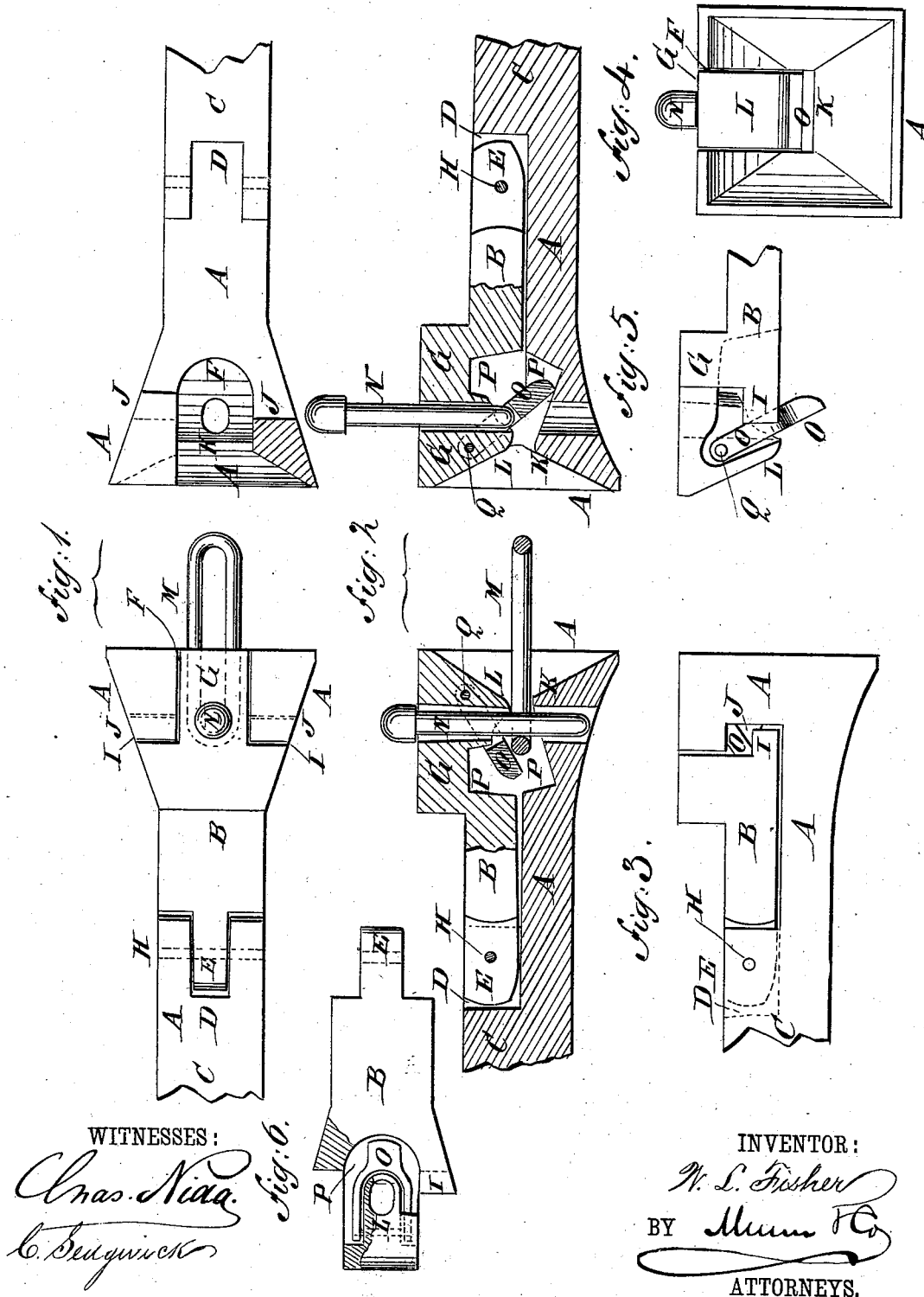


(No Model.)

W. L. FISHER.  
CAR COUPLING.

No. 261,328.

Patented July 18, 1882.



# UNITED STATES PATENT OFFICE.

WILLIAM L. FISHER, OF BAY CITY, MICHIGAN.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 261,328, dated July 18, 1882.

Application filed January 30, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM LIVINGSTON FISHER, of Bay City, in the county of Bay and State of Michigan, have invented a new and useful Improvement in Car-Couplings, of which the following is a full, clear, and exact description.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a plan view of my improved car-coupling, part being removed, and partly in section. Fig. 2 is a sectional side elevation of the same. Fig. 3 is a side elevation of a part of the same. Fig. 4 is a front elevation of a part of the same. Fig. 5 is a side elevation of the forward end of the upper part. Fig. 6 is a view of the under side of the upper part, partly in section.

The object of this invention is to facilitate the coupling of cars and promote security in the use of car-couplings.

The invention consists in a car-coupling constructed with a lower part recessed in its upper side and the upper part fitted into the recess in the lower part and having its jaw a little in the rear of the lower jaw; and, also, in the combination, with the recessed shoulder of the lower part, of the lugs formed upon the forward shoulders of the upper part, whereby the vertical play of the upper part of the coupling is limited, as will be hereinafter fully described.

The coupling-head is formed in two parts, A B, the lower part, A, of which is rigidly connected with or formed solidly upon the draw-bar C. The middle part of the upper side of the part A is cut away to receive the upper part, B, the said recess having vertical shoulders at its forward and rear ends, as shown in Figs. 1 and 3. In the rear shoulder of the part A is formed a slot, D, to receive a tenon, E, formed upon the rear end of the part B, and in the forward shoulder of the said part A is formed a slot, F, to receive a tenon, G, formed upon the forward end of the said part B. The part B is hinged to the part A by a pin, H, which passes through the said part A and through the tenon E of the part B. The lower

side of the end of the tenon E is beveled, as shown in Fig. 2, to allow the forward end of the said part B to have a slight upward movement.

Upon the forward shoulders of the part B, at the opposite sides of the tenon G, are formed lugs I, which enter recesses J in the forward shoulder of the part A. The recesses J are made deeper than the thickness of the lugs I to allow the forward end of the part B to have a slight vertical movement and to limit the said movement.

The mouth of the coupling-head is made hopper-shaped, as shown in Fig. 4, and the upper and lower inclines are so formed that the lower jaw, K, shall be a little in front of the upper jaw, L, which is formed upon the forward end of the tenon G. The throat of the coupling, or the space between the jaws K L, is made a little higher than the thickness of the coupling-link M. By this construction the said jaws will hold the link in a horizontal position, so as to enter the coupling-head of an adjacent car when the cars are run together. The link M is held in place by the coupling-pin N, which passes through the tenon G and through the part A. When the coupling is under a draft-strain the forward shoulders of the part B abut against the forward shoulders of the part A, so that the coupling-pin N will be firmly supported above and below the link M.

O is a stirrup, which is placed in a recess, P, in the parts A B, in the rear of the jaws K L, and its arms pass up into recesses formed in the opposite sides of the tenon G, and are pivoted to the said tenon a little in front of the hole for the coupling-pin N by a pin, Q. With this construction the stirrup O will rest against the inner side of the pin N when the said pin is in place, and when the pin N is raised will swing forward beneath the lower end of the said pin, so as to support the said pin in a raised position, the stirrup resting against the inclined lower side of the recess P, so that when the cars are run together the entering link M will strike against the stirrup O and push it back, allowing the pin N to drop through the link M. With this construction the slight vertical movement of the upper part, B, of the coupling, in connection with the recess P, al-

lows the link M to have the necessary play, and allows high and low cars to be coupled when required.

Having thus described my invention, I claim  
5 as new and desire to secure by Letters Patent—

1. An improved car-coupling head, consisting of the lower part, A, having its upper side recessed and provided with the slot F, and the upper part, B, provided with the tenon G and  
10 fitted in the said recess and slot, and having its jaw L a little in the rear of the lower jaw, K, substantially as and for the purpose set forth.

2. In a car-coupling, the combination, with the recessed shoulder of the part A, of the lugs I, formed upon the forward shoulders of the part B, substantially as herein shown and described, whereby the vertical play of the upper part of the coupling is limited, as set forth. 15

WILLIAM LIVINGSTON FISHER.

Witnesses:

GEORGE FROST,  
LEVI P. OLDFIELD.