

C. P. RUSSELL.
Car-Couplings.

No. 147,177.

Patented Feb. 3, 1874.

Fig. 1.

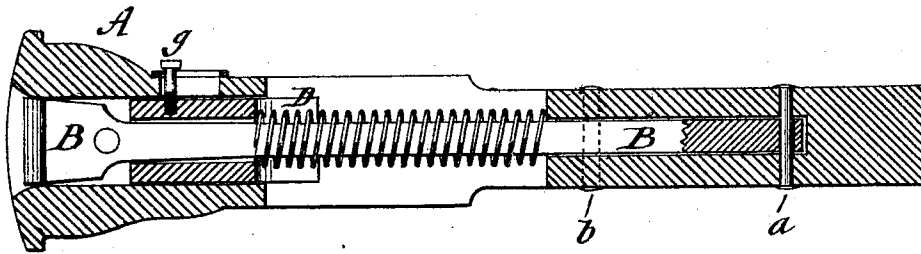


Fig. 2.

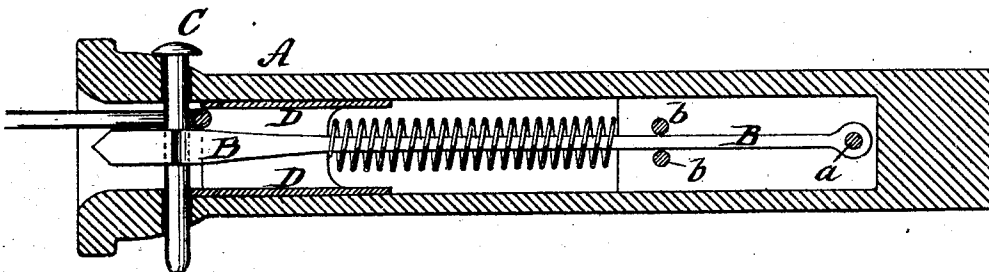
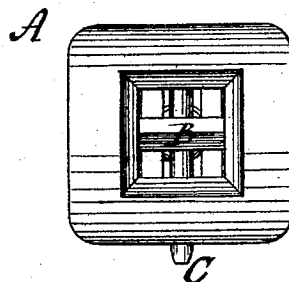


Fig. 3.



Witnesses:

H. W. Dodge.
R. H. Winterney

Inventor:

Chas. P. Russell,
By his attys
Dodge & Son!

UNITED STATES PATENT OFFICE.

CHARLES P. RUSSELL, OF BATTLE CREEK, MICHIGAN.

IMPROVEMENT IN CAR-COUPPLINGS.

Specification forming part of Letters Patent No. 147,177, dated February 3, 1874; application filed June 19, 1873.

To all whom it may concern:

Be it known that I, CHARLES P. RUSSELL, of Battle Creek, in the county of Calhoun and State of Michigan, have invented certain Improvements in Car-Couplings, of which the following is a specification:

My invention relates to that class of couplings in which the ordinary link and pin are employed; and consists, first, in a peculiarly-arranged spring-tongue, to hold the link in a horizontal position, so that it will enter the draw-head of the other car; and, secondly, in a peculiar sliding block, to hold the coupling-pin up until the link enters the draw-head.

Figure 1 is a longitudinal horizontal section through a draw-head having my improvements applied. Fig. 2 is a longitudinal vertical section of the same; and Fig. 3 an end or face view of the same.

I construct the draw-head in the ordinary manner, and mount lengthwise therein a long spring tongue or bar, B, which is held by a transverse pin, *a*, passing through its rear end, and two pins or rods, *b*, between which the tongue passes, as shown in Fig. 2. I make the forward end of the tongue of a flat form, and of the full width of the mouth or opening in the draw-head, and bevel the end on both the upper and under sides, as shown in all the figures. I also arrange the tongue in such manner that its end, when free, stands in the middle of the mouth or opening, so that the coupling-link may be inserted either above or below it; but make it of such thickness that the link, when inserted, springs the tongue up or down, as the case may be. The tongue, pressing against the link, whether it be inserted above or below, presses it snugly against the side of the mouth or opening, and holds it in a horizontal position, so that its outer end will enter the other draw-head when the two cars are brought together.

When a connection is to be made with a car

having a higher draw-head, the link is inserted above the tongue; but when the connection is to be with a car having a lower draw-head, the link is inserted under the tongue.

In order to render the coupling automatic, without impeding the operation of the spring-tongue, I mount in the mouth or opening a tubular block or sleeve, D, which surrounds or encircles the tongue, and which is arranged so that it can slide forward under and support the coupling-pin C.

The coupling-pin is made as usual, and arranged to pass down through a hole in the draw-head and the tongue, as shown. A spiral spring is mounted on the tongue, and arranged to push the sliding block forward, but this spring may be omitted. The sliding block is provided with an arm or handle, *g*, which extends out through a slot in the side of the draw-head, so that by taking hold thereof the attendant can move the block back and forth without endangering his hands between the draw-heads. When the pin is raised and supported by the block, the link entering, forces the block back, and allows the pin to drop through the link.

I am aware that the use of springs to hold the coupling-link, and of a sliding block to support the pin, are not original with me; but my construction and arrangement of parts is, I believe, new and valuable.

Having described my invention, what I claim is—

1. The vibrating tongue B, mounted in the draw-head, as and for the purpose described and shown.

2. In combination with the draw-head A, tongue B, and coupling-pin C, the tubular sliding block encircling the tongue, as shown.

CHARLES P. RUSSELL.

Witnesses:

M. B. RUSSELL,

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