(No Model.) 2 Sheets—Sheet 1.

D. CARLOUGH.

CAR COUPLING.

No. 264,926. Patented Sept. 26, 1882.

Fig 1

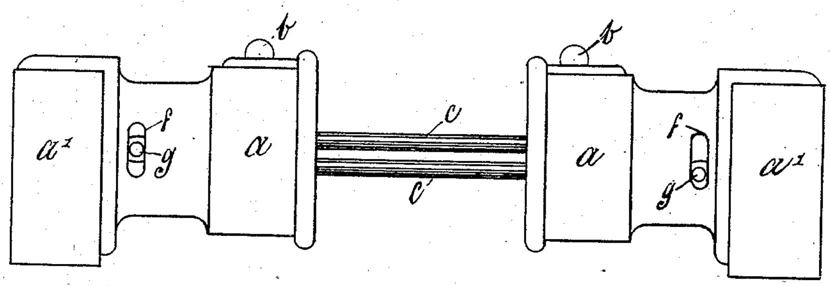


Fig 2

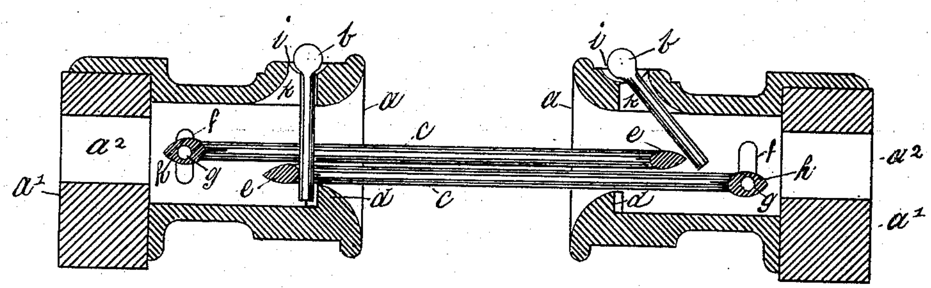
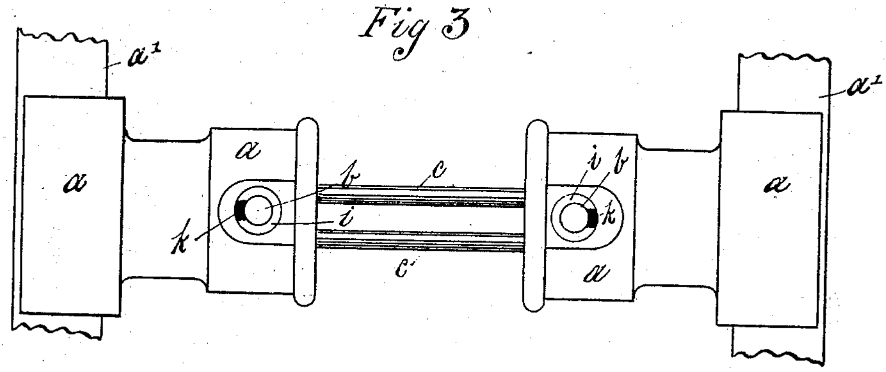


Fig 3



Witnesses
Richard A. Healy
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(No Model.) 2 Sheets—Sheet 2.

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Fig 4

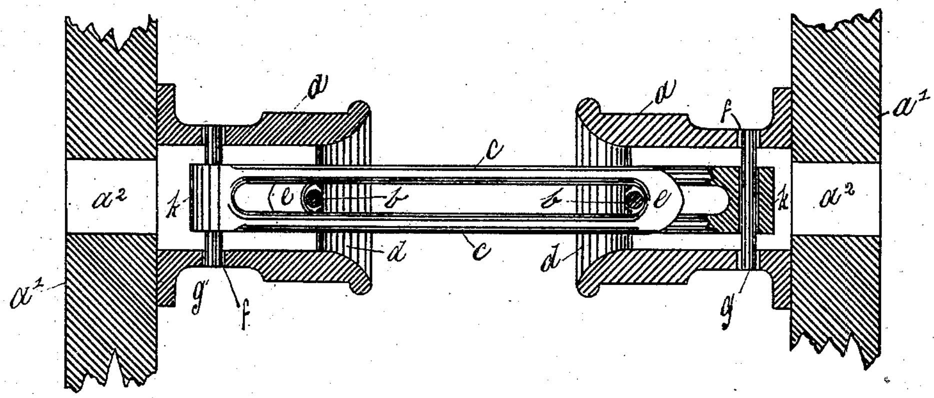


Fig 5

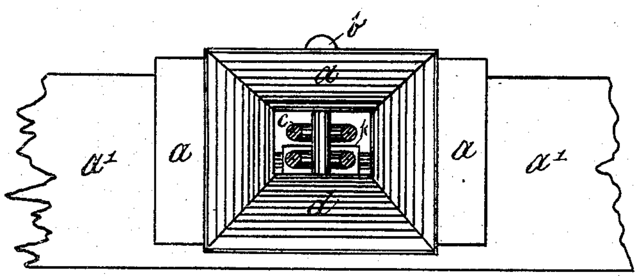
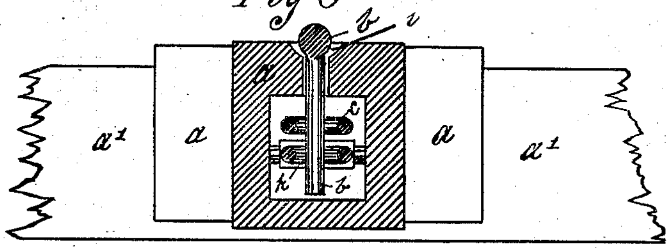


Fig 6



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UNITED STATES PATENT OFFICE.

DANIEL CARLOUGH, OF PATERSON, NEW JERSEY.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 264,926, dated September 26, 1882.

Application filed July 28, 1882. (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, in which—

Figure 1 is a side view of my newly-invented coupling, showing the parts coupled together. Fig. 2 is a horizontal section of the same. Fig. 3 is a plan. Fig. 4 is a sectional plan of the same. Fig. 5 is a front view of the coupling, and Fig. 6 is a section through the coupling-pins.

a represents the coupling-box, the front of which is constructed open and bell-shaped, and is thereby adapted to meet any differences in the height of the cars to be coupled, or any lateral differences therein, and guide the coupling-link *c* into engagement with the coupling-pin *b*.

a' represents that part of the coupling which is to be attached to the cars, which may be attached thereto by any of the known means now employed for that purpose.

a^2 represents the opening in the coupling-box.

b represents the coupling-pin, which is provided with a head of cylindrical form sufficiently large to prevent the escape of the pin through the hole provided for the same in the coupling-box *a*. The coupling-box *a* is dished or hollowed out where the coupling-pin *b* enters the same. The cylindrical part of the pin *b* rests in the dish *i* of the coupling-box *a*, and readily yields to the touch of the coupling-link *c*.

c represents the coupling-link, which is constructed with an open center, which gives ample space for the coupling-pin *b* to work freely therein. The pivot end of the coupling-link *c* is sufficiently swelled to provide for a suitable hole through the same to accommodate a pivot, *g*, without weakening the link *c*. The pivot *g* works in suitable slots, *f*, formed in the sides of the coupling-box *a*. The pivot *g* may be made like ordinary bolts, kept in position by means of a screw-nut, &c. The free end *e* of the coupling-link *c* is constructed with a feather-edge, which allows the links to operate freely over each other when coupling the cars. The top of the coupling-box *a* is provided with a slot, *k*, back of the coupling-pin *b*, which admits of the coupling-pin's backward movement when the same is brought into engagement with the free sharpened end of the coupling-link *c*, which carries the pin *b* backward until the link *c* is allowed to pass under the coupling-pin *b*, which, after the solid part of the link *c* has passed in its movement beyond the end of the pin *b*, the coupling-pin *b*, by force of gravity, drops down in the open center of the link *c*, by which action of the pin *b* the cars are coupled together. The bottom of the coupling-box *a* is provided with a receiving-hook, *d*, which holds the coupling-pin *b* in position for draft.

Operation: The coupling-box *a* having been attached to the cars by any of the ordinary means employed for that purpose, the link *c* is placed in position in the coupling-box and secured therein by means of the pivot *g* in the slots *f*. The coupling-pin *b* is now put in position, which places the coupling devices in position for automatic action. The cars to be coupled are brought together therefor when the coupling-link *c* presents its sharpened end *e* to the bell-mouth *a'* of the coupling-box, and is directed thereby into engagement with the coupling-pin *b*, which recedes in its engagement with the link *c* until the solid part *e* of the link *c* has passed under and beyond the end of the pin *b*, which releases the coupling-pin *b* from the action of the coupling-link *c*, which causes the pin *b*, by force of gravity, to fall down in the open center of the link *c*, automatically coupling the cars together. The cylindrical form of the head of the coupling-pin *b* facilitates the pin's return to its perpendicular position by relieving the pin from friction on account of its small bearing-surface on the coupling-box. My coupling works equally well with one or two links. The ends of the links being sharpened causes them to pass over and under each other freely. The coupling-pin *b* may be constructed with a point at the bottom to fall in a slot in the bottom of the coupling-box; or an opening may be made in the coupling-box sufficiently large for the coupling-pin *b* to pass through the same, if required, to guard against the pin raising out of position

under heavy draft, &c. The coupling-link *c* is so arranged that it rests on the top of the receiving-hook *d*, and is balanced thereon, but is allowed, by reason of the slot *f*, to yield when it becomes necessary in the operation of coupling, and then returns to its horizontal position.

Having described my newly-invented coupling and its operation, what I claim as my invention, and desire to secure by Letters Patent, is—

The combination of the coupling-box *a a' a²*, coupling-links *c*, coupling-pin *b*, pivots *g*, slots *f*, slot *k*, dish *i*, latch-hook *d*, and sharpened end *e*, substantially as and for the purpose set forth.

DANIEL CARLOUGH.

Witnesses:
WILLIAM H. GALLOWAY,
WILLIAM H. DENIKE.