

(No Model.)

H. HADDEN.
CAR COUPLING.

No. 370,695.

Patented Sept. 27, 1887.

Fig. 1.

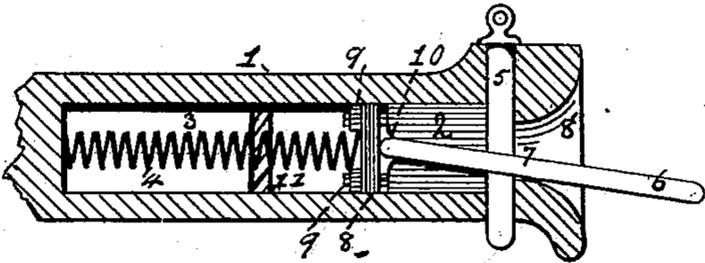


Fig. 2.

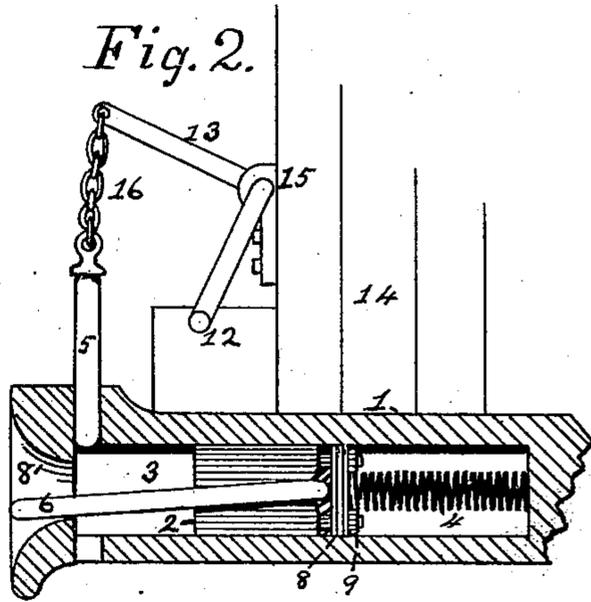
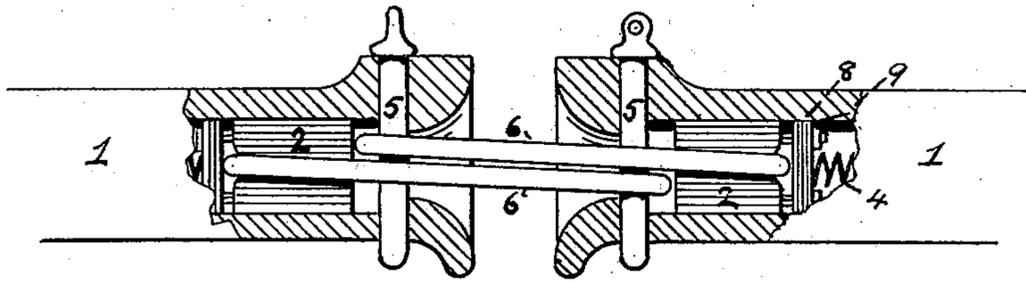


Fig. 3.



Witnesses:

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UNITED STATES PATENT OFFICE.

HARVEY HADDEN, OF PEEKSKILL, NEW YORK.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 370,695, dated September 27, 1887.

Application filed October 6, 1886. Serial No. 215,438. (No model.)

To all whom it may concern:

Be it known that I, HARVEY HADDEN, a citizen of the United States, residing in the village of Peekskill, in the county of Westchester and State of New York, have invented new and useful Improvements in Car-Couplings, of which the following is a specification.

My invention relates to ordinary link-couplings, and its object is to furnish a coupling in which the link is always in place, cannot be injured when a car is run against a solid obstruction, will couple with any of the ordinary draw-heads, when used with one of its own kind, will furnish a double link-coupling, and will furnish either a single or double link-coupling with any of the ordinary link-couplings. These objects are attained by the means illustrated in the accompanying drawings, in which similar letters and figures refer to similar parts.

Figure 1 is a sectional elevation of one of my draw-heads and link mechanism. Fig. 2 is a like view showing the draw-head in combination with the end of a car and mechanism for handling the coupling-pin. Fig. 3 is a sectional view showing the position of the several parts when two cars are coupled.

a, Fig. 1, represents a draw-head differing from the common form chiefly in the chamber 3, which is greater in vertical height than the inner end, 7, of the mouth 8. The coupling-pin 5 passes through the draw-head in the usual way. Within the chamber 3 is placed a sliding block, 2, which is recessed at 10 to receive the link 6, as shown. A plate, 8, secured to the block 2 by means of the bolts and nuts 9 9, keeps the link to its place against the block. The link, however, has free play in the space allotted to it, and, if desirable, the inner end of the block may be parallel with the plate 8—that is, the recess 10 may be omitted, thus allowing the link freedom to move up and down between the bolts 9 9. Spring 4 exerts a continual pressure against the block 2, keeping it up to its required place. 11 is a stop limiting the inward movement of the block 2. This stop may be cast within the chamber 3; or it may be a bar or bolt inserted therein.

Fig. 2 illustrates one of well-known meth-

ods of handling the coupling-pin—a short chain, 14, uniting the pin 5 to the arm 13, which is secured to a shaft hanging in bearings 15. Each end of the shaft being provided with a crank, as 12, enables the train-man to manipulate the pin without passing between the cars. It is obvious that when the pin is lifted to the position shown the normal position of the block 2 would be at the forward end of the chamber 3, affording a support to hold the pin in place and permitting the pin to fall when pushed back, as shown.

The link 6, being secured around the block 2, of course can never be removed, and if the draw-head is run against a solid obstruction the link is pushed within the chamber 3, as shown, and so escapes being bent or broken.

Fig. 3 shows a pair of these couplings joined. The links lie normally in nearly a horizontal position, and it makes no difference how the draw-heads come together about the proper entering of the links. They pass each other freely, each pushing back the supporting-block of the other, so releasing the coupling-pins, which, falling into their sockets, secure both links in the manner shown.

Referring again to Fig. 1, the distance from the inner edge of the pin 5 to the outer end of link 6 is just the length of the average of common coupling-links. It is plain therefore that this link will unite with the common forms of draw-heads. If it is required to unite it by a double link with an ordinary draw-head, the extra ordinary link is first hooked in this coupling, when the two links, one lying on the other, will readily unite with the ordinary draw-head. As an ever-ready car-coupling this combination is of great advantage over other link-couplings in that it cannot be carelessly nor very easily willfully injured. The link being always in its place is an advantage that has been much sought after.

In the making of my car-couplings I do not wish to be restricted to the specific construction herein shown, so long as I adhere to the principles of my invention.

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

The combination, in a car-coupling, with a draw-head having a large bell-shaped opening

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with a narrow throat, of the solid block 2, limited in its movement between said narrow throat and the stop 11, such movement permitting the link to be pushed entirely within the draw-head, said block being provided with plate 8 and loosely supporting a permanently-attached link, 6, stop 11, spring 4, and coupling-pin 5, all substantially as herein shown and described.

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