

(No Model.)

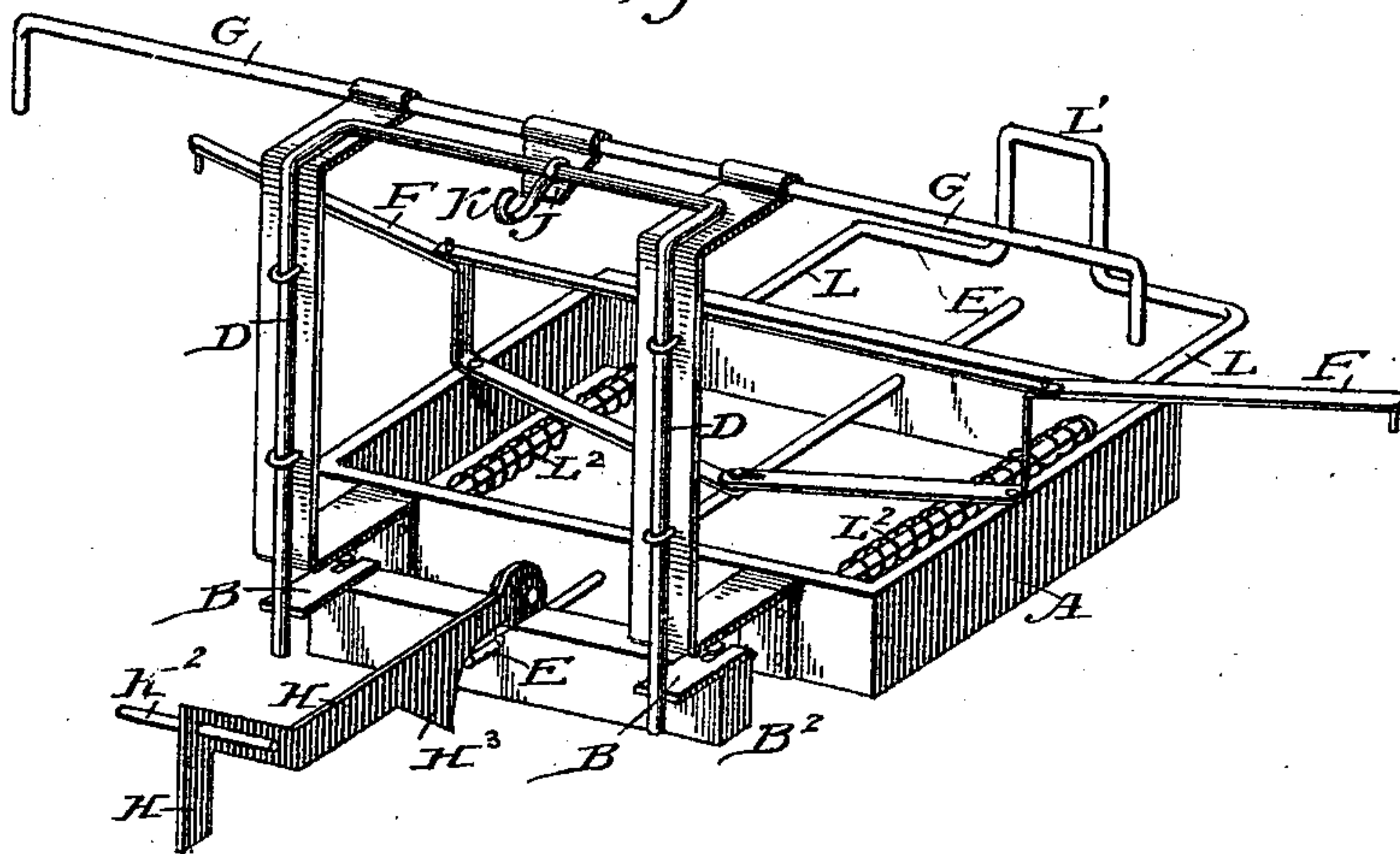
2 Sheets—Sheet 1.

J. A. GENDRON.
CAR COUPLING.

No. 516,158.

Patented Mar. 6, 1894.

Fig. 1.



Witnesses.

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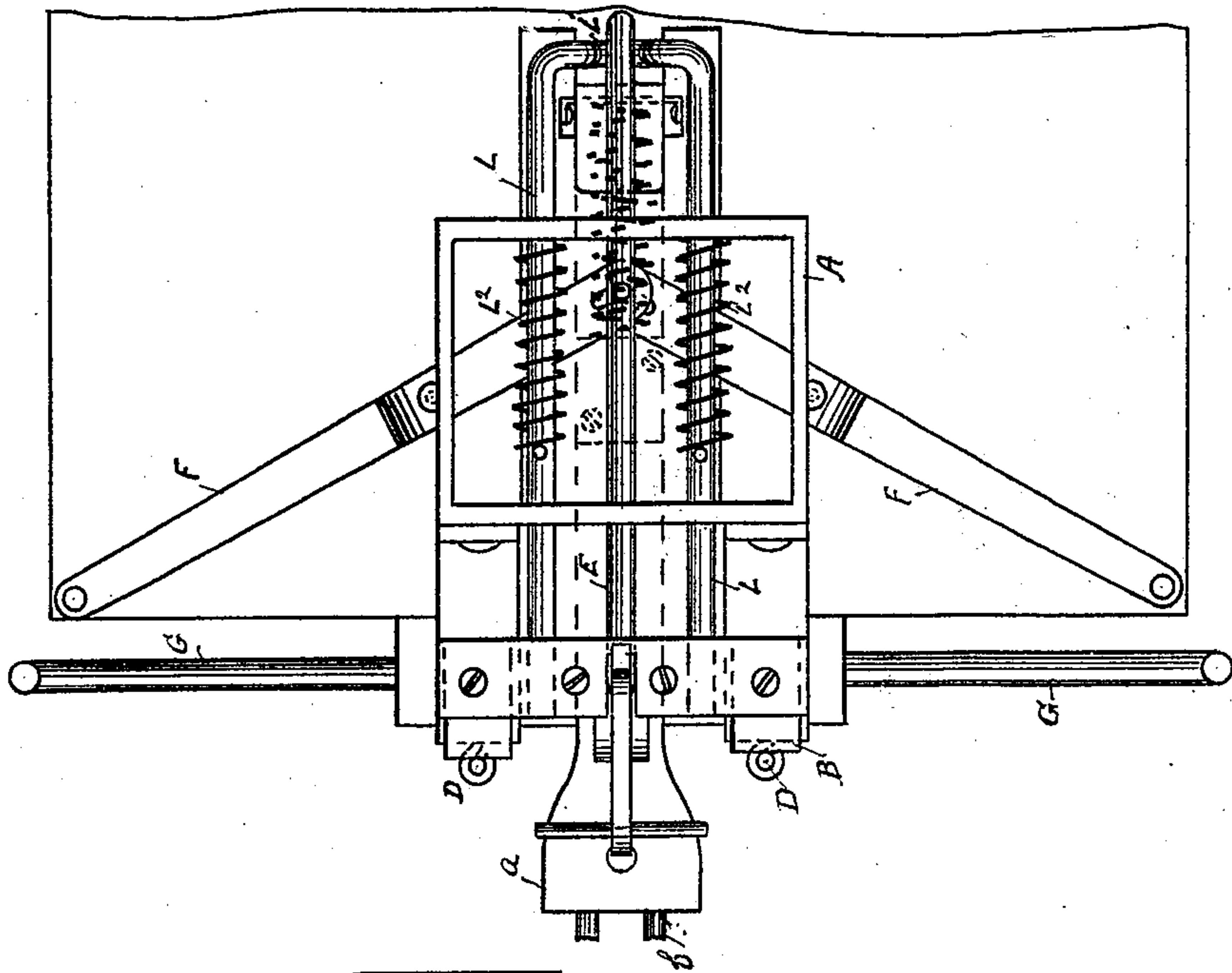


Fig. 3.

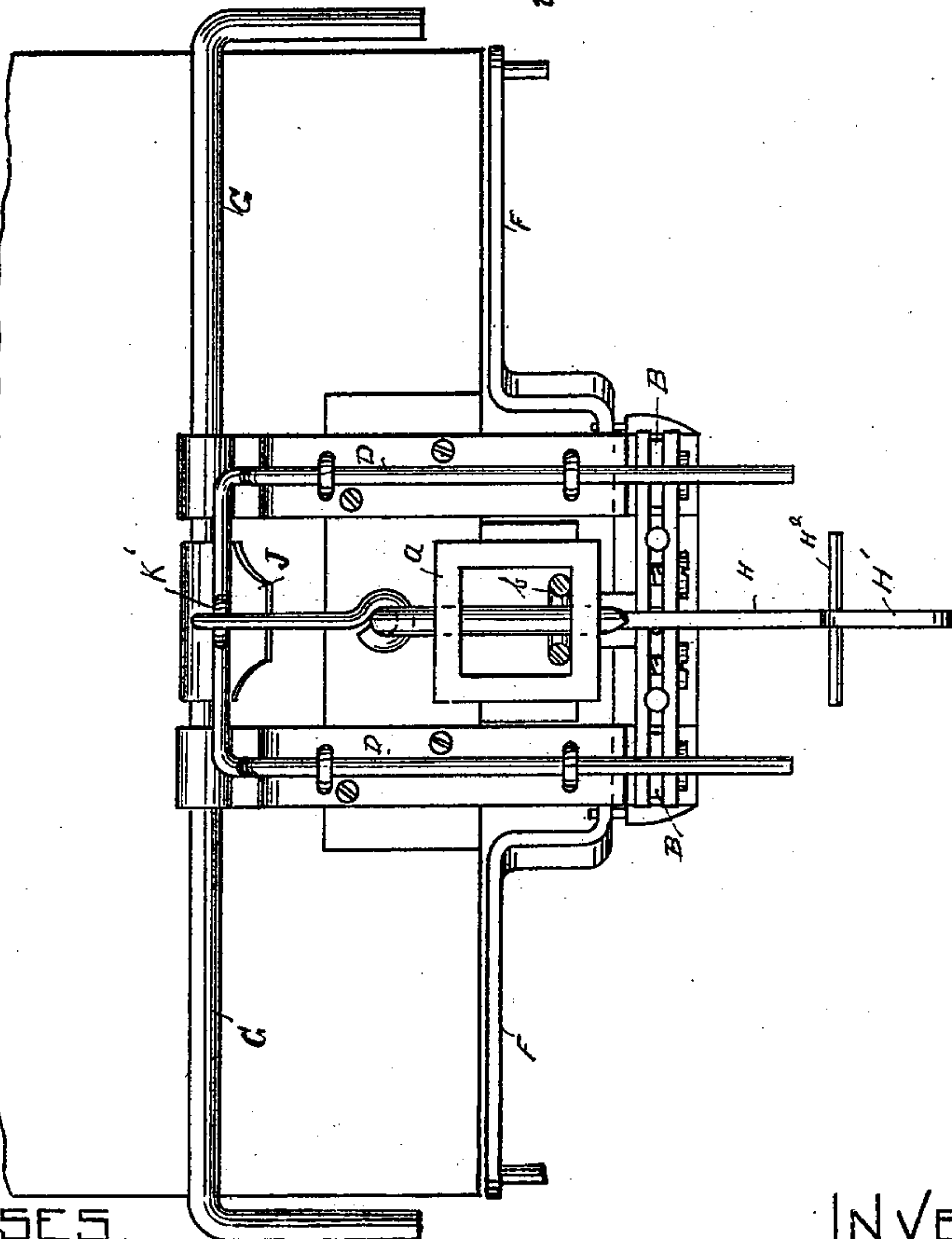


Fig. 2.

WITNESSES.

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UNITED STATES PATENT OFFICE.

JOSEPH AUREL GENDRON, OF FARNHAM, CANADA, ASSIGNOR TO M. H. ST. DENIS, OF SAME PLACE.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 516,158, dated March 6, 1894.

Application filed September 8, 1891. Serial No. 405,135. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH AUREL GENDRON, merchant, of the town of Farnham, district of Bedford, Province of Quebec, Canada, have invented new and useful Improvements in Car-Couplers; and I do hereby declare that the following is a full, clear, and exact description of the same.

The principal object of my invention is to provide means whereby the coupling of railway freight cars having the draw-bar link and pin coupling in ordinary use may be effected by means of levers or handles at the side of the car, thereby avoiding the danger of going between the cars. Since the relative height of draw-bars varies somewhat it is considered important to provide means of holding, raising or lowering the link as required.

My invention relates to the manner of lifting and guiding the ordinary coupling link, providing means of suspending the coupling pin ready to drop into the link, and consists principally in a specially constructed device having one end hinged to an adjustable plate carried in a frame secured to and below the draw-bar timbers, the other end is shaped to hold up the coupling link. Also a device for lifting the coupling pin and causing it to automatically drop into the link to couple the cars.

For full comprehension of this invention reference must be had to the annexed drawings forming part of this specification, in which—

Figure 1 is a perspective view of my improved car coupler detached from the car, having the coupling arm, upheld in the same position as when employed in coupling the cars. Fig. 2 is an end view of the same, attached to a car, showing the arm suspended as when in transit. Fig. 3 is an inverted plan view of the same attached to a car.

The frame A in which my link lifting mechanism is carried is made in a form to be quickly connected with the draw timbers of the car, and may be modified in a form to suit any standard form of car or draw timbers. Devices heretofore designed for this purpose, have, so far as I am aware, failed to insure the dropping of the coupling pin simultaneously with the entrance of the coupling

link. This result, which is absolutely essential to the usefulness of devices of this kind, I obtain by utilizing the movement of the draw bar carrying the pin, caused by the push against it by the draw bar carrying the link.

The arm H is hinged, by a raised strap or lug, to a movable bar B², and has a pendent lug, formed with a curved face, against which the push rod E is pressed by means of either one of the levers F causing the other end of the arm H to rise and lift the coupling link to enter the other draw-bar, which, by its movement against the turned up end L' of the rods L L as the draw-bars meet, will draw back the bearing B from under the guides D D, and allow the coupling pin suspended from the bracket K, to drop into place in the draw-bar or link, thereby coupling the cars. The face H' of the arm H is made at an angle such that as it strikes against the lower edge of the approaching draw-bar it will be forced downward as the link carried upon it enters the approaching draw-bar, thereby allowing the draw-bars to come together. Carried in and extending a suitable distance at each side of the arm H, and near the upper angle of the inclined face H', is the horizontal pin H², upon which the coupling link is lifted and held in position to enter the opposite draw-bar. In order to provide such bearings for the guides D D, holding up the coupling pin, as may be automatically removed to allow the pin to drop as the link reaches its normal place in the draw-bar, I carry the bar B² upon which the slotted bearings B are secured, upon the rods L L pressed forward by coil springs thereon, so that as the rods D D are raised, the bearings B will, by the action of the springs L² be thrown out and support the rods D, D, during the process of coupling, and until the draw-bar carrying the link moves the draw-bar carrying the pin, against the turned up ends L' of the rods L, L, and pulls back the bearings B to allow the guide rod D to drop with the coupling pin. As the face of the approaching draw-bar strikes the inclined face H', the link lifting arm H will usually be forced downward, but in case of engagement of face of draw-bar with the inclined face H', the elastic springs L² coiled

around the rods L L will yield to the pressure and allow the arm H to be pushed backward to allow the coupling to take place, and also avoiding the crushing of the arm H or its bearings. In order to adjust the position of the arm H to fit draw-bars of different lengths, I make the cross-piece or bar B² movable on the rods L, L, so that its position may be changed, and made secure by set screws or other suitable fastenings. By rotary movement of the cranked rod, or rock shaft, G, the lug, or arm, J secured thereon, is brought against the bracket K, which being firmly secured to the guides D, D, raises the coupling pin, and guide rods, D, D, so as to allow the bearings B to come under and support the guide rods and coupling pin.

Having thus described my invention, what I claim, and for which I wish to obtain Letters Patent, is—

1. In combination with the car, the pendulous arm H hinged in the vertical plane of the center line of the draw-bar, to be swung upward to lift and guide the coupling link by pressure of a push rod carried under the draw-bar against a pendent lug or stem of said arm, by means of levers located at the side of the car, all as described and set forth.

2. In combination with the draw-bar of a

car, a device arranged to lift and guide the coupling link into place by means of a vertically movable arm operated by the horizontal movement of a rod being pressed against a lug or stem of the said arm, such pressure being effected by levers located at the sides of the car, substantially as described.

3. The bracket J and guide rods D, D, arranged to be lifted up to hold the coupling pin in suspension to be dropped into the draw-bar and link by the movement of the draw-bar thereunder, as and for the purpose described.

4. In combination with the draw-bar of a car, the rods L, L, having their inner ends L', L', turned up to be acted upon by movement of draw-bar, and carrying on the other ends of said rods, the bearings B, substantially as described.

5. In combination with the draw-bar of a car, the vertically movable bracket or pin lifter, as described, with suitable means of attaching the same to the car, in combination with spring actuated bearings therefor, substantially as set forth.

JOSEPH AUREL GENDRON.

Witnesses:

W. H. FULLER,
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