

(No Model.)

M. L. CABLE.
CAR COUPLING.

No. 490,800.

Patented Jan. 31, 1893.

Fig. 1.

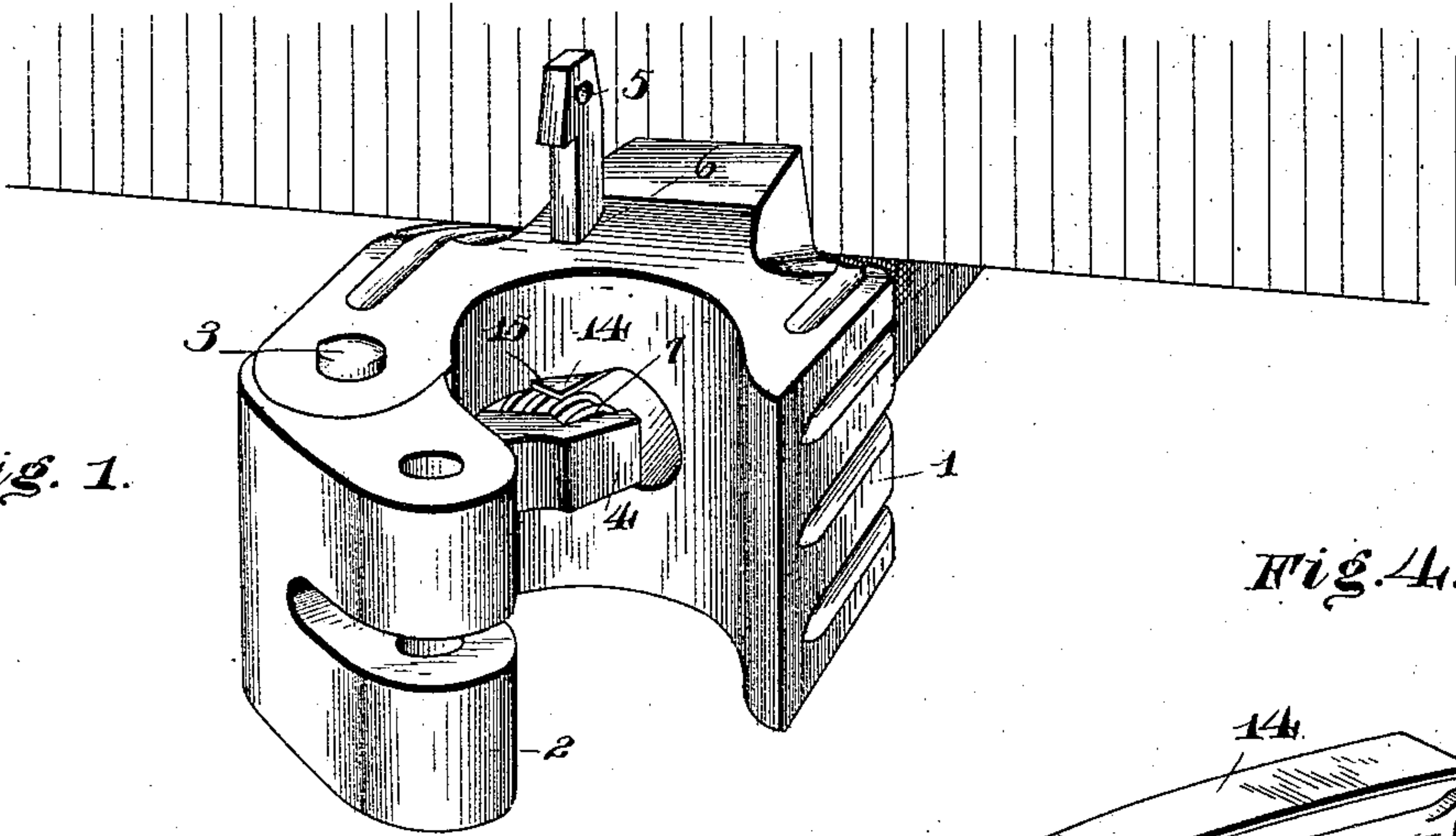


Fig. 2.

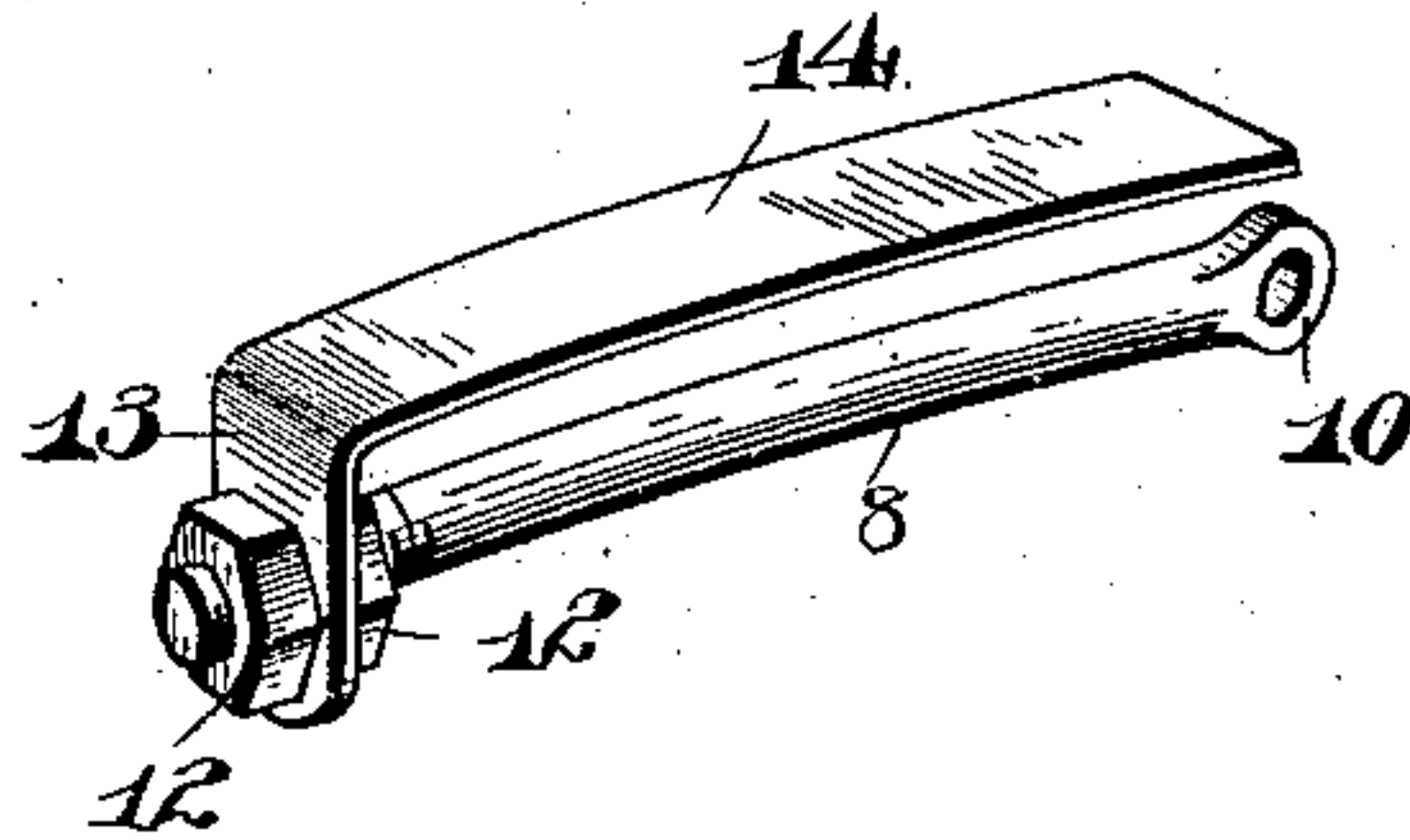


Fig. 5.

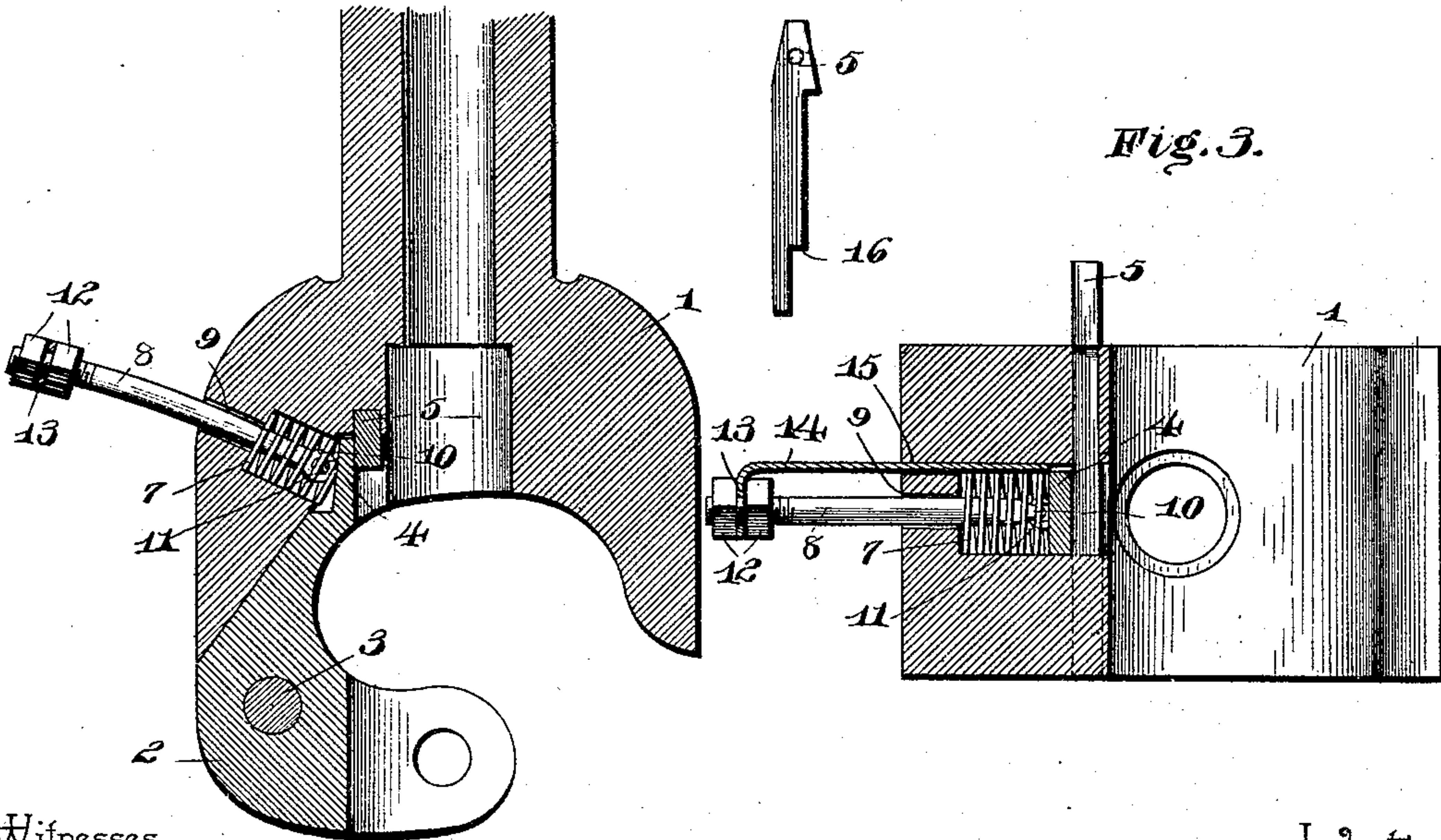


Fig. 3.

Witnesses

Chas. G. Ford.

N. H. Riley

Inventor

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By his Attorneys,

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UNITED STATES PATENT OFFICE.

MARTIN LUTHER CABLE, OF REIDSVILLE, NORTH CAROLINA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 490,800, dated January 31, 1893.

Application filed August 22, 1892. Serial No. 443,778. (No model.)

To all whom it may concern:

Be it known that I, MARTIN LUTHER CABLE, a citizen of the United States, residing at Reidsville, in the county of Rockingham and State of North Carolina, have invented a new and useful Car-Coupling, of which the following is a specification.

The invention relates to improvements in car couplings.

The object of the present invention is to improve the construction of twin jaw car couplings, to enable them to be coupled automatically and to be readily uncoupled, and when uncoupled to maintain the knuckle open in position preparatory to coupling.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings and pointed out in the claims hereto appended.

In the drawings—Figure 1 is a perspective view of a car coupling constructed in accordance with this invention. Fig. 2 is a horizontal sectional view. Fig. 3 is a transverse sectional view. Fig. 4 is a detail perspective view of the supporting plate and the rod. Fig. 5 is a detail view of the key.

Like numerals of reference indicate corresponding parts in all the figures of the drawings.

1 designates a draw-head to which is hinged a knuckle 2 by a knuckle pin 3; and the rear end 4 of the knuckle is adapted to be engaged by a vertically disposed key 5 arranged in a vertical opening 6 of the draw-head to lock the knuckle closed when coupled. The knuckle is held normally open for coupling by a horizontally disposed spiral spring 7 which is interposed between the rear or inner end 4 of the knuckle and the draw-head, and is disposed on a rod 8. The rod 8 is arranged in a transverse opening 9 of the draw-head, and is provided at its inner end with an eye 10 which is linked into an eye 11 of the knuckle; and the outer end of the rod is threaded and is secured by nuts 12 to a downwardly bent end 13 of a horizontally disposed supporting plate 14. The horizontally disposed supporting plate 14 is arranged in a slot 15 and moves with the knuckle, and is

adapted to support the key in an elevated position when the knuckle is open, and to allow the key to fall to lock the knuckle when the latter closes. The key is recessed at its lower end to provide a shoulder 16 which rests upon the supporting plate when the knuckle is open. The narrow portion of the pin formed by the said recess being in rear of the knuckle, and when the knuckle entirely closes it is engaged by the portion of the key above the shoulder, and thereby securely locked. As soon as the key is raised and lifted out of engagement with the knuckle the spiral spring forces the latter open.

It will be seen that the car coupling is simple and comparatively inexpensive in construction, that it is adapted to couple automatically and to be readily uncoupled and that when uncoupled the knuckle is held open in position for coupling.

What I claim is—

In a car coupling, the combination of a draw-head provided with a transverse opening and a transverse slot and provided with a vertical key opening, a knuckle hinged to the draw-head, a vertically movable key arranged in the key opening and provided near its lower end with a shoulder, a rod arranged in the transverse opening and having its inner end connected to the rear end of the knuckle and its outer end threaded, a spiral spring disposed on the rod and interposed between the rear end of the knuckle and the draw-head and adapted to hold the knuckle normally open, a supporting plate arranged in the transverse slot and adapted to hold the key elevated and having its outer end bent downward and provided with an opening receiving the outer end of the rod, and nuts arranged on the outer end of the rod and adjus- tably connecting the plate to the rod, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

MARTIN LUTHER CABLE.

Witnesses:

EUGENE IRVIN,
R. L. WATT.