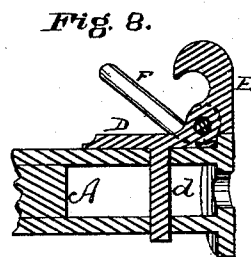
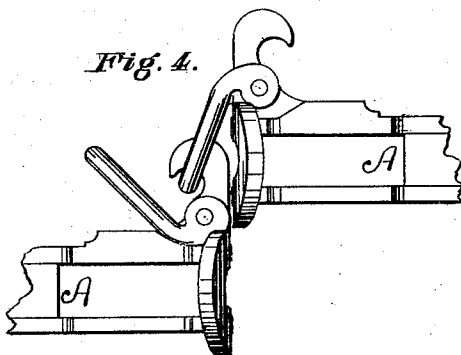
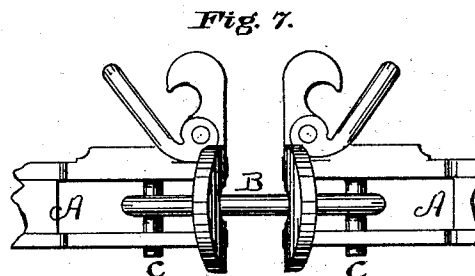
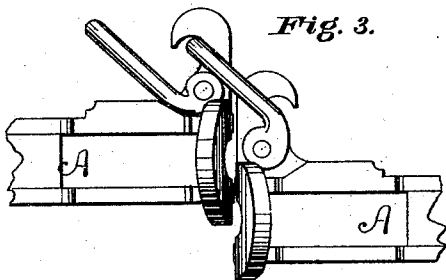
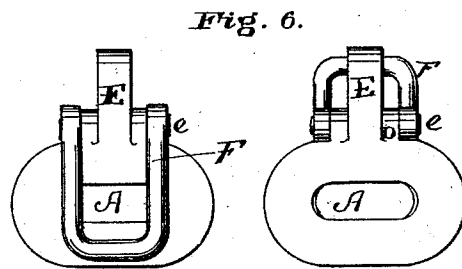
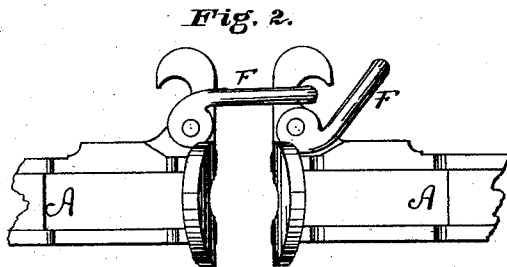
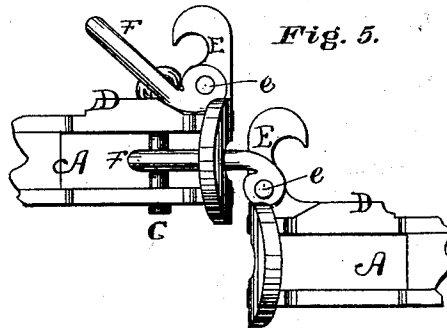
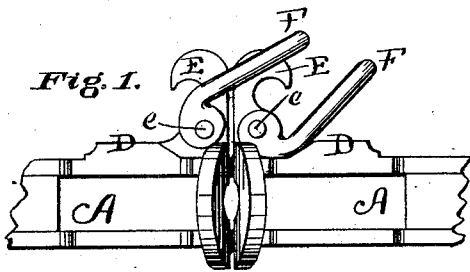


H. G. P. JENNINGS.
Car-Couplings.

No. 155,954.

Patented Oct. 13, 1874.



Attest:
Clarence Poole
J. S. Brown

Inventor:
Horatio S. P. Jennings
By his atty R. D. Smith

UNITED STATES PATENT OFFICE.

HORATIO G. P. JENNINGS, OF LA FAYETTE, INDIANA.

IMPROVEMENT IN CAR-COUPPLINGS.

Specification forming part of Letters Patent No. **155,954**, dated October 13, 1874; application filed July 23, 1874.

To all whom it may concern:

Be it known that I, HORATIO G. P. JENNINGS, of La Fayette, in the county of Tippecanoe and State of Indiana, have invented a new and useful Improvement in Couplers for Rail-Cars; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, in which—

Figures 1, 2, 3, 4, 5, 6, 7 are side elevations, representing my invention in various positions as relates to each other. Fig. 8 is a longitudinal section, showing a modification in structure.

This invention relates to an improvement in draw-bars for railway-cars, being a novel form of draw-head and stirrup, whereby two draw-bar heads may be coupled when differing in level, and without the employment of the ordinary link, while said ordinary link may be used, if desired, and the stirrup employed as an additional security. My invention consists of a hollow or skeleton draw-bar, adapted to receive an ordinary link and draw-pin, and provided with a backward-curved horn on its upper front end, and a stirrup pivoted to the base of said horn in such a way that it may fall down flat over the end of the draw-bar, or be thrown back over the top of the horn, said stirrup being capable of engaging over the horn of an opposite draw-bar, or of entering the hollow thereof, to be secured by the common draw-pin. The peculiar conformation of the said stirrup enables the coupling to be effected under a greater variety of circumstances, and with greater security than heretofore.

I am aware that a coupling has been made with a backwardly-bending horn and a link, and therefore do not claim, broadly, a draw-bar with a horn and link; but I am not aware that any hollow or skeleton draw-bar has been heretofore constructed with a horn and a link of the peculiar form and mode of attachment, and therefore capable of coupling under the variety of circumstances hereinafter described.

That others may fully understand my improvement, I will particularly describe it.

A is a hollow or skeleton draw-head, which I prefer to construct of wrought-iron or steel. It has the ordinary mouth for the reception

of a common coupling-link, B, and hole for a common draw-pin, C. Upon the top and front end of the draw-head A a plate, D, is welded, and said plate has upon its front a horn, E, the top of which curves backward so as to form a hook, and a transverse hole for the reception of a joint-bolt, *e*. The ends of the stirrup F have eyes to receive the said joint-bolt, and are thereby permanently attached to the draw-head. The stirrup F is bent in the form of a loop, extending from one side of the horn E to the other, and straddling over the hook, as shown. The ends of the stirrup E are also bent so as to offset the bolt-eye entirely at one side, and sufficiently far to permit the stirrup to fall over forward and rest vertically against the end of the draw-head, as shown in Fig. 6, so that it will not be liable to injury in case two cars come in contact while the stirrup is thrown forward. The link B may also be introduced while the stirrups of the two opposed draw-heads are both in the last-named position, said link being introduced through the loops of said stirrup, and the latter then serves to bring the bumping-surfaces near together, and prevent jerk when stopping or starting. It is not contemplated, however, to use said stirrups in that way, but as couplers engaging with the horn of the opposite draw-head, or inserted in the mouth thereof, and secured with the ordinary draw-pin.

In Fig. 1 this coupling is shown as being effected when the draw-heads are on the same level—in this event either stirrup may be employed. Fig. 2 shows the same coupling while in operation. Figs. 3 and 4 show the operation of the coupler when the draw-heads are at different levels, either from different heights of the cars or from jolting during running. Fig. 5 shows the coupling when the draw-heads differ very much in level, the stirrup of the lower one being inserted in the mouth of the upper one, and secured by the ordinary pin. Fig. 6 shows the stirrup hanging over the end of the draw-head, and Fig. 7 shows the coupling with the ordinary link. Either stirrup may be employed as an additional security. Fig. 8 shows the horn and link constructed to fit any ordinary draw-head by inserting the post-pin *d* in the ordinary pin-hole.

Cars provided with this improvement may

be coupled after coming together. Thus all the cars to compose the train may be backed up together, and then coupled by throwing the stirrup over the horn, as in Fig. 1, and the result is a great saving of time and an avoidance of personal danger.

The coupling-stirrups are always at hand, and in case of the breaking of a stirrup the opposite one is always there to be substituted; or, in case both stirrups should be disabled, the coupling may still be effected by an ordinary link, or by a chain or rope around the horns E.

Having described my improvement, what I claim as new is—

1. A hollow or skeleton draw-head, A, provided with the ordinary mouth and draw-pin hole, and combined with the hooking-horn E and stirrup F, fitted to engage with the horn, or enter the mouth of the opposite draw-head, as and for the purpose set forth.

2. The stirrup F, formed with its bolt-eyes offset at one side, so that said stirrup may fall down over and rest upon the face of the draw-head, as set forth.

HORATIO G. P. JENNINGS.

Witnesses:

THOMAS HARDING,
ISAAC W. ALLISON.