C. L. CLOUTMAN.
Car-Coupling.

No. 209,656. Patented Nov. 5, 1878.

Fig. 1.

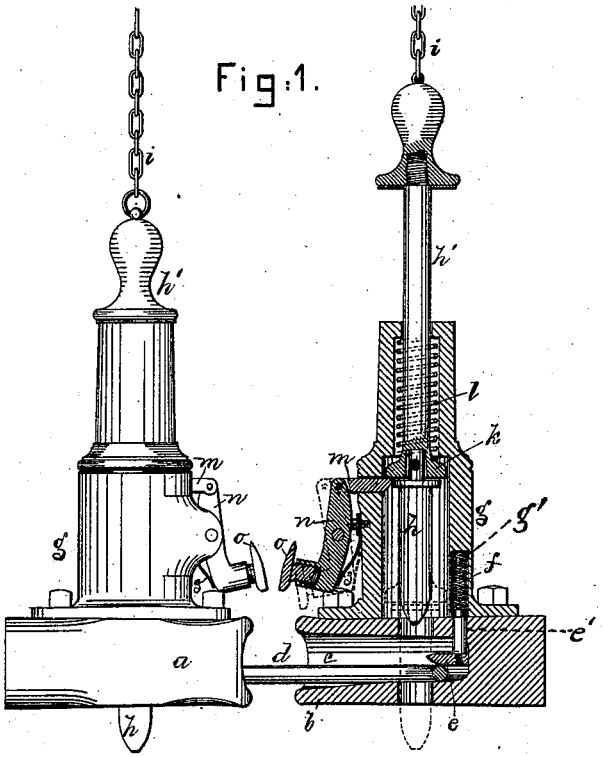
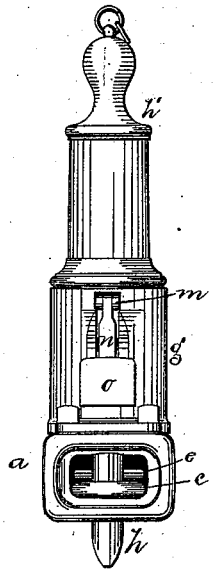


Fig. 2.



Witnesses.
W. J. Pratt.
L. A. Baxter.

Inventor.
Charles L. Cloutman
by Crosby & Gregory Attys.

UNITED STATES PATENT OFFICE.

CHARLES L. CLOUTMAN, OF FARMINGTON, NEW HAMPSHIRE, ASSIGNOR TO HIMSELF AND ALONZO I. NUTE, OF SAME PLACE.

IMPROVEMENT IN CAR-COUPLINGS.

Specification forming part of Letters Patent No. **209,656**, dated November 5, 1878; application filed March 2, 1878.

To all whom it may concern:

Be it known that I, CHARLES L. CLOUTMAN, of Farmington, county of Strafford, State of New Hampshire, have invented an Improvement in Car-Couplings, of which the following is a specification:

This invention relates to car-couplings, and has for its object the production of an automatically-operating coupling device, quick and reliable in action.

The ends of the coupling-links, as they enter the openings in the draw-heads, are placed in proper horizontal position under the coupling pins or bolts by yielding pressers, and the draw-heads, as they approach each other, operate the bolt-suspending devices, which permits the bolt upheld by one of them to descend and enter the coupling-link and draw-head, thereby joining the cars together.

Figure 1 represents in side elevation, partially in section, coupling devices such as will be placed at the ends of two cars; Fig. 2, a front elevation of one of the draw-heads and pin or bolt carrier as it would appear looking at the end of a car.

The draw-heads *a b*, preferably of metal, will be supported, with reference to the car-platforms, in any usual way. Each draw-head has an opening, *c*, to receive one end of the usual coupling-link *d*, which, as it enters, is kept in the proper horizontal position against its bottom by the presser *e*, rounded at its forward end to permit the coupling-link to pass under it. This presser *e* is provided with a guiding-stem, *e'*, which extends vertically therefrom and enters a socket, *g'*, in the case *g*, where it is connected with the spring *f*, that acts to hold the presser down upon the link. This case *g* contains the coupling pin or bolt *h*, which is shown as pivoted to the lower end of a lifting-rod, *h'*, adapted to be raised by hand or otherwise, or by a chain, *i*, connected with the upper end of the rod, and extended to the top of the car.

The rod and bolt might be made as one rigid piece; but by dividing them, as shown, I am enabled to employ a very strong, thick bolt and a lighter rod to lift it, and the bolt is permitted a little lateral play to permit it to easily enter the coupling-link. The rod has a collar, *k*, and above it a spring, *l*, to depress the rod and bolt quickly when not held up by the slide-rest *m*, which is connected with the lever *n*, having a striking-piece, *o*. The slide-rest, lever, and striking-piece constitute what I denominate the "bolt-suspending" devices. A spring, 3, pressing against the lower end of the lever *n*, pushes the slide-rest *m* into the case *g*, to support the rod and bolt when elevated, as shown at the right of Fig. 1. As the bolt is lifted the upper inclined end of the collar pushes the slide-rest out, and as the collar passes its end the slide is quickly thrown under the collar.

When coupling together two cars one end of the coupling-link is usually placed by hand within one of the draw-heads, where it is caught by the coupling pin or bolt. Suppose this to have been done with the draw-head *a*, and that the coupling-link projects outward therefrom. The bolt of the draw-head *b* is held up, as shown in full lines, and the end of the coupling-link, entering the opening in draw-head *b*, meets the presser *e*, which acts to hold it in proper position over the bolt-passage in such draw-head, and as the ends of the draw-heads approach each other the pads *o* meet, turning the levers *n* and withdrawing the slide-rests *m*, which permits the bolt and rod held up by one of the slide-rests to be thrown down by the spring *l* through the coupling-link and draw-head under it, thereby connecting the two cars together.

The pressers keep the coupling-links from rattling and maintain the links in horizontal position.

These couplings may be employed for passenger or freight cars, and by their use accidents incident to coupling cars are avoided.

To apply this invention to draw-heads most commonly in use, it is necessary only to apply to such draw-heads, the presser, and the case *g*, and its attachments for operating the bolt. The cars being coupled together will have the usual bumpers.

I claim—

1. The rod *h'*, collar *k*, and bolt *h*, in combination with the slide-rest and lever *n*, operat-

ing by contact of the levers on approaching couplings to release the coupling pin or bolt, all substantially as described.

2. A coupling-pin-operating rod, *h'*, having a collar, *k*, in combination with the slide-rest *m*, spring-lever *n*, and striking-piece *o*, substantially as and for the purpose described.

3. In a car-coupling, a presser, *e*, rounded at its forward end, and having a guiding-stem, *e'*, in combination with the casing *g* and its contained spring *f*, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CHARLES L. CLOUTMAN.

Witnesses:

A. HUNERWADEL,

L. A. BAXTER.