

C. G. CASE & D. GOULD.

CAR-COUPLING.

No. 185,295.

Patented Dec. 12, 1876.

Fig: 1.

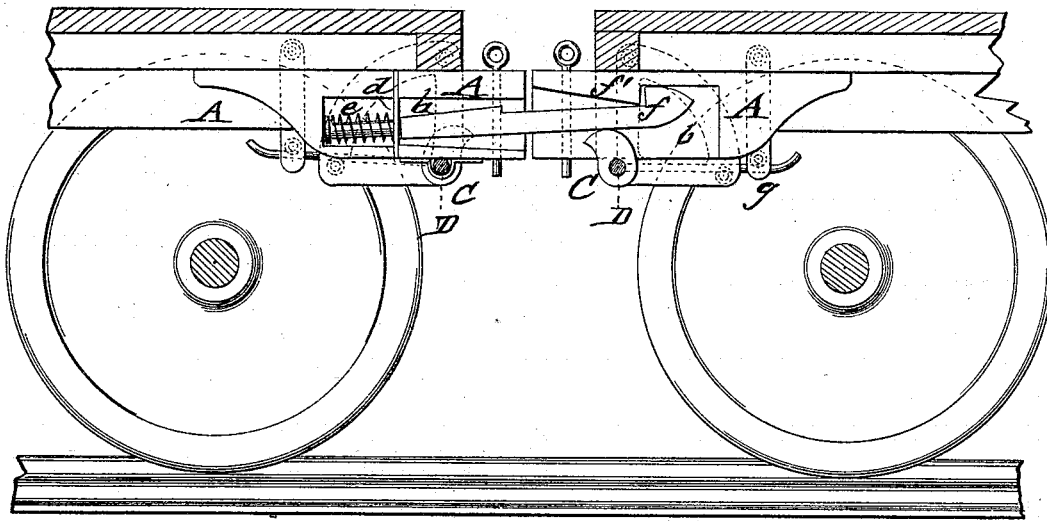


Fig: h.

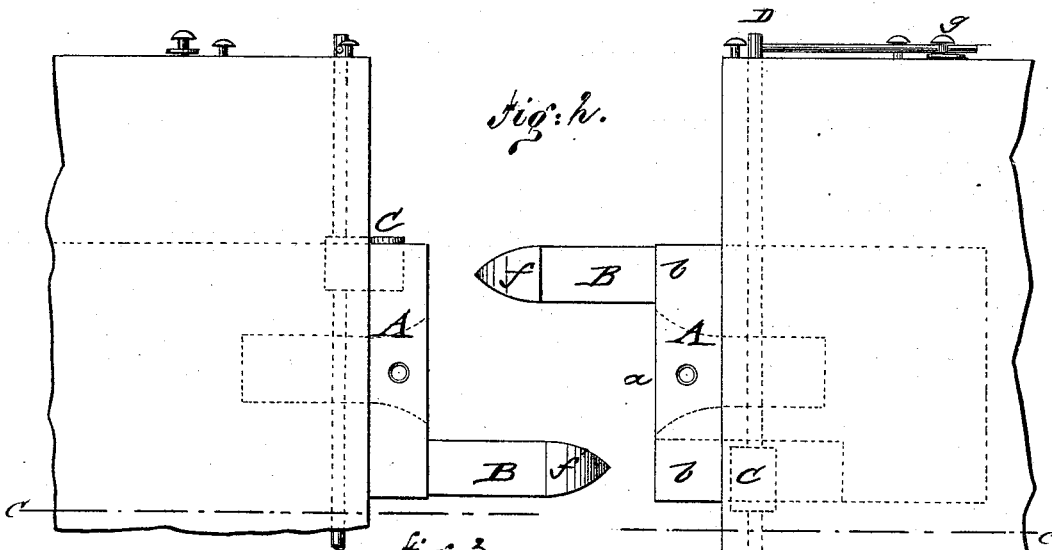
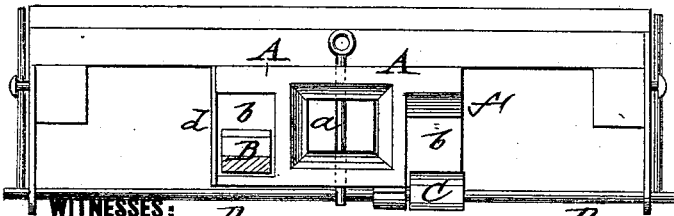


Fig: 3.



WITNESSES:

*Chas. N. ...
John ...*

INVENTOR:

*C. G. Case.
BY D. Gould.
Munn & ...
ATTORNEYS.*

UNITED STATES PATENT OFFICE.

CHARLES G. CASE AND DANIEL GOULD, OF DAVENPORT, IOWA.

IMPROVEMENT IN CAR-COUPPLINGS.

Specification forming part of Letters Patent No. 185,295, dated December 12, 1876; application filed May 27, 1876.

To all whom it may concern:

Be it known that we, CHARLES G. CASE and DANIEL GOULD, of Davenport, in the county of Scott and State of Iowa, have invented a new and Improved Car-Coupling, of which the following is a specification:

In the accompanying drawing, Figure 1 represents a side elevation, partly in longitudinal section, on the line *c c*, Fig. 2, of our improved car-coupling; and Fig. 2 is a top view, and Fig. 3 an end view, of the same.

Similar letters of reference indicate corresponding parts.

The invention consists in a swinging and spring-cushioned coupling-hook, provided with an upwardly-projecting shoulder connected with a top shoulder in the opposite draw-bar by a swinging cam, as hereinafter described.

In the drawing, A represents the draw-bar of our improved car-coupling, which is applied in any approved manner to the car-frame. It is made of such width that three cavities may be arranged in the same, the central one, *a*, with tapering mouth and top and bottom holes for the connection with cars, having the common pin and link, and the outer cavities, *b*, for the double interlocking of the swinging coupling-hook B of each draw-bar. One of the outer cavities *b* serves to apply a coupling-hook, while the other serves to lock that of the opposite draw-bar. The coupling-hook B is made of square or oblong cross-section at the main or front part, and round at the rear end, which slides in a perforated socket-plate, *d*, for lateral play, and having a spiral spring, *e*, around the rear end, placed between a rear pin or shoulder and the socket-plate to admit the forward play in turning curves, &c. The front end of the coupling-hook B has an upward-extending shoulder or projection, *f*, that passes along the downward inclined top part

of the cavity *b* until the hook has fully entered the same. A top shoulder, *f'*, of the cavity serves to interlock with the coupling-hook B when the same is raised after entrance, by a cam, C, attached to a lateral shaft, D, that is hung to suitable bearings or staples, and operated by lever-handles at the end of the shaft, said handles swinging along the sides of the car into upright or horizontal position against retaining pins or stops, according as the cam is to be released from or brought to bear on the coupling-hook B. The lever-handles may be locked securely into position by a swinging catch, *g*, that bears on the lever when the same is in upright or horizontal position.

When the cars approach each other the coupling-hooks B enter their corresponding cavities, and may then be locked by side levers, and by connecting devices from the sides, platform, or top of the car without danger of accident to any one getting between the cars, as this may be entirely dispensed with. The uncoupling is also readily accomplished by swinging the cams down so as to release the hooks from the top shoulders of the draw-bars.

Having thus described our invention, we claim as new, and desire to secure by Letters Patent—

The combination of the swinging and spring-cushioned coupling-hook, having upward-projecting shoulder or hook, with the outer cavity of the opposite draw-bar having top shoulder and swinging cam at the lower part, to operate substantially as and for the purpose set forth.

CHARLES G. CASE.
DANIEL GOULD.

Witnesses:

GEO. E. HUBBELL,
HENRY KLAAS.