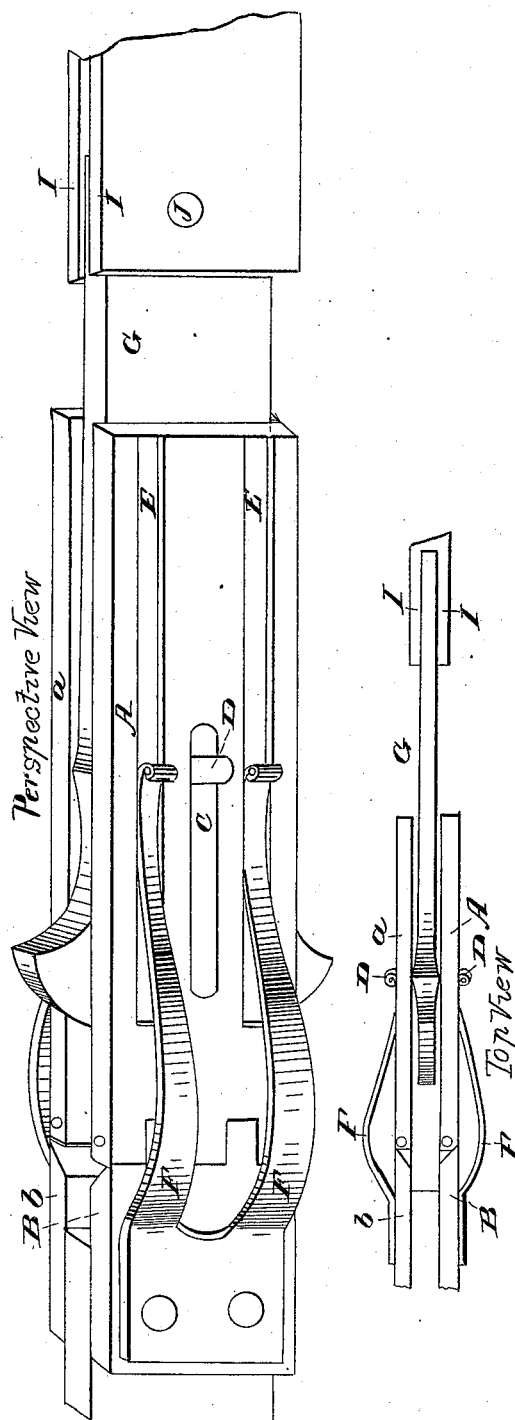


HUNT & BROWN.

Car Coupling.

No. 538.

Patented Dec. 26, 1837.



# UNITED STATES PATENT OFFICE.

CONRAD H. HUNT AND WILLIAM BROWNE, OF FREDERICKSBURG, VIRGINIA.

## SELF-SEPARATING LINK FOR CONNECTING RAILROAD-CARS AND LOCOMOTIVES.

Specification of Letters Patent No. 538, dated December 26, 1837.

*To all whom it may concern:*

Be it known that we, CONRAD H. HUNT and WILLIAM BROWNE, of the town of Fredericksburg, in the county of Spotsylvania and State of Virginia, have invented a new and useful improvement in links for connecting railroad cars and engines, called "Hunt and Browne's self-separating link for connecting railroad cars and engines," which is described as follows, reference being had to the annexed drawings of the same, making part of this specification.

This link consists of two plates A, *a*, six inches, more or less, in width, one inch in thickness, and 18 inches, more or less, in length; to each of which is attached, by a storage hinge, a piece of iron B, *b*, of the same width and thickness, of from 4 to 8 inches in length as may be required. In the center of the plates A, *a*, from 4 to 6 inches more or less, from the extreme end is an oblong mortise C, passing entirely through each plate, about 4 or 6 inches in length, of sufficient width to permit an iron pin, D, one inch in diameter to play easily backward and forward therein—the inner surface of the plates and grooves to be smooth and polished. On the outer side of each plate are two grooves E, *e* for a curved twin spring F *f* to play in; which spring, and the one on the other side plate of the link are to be of sufficient strength to keep said plates closed against the draft bar and in their parallel position and are to be fastened to the outside of the plates B, *b* by the same bolts that attach them to the car or engine.

The draft bar G, consists of a piece of iron about one inch in thickness, from 3 to 5 inches in width and 18 inches, more or less, in length, as may be required. The end which is to operate as the lever between the plates A, *a*, to open the same as before described, is to spread to the width of 8 or 10 inches, and to be splayed off at this end within  $\frac{3}{4}$  or  $\frac{1}{2}$  an inch to an edge. From 4 to 6 inches from this end is to be permanently fixed a polished iron pin D before mentioned with rounded ends and of sufficient length to pass from  $\frac{1}{4}$  to  $\frac{1}{2}$  an inch through the oblong mortises in the parallel plates A, *a*,

before described. At the point where this pin passes through the draft bar it is to swell from  $1\frac{3}{4}$  to 2 inches thick, and to fall off either way to 1 inch in thickness for the purpose of accommodating the link to any lateral motion which the cars may naturally have, or to any curvatures which may occur in the road, without interfering with or opening the parallel side plates. The other end of the draft bar is to be attached to the car or engine, by passing in between two pieces I I, which are permanently fixed to the car or engine, of sufficient length to embrace it and prevent it from having any lateral motion at that end, but at the same time to have a vertical motion to accommodate itself to the undulatory motion of the cars or engine, being fastened by a pin J, passing through said pieces and draft bar.

The operation of this link is simply that of a lever operating at equi-distant points from the draft pin of the draft bar on both sides in opening the parallel plates and disengaging the draft pin from said plates, so that in case any accident occurs which may result in throwing any of the cars or engine of a train off the track, the remaining portion may thus become separated therefrom and remain in their proper places on the track.

The invention claimed by us the said CONRAD H. HUNT and WILLIAM BROWNE and which we desire to secure by Letters Patent consists in—

The construction of the before described self separating link for connecting railroad cars and engines and in case of the engine or car of a train being thrown off the track, for instantaneously becoming disengaged leaving the remaining portion of the train securely on the track, whether constructed precisely in the manner before described or in any other substantially the same in principle.

CONRAD H. HUNT.  
WILLIAM BROWNE.

Witnesses:

H. R. ROBESY,  
R. T. THORN, Jr.