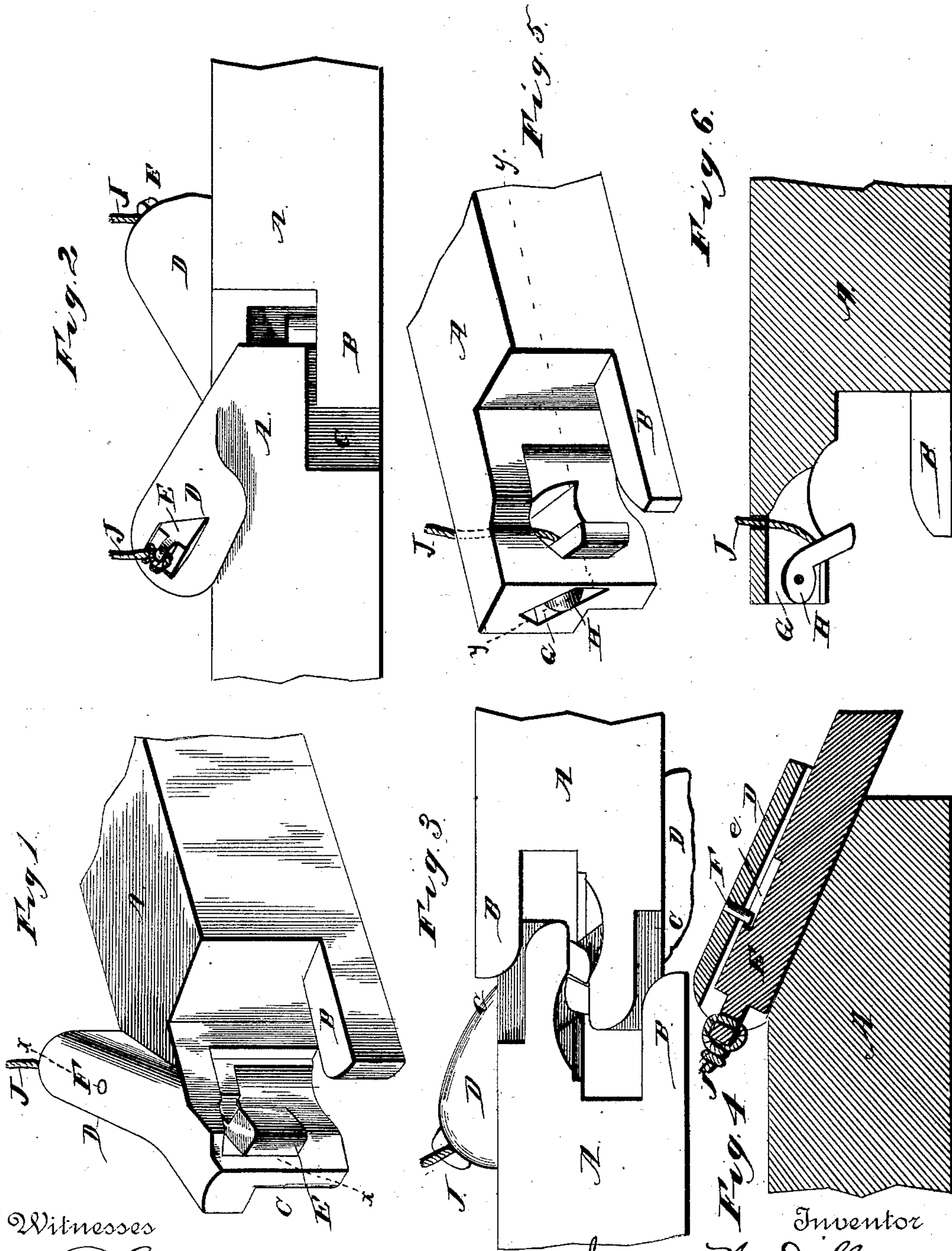


(No Model.)

J. W. DILLON.
CAR COUPLING.

No. 374,459.

Patented Dec. 6, 1887.



Witnesses
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By his Attorneys,

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UNITED STATES PATENT OFFICE.

JAMES WEAVER DILLON, OF NEW SALEM, ILLINOIS.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 374,459, dated December 6, 1887.

Application filed May 3, 1887. Serial No. 236,998. (No model.)

To all whom it may concern:

Be it known that I, JAMES WEAVER DILLON, a citizen of the United States, residing at New Salem, in the county of Pike and State of Illinois, have invented a new and useful Improvement in Car-Couplers, of which the following is a specification.

My invention is an improvement in car-couplings; and it consists in certain novel features, hereinafter described and claimed.

In the accompanying drawings, which fully illustrate my invention, Figure 1 is a perspective view of a draw-head embodying my improvements. Fig. 2 is a side elevation showing two draw-heads coupled together. Fig. 3 is a bottom plan view of the same. Fig. 4 is a vertical section on the line $x x$ of Fig. 1. Fig. 5 is a perspective view showing a modified form of draw-head, and Fig. 6 is a longitudinal section on the line $y y$ of Fig. 5.

Referring by letter to the drawings, A designates the draw-head, adapted to be secured to the car in the usual or any preferred manner. The front end of the draw-head is cut away on one side, and is provided with the forwardly-projecting tongue B, the inner forward corner of which is rounded or beveled, as shown. The opposite side of the draw-head extends forward in line with the main body of the same, and is provided at its lower outer edge with the recess or cut-out portion C. The upper part of this half or side of the draw-head is provided with the upwardly and rearwardly inclined enlargement D. This enlargement is tubular, and the sliding latch or coupling-hook E works therein. The coupling-hook is provided with a longitudinal groove, e , in its upper face, which is engaged by a pin or other stop, F, projecting downward from the tubular enlargement D, whereby the play of the latch or coupling-hook is limited. The recess or cut-out portion C of one draw-head is intended to receive the projecting tongue B of the other draw-head, and the said recess is slightly narrower than the said tongue, so that when the two draw-heads are brought together they will be directed slightly to one side of each other, and thereby aid in holding the coupling-hooks together.

In Figs. 5 and 6 I have shown a modified form of my device. In this form I dispense

with the tubular enlargement D, and in the front end of the extended portion of the draw-head I form a recess, G, in which I pivotally secure a weighted dog, H. The floor of this recess is inclined downwardly and inwardly toward the cut-away portion of the draw-head, so that the said dog normally has its end projecting from the recess in position to be engaged by a similar dog in the other draw-head.

In operation the draw-heads are brought together, and thereby automatically coupled. This operation will be readily understood. The normal position of the coupling-hooks is shown in Fig. 1. When the draw-heads are brought together, the coupling-hooks will mutually yield sufficiently to pass each other, and as soon as they have so passed will resume their normal position in the path of the engaging coupling-hook. Consequently any action which tends to draw the draw-heads apart will be counteracted and prevented by the hooks engaging each other, as shown in Fig. 3.

By my device the cars cannot be uncoupled while in motion, so that the accidental dividing of trains is prevented. When the train comes to a stop, the momentum of the cars will cause them to become "jammed"—that is, the draw-heads will come together sufficiently to disengage the coupling-hooks, when either one may be withdrawn from the path of the other by means of the rope or chain J, which is secured to the outer end of the coupling-hooks or the rear side of the dogs. This chain or rope may be extended to the top or side of the car, so that the brakeman will in no case be required to go between the cars.

It will be noticed that when two draw-heads come together they are directed slightly to one side, so that they are thrown toward the hooks or dogs and the engagement thereof made certain. This action also prevents the accidental uncoupling of the draw-heads, as will be readily understood. The tubular enlargement also prevents lateral movement of the coupling-hooks.

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

1. A draw-head for car-couplings, having one side cut away and provided with a projecting tongue, B, and its other side provided

with a recess, C, the coupling devices being carried by the non-cut-away portion of the draw-head, substantially as set forth.

2. A draw-head having one side cut away and its other side projecting forward and provided with a recess having an inclined bottom, combined with the coupling device mounted in said recess, so as to normally project therefrom toward the cut-away portion of the draw-head, substantially as specified.

3. The combination, with the draw-head

having the tubular enlargement, of the coupling-hook sliding in said enlargement and a stop-pin therein to limit the play of the coupling-hook, substantially as set forth. 15

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

JAMES WEAVER DILLON.

Witnesses:

W. R. HOOPER,

W. W. GRIFFIN.