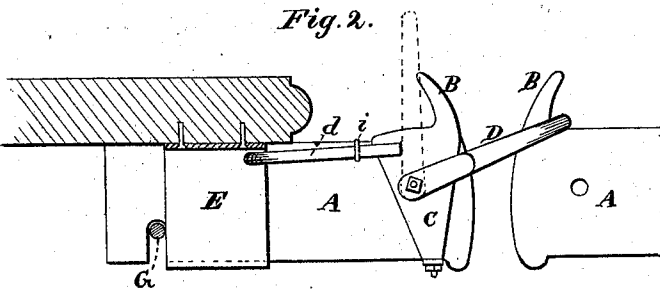


Car-Couplings

No. 149,726.

Patented April 14, 1874.



Witnesses:

H. H. Du Hamel

Inventor:

Attorney.

UNITED STATES PATENT OFFICE.

WILBER F. CORNELIUS, OF MUNCIE, INDIANA, ASSIGNOR TO HIMSELF AND
JAMES H. LONG, OF SAME PLACE.

IMPROVEMENT IN CAR-COUPINGS.

Specification forming part of Letters Patent No. 149,726, dated April 14, 1874; application filed
February 10, 1874.

To all whom it may concern:

Be it known that I, W. F. CORNELIUS, of Muncie, county of Delaware and State of Indiana, have invented certain new and useful Improvements in Couplings for Railroad-Cars, of which the following is a specification:

The nature of my invention consists in the construction and arrangement of an automatic car-coupling, operated by the concussion of one car against the other, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a perspective view of my car-coupling. Fig. 2 is a side elevation of the same, and Fig. 3 is a perspective view of a saddle used to convert the ordinary coupling into my self-acting coupling.

A represents an ordinary draw-head or bumper, attached to the car in any of the known and usual ways, and with the usual spring or springs behind it to yield for the concussion when the cars are brought together. On top of the draw-head A, at the front end, is formed or attached a broad hook, B.

When the draw-head is constructed at first for my coupling, then the hook B is formed with it; but when an old draw-head is to be converted into my coupling, then the hook B is formed upon a saddle, C, which fits around the front end of the draw-head, and is firmly bolted to the same.

D represents a bail or clevis, pivoted to the sides of the draw-head A, near the front end; and one end of this clevis is, beyond the pivot, formed with a cam projection, *a*, against which a spring, *b*, bears, said spring being attached to the side of the draw-head.

When the cars are not coupled, and the clevis D not in use, it hangs down under the draw-bar, out of the way; but, preparatory to coupling, it is elevated to a perpendicular position, as shown in Fig. 1, the spring *b*, by its action upon the cam *a*, holding it firmly in this position. When thus elevated, one side of the clevis is directly against the front

end of a rod, *d*, which is permanently attached to a band, E. This band is secured to the car-timbers, and passes around the draw-bar A.

The rod *d* is held in proper position by a loop or eye, *i*, on the side of the draw-bar.

As the cars are brought together for the purpose of coupling, the concussion moves the draw-bar A inward a short distance, the springs behind it being compressed, and the rod *d*, being stationary, pushes the clevis over forward a certain distance, to allow the spring *b*, by its action upon the cam *a*, to throw it down over the hook on the opposite draw-head, and thus couple the cars.

From one end of the clevis D a chain, *f*, passes, over a pulley, *h*, on the side of the draw-head, to a shaft, G, under the car, which shaft is provided with a crank at each end, by means of which the clevis is raised to a perpendicular position, preparatory to coupling, and also raised to uncouple the cars. The same may be done from the front or the top of the car, by suitable connections being made with the chain *f*.

This coupling is simple and durable, and not liable to get out of order.

The saddle C, with its hook, and the other devices, can be made separate, and attached to the draw-heads now in use.

If anything should get broken, or if coming next to a car not provided with my coupling, the ordinary pin-and link coupling can be used with the draw-head A.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The saddle C, formed with the hook B, for the purpose set forth.

2. The pivoted bail D, provided with the cam *a*, in combination with the spring *b*, substantially as and for the purposes set forth.

In testimony that I claim the foregoing as my invention I hereunto affix my signature this 2d day of February, 1874.

WILBER F. CORNELIUS.

Witnesses:

NATHAN LONG,
FRANK W. WATSON.