(No Model.)

J. M. SCURR & S. R. COTTON.

CAR COUPLING.

No. 545,862. Patented Sept. 3, 1895.

Fig. 1.

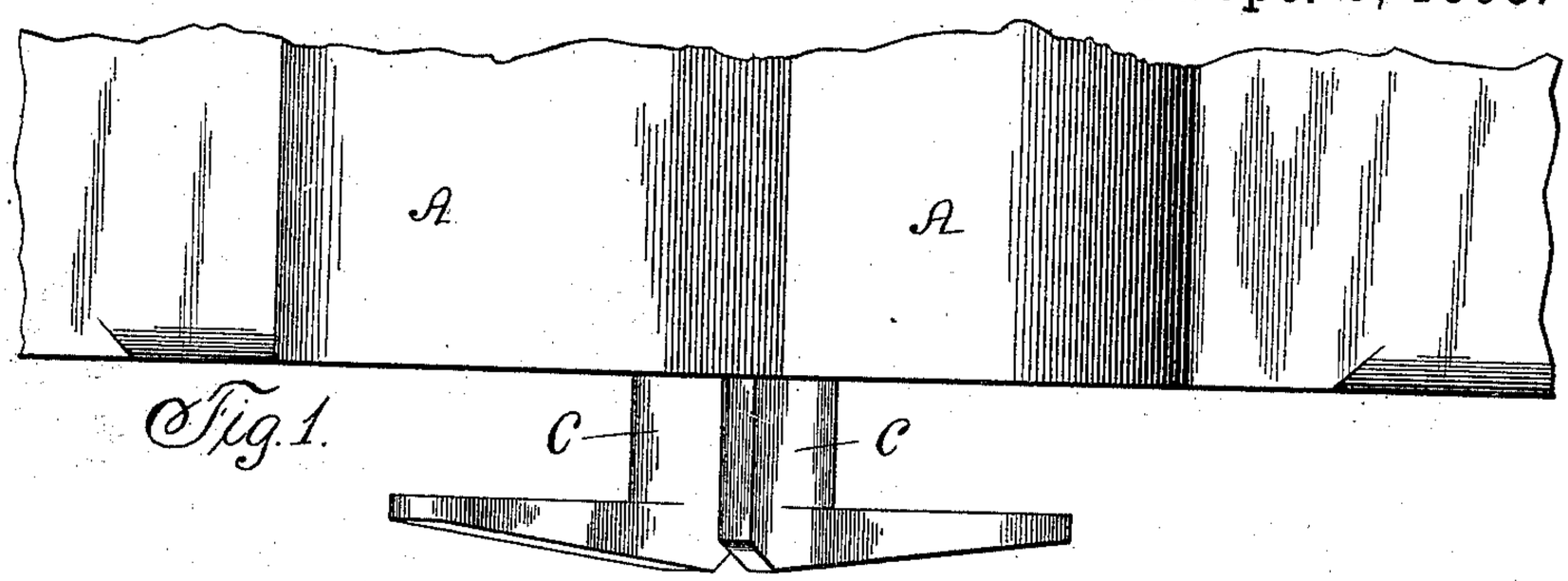


Fig. 2.

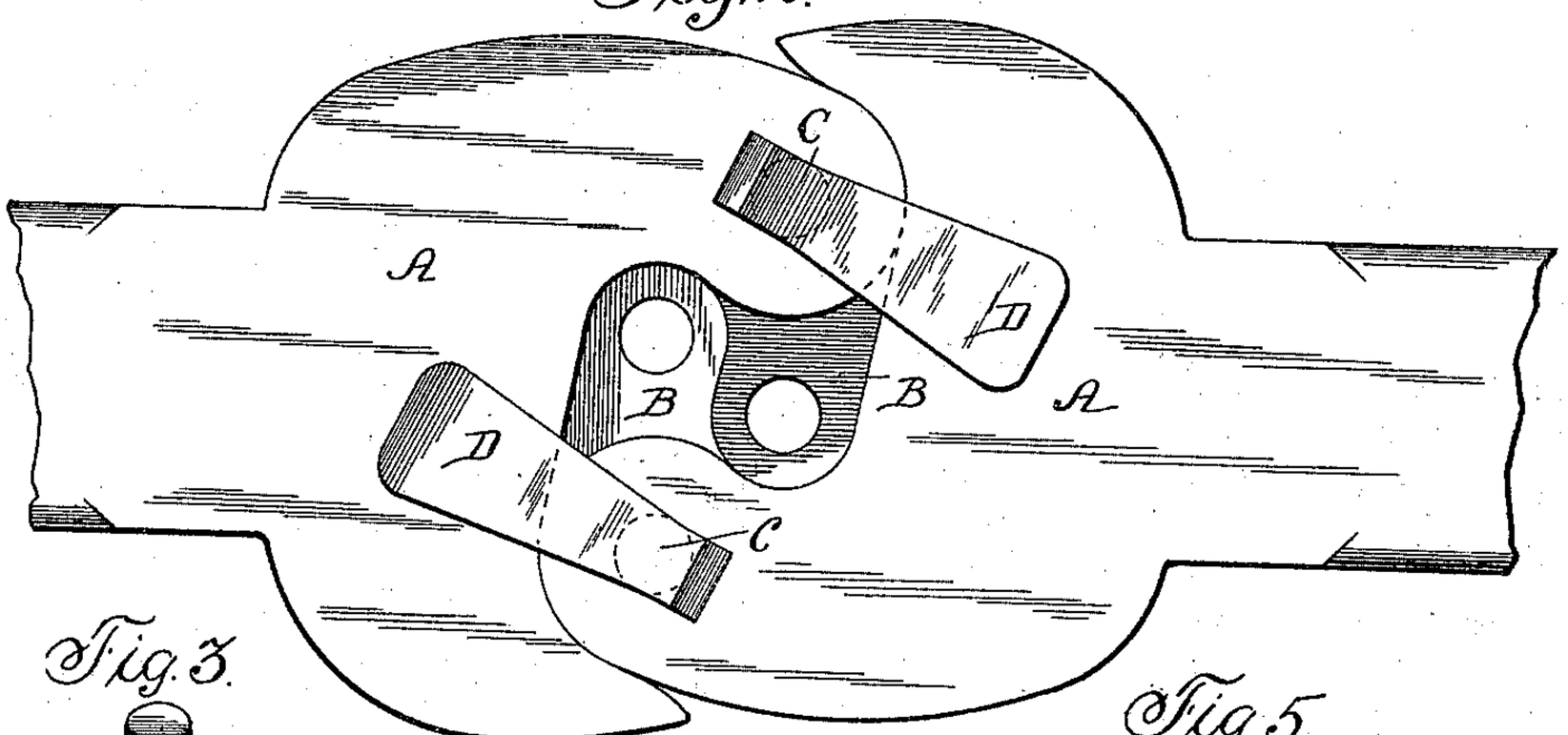


Fig. 3.

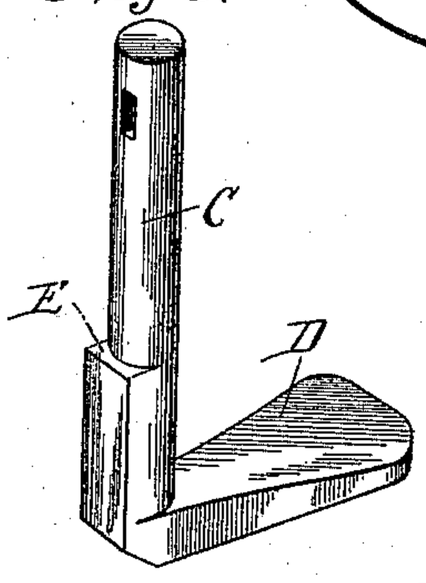


Fig. 5.

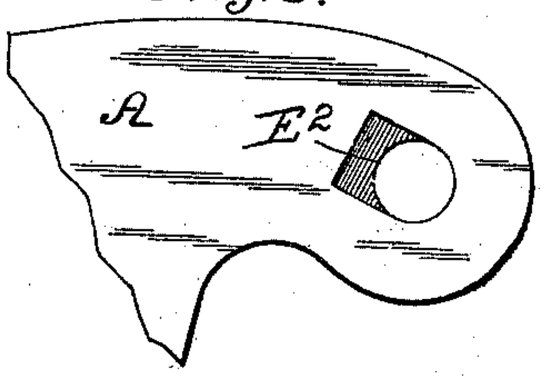
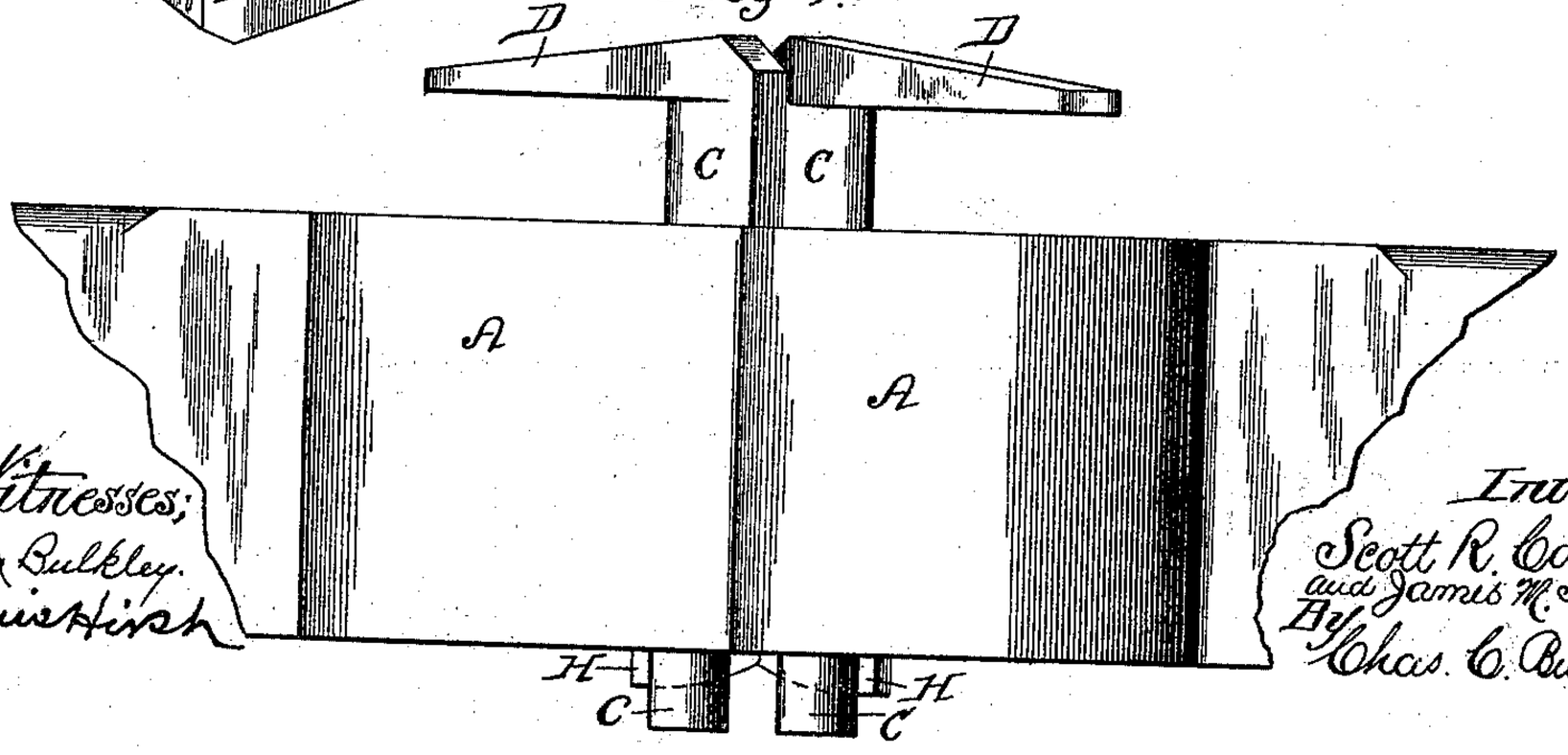


Fig. 4.



Witnesses;
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Inventors,
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UNITED STATES PATENT OFFICE.

JAMES M. SCURR AND SCOTT R. COTTON, OF CRESTON, IOWA, ASSIGNORS TO THE SIMPLEX CAR COUPLER COMPANY, OF ST. JOSEPH, MISSOURI.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 545,862, dated September 3, 1895.

Application filed October 8, 1892. Serial No. 448,265. (No model.)

To all whom it may concern:

Be it known that we, JAMES M. SCURR and SCOTT R. COTTON, citizens of the United States, residing at Creston, in the county of Union and State of Iowa, have invented new and useful Improvements in Car-Couplings, of which the following is a specification.

Our invention relates to that class of car-couplings known as the "vertical-plane" type, and is designed to overcome those damages to property and danger and injury to life which result from the breaking of a draw-head or pulling out of a draw-bar, which when broken off or pulled out falls upon the track, causing the breakage of brake appliances, frequent derailments, and other damage.

To this end our invention, in conjunction with a draw-head of the vertical-plane type, consists in an extension-support projected forward from and beyond the vertical face of the draw-head in such a manner as that when the coupling is effected this extension-support is in such a position relative to the opposite draw-head as that when from any cause the draw-head or draw-bar is broken off or loosened from its fastenings the extension-support receives and withholds the draw-bar or draw-head from falling upon the track to cause the stated damage, this extension-support, however, being inactive when said draw-bar or draw-head is intact, each draw-head being held by an opposite extension-support.

Our invention consists, further, in certain details of construction about to be particularly pointed out, reference being had to the accompanying drawings, in which—

Figure 1 is a side view of two draw-heads shown interlocked, and also showing the relative positions of the extension-supports projecting over the under sides of the draw-heads. Fig. 2 is a plan view of the lower side of two draw-heads also shown interlocked in a coupled position. Fig. 3 is a detailed view of a knuckle-pin and integral extension-support. Fig. 4 is a side view of two draw-heads also shown interlocked in a coupled position, the extension-supports projecting over the top side of the draw-heads. Fig. 5 is a detail view showing the notch formed in the draw-head in which a shoulder on the knuckle-pin seats.

A designates the two draw-heads of the vertical-plane type, the knuckles B of which are hinged to the draw-heads by means of the knuckle-pins C in the usual manner. These knuckle-pins C in carrying out the end to be attained by our invention are constructed differently from the ordinary knuckle-pin, being somewhat longer, for a purpose to be set forth, and having formed integrally therewith the extension-support D, a shoulder E being provided, as shown more clearly in Fig. 3. A notch E^2 is formed in the draw-head, in which notch the shoulder E finds a seat.

When a coupling is effected, each of the extensions D respectively project beyond and overlap each opposite draw-head, so that if from any cause either of the said draw-heads should become broken or dislodged, so as to naturally fall upon the track and cause damage, the extension-supports serve to sustain the draw-heads and prevent the same from falling upon the track.

The knuckle-pins C are held in place by means of a key H, Fig. 4, or by other suitable means.

In Fig. 1 the extension-supports D are shown disposed under the draw-heads, in which event the pins C are inserted from below. The said extension-supports may, however, be disposed above the draw-heads, as shown in Fig. 4.

When the extension-support is located underneath the draw-heads and the latter is broken off or pulled out, the said support engages the opposite intact draw-head and supports the broken or dislodged head, and if located above, the extension-support engages the opposite draw-head, which latter sustains the broken or dislodged draw-head.

The shoulder E when seated in the notch E^2 serves to hold the extension-support rigidly in an operative position, while, the length of the pins C being increased, and, when positioned, extending either above or below the draw-heads, the extension-supports D do not interfere in effecting a coupling between cars of varying elevation.

It is obvious that the device employed for accomplishing the desired results is of the utmost simplicity, and, being a part of the knuckle-pin itself, does not increase the number of parts.

Having thus described our invention, what

we claim as new therein and desire to secure by Letters Patent, is—

1. In a car coupling of the vertical plane type, the combination with a pair of draw-heads, of extension supports formed integrally with each of the knuckle pins and which said extension supports are so positioned as to project beyond the vertical faces of the drawheads so that when a coupling is effected each of the supports overlaps its respectively opposite drawhead for the purpose set forth.

2. The combination with a drawhead having a notch or recess in proximity to the point of adjustment of the knuckle pin, of a knuckle pin having an extension support secured thereto and a shoulder, which latter when seated in the notch or recess serves to hold the extension support in position.

3. The combination with the drawhead, of a knuckle pin having an extension support formed integrally therewith, said knuckle pin extending to a point beyond the face or side of the drawhead, whereby cars of differing heights may be coupled without interfering with the extension support.

In witness whereof we have hereunto set our hands this 20th day of September, 1892.

JAMES M. SCURR.
SCOTT R. COTTON.

Witnesses:
T. J. DAVIS,
L. B. SMITH.