(No Model.)

E. CASPER.

CAR COUPLING.

No. 263,653. Patented Aug. 29, 1882.

Fig. 1.

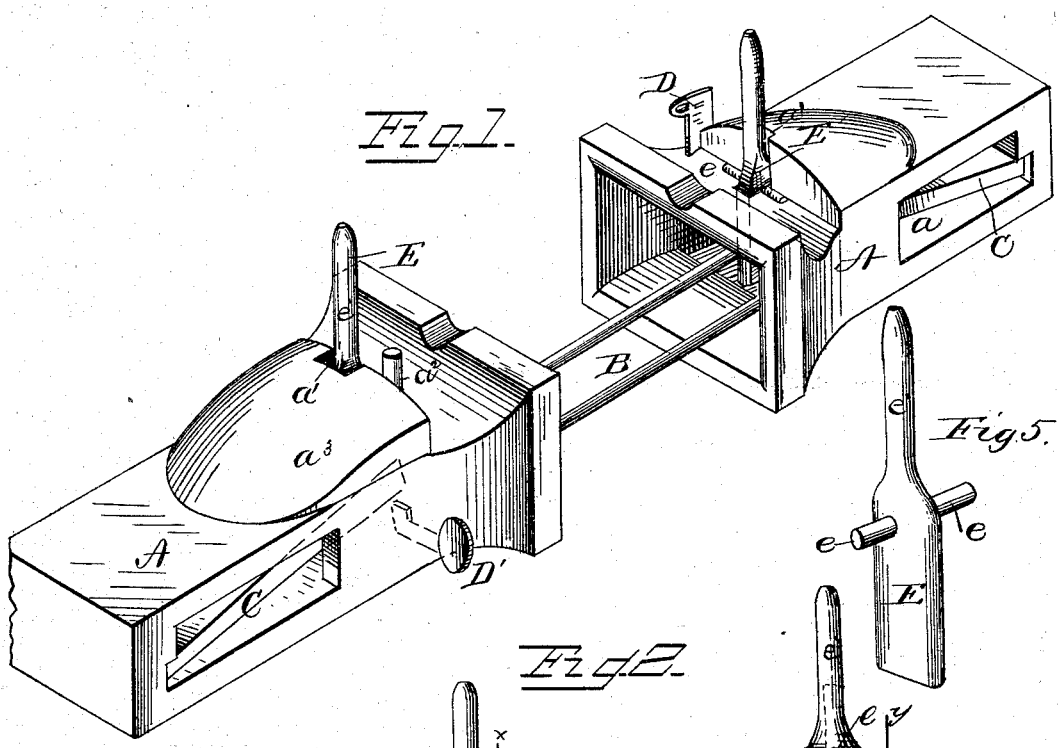


Fig. 5.

Fig. 2.

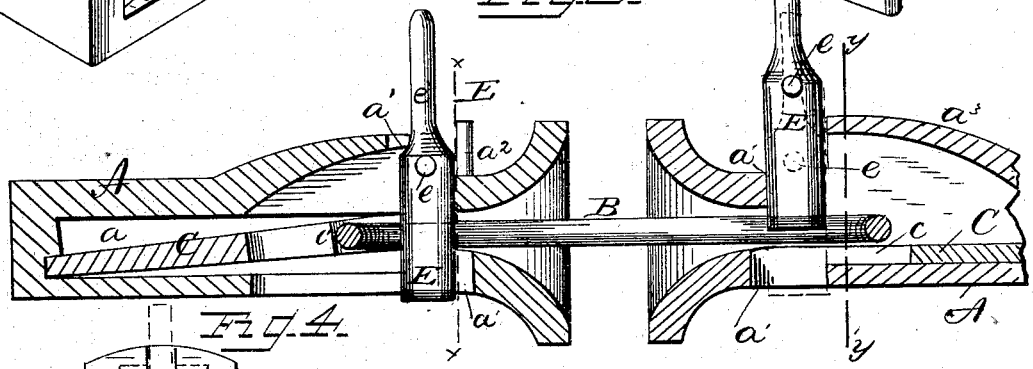


Fig. 4.

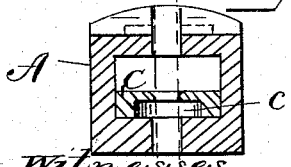
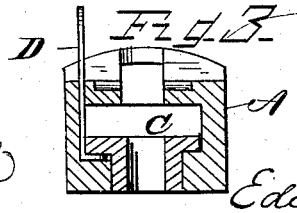


Fig. 3.



Witnesses.
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UNITED STATES PATENT OFFICE.

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CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 263,653, dated August 29, 1882.

Application filed June 19, 1882. (No model.)

To all whom it may concern:

Be it known that I, EDWARD CASPER, a citizen of the United States, residing at Collomsville, in the county of Lycoming and State of Pennsylvania, have invented certain new and useful Improvements in Car-Couplings; 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.

Figure 1 is a perspective view of this invention, but showing the stop raised in both draw-heads, and also both forms of the lifting device. Fig. 2 is a longitudinal central section of Fig. 1, but showing the link as in ordinary position in use. Fig. 3 is a cross-section on line *y y*, Fig. 2, to show construction of the stop; Fig. 4, details of stop on line *x x*, Fig. 2; Fig. 5, detail of coupling-pin.

This invention belongs to that class of devices known as "railroad-car couplings;" and the novelty consists in the special details of the construction and arrangement of the several parts, all as will now be more fully and in detail set out and explained.

In the accompanying drawings, A denotes any ordinary draw-head, and B the coupling-link. Inside of each draw-head is the stop C, which is a flat piece of wood or metal of suitable shape and size to fit on the bottom of the chamber *a* of the draw-head. It is so fitted at the back side by hinging or otherwise that it can have motion on this end. The front part extends forward near to the mouth of the draw-head. Here it is cut out, as indicated at *c*. By this construction, when the stop is raised, as by lifting piece D or lever D′, it will offer at *c* a suitable stop and support for the end of the link C, as is shown in Fig. 2. When the link is thus in position it is secured there by the coupling-pin E. This pin fits loosely in the socket *a′* in the top and near the mouth, and in such a manner that when the link B rests in the chambered or grooved end *c* of the stop there is just space enough for the pin to drop through the end of the link. This pin has an upwardly-projecting part, *e′*, which can be used as a handle. In this position the link is ready for entering the mouth of the draw-head of the car which is to be coupled on, and has sufficiently free movement to enter any-sized draw-head. This pin has free swinging motion to the rear inside of *a* when not fixed, as above, on the supporting-journals *e*, about midway of its length, which rest in suitable seats in the top of the draw-head, so that when the link is held in one draw-head, as has been above described, it will readily enter the mouth of the draw-head of the other car, knocking back and up the pin as it enters the mouth, so that the pin is turned up against the inside of the arch a^3 and allows free passage for the link to enter the draw-head, and when the link is in the pin drops easily into the end of the link. In this way, which is that of ordinary use, and as now shown in Fig. 2, one end of the link has some motion inside the draw-head. The lower end of the pin E, being stopped by the forward edge of *a′* on the lower side of the mouth, can have no forward movement.

If desired, there may be some guide-pins a^2 on the outer side of slot *a′*. Connection may be arranged from the lifting devices D or D′ to the top of the car, so that the brakeman can easily manipulate this pin, as for unshackling.

This device can be very cheaply made, and the several parts are all peculiarly strong and not at all liable to get out of order in any ordinary use, while for all the conditions demanded in such a device this coupler is very effective and certain in its operation.

Having thus described my invention, what I consider new, and desire to secure by Letters Patent, is—

1. The swinging coupling-pin E, having journals *e* and handle *e′*, combined with draw-head A, having socket *a′* and arched chamber a^3, substantially in the manner shown and described.

2. The draw-head A, having arched top a^3, socket *a′*, and chamber *a*, combined with the stop C on the floor of said chamber, hinged or jointed at its rear end and having the groove or chamber *c* at its front end, and movable by a lift and pin, E, substantially as shown and described.

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

EDWARD CASPER.

Witnesses:

THOMAS W. LLOYD,

JOHN G. READING, Jr.