

(No Model.)

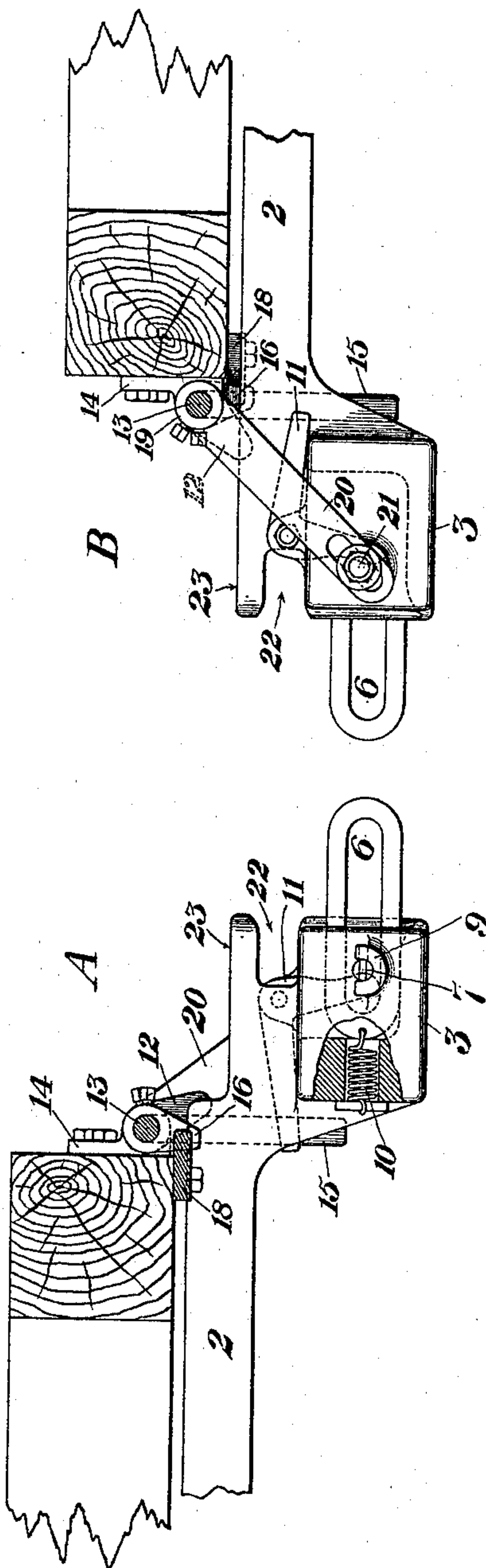
2 Sheets—Sheet 1.

J. JARRETT, J. R. DAVIES & J. EDWARDS.
CAR COUPLING.

No. 544,852.

Patented Aug. 20, 1895.

Fig. 1.



WITNESSES

H. M. Corwin
H. T. Corwin

INVENTORS

John Jarrett
John R. Davies
John Edwards
by *H. B. Russell*
Their Attorneys

(No Model.)

2 Sheets—Sheet 2

J. JARRETT, J. R. DAVIES & J. EDWARDS.

CAR COUPLING.

No. 544,852.

Patented Aug. 20, 1895.

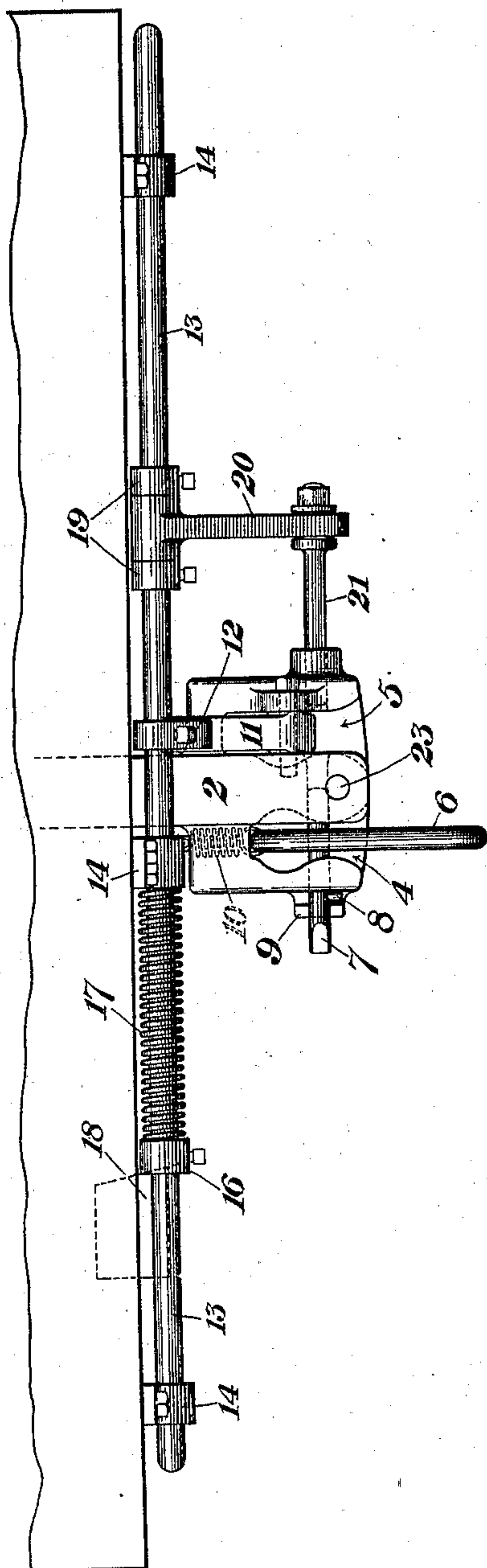
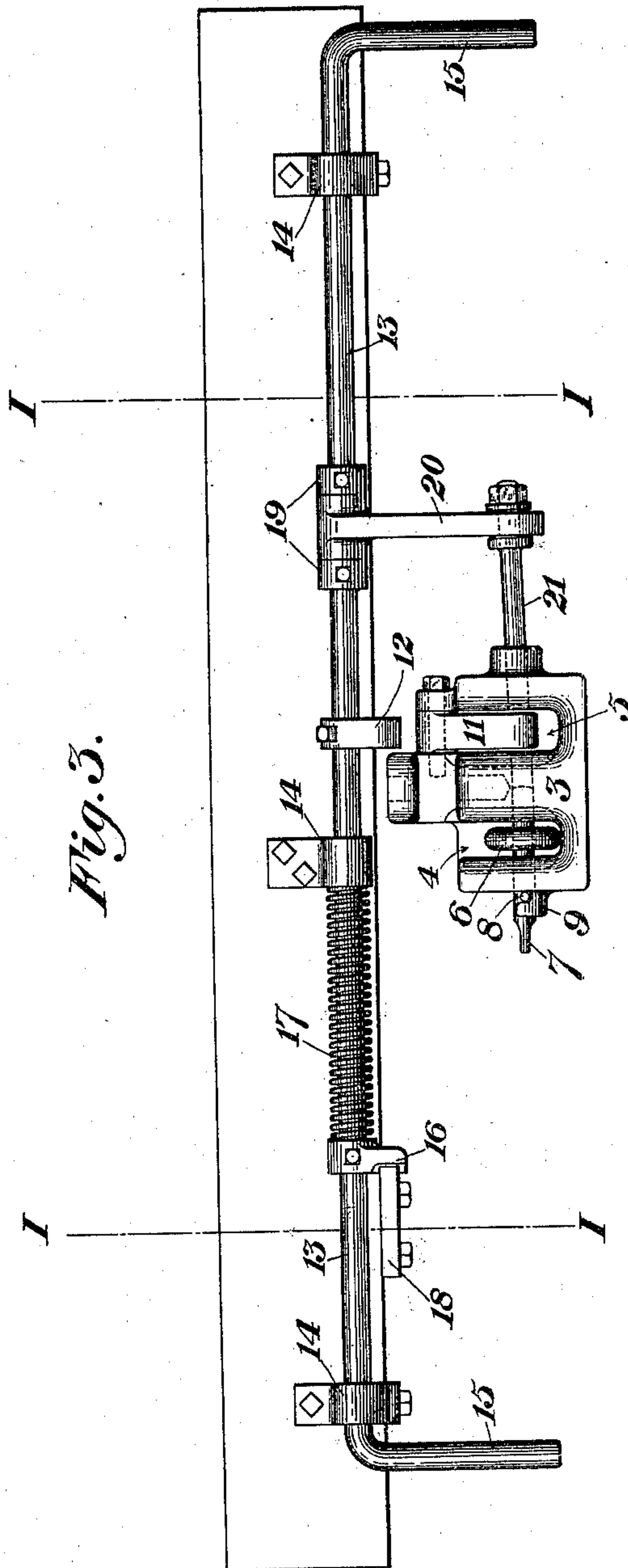


Fig. 3.



WITNESSES




INVENTORS

John Garrett
John R. Davies
John Edwards
by N. Batewell & Sons
their Attorneys

UNITED STATES PATENT OFFICE.

JOHN JARRETT, OF PITTSBURG, JOHN R. DAVIES, OF DUQUESNE, AND JOHN EDWARDS, OF HOMESTEAD, PENNSYLVANIA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 544,852, dated August 20, 1895.

Application filed January 14, 1895. Serial No. 534,746. (No model.)

To all whom it may concern:

Be it known that we, JOHN JARRETT, residing at Pittsburg, JOHN R. DAVIES, residing at Duquesne, and JOHN EDWARDS, residing at Homestead, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Car-Couplers, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, in which—

Figure 1 is a cross-section of the end sills of cars provided with coupler-heads constructed in accordance with our invention and situate in the position which they occupy when about to be coupled together, the section being taken on the line 1 1 of Fig. 3. Fig. 2 is a top plan view of one of the coupler-heads, and Fig. 3 is a front elevation of the same.

Our invention relates to that class of automatic couplers in which two links or locking projections are employed, one on each coupler-head, and it is designed to cheapen, simplify, and improve the action of such couplers.

In the drawings, in which similar numerals indicate corresponding parts, 2 represents the draw-bar of the coupler, which may be of the usual type and outline and which is bent down to form the coupler-head 3, as shown in Fig. 1. This depressing of the coupler proper below the level of the draw-bar is an important part of our invention, since it brings the strain at a point near to the track and tends to hold the cars more firmly thereon.

Each coupler-head is provided with two recesses 4 and 5, in one of which a link 6 is normally held by a pin 7, which passes through registering holes in the coupler-head, and is held in place by a projecting pin 8 thereon, which drops into a recess in a flange 9, which is suitably grooved to fit the pin. To keep the link in a horizontal position and insure its entrance into the corresponding recess of the other head, we employ a coiled spring 10, which enters a hole in the rear portion of the link and is removably secured at the rear of the head. Above the other recess of the head is pivoted a bell-crank lever 11, one of whose arms extends downwardly into the recess, while the other is adapted to engage a trip arm or trigger 12 upon the operating-rod 13.

This rod rocks within suitable straps or bearings 14, secured to the end of the car, and is provided at each end with an operating-handle 15. Between one of the straps 14 and a catch 16, secured to the rod, is a coiled spring 17, which, when the operating-rod is released by its rocking motion, due to the action of the opposing link upon the bell-crank lever, thus releasing the catch 16 from a plate 18 upon the car, moves the rod longitudinally. To prevent possibility of the rod 13 being released by jarring of the cars, or otherwise than by the opposing link of another coupler, we form the meeting faces of the plate 18 and catch 16 at an angle, as shown in Figs. 2 and 3. Loosely secured to the rod between two collars 19 is a pivoted link 20, through a slot in which passes the stem of a pin 21, adapted to hold securely in place the link of the opposite coupler-head.

To provide for use of this coupler with an ordinary coupler-head we provide an upward central extension, having a horizontal recess 22 and registering vertical holes 23. When this part is used, the stationary link is swung up out of the way and held by a hook upon the car, or in any other suitable manner, and the ordinary vertical pin dropped through the holes 23.

The action of the coupler is apparent, the stationary link upon each head entering the recess of the other head and acting upon the bell-crank lever, thus releasing the catch upon the rod, when the rod is slid longitudinally by the action of the spring, and the pin 21 enters the link, holding it in place until withdrawn by means of the end handles of the rod.

The advantages of the invention will be appreciated by those skilled in the art, since the parts are simple, few in number, and not liable to get out of order.

It is evident that instead of links stationary locking projections may be provided on each coupler-head, these projections having holes for the locking-pins.

Many other variations in the form, construction, and arrangement of the parts of the invention may be made by the skilled mechanic without departure therefrom, since

What we claim is—

1. A coupler-head having a locking projection, a recess having a lever projecting thereinto, a rod having a pin arranged to enter the recess, and a projection upon the rod arranged to be acted upon by the lever; substantially as described.

2. A coupler-head having a locking projection, a recess having a lever projecting thereinto, a rod having a pin arranged to enter the recess, a projection upon the rod arranged to be acted upon by the lever, and a spring held between a projection upon the rod and a stationary piece upon the car; substantially as described.

3. A coupler-head having two recesses, a link held in one of said recesses, a sliding rod having a pin arranged to enter the other recess, and a lever projecting into the recess and arranged to release the sliding rod; substantially as described.

4. A coupler-head having two recesses, a

link held in one recess, a sliding rod having a pin arranged to enter the other recess, an arm upon the rod arranged to be engaged by a lever which projects into the second recess, and a catch upon the rod arranged to engage a stationary piece upon the car; substantially as described.

In testimony whereof we have hereunto set our hands.

JOHN JARRETT.
JOHN R. DAVIES.
JOHN EDWARDS.

Witness as to John Jarrett and John R. Davies:

W. B. CORWIN.

Witness as to John Jarrett, John R. Davies, and John Edwards:

H. M. CORWIN.

Witness as to John Edwards:

F. E. GAITHER.