

D. A. BAINTER.
Car-Couplings.

No. 146,375.

Patented Jan. 13, 1874.

Fig. 1.

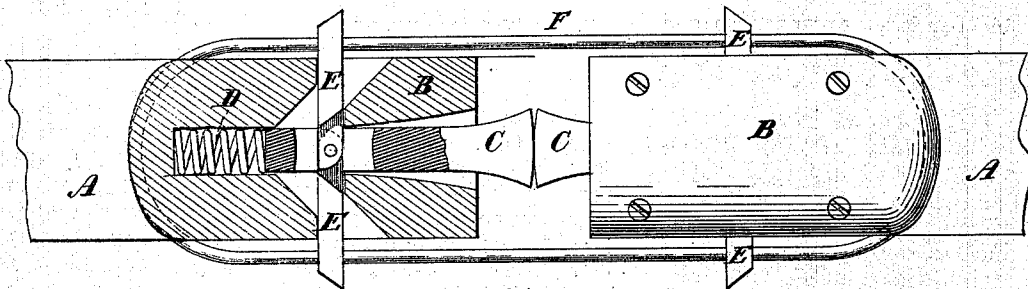


Fig. 2.

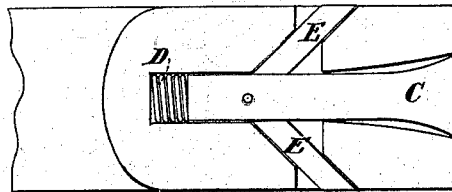


Fig. 3.

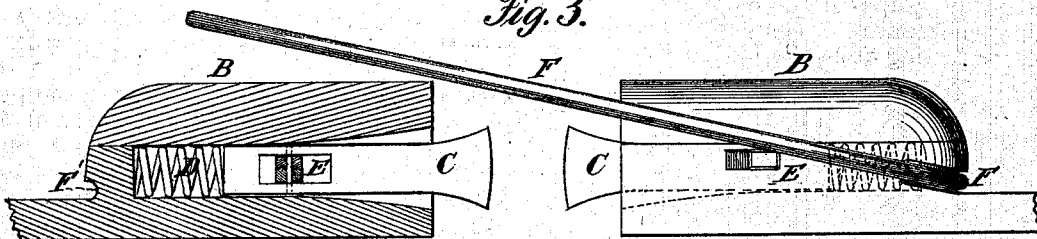
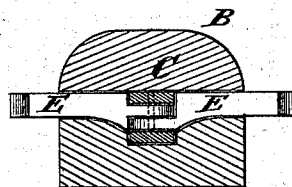


Fig. 4.



Witnesses.
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D. A. Bainter.

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Attys

UNITED STATES PATENT OFFICE.

DAVID A. BAINTER, OF KEWANNA, INDIANA.

IMPROVEMENT IN CAR-COUPPLINGS.

Specification forming part of Letters Patent No. **146,375**, dated January 13, 1874; application filed October 11, 1873.

To all whom it may concern:

Be it known that I, DAVID A. BAINTER, of Kewanna, in the county of Fulton and State of Indiana, have invented a new and useful Improvement in Car-Couplings for Railway-Cars; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings making part of this specification, in which—

Figure 1 is a plan of two draw-heads, one in section. Fig. 2 is a plan view of a draw-bar, the top having been removed. Fig. 3 is an elevation of the draw-bars, one in section. Fig. 4 is a vertical transverse section of one of the draw-bars.

The same letters are employed in all the figures in the designation of identical parts.

This improvement relates to a mode of automatically coupling railroad-cars, and consists in mechanism for supporting the links on arms projecting from the sides of the draw-head as the cars approach, which arms are retracted by pressure on a plunger projecting in front of the buffer-head as the cars encounter one another, permitting the link to fall over the raised portion of the draw-heads recessed for the purpose of receiving the link, the arms being again projected over the link when the cars are drawn apart.

In the annexed drawing, A is the draw-bar of a railway-car, on the end of which is a raised portion, B, forming a buffer-head, recessed to receive the mechanism for supporting, dropping, and confining the link. This mechanism consists of a plunger, C, the outer end of which projects beyond the end of the buffer-head and its inner end bears against a spiral spring, D, placed in the base of the recess. This spring, yielding to pressure applied to the outer end, projects the plunger when relieved from the pressure. A mortise is formed transversely

through the plunger to receive the two arms E E, which are secured by a pin on which they can swing, and which, when the plunger is in its normal position, project through inclined holes formed in the sides of the draw-head, as shown in the drawings, Figs. 1 and 2. When the plunger is pushed back the arms E E are swung on their pivot, and drawn in until their ends are drawn within or at least flush with the sides of the buffer-heads, as shown in Fig. 2.

When the cars are to be coupled the link F is placed over one of the buffer-heads, the end being received in a recess formed therein at F', and the link being supported on the projecting arms in an inclined position, as shown in Fig. 3. When the two similarly-fitted buffer-heads encounter one another, the plunger will be pushed back, retracting the arms E and permitting the link to fall over the other buffer-head B, resting on top of the draw-bar, as soon as the train is drawn forward, the link will be held in the two recesses F', and the arms E will be projected by the action of the spring against the plungers. As these arms are above the link they will hold the link in place and prevent it from becoming uncoupled while the train is in motion.

What I claim as my invention, and desire to secure by Letters Patent, is—

In combination with the draw-head of a railway-car the plunger C and arms E for supporting, dropping, and confining the link, substantially as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

DAVID A. BAINTER.

Witnesses:

J. Q. HOWELL,
W. C. ROSSMAN.