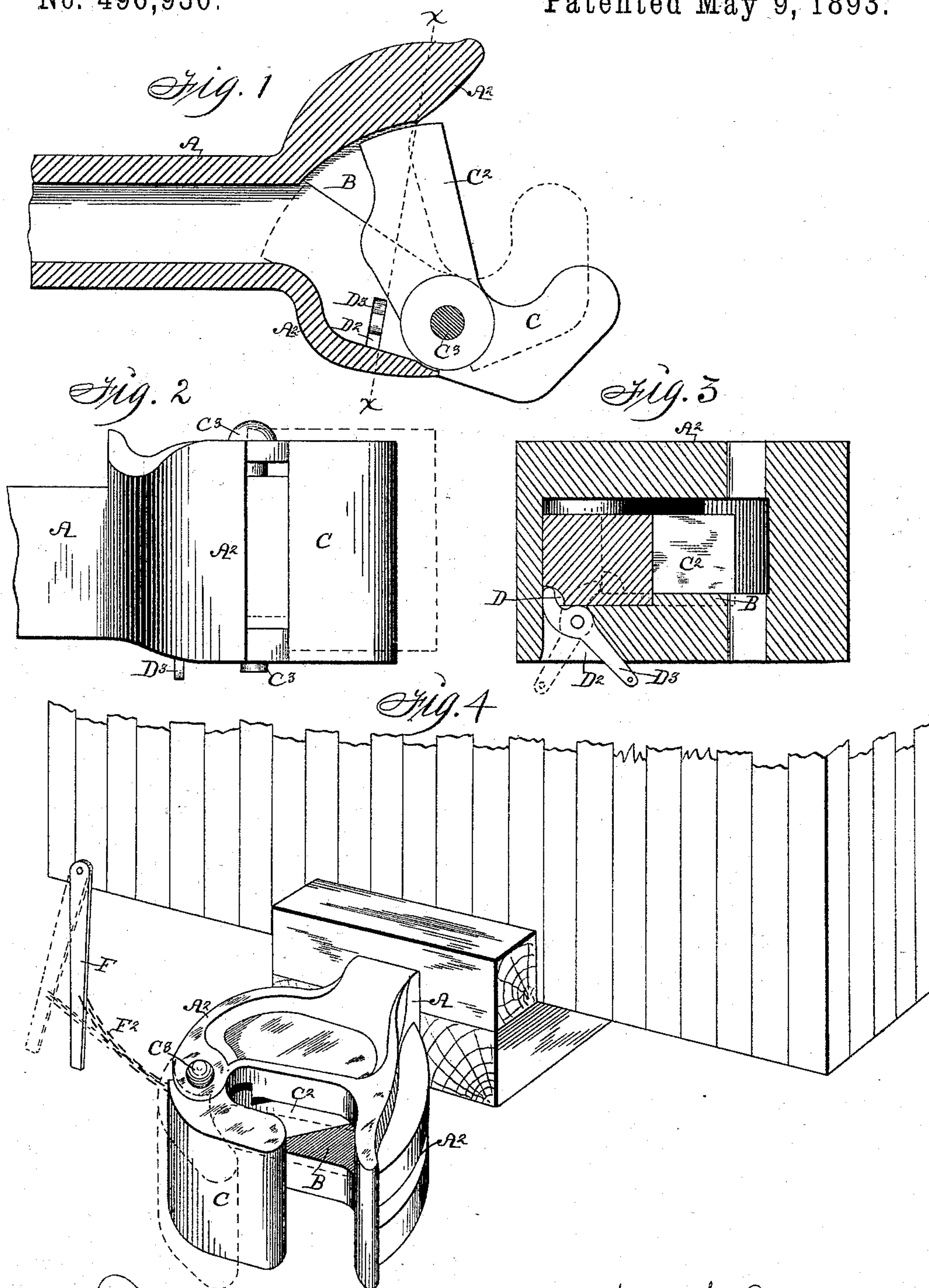


(No Model.)

A. S. EDEY.
CAR COUPLING.

No. 496,930.

Patented May 9, 1893.



Witnesses:
W. J. Sankey.
J. Ralph Orwig.

Inventor: Alfred S. Edey.
By Thomas G. Orwig, Attorney.

UNITED STATES PATENT OFFICE.

ALFRED S. EDEY, OF DES MOINES, IOWA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 496,930, dated May 9, 1893.

Application filed June 7, 1892. Serial No. 435,830. (No model.)

To all whom it may concern:

Be it known that I, ALFRED S. EDEY, a citizen of Great Britain, residing at Des Moines, in the county of Polk and State of Iowa, have
5 invented a new and useful Car-Coupling, of which the following is a specification.

My invention relates to that class of couplers in which the vertical jaw is automatically locked, by having a projection on its under
10 surface drop into a depression in the draw head cavity, and my invention consists in the construction of the draw head and vertical jaw and in the arrangement and combination therewith of the means for elevating the
15 vertical jaw as required to uncouple, as hereinafter more fully set forth, pointed out in my claims and illustrated in the accompanying drawings, in which—

Figure 1 is a transverse horizontal sectional
20 view of the coupler. The dotted lines of this figure show the vertical jaw in a closed position. Fig. 2 is a side elevation of the coupler. Dotted lines are shown, illustrating the position the vertical jaw would assume when
25 opened. Fig. 3 is a vertical transverse sectional view of the coupler looking rearwardly from the line $x-x$ of Fig. 1. Fig. 4 shows, in perspective, my complete coupling device attached to a car, as required in practical use.
30 Referring to the accompanying drawings the reference letter A is used to designate the draw bar.

A² designates the draw head which is of the same general conformation as that class of
35 draw-heads which have vertical hinged jaws, now in common use.

The reference letter B designates a raised shoulder formed on or fixed to the forward portion of the bottom of draw head cavity.
40 The rear edge of this shoulder is inclined rearwardly from that side of the draw head to which the vertical jaw is pivoted, and the top surface of the bottom of the draw-head cavity forward of the said shoulder is preferably parallel with the under surface of the rear extension of the vertical jaw.
45

C designates the vertical jaw having an integral rear extension C². This jaw has a pivotal connection with the draw-head by means
50 of a pin C³, and is so arranged as to be capable of a slight vertical movement thereon, the top of the vertical jaw and the top of the

draw-head being preferably flush, when the former is in a closed position.

The rear extension C² of the draw head is
55 adapted in shape to enter the drawhead cavity in the rear of the shoulder B, and is also capable of being elevated and swung forwardly over the said shoulder.

D designates a notch formed in the rear
60 lower corner of the rear extension of the vertical jaw for purposes hereinafter specified.

D² designates a vertical slot formed in the bottom of the draw-head, immediately below the notch D.
65

D³ is a lever fulcrumed in the said slot and having its upper end adapted to enter the notch D so that it will elevate the vertical jaw and swing it forwardly when the lower end of the said lever is moved laterally. Any of the
70 common devices for moving the said lever laterally may be employed, my preference however, being for the one shown in the accompanying drawings, which comprises cheapness and simplicity with effectiveness, and consists of a lever F fulcrumed to the end of a
75 car in proximity to its side and chain F² connecting the levers D³ and F.

Having thus described the construction and function of each part of the device in turn, what I claim as my invention, and desire to secure by Letters Patent, is—
80

1. In a car-coupling having a vertical jaw hinged therein and capable of a limited vertical movement relative to the draw head, a
85 rear extension on the said vertical jaw, having a square corner on its lower forward edge and a smooth lower surface, and a straight square shoulder formed on the bottom of the draw head cavity extending parallel with the
90 said rear extension, when in a closed position, so that the rear extension will drop behind the shoulder when closed, and means for elevating the vertical jaw and throwing it forwardly.
95

2. In a car coupling having a vertical jaw hinged therein and capable of a limited vertical movement relative to the draw head, a rear extension on the said vertical jaw having a square corner on its lower forward edge,
100 and a smooth lower surface, and a straight square shoulder, formed on the bottom of the draw head cavity and extending parallel with the said rear extension, when in a closed po-

sition, so that the rear extension will drop behind the shoulder when closed, means for elevating the draw head and throwing it forwardly, comprising a lever extended through
5 a slot in the draw head, and pivoted therein with its upper end in engagement with the rear extension of the vertical jaw and its lower end projecting below the draw head and an inclined surface on the said rear extension
10 adapted to be engaged by said lever substantially as and for the purposes stated.

3. In a car-coupling having a draw head and a vertical jaw hinged therein and adapted to be automatically locked by having a portion
15 of the vertical jaw drop into a cavity in the

draw head, means for elevating the vertical jaw and throwing it forwardly, comprising a lever extended through a slot in the draw-head and pivoted therein with its upper end in engagement with the rear extension of the
20 vertical jaw and its lower end projecting below the draw head and an inclined surface on the said rear extension adapted to be engaged by the said lever, substantially as and for the purposes stated.

ALFRED S. EDEY.

Witnesses:

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