

(No Model.)

W. COLLIN.

CAR COUPLING.

No. 245,449.

Patented Aug. 9, 1881.

Fig. 1

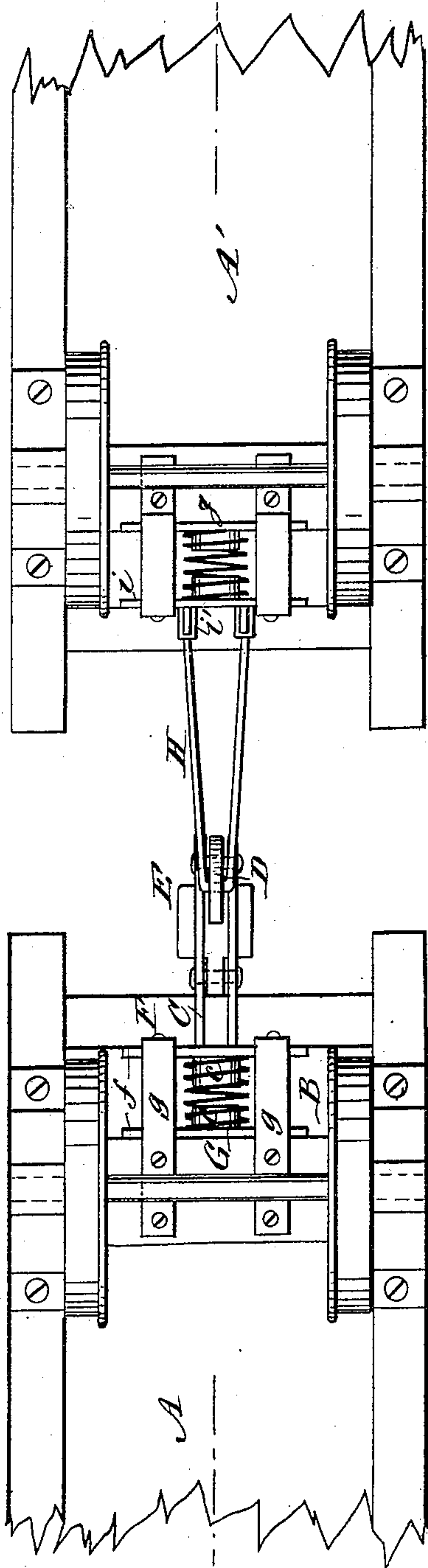
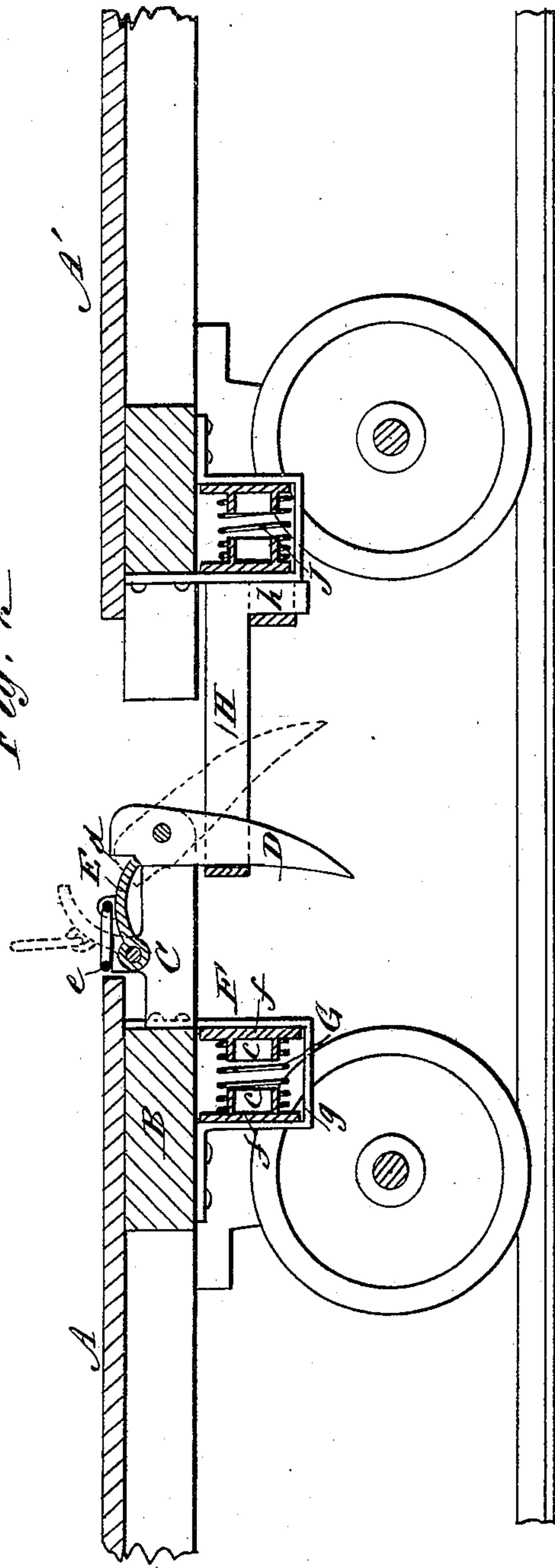


Fig. 2



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## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 245,449, dated August 9, 1881.

Application filed May 9, 1881. (No model.)

*To all whom it may concern:*

Be it known that I, WENDEL COLLIN, a citizen of the United States, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Car-Coupling, of which the following is a specification.

My invention relates to improvements in car-couplings; and the object of my improvement is to construct a coupling which shall, first, lock automatically and be unlocked from the platform, sides, or top of the car; second, be effective where the cars differ in height; and, third, be simple in construction and not liable to fall out of repair.

My invention consists in constructing a car-coupling consisting of the following essential parts, to wit: a draw-head composed of two metal strips bolted to the front cross-beam of the car; a bolt one end of which is pivoted between the outer ends of said draw-head, and in whose upper inner corner is formed a notch; a plate hinged to the draw-head in the rear of said bolt and engaging with said notch; a loop constructed of a single strip of metal fastened to the outside face of a bumper on the under side of the cross-beam of the second car, and adapted to engage with the aforesaid bolt; and a second bumper bolted in the same position to the under side of the cross-beam of the first car, all of which will be hereinafter more fully described.

In the drawings, Figure 1 is a bottom view of two platform-cars connected by my improved coupling, and Fig. 2 is a vertical central longitudinal section of the same.

Similar letters refer to corresponding parts in both views.

To the front cross-beam, B, of the car A is bolted or otherwise fastened the draw-head C, said draw-head being composed of two strips of metal having a space between them and extending horizontally some distance in front of said car.

Between the outer ends of the draw-head is pivoted a bolt, D, said bolt being curved on its outer edge toward its free extremity and having a notch, *d*, formed in its upper inner corner.

Between the sides of the draw-head and in the rear of the pivotal point of the bolt a plate, E, is hinged, whose free edge engages with

notch *d* and holds the bolt in place after the cars have been coupled. Said plate E is also provided with a rung, *e*, by which it may be raised when it is desired to uncouple the cars.

To the bottom of the cross-beam B is secured the spring-bumper F, said bumper consisting of the plates *f*, provided with the studs or spring-seats *c* and the metal coil-spring G, the whole fastened to the cross-beam and held in position by the metal bands *g*. In the same manner a second bumper, J, is secured to the front cross-beam of the car A'. This bumper has secured to its outer plate, *i*, the staples *i'*, in which the downward-projecting ends *h* of the coupling-loop H are held, said loop being constructed of a single strip of metal bent in the shape shown.

The operation of my invention is as follows: As the cars approach each other the coupling-loop H comes in contact with the depending bolt D and swings it back until the end of said bolt slides over the top of the loop and falls between the sides of the same. The bumpers F J receive the shock of the concussion and drive the cars apart, and as the latter separate the bolt is drawn forward until the notched top of said bolt comes in contact with the plate E, with which it engages, and by which further forward movement is prevented.

When it is desired to uncouple the cars the plate E is raised by means of the rung *e* and the pivoted bolt D is drawn forward until it slides over the top of the loop and falls to its normal position.

It will be seen that by this construction the car may be uncoupled without danger to the operator either from the platform of an ordinary truck or by means of connecting-chains from the top or sides of a box-car.

It will also be seen that though the cars be of somewhat different height no difficulty will be experienced in coupling them.

Having thus described my invention, what I claim is—

1. The car-coupling herein described, consisting of the draw-head C, the pivoted notched bolt D, the hinged catch-plate E, and the coupling-loop H, substantially as and for the purposes described.

2. In a car-coupling, the pivoted notched bolt D and hinged catch-plate E, in combina-



tion with a coupling-loop, substantially as and for the purposes described.

3. The combination, with the bolt D and catch-plate E, of the coupling-loop H, formed  
5 of a single piece of bent metal, and provided with projections *h*, engaging with staples *i'* of the bumper J, substantially as and for the purposes set forth.

4. In combination with pivoted bolt D, catch-plate E, and loop H, the bumpers F J, sub- 10  
stantially as and for the purposes described.

WENDEL COLLIN.

Witnesses:

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