

G. H. MERRIAM.

Improvement in Car-Couplings.

No. 130,651.

Patented Aug. 20, 1872.

Fig. 1.

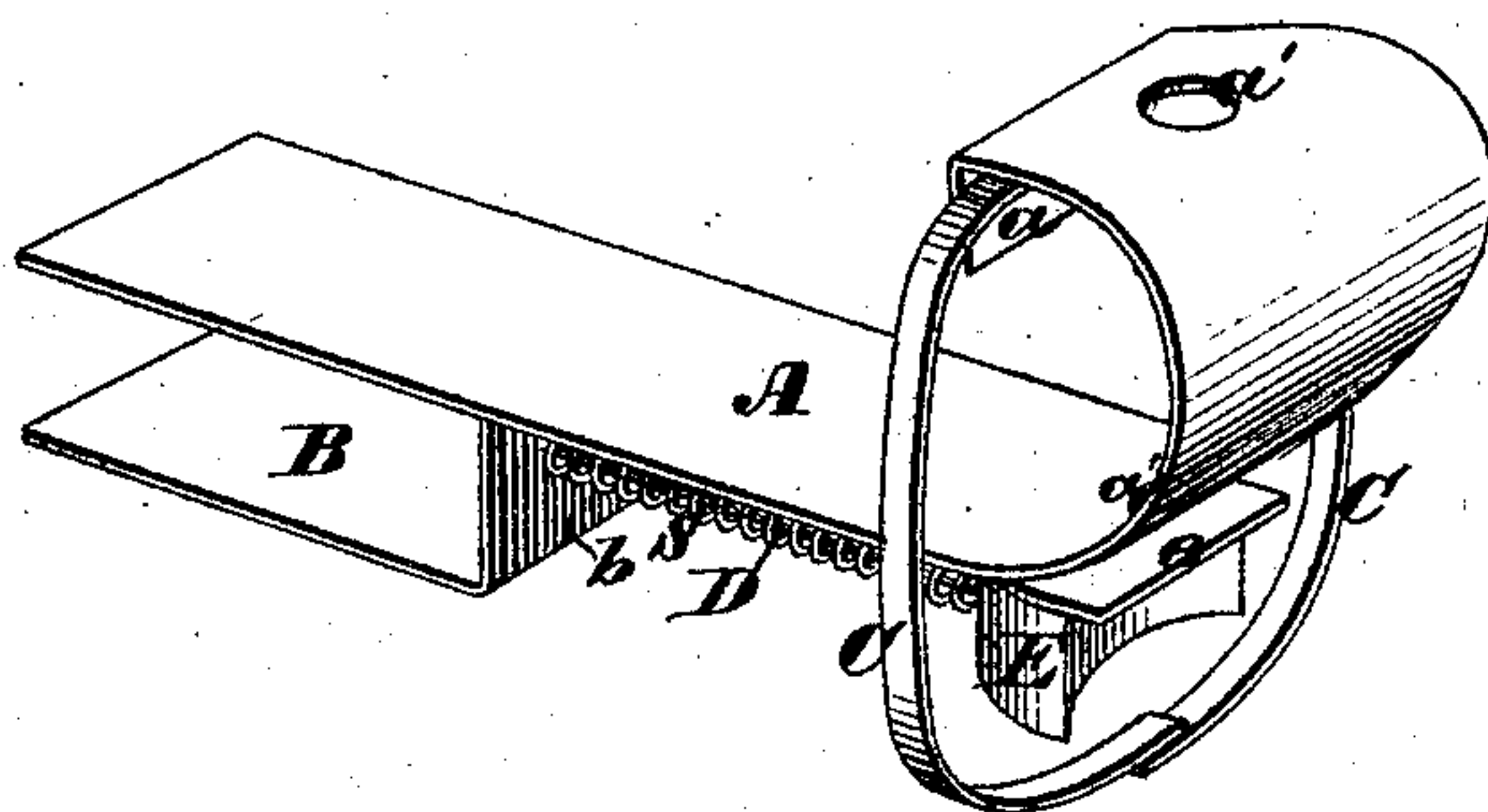
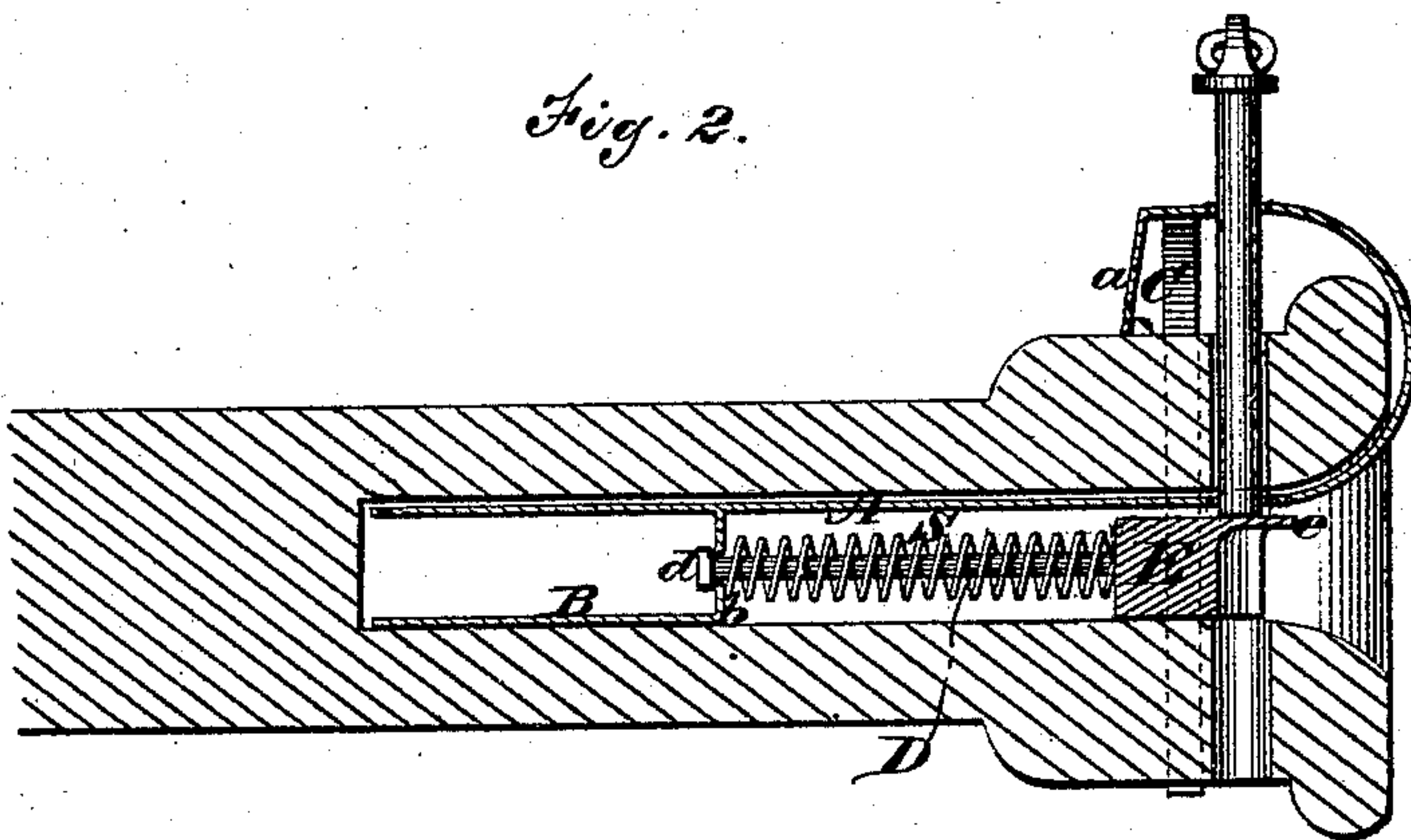


Fig. 2.



Witnesses.
C. F. Brown.
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Inventor.
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By his Attys.
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UNITED STATES PATENT OFFICE.

GEORGE H. MERRIAM, OF PORTLAND, MAINE, ASSIGNOR OF ONE-HALF OF HIS RIGHT TO SETH H. WOODBURY AND WILLIAM T. GRAY, OF LYNN, MASSACHUSETTS.

IMPROVEMENT IN CAR-COUPPLINGS.

Specification forming part of Letters Patent No. 130,651, dated August 20, 1872.

To all whom it may concern:

Be it known that I, GEORGE H. MERRIAM, of Portland, in the county of Cumberland and State of Maine, have invented a new and Improved Automatic Coupling-Attachment for Draw-Heads; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing, forming a part of this specification, in which—

Figure 1 is a perspective view of my invention; and Fig. 2 is a sectional view, showing my improvement attached to a draw-head.

Similar letters of reference in the accompanying drawing indicate the same parts.

The object of this invention is to provide for the public a new article of manufacture—to wit, a simple and cheap device, which can be readily attached to any of the old-fashioned draw-heads without altering their construction in any respect, for the purpose of enabling them to couple the cars automatically; and to this end the invention consists in the construction and employment of a device made independently of the draw-head, and adapted to be attached to or removed from it at pleasure, for the purpose above indicated, and substantially as I will now proceed to describe.

In the drawing, A is a plate of metal, bent into the form represented in Fig. 1, and provided with a turned-down lip, *a*, and two holes or slots, *a'*, in vertical line with each other. B is a second plate attached to the plate A by any suitable means, and thence extending downward so as to form a squared shoulder, *b*, and then backward to a line with the end of the plate A. C C are a pair of spring-clasps attached to the upper part of the plate A, and adapted to embrace the draw-head and hold the device in proper relation thereto. D is a rod extending from behind the shoulder *b*, where it is keyed or provided with a head, *d*, to a point under and in line with the holes *a'*, where it terminates in a block, E, it being encompassed by a spiral spring, *s*, between the block and the shoulder *b*. The block is made

concave on its front side, with an overhanging flange, *e*, across its upper edge, as shown. The tension of the spring and the arrangement of the parts are such that a slight backward thrust against the block E moves it back from under the holes *a'*.

In construction, the device above described is adapted to be inserted into the draw-head of a railroad-car, the bent part of the plate A fitting closely around the upper lip of the draw-head, the flange *a* coming down upon the draw-bar or catching behind any projecting surface cast thereupon, the spring-straps C C clasping around the draw-bar, the holes *a'* *a'* coming in vertical line with the bolt-holes of the draw-head, and the rear portion of the plate A, together with the plate B, and the parts D E S, fitting inside of the draw-head, where they are securely held by their shape, by the clamps C, and by the operation of the part B, the rear end of which may be made to spring down so as to keep the parts from rattling, and hold them in their proper position. Thus applied to any old-fashioned draw-head it renders the latter an automatic coupler, for the coupling-pin, resting upon the block E, will be at once dropped through the link whenever the latter enters the draw-head and strikes the block. The form of the block is designed to hold the link in a horizontal position while the cars are separated from each other. The inner end of the link fits into the recess in the face of the block, and is held down by the flange *e* keeping the outer end of the link from dropping below the horizontal line, and also from swinging from one side to the other, out of line with the draw-bar of the next car. If preferred, the plates A B may be struck up from a single piece of metal, a suitable shoulder, *b*, being provided to receive and hold the end of the rod D, and to sustain the spring S when under compression. The block E will always be made to fit as closely as possible within the draw-head without binding.

The whole cost of constructing the attachment and connecting it to the car is less than a dollar, while it answers perfectly as a sub-

stitute for the most complicated and expensive automatic couplings.

Having thus described my invention, what I claim is—

1. As a new article of manufacture, an automatic coupling attachment, constructed substantially as described, and adapted to be fitted upon and used in connection with the old-fashioned draw-heads, in the manner substantially as above set forth.

2. The automatic coupling attachment herein described, consisting of the plates A B, clasp C, rod D, block E, and spring S, all constructed and arranged substantially as and for the purposes set forth.

GEO. H. MERRIAM.

Witnesses:

GEO. F. HOLMES,
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