

No. 676,712.

Patented June 18, 1901.

I. BARTLETT.
CAR COUPLING.

(Application filed July 19, 1900.)

(No Model.)

2 Sheets—Sheet 1.

FIG. 1.

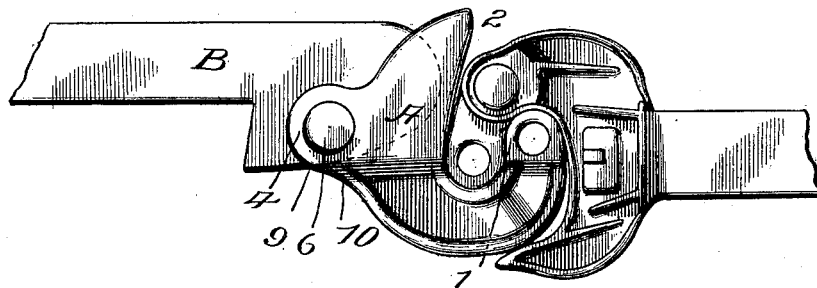
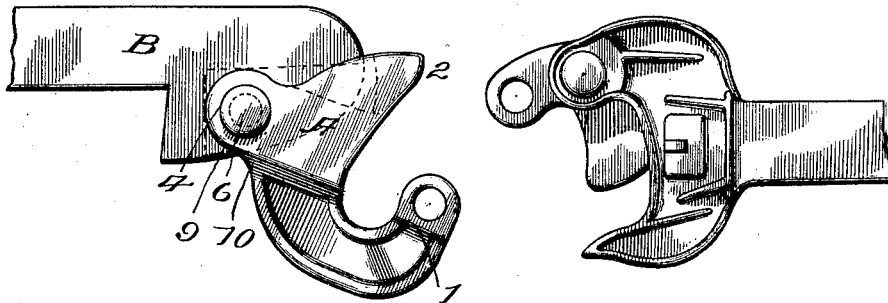


FIG. 2.

Witnesses

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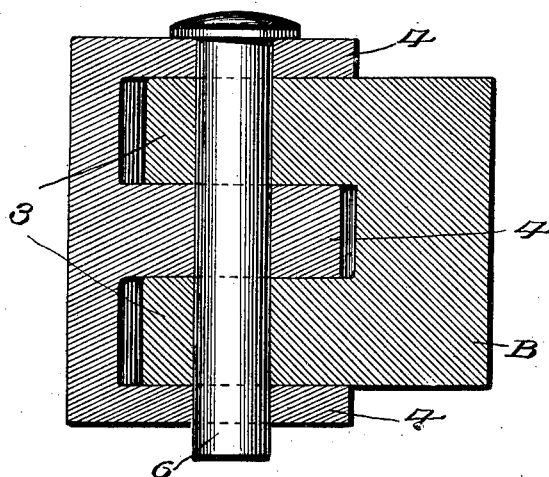
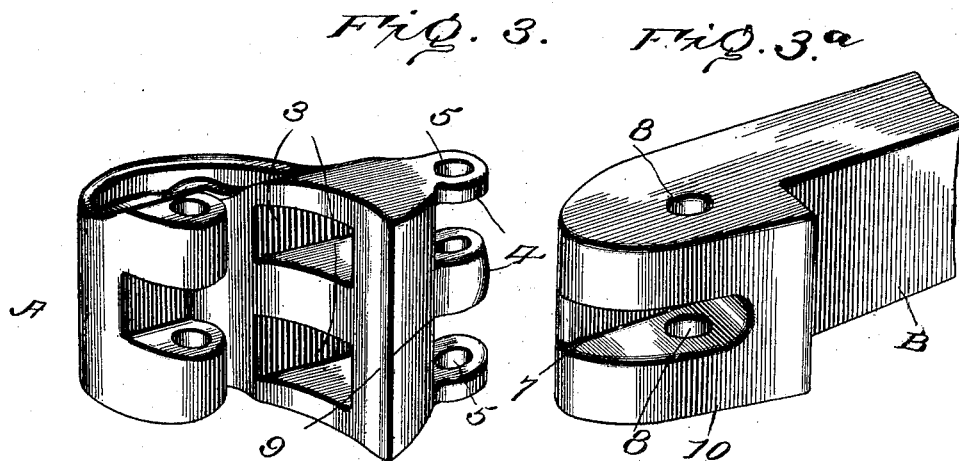


FIG. 4.

Witnesses

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UNITED STATES PATENT OFFICE.

ISAAC BARTLETT, OF LANCASTER, NEW HAMPSHIRE.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 676,712, dated June 18, 1901.

Application filed July 19, 1900. Serial No. 24,196. (No model.)

To all whom it may concern:

Be it known that I, ISAAC BARTLETT, a citizen of the United States, residing at Lancaster, in the county of Coos and State of New Hampshire, have invented certain new and useful Improvements in Car-Couplers, of which the following is a specification.

My invention relates to an improvement in car-couplings, the primary object being to provide an appliance by which the well-known Miller draw-bar head can be adapted for coupling with the Janney type of car-coupling, and more particularly the so-called "Trojan" car-coupler. There has been experienced a difficulty in coupling cars in which different types of couplings are used, and especially in effecting a coupling between the Miller type and the other well-known Janney type of coupling. By the use of the present simple attachment all this difficulty is obviated and means is provided for adapting the Miller draw-bar head to all varieties of the Janney type of car-coupling.

With this object in view my invention consists in a coupling-hook adapted to be pivotally and detachably connected with a Miller draw-bar head and so constructed with respect to the latter that its movements are limited by the contact of the hook with parts of the said draw-bar head which form shoulders to define the extreme throws or movements of the hook.

The invention still further consists in certain novel features of construction and combinations of parts, which will be hereinafter described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a plan view showing the hook swung back and in position to engage and lock to a Janney type of coupling. Fig. 2 shows the couplings together. Figs. 3 and 3^a are views showing the parts detached, and Fig. 4 is a section.

A represents the improved hook attachment, which in general outline is quite similar to the ordinary Janney type of coupling, except that it is cast in one integral piece of metal, including the hook proper, 1, and the guard-arm or horn 2 at a point opposite therefrom. The interior is chambered out, as at 3 3, and the attachment terminates at the rear in three superimposed and separated

lips 4 4 4. These lips have holes 5 5 therein to receive a pin 6, by which the attachment is pivotally connected with the Miller draw-bar head.

B represents the draw-bar head referred to of the Miller type, it comprising a hook, which hook is chambered out at the center, as at 7, and provided with holes 8 8 to receive the pin. The parts are assembled by unlocking the lips and Miller hook, the upper and lower lips embracing the upper and lower surfaces, respectively, of the Miller hook and the central one fitting the chambered opening in the center of the Miller hook, and the pin C, passing through the holes in the lips and jaws of the Miller hook, serving to fasten the parts together removably and pivotally.

The movements of the hook attachment are rather limited and are defined in the extreme throws of the hook attachment by the edge 9 of the hook attachment striking the outer surface 10 of the Miller hook in the one movement of the hook attachment and the inner wall of the cavity of the Miller hook striking the corresponding edge of the middle or intermediate lip of the hook attachment in the other extreme throw of the latter.

To effect a coupling, it will be seen that the hook A is merely thrown back in the position shown in Fig. 1, and upon the contact of the approaching coupler of the other car therewith it is swung forward to the position indicated in Fig. 2, thus locking the parts securely together, the knuckle of the other coupling fitting into the curved interior of the hook, where the parts are held until the knuckle of the other coupling is interlocked, when the parts can be drawn apart, and by which act the hook A will be drawn back into the position indicated in Fig. 1. In this way by a most simple attachment I adapt this Miller draw-bar head to couple with all the Janney types of car-coupling, and when a car having a Miller coupling approaches the hook A can be removed, and the usual coupling action of the Miller head takes place.

It is evident that slight changes might be made in the form and arrangement of the several parts described without departing from the spirit and scope of my invention, and hence I do not wish to limit myself to the exact construction herein set forth; but,

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

- 5 1. In a car-coupling, the combination with a Miller type of draw-head, of a knuckle-hook of the Janney type pivotally connected therewith for coupling with Janney type of coupling, one side of the Miller draw-head serving as a stop in one direction for the knuckle.
- 10 2. In a car-coupling, the combination with a Miller type of draw-head, of a coupling-hook pivoted thereto, said hook fitted and adapted to couple with a coupling having the Janney knuckle, one side of the Miller draw-head serving as a stop in one direction for the knuckle.
- 15 3. In a car-coupling, the combination with a Miller type of draw-head, of a hook pivoted thereto and confined in its extreme movements to a coupled position or a position to couple, one side of the Miller draw-head serving as a stop in one direction for the knuckle.
- 20 4. In a car-coupling, the combination with a Miller type of draw-bar head having a central cavity formed therein and provided with a pin-hole, of a hook having rearwardly-projecting lips which extend above, below and into the cavity of the Miller draw-bar head respectively and each lip provided with a hole to receive the pin by which the hook is pivotally attached to the Miller draw-bar head, the parts so constructed and adapted that parts of the Miller head form shoulders for the hook which limit the extreme swings or throws of the latter.
- 30 5. The combination with a Miller hook, of

a knuckle pivoted thereto, said knuckle limited in its movements so that it is automatically closed by the coupling of the other car to be coupled thereto, one side of the Miller draw-head serving as a stop in one direction for the knuckle.

6. In a car-coupling, the combination with a Miller type of draw-head chambered out on one side, of a Janney type of knuckle having a central web adapted to enter the chamber in the Miller draw-head, one edge of the latter serving as a stop to limit the swing of the knuckle in one direction and the vertical wall of the chamber a stop for the web to strike as a limit to the swing of the knuckle in the opposite direction.

7. In a car-coupling, the combination with a Miller type of draw-head having a chamber formed in one side, of a knuckle having a hook on one end, a horn opposite, a central web, separated lips, said knuckle provided with chambers on either side of the central web, and having a limited pivotal swing defined by its striking a side of the Miller draw-head at one extreme and the web of the knuckle striking the vertical wall of the chamber in the Miller draw-head in the opposite extreme movement.

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

ISAAC BARTLETT.

Witnesses:

WILL P. BUCKLEY,
IRVING W. DREW.