

No. 629,587.

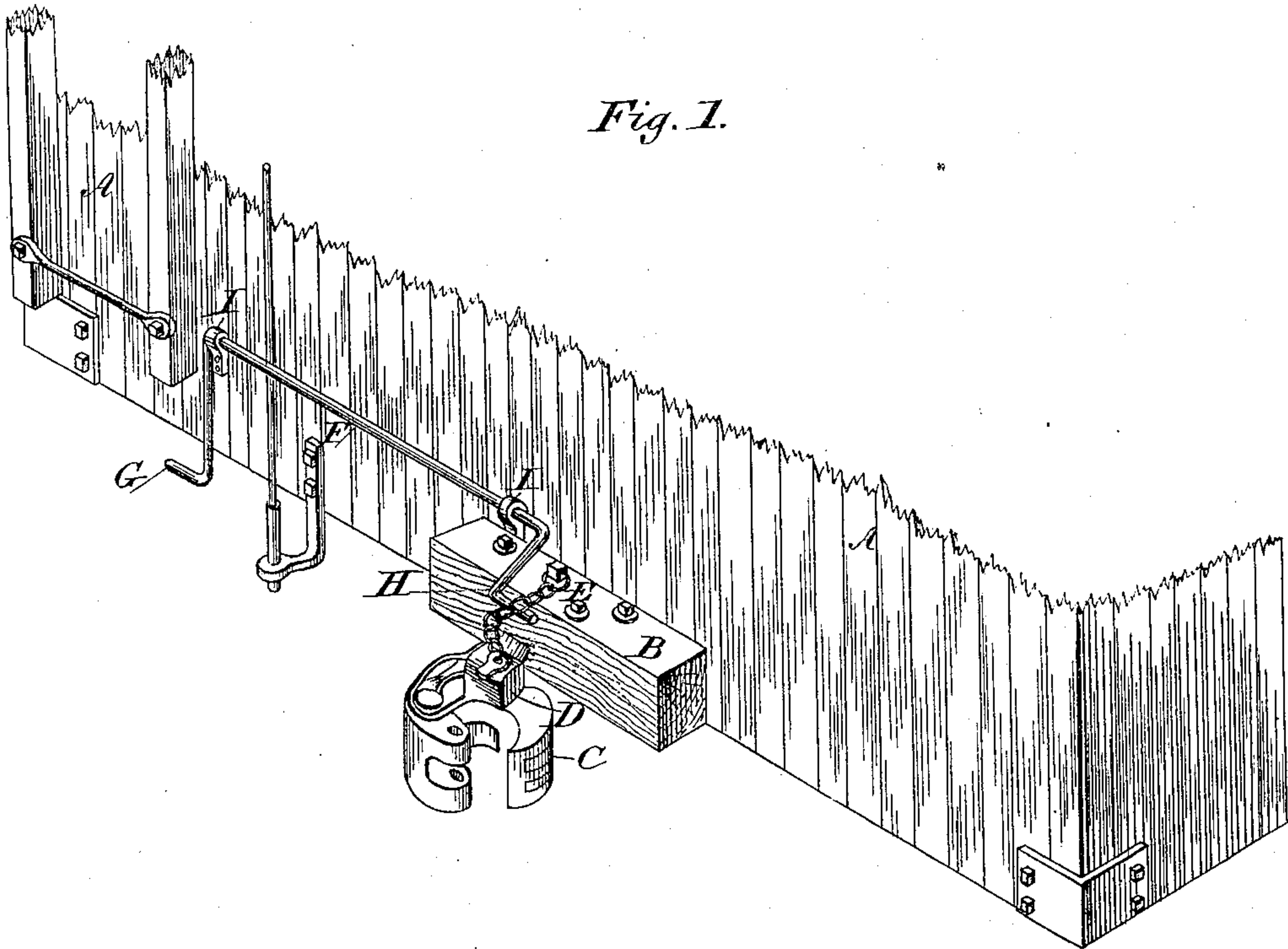
**Patented July 25, 1899.**

**T. L. McKEEN.**  
**CAR COUPLING.**

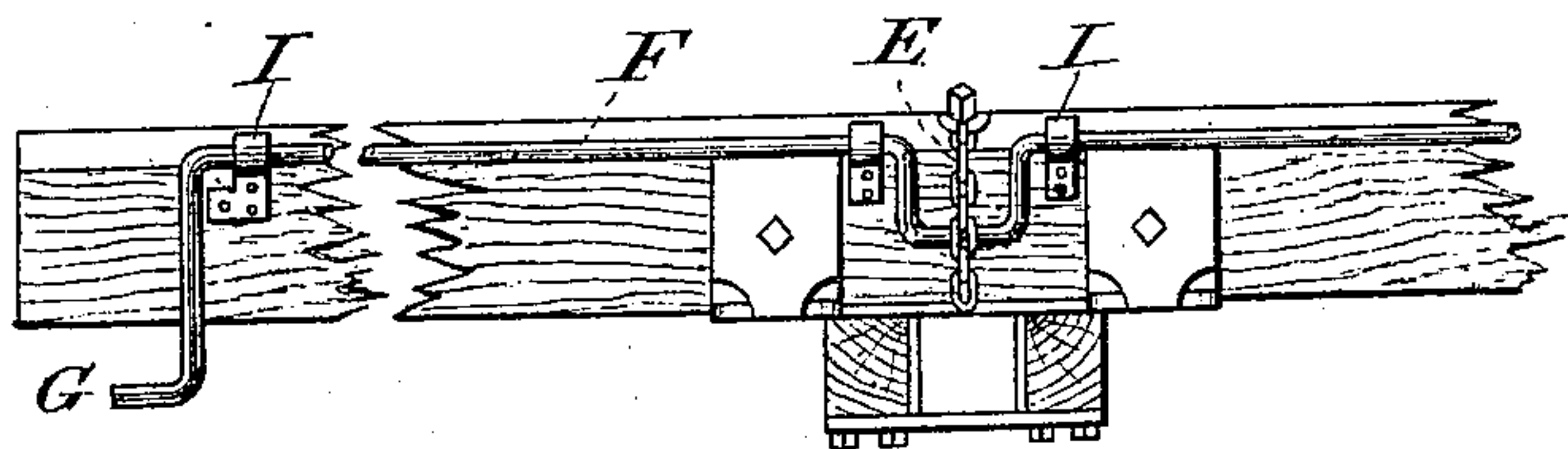
(Application filed May 13, 1899.)

(No Model.)

*Fig. 1.*



*Fig. 2.*



*Witnesses:*

F. C. Brecht.  
Mrs Tyler

*Inventor:*

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# UNITED STATES PATENT OFFICE.

THOMAS L. McKEEN, OF EASTON, PENNSYLVANIA, ASSIGNOR TO THE ACME RAILWAY EQUIPMENT COMPANY, OF SAME PLACE.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 629,587, dated July 25, 1899.

Application filed May 13, 1899. Serial No. 716,714. (No model.)

*To all whom it may concern:*

Be it known that I, THOMAS L. McKEEN, a citizen of the United States, residing at Easton, in the county of Northampton and State of Pennsylvania, have invented certain new and useful Improvements in Car-Couplers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to certain new and useful improvements in car-coupler attachments.

It is well known that it frequently happens that the draft-rigging gives way to such an extent that the coupler may be drawn entirely out or the head of the coupler may be broken off, and in either case the entire coupler or the head portion may drop upon the track and derail the cars. The main purpose of my invention is to provide means by which the locking device of the coupler may be released by hand when desired and to so construct and arrange the releasing mechanism that it shall automatically release the interlocking couplers should the draft-rigging become slack or the head of either coupler become separated from the shank and at the same time secure the coupler or head, as the case may be, from falling upon the track.

With these ends and objects in view my invention consists in the construction and arrangement hereinafter more fully set forth.

In order that those skilled in the art to which my invention appertains may fully understand the same, I will proceed to describe the construction and operation of my improved releasing device, referring by letters to the accompanying drawings, in which—

Figure 1 is a perspective view of the end of a car with my invention applied thereto, and Fig. 2 an end view showing a modification of the releasing-bar.

Similar letters of reference indicate like parts in both figures of the drawings.

A represents the end of an ordinary car.

B is a buffer-block, and C an ordinary coupler, the swinging jaw of which is locked or released by a vertically-movable locking-bolt D.

E is a chain having one end connected to

the upper end of the locking-bolt D and the other end secured to the buffer-block B. A releasing bar or rod F, having a handle G and a crank-arm H, is secured to the end of the car in suitable bearings I, within which the bar or rod F is free to rock in an obvious manner. The crank H of the bar or rod F may be constructed as shown at Fig. 1 or as illustrated at Fig. 2 and is adapted to lie under the chain E, as clearly shown, and in plane above the upper or exposed end of the locking-bolt D, so that when the said bolt is rocked upon its axis the crank end will lift the chain E, which in turn will lift the locking-bolt and cause the release of the swinging jaw of the coupler, all of which may be accomplished through the medium of the handle G of bar F.

The length of the chain E bears such relation to the crank-arm H of the releasing bar or rod F and the ordinary movement of draft-rigging and coupler that should the draft-rigging become too slack or break or should the head of the coupler break away from the shank the strain exerted by the chain upon the upper surface of the crank-arm F' will cause the chain to lift the locking-bolt D, thus releasing the swinging jaw of the coupler and in an obvious manner releasing it from the coupler of the adjacent car, and as the locking-bolt is connected with the coupler-head the latter is held through the medium of the chain E from falling upon the track.

While I have shown my invention as particularly applicable to a coupler having a vertically-movable locking-bolt, it will be readily seen that it may be applied to locking-bolts having an oscillating or other movement, which can be effected by tightening or straining the chain over the crank-arm H of the operating rod or bar F.

I am aware that it is not broadly new to provide couplers with means for automatically unlocking the same and also preventing the coupler from falling upon the track, and I am also aware that it is not broadly new to provide means to be operated by hand for releasing the coupling mechanism, and I therefore do not wish to be understood as making any such broad claim; but

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

In combination with a car and coupler, the latter provided with a locking-bolt and a  
5 chain extending from the head of the locking-bolt and secured to the buffer-block or end of the car, a rock-shaft secured to the end of the car, and provided at the outer end with an operating-handle and at the opposite or inner  
10 end with a crank-arm arranged below the

chain and adapted to bear upon the under side thereof, substantially as and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

THOMAS L. McKEEN.

Witnesses:

H. D. MAXWELL,  
ALEX. BRAUGH.