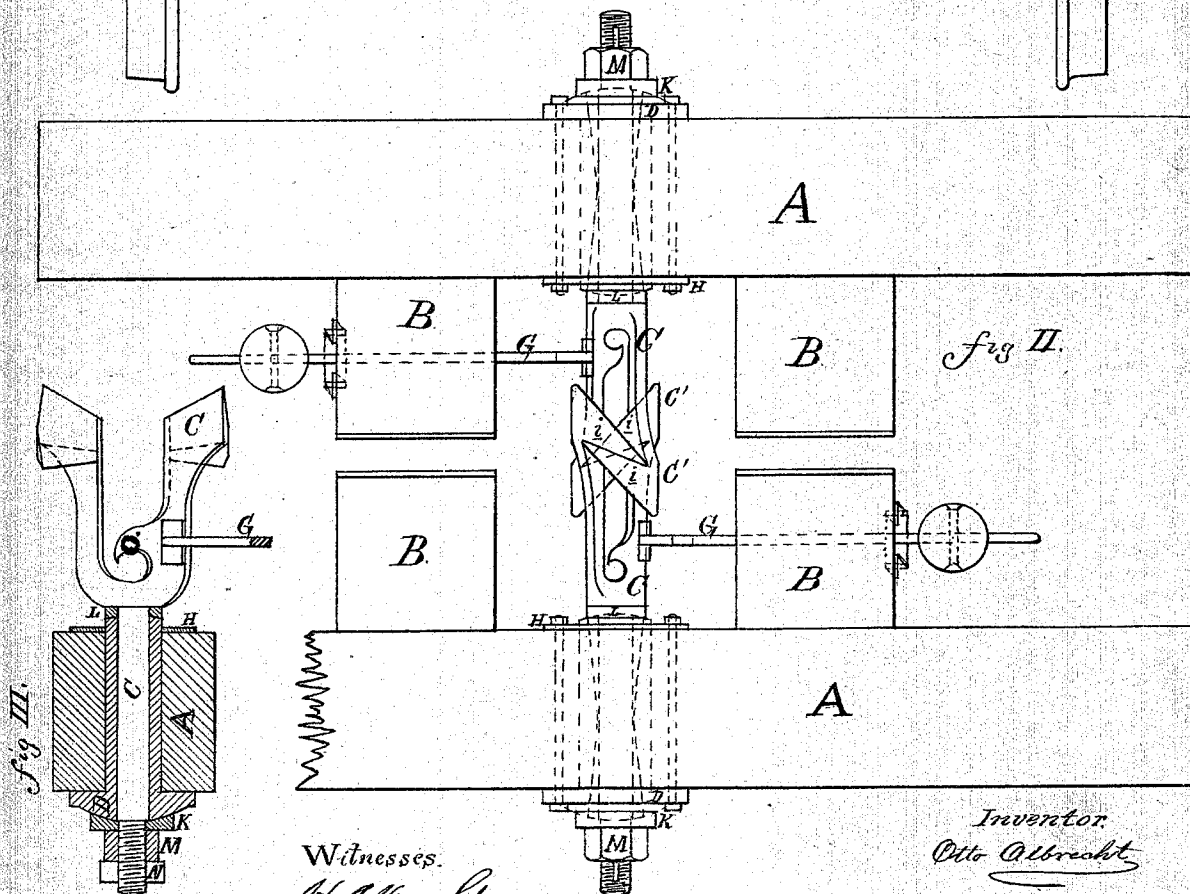
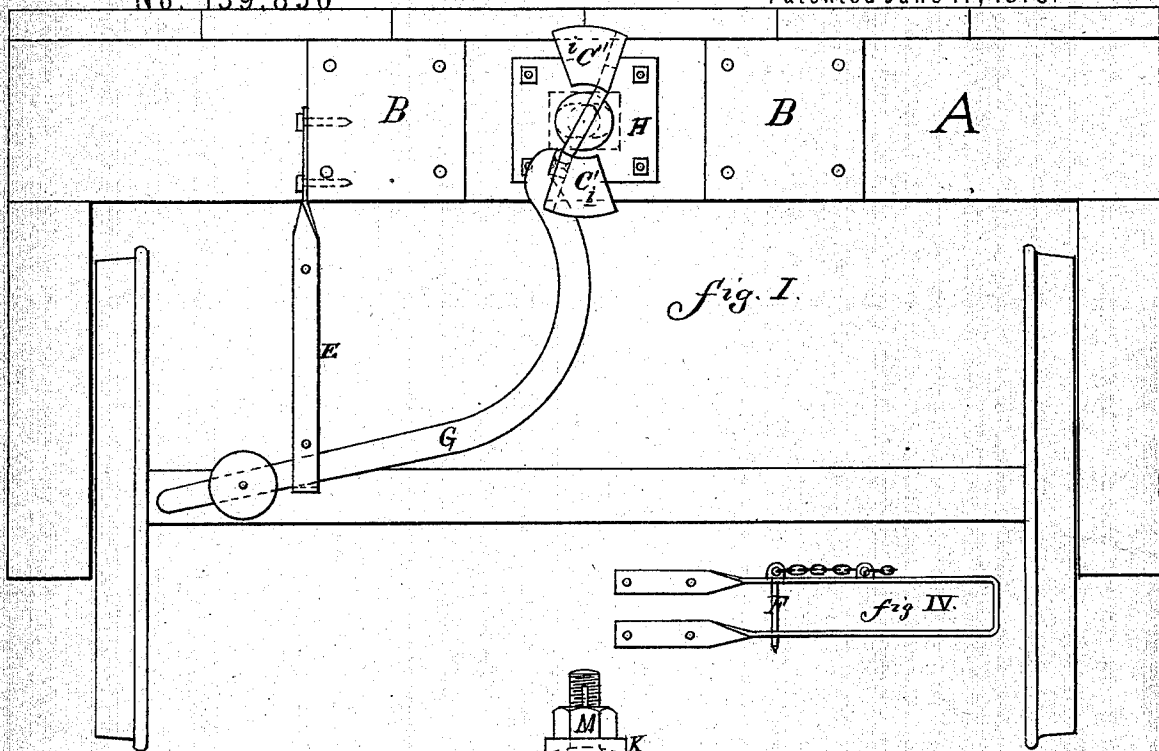


O. ALBRECHT. Car-Couplings.

No. 139,850

Patented June 17, 1873.



Witnesses.
H. Albrecht
Aug. Albrecht

Inventor,
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UNITED STATES PATENT OFFICE.

OTTO ALBRECHT, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN CAR-COUPPLINGS.

Specification forming part of Letters Patent No. **139,850**, dated June 17, 1873; application filed September 10, 1870.

To all whom it may concern:

Be it known that I, OTTO ALBRECHT, of the city of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented an Improved Automatic Car-Coupling, of which the following is a specification:

My invention relates to that class of car-couplings which are self-locking when the cars are brought together; and consists of devices too fully described hereafter to need preliminary explanation, whereby the automatic connection of the cars may be rapidly and certainly effected.

Figure 1 is an end view of a car with my improved coupling attached; Fig. 2, a plan view, showing the bumper-beams of two contiguous cars with my improvement; Fig. 3, a detached sectional view; and Fig. 4, a detached view of part of the device.

In the center of the bumper-beam A of a car is inserted and firmly secured the tubular metal socket D, through which passes a bar, C, the opening for the reception of the said bar being circular at or near the middle of the socket, but widened at each end to permit a limited lateral play of the bar in both directions. At the rear end of the socket is a flange with a convex face adapted to the concave face of a washer, K, through which the bar C passes, and against which bears a nut, M, turning on the threaded end of the bar and secured by a key, N. The front end of the bar is divided to form a fork or yoke, C', between which and the front end of the socket is a washer, L, with a concave face adapted to the convex end of the socket. On the outer extremity of each arm of the fork C' is a barb, *i*, the two barbs projecting to different sides of the fork, which is generally maintained in the nearly vertical position, shown in Fig. 1, by a weighted arm, G, connected to the lowermost branch of the fork and extending through a vertical guiding-yoke, E, in which are two openings for the reception of a detachable pin,

F, connected to the yoke by a chain. The yoke E is secured at its upper end to the side of one of the usual bumpers B B.

When two cars in the same track, each provided with the devices described, are brought toward each other the inclined faces of the barbs on one fork will be brought against those of the other, and both forks will be turned on their axes, raising the weighted arms G until the abrupt shoulders of the barbs pass each other when the weights of the arms will turn them back to their first position, interlocking the barbs, as shown in Fig. 2, and thus connecting the cars together.

It will be seen that owing to the form of the openings in the sockets the coupling devices are always maintained in their proper relative positions when disconnected, but that when the cars are coupled together the bars C can play freely laterally to accommodate themselves to the lateral swing of the cars in motion; or in turning a curve the concave faces of the washers K always affording firm broad bearings, against which the convex faces of the flanges *s* bear, whatever may be the positions of the bars C.

After coupling the cars may be more securely connected by inserting the pin F in the lowermost openings in the yoke E; or the coupling devices may be maintained in such a position as not to connect when brought together by raising the arm G and inserting the pin F in the upper openings so as to prevent the descent of the bar.

I claim—

The socket-tube having an internal opening expanding toward each end, in combination with the bar C having a washer or nut adapted to the rounded face of the rear end of the tube, as specified.

OTTO ALBRECHT.

Witnesses:

H. ALBRECHT,
AUG. ALBRECHT.