C. W. STIMPSON, Jr.

Car-Couplings.

No. 195,964. Patented Oct. 9, 1877.

Fig 1.

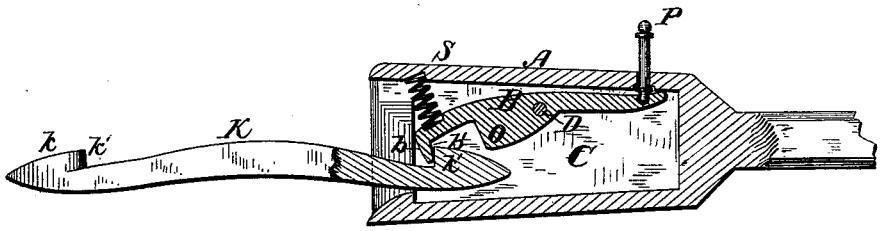


Fig 2

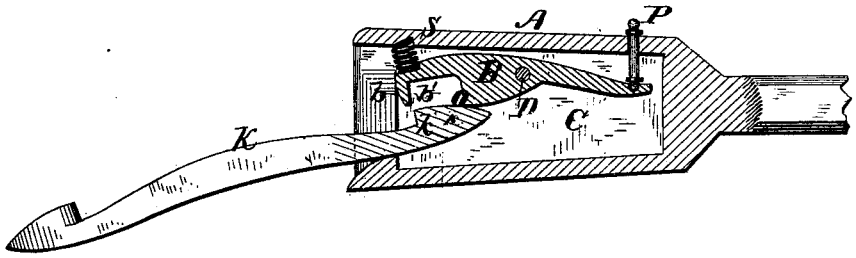
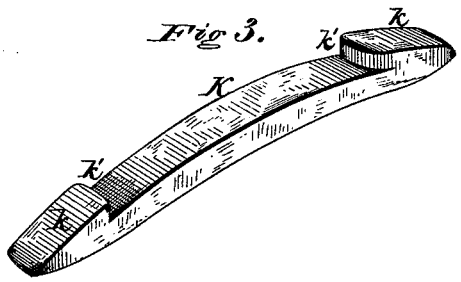


Fig 3.



Witnesses.

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UNITED STATES PATENT OFFICE.

CHARLES W. STIMPSON, JR., OF THOMASTON, MAINE.

IMPROVEMENT IN CAR-COUPLINGS.

Specification forming part of Letters Patent No. **195,964**, dated October 9, 1877; application filed August 9, 1877.

To all whom it may concern:

Be it known that I, CHARLES W. STIMPSON, Jr., of Thomaston, in the county of Knox and State of Maine, have invented certain new and useful Improvements in Car-Couplings; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 represents a longitudinal vertical section of a draw-head to which my improvements are applied, the link or coupling-bar being shown in working position. Fig. 2 is a similar view, showing the manner in which the coupling-bar is automatically detached from the draw-head when a car leaves the track; and Fig. 3 is a perspective view of the coupling-bar.

Similar letters of reference in the accompanying drawings denote the same parts.

My invention relates to improvements in that class of car-couplings in which a catch or lever pivoted within the draw-head is employed in connection with a link or coupling-bar to effect the coupling; and it has for its object to simplify their construction, cheapen their cost of manufacture, and render them certain in their operation, and also in so arranging the various parts that when, from any cause, a car leaves the track, it shall be automatically disconnected from the remaining ones.

To these ends my invention consists in the novel construction of the various parts, which I will now proceed to describe, and point out particularly in the claim.

In the drawings, A represents a draw-head, provided with the usual flaring mouth, and having an oblong chamber, C, sufficiently large to accommodate the coupling-catch B. The said catch is pivoted upon a cross-bolt, D, and its forward end is beveled at *b*, and provided with a shoulder, *b'*, which latter engages with a corresponding shoulder on the coupling-bar when the device is coupled.

The forward end of the catch is further provided with a swell or projection, O, which assists in releasing the coupling-bar from the catch when the car leaves the track, as will be hereinafter more fully explained.

A spring, S, arranged in the top of the chamber C, exerts its tension upon the forward end of the catch B, and keeps the latter normally depressed, and a bolt or pin, P, working through the top of the draw-head, and resting upon the rear of the catch, serves as means for operating the latter in uncoupling.

The coupling-bar K is curved in longitudinal section, and its ends or heads are beveled at *k k*, to facilitate their entrance into the draw-heads, and provided with shoulders *k' k'*, which engage with the corresponding shouldered ends of the catches.

The operation of the device thus constructed is as follows: As the coupling-bar enters the draw-head its beveled end presses against the correspondingly-shaped end of the catch, and, overcoming the tension of the spring S, raises the catch, and passes under until its shoulder *k'* engages with the shoulder *b'* of the catch, as shown in Fig. 1.

It will be observed that in this position the heads of the coupling-bar will rest under and against the swells or projections O on the catch. Therefore, if one end or head of the bar is carried down by the draw-head of a car leaving the track, the opposite head will press against the swell, and raise the catch sufficiently high to free the shoulder of the latter from the shoulder on the bar, as seen in Fig. 2, and thus allow the bar to be withdrawn.

The uncoupling of the cars ordinarily may be performed by pressing upon the pin or bolt P.

I claim as my invention—

The catch B, pivoted within the draw-head, having the beveled and shouldered end *b b'*, and the swell or projection O, combined with the spring S and curved double-headed connecting-bar, substantially in the manner described, and for the purpose specified.

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Witnesses:
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