C. GIFFORD.
Car-Coupling.

No. 204,212. Patented May 28, 1878.

Fig: 1.

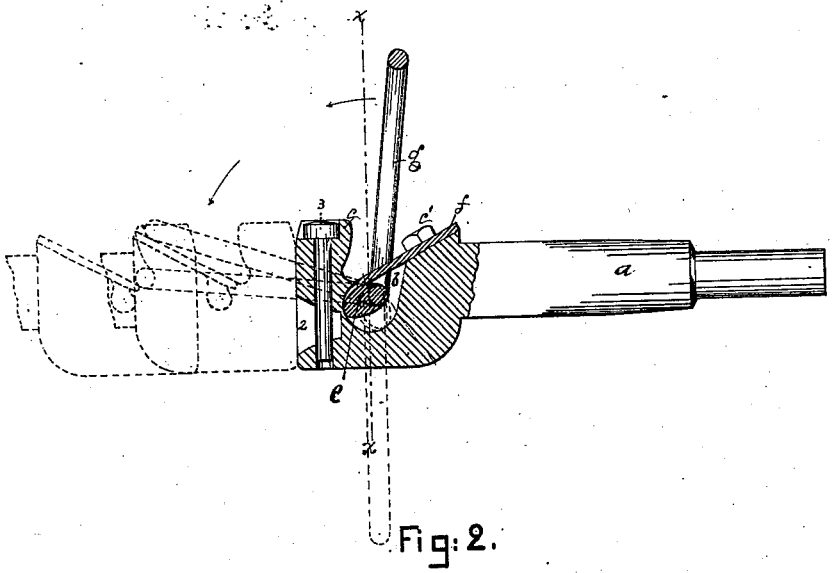


Fig: 2.

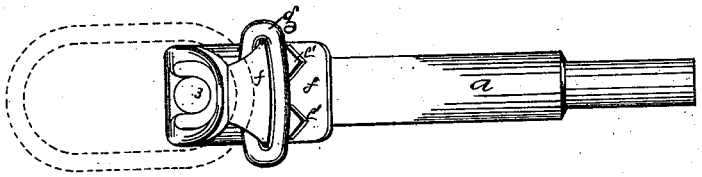
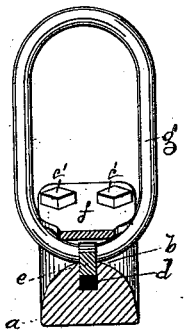


Fig: 3.



Witnesses.
W. J. Pratt.
A. Hunemadel

Inventor.
Charles Gifford
by Crosby & Gregory Attys

UNITED STATES PATENT OFFICE.

CHARLES GIFFORD, OF GARDINER, MAINE.

IMPROVEMENT IN CAR-COUPLINGS.

Specification forming part of Letters Patent No. **204,212**, dated May 28, 1878; application filed March 18, 1878.

To all whom it may concern:

Be it known that I, CHARLES GIFFORD, of Gardiner, county of Kennebec, State of Maine, have invented an Improvement in Car-Couplings, of which the following is a specification:

This invention relates to car-couplings, and is an improvement on that class of couplings represented in United States Letters Patent No. 19,925.

The invention consists in providing the coupling-link with a projection to enter a guide in the draw-head, whereby the link is guided as it is moved and is kept from tipping laterally; also, in the combination, with the guided link, of a holding or bridge plate attached to the draw-head to retain the projection of the link down into its guide-groove. The draw-head and link are adapted to couple with a like-shaped draw-head, or with any draw-head using a coupling-pin, and it may therefore be used with any of the usual forms of draw-heads.

Figure 1 represents, in longitudinal section, in full lines, a draw-head provided with my improvements, the dotted lines showing the counterpart, supposed to be upon another car; Fig. 2 a top view, and Fig. 3 a cross-section, on the line *x x*, Fig. 1.

The draw-head *a* has at its face the usual opening 2 to receive the common coupling-link, it being held by the coupling-pin 3. The upper portion of the draw-head is provided with a recess, *b*, to receive the coupling-link *g*, said recess having in front of it a draw-post, *c*, over which a coupling-link, like *g*, of another draw-head, may catch, as shown in dotted lines, Fig. 1. The coupling-link *g* has at one of its ends a projection, *e*, which enters a guiding-groove, *d*, (see Fig. 3,) in the draw-head. The link is held down by the holding or bridge plate *f*, so that the projection remains within the groove *d* as the link is turned up and down, thereby guiding the link in the proper direction, and insuring that it moves in the proper path to unerringly fall over the draw-post *c*, with which it is to connect.

The plate *f* is secured to an angular seat upon the draw-head by screws *c' c'*, and projects forward through the link *g*. The plate *f* is so shaped (see Fig. 2) that the link *g*, as it is elevated, bears upon the sides of and is guided by the plate, and is by it held in vertical position. The striking together of the draw-heads causes the link to fall forward to engage a draw-post of an opposed draw-head.

When a draw-head like *a* is by a link connected with a draw-head unprovided with a draw-post, then the link *g* is permitted to drop, as shown in dotted lines, Fig. 1.

What I claim is—

1. The coupling-link provided with the projection, in combination with the draw-head provided with the guiding-groove to receive said projection, substantially as and for the purpose described.

2. The draw-head and coupling-link, combined with the holding-plate *f*, projected through the link to hold it down in the recess *b*, and to steady the link in its vertical position, substantially as and for the purpose described.

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

CHAS. GIFFORD.

Witnesses:

G. W. GREGORY,

L. A. BAXTER.