

(No Model.)

W. H. KELLOGG.
CAR COUPLING.

No. 460,510.

Patented Sept. 29, 1891.

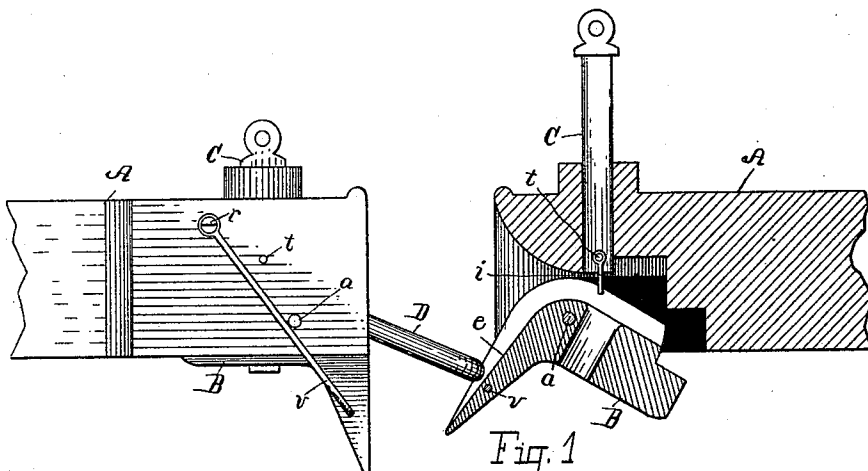


Fig. 1

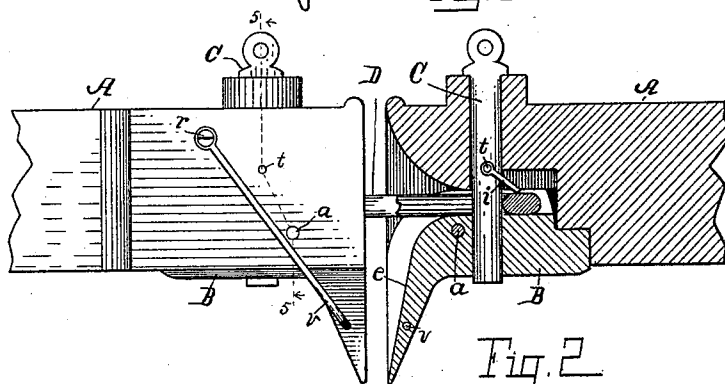


Fig. 2

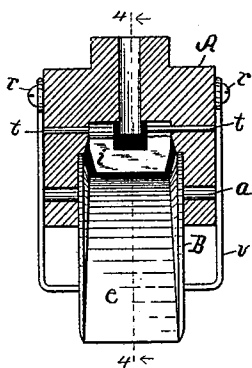


Fig. 3

Witnesses:

Walter S. Wood
Edith Perkins

Inventor.

William H. Kellogg
By Lucius C. West
Att'y.

UNITED STATES PATENT OFFICE.

WILLIAM H. KELLOGG, OF LAWTON, ASSIGNOR OF ONE-HALF TO WILLIAM
A. FORBES, OF KALAMAZOO, MICHIGAN.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 460,510, dated September 29, 1891.

Application filed April 10, 1891. Serial No. 388,415. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. KELLOGG, a citizen of the United States, residing at Lawton, county of Van Buren, State of Michigan, have invented a new and useful Car-Coupler, of which the following is a specification.

This invention relates to that class of car-couplers in which the end of the link comes in contact with the support of the coupling-pin, tripping the support from beneath the pin, allowing the latter to drop automatically to place.

The object of the invention is to provide the draw-bars with link-guides which can be set at an incline, so that the free end of the link will come in contact with the inclined surface of said link-guide and be guided to place.

Another object consists in the combination of the different features of construction and the U-support for holding the pin, all as more clearly set forth below.

In the drawings forming part of this specification, Figure 1 is a side elevation showing the right half in section on dotted line 4 4 in Fig. 3. Fig. 2 is the same, showing a change in the position of the link-guide; and Fig. 3 is a section on line 5 5 in Fig. 2, looking from a point at the right.

Referring to the lettered parts of the drawings, A A are the draw-bars, which, when in use, are attached to the adjacent ends of two cars in the ordinary manner of employing draw-bars. No cars are here shown, and the rear ends of the draw-bars are broken away.

At *i* in the upper portion of the throat of the draw-bar is shown the pin-support, made out of a thin plate in something of a form of a letter U, the free ends of said support being pivoted at *t t* to the sides of the draw-bar. From the fact that this support is pivoted at the upper side, it hangs by gravity in a vertical position, as in Figs. 1 and 3, and the lower end of the raised coupling-pin C rests in the yoke of said support. By this means, when the draw-bars come together end to end, as in Fig. 2, the link D trips the support *i*, tilting it backward and allowing the pin to automatically drop to place.

The throat of the draw-bar A is open at the lower side, and in this opening is pivoted at *a* the link-guide B. This guide is shaped like an elbow, its rear branch being provided with a vertical hole constituting an extension to the hole in the draw-bar which receives the coupling-pin C, and the forward branch presenting a grooved surface *e*, against which the free end of the link D comes in contact. In Fig. 1 one of the link-guides (the right-hand one) is set in position to receive the link D, and in Fig. 2 this guide is in the position it occupies when the draw-bars are coupled. The link-guide is held in its two positions by a bail *v*, pivotally attached to the lower end of the link-guide, the upper ends of said bail being pivoted at *r* to the sides of the draw-bar, as in Figs. 1, 2, and 3, thus bringing the pivot *a* of the link-guide B between the two pivoted ends of the bail *v*, thus causing the leverage to be such that the link-guide will be held sufficiently firm by the bail and still be allowed to yield in the operation, as follows: The left-hand draw-bar in Fig. 1 shows one end of the link D coupled. Before coupling the right-hand draw-bar the operator sets the link-guide by tilting the same, so as to bring its forward surface at an incline. This link-guide may be thus set by hand, or it may be provided with some projecting handle to operate it with, no handle being here shown. When the draw-bars approach each other, the free end of the link D, which is hanging downward at an incline, comes in contact with the lower end of the link-guide and slides upward on the same as the draw-bars are forced together and is carried back to place, as in Fig. 2, in which figure, as before stated, the link has tripped the pin-support and the pin C has dropped to place through the link and through the hole in the link-guide. During this action the link-guides B come in contact with each other, forcing the inclined one back to its normal position, as in Fig. 2. Thus draw-bars of the same and different heights in relation to each other may be readily and automatically coupled without any necessity of endangering the operator by having to raise the link by hand, and since the pivot *a* of the link-guide is

forward of the pin-hole in said link-guide the parts may be made of sufficient strength, so that in effect the coupling-pin has the same surface in the draw-bar to draw against
5 as in constructions in which the lower side of the draw-bar is solid like the upper side.

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

10 1. The draw-bars of a car having a link-guide pivoted therein at the forward end, so as to be tilted to bring the forward surface of said guides at an incline and be forced back to place, said link-guides being provided
15 with the pin-holes in the rear of their pivot, in combination with the coupling link and pin and a support for said pin which will be tripped when the end of the link comes in contact with it, substantially as set forth.

20 2. The combination of the draw-bar of a car, the elbow-shaped link-guide pivoted in the forward end of said draw-bar, said link-

guide being provided with a pin-hole, a bail pivoted to the lower end of the link-guide, the upper ends of said bail being pivoted to
25 the sides of the draw-bar, a coupling link and pin, and a movable support for the latter, substantially as set forth.

3. The combination of a draw-bar of a car, the link-guide pivoted to the forward end of
30 said draw-bar and provided with the pin-hole, the bail pivoted to the lower end of the link-guide, the upper ends of said bail being pivoted to the draw-bar, the coupling link and pin, and U-shaped pin-support pivoted in the
35 throat of said draw-bar beneath the pin-hole, substantially as set forth.

In testimony to the foregoing I have hereunto subscribed my name in the presence of two witnesses.

WILLIAM H. KELLOGG.

Witnesses:

WM. A. FORBES,
EDITH L. PERKINS.