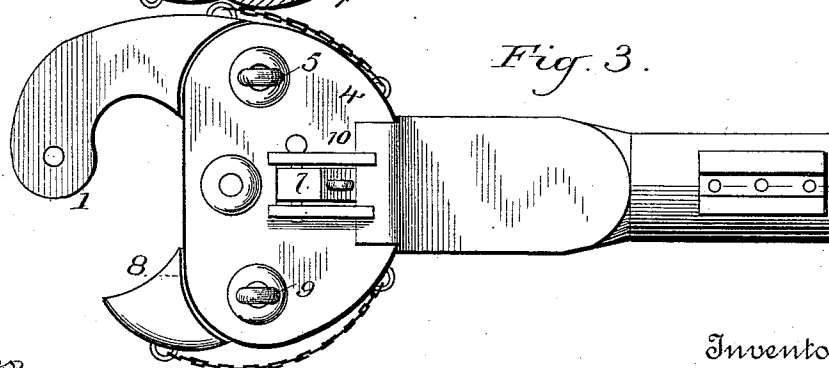
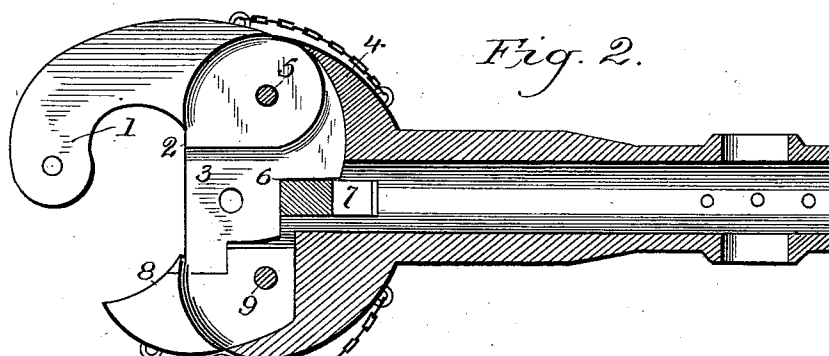
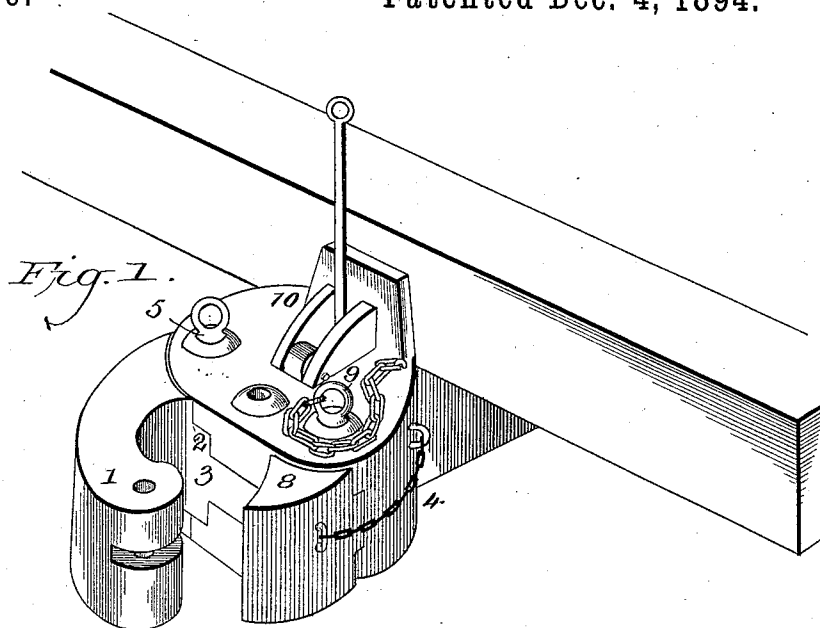


(No Model.)

E. R. KIRBY.
CAR COUPLING.

No. 530,186.

Patented Dec. 4, 1894.



Witnesses

J. W. Reynolds
Chas S Hoyer

Inventor

E. R. Kirby.

By John Wedderburn
Attorney

UNITED STATES PATENT OFFICE.

EDWARD R. KIRBY, OF TERRE HAUTE, INDIANA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 530,186, dated December 4, 1894.

Application filed February 5, 1894. Serial No. 499,170. (No model.)

To all whom it may concern:

Be it known that I, EDWARD R. KIRBY, a citizen of the United States, residing at Terre Haute, in the county of Vigo and State of Indiana, have invented certain new and useful Improvements in Car-Couplers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to car couplings of that class known as Janney-type, and has for its object to simplify the construction and arrangement of the several parts and render them more positive in their action, wherein the parts are readily removable and adapted to be separated with ease and facility in case of breakage, and wherein the bearings of the knuckle and lock are in the center of the draw bar and not on the side.

With these and other objects in view, the invention consists of the construction and arrangement of the several parts which will be more fully hereinafter described and claimed.

In the drawings: Figure 1 is a perspective view of the end of a car, showing the improved coupling applied thereto. Fig. 2 is a top plan view of the improved draw head partially in section. Fig. 3 is a top plan view in full line.

Similar numerals of reference are employed to indicate corresponding parts in the several views.

Referring to the drawings, the numeral 1 designates the knuckle having a shoulder 2 and a tongue 3. The said knuckle is removably attached to the head 4 which is recessed to receive the same by means of a coupling pin 5. The inner part of the tongue of the said knuckle is formed with a recess 6 and is adapted to be engaged by a gravitating dog 7 in the rear part of the head to hold the knuckle against release. The said dog is adapted to be operated by a rod and chain, cord or other device extending upward therefrom and either to the side or top of the car. On the opposite side of the head to that to which the knuckle is applied is a guard arm 8 which is in like manner connected by a coupling pin 9, and is adapted to be removed

when desired. The coupling pins connecting the knuckle and the guard arm can be held to the head by means of suitable chains or other devices and the draw head proper in the central portion thereof is formed with pin openings for the purpose of applying the ordinary link if necessary, in coupling cars and in case some of the parts may become broken. In rear of the dog is an upwardly extending guard 10 which shields the opening into which the dog has movement, and also protects the pull rod or other device attached to the dog.

The special advantage of this coupling is that it is automatic and employs a common draw bar combined with a distinct head carrying the knuckle and the guard. In other similar couplings heretofore used, when a knuckle was broken it was necessary to put in a new knuckle or remove the coupler and put in an ordinary draw bar. It often occurred that all kinds of knuckles were not in stock and when one of the same became broken it required considerable expense of labor and time to refit the coupler for use, and at all events, required a great delay when one of the said knuckles became broken while the car was in a train, necessitated the cutting out of the car and delaying the train until the coupler was fixed. In the present form of coupler, should a knuckle become broken the coupling pin that holds the guard arm is removed and said guard arm detached, and as well the knuckle itself can be disconnected and an ordinary link may be inserted in the head and attached to the coupler and thereby obviated delay and the expense of time and labor in refitting the coupler at once.

A further advantage of the present form of coupler is the almost impossibility to break the lock or dog, as it has a solid bearing in the adjacent wall of the head and all the bearings of the knuckle and the lock or dog are in the center of the draw bar and not on the side as in a great many of the couplings now in use.

It will be evident that the present form of coupler is an exceptionally valuable acquisition to the art and it is apparent that many minor changes in the construction and arrangement of the several parts can be made

and substituted for those shown and described without in the least departing from the nature or spirit of the invention.

Having thus described the invention, what is claimed as new is—

10 The herein shown and described car coupling, composed of a draw head provided with a vertical opening to receive the ordinary coupling pin and having a vertically disposed guard 10, a knuckle pivoted at one corner of the draw head and having a laterally extended tongue which is provided with a recess on its inner edge, a guard arm pivoted to the opposite corner of the draw head and
15 adapted to engage with the free end of the

said tongue, and a vertically disposed gravitating dog mounted in a housing by the said guard 10, and adapted to engage at its lower end with the recessed edge of the said tongue, substantially as described for the purpose set forth, the knuckle and guard arm being removable so that the coupling is adapted for use with the common pin and link.

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

E. R. KIRBY.

Witnesses:

HENRY J. KINTZ,
FRED CARRINGTON.