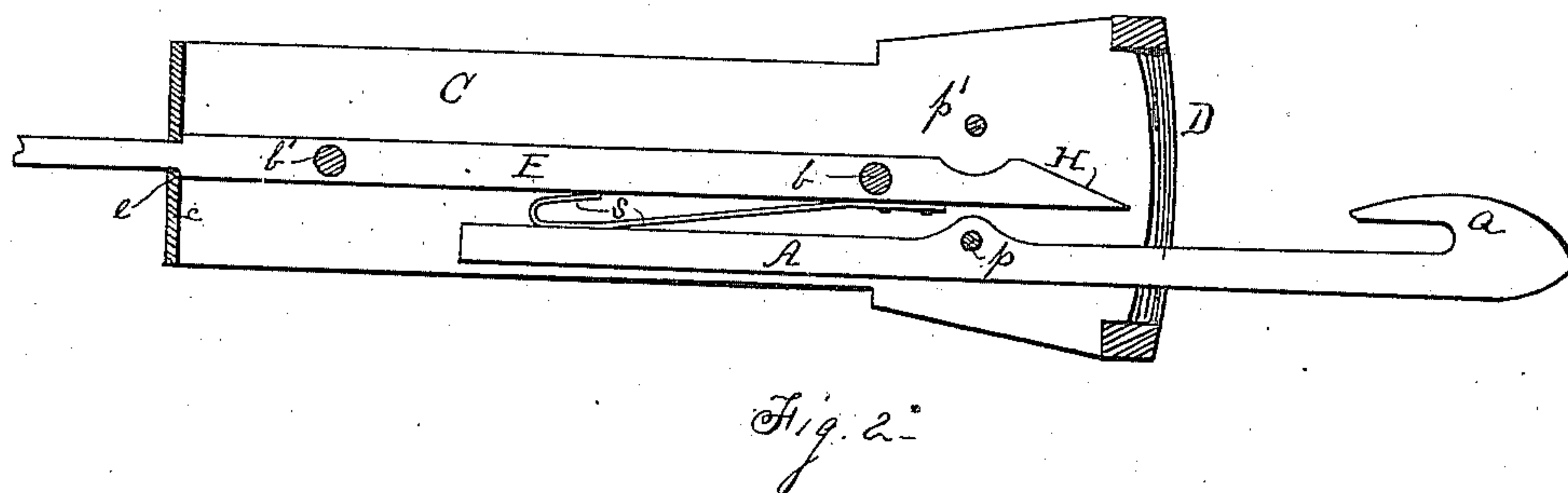
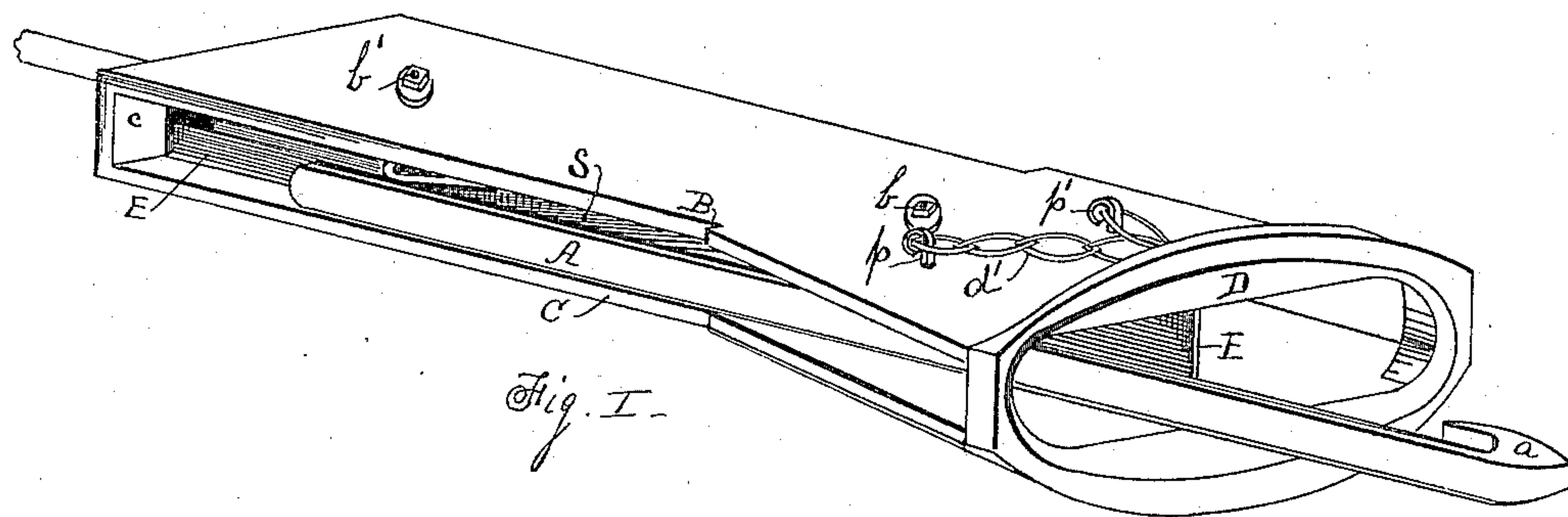


(No Model.)

M. BUCH.
CAR COUPLING.

No. 309,194.

Patented Dec. 16, 1884.



Witnesses
Geo. A. Lane
Alexander Harris

Inventor
Milton Buch
by Wm. R. Gerhart
Atty.

UNITED STATES PATENT OFFICE.

MILTON BUCH, OF LANCASTER, PENNSYLVANIA, ASSIGNOR OF ONE-HALF
TO ADAM MISCHLICH, OF SAME PLACE.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 309,194, dated December 16, 1884.

Application filed August 16, 1884. (No model.)

To all whom it may concern:

Be it known that I, MILTON BUCH, a citizen of the United States, residing at Lancaster, in the county of Lancaster and State of Pennsylvania, have invented a new and useful Car-Coupling, of which the following is a specification.

My invention relates to car-couplings; and the object of my improvement is to couple cars automatically, thereby avoiding the numerous accidents which are constantly occurring while coupling by hand.

I attain my object by means of the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of one-half of the coupling; and Fig. 2, a top view or plan of the same, partly in section, and with the top plate of the casing removed.

As my coupling does not apply to any particular kind or construction of car, but can be attached to any, I will not describe any parts of the car, but confine my explanation to the car-coupling itself, so that those interested may understand the use and construction of the same. The coupling-rod A, having a coupling-hook, *a*, at its outer end, is pivoted in a casing by means of a coupling-pin, *p*, which passes through the rod and the top and bottom plates, B and C, of the said casing. The distances between the plates of the casing and the width of the opening in the draw-head D, through which the coupling-rod passes, are sufficient to allow all necessary vertical and horizontal motion to the said coupling-rod. The draw-bar E rests longitudinally between the upper and lower plates of the casing, and is secured therein by means of bolts *b b'*, and has a shoulder, *e*, which rests against the rear plate, *c*, of the casing. The lower end of the bolt *b*, which projects beyond the bottom plate of the casing, has an eye, in which is secured one end of a coupling-chain, the other end, when the chain is not in use, being upheld by a hook at the lower end of the bolt *b'*. This chain is to be used for coupling with cars unprovided with my device. The forward end

of the draw-bar has a sloping face, H, on one side. The coupling-pin *p* is placed on one side of the draw-bar, and a second, *p'*, on the other, which is intended to engage the hook of the coupling-rod similar to A, projecting from a like coupling of another car. The two coupling-pins of each casing are connected by means of a chain, *d'*, so that either being withdrawn from its socket it will be prevented from dropping or being lost. The draw-head D slopes from its outer edge to the inner, particularly above and below, so as to catch the outer end of an opposite coupling-rod and oblige it to slide into the casing, while the sloping face H of the draw-bar guides it in the proper direction for engaging with the coupling-pin *p'*. The rear end of the coupling-rod rests against a spring, S, which acts constantly to force it outward, thereby throwing the hook *a* toward the center of the opposite casing, so that if, in backing the cars, the hook disengages longitudinally with its draw-pin it will be forced to re-engage with said draw-pin upon a forward movement of the cars. The couplings of each car are made with the coupling-rod at the one end on one side, and that at the other on the opposite, so that whenever two cars meet each hook will find an opening in the opposite casing with a pin with which to engage.

What I claim as my invention, and desire to secure by Letters Patent, is—

As a car-coupling, the combination, with a casing divided longitudinally into two sections, of a coupling-rod pivoted in one of said sections, and having a coupling-hook at the outer end thereof, a coupling-pin located to engage a similar coupling-hook opposite it, and the division between the said sections having a sloping face so inclined as to guide said opposite coupling-hook toward its coupling-pin, substantially as set forth.

MILTON BUCH.

Witnesses:

WM. R. GERHART,
H. CARPENTER.