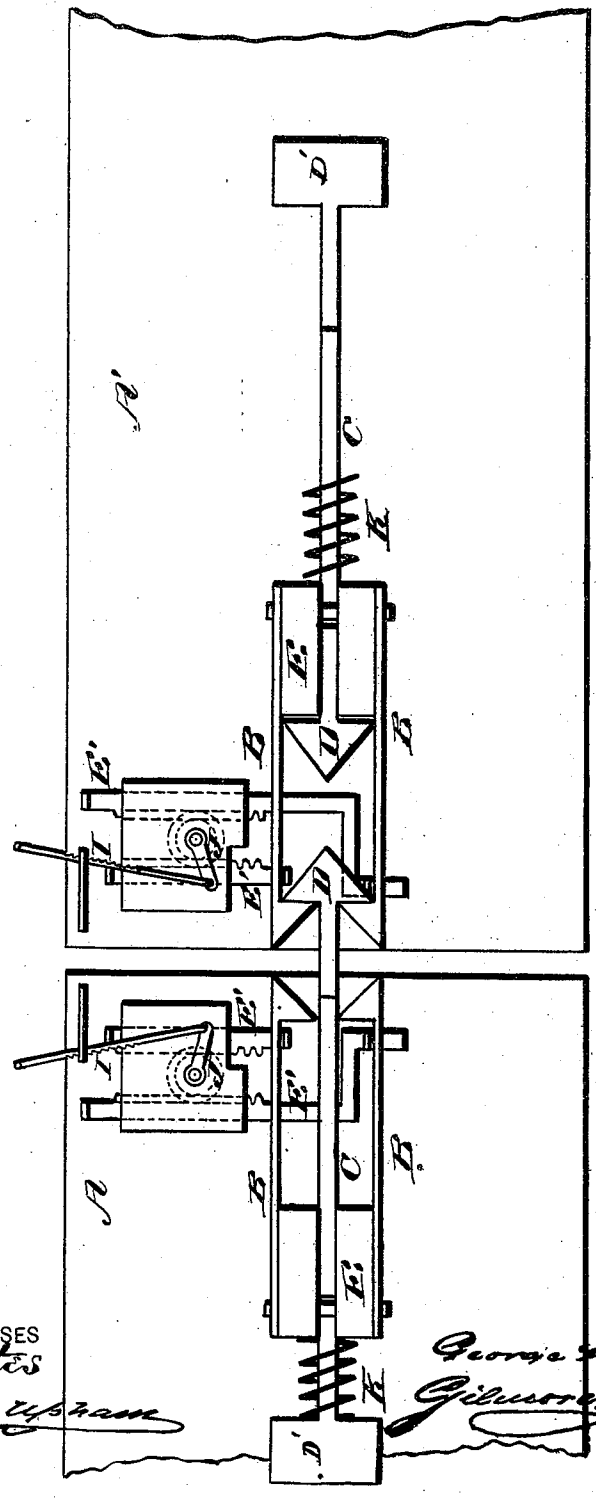
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G. W. MATHEWS.

CAR-COUPLING.

No. 193,262. Patented July 17, 1877.

Fig. 1.



WITNESSES

E. H. Bates

George E. Upham

INVENTOR.

George W. Mathews.

Gibson, Smith & Co

ATTORNEYS.

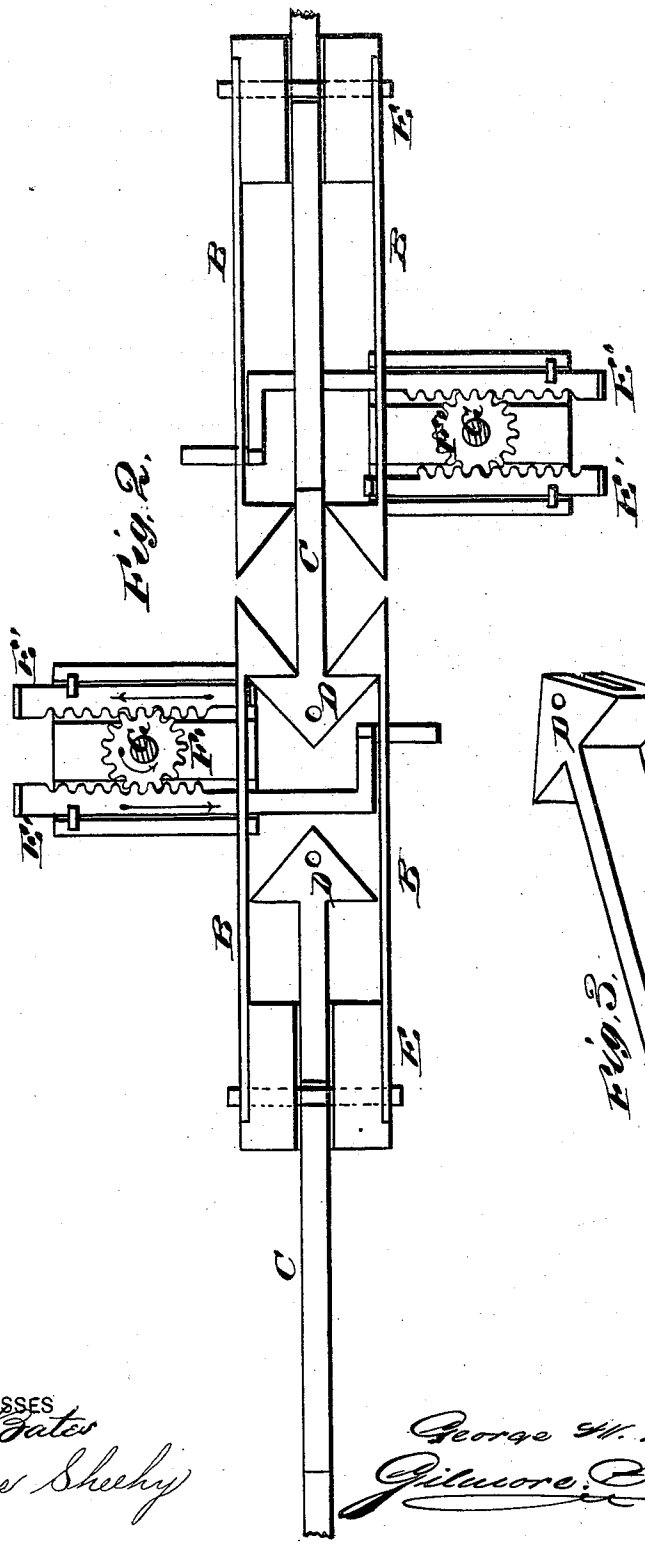
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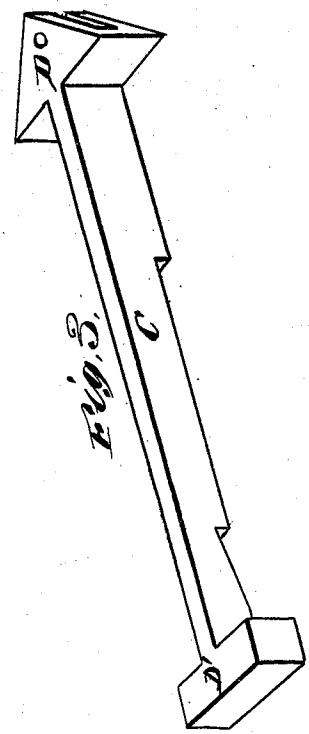
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G. W. MATHEWS.

CAR-COUPLING.

No. 193,262. Patented July 17, 1877.





WITNESSES

E. H. Bates

James Sheehy

INVENTOR.

George W. Mathews.

Gilmore, Thurston & Co.

ATTORNEYS

N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

3 Sheets—Sheet 3.

G. W. MATHEWS.

CAR-COUPLING.

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Fig. 3.

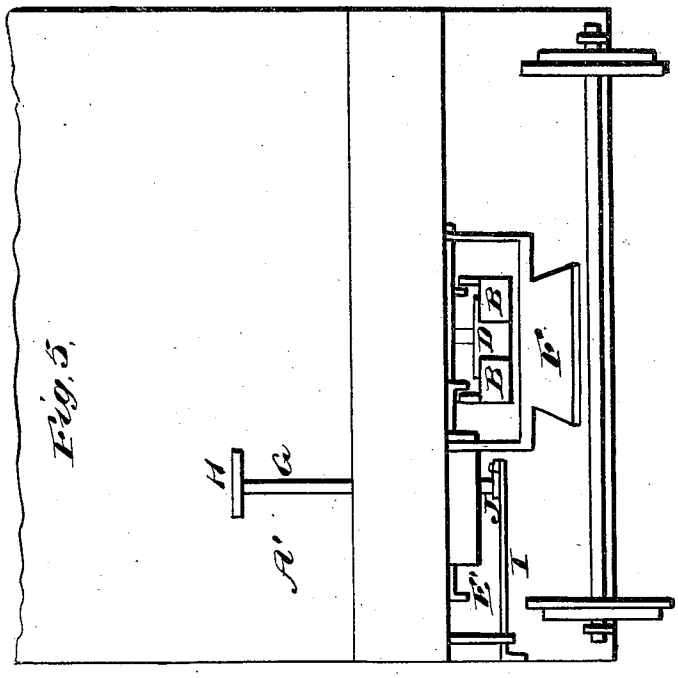
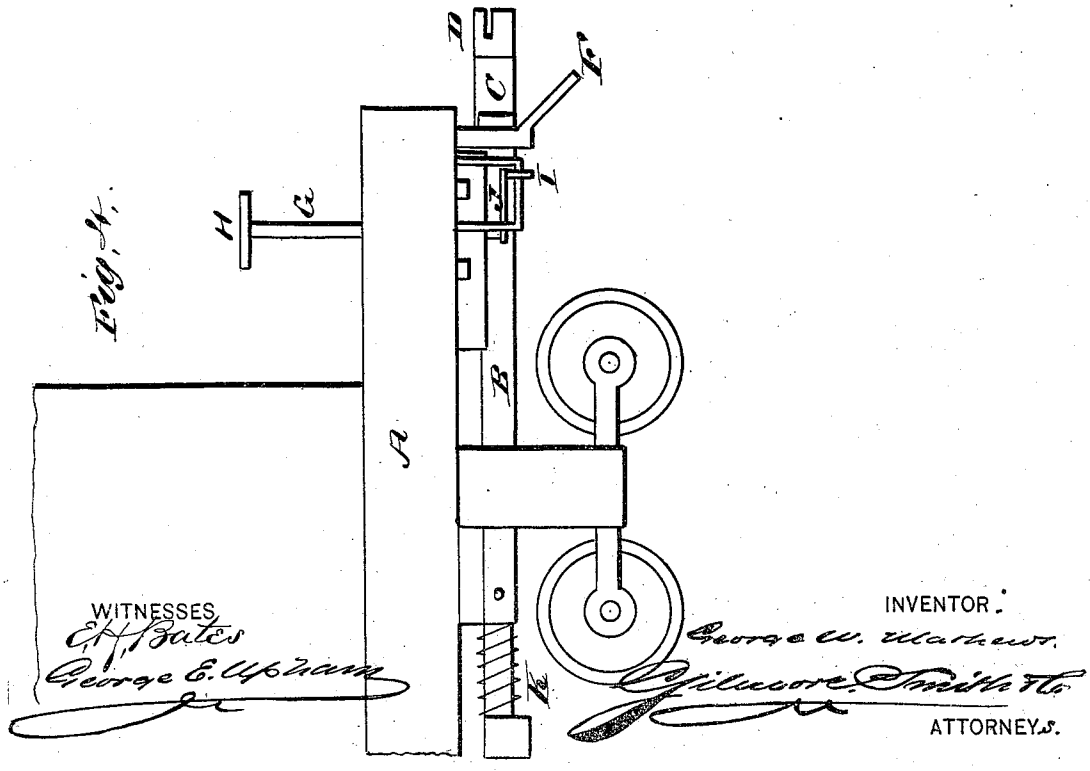


Fig. 4.



WITNESSES
E. H. Bates
George E. Upham Jr.

INVENTOR.
George W. Mathews.
Gilmore, Smith & Co.
ATTORNEYS.

N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

GEORGE W. MATHEWS, OF ICKESBURG, PENNSYLVANIA.

IMPROVEMENT IN CAR-COUPLINGS.

Specification forming part of Letters Patent No. **193,262**, dated July 17, 1877; application filed March 24, 1877.

To all whom it may concern:

Be it known that I, GEORGE W. MATHEWS, of Ickesburg, in the county of Perry and State of Pennsylvania, have invented a new and valuable Improvement in Car-Couplings; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a bottom view of my car-coupling, and Fig. 2 is a plan view of my car-coupling. Fig. 3 is a perspective view of the link. Fig. 4 is a side view of my car-coupler attached, and Fig. 5 is a front view thereof.

This invention relates to devices for coupling cars automatically; and it consists in the construction, arrangement, and combination of the parts hereinafter set forth.

In the accompanying drawings, A A′ designate, respectively, two ordinary railway-cars, each one of which is provided with a pair of spring-hooks or spring-jaws, B B, and a draw-bar, C, that slides between them. The outer end of said draw-bar is provided with an arrow-head, D, and its inner end with a block, D′, and the rear ends of spring-hooks B are connected to a slotted block, E, that serves as a guide for draw-bar C.

F designates a downwardly-inclined flaring guide-plate suspended from said car below and in front of said spring-jaws B, and serving to direct the arrow-head D of the opposite draw-bar between said hooks in the act of coupling. The draw-bar C of either car may be withdrawn under the latter, so as to offer no impediment to the entrance of the arrow-head D of the other car; but one of said arrow-heads must protrude in order to effect a coupling.

Spring hooks or jaws B B may be opened at will by means of two transverse sliding racks, E′ E′, which are connected, respectively, to each of the said hooks or jaws, or adapted to engage with lugs on them, and operated in opposite directions by means of a pinion, F′, which turns between them and engages therewith. This pinion is on a shaft, G, and may be operated from the platform of the car by a hand-wheel, H, or from the side of the car by a sliding bar, I, which is attached to a horizontal arm, J, of said shaft G. Each draw-bar C is provided with a retracting-spring, K, inserted between the block D′ of the draw-bar and the slotted block E.

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

The combination, with the spring-jaws B, slotted block E, guide F, racks E′ E′, pinion F′, and shaft G, having the wheel H, of the draw-bar C, having the arrow-head D, block D′, and retracting-spring K, substantially as described, and for the purpose set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

GEORGE W. MATHEWS.

Witnesses:

JONATHAN PRICE,

JOHN ICKES.