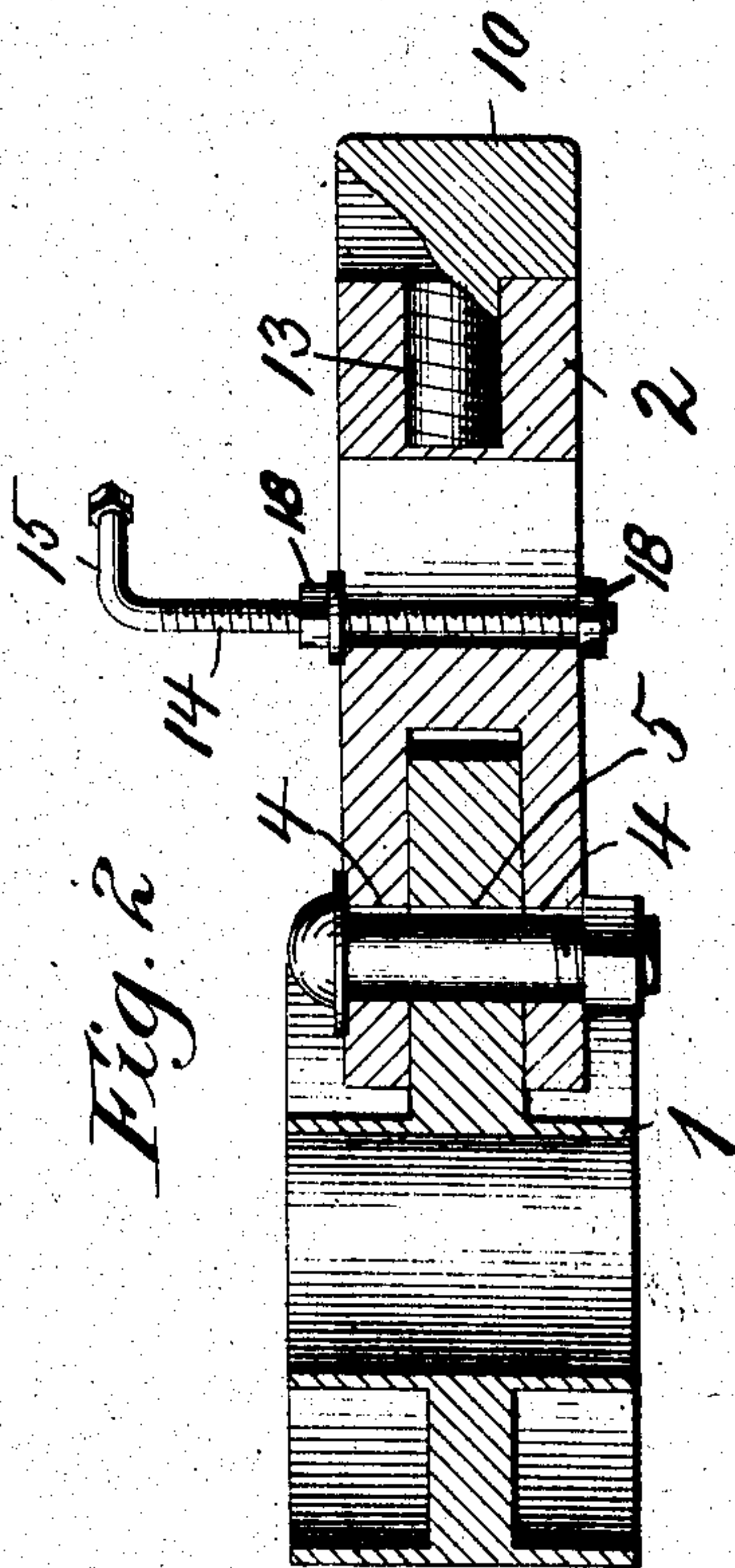
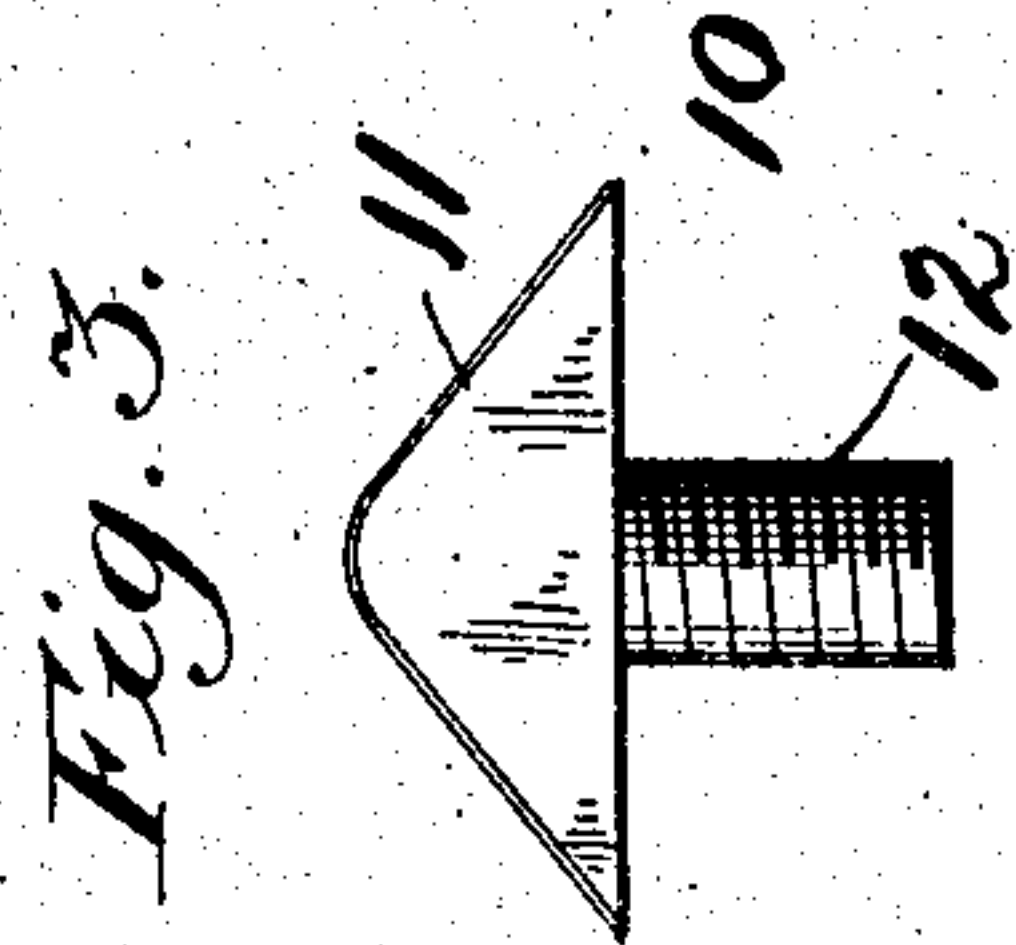
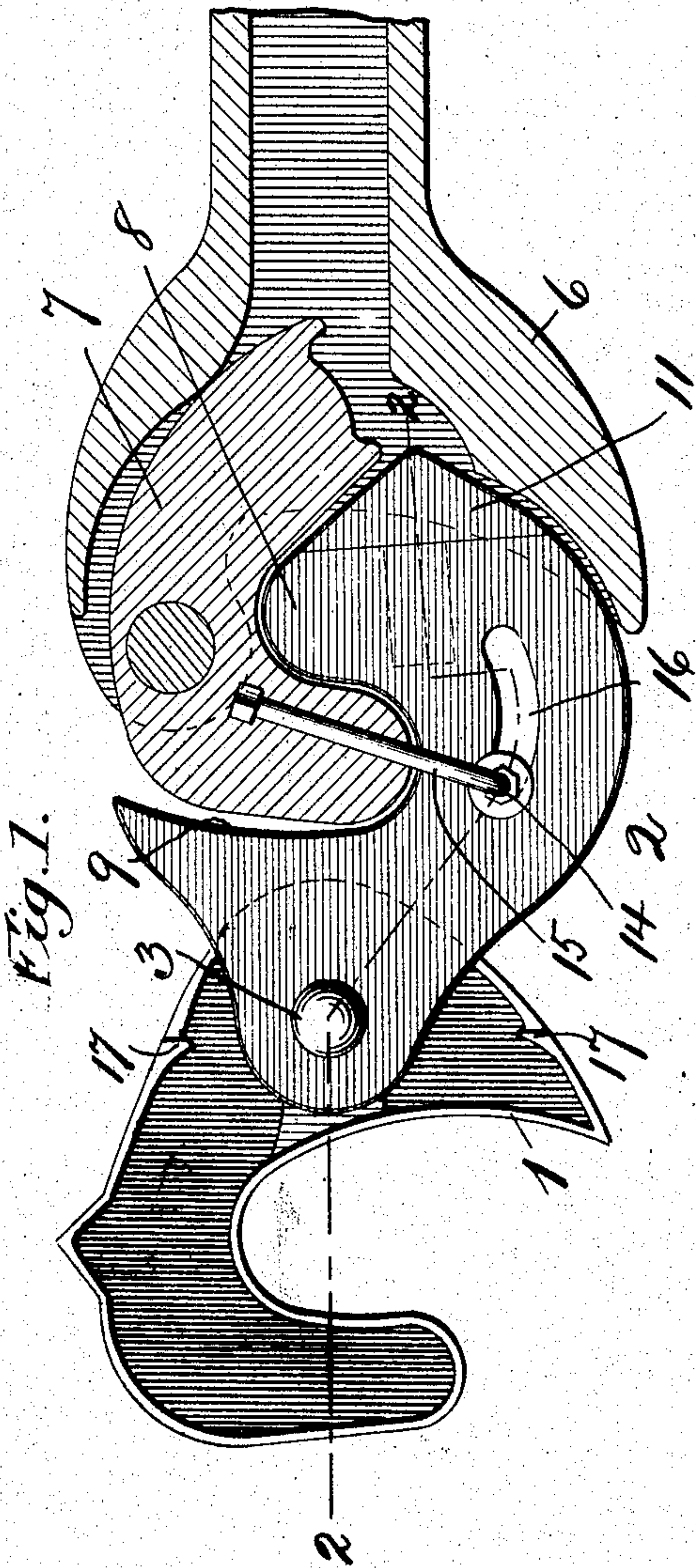


No. 815,525.

PATENTED MAR. 20, 1906.

W. W. GORDON.
CAR COUPLING.

APPLICATION FILED NOV. 28, 1905.



Witnesses:

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UNITED STATES PATENT OFFICE.

WILLIAM W. GORDON, OF WASHINGTON, DISTRICT OF COLUMBIA.

CAR-COUPLING.

No. 815,525.

Specification of Letters Patent,

Patented March 20, 1906.

Application filed November 28, 1905. Serial No. 289,466.

To all whom it may concern:

Be it known that I, WILLIAM W. GORDON, a citizen of the United States, residing at Washington, in the District of Columbia, have invented certain new and useful Improvements in Car-Couplings, of which the following is a specification.

My invention relates to car-couplings, and more particularly to auxiliary means for coupling or connecting two draw-heads of automatic car-couplings to enable the cars to which the couplings are applied to run on very sharp and short curves.

While the present invention relates more particularly to auxiliary coupling means, such as described and shown in my copending application, filed October 11, 1905, Serial No. 282,303, and is, in fact, an improvement upon the device seen in said copending application, yet my present improvements are applicable to any auxiliary coupling means which comprises a coupling section or head which is adapted to engage with the ordinary coupling-knuckle of the well-known Janney type of coupling.

One of the objects of my present invention is to provide a means whereby the auxiliary coupling device may be supported from the usual coupling-knuckle while said auxiliary device is being applied, and thus relieve the employee from supporting the entire weight of the auxiliary device during such application.

A further object of my invention is to make the said supporting means adjustable, so that the same may cooperate with knuckles of various heights or thicknesses.

A further object of my invention is to provide one of the coupling heads or sections of the auxiliary coupling means with a detachable head-piece, which head-piece may be readily detached for the purpose of substituting another head-piece of different shape or configuration, whereby the coupling head or section will be adapted to cooperate with coupling-knuckles of varying shapes as well as with draw-heads having cavities or recesses of different shapes.

The invention consists in the novel construction, arrangement, and combination of parts, as hereinafter fully described, illustrated in the drawings, and pointed out in the appended claims.

In the drawings, Figure 1 illustrates a horizontal sectional view of a portion of a draw-head and coupling-knuckle of an automatic

coupling of the well-known Janney type, showing the application of my auxiliary coupling means thereto, said auxiliary coupling means being shown in plan. Fig. 2 is a vertical sectional view on the line 2-2 of Fig. 1. Fig. 3 is an elevation of the detachable head-piece.

1 and 2 indicate the coupling heads or sections of an auxiliary coupling device of the character described and shown in my afore-said copending application for patent. These sections or heads are pivotally connected together, as by a bolt 3, for instance, which passes through aligned apertures 4 and 5 in said sections. For the purpose of adapting the section 2 to be attached to a draw-head, as 6, and be locked in position by means of the usual swinging coupling-knuckle, as 7, said section 2 is provided with a hook portion 8 and recess 9, whereby the hook of the knuckle 7 may engage within said recess 9 behind the hook 8.

With a view to adapting the coupling-section to cooperate with draw-heads having recesses which vary in shape and with coupling-knuckles having varying shapes, particularly at their tail or rear ends, I provide the section 2 with a detachable portion or head-piece 10, which comprises the head 11 and threaded shank 12. (Seen clearly in Fig. 3.) The head 11 is of a triangular shape, so as to cooperate with the draw-head and coupling-knuckle, (shown clearly in Fig. 1;) but in the event that it is desired to attach my auxiliary coupling device to a draw-head and coupling-knuckle, the recess in which draw-head may be somewhat different in shape from that shown and the rear or tail end of the knuckle differing somewhat from the shape shown in Fig. 1, I can readily detach the head-piece 10 and substitute one of the required shape. The threaded shank 12 of the head-piece 10 is adapted to screw within a threaded aperture 13 in the section 2.

For the purpose of facilitating the application of my auxiliary coupling means to one of the draw-heads of a car and render it unnecessary for the employee to support or carry the entire weight of said auxiliary coupling device until the same has been locked in position by the coupling-knuckle I provide a support carried by the section 2, which support is adapted to engage with the coupling-knuckle, so that the latter will support the auxiliary coupling device during the time that the latter is being applied to a draw-head, and the

said support preferably consists of a rod 14, whose upper end is bent horizontally, as at 15, which bent portion is adapted to engage over the upper surface of the hook portion of the knuckle 7, and when thus engaged said knuckle will entirely support the auxiliary coupling-sections. The support 14 is connected with the section 2, so that said support may be raised or lowered to adapt it to engage over the upper surface of coupling-knuckles of varying heights or thicknesses. The manner in which the support 14 may be adjustably connected with the section 2 may be varied, and I show one way in which it is adjustably connected, the vertical portion of the support 14 being threaded and engaged by threaded nuts 18, which nuts after the rod 14 has been raised or lowered to the required extent are screwed tightly against the upper and lower faces of the section 2 to hold the rod in its adjusted position. The threaded portion of the rod 14 passes through a slot 16, formed in the section 2, which slot may answer for the attachment of a draft-chain when it is desired to employ such chain in the replacement of a derailed car upon the track-rails.

The section 1 is provided with shoulders 17, which are adapted in the swinging movements of the section 1 to abut against the section 2, and thus prevent said section 1 from swinging to such an extent as would prevent said section from coupling up to the regular automatic coupling carried by a car.

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

1. An auxiliary coupling means comprising two coupling sections or heads, each of which is provided with a coupling-hook adapted to engage with the respective coupling-knuckles of adjacent cars, said coupling-sections being pivotally connected together and one of said sections being provided with a detachable portion or head-piece adapted to enter within the horizontal slot of a draw-head.

2. An auxiliary coupling means comprising a coupling section or head adapted to be engaged by the hook portion of a coupling-knuckle and having a threaded aperture, and a detachable portion or head-piece having a threaded shank engaging within said threaded aperture.

3. An auxiliary coupling means comprising two coupling sections or heads and a pivot-bolt pivotally connecting said sections

together, one of said sections being adapted to be engaged by the hook portion of a coupling-knuckle, and being provided with a detachable portion or head-piece for the purpose specified.

4. An auxiliary coupling means comprising two coupling sections or heads, each of which is provided with a coupling-hook adapted to engage with the respective coupling-knuckles of adjacent cars, said coupling-sections being pivotally connected together, and a support carried by one of said coupling-sections and constructed to engage over the upper face of its respective coupling-knuckle for the purpose specified.

5. An auxiliary coupling means comprising a coupling section or head adapted to be engaged by the hook portion of a coupling-knuckle, and a vertically-adjustable support carried by said coupling-section and constructed to engage over the upper face of said coupling-knuckle for the purpose specified.

6. An auxiliary coupling means comprising a coupling section or head adapted to be engaged by the hook portion of a coupling-knuckle, and a support carried by said coupling-section and comprising a rod having its upper end bent so as to engage over the upper face of said coupling-knuckle, for the purpose specified.

7. An auxiliary coupling means comprising a coupling section or head adapted to be engaged by the hook portion of a coupling-knuckle, and a support carried by said coupling-section and comprising a vertically-adjustable rod having its upper end bent so as to engage over the upper face of said coupling-knuckle, for the purpose specified.

8. An auxiliary coupling means comprising a coupling section or head, a support consisting of a rod having a threaded portion and a bent-over portion, and means engaging with the threaded portion of the rod and adapted to lock the same in adjusted position.

9. An auxiliary coupling means comprising two coupling sections or heads, a pivot-bolt pivotally connecting said sections together, and shoulders on one of said sections adapted to abut against the other section for the purpose specified.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM W. GORDON.

Witnesses:

WM. E. BOULTER,
MYRTLE PAINTER.