

A. T. NORGAN.
Car Coupling.

No. 105,970.

Patented Aug. 2, 1870.

Fig 2

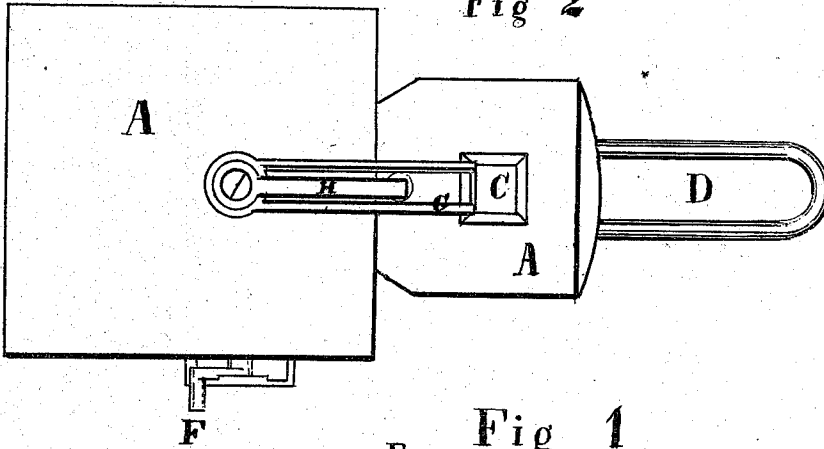


Fig 1

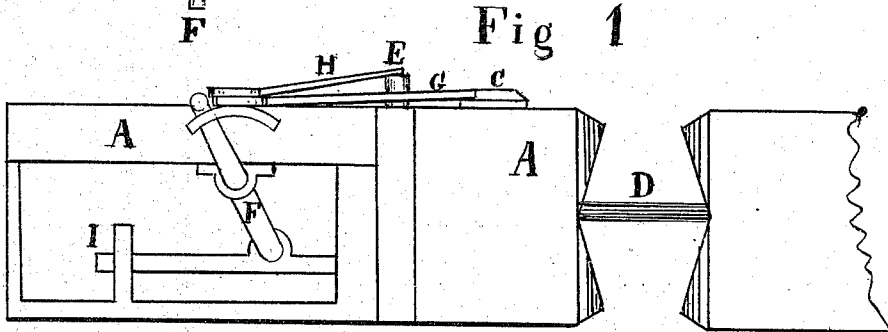


Fig 3

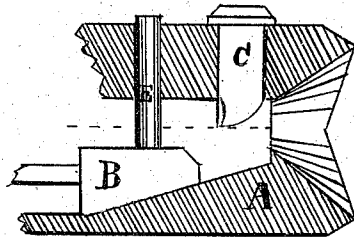


Fig 4

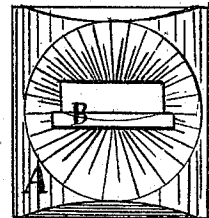


Fig 5

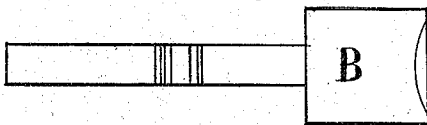
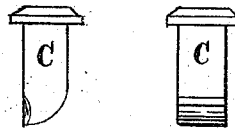


Fig 6



Inventor

A. T. Norgan

Witnesses:

E. Andrews
Morgan Reed

United States Patent Office.

ANTHONY T. NORGAN, OF POTTSVILLE, PENNSYLVANIA.

Letters Patent No. 105,970, dated August 2, 1870.

IMPROVEMENT IN CAR-COUPINGS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, ANTHONY T. NORGAN, of Pottsville, in the county of Schuylkill and State of Pennsylvania, have invented a new and improved Mode of Coupling Railway Cars; and I do hereby declare the following to be a full and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon.

Figure 1 is a side view, complete, showing the coupling-head A and lever F operating on the shank of the wedge B, and the link D connecting to a similar head, in red ink.

Figure 2 is a top view, showing the arrangement of the spring H operating on the pin E, and spring G operating on the bolt C; also, the lever F and link D.

Figure 3 is an interior view, showing the construction of the head A, bolt C, and pin E; also the wedge B drawn back.

Figure 4 is an end view, showing the end of the wedge B in position to operate.

Figure 5 is a top view of the wedge B, and its shank.

Figure 6 is a side and end view of the bolt C.

Similar letters indicate corresponding parts in the figures.

The nature of my invention consists in a combination of devices for coupling cars, as hereinafter fully described.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

I construct the interior part of A, as shown in fig. 3, with the angle, to suit the lower part of the wedge B, and to allow it to move up under the end of the bolt C, and form part of the aperture, as shown at fig. 4, the construction of A not allowing it to move any further than the dotted line.

The upper part of A being provided with the square hole for the bolt C, and another hole for the pin E to move in, the pin E moves freely, the lower end resting on the wedge B. The upper end, being operated

upon by the spring H, as shown at fig. 1, holds the wedge B steady, and also prevents the link D from going in too far.

The bolt C is constructed as shown at fig. 6, being tapered off on one side and rounded on the opposite side to fit the link D, and having the flanged head to hold it in place.

The spring G operates on the bolt C, as shown at figs. 1 and 2.

The lever F is connected to the shank of the wedge B, and moves it back and forth, as shown at fig. 1. The wedge B is held steady by its shank moving through the slot, as shown at I, fig. 1.

Cars being provided with this coupling-head, the operation is as follows:

The lever F being thrown back, as shown at fig. 1, draws the wedge B under the bolt C, and forms part of the head A, as shown at fig. 4. The link D, being held in the opposite head, coming together, is led by the funnel shape of the head A to the aperture, where, striking the tapered part of the bolt C, raises it up and passes to the pin E. The bolt C drops into the link by its own weight and, by the action of the spring G, thereby coupling the cars, as desired.

The lever F being reversed, draws the wedge B from under the bolt C; the link D falls as soon as it is relieved of the strain upon it, and the cars are detached.

The advantages of this arrangement are in saving one-half the time in coupling and uncoupling cars, and preventing injury to those employed for that purpose.

Having thus fully described my invention,

What I desire to secure by Letters Patent is—

The combination and arrangement of the head A, bolt C, pin E, and wedge B, with the springs H and G, operating in the manner and for the purpose herein described and specified.

A. T. NORGAN.

Witnesses:

F. ANDREWS,
MORGAN REED.