

(No Model.)

2 Sheets—Sheet 1.

W. P. PRENDERGAST.
LOCOMOTIVE DRAW BAR COUPLING.

No. 470,897.

Patented Mar. 15, 1892.

Fig. 1.

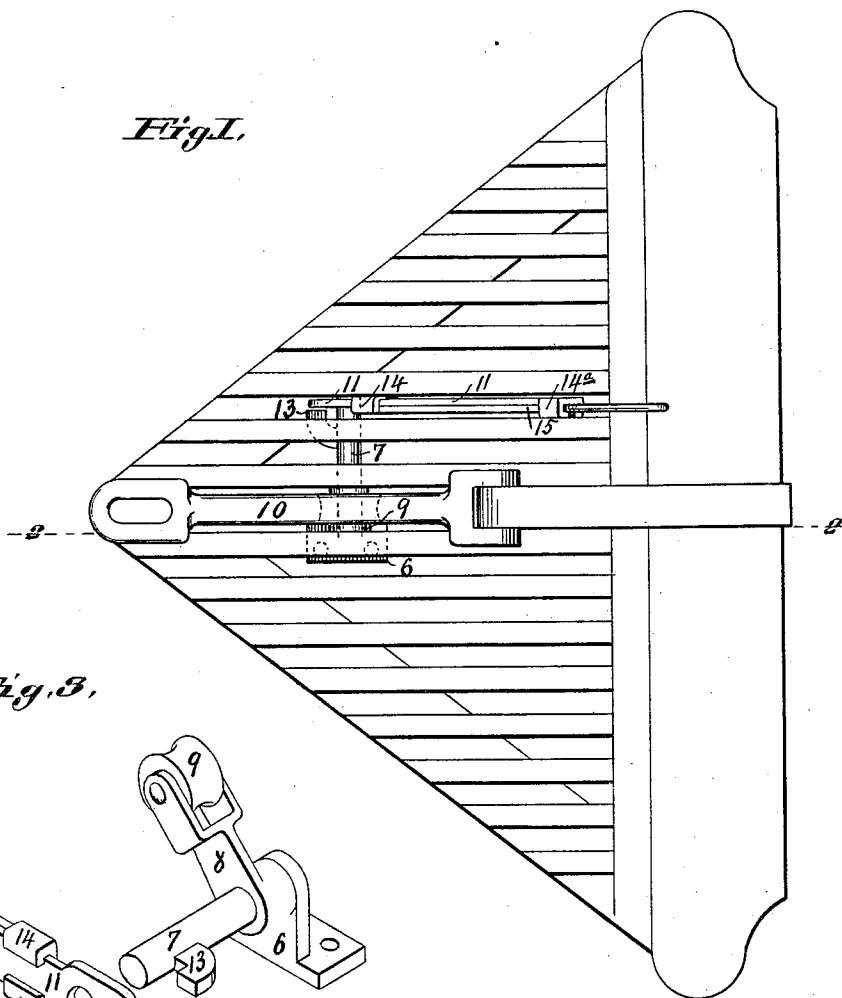


Fig. 3.

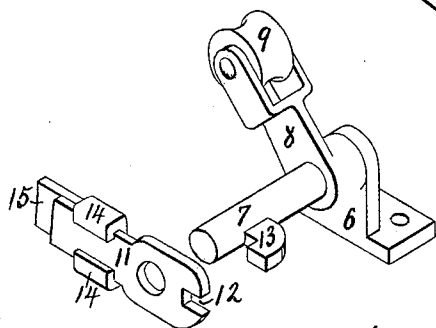
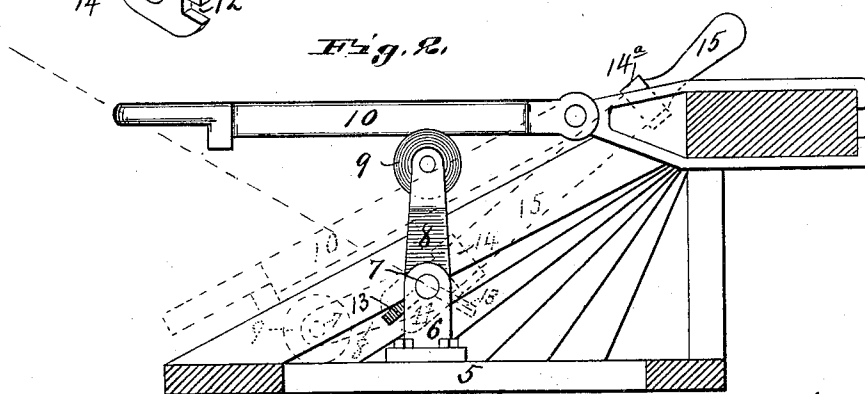


Fig. 2.



Witnesses:
Charles Pickles,
C. W. Davis

Inventor:
W. P. Prendergast,
By *Thos. C. Thos.*
Attorneys

(No Model.)

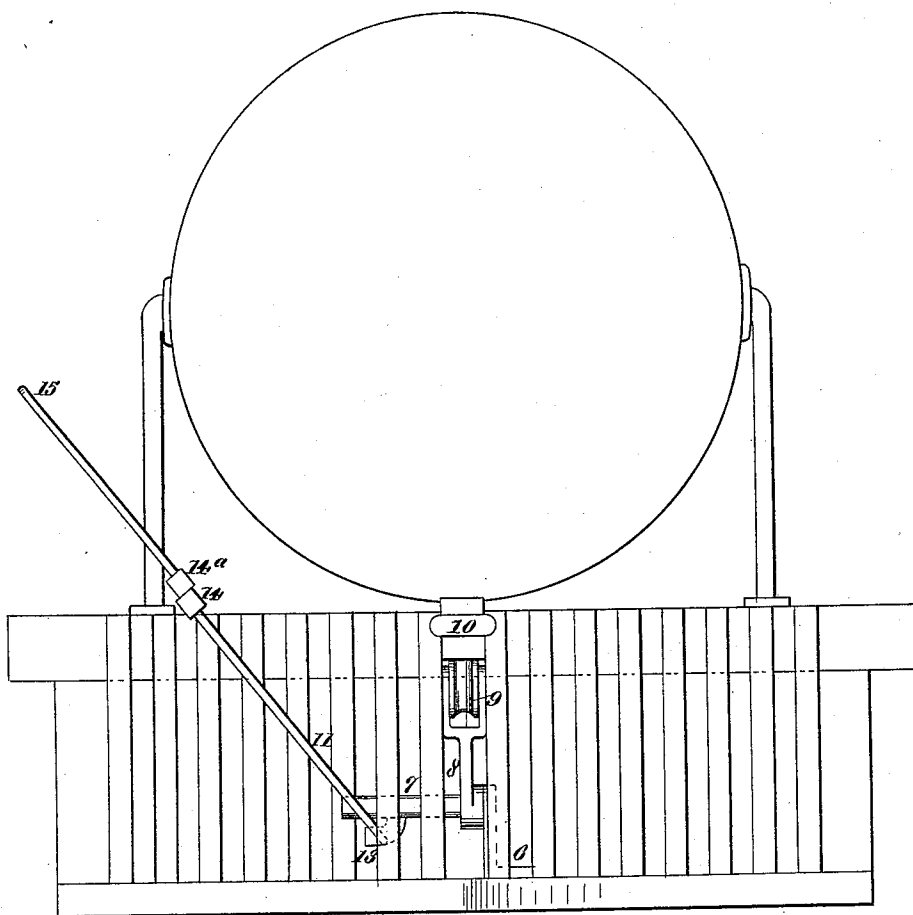
2 Sheets—Sheet 2.

W. P. PRENDERGAST.
LOCOMOTIVE DRAW BAR COUPLING.

No. 470,897.

Patented Mar. 15, 1892.

Fig. 4.



Witnesses:
Charles Pickles,
a. w. Davis

Inventor:
W. P. Prendergast,
By Fowler & Fowler
Attorneys -

UNITED STATES PATENT OFFICE.

WILL. P. PRENDERGAST, OF ST. LOUIS, MISSOURI.

LOCOMOTIVE DRAW-BAR COUPLING.

SPECIFICATION forming part of Letters Patent No. 470,897, dated March 15, 1892.

Application filed October 16, 1891. Serial No. 408,850. (No model.)

To all whom it may concern:

Be it known that I, WILL. P. PRENDERGAST, a citizen of the United States, residing at St. Louis, in the State of Missouri, have invented a certain new and useful Locomotive-Pilot Draw-Bar Coupler, of which the following is such a full, clear, and exact description as will enable any one skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

The object of my invention is to provide a ready means whereby the pilot draw-bar of a locomotive may be coupled to a car.

The invention relates to devices for conveniently raising and lowering the pilot draw-bar to effect the said coupling.

The invention will be best understood by referring to the accompanying drawings, illustrating one form of my invention, and in which—

Figure 1 is a plan view of the fore part of a locomotive (cow-catcher) provided with my improvement. Fig. 2 is a side elevation thereof. Fig. 3 is an isometric projection of the mechanism for raising a pilot draw-bar to effect the coupling, and Fig. 4 a front elevation.

To one of the bottom bars 5 of a cow-catcher of a locomotive is secured an angle-iron 6, suitably perforated to receive a spindle 7, carrying an arm 8, bifurcated at its upper end to support a roller 9, which takes beneath the pilot draw-bar 10. This draw-bar is of the usual construction and needs no explanation. Upon the other end of the spindle 7 is slipped a perforated bar 11, having a notch 12 in the end thereof for engaging a lug 13, projecting from said spindle 7. This bar is shown in Fig. 3 as broken away at its upper end to economize space in the drawings. It is engaged by the turned-over part 14 of another bar 15, forming therewith an extensible handle, the said bar 11 having a turned-over part 14^a at its upper end, against which the part 14 may come to prevent the two bars from being separated from each other. The bar 15 may be suitably adjusted along the bar 11. The bars 11 and 15 pass up between two of the bars of the cow-catcher. The extensible handle formed by the bars 11 and 15 is capable of a tilting movement, so as to engage and disen-

gage the lug 13 of the spindle 7, and thereby to couple and uncouple the extensible handle to or from the spindle, as desired.

Any means of coupling or uncoupling the extensible handle I regard as within the spirit of my invention.

The normal position of the pilot draw-bar is that shown in Fig. 1 and by dotted lines in Fig. 2. When this pilot draw-bar is to be coupled to a car, ordinarily it must be raised by hand to effect the coupling, and as it weighs in the neighborhood of one hundred and twenty-five pounds, this is not an easy task to accomplish, besides endangering the life of the person who effects the coupling. Another objection to raising the draw-bar by hand is that the engineer cannot ordinarily see the person who is making the coupling when the draw-bar is raised by hand. In the present invention I arrange the extensible handle at the fore part and at that side of the locomotive which is visible from the engineer's cab, and this enables the engineer to readily see when the coupling is effected, so that he may govern the locomotive accordingly. The normal position of the extensible handle is as represented in Figs. 1 and 2. When a coupling is to be made, the bar 15 is grasped and is preferably slid along the bar 11, so as to make a longer lever-arm, Fig. 4, and thereby increase the leverage to make the pilot draw-bar raise easily. The normal position of the arm 8, roller 9, and lug 13 is that shown by the dotted line in Fig. 2. To make a coupling, the handle is thrown forward and is then tilted and the notch therein made to engage the lug 13, Fig. 4, whereupon the handle is thrown backward to its normal position, raising the arm 8 and causing the roller 9 to travel beneath the draw-bar and lifting the same to the position shown in Figs. 2 and 4. After the coupling is effected the handle may be made to disengage the lug 13, or not, as the case may be, and then the arm 8 and roller 9 will drop to their normal position. The roller 9 acts as an anti-friction device and makes the bar lift easier. When the coupling is effected, the extensible handle being in its normal position, the bar 15 will of its own weight gravitate down the bar 11 to its normal position.

Having now fully set forth my invention,

what I desire to claim and secure by Letters Patent of the United States is—

1. The combination, with a pilot draw-bar of a locomotive, of a suitable handle, levers and connections intermediate of the handle and the said draw-bar, by which the draw-bar may be raised and lowered, and means for disconnecting the handle from the mechanism, for the purpose described.
2. As a means of raising and lowering a pilot draw-bar of a locomotive to effect coupling and uncoupling of the same, a spindle suitably journaled upon the cow-catcher, an arm carried thereby bearing an anti-friction roller, and an extensible handle controlling said spindle and arm to raise and lower the bar.
3. The combination, with a pilot draw-bar of a locomotive, of a spindle journaled beneath the bars of the cow-catcher of a locomotive, an arm carried thereby adapted to engage the said draw-bar, a tiltable handle extending between the bars of the cow-catcher, and means whereby the handle may be connected and

disconnected from said spindle, substantially as and for the purpose described.

4 As a means of raising and lowering the pilot draw-bar of a locomotive to effect coupling and uncoupling of the same, a spindle suitably journaled upon the cow-catcher, an arm carried thereby, an extensible handle extending between the bars of the cow-catcher on that side of the locomotive visible from the engineer's cab and controlling said spindle and arm to raise and lower the draw-bar, and means for coupling and uncoupling said extensible handle to and from said spindle, for the purpose described.

In testimony whereof I have hereunto set my hand and affixed my seal, this 28th day of September, 1891, in the presence of the two subscribing witnesses.

WILL. P. PRENDERGAST. [L.S.]

Witnesses:

J. C. WHITESIDE,
E. P. WHITESIDE.