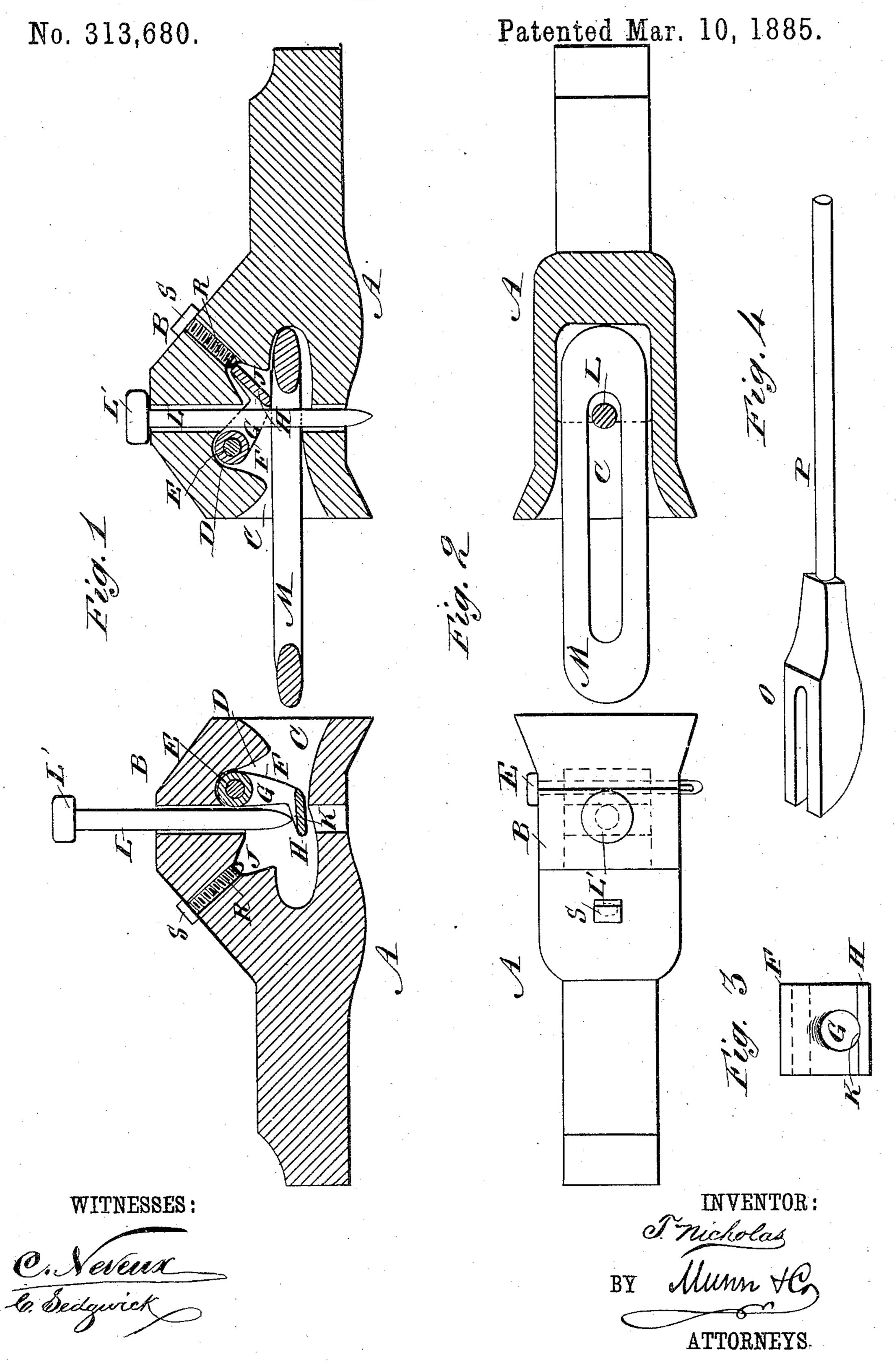
## T. NICHOLAS.

CAR COUPLING.



## United States Patent Office.

## THOMAS NICHOLAS, OF ISHPEMING, MICHIGAN.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 313,680, dated March 10, 1885.

Application filed December 26, 1884. (No model.)

To all whom it may concern:

Be it known that I, Thomas Nicholas, of Ishpeming, Marquette county, Michigan, have invented a new and Improved Car-Coupling, of which the following is a full, clear, and exact description.

The invention consists in the construction and arrangement of parts, as will be hereinafter described and claimed.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a longitudinal sectional elevation of two draw-heads provided with my improved coupling devices. Fig. 2 is a plan view of the same. Fig. 3 is a rear face of the tripping-plate. Fig. 4 is a perspective view of the uncoupling-lever.

The draw-head A is provided on the top with a transverse raised part, B, from the top of which the vertical pin-aperture extends downward. The draw-head is provided with a link-receiving opening, C, in the top of which a transverse recess, D, is formed, in which a

transverse shaft, E, is held, on which a tripping-plate, F, is hung in such a manner that it can swing within the opening C in the direction of the length of the draw-head. The

oplate F is provided with an aperture, G, and with a flange, H, on its bottom edge, which flange extends toward the rear or inner end of the draw-head. The plate F is of such length that when it hangs vertically its lower edge will be at or near the bottom of the open-

of edge will be at or near the bottom of the opening C. A transverse recess, J, is formed in the top or roof of the opening C, into which recess the flange H can swing. Usually the plate F hangs vertically, and the lower end of a pin, L, passed through the vertical pin-ap-

head is ready for coupling. When the link M enters, it strikes the bottom part of the plate F, and swings the same inward and from under the pin L, which is thus caused to drop 45 through the opening G and through the link M, the entering end of which has by this time passed the lower end of the plate F. The parts are in the position shown in Fig. 1 on the right side.

To facilitate the movement of the plate F under the coupling-pin L, I have provided a transverse groove, K, in the top of the flange H, in which groove the point of the pin L rests.

To uncouple the cars, I use a fork, O, secured to a handle-rod, P. The prongs of the fork are beveled, and the ends of the prongs are placed below the head L' of the pin, and then the outer end of the handle-rod is deferessed, whereby the pin is raised. A diagonal hole, R, is formed in the rear part of the draw-head, and extends from the recess J up to the rear surface of the draw-head. It is usually closed by a screw, S, provided at its 65 outer end with a head. This screw, held diagonally behind the bolt or drop pin, is used to regulate the swing of the tripping-plate.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—70 The combination, with a draw-head having

an inclined aperture, R, in the rear, of the plate F, pivoted in the draw-head, which plate has an aperture, G, and a flange, H, and of the screw S, held in the aperture R, substan-75 tially as herein shown and described.

THOMAS NICHOLAS.

Witnesses:

RICHARD HOOPER, THOMAS B. NOALL.