

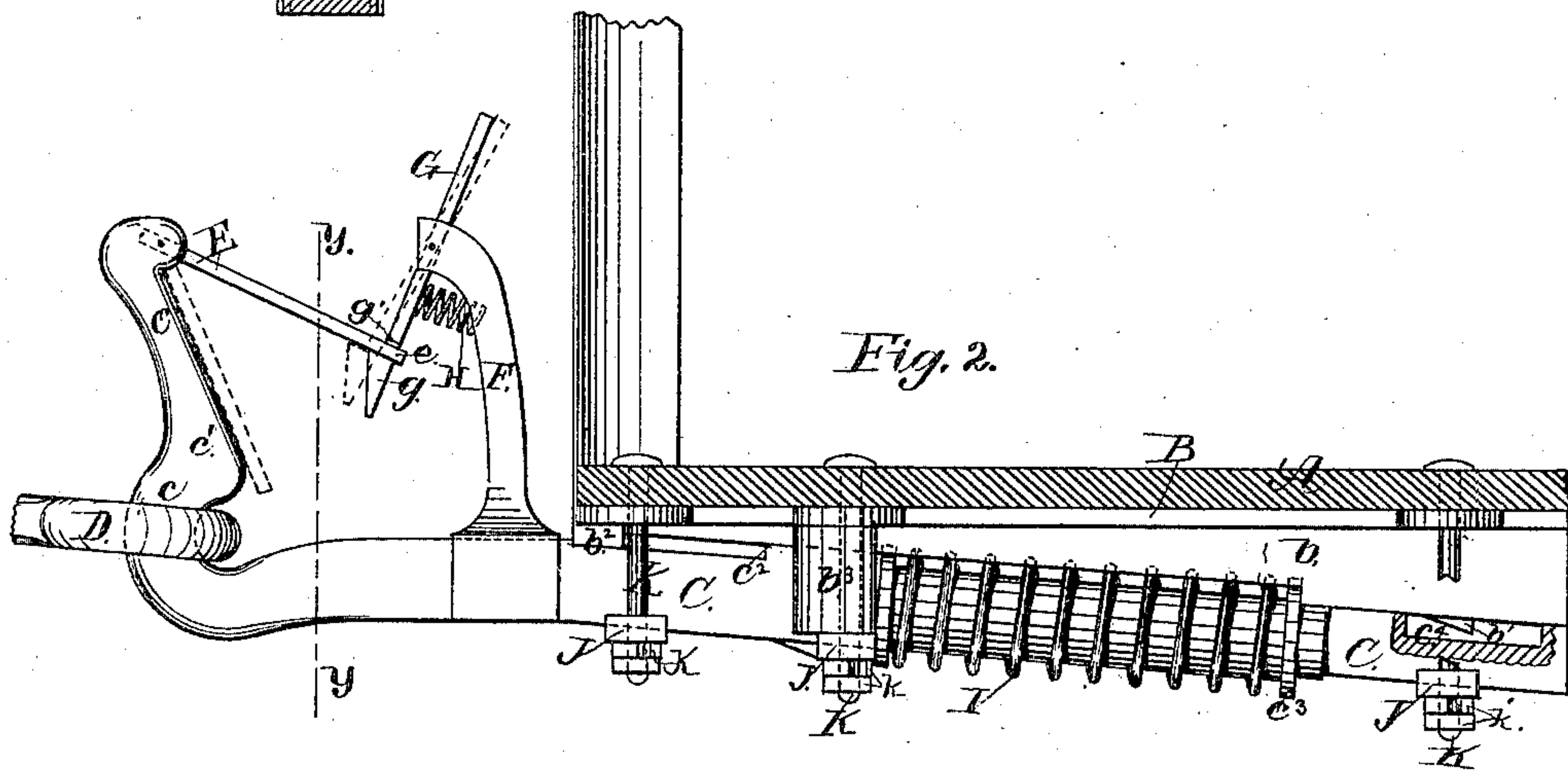
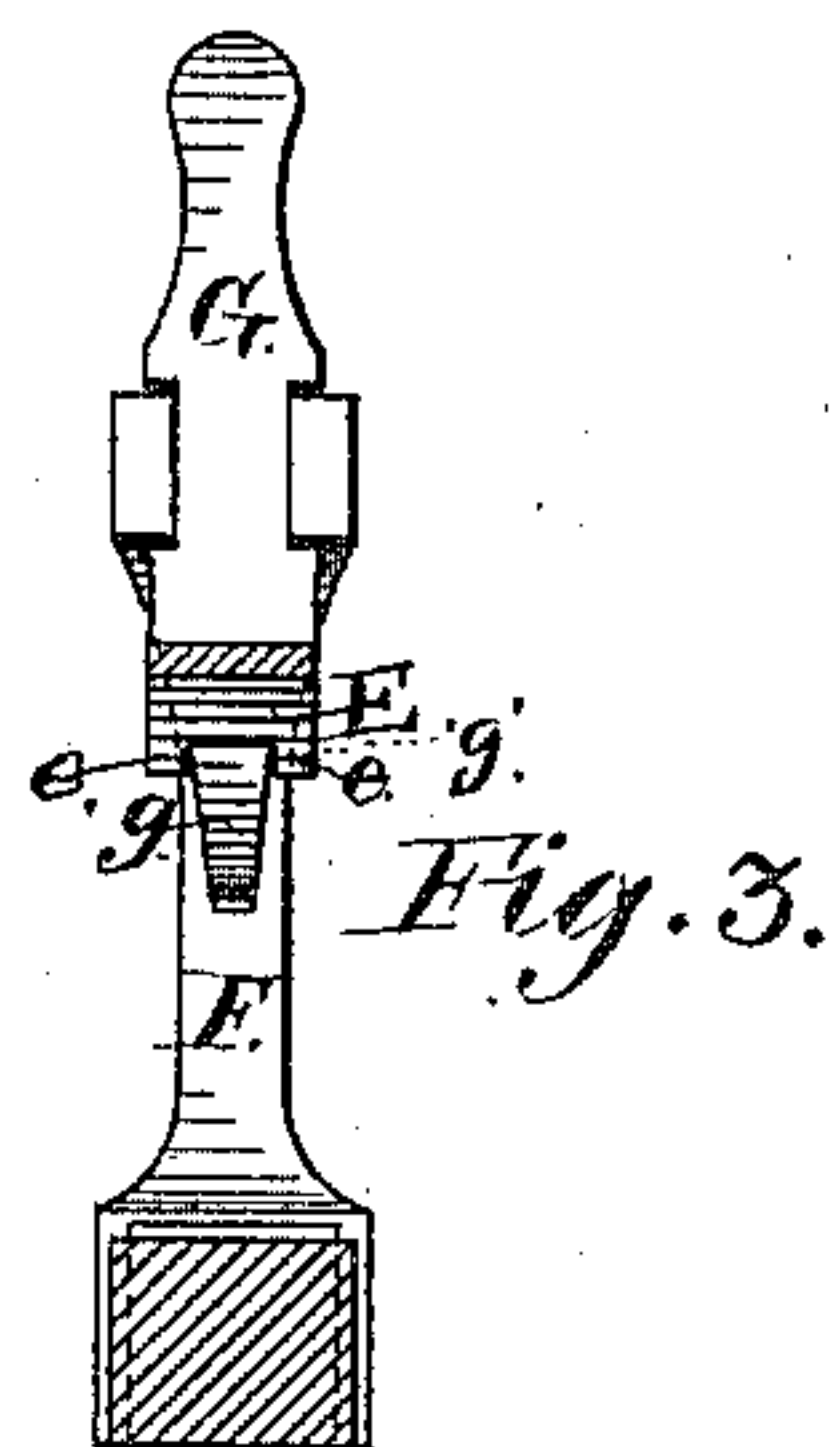
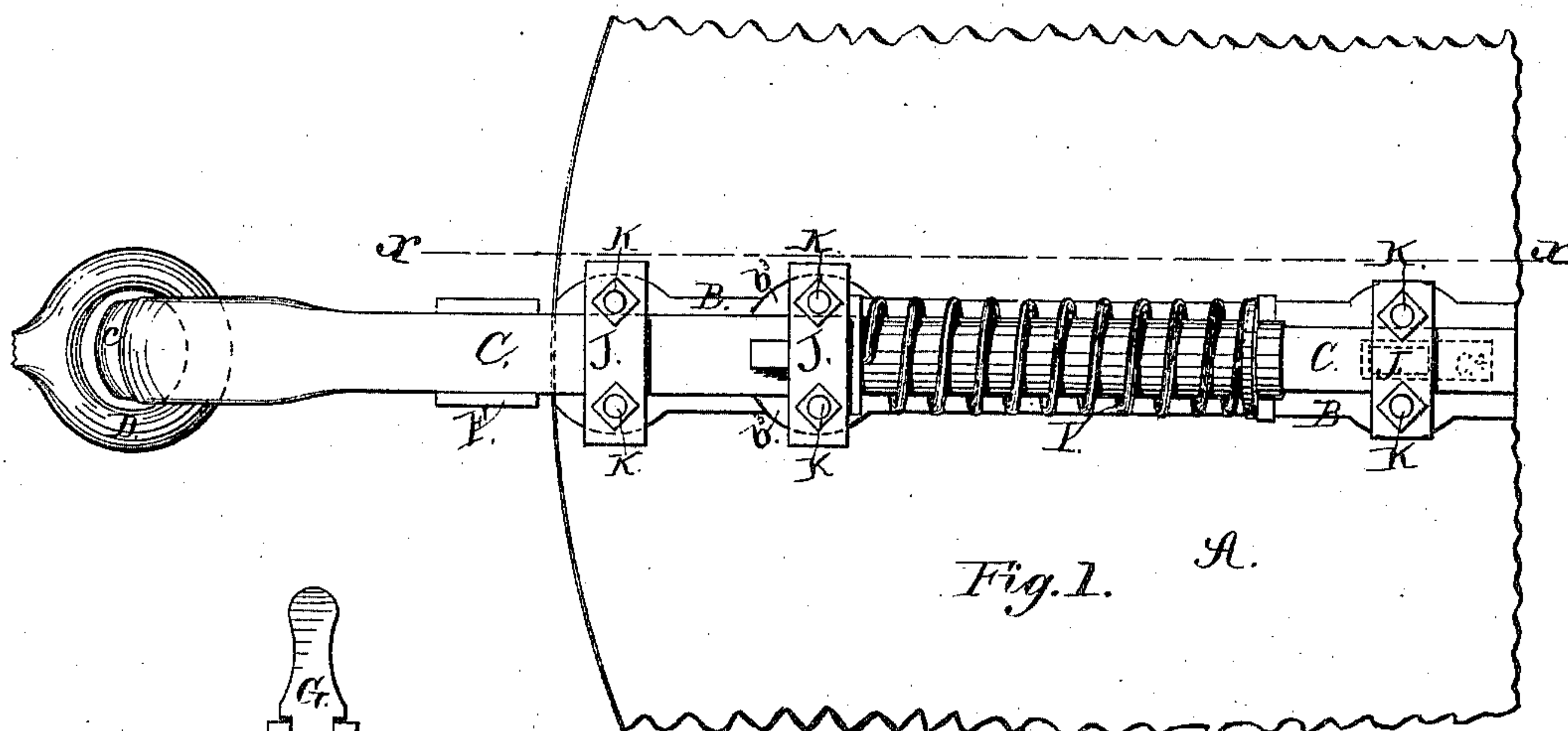
(No Model.)

W. H. KENNAH.

DRAW BAR FOR HORSE CARS.

No. 302,660.

Patented July 29, 1884.



*Witnesses:*

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by

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# UNITED STATES PATENT OFFICE.

WILLIAM H. KENNAH, OF ALBANY, NEW YORK.

## DRAW-BAR FOR HORSE-CARS.

SPECIFICATION forming part of Letters Patent No. 302,660, dated July 29, 1884.

Application filed December 31, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM H. KENNAH, of the city and county of Albany, in the State of New York, have invented certain new and useful Improvements in Horse-Car Draw-Bars, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, which form part of this specification, and in which—

Figure 1 is an inverted plan view of part of end of a horse-car provided with my improvements; Fig. 2, a longitudinal section of the same at the line *xx*, and Fig. 3 a transverse section of the draw-bar at the line *yy* on Fig. 2.

As illustrated in the drawings, A is the bottom of a horse-car, which may be made in any suitable style, form, and manner.

B is the bed-piece for the draw-bar. Said bed-piece is secured to the under side of the bottom of the car, and has an inclined seat, *b*, formed on its under face, for receiving the draw-bar. Said seat has near its innermost end a stop, *b'*, formed thereon, and near its foremost end another stop, *b''*, is also formed.

The purposes of the stops *b'* and *b''* will be hereinafter explained herein. Lugs *b'''* are formed on said bed-piece for the purpose of holding the draw-bar sidewise and guiding the same during its endwise movements. Said lugs also form abutments for the resistance-spring that applies to the draw-bar.

C is the draw-bar, having on its outer end a hook, *c*, for receiving the eye D of the pole to which the horses are commonly attached.

An arm, *c'*, is formed above the hook *c*, and to the upper end of said arm a guard, E, is pivoted, to swing with an up-and-down movement from the position shown by the full lines in Fig. 2 into the position indicated by the dotted lines in the same figure.

F is a bracket or standard projecting from the upper side of the draw-bar C, and having a latch-piece, G, pivoted to its upper end and arranged to swing longitudinally, as indicated by dotted lines in Fig. 2. Said latch-piece is provided at its lower end with a narrowed catch, *g*, which is adapted to pass through a notch formed in the free end of the guard E, where it will engage with and lock the said guard in the position shown by the full lines of Fig. 2, wherein the projections *e* (at the sides of the notch in the end of the guard E) will straddle the catch *g*, and by striking the shoulders *g'* prevent the said guard from moving above the position shown in the drawings.

A spring, H, interposed between the standard F and latch-piece G, exerts its pressure to force the latter outward into the position indicated by dotted lines in Fig. 2. A shoulder, *c''*, formed on the upper face of the draw-bar C, engages against the stop *b''*, and prevents said draw-bar from moving too far underneath the car. A spiral spring, I, that surrounds the cylindrical body of the draw-bar, is interposed between the lugs *b'''* on the bed-piece B and the collar *c'''* on the draw-bar, and forms an elastic medium for receiving the strain of the animals while drawing the car. A slotted recess, *c''''*, (shown by dotted lines in Fig. 1,) is formed on the upper face of the draw-bar C, and engages over the stop *b'* in such manner that it will guide the inner end of the draw-bar and prevent the latter from being drawn out too far.

J represents binders fixed across the draw-bar C, and secured in place by means of bolts K, provided with double nuts *k*, whereby the draw-bar C is retained in position with sufficient freedom to permit an easy endwise movement of it.

When the guard E is dropped into the position indicated by the dotted lines in Fig. 2, the eye D may be slipped over the arm *c'* until it engages in the hook *c* of the draw-bar, after which the guard E is swung up into the position shown by the full lines of Fig. 2, and in accomplishing the latter movement the said guard pushes back the lower end of the latch-piece G until the catch *g* engages under said guard to retain in the position last named, wherein the parts are so arranged that the eye D cannot be accidentally displaced from its connection with the draw-bar C. To remove the eye D from the hook *c*, the catch *g* must first be moved backward until the guard E is freed from the hold of said catch, whereupon the guard E will drop into the position indicated by the dotted lines in Fig. 1, so that the eye D can be raised clear from the draw-bar.

I claim as my invention—

The combination, with a draw-bar, C, provided with the hook *c* and arm *c'*, of the guard E, jointed to the arm *c'*, and the latch-piece G, jointed to the standard F, all being constructed and arranged to operate substantially as herein specified.

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Witnesses:

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