

(No Model.)

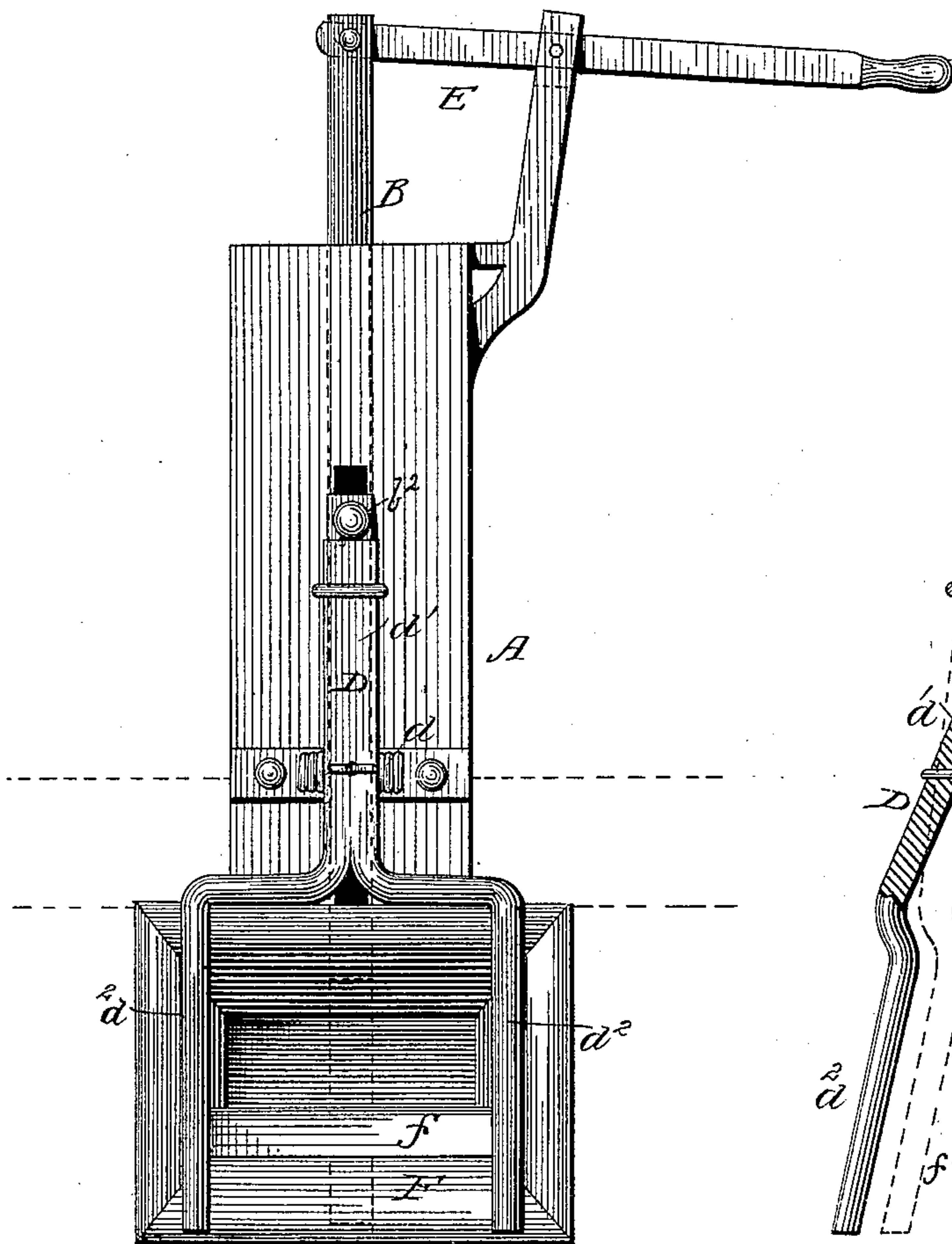
G. I. BLACKLEY, J. I. NICHOLSON & H. A. HOLLOMAN.

## CAR COUPLING.

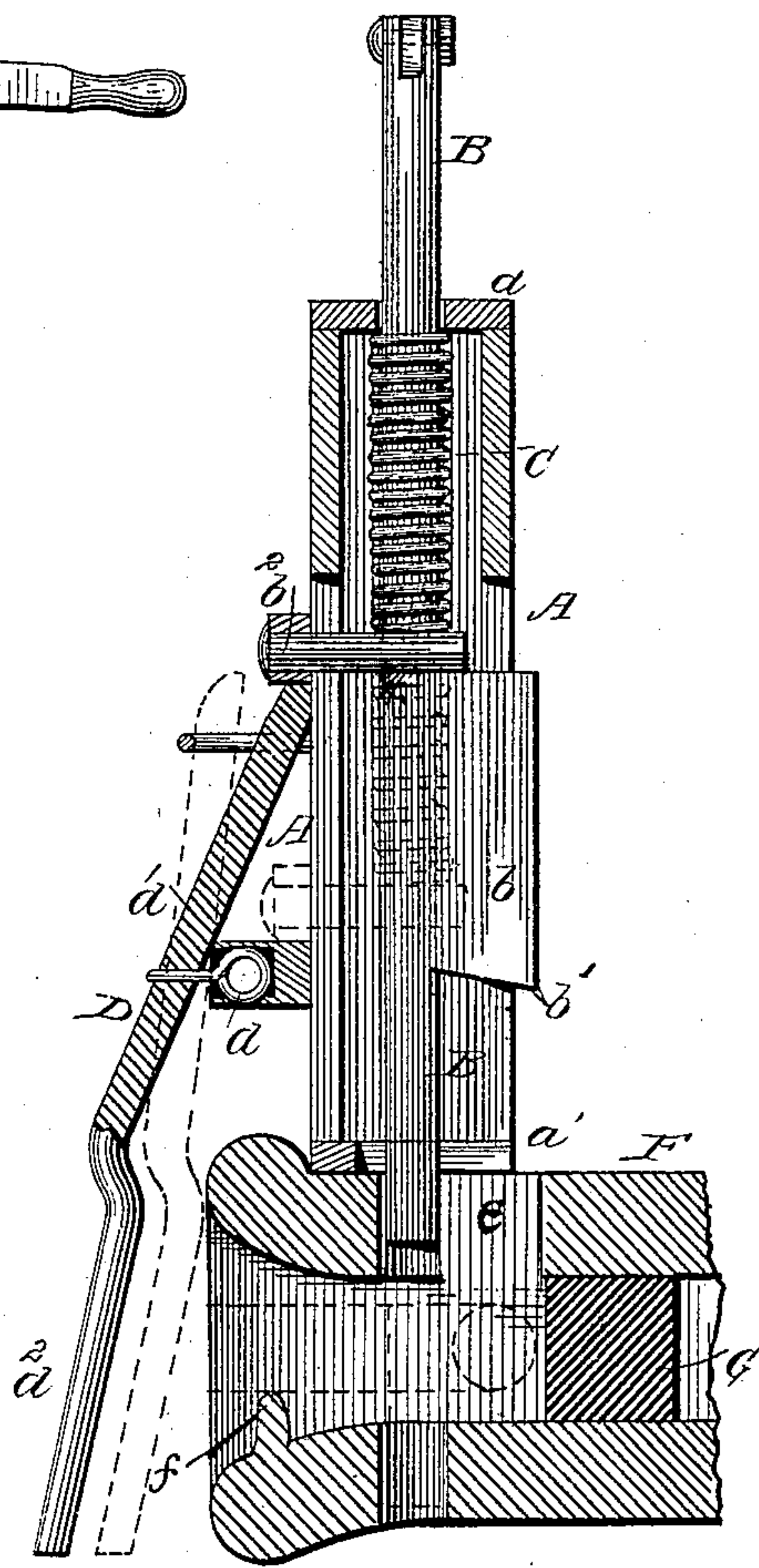
No. 267,321.

Patented Nov. 14, 1882.

*Fig. 1,*



*Fig. 2,*



WITNESSES :

Witnesses:  
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# UNITED STATES PATENT OFFICE.

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## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 267,321, dated November 14, 1882.

Application filed March 18, 1882. (No model.)

*To all whom it may concern:*

Be it known that we, GEORGE I. BLACKLEY and JOHN I. NICHOLSON, of Greenville, Hunt county, Texas, and HARVEY A. HOLLOMAN, of White Rock, Hunt county, Texas, have invented a new and Improved Car-Coupling; and we do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a front end elevation. Fig. 2 is a side sectional elevation, showing only a fragment of the draw-bar.

This invention relates to that class of couplings in which a vertically-moving pin is employed in connection with a link of ordinary construction for the purpose of securing the cars together; and it consists mainly in the combination, with a pin of special construction, having attached thereto a spring adapted to give it its downward movement, of a pivoted frame adapted to hold the pin in its elevated position against the action of the spring until the cars come together, and then to release the same in order that the coupling may be effected.

In the drawings, A represents a box or frame, of any proper construction, which may be secured in any proper manner upon the top of the draw-head, or may be made an integral part of the same, as may be preferred, which is provided with a top and bottom plate,  $a$   $a'$ , as shown.

B represents a long pin, having near its lower end the lateral projection  $b$ , with the inclined face  $b'$  and the lateral stud or bolt  $b^2$  projecting out from the front plate of the frame A, which pin is supported and guided by proper bearings in the top and bottom plate, as shown.

C represents a coiled spring, encircling the pin, which bears at one end upon the stud  $b^2$  and at the other against the top plate of the frame, as shown.

D represents a frame or plate pivoted by means of a coiled spring,  $d$ , to any proper bearing upon the frame A, which is provided above with the single arm  $d'$  and below with the two arms  $d^2$   $d^2$ , as shown. This plate or frame, when in its normal position, has the upper end of its arm  $d'$  bearing with an elastic pressure against

the front plate of the frame A at a point which is in the same vertical plane as the stud  $b^2$  of the pin.

E represents a lever having its fulcrum located in any proper bracket secured at any proper point, by means of which the coupling-pin may be raised from the side; but, if desired, it may be modified to act from the top of the car.

F represents the draw-head, the upper plate of which is provided with a slot,  $e$ , adapted to permit the entrance of the pin B, with its projection  $b$ . The lower plate of the draw-head is provided near its mouth with a rib or projection,  $f$ , as shown.

G represents a block of rubber, located in the draw-head, which serves to arrest the movement of the entering link at the proper point.

The operation is substantially as follows: The pin being in its depressed position, and it being desired to effect a coupling, the lever E is actuated to raise the pin sufficiently high to bring its stud  $b^2$  above the upper arm,  $d'$ , the frame of the arm freely swinging on its spring-pivot to permit this upward movement, and also to prevent its return when the stud has passed the end of the arm. When the parts are in this position the pin, it will be understood, is held from downward movement under the action of the spring C by the contact of the upper end of arm  $d'$  with the stud  $b^2$  of the pin. When, however, the cars come together the end of arm  $d'$  is moved outward and disengaged from the stud  $b^2$  of the pin, this result being accomplished by the swinging inward of the arms  $d^2$   $d^2$  when these are struck by the approaching car. The pin, when thus released, is forced quickly down by the action of the spring C and caused to engage with the entered link. The inclined face  $b'$  of the projection  $b$  of the pin, it will be observed, rests upon the end of the link, and serves, in connection with the rib  $f$ , to hold the same in a horizontal plane. By means of the block G the end of the link is prevented from entering the draw-head far enough to escape action of the projection  $b$ .

By means of the described construction simplicity is obtained with efficiency of operation. The action described is automatic, so that the

brakeman need not endanger his life by going between the cars.

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

1. The combination, with the draw-head F, provided with the slot *e* and slotted frame A, secured to the upper face of the draw-head, of the coupling-pin B, provided with the projection *b* and spring C, substantially as described, and for the purpose set forth.

2. The combination, with the draw-head F and slotted frame A, secured to the upper face of the draw-head, and the coupling-pin B, provided with the stud *b*<sup>2</sup> and spring C, of the

frame D, pivoted to the frame A by a coiled spring, *d*, and provided at its upper end with the arm *d'* and its lower end with the arms *d*<sup>2</sup>, substantially as described, and for the purpose set forth.

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