

(No Model.)

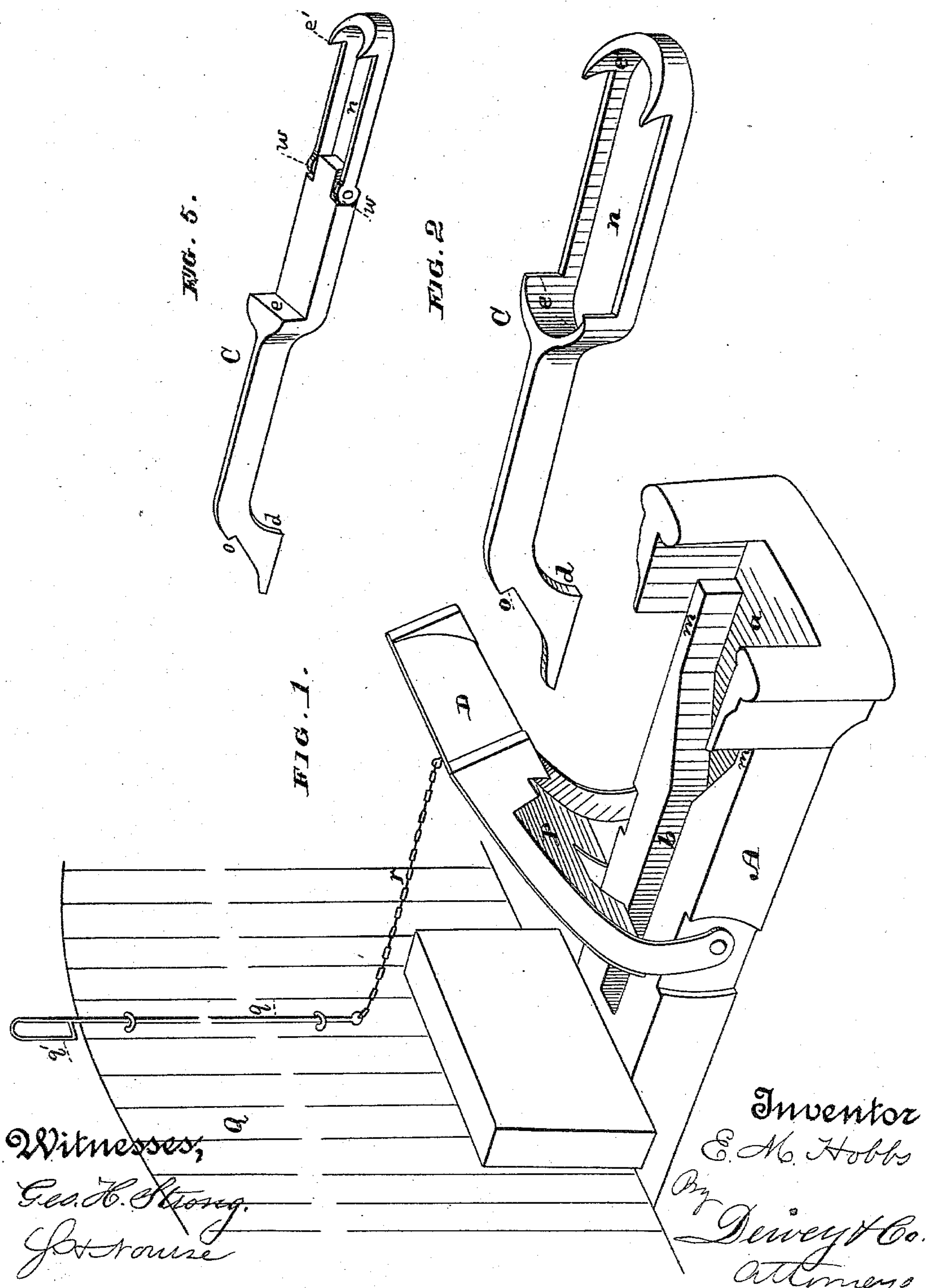
2 Sheets—Sheet 1.

E. M. HOBBS.

CAR COUPLING.

No. 287,934.

Patented Nov. 6, 1883.



(No Model.)

2 Sheets—Sheet 2.

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FIG. 3

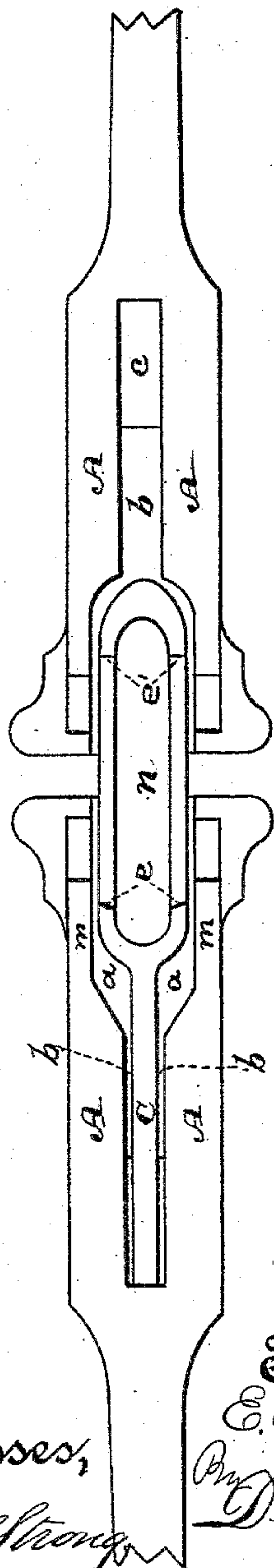
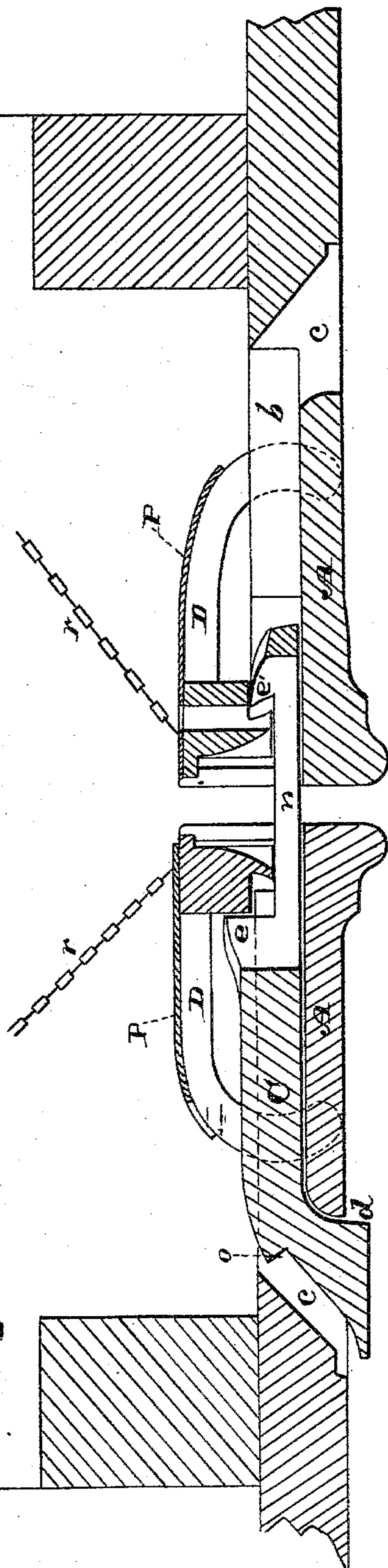


FIG. 4.



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UNITED STATES PATENT OFFICE.

ELIJAH M. HOBBS, OF SANTA ROSA, CALIFORNIA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 287,934, dated November 6, 1883.

Application filed March 6, 1883. (No model.)

To all whom it may concern:

Be it known that I, ELIJAH M. HOBBS, of Santa Rosa, county of Sonoma, State of California, have invented an Improved Car-Coupling; and I hereby declare the following to be a full, clear, and exact description thereof.

My invention relates to certain new and useful improvements in car-couplings, and especially in that car-coupling heretofore secured to me by Letters Patent of the United States, No. 267,749, November 21, 1882, to which said Letters Patent reference is hereby made.

My invention consists in an improvement in the connecting or coupling pin, and in a guard for the externally-pivoted link-latch, all of which will hereinafter fully appear, reference being made to the accompanying drawings, in which—

Figure 1 is a view of my device. Fig. 2 is a view of the pin. Fig. 3 is a top view. Fig. 4 is a sectional view. Fig. 5 is a view of my hinged link-pin.

A represents the draw-head, having an open top. From the rear of the draw-head chamber *a* extends, backwardly, a passage, *b*, through the floor of which, at its rear end, is made a hole, *c*. Pivoted to the outside of the draw-head is a heavy link-latch, D, which is adapted to fall down upon side walls, *m*, in the chamber of the draw-head.

C represents the coupling-pin. Its rear end is beveled and is provided with an under shoulder, *d*. It has also an upper central shoulder, *e*, and a forward end shoulder, *e'*. Thus far the pin corresponds to those shown in my patent; but I now use but a single pin, and this I provide with a slot, *n*, between the shoulders *e* *e'*, thus making it a link-pin. At its rear end, on top, I provide a shoulder, *o*. This link-pin fits its rear end into the hole *c*, its under shoulder, *d*, securing it. Its shoulder *o* limits the rise of the forward end by coming in contact with the rear wall of passage *b*, and thus adds to the security of the pin in the hole *c*. The forward end extends into the opposite draw-head, which is a duplicate of the one described.

The pivoted link-latches drop down over the shoulders *e* and *e'*, which impinge behind the lip or edge of the link-latches, and thus couple the cars. If, however, it should be desired to couple by the employment of the ordinary

pin, this can be done by reason of the slot *n*. This is the object of the slot—namely, that the pin C may be used as an ordinary link and receive a vertical pin. When these open draw-heads are used in a region in which snow falls, some provision should be made to keep the chambers clear. For this purpose I cover the link-latches with a metal sheet, P, which, while not interfering with their movement, afford the chambers of the draw-heads a protection from snow, dust, or other foreign materials likely to find their way in and clog the device.

Attached to the end of the car Q by suitable guides is a rod, *q*, the upper end of which is provided with a hand-loop, *q'*. Its lower end is attached by a chain, *r*, to the forward end of the link-latch D, or to its cover, as shown. Upon the end of the other car is to be a similar contrivance; whereby either or both of the latches may be raised to release the pin. In raising the rod *q* its hand-loop is turned and fits over the edge of the car-roof for support, thus sustaining the latch in an elevated position. To release it the loop is turned sidewise and the rod descends to the first guide and allows the latch to fall.

It may be found impracticable to use a rigid coupling-pin. If one draw-head should be lower than the other, the end of the pin would not enter the draw-head, but would bind and have a tendency to raise the link-latch from its engagement. In order to avoid this I may construct my link as shown in Fig. 5. Here the slotted portion is separate, and is jointed or hinged to the solid portion at *w* by any suitable form of hinge. This hinge should be made stiff enough to maintain either end of the link-pin in any position to which it may be forced, and yet not too stiff but that it may yield when necessary. By this construction the link-pin may fit any draw-head by conforming its direction to enter the draw-head chamber without bending.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a car-coupling, the open-top draw-head A, provided with passage *b* and hole *c*, and side walls, *m*, and the pivoted link-latch D, in combination with the link-pin C, having a rear beveled end, with shoulder *d*, a central should-

der, *e*, and forward shoulder, *e'*, and a slot, *n*, between the shoulders *e e'*, substantially as herein described.

2. In a car-coupling, the open-top draw-head
5 A, having passage *b* and hole *c*, in combination with the link-pin C, adapted to fit said draw-head, and having a rear top shoulder, *o*, and link-latch D, for securing said link-pin, all arranged and operating substantially as herein
10 described.

3. The open-top draw-head A, in combination with the externally-pivoted link-latch D, provided with a cover or cap, P, substantially as and for the purpose herein described.

15 4. In a car-coupling, in combination with opposite draw-heads and suitable latching de-

vices, a coupling link or pin having a vertically hinged or jointed body, adapting it to conform to any direction to engage with the draw-heads, substantially as herein described. 20

5. In a car-coupling, in combination with the draw-heads A and link-latches D, the link-pin C, adapted to fit in said draw-heads and to engage with said latches, said link-pin having a jointed or hinged body at *w*, substantially as 25 and for the purpose herein described.

In witness whereof I hereunto set my hand.

ELIJAH M. HOBBS.

Witnesses:

S. H. NOURSE,

GEO. H. STRONG.