(No Model.)

D. CARLOUGH.

CAR COUPLING.

No. 291,149. Patented Jan. 1, 1884.

Fig 1

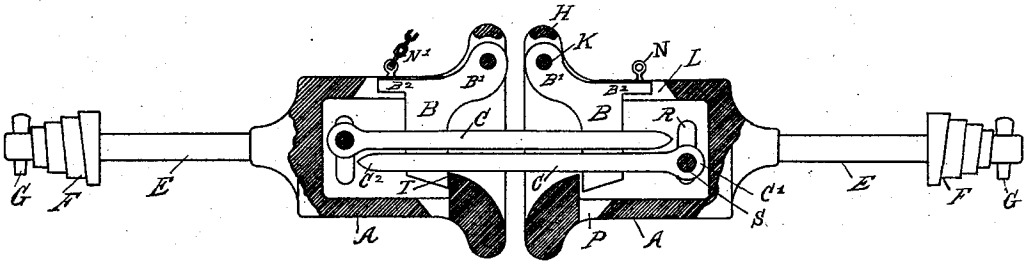


Fig 2

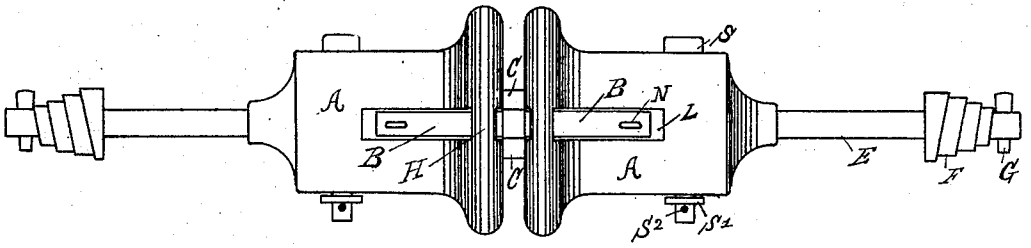


Fig 3

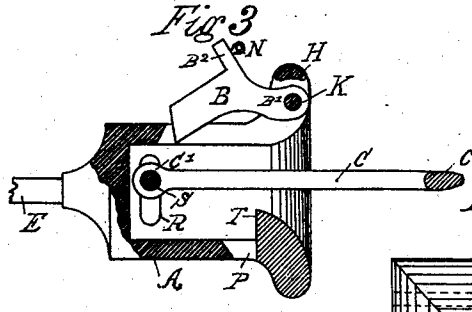


Fig 4

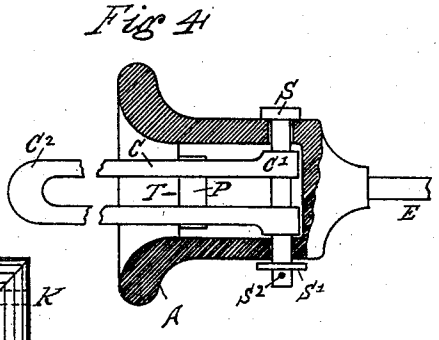
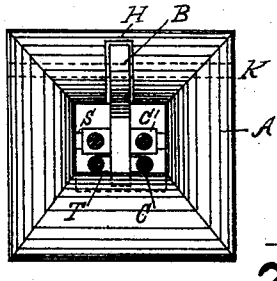


Fig 5



Witnesses
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Wm. N. Galloway

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N. PETERS. Photo-Lithographer. Washington, D. C.

UNITED STATES PATENT OFFICE.

DANIEL CARLOUGH, OF PATERSON, NEW JERSEY.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 291,149, dated January 1, 1884.

Application filed November 26, 1883. (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 produce a car-coupling of more simple construction than those now in use, and one that will be reliably automatic in operation, and is an improvement on the one for which I obtained Letters Patent No. 264,926, September 26, 1882; and the improvement consists of pawls novelly constructed with projecting lugs and pivoted by one of said lugs in slots formed in the top of the coupling-box, in combination with the coupling-box having vertically-arranged slots in the sides of the same, and pivot-bolts adapted to work in said slots, and coupling-links adapted to said pivot-bolts, which I will hereinafter more fully explain.

Figure 1 of the drawings is a longitudinal section of my improved coupling. Fig. 2 is a plan of the same. Fig. 3 is a section showing the pawl lifted. Fig. 4 is a sectional plan, and Fig. 5 is the front of the coupling-box in elevation.

A represents a coupling-box, the front of which is made sloping from its outward extremity inwardly to the box proper. The coupling-box has suitably arranged in each side of the same a slot, R, and in the bottom of the same an opening, P. The front of the coupling-box at the bottom projects upwardly above the bottom and forms a stop for the pawl B, which pawl is constructed with projecting lugs B′ and B^2. The pivotal point of the pawl B is in the lug B′, and is pivoted thereby to the outer upper edge of the coupling-box A on a pivot-bolt, K, the pawl B being arranged in a slot, L, formed therefor in the top of the coupling-box B. The lug B^2 of the pawl B is provided with a ring, N, to which ring there is attached a chain, N′. In the slots R there are arranged pivot-bolts S, having washers S′ and pins or keys S^2. The coupling-links C have enlargements C′ formed on their inner and bifurcated ends, in which enlargements there are suitable holes to accommodate the pivot-bolts S, on which bolts the coupling-links C pivot. The outer ends of the coupling-links have solid sharpened ends C^2, as shown in Figs. 3 and 4. The outer end of the shaft E is provided with spring F and pin G.

Operation: The coupling is supposed to have been secured to the cars by some of the known means employed therefor. The coupling-links C are placed in position on the pivots S, arranged in slots R, which action places the coupling devices in position for automatic action. The cars to be coupled are brought together therefor. The solid sharpened ends C^2 of the coupling-links C present themselves to the mouth of the coupling-box A, which, owing to its open and flaring form, is adapted to meet any differences in the height of the cars, or any lateral differences of the same, and guide the ends of the coupling-links C into their engagement with the pawl B, which recedes in its contact with the link C until the solid part C^2 of the link C has passed beyond the pawl B, which permits the pawl, by force of gravity, to drop down in the open or slotted form of the coupling-link C, and thus automatically couple the cars together. The sharpened ends of the coupling-links C adapt the same to pass each other without injury to the links. The pawl B, after entering the opening in the link C, passes forward until it strikes the stop T, as shown in Fig. 1. The coupling-links C rest horizontally on the stop T, and any pressure that may fall on the links C is met by the adjustable pivot S in the slot R, which adjusts itself to the wants of the link and prevents injury to the links C thereby. The opening P prevents the accumulation of dirt, &c., in the coupling-box by allowing the same to pass out. The spring F serves, by its elasticity, to break the sudden jar of the devices in the well-known way. The cars are uncoupled by simply lifting the pawl B by means of the chain-link N′, and the devices are kept out of automatic action when making up trains, &c., by hooking the link N′ on a hook placed in suitable position therefor, with the pawl lifted.

My improved coupling can and may be made with one or two links, as desired. The stop H serves to stop the pawl B in a suitable position in its upward motion.

Having described my improved car-coupling and its operation, I claim and desire to secure by Letters Patent—

The combination of the pawl B, having lugs B' B^2, pivoted in the coupling-box A, coupling-box A, having vertically-arranged slots R, slot L, opening P, catch or stop T, pivot-bolts S, having washer S', key S^2, coupling-links C, adapted to work on pivots S, the pivots adapted to work in slots R, link N', and stop H, substantially as set forth.

DANIEL CARLOUGH.

Witnesses:
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JOHN INGLIS.