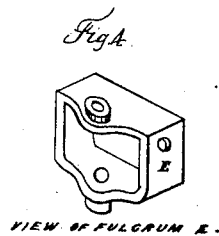
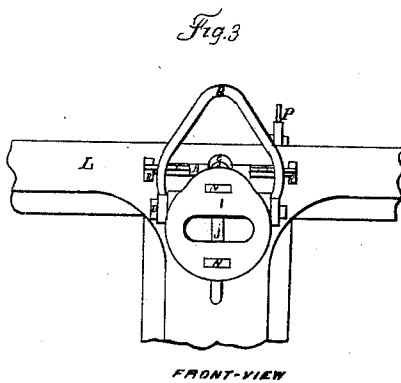
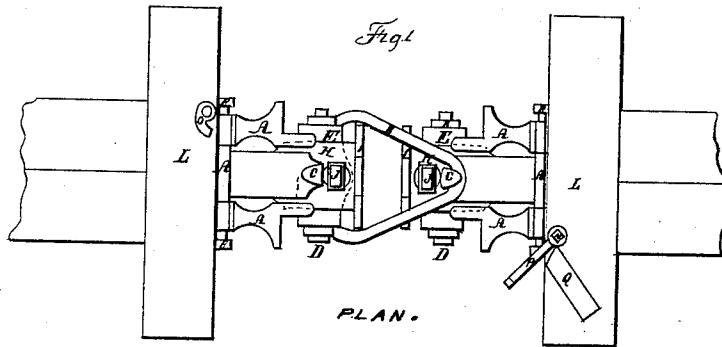
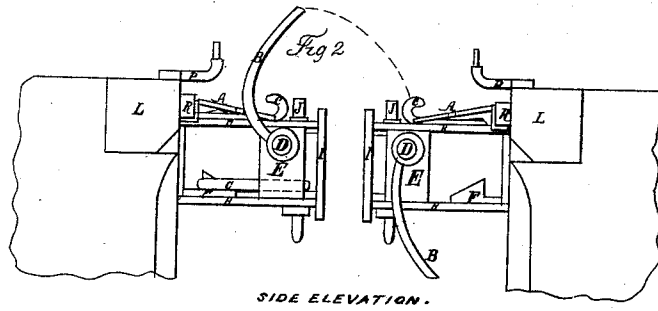


J. C. RANSIER.
Car Coupling.

No. 23,498.

Patented Apr. 5, 1859.



Signed in presence of
R. W. Ashley Secy. M. A.
D. Miller

J. Clinton Ransier

UNITED STATES PATENT OFFICE.

J. CLINTON RANSIER, OF LYONS, NEW YORK.

CAR-COUPLING.

Specification of Letters Patent No. 23,498, dated April 5, 1859.

To all whom it may concern:

Be it known that I, J. CLINTON RANSIER, of the town of Lyons, in the county of Wayne and State of New York, have invented a new and useful Improvement in Railroad-Car Couplings; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure one (1) is a ground plan, Fig. two (2) is a side elevation, Fig. three (3) is a front view, and Fig. four (4) is a perspective view of fulcrum E.

Construction and specification of the above car coupling.—Fulcrum E (Fig. 4) is provided with shoulders or bearings and is secured between bars H and H and in rear of bumper plate I by its shoulders or bearings passing through said bars H and H, thus forming an axis of said bearings or shoulders which allows fulcrum E to revolve or turn upon its axes and act in part as a swivel; fulcrum E is also provided with a hole running or passing through either shoulder perpendicularly and parallel with its bearings for the purpose of admitting bolt J (see Fig. 3) to pass into and through the opening in said fulcrum E. Fulcrum E is further provided with an opening corresponding nearly with the link hole through bumper plate I for the purpose of admitting a link or other contrivances to pass into or through said fulcrum E.

Clevis or connecting link B is formed crowning and with a bulge or curve on either side for the purpose of allowing said clevis to revolve up and down, over and upon the outside of the body of the bumper and plate I constructed in such a manner that said clevis B will not chafe against or conflict with bumper plates I when the bumpers are coupled together. Clevis B is connected to fulcrum E by bolt D by said bolt passing through the perforated ends of said clevis and through fulcrum E horizontally and near the top; by thus connecting clevis B and fulcrum E they form nearly a swivel, which allows clevis B to revolve up and down, to the right and left, &c., and conforms to the rocking and swaying motion of cars when connected, and furthermore by this mode (clevis revolving over the outside of bumper plate and body of the bumper) cars can be coupled together should the cars

vary in height to the extent of from one to eight inches, by setting the clevis or connecting link upon the highest car. Catch F is placed between bars H and H for the purpose of holding link G² in rear of bumper plate I when not in use. Link G is used for effecting an extra fastening in connection with my mode of coupling, also to be used to effect a coupling with other kinds of bumpers. Bolt J is to be used in connection with link G, (Fig. 2.) Hook C is placed upon the top bar H for the purpose of receiving and securing the curved end of opposite clevis B in the process of coupling. (See Fig. 2.)

Arms A A are connected to sill L by eye headed bolts R which allows said arms to revolve up and down as may be required; arms A A are used for sustaining clevis B when in its upright or set position; also for throwing said clevis forward in the process of coupling; arms A A (when in connection with dog O Fig. 1) is used for the purpose of uncoupling or casting off the opposite clevis B when connected, which is accomplished by turning rod N by crank P against stop Q (Fig. 1,) which turns the lever point of dog O against one of the shoulders of A A, by which means raising the points of arms A A and the curved end of the opposite clevis B so that said clevis B will be disconnected from hook C. By then parting the bumpers asunder said clevis will drop in its downward position, or by turning crank P suddenly against stop Q will set the opposite clevis in its upright position ready for recoupling.

Note.—Any kind of bumper springs now in use will be applicable to my mode of couplings therefore for merely giving my couplings a full illustration I have for that purpose provided my model with spiral springs, between bars H and H and in the rear end of the bumpers, secured in the center by a pin.

Mode of operation.—Set one clevis B in its upright position against arms A A and the opposite clevis B in its downward position. (See Fig. 2.) By then running or pressing said bumpers together (face to face) the bumpers will settle back in their sockets, while arms A A being in a fixed position will throw clevis B from its upright position over hook C on the opposite bumper. To effect a coupling where the cars should vary materially in height set the clevis in

its upright position on the highest car; for uncoupling, see "Construction."

Having thus fully described the construction and operation of my improved car coupling and inventions of the same, I lay no
5 claims to bars H and H, bumper plates I, link G (Fig. 1,) sill L, nor bolt J as my invention, as the same is now in general use; but

10 What I claim as my invention and desire to secure by Letters Patent is—

1. Clevis B in connection with fulcrum E by bolt D for the purpose of a connecting
15 link between railroad cars so constructed and arranged that said clevis or link will encircle and revolve up and down and sway to the right and left over the outside of bumper plate (or plates) I and the body of the
20 bumper and otherwise arranged and constructed for the purpose as substantially set forth and described in this specification.

2. I also claim revolving arms A A or their equivalents in combination with dog
25 O (as seen in right hand plan Fig. 1) for the purpose of aiding in casting off the opposite clevis from hook C in the process of

disconnecting or uncoupling, also for a rest for and in aiding in throwing clevis B (on the same bumper) forward from its upright
30 position in the process of effecting a coupling as substantially set forth and described in this specification.

3. I also claim hook C or its mechanical equivalent placed on top of the upper bar
35 H and in rear of the top shoulder of fulcrum E for the purpose of receiving the curved point of the opposite clevis B in the process of coupling.

I do not intend to confine myself to rod or shaft N for the purpose of turning dog O
40 against the shoulder of arms A A for the purpose of raising the points of said arms in the process of casting off the opposite clevis in the process of uncoupling as herein described as other well known modes of screw
45 or lever power can be applied with equal effect.

J. CLINTON RANSIER.

Signed in presence of—
R. W. ASHLEY,
DENISON WILDER.