

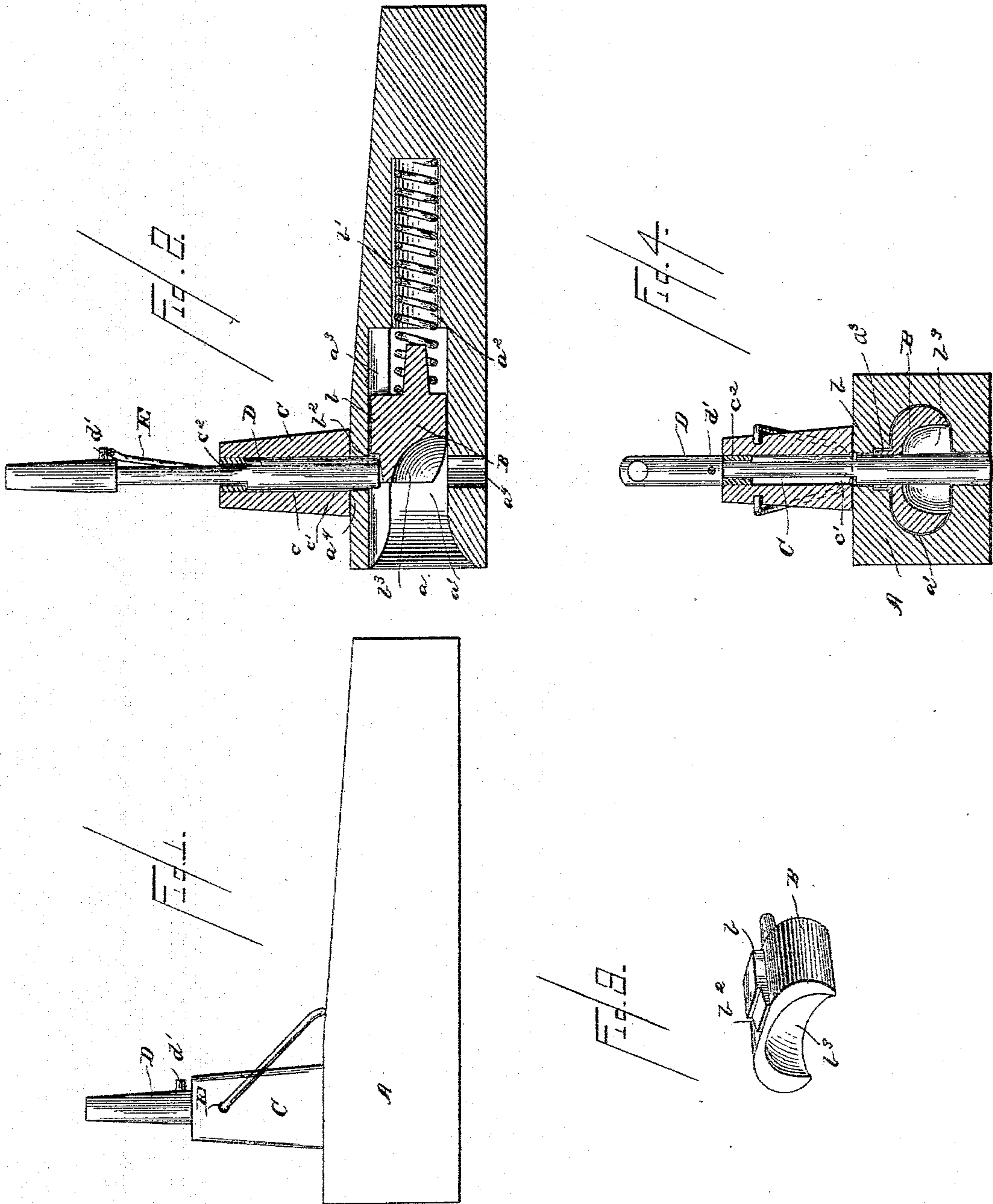
(No Model.)

W. F. HALL.

CAR COUPLING.

No. 356,763.

Patented Feb. 1, 1887.



Witnesses

*Geo. Thayer*

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# UNITED STATES PATENT OFFICE.

WALTER F. HALL, OF URICH, MISSOURI.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 356,763, dated February 1, 1887.

Application filed October 18, 1886. Serial No. 216,553. (No model.)

*To all whom it may concern:*

Be it known that I, WALTER F. HALL, a citizen of the United States, residing at Urich, in the county of Henry and State of Missouri, have invented a new and useful Improvement in Car-Couplings, of which the following is a specification.

My invention relates to improvements in car-couplings; and it consists of the details of construction, novel combination, and adaptation of parts for service, substantially as hereinafter described, and specifically pointed out in the claim appended.

The object of my invention is to provide a car-coupling in which the coupling is effected automatically, and thereby avoid the necessity of the attendant passing between the cars, at the risk of his life, to accomplish this end; further, to provide novel and efficient means for guiding the coupling-link and controlling the coupling-pin, all as hereinafter fully explained.

In the accompanying drawings, which illustrate a car-coupling constructed in accordance with and embodying the features of my invention, Figure 1 is a side elevation of my improved car-coupling. Fig. 2 is a longitudinal sectional view of the same. Fig. 3 is a detail view of the pin-supporting block, and Fig. 4 is a transverse sectional view.

Referring to the drawings, in which similar letters of reference denote corresponding parts in the several figures, A designates the draw-head of an ordinary car. This draw-head A is provided with the usual flaring mouth,  $a$ , communicating with a suitable chamber,  $a'$ , in the rear wall of which chamber is provided a circular socket,  $a''$ , for the purpose to be explained.

In the upper wall of the draw-head A, on the inner side thereof, is provided a rectangular groove,  $a^3$ , adapted to receive the correspondingly-shaped projection or feather  $b$ , formed on the upper face of the pin-supporting block B. At the rear portion of the block is provided a stud, to which is fitted a spring,  $b'$ , adapted to be received in the socket  $a''$  of the draw-head A.

From this construction it will be seen that

I provide a spring-actuated pin-supporting or coupling block and guiding means for the same. This block B is further provided on its upper face with a notch or cut-out portion,  $b^2$ , to support the coupling-link in raised position, and on its lower face or portion is cut out, as at  $b^3$ , to receive and guide the link in the draw-head of an approaching car.

Formed integral with the draw-head A, or in any preferred manner rigidly secured thereto, on the upper face thereof, is a vertically-disposed block, C, provided with a central opening or passage,  $c$ , which is in line and communicates with the usual aligned openings,  $a^4$ , in the draw-head A, through which the coupling-pin D is passed.

The opening  $c$  in the block C is of a larger diameter at its lower end,  $c'$ , than at its upper end,  $c''$ , so as to prevent the coupling-pin D, which is of a shape similar to the said opening  $c$ , from being withdrawn or working out.

At a suitable point on the coupling-pin D is provided a lug or extension,  $d'$ , to rest against the upper end of a pivoted bail, E, that is attached to the block C.

From the foregoing description, taken in connection with the drawings, the operation of my car-coupling will be readily understood, and is as follows: The coupling-pin D is raised and supported by the supporting-bail E, the lower end of the pin resting in the notch  $b^2$  of the spring-actuated block B and retaining the block in place. The link of the approaching car enters and strikes in the cut-out portion  $b^3$  of the block B, forces the latter back, and causes the pin to fall and thus effect the coupling automatically, as will be readily understood by reference to Fig. 2 of the drawings.

It will be readily observed that I provide a car-coupling of very simple construction, which is thoroughly efficient in operation, as well as automatic, and that it is very cheap to manufacture.

It will also be seen that my improved means for guiding the coupling pin and link are thoroughly efficient, and that the coupling of the cars is always certain and the danger of losing lives is prevented.



I claim—

In a car-coupling, the draw-head A, block C, pin D, and supporting device E, in combination with spring-actuated block B, having notch  $b^2$ , to receive one end of pin D, and cut-out portion  $b^3$ , to form a guide for the link, all combined, arranged, and operating for the purpose set forth.

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

WALTER F. HALL.

Witnesses:

ALBERT H. HALL,  
OBADIAH R. TOMPKINS.