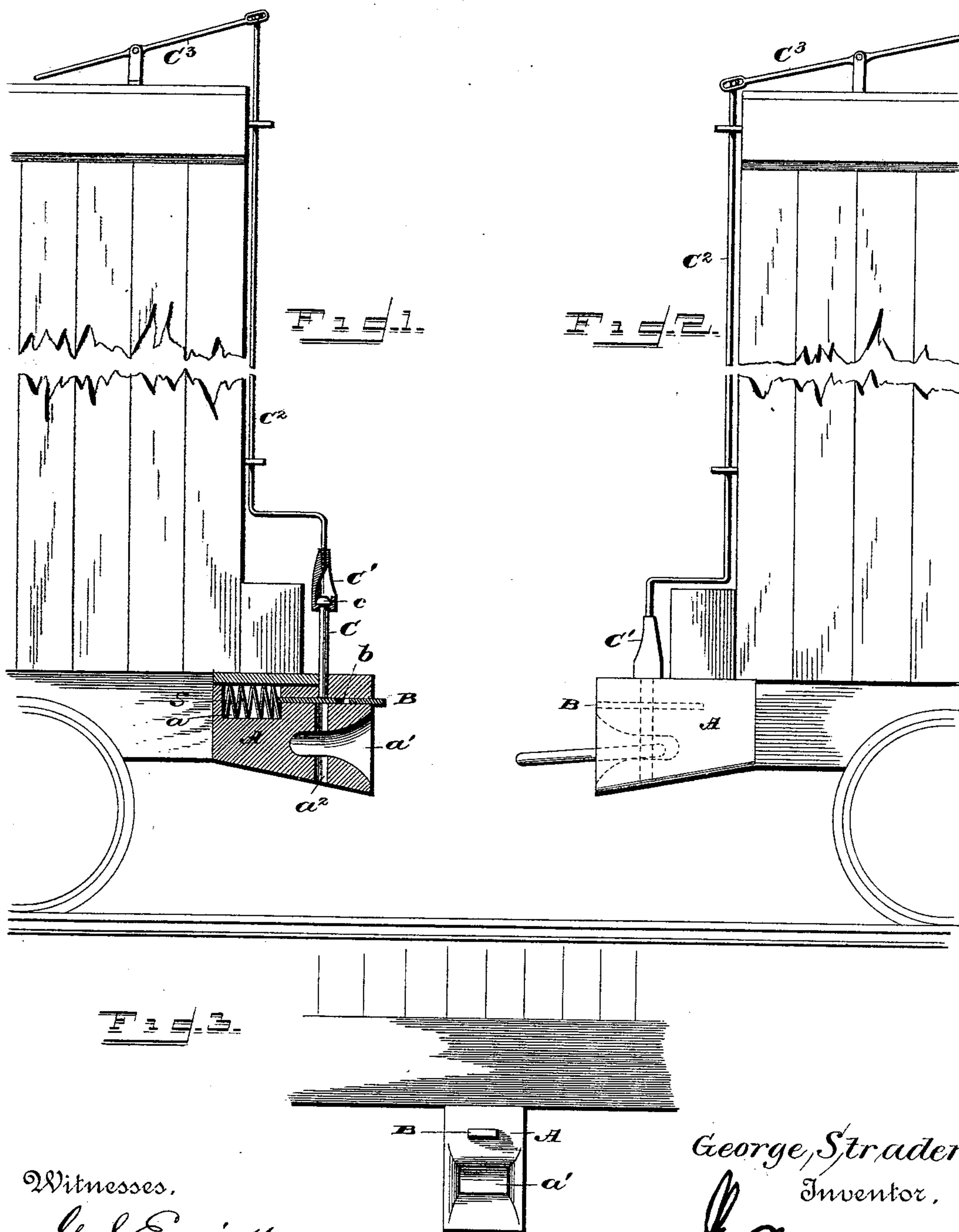


(No Model.)

G. STRADER.  
CAR COUPLING.

No. 386,790.

Patented July 24, 1888.



Witnesses.

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# UNITED STATES PATENT OFFICE.

GEORGE STRADER, OF OLIVE HILL, KENTUCKY, ASSIGNOR OF ONE-HALF  
TO SAMUEL V. WILCOX, OF SAME PLACE.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 386,790, dated July 24, 1888.

Application filed January 26, 1888. Serial No. 261,977. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE STRADER, a citizen of the United States of America, residing at Olive Hill, in the county of Carter and State of Kentucky, have invented certain new and useful Improvements in Car-Couplers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

My invention relates to certain new and useful improvements in car-couplers; and it consists in the novel construction and arrangement of the parts, which will be more fully hereinafter described, and particularly pointed out in the claims.

The object of my invention is to provide a convenient form of coupler having the function of providing a rest for the coupling-pin when in the act of coupling, and when two draw-heads meet to operate certain mechanism to allow the pin to drop. I attain this object by the construction illustrated in the accompanying drawings, wherein like letters of reference indicate similar parts in the several views, and in which—

Figure 1 is a side elevation of a car, showing the draw-head and coupling mechanism in section. Fig. 2 is a side elevation of a car, showing my improvement applied thereto. Fig. 3 is a front elevation of the draw-head, shown as applied to the lower portion of a car.

A indicates the draw-head, which is formed with a rear chamber or recess, *a*, in which is seated a coil-spring, S. The said draw-head is also formed with a link opening or orifice, *a'*, and also with a vertical coupling-pin orifice, *a''*. The upper portion of the draw-head is further formed with a horizontal slot, in which is seated a sliding plate, B, having an aperture, *b*, therein conforming in diameter to the coupling-pin hole in the draw-head.

The coupling-pin C may be of ordinary construction, or is formed preferably with a head, *c*, which engages a socket connecting block or casting, C', to the upper end of which the lower screw-threaded end of the rod C<sup>2</sup> is secured, and then extends upward to the top

portion of the car, and is engaged by an operating-lever, C<sup>3</sup>.

The operation of my improved device is as follows: When it is desired to couple two cars together, the lever C<sup>3</sup> is depressed, as shown in Fig. 1, raising the coupling-pin C so that the lower end thereof will clear the aperture *b* in the plate B. When the said coupling-pin C shall have assumed this position, the said plate will be impelled forward by the spring S, as shown in Fig. 1, with the coupling-pin resting upon the top portion thereof, but still held in a portion of the hole *a''*. When the two draw-heads strike, the sliding plate B is engaged by the opposing draw-head and driven backward against the spring S, when the aperture *b* of said plate B comes beneath the lower end of the coupling-pin C. The pin C may then drop through by gravity or be forced down by the lever and pass through the link, thus securely coupling the cars together.

Having thus described my invention, what I claim is—

1. The combination, with a draw-head having a perforated spring-pressed slide above the link-opening, and a lever fulcrumed on the car and provided at one end with a depending rod, of a block secured to the lower end of said rod, and having an open-sided inclined slot, a coupling-pin seated at its lower end in the pin-opening of the draw-head, and its head swivelingly seated at a point below the inclined inner wall of the socket-block, substantially as described.

2. The combination, with a draw-head having a perforated spring-pressed slide above the link-opening, and a lever fulcrumed on the car and provided at one end with a depending rod having its lower end threaded, of a socket-block provided at top with a tapped opening to receive said threaded end of the rod, and with an open-sided inclined slot, a coupling-pin seated at its lower end in the pin-opening of the draw-head, and having its head swivelingly seated below the inclined inner wall of the slot or socket, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

GEORGE STRADER.

Witnesses:

W. A. DAVIS,  
J. M. TYNE.