United States Patent Office.

FRANK F. BOYCE, OF RYE, NEW HAMPSHIRE.

CAR COUPLING-LINK.

SPECIFICATION forming part of Letters Patent No. 396,726, dated January 29, 1889.

Application filed February 8, 1888. Serial No. 263,346. (No model.)

To all whom it may concern:

Be it known that I, FRANK F. BOYCE, a citizen of the United States, residing at Rye, in the county of Rockingham and State of New 5 Hampshire, have invented a new and useful Improvement in Coupling-Links for Railroad Freight-Cars, of which the following is a specification.

The object of my invention is to produce a 10 coupling-link for railroad freight-cars whereby the brakeman or attendant can couple the cars without danger of having his fingers crushed between the draw-heads or buffers.

The invention consists in attaching to the 15 ordinary coupling-link an arm whereby the end of the link that has to be guided into the draw-head or buffer of the cars to be connected can be raised by the attendant without danger of accident.

Referring to the accompanying drawings, Figure 1 represents a plan or top view of a coupling-link embodying my invention. Fig. 2 is an end view of same, and Fig. 3 a side view. Fig. 4 is a side view of two adjacent 25 draw-heads or buffers connected by a link embodying my invention. Fig. 5 is a plan or top view of the same.

A represents a coupling-link provided with an arm, B.

C C are draw-heads or buffers.

The arm B is placed slightly out of the center of the length of the link, and the drawheads or buffers are each hollowed out on one side, as shown at c c, to receive the arm B, so 35 that the draw-heads or buffers of two adjacent cars can come into contact with each other without striking the arm.

The arm B may be made straight, if desired; but I prefer to bend it at right angles,

as shown, so as to be more out of the way, 40 but leaving sufficient space between the link and the bent-down portion b so that there will be plenty of room for a man to hold the arm and raise the link to the required height to enter the draw-head or buffer of the car to 45 be coupled without his hand coming between the same.

The draw-heads or buffers are recessed or hollowed out on one side, as shown, and the recesses are formed on opposite sides at each 50 end of the car, so that no matter which way the car is turned the recess in one draw-head or buffer will be on the opposite side to that in the draw-head or buffer of the adjacent car.

It will be seen that by this construction of 55 link all liability of accidents to an attendant coupling freight-cars, now of such frequent occurrence, is entirely overcome, as it would be impossible for him to get his hand crushed if he raises the link by means of the arm B. 60

My invention can be readily and cheaply

applied to all links now in use.

What I claim as my invention is— A coupling-link, A, provided with an arm, B, said arm being attached to the side of the 65 link at either side of its center, in combination with the ordinary coupling-pin and a draw-head or buffer provided on one side with a recess, c, of sufficient depth to receive the arm B, substantially as and for the purposes 70 set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

FRANK F. BOYCE.

Witnesses:

E. Washington Brown, W. W. McIntire.

I. H. BROWN.

TEMPORARY BINDER FOR PHOTOGRAPHIC CARDS.

Patented Jan. 29, 1889. No. 396,727. Witnesses