L. H. SHULAR.

Car Coupling.

No. 29,526. Patented Aug. 7, 1860.

Fig. 1.

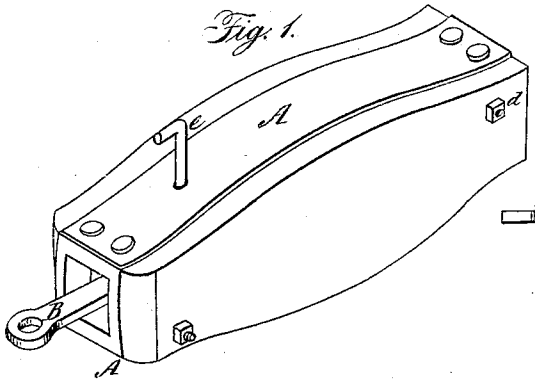


Fig. 2.

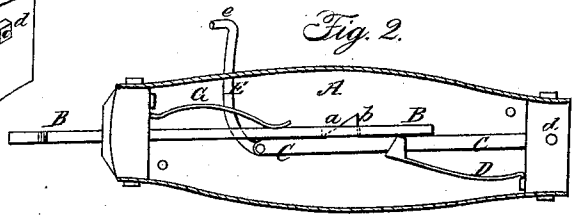


Fig. 3.

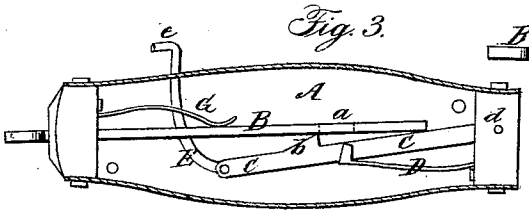
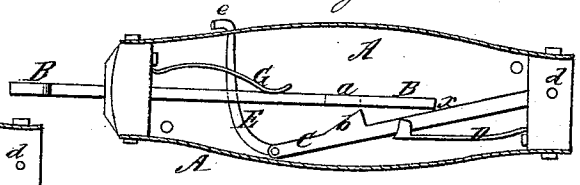


Fig. 4.



Witnesses:

W. C. McIntire.

Sam'l E. Morton.

Inventor:

L. H. Shular by Atty.

J. Mac Pherson

UNITED STATES PATENT OFFICE.

LEWIS H. SHULAR, OF CRAWFORDSVILLE, INDIANA.

CAR-COUPLER.

Specification of Letters Patent No. 29,526, dated August 7, 1860.

To all whom it may concern:

Be it known that I, LEWIS H. SHULAR, of Crawfordsville, county of Montgomery, in the State of Indiana, have invented certain new and useful Improvements in Car-Couplings; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

My invention relates to a novel construction of car coupling and consists in the ordinary case or buffer piece of a vibratable spring, catch bar in combination with a guiding spring and connecting link bar and foot piece the whole arranged and operating as will be hereinafter described.

To enable those skilled in the art to make and use my invention I will proceed to describe its construction and operation referring by letters to the accompanying drawings forming part of this specification and in which—

Figure 1, is an isometrical perspective of my improved car coupling. Fig. 2, is a side view of same with one side of the case removed to display the internal mechanism. Fig. 3, is a similar view to Fig. 2, but with the connecting or coupling link in another position, and Fig. 4, is a similar view with the coupling link in still another position.

In the different views of the drawing the same letter denotes the same parts of the apparatus.

A, is the case or buffer piece which extends out from the car platform and which may be made pretty much in the usual manner.

B, is the coupling link which consists of a flat bar of iron with a suitable slot *a* near its end, to accommodate the catch lip, *b*, on the catch bar, C. Said bar C is hung at one end on a pivot, *d*, around which it freely vibrates and is kept continually pressed upward by a spring, D, (see Figs. 2, 3, 4).

To the forward and moving end of bar, C, is connected a depressing bar, E, which extends up through the top surface of case, A, and is bent over at, *e*, to be adapted to the pressure of the foot of the car man or operator.

G, is a spring which is secured at one end in the forward end of case, A, above the bar, B, and the inner end of said spring presses down onto bar, B, counteracting the upward pressure of spring, D, and thus in connection with spring, D, maintains the bar, C, in a central position in case, A. The spring G is so curved, or shaped as to form a guide for the bar, B, as it enters the case, A, and cause it always to run in on top of bar, C, and under spring, G, which latter keeps the bar, B, pressed down tightly onto bar, C, and thus insures the catching of lip, *b*, into slot, *a*, when the bar, B, arrives at the proper position.

At Fig. 3, the bar, B, is supposed to be running into case, A, as the cars come together to form the connection and is shown as having been forced past the proper position to catch the spring, G, meantime keeping it down onto bar, C, and consequently onto lip, *b*, and the moment the car moves in an opposite direction (which pulls the bar B, out) the bar B, will slide until the slot, *a*, gets over the lip, *b*, when said lip, *b*, will shoot into the slot by the combined pressure of springs, D, and, G, and the link, B, will be securely locked onto bar, C, as shown in Fig. 2.

When it is desired to uncouple, the brakeman, or operator simply puts his foot onto the projecting end, *e*, bar E, and presses it down into the position seen at Fig. 4, when the bar, B, can be readily withdrawn from case, A.

It will be observed by reference to Fig. 4, that when the bar, E, is pressed down the catch bar, *c*, is vibrated into the position shown and the inner end of bar, B, rests on bar, C, in such manner that if the spring, G, should continue to exert any downward pressure on bar, B, said bar will not be forced into catch, or connection with lip, *b*, since the rear end of bar, C, will hold the end of B, up until the slot, *a*, has passed over lip, *b*,—and it will be understood that the forward vibrating end of bar, C, is located a little lower than the lowest point at which the end of bar, B, can pass in entering case, A, so as to insure the passage of bar, B, over the end of bar, C, and the spring G is so shaped as to constitute a guide to guide the end of bar, B, down onto and along over the bar, C.

The bar, B, is illustrated as suited only for one case, A, but it will be understood its other end may be extended (and will be in practice) and a duplicate of the end in case to fit a similar case on the platform of another car.

By the construction and combination of

the several parts as hereinbefore described a very simple and effective, and reliable coupling is produced while the whole apparatus will cost but little for its construction.

Having described the construction and operation of my improved car coupling, what I claim therein as new and desire to secure by Letters Patent is—

The combination of the vibrating catch bar, C, elevating spring D, presser bar E, (or its equivalent), depressing and guide spring G, and connecting link B, the whole constructed and operating substantially as described for the purpose set forth.

In testimony whereof I have hereunto set my hand and affixed my seal.

LEWIS H. SHULAR. [L. S.]

Witnesses:

LEWIS WALLACE,

E. C. H. Cox.