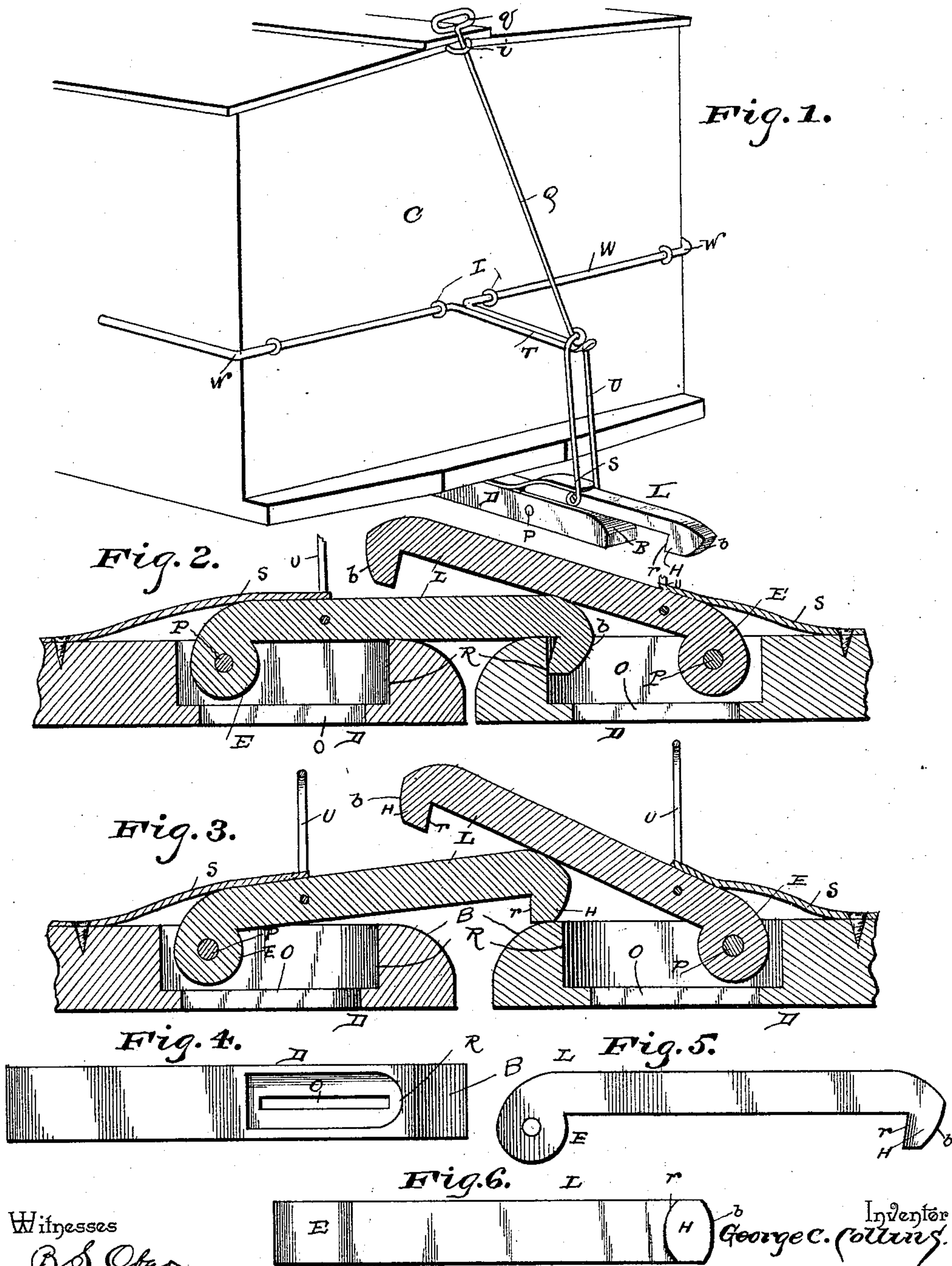


(No Model.)

G. C. COLLINS.
CAR COUPLING.

No. 454,978.

Patented June 30, 1891.



Witnesses

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UNITED STATES PATENT OFFICE.

GEORGE C. COLLINS, OF BOLIVAR, MISSOURI.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 454,978, dated June 30, 1891.

Application filed February 28, 1891. Serial No. 383,221. (No model.)

To all whom it may concern:

Be it known that I, GEORGE C. COLLINS, a citizen of the United States, residing at Bolivar, in the county of Polk and State of Missouri, have invented a new and useful Car-Coupling, of which the following is a specification.

This invention relates to car-couplings; and the object of the same is to effect certain improvements therein.

To this end the invention consists of the details of construction, substantially as hereinafter more fully described and claimed, and as illustrated on the sheet of drawings, wherein—

Figure 1 is a perspective view of the end of a car embodying my improvements. Fig. 2 is an enlarged central longitudinal section of two draw-heads coupled. Fig. 3 is a similar section showing the position of parts in the act of uncoupling. Fig. 4 is a plan view of one draw-head with the coupling-link removed. Fig. 5 is a side elevation of the link. Fig. 6 is a bottom plan view of the same.

Referring to the said drawings, the letter C designates a car, and D a draw-head attached to the same in any suitable manner. This draw-head is of the shape best seen in plan in Fig. 4—that is to say, it has a large recess in its body, with a rounded front end R and with an open slot O through its bottom, to permit whatever dirt or water may accumulate in the recess to pass out.

The letter L designates the coupling-link, whose rear end E is enlarged and mounted on a transverse pivot P within the recess in the draw-head, the body of the link passing over the front end of the draw-head, which is beveled as shown at B. The outer or free end of the link is provided with a depending head H, whose rear face *r* inclines to the rear and is rounded, and whose outer face *b* is beveled, as shown. A leaf-spring S is secured to the top of the draw-head, and its free end bears upon the link L, so as to hold the latter normally in the proper position.

The letter U designates an inverted-U-shaped bail which rises from the coupling-link, to which it is pivotally connected at a point slightly in front of the pivot P.

W is a stout wire or rod journaled in eyes I in the end of the car, and having its ends *w*

bent at an angle to its body, so as to form handles, which stand at the sides of the car. At its center this wire is formed into a tongue T, which projects forwardly through the upper end of the bail U, and is preferably turned up at its tip, so as to prevent the bail slipping off. Another rod Q is connected to the top of the bail, and leads thence through an eye *i* to the top of the car, where it is provided with a handle *q*.

In operation, when the cars are brought forcibly together, the beveled ends *b* of the two links L meet first, and one link naturally passes beneath the other—generally the link of the draw-head which stands the lower. The head H of this link passes onwardly, (the other head riding on the top of the link,) and finally it drops into the recess of the other draw-head. In this position the inclined rear face *r* fits closely within the rounded front end R of the recess, and hence the link can turn slightly within the recess and can rise and fall, as is necessary in railroad travel. The fact that the face *r* of the head H inclines to the rear serves to keep the cars in coupled position, as best seen in Fig. 2.

When desired to uncouple the cars, one of the handles *w* is depressed, or the handle *q* is raised, with the result that the bail U is lifted, and the link L, to which it is connected, is moved around its pivot P. This causes its free end to rise, as shown in Fig. 3, until it passes out of the recess with which it is engaged, the other coupling-link rising sufficiently to permit this movement.

I desire it to be understood that various changes in the details of construction and the relative sizes and arrangements of parts may be made without departing from the spirit of my invention, all of which I reserve the right to incorporate, as experience and fancy may dictate.

What I claim as new is—

1. In a car-coupling, the combination, with a draw-head having an open-topped recess with a rounded front end, the front end of the draw-head being beveled, of a coupling-link having an enlarged rear end mounted on a transverse pivot at the rear end of said recess, an enlarged depending head at the front end of said link, having a rearwardly-inclined and rounded rear face and a front face bev-

eled off on top and bottom, a spring secured to the draw-head and pressing said link normally in contact therewith, and means for raising the link, substantially as described.

- 5 2. In a car-coupling, the combination, with a draw-head, a coupling-link pivoted thereto, a spring pressing said link normally downward, and an inverted-U-shaped bail whose ends are pivotally connected to said link at a
10 point slightly in front of the latter's pivot in the draw-head, of an uncoupling-rod journaled across the end of the car and having handles at its ends, a tongue at its center pro-

jecting forwardly through said bail, and turned up at its tip, and another rod extending from said bail to the top of the car, and there provided with a handle, substantially as hereinbefore described. 15

In testimony that I claim the foregoing as my own I have hereto affixed my signature in 20 presence of two witnesses.

GEORGE C. COLLINS.

Witnesses:

E. S. BATTIN,
J. P. COATES.