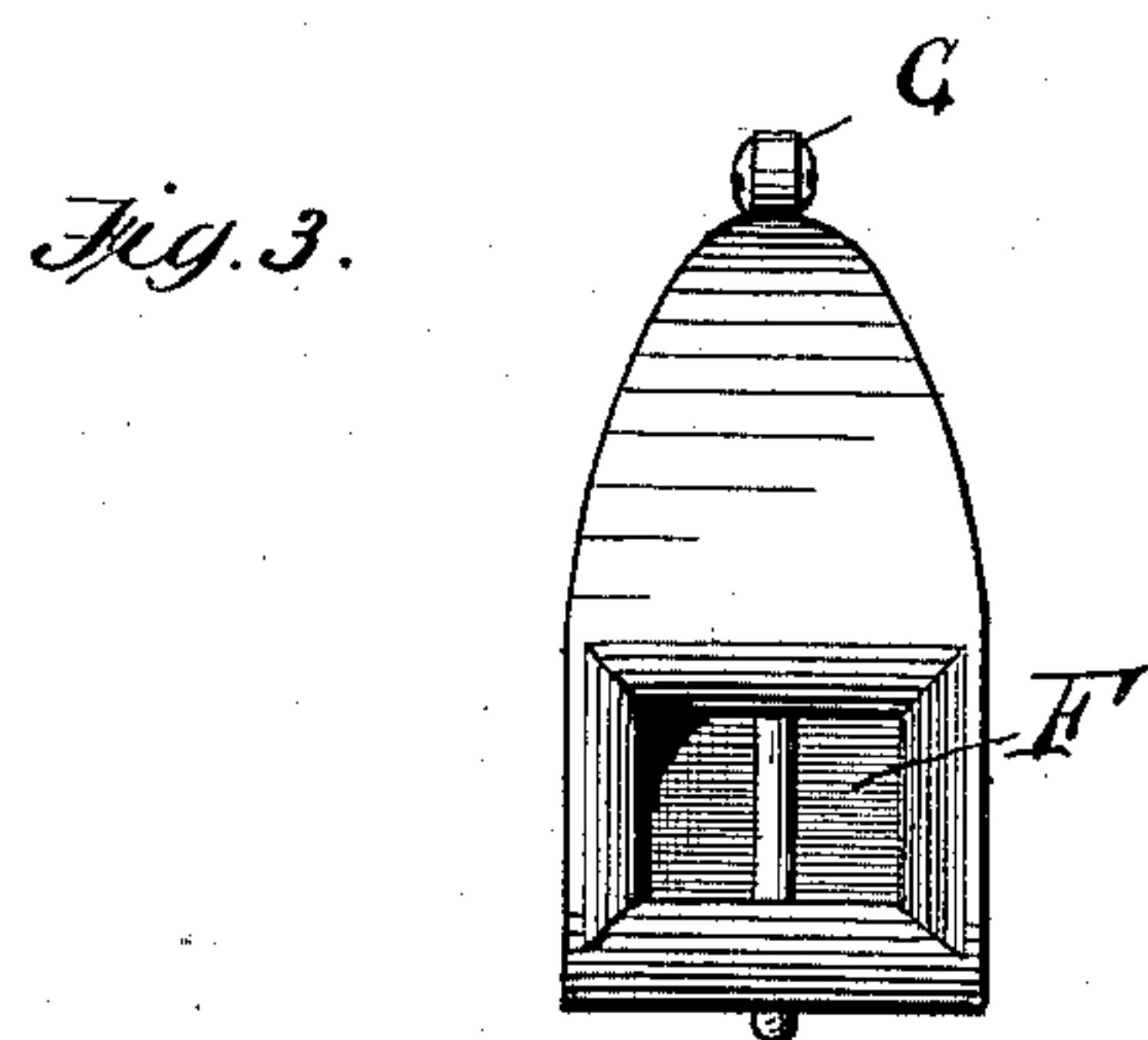
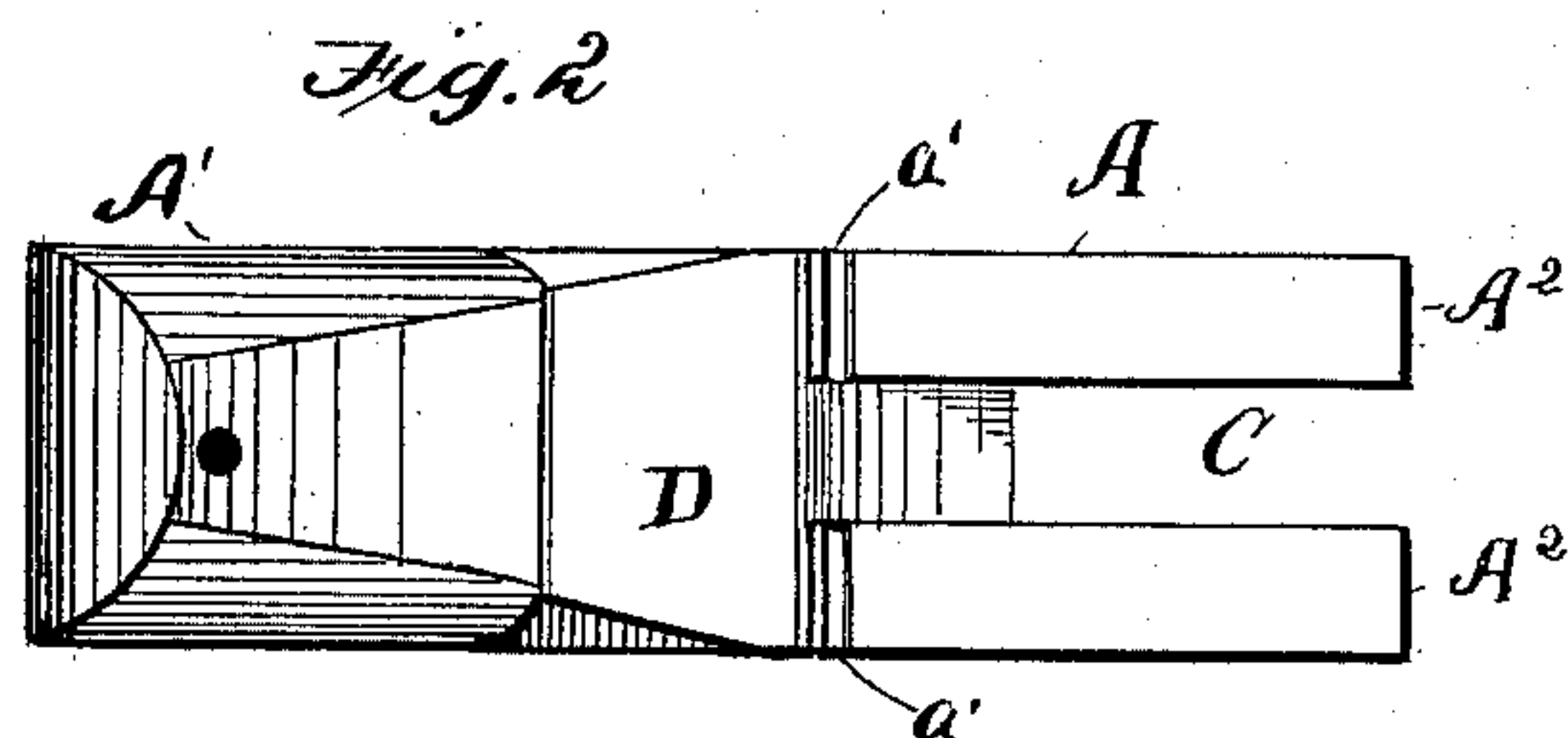
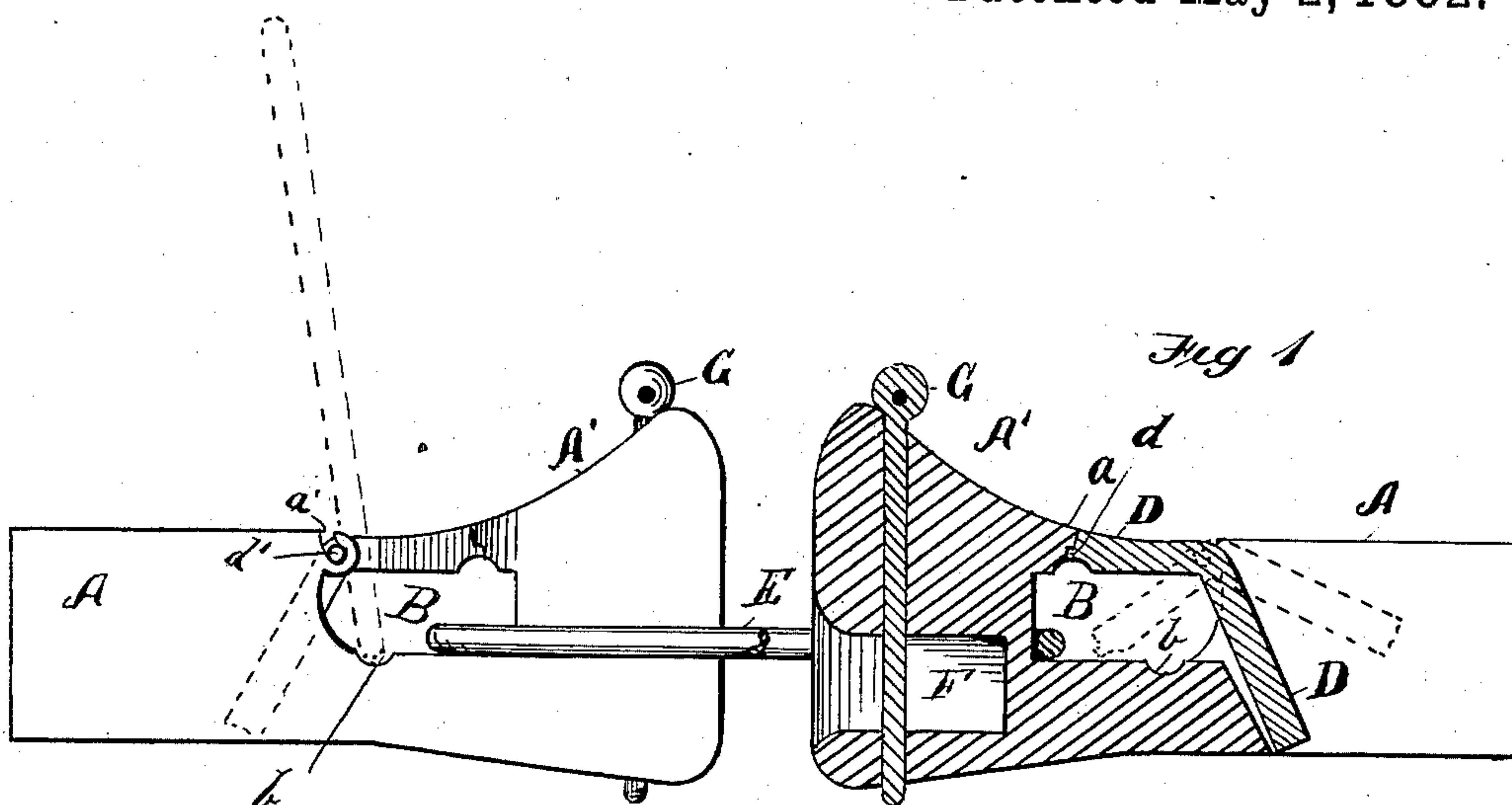


(No Model.)

W. MELIUS.
CAR COUPLING.

No. 257,176.

Patented May 2, 1882.



Attest
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His Atty

UNITED STATES PATENT OFFICE.

WALTER MELIUS, OF ALBANY, NEW YORK.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 257,176, dated May 2, 1882.

Application filed February 1, 1882. (No model.)

To all whom it may concern:

Be it known that I, WALTER MELIUS, of Albany, in the county of Albany and State of New York, have invented certain new and useful Improvements in Automatic Car-Couplings; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

My invention has for its object to provide an improved automatic car-coupling which shall be cheap and simple in construction and effective in operation; and to this end it consists of a coupling constructed and operating substantially as I will now proceed to describe.

Referring to the accompanying drawings, Figure 1 represents two of my improved couplings, one in side elevation and the other in longitudinal section. Fig. 2 is a top plan view of one of the couplings, and Fig. 3 is a front elevation of the same.

Similar letters of reference in the several figures denote the same parts.

A A represent the draw-heads of the couplings, constructed of iron and adapted to be connected to the car-platforms in the ordinary or any preferred manner. Each draw-head is provided with a wide transverse slot or recess, B, just back of its forward or enlarged portion, A', and the shank portion of each is bifurcated, and the space C between the two parts A² A² of the shank leads into the transverse slot B, as shown. Hung at the rear upper edge of the slot B, so as to swing freely, is an angular metal latch, the forward part, D, of which extends across the slot B, while its rear part, D', projects down into the space between the parts A² A² of the shank, as shown in Fig. 1. The draw-head, near the forward upper corner of the slot B, is preferably provided with a shoulder, a, and a corresponding shoulder, d, is formed on the forward portion of the latch, which fits against the shoulder a when the latch is in normal position. The part D' of the latch is made heavier than the part D, so that when the part D is depressed it will, upon being released, automatically return to its normal or closed position.

In hanging the latch a hole may be made

through it at its angle and a pin passed through it and through the sides of the draw-head; but I preferably provide the latch with laterally-projecting pins or trunnions d' d', and slot the parts A² A² of the draw-head, so as to form bearings a' for said trunnions therein, as shown in Figs. 1 and 2. This construction forms a strong hinge, and at the same time enables the latch to be readily put in and taken out when desired. To set the couplings for automatic engagement, one end of a link, E, is pressed down upon the front portion, D, of the latch of one of them, and is caused to enter the slot B. As the link slips off the end of said part D the weight of the part D' causes the latch to return to its first position, but with the part D inclosed by the link. The entered end of the link is then brought to the rear end of the slot and seated in a depression, b, so that the body of the link will be in an elevated position, as shown in Fig. 1. Now, when the two draw-heads approach each other and strike the shock resulting causes the link to swing down over the forward part of the opposite draw-head, strike upon the latch of the same, and enter the slot below the latch, the latch automatically closing back to its first position, as before, thus securely locking the two draw-heads together. When the cars start up the links will bear against the forward parts of the slots B B, as will be understood, and, however greatly the cars may rock, the latches will not open accidentally, so as to liberate the link.

In order that the draw-head may be adapted to couple to ordinary cars employing the common link-and-pin coupling, I provide a chamber, F, in the forward part of it, and provide a vertical hole leading through it for the accommodation of a straight pin, G, as shown.

My coupling can be made at slight cost, and its employment will prevent the many accidents incident to the use of the ordinary link-and-pin couplings, as no one is required to go between the cars to effect the engagement of the link. When the cars do not come together with a shock, to effect the coupling it is only necessary that the elevated link be turned down, and this can be done by a person at the side of the track or upon the car-platform.

When the link is not needed for coupling it may be swung down so as to hang below the draw-head, as will be readily understood.

Having thus described my invention, I claim
5 as new—

1. The combination of the draw-head A, having the transverse slot B, and the bifurcated shank A² A², with the angular weighted latch hinged at the rear upper corner of the
10 transverse slot, as described, with its forward arm adapted to engage with the draw-head at the upper forward corner of the slot, and with its rear weighted arm adapted to play between the parts of the bifurcated shank and to be
15 guided thereby, substantially as described.

2. The combination of the draw-head having the transverse slot and bifurcated shank and the slotted bearings *a' a'*, with the hinged weighted latch having trunnions *d' d'*, adapted to engage with the slotted bearings *a' a'*, where- 20
by a strong hinge is formed and the latch is enabled to be readily put in and taken out when desired.

WALTER MELIUS.

Witnesses:

THOMAS J. DOLAN,
JOHN A. HEENAN.