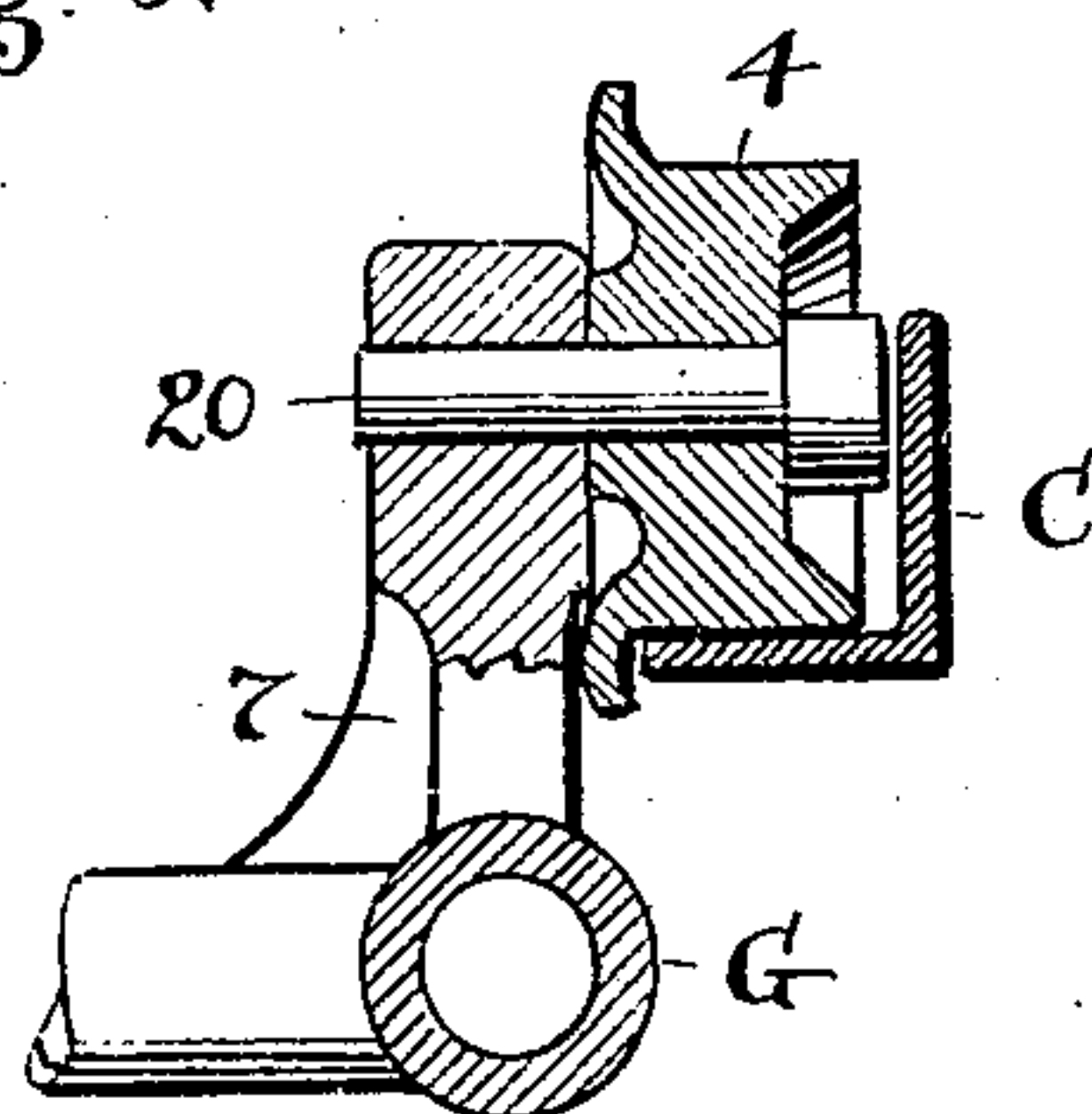


Fig. 5.



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UNITED STATES PATENT OFFICE.

BENJAMIN LEV, OF CLEVELAND, OHIO, ASSIGNOR TO THE ECLIPSE RAILWAY SUPPLY COMPANY, OF CLEVELAND, OHIO, A CORPORATION.

CAR-FENDER.

No. 868,103.

Specification of Letters Patent.

Patented Oct. 15, 1907.

Application filed January 23, 1907. Serial No. 353,614.

To all whom it may concern:

Be it known that I, BENJAMIN LEV, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Car-Fenders, and do declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to car fenders and the invention consists in a fender mechanism adapted to fold and to be run back beneath the end of the car out of the way, all substantially as shown and described and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a plan view of the fender shown as in operation at the front of a car, and Fig. 2 is a side elevation thereof as it appears in Fig. 1. Fig. 3 is a side elevation of one end of the car body and showing the complete fender folded and slid in beneath the car body. Fig. 4 is a cross section on line x, x, Fig. 3, and Fig. 5 is an enlarged sectional detail of a portion of the fender and its supporting rail, as will hereinafter more clearly appear.

The drawings clearly illustrate the essential characteristics of the invention, which is to provide a tilting fender carrier adapted to pick up and safely convey a body that may come in its path, but which also may be folded, as appears in Fig. 3, and be pushed or run back under the car so as to be practically out of the way and leave the car entirely free at its end. This transfer of the fender from the front of the car is highly important for various reasons, such as saving yard or shed room for the cars and enabling them to be placed close together endwise, and also to couple one car to another on the road as frequently is desirable in street service. In such a case a fender can be instantly pushed out of the way of the car to be hauled and a close coupling readily occur to practical railroad men. To these ends the car body or platform B is equipped with angle iron rails C on each side which are supported on hangers c on the bottom of the car body and which form tracks for the fender. Furthermore a T rail D is provided centrally of the car lengthwise and which is suspended by suitable hangers d on a plane parallel with side rails C and adapted to carry the inner end of the guide and supporting frame G. Said frame has sides g converging in V shape from the front of said frame to said middle rail D, whereon the said frame is supported by means of a roller 2 running in contact with the bottom of said rail and over reaching fingers 3 engaged over the top and sides of said rail and slidable thereon. The front frame has rollers 4 running on tracks C, and said tracks or rails C extend

rearward a sufficient distance to house the carrier beneath the car body, but rail D stops short at the front as seen in Fig. 1.

The fender frame H is hinged at h to the front projecting portions 5 of frame G just within the projection of rails C, and said fender carrying frame has arms 6 diverging to a suitable width and position to pivotally engage tilting carrier J thereon. The outer ends of said arms 6 are held in suitable elevation by chains L, adjustable on standards N, and spring fender O is hinged at 8 on frame H and adapted to be folded down upon or over carrier J as seen in Fig. 3. Otherwise chain R holds the fender in raised working position and under spring tension shown in Fig. 2. The said hinge 8 has a rearwardly projecting portion 9 resting back on frame H, which prevents tilting of the fender to the rear further than shown and thus holding it well apart from the car body and under its own spring tension to protect the person thrown against the same.

The guide or supporting frame for the fender mechanism as a whole has this peculiarity, among others, that the inner V shape extremity bears upward against rail D through roller 2 while its front corners bear downward on rails C through rollers 4. Then as the fender mechanism is supported from these front corners, it will be seen that rollers 4 become a fulcrum and the V portion of frame G under rail D a lever to hold said frame and the attached parts in right working relations. The same occurs when the fender mechanism is folded and retired, Fig. 3, but to make this accommodation rail D is bent upward to a higher plane toward its rear end so as to permit the fender mechanism to drop and pass in beneath said rails C and D. Fingers 3 hold the inner end of guide frame G in right working relation to rail D.

Back stops 10 and 12 are provided for the guide frame to keep the respective parts forward in working position and prevent the same from being thrust to the rear when an obstruction is encountered, and said stops are pivoted to turn horizontally beneath rails C into position to engage forward hangers 7 of the guide frame, or to swing away therefrom to permit said frame to be run rearward when storing of the parts beneath the car is required. A transverse rod or bar 15 controls these stops, and is controlled by spring 16 to normally hold said stops in engaging position.

The two frames G and H have opposed vertical shoulders 18 and 19 beneath the hinge which connects them, so that frame H will be horizontally supported and cannot drop beneath that level even if chain L be absent, and said chain serves to hold up the front ends of said arms at whatever level they may be adjusted.

In Fig. 5 I show a simple arrangement for engaging rollers 4 with supporting frame G, or the hangers —7—

therefor, which consists in a spindle 20 loosely inserted through said rollers into said hanger and having a head opposite the vertical flange of rail C and confined thereby, thus making it convenient to remove frame G when occasion requires but holding it in secure work position normally.

What I claim is:—

1. In car fenders, a fender mechanism comprising a spring fender adapted to stand vertically, a tilting carrier and a hinged support for said parts, and a frame having said hinged support engaged with its front and adapted to slide beneath the car body, said spring fender and carrier being foldable.
2. In car fenders, a car with tracks at its bottom and fender mechanism comprising a fender support and a carrier pivotally supported thereon, and a frame adapted to travel on said tracks having said fender support hinged to fold thereon.
3. A car body and tracks lengthwise on the bottom thereof, fender mechanism comprising a foldable fender carrying frame and a support therefor adapted to run on said tracks and convey said frame beneath the body of the car folded on said support.
4. A car body and tracks lengthwise beneath the same, in combination with fender mechanism adapted to be supported at the front of the car comprising a tilting carrier and an upright fender behind the same, and a supporting frame for said mechanism engaged on said tracks.
5. A car body having tracks on the bottom thereof, a supporting frame having rollers running on said tracks and fender mechanism hinged to the front of said frame adapted to fold and to be retired beneath said tracks, said supporting frame having a roller at its center and rear engaging beneath one of said rails.
6. A car body and central and side tracks lengthwise on the bottom thereof, in combination with a fender supporting frame on said tracks having rollers upon the top of

the side tracks and a roller engaging the bottom of the middle track.

7. A car body having side tracks and a central track on its bottom, in combination with a fender supporting frame having a substantially V shaped portion at its rear operatively engaged from beneath with said central track and rollers running on top of said side tracks, and a folding fender mechanism hinged to the front of said supporting frame and carried in a substantially horizontal position thereby.

8. A car body and a central and side track on the bottom thereof, a supporting frame for a car fender adapted to run on said tracks, a fender carrying frame hinged to said supporting frame, a tilting carrier and a fender adapted to fold upon said carrying frame.

9. A car having tracks lengthwise on its bottom, a fender supporting frame adapted to travel on said tracks and having rollers, and means to lock said frame in working position comprising stops adapted to swing laterally behind said rollers, and an operating connection uniting said stops.

10. A car body and tracks on the bottom thereof, in combination with a supporting frame having rollers traveling on said tracks, and stop mechanism for said frame adapted to prevent the thrusting of the frame to the rearward when an obstruction is encountered, said mechanism comprising stops for said rollers and a rod connecting said stops, and fender mechanism supported upon the front of said frame.

11. In car fenders, the combination of a carrier, with a spring fender mounted at the rear thereof and means to hold said spring fender under tension at its free end.

In testimony whereof I sign this specification in the presence of two witnesses.

BENJAMIN LEV.

Witnesses:

R. B. MOSER,
E. M. FISHER.