

(No Model.)

H. A. GIBSON.
CAR COUPLING.

No. 265,405.

Patented Oct. 3, 1882

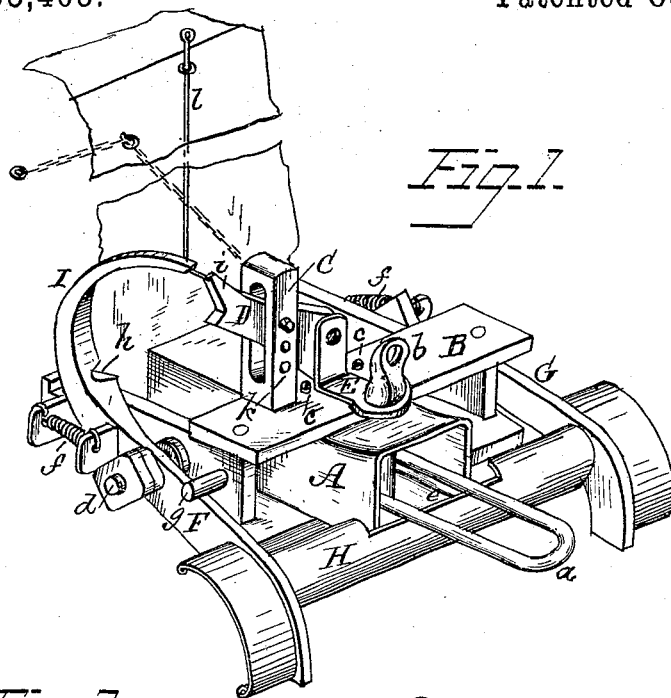


Fig. 1

Fig. 2

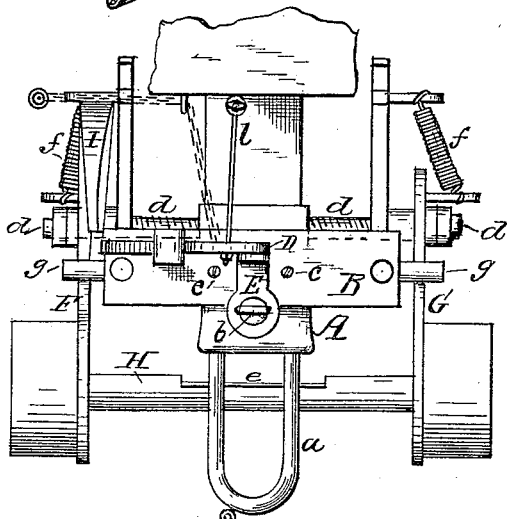
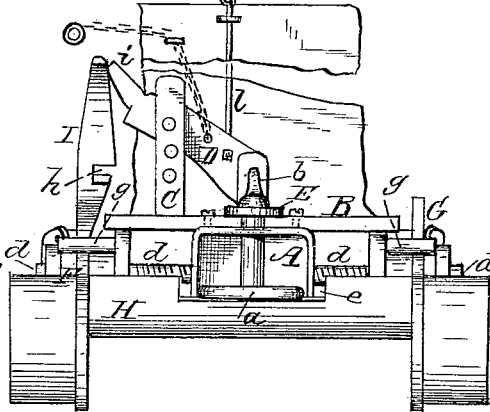


Fig. 3



Witnesses:
E. M. Mills
L. L. Miller

Inventor:
Henry A. Gibson
per Cha. H. Fowler
Attorney

UNITED STATES PATENT OFFICE.

HENRY A. GIBSON, OF OTTERVILLE, MISSOURI.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 265,405, dated October 3, 1882.

Application filed June 22, 1882. (No model.)

To all whom it may concern:

Be it known that I, HENRY A. GIBSON, a citizen of the United States, residing at Otterville, in the county of Cooper and State of Missouri, have invented certain new and useful Improvements in Car-Couplers; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a perspective view of my invention; Fig. 2, a top plan view thereof, and Fig. 3 an end view.

The object of the present invention is to provide a simple, cheap, and effective device for coupling cars, that can be attached to and used with the ordinary draw-head, coupling-link, and pin; and the invention consists in the details of construction, substantially as shown in the drawings, and hereinafter described and claimed.

In the accompanying drawings, A represents the draw-head, of the usual construction, as is also the link *a* and coupling-pin *b*.

To the draw-head A is connected the clamping-frame B, which may be of any suitable form or construction, said frame being held firmly and stationary upon the draw-head by set-screws *c*, passing through the upper and lower sides of the frame, and also screws *d*, the ends of which press against the draw-head. Although I consider this as the most practical means of securing the frame to the draw-head, I do not desire to be understood as confining myself to the means shown, as other well-known means may be employed without departing from the principle of my invention; and, also, the frame can be made so as to fit any of the draw-heads now in common use. The frame B has cast or otherwise connected to it a post, C, which is slotted, as shown, to receive a lever, D, pivoted thereto.

To the inner end of the lever D is pivoted a carrier, E, having a hole for the reception of the coupling-pin *b*, said pin passing through a hole in the draw-head.

The screws *d*, which assist in holding the frame B to the draw-head A, also serve as a pivot for attaching to the side of the frame B the arms F G, suitable nuts and washers being

used for retaining said arms on the outer ends of the screws. The arms F and G are connected at or near their outer ends by a cross-piece, H, which is cut away, as shown at *e*, to form a guide for the coupling-link *a*, and when connected to the arms can be turned at any angle to gage and guide the link, so that it will never miss any draw-head, the cross-piece H being convex, as shown. The rear end of the arm F is extended to form a curved trip-lever, I, which strikes the pivoted lever D and forces the outer end down, raising the carrier E, and with it the coupling-pin. The opposite arm, G, is for the purpose of balancing the arm F, trip-lever I, and the cross-piece H, also supporting them and holding them steady to prevent twisting and wobbling from one side to the other.

To the rear of the arms F G are connected suitable springs, *f*, said springs being also connected to the rear extension of the sides of the frame B for the purpose of pulling the arms F G back in position when the cars start to move forward. Two stops, *g*, projecting from the sides of the frame B at a point above the arms F G, keep the springs *f* from raising said arms too high.

If desired, the sides of the frame B can be made wider and not so long, so as to give the draw-head its full slack when they bump together. The springs also can be set downward, as well as horizontal, and the end of the pivoted lever, as well as the end of the trip-lever, can be case-hardened to prevent wear.

Should the coupling-pin not rise quick enough to get out of the way of the link, all that is necessary is to curve the end of trip-lever to a greater degree.

The trip-lever I has an open slot, *h*, so that when the draw-heads come together the finger *i* on the pivoted lever D will pass through it, and the coupling-pin *b* drop down into place through the link, thus coupling the cars automatically and with certainty.

The post C has extra holes through it, as shown at *k*, to put a pin in to prevent brakemen from pulling the coupling-pin clear out of the carrier E when the cars are making a coupling.

A rod, *l*, is connected to the pivoted lever D, and extends up to the top or roof of the car, and also a chain, rod, or other device connected to the lever, and extends out at the sides of the

car, to enable the car to be uncoupled from the top or side, as desired.

Any desirable means may be employed for uncoupling the cars, and I therefore do not wish to confine myself to the construction shown.

It will be seen that a strong, durable, as well as practical, means is provided for automatically coupling cars, and that can be readily connected to any style of draw-head now in use and operated with the ordinary coupling link and pin.

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

In a car-coupler, the combination, with a suitable frame, B, adapted to be connected to the draw head, and having pivoted lever D, with finger *i*, and the pin-carrier E, of the arm F, cross-piece H, and trip-lever I, with slot *h*, substantially as and for the purpose set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

HENRY ANDREW GIBSON.

Witnesses:

MONROE CRAWFORD,
HOWARD ADAMS.