(No Model.)

D. CARLOUGH.

CAR COUPLING.

No. 325,819. Patented Sept. 8, 1885.

Fig 1

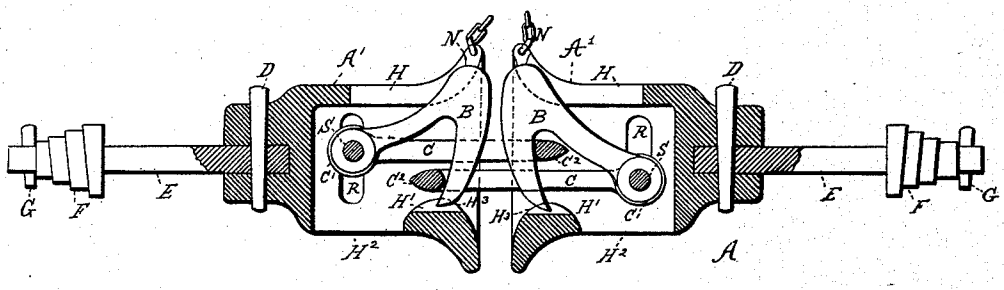


Fig 2

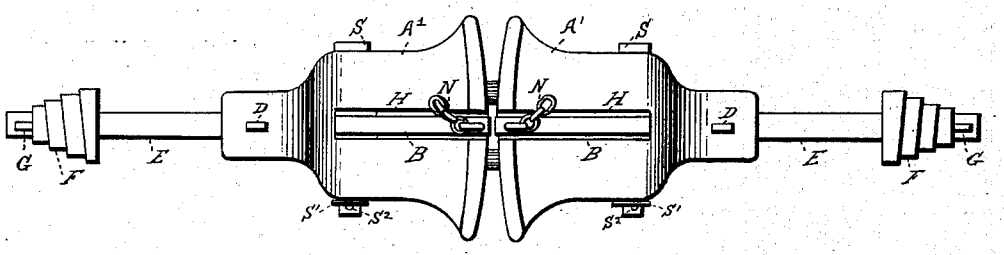


Fig 3

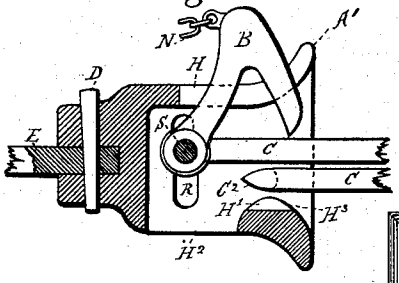


Fig 5

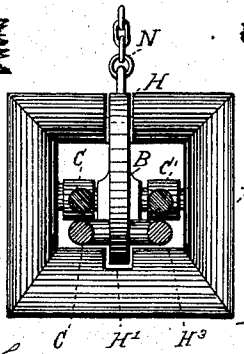
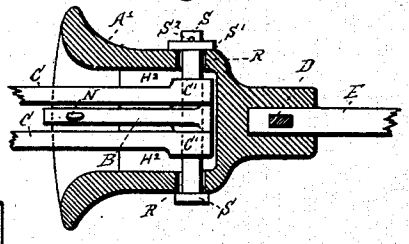


Fig 4



Witnesses

Richard A. Hardy

George L. Bowmhall

Inventor

Daniel Carlough

John Maglin atty

UNITED STATES PATENT OFFICE.

DANIEL CARLOUGH, OF PATERSON, NEW JERSEY.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 325,819, dated September 8, 1885.

Application filed February 7, 1885. (No model.)

To all whom it may concern:

Be it known that I, DANIEL CARLOUGH, a citizen of the United States, residing at Paterson, Passaic county, State of New Jersey, have invented a new and useful Improvement in Car-Couplings, of which the following is a specification, reference being had to the accompanying drawings, forming a part thereof.

The object of my invention is to provide an improved car-coupling, and is a further improvement on the one for which I obtained Letters Patent No. 291,149, January 1, 1884; and the improvement consists in the arrangement of devices, which will be hereinafter fully explained, and pointed out in the claims.

Figure 1 of the drawings is a sectional elevation of the couplings in engagement. Fig. 2 is a plan of the same. Fig. 3 is a section showing the pawl out of engagement. Fig. 4 is a sectional plan of draw-head, and Fig. 5 is a front view of the same.

A represents a car-coupling having a draw-head, A′, the outer end of which head is curved, and is provided with an open flaring mouth, A^2. The inner end of the draw-head A′ has arranged therein a suitable orifice to accommodate the inner end of a draw-bar, E, which bar has a slot running through its said inner end, which slot corresponds with a like slot arranged in the draw-head A′, through which slots passes a key, D, and thus secures the draw-bar E to the draw-head A′. The outer end of the draw-bar is provided with the usual spring, F, and key to hold said spring in position on the draw-bar, the key G passing through the end of the bar, as shown in Fig. 1. The draw-head A′ has arranged in each side of the same a vertical slot, R, in which slots there is placed a bolt S, having washers S′ and pins S^2, the latter passing through the bolt S, and holding said bolt in position in the slots R. The bolt S has pivoted thereon in the coupling-box a coupling-link, C, and a pawl, B. The inner ends, C′, of the link C have enlargements formed thereon, to accommodate the bolt S, on which the ends C′ pivot. The outer end of the coupling-link is suitably sharpened, as shown at C^2, Fig. 1. The pawl B is hook-shaped, and pivots centrally on the bolt S between the ends C′ of the coupling C, and is suitably enlarged at that point to give the pawl ample strength where the same pivots on the bolt S. The upper front part of the draw-head A′ has a slot, H, arranged therein, to accommodate the pawl B, which pawl has a link, N, arranged in the same at its top part, where a suitable eye is formed on the pawl therefor. The inner lower part of the coupling-box has a swell, H^3, formed therein, in which swell there is arranged a recess, H′. The bottom of the coupling-box is provided with an opening, H^2.

Operation: The coupling A is supposed to have been secured to the cars by some of the means employed therefor. The cars to be coupled are brought together therefor. The coupling-links C present themselves to the open mouth A^2, which directs the links C into engagement with the pawls B, which pawls, owing to their sloping form, are elevated in their contact with the sharpened curved ends of the links C until the solid portions C^2 of the links C have passed beyond the lower portion of the pawl B, when the pawls by gravity fall down in the open center of the coupling-links C, coupling thus the cars together. The sharpened ends C^2 of the coupling-links admit of the same passing over or under each other without injury to the links. The bolts S, which are adjustable in the slots R, adjust themselves to meet the wants of the links to suit the differences in the height of cars or prevent injury to the same when they are assailed from above in their uncoupled position. The swell H^3 acts to keep the links in a nearly horizontal position when the same are resting thereon in their uncoupled position, while the recess H′ furnishes side bearings for the pawls B, which secures the pawls against undue lateral strain when rounding curves, &c. The front of the draw-head A′, which is suitably curved, admits of the coupled cars rounding curves with facility, while the opening H^2 prevents the accumulation of dirt, snow, &c., in the coupling-box.

When making up trains, &c., the coupling A may be kept out of automatic action by hooking the links N on a suitable hook prepared therefor, to hold the pawls in their elevated positions shown in Fig. 3, while the elasticity of the draw-head is taken up by the spring F in the well-known way.

Having described my invention, I claim and desire to secure by Letters Patent in a car-coupling—

1. The combination, with the pawl B, pivoted on bolt S, the pawl having enlargements and an eye to accommodate link N, and having a curved front part to engage link C, of the bolt S, with slots R, for pivoting the pawl B adjustably on said bolt S, with draw-head A′, having said slots R in the sides thereof, the draw-head having a slot, H, in the top of the same, to accommodate said pawl B, with recess H′, to protect the pawl laterally, with link N, for actuating the pawl, substantially as described.

2. The combination, with the pawl B, and bolt S for pivoting said pawl, and draw-head having slots R, of the coupling-links C, pivoted adjustably on said bolt S, arranged in said slots R, the links having an open center with solid sharpened end C^2, to engage the pawl B, and enlargements C′ for strength, the draw-head having an open flaring curved front A^2, with swell H^3, for supporting link C in nearly horizontal position, with opening H^2 for the escape of dirt, washers S′, and pin S^2, substantially as described.

DANIEL CARLOUGH.

Witnesses:
GEORGE L. BROOMHALL,
DANIEL B. HUBBARD.