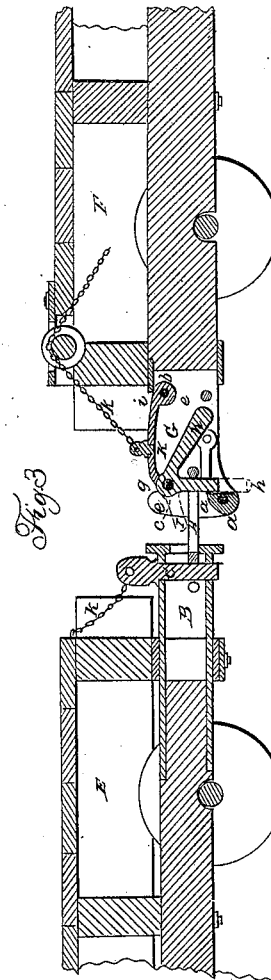
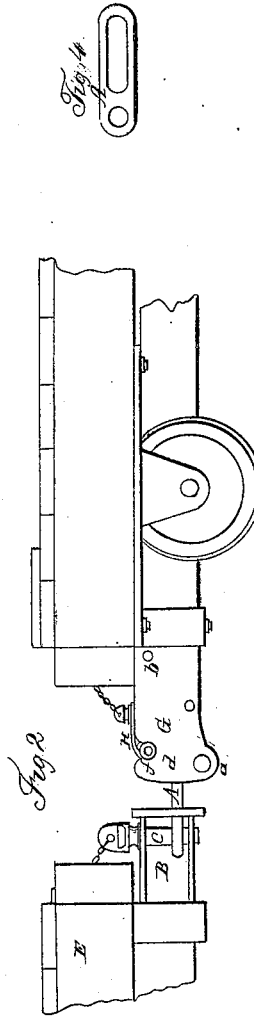
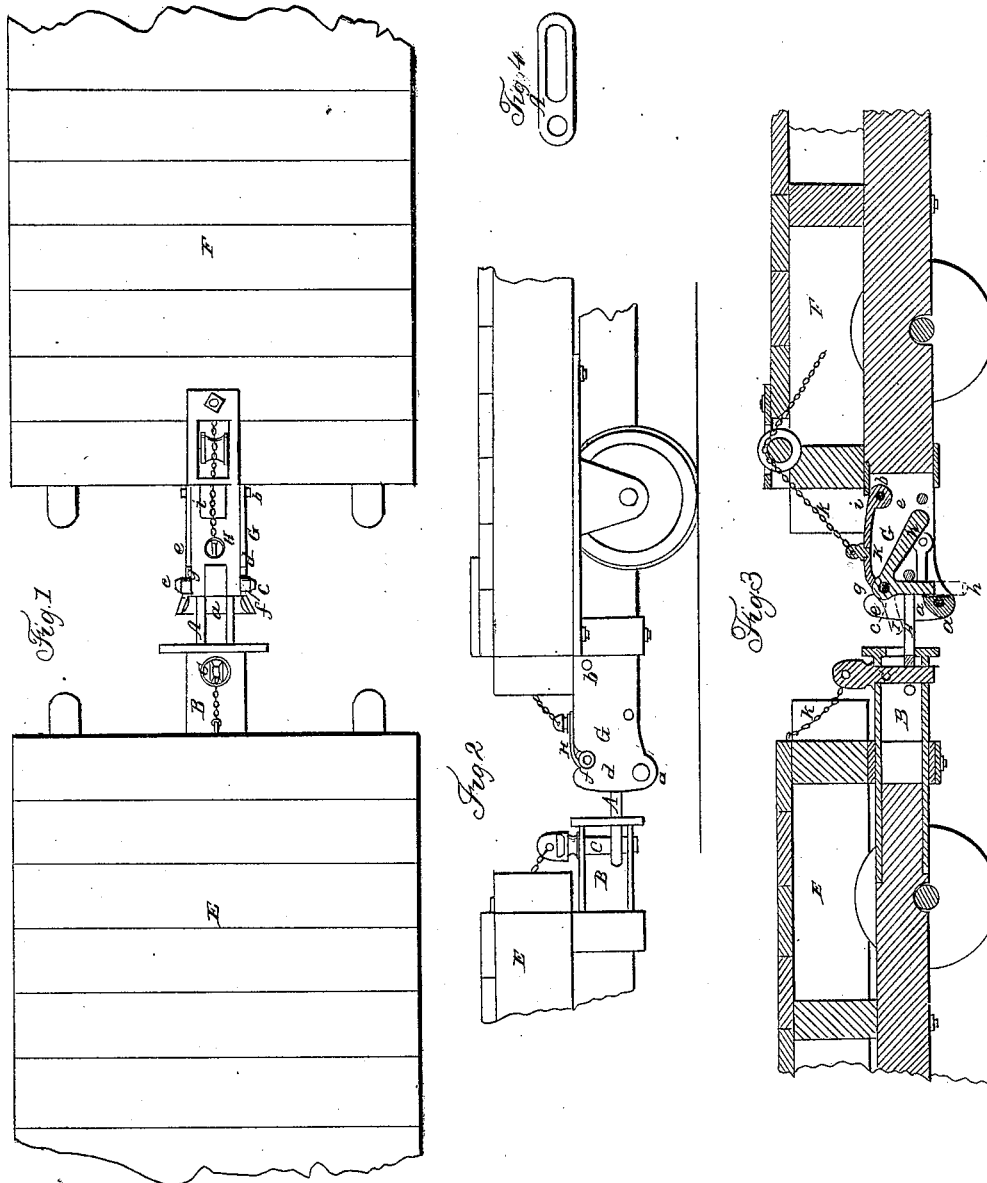


Car Coupling.

Car Coupling.

No. 7,741.

Patented Oct. 29, 1850.



UNITED STATES PATENT OFFICE.

NATHAN HASKINS, OF HILLSBORO COUNTY, NEW HAMPSHIRE.

CAR-COUPLING.

Specification of Letters Patent No. 7,741, dated October 29, 1850.

To all whom it may concern:

Be it known that I, NATHAN HASKINS, of the county of Hillsboro and State of New Hampshire, have invented a new or Improved Coupling for Railway-Cars; and I do hereby declare that the same is fully described and represented in the following specification and accompanying drawings, letters, figures, and references thereof.

Of the said drawings Figure 1, represents a top view of the two adjacent ends of two car platforms, and my improved coupling as applied thereto. Fig. 2, is a side elevation of the same. Fig. 3, is a central, vertical and longitudinal section of the same. Fig. 4, is a top view of the coupling link as detached from the buffer socket.

In the said drawings A exhibits the coupling link constructed in top view as seen in Fig. 4. It is connected with the buffer socket B, by means of a pin or shackle bolt C, which extends down through both of them when the end of the link is placed within the cavity of the buffer, the latter being constructed and fastened to the car E, in the usual way. The other car E, has a coupling or buffer socket G, affixed to it in the usual way, and made open both at top and bottom, with the exception of the front part *a*, of the bottom which connects the two sides together, and is made cam shaped, or with a straight or curved inclination as seen in Fig. 3.

The hinge H, is placed over the top of the coupling socket *e* and is hinged or jointed to the same at its rear end, so as to freely rise up and down on the joint pin, which is seen at 3. To the front end of this said hinge H, a pin I, is jointed or hinged, and turns or plays on a joint pin as seen at *c*, the said joint pin being made to project at each end from the hinge H, and to rest in notches *f*, *g*, cut or formed in the two sides *d*, *e*, of the socket G, one of these notches being seen at *f*, in Fig. 2. A heavy or weighted pin or arm *h*, is made to extend back from the connecting pin I, and to be of such weight as to overbalance the connecting pin I, and throw it into the position denoted by dotted lines whenever the lower end of the pin is lifted above the cross bar *a*. A spring *i* may be made to bear on the top of the hinge H, with the required or sufficient power to keep it down or horizontal under ordinary circumstances. In case of breakage of the

pin I, the pin or arm *h*, may be used for connecting the cars.

When either of the two cars is brought or moved near enough toward the other while both are on the railway track, that end of the connecting link A, which projects beyond the buffer head or socket B, will pass under the pin I, and be forced within the buffer socket G, and will be carried in contact with the pin or weighted arm *h*, of the connecting pin I, and force it back, or so raise it up as to cause the pin I, to turn downward into the link, and against the inclined top of the bar *a*, and together with the hinge H, to be lifted by said inclined top until it passes beyond the same so as to enable its weight, or the power of the spring *i* to throw the pin I, down into a vertical position, and so that its lower end shall rest firmly behind the bar *a*, as seen in Fig. 3. In this position of things the two cars will be coupled together. If we desire to uncouple them at any time we have only to lift the hinge H, so as to elevate the pin *i*, above the bar *a*. While this is done, if the cars are moved apart they can be freely separated, and the pin I, and its weighted arm will take the position as denoted by dotted lines, viz, one in which it is ready to be again acted upon by and connected with the link. The lifting of the hinge H, may be effected by power applied to a chain *k*, attached to it, the said power being produced by any proper mechanism or means, or by a cam under pin I, or hinge H.

My improved coupling is so constructed that should the engine or car to which the shackle is confined, viz, the car E, run off the track, or over any serious obstacle, it, the said engine or car E, will be at once disengaged from the car directly in rear of it; for when either the front or rear end of such car E, is raised or depressed there is such a leverage produced on the connecting link, as to cause it to lift the pin I, above the bar *a*, which taking place the weighted arm of the said pin will immediately fall, and throw the pin into an inclined position so as to disengage it from the coupling link. The improved couplings are connected by placing the link A, on the coupling I, of one car, and afterward bringing the other end of the link into connection with the pin I, of the next car.

My invention differs materially from all

others now in use, it being so constructed as not only to be of great utility, but greatly prevents accident to life and property by disengaging under the above circumstances.

5 What therefore I claim as my invention is—

The improvement whereby the cars are connected or disengaged under the above named circumstances; or in other words I
10 claim the combination of the suspended extension pin I, with its weighted pin or arm

h, or any mechanical equivalent therefor, the hinge H, and the buffer socket to which they are applied, the same being constructed and made to operate substantially set forth. 15

In testimony whereof I have hereto set my signature this fifteenth day of November, A. D. 1849.

NATHAN HASKINS.

Witnesses:

R. H. EDDY,

DANIEL A. RICE.