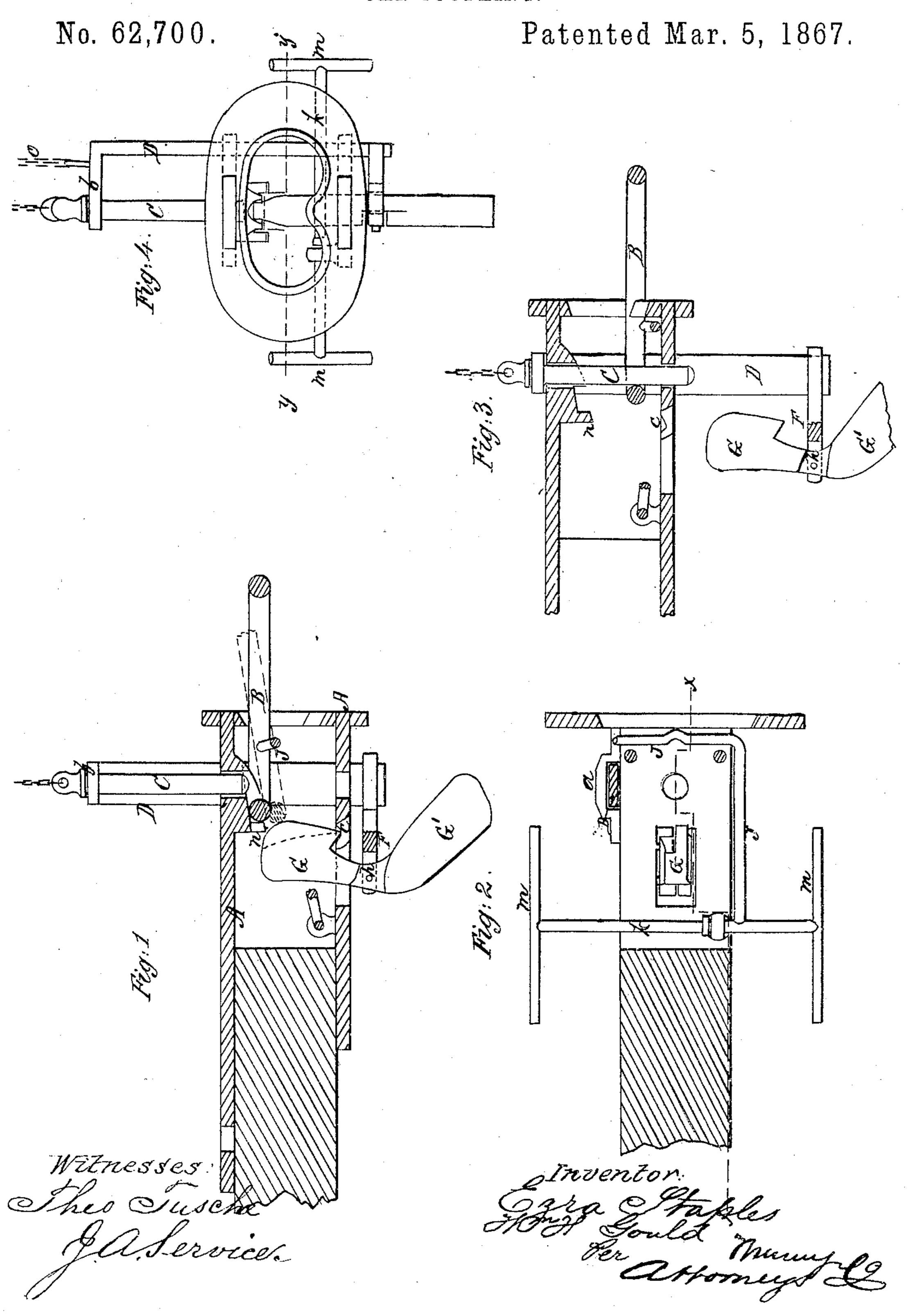
E. STAPLES & W. W. GOULD. CAR COUPLING.



Anited States Patent Pffice.

EZRA STAPLES AND WILLIAM W. GOULD, OF SKOWHEGAN, MAINE.

Letters Patent No. 62,700, dated March 5, 1867.

IMPROVED CAR-COUPLING

The Schedule referred to in these Zetters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that we, Ezra Staples, and William W. Gould, of Skowhegan, in the county of Somerset, and State of Maine, have invented a new and useful improvement in Car-Coupling; and we do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

Our invention consists in constructing a safe and effectual apparatus by which railroad cars may be easily

coupled together and uncoupled without danger to life or limb, as will be hereinafter described.

Figure 1 represents a vertical section of our coupling, showing the link raised, it being through the line xx of fig. 2, showing the cars uncoupled.

Figure 2 is a horizontal section of the coupling, through the line y y of fig. 4.

Figure 3 is a vertical section, the same as fig. 1, showing the link down, as when the cars are coupled.

Figure 4 is a front or end view.

Similar letters of reference indicate corresponding parts.

A represents the draw-head. B is the coupling link. C is the coupling pin or bolt. D represents a vertical sliding bar, attached or held to the side of the draw-heal by guide staples, a. The top part of this slide, marked b, is turned at right angles with the bar, with a hole through it, through which the coupling pin passes, as seen in figs. 1 and 4. To the bottom end of the sliding bar D there is a piece, F, attached, which stands at right angles with the bar. The outer end of this piece F is forked, to receive the hook and counterbalance G G', which hangs on a pivot, h, in the fork, as seen in the drawing. The hook and counterbalance G G' form one piece, and hang vertical. The hook G passes up through the lower portion of the draw-head when the slide D is raised, as seen in figs. 1 and 2. To allow of this, the piece F, (to which G is attached,) stands in a position diagonal to the slide D. The duty of the hook is to hold up the sliding bar and the coupling pin, as seen in fig. 1. The hook rests in a little recess in the draw-head plate, at c. When the slide D stands as seen in fig. 1, the draw-head is ready to be coupled, and the link P, as seen in the figure, is attached to another drawhead or car. The link is held up, as seen, by a bent lever, J, which is attached to and operated by a horizontal rod, k. This rod has handles, m m, attached to its ends, which are designed to be worked on either side of the cars. When the link is raised, its back end rests against a lug, n, as seen in fig. 1. The end of the hook G is halved as far back as the dotted line; the projecting portion receives the end of the link as the cars come together. When this takes place the hook is thrown back out of the recess c, and the slide D drops with the coupling pin C within the link. The cars are then coupled together, as seen in fig. 3. The hook G is thrown forward by the counterbalance G', and drops into the recess c by its own gravity when the slide is raised. O is a chain, by which the slide is raised. This is done from the platform of the car.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—The drop slide D, carrying the pin C, forked piece F, hook G, counterbalance G', draw-head A, having its bottom plate slotted, lug n, bent lever J, horizontal rod k, and handles m m, when all are constructed and arranged as herein set forth, for the purpose specified.

Witnesses:

GEO. W. LUCE, MARION MILLS. EZRA STAPLES, WM. W. GOULD.