(No Model.)

C. E. SEABURY.

CAR COUPLING.

No. 456,858. Patented July 28, 1891.

Fig. 1.

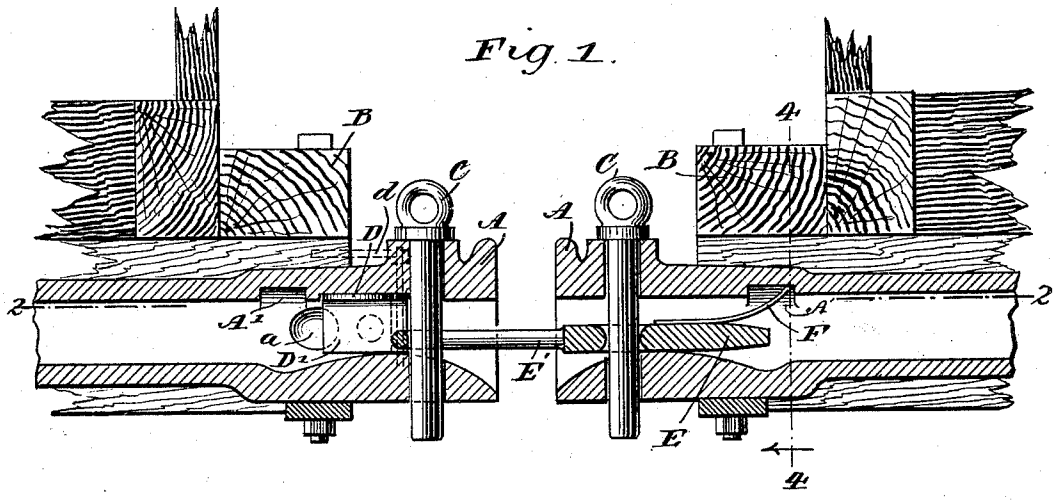


Fig. 2.

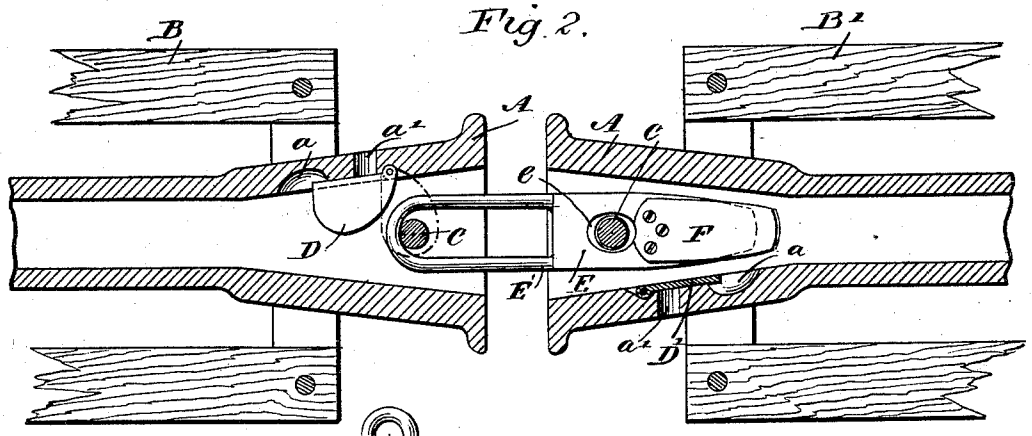


Fig 3.

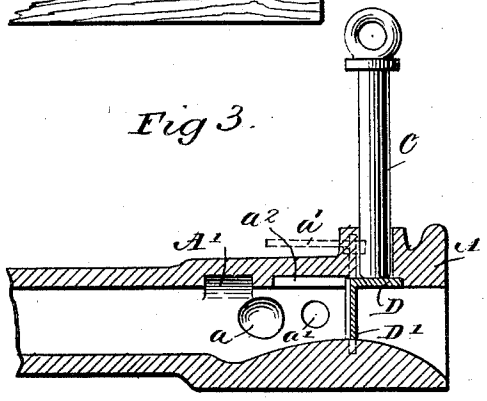


Fig 4

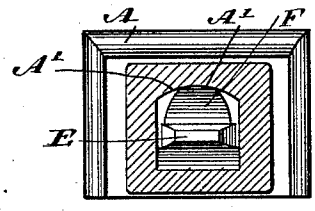
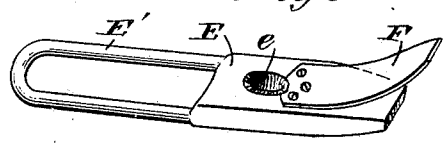


Fig 5.



WITNESSES:

Paul Johnston

E. M. Clark

INVENTOR:

C. E. Seabury

BY Munn & Co.

ATTORNEYS

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

CHARLES E. SEABURY, OF STONY BROOK, NEW YORK.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 456,858, dated July 28, 1891.

Application filed December 20, 1890. Serial No. 375,344. (No model.)

To all whom it may concern:

Be it known that I, CHARLES E. SEABURY, of Stony Brook, in the county of Suffolk and State of New York, have invented a new and Improved Car-Coupling, of which the following is a full, clear, and exact description.

My invention relates to improvements in car-couplings, and is an improvement on the car-coupling patented to me June 3, 1890, No. 429,365; and the invention is intended to provide means for automatically coupling railway-cars, the special object of the improvement being to provide means for holding the coupling-link in a perfectly straight position, so that it will be sure to enter the draw-head of an opposing coupling.

To this end my invention consists in a draw-head having a concave recess in the top and a link having an upwardly-curved spring to fit the recess. This construction will be hereinafter fully described, and specifically pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a broken vertical longitudinal section of the coupling in a coupled position. Fig. 2 is a sectional plan view of the same. Fig. 3 is a broken longitudinal section of a single draw-bar with the coupling-pin supported in an elevated position. Fig. 4 is a cross-section of the draw-head on the line 4 4 of Fig. 1, and Fig. 5 is a detail perspective view of the coupling-link.

The draw-heads A are supported in a suitable frame-work B′ on the bottom of the cars B in the ordinary way, and the draw-heads are provided with the usual cavities and flaring mouths, and also with coupling-pins C, which move in vertical perforations through the draw-heads in the ordinary way. Each draw-head has a plate D hinged to one side thereof in the upper portion of the cavity and adjacent to the pin C, so that it will swing in a recess a^2 of the draw-head, and may be made to extend beneath the coupling-pin, as best shown in Fig. 3, to support the pin, and the plate has a depending flange D′, which closes against the side of the draw-head when it is struck by a link, and the plate D is thus swung from beneath the pin C, allowing the pin to drop. The draw-head has a finger-hole or recess *a* on one side at a point opposite the rear end of the flange D′ when said flange is closed against the wall of the draw-head, and the brakeman may thus place his finger behind the flange and swing the plate into position to hold the coupling-pin. The draw-head is also provided with a perforation *a′* in one side, which is behind the flange D′ when the flange is closed against the wall, and through this perforation a pin or other similar article may be thrust to swing the flange and plate forward. Instead of using the finger or the pin, the plate may be provided with a handle *d*, as indicated by dotted lines in the drawings, and in this case neither the finger-hole nor perforation will be needed.

The coupling-link comprises a block E, which is beveled at its outer end, and which is adapted to enter the draw-head, said block having a vertical perforation *e* to receive the coupling-pin, and a link portion E′, adapted to enter a draw-head and also to receive a coupling-pin. The link is provided with an upwardly-extending spring or wing F, which is secured to the block E and extends toward the outer end of the block, and the spring is rounded slightly toward its free end, as best shown in Figs. 4 and 5.

The draw-head is provided in the upper portion of its cavity with a concave recess A′, which is located at a point where the upper end of the spring F will fit within it when the link is in position in the draw-head, and it will be seen that as the recess A′ is concave or rounded from the side toward the center and the spring F is also rounded toward the end the pressure of the spring on the walls of the recess will force the end of the spring to the center of the recess, and the link will thus be held in a perfectly straight position, so that it will be sure to enter the draw-head of an opposing coupling. It will be noticed that while the spring holds the link in a perfectly straight position still the link may be swiveled to one side or the other or may be moved vertically, so that it may be made to enter a draw-head which is higher or lower than the one in which it is held.

The coupling operates as follows: The coupling-link is secured in one draw-head, with the spring F projecting into the recess A′, so as to

hold it in a straight position, and the pin C is raised in the opposing draw-head and the plate D swung beneath it, and when the couplings come together the link will strike the flange D′ and swing the plate from beneath the pin and the pin will drop through the link, thus coupling the cars.

The coupling which I have shown in the drawings and described above is substantially like the one shown in the patent above referred to, the only difference being in the means for holding the coupling-link in a straight position.

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

1. A car-coupling comprising a draw-head having a recess in the top and a link having a spring secured thereon and adapted to enter the recess, substantially as described.

2. In a car-coupling, the combination, with the draw-head having a concave recess in its top, of the coupling-link having a spring secured to one side and adapted to enter the recess, substantially as described.

3. The combination, with the draw-head having the concave recess in the top, of the coupling-link having the upwardly-curved spring secured thereto, said spring having its free end rounded, substantially as described.

CHARLES E. SEABURY.

Witnesses:
W. B. SHERRY,
W. P. RAPIER.