

R. F. WOLCOTT.  
Car Coupling.

No. 104,678.

Patented June 21, 1870.

Fig. 1.

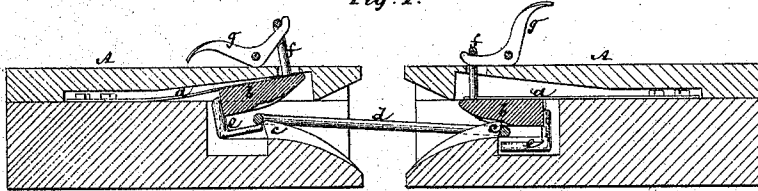


Fig. 2.

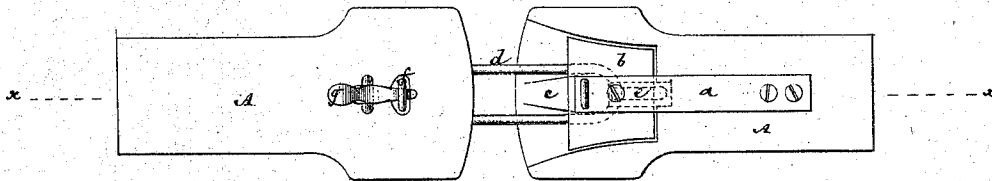
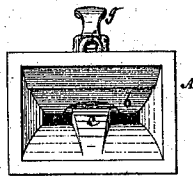


Fig. 3.



Witnesses.  
Fred. Haynes  
R. F. Rabear

R. F. Wolcott  
per Oliver Coombs  
Haynes

# UNITED STATES PATENT OFFICE.

RUSSEL F. WOLCOTT, OF CLAREMONT, NEW HAMPSHIRE, ASSIGNOR TO  
AUSTIN C. CHASE, OF SAME PLACE.

## IMPROVEMENT IN CAR-COUPPLINGS.

Specification forming part of Letters Patent No. **104,678**, dated June 21, 1870.

*To all whom it may concern:*

Be it known that I, RUSSEL F. WOLCOTT, of Claremont, in the county of Sullivan and State of New Hampshire, have invented a new and useful Improvement in Car-Couplings, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, and in which—

Figure 1 represents a longitudinal vertical section through the improved coupling, taken as indicated by the line *xx* in Fig. 2, which is a plan of said coupling with the upper portion of one of the bumpers removed; and Fig. 3, an end view in front of one of said coupling-heads or bumpers.

Similar letters of reference indicate corresponding parts.

My improvement in car-couplings embraces a flat spring arranged within each coupling-head or bumper, with a jaw-piece of peculiar form attached to its free end, and carrying a shackle-lifter for operation in connection with a fixed catch arranged in the lower part of the mouth of the bumper, and provided with an unshackling-lever for operation by the foot or hand, the several parts being so constructed that the coupling-link or shackle is readily inserted and held securely in lock, with every provision against becoming detached by any effect of the ordinary draft or different heights of the cars, and is free to meet all oscillating or irregular movements of the same when on the track, but breaking the connection in case of a car being thrown off the track.

Referring to the accompanying drawings, A, A represent the coupling-heads or bumpers of two adjacent cars. Each of these heads has arranged within its upper portion a flat spring, *a*, made fast in the rear, and carrying at its forward and free end, for up and down play within the mouth of said head, a jaw-piece, *b*, of a form so that when held down by the spring it drops a little below a catch, *c*, formed in the lower part of the mouth to hold the coupling-link or shackle *d* in its place; but it is made shelving, or of a turned-up shape in front on its

under side, and the catch made falling away on top to facilitate the entry of the shackle over the catch and under or into lock by the jaw-piece; also, the mouth of the bumper being suitably shaped to allow of all necessary play of the shackle to meet the ordinary oscillating or irregular movements of the cars when on the track without any risk of its becoming detached. The catches *c* are of slightly hooked form at their back or locking end, so that in case the cars should differ in height the raised end of the shackle will be restrained from slipping off its catch by the ordinary draft on the shackle. In case, however, one of the cars should get off the track, the shackle in being pressed or jerked down at its one end and raised at its opposite end will be detached from its one catch by raising the spring-borne jaw-piece *b* of said catch; and to insure the lifting of the shackle from off or over the catch under such circumstances each jaw-piece *b* is provided with a shackle hook or lifter, *e*, arranged to project from the under side of the jaw-piece, so that the latter in rising carries the shackle along with it and prevents the shackle from falling back before the spring operating on the jaw-piece closes, thus allowing of the shackle being jerked or drawn forward over the catch, and which the shape of the shackle lifter in no way interferes with.

Arranged on the top of each head or bumper, and in connection by links or rods *f* with each spring *a* and jaw-piece *b*, is a bent or other suitably shaped lever, *g*, for operation by the foot, hand, or other means, for the purpose of unshackling the coupling at pleasure or as required.

What is here claimed, and desired to be secured by Letters Patent, is—

The combination and arrangement of the jaw-piece *b*, its spring *a*, and shackle-lifter *e* with the catch *c*, lever *g*, and its connecting-link *f*, as shown and described.

R. F. WOLCOTT.

Witnesses:

HENRY JUDKINS,  
T. R. GOWDE.