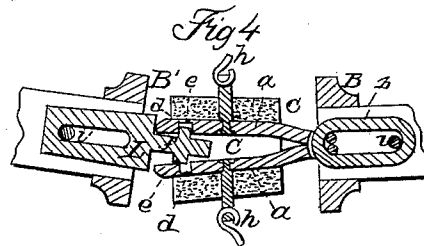
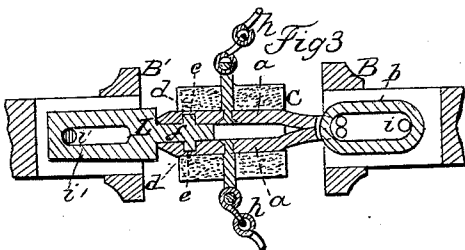
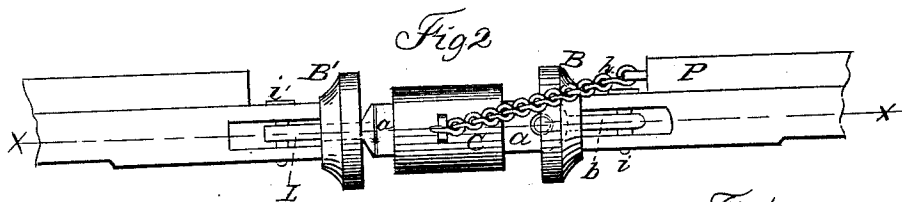
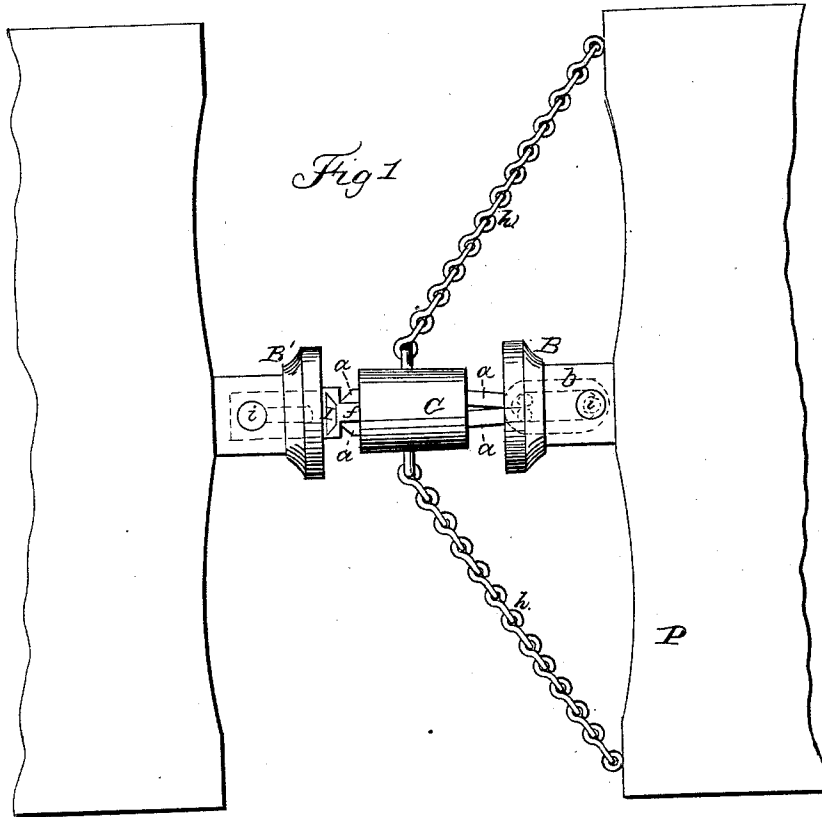


J. M. CONNEL.
Car Coupling.

No. 19,021.

Patented Jan. 5, 1858.



UNITED STATES PATENT OFFICE.

JAMES M. CONNEL, OF NEWARK, OHIO.

RAILROAD-CAR COUPLING.

Specification of Letters Patent No. 19,021, dated January 5, 1858.

To all whom it may concern:

Be it known that I, JAMES M. CONNEL, of Newark, in the county of Licking and State of Ohio, have invented a new and useful Improvement in Railroad-Car Couplings; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawing, forming part of this specification, in which—

Figure 1 is a top view of coupling. Fig. 2 is a side view of same. Fig. 3 is a longitudinal section on line *x x*. Fig. 4 is a similar section showing the act of self uncoupling.

Similar characters of reference in the several figures denote the same part of the coupling and connections thereof.

The object of this invention is to provide a coupling that may be used as an ordinary link, and which will disconnect when the engine or car leaves the track.

The nature of the invention consists in incasing the securing plates in vulcanized india rubber so as to be held perfectly tight under ordinary circumstances and be enabled to separate when violent side strain takes place; the details of construction and operation being substantially as follows:

In the drawing B B' are the draw heads of the cars to be connected. The coupling consists of the plates *a a* held at one extremity by the link *b*, and incased in a cylinder of vulcanized india rubber C. In the inner faces of the plates *a a* are cavities *d d* (Figs. 3 and 4) for the reception of projections *e e* on the tongue *f* of the link L. The plates *a a* are connected by chains *h h* with the platform P. Bolts *i i'* pass through the draw heads B B' and the links L and *b*, and

unite the cars in the same manner as when an ordinary coupling bar is used. In separating the cars the pin *i'* is removed so as to leave the coupling remain attached to the draw head B.

The self disconnecting properties of this coupling will never be brought into action until by the deviation of one of the cars from the track the plates *a a* will be drawn asunder as shown in Fig. 4 and a separation of the cars take place by the slipping of the projections on tongue *f* from the cavities *d* in the plates *a a*.

The great advantage of this coupling is its simplicity and adaptation to bumpers of ordinary construction; where it can be used as a simple coupling bar until occasion requires the instantaneous disconnection of the cars; when it acts as above stated.

I do not claim embracing a tongue by plates, when said tongue has a longitudinal movement between the plates, as shown in the expired patent of Hunt & Brown. But What I do claim as new and of my own invention, and desire to secure by Letters Patent, is—

The plates *a a*, tongue L, link *b* and chains *h h*, in combination with each other and the vulcanized india rubber casing embracing the plates, when the connection between plates and tongue is such as to prevent their moving longitudinally upon each other substantially as set forth.

In testimony whereof, I have hereunto signed my name before two subscribing witnesses.

J. M. CONNEL.

Witnesses:

DAVID B. MOORE,
T. E. EDDY.