D. G. W. SNYDER.

Car Coupling.

No. 92,386. Patented July 6, 1869.

Fig. 1

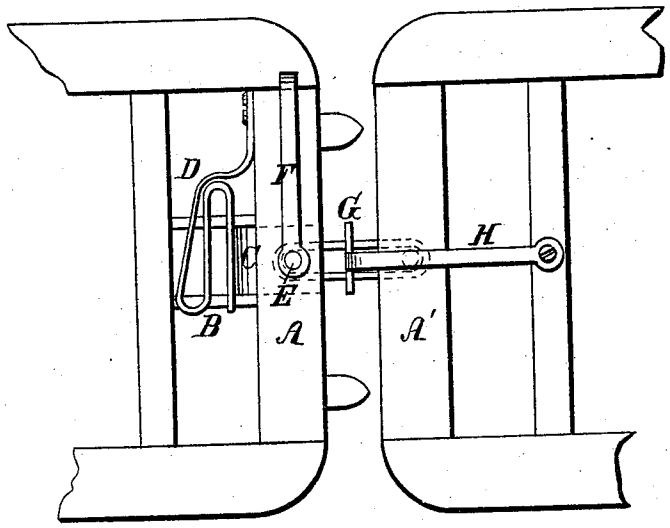


Fig. 2

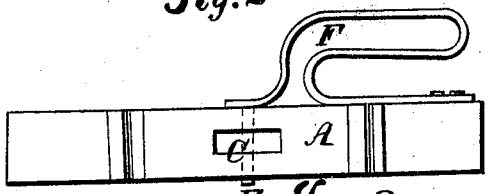
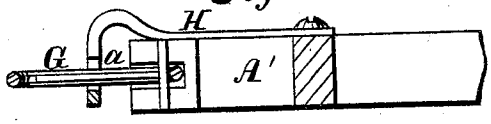


Fig. 3



Witnesses.

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D. G. W. SNYDER, OF WILLIAMSPORT, MARYLAND.

Letters Patent No. 92,386, *dated July* 6, 1869.

IMPROVED RAILWAY-CAR COUPLING.

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, D. G. W. SNYDER, of Williamsport, in the county of Washington, and State of Maryland, have invented a new and useful Improvement in Car-Couplings; and I do hereby declare the following to be a full, clear, and exact description of the same, sufficient to enable others skilled in the art to which my invention appertains, to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a top view of the platforms of two cars provided with my coupling.

Figure 2 is an end view of one platform.

Figure 3 is a longitudinal section.

My improvements relate principally to that class of car-couplings in which the coupling-pin is supported on a spring-slide until the entering link from the other car forces back the slide, permitting the pin to fall through the opening in the link, thus effecting the connection of the cars.

My invention consists in the employment of a slotted bar, so arranged as to support the link in a horizontal position, whereby it is made to enter the draw-head of the next car, thus obviating the necessity of supporting the link by the hand, a practice which frequently results in serious bodily injury. This improvement is applicable as well to cars provided with the common link-and-pin couplings, as to those having connecting-devices of the kind above described.

My invention also consists in the employment, instead of spiral and the ordinary flat springs, of springs of peculiar construction, for forcing down the coupling-pin, and retaining it in position, and for throwing forward the sliding-pin support, whereby increased strength and durability are obtained, as will be hereinafter more fully described.

Similar letters of reference indicate corresponding parts in the several figures.

In the drawings—

A A′ represent the platforms of two contiguous cars.

B may represent the draw-head, with which both ends of each car are provided.

In the draw-head is fitted a sliding block, C, against the rear of which presses the free end of a spring, D, which, at its other end, is made fast to the car, as shown.

The coupling-pin E is secured to the free extremity of a spring, F, fastened, at its opposite end, to the top of the platform. This pin passes down through an opening in the front of the platform, as shown.

G is the coupling-link, which rests in a slot, *a*, in the bent portion of an arm, H, which is secured either on top or to the under side of the platform of the car.

By bending a flat bar or strip into the forms shown at D F, a very strong spring is produced.

It is difficult, if not impossible, to make spiral springs of sufficient strength to resist the concussion caused by the contact of cars when coupling the same.

Were straight springs employed, they could not exert pressure squarely on the slide C, and coupling-pin, and would therefore tend to throw these parts out of line.

By my construction, these objections are obviated, and a very effective and inexpensive spring is produced.

By the employment of the arm A, the coupling-link is always maintained in a horizontal position, to enter the opposite draw-head, thereby dispensing with the dangerous practice of guiding the link by the hand.

The operation of my coupling will be readily understood.

The coupling-pin E is supported on its slide C, and as the link G, which has been previously made fast to the opposite draw-head, enters the draw-head B, it forces back the slide C from under the pin E, which is immediately thrown down by the force of its spring F, and couples the car.

To uncouple the cars, it is only necessary to raise the spring F, (which may be done by a person standing on the platform,) when the block C being released, is thrown forward by its spring, thus pushing out the link, and resuming its place under the coupling-pin.

I do not claim, broadly, a slide with a spring arranged behind it, for supporting the coupling-pin; neither do I claim a spring for throwing down the coupling-pin, as I am aware that these features have been used heretofore in car-couplings; but having thus described my invention,

What I claim as new, and desire to secure by Letters Patent, is—

1. The bent and slotted bar H, attached to a car, for maintaining the coupling-link in a horizontal position, substantially as and for the purpose set forth.

2. The springs D F, made of flat bars of metal, bent into the form described, whereby additional strength is obtained, and the pressure is exerted on the slide C and on the coupling-pin, which is secured to the spring F, all constructed, arranged, and operating substantially as herein described.

To the above specification of my invention, I have signed my name, this 28th day of April, 1869, in the presence of two subscribing witnesses.

D. G. W. SNYDER.

Witnesses:

GEO. W. ROTHWELL,

JOHN A. WIEDERSHEIM.