

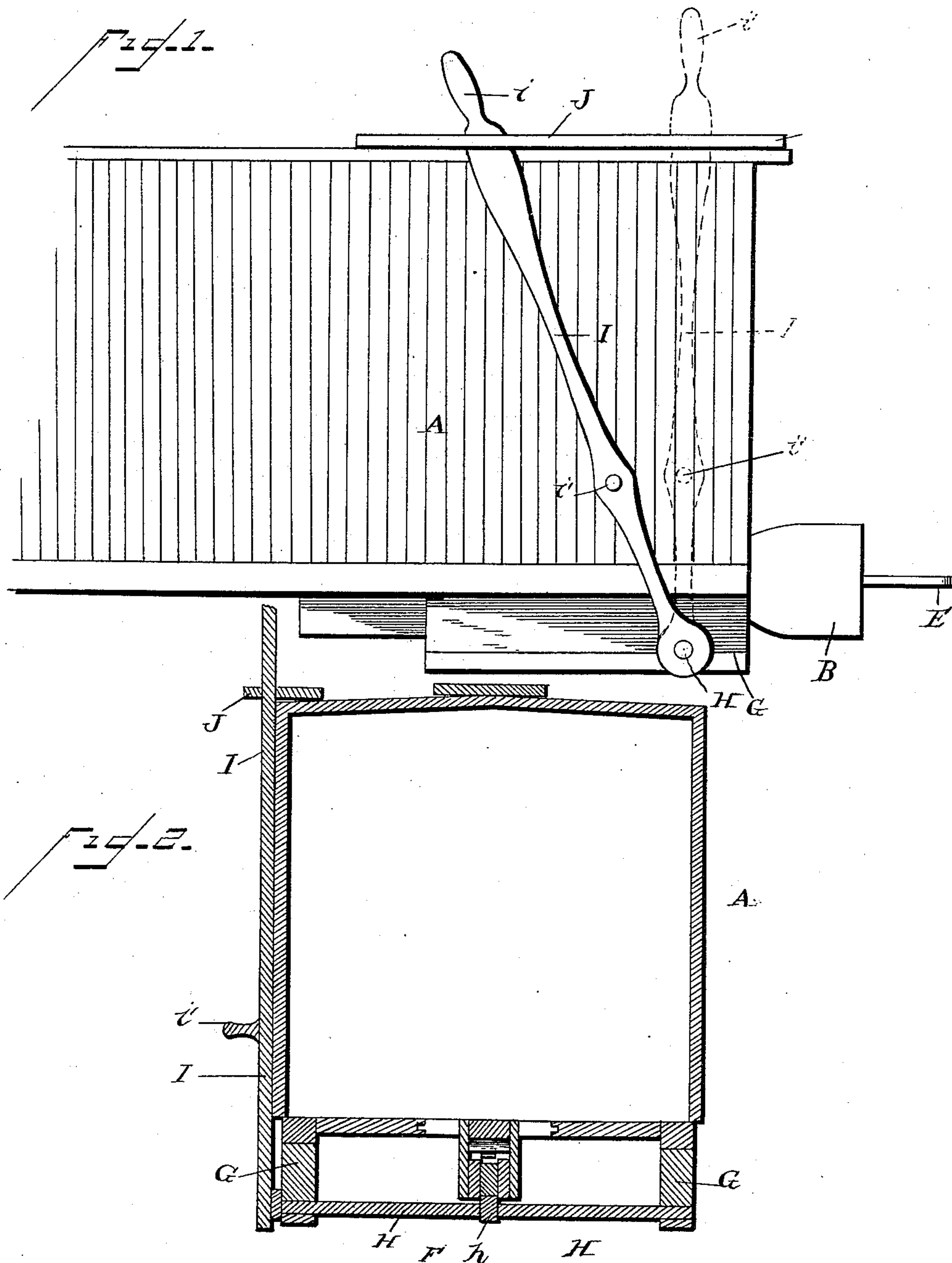
(No Model.)

2 Sheets—Sheet 1.

G. W. POWELL.
CAR COUPLING.

No. 429,096.

Patented May 27, 1890.



WITNESSES:
F. L. Ourand.
Arthur L. Mossell.

INVENTOR:
George W. Powell,
by James Duggan & Co.
Attorneys.

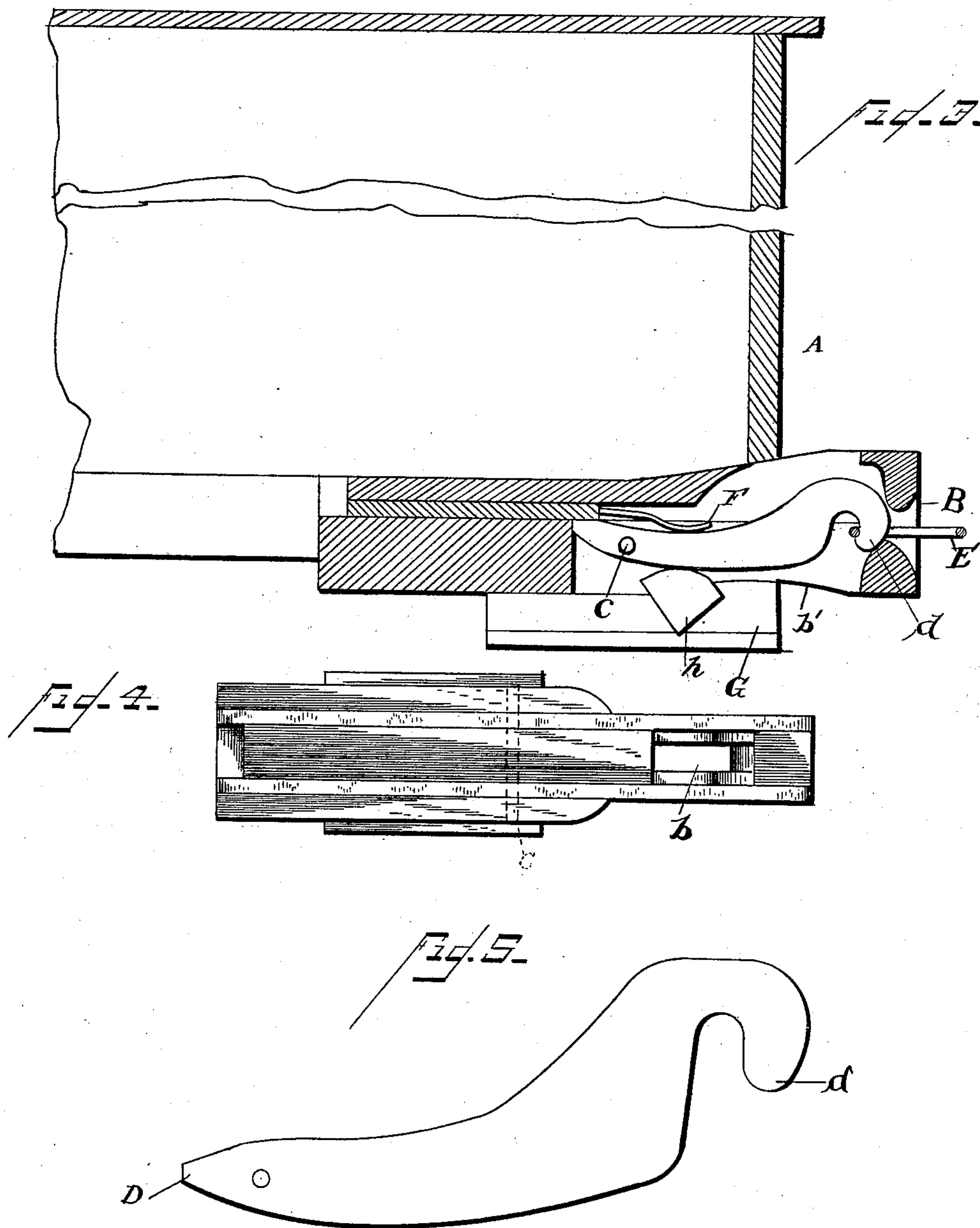
(No Model.)

2 Sheets—Sheet 2.

G. W. POWELL.
CAR COUPLING.

No. 429,096.

Patented May 27, 1890.



WITNESSES:
H. L. Ourand
Arthur L. Morrell

INVENTOR:
George W. Powell
J. Sams Dager & Co.
Attorneys

UNITED STATES PATENT OFFICE.

GEORGE WASHINGTON POWELL, OF SUNNY SOUTH, ALABAMA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 429,096, dated May 27, 1890.

Application filed March 18, 1890. Serial No. 344,386. (No model.)

To all whom it may concern:

Be it known that I, GEORGE WASHINGTON POWELL, a citizen of the United States, and a resident of Sunny South, in the county of Wilcox and State of Alabama, have invented certain new and useful Improvements in Car-Couplings; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

My invention has relation to improvements in car-couplings designed to automatically couple and also to be uncoupled by an operator from the side of the car, in order to avoid the necessity of passing between the cars to be connected.

The object of my invention is to provide a construction capable of effecting the above-named function in an efficient manner, and, furthermore, to provide a coupler of a most simple construction, yet at the same time combining in an eminent degree efficiency of operation and durability.

With these objects in view the invention consists in the improved construction and combination of parts, as hereinafter more fully described in the specification, and specifically pointed out in the claims.

In the accompanying drawings, Figure 1 is a side elevation of a portion of a car with my improvement applied thereto. Fig. 2 is a cross-sectional view. Fig. 3 is a longitudinal sectional view. Fig. 4 is a detail view in plan of the draw-head with the coupling-latch removed, and Fig. 5 is a detail view of the coupling-latch.

Like letters of reference refer to like parts throughout the several views.

Referring to the drawings, the letter A indicates the car-body, and B the draw-head secured thereto, said draw-head provided upon its upper and lower edges, respectively, with longitudinal slots or openings *b b'*. Pivoted upon a transverse bar C, in the rear of the draw-head, is the rear end of a coupling-latch D, said latch terminating at its forward end in a hook *d*, which is adapted to engage the coupling-link E. Above this coupling-latch is secured a spring F, which bears upon the coupling-latch and serves to hold the same in

firm engagement with the coupling-link after the coupling has been effected.

The letters G G indicate depending hangers, which extend down from the bottom of the car at the ends thereof. These hangers form bearings for a transverse shaft H, said shaft being formed or provided with a central cam *h*, which passes into the slot *b'* in the under side of the draw-head, and bears against the coupling-latch. It is obvious that when this shaft is turned the cam so operates upon the latch as to elevate the same, in this manner providing for the uncoupling of cars.

In order to effect a convenient turning of the shaft, I have connected to one end thereof a vertical hand-lever I, said lever extending through a guide J, projecting laterally from the roof of the car. The lever terminates at its upper end in a hand-piece *i*, by which it may be conveniently manipulated from the roof of the car; and it is furthermore provided at a suitable distance from its lower end with a laterally-extending hand-piece *i'*, so as to afford convenient means for operating the lever from the side of the car, in both cases obviating the necessity of a person passing between the cars in order to uncouple the same.

It is evident that, if preferred, both ends of the transverse shaft H may be provided with the vertical hand-levers and their adjuncts. In practice perhaps this will be more desirable, inasmuch as the cars may then be uncoupled from either side.

Having thus fully described the construction of my improved car-coupling, the operation of the same is as follows: As the car carrying the coupling-link approaches the other car to be coupled thereto, the link passes into the draw-head of the latter car, and pressing upon the slightly-beveled end of the hook portion of the coupling-latch will overcome the downward pressure of the spring F. After passing by this portion of the hook the gravity of the latch, aided by the pressure of the spring, will cause the said latch to fall into engagement with the link, and thus securely couple the cars. When it is necessary to detach the cars, all that is required is simply to operate the hand-lever, which causes the transverse shaft B to partly rotate and the cam *h* to act against the under side of the

coupling-latch, so as to elevate the same, when of course the link may be readily withdrawn.

Having thus described my invention, what I claim, and desire to secure by Letters Patent of the United States, is—

1. In a car-coupler, the combination, with a draw-head provided on its lower edge with a longitudinal slot, of a coupling-latch pivoted in said draw-head, hangers, a transverse shaft having bearings in said hangers, said shaft formed or provided with a cam, a vertical lever secured to the end of the transverse shaft, and extending upward above the roof of the car, and a laterally - extending guideway through which said lever passes, substantially as set forth.

2. In a car-coupler, the combination, with a draw-head provided upon its upper and lower edges with longitudinal slots, of a spring-

pressed coupling-latch pivoted in said draw-head and working in the slot, said latch terminating in a hooked end adapted to engage the coupling-link, hangers, a transverse shaft having bearings in said hangers, said shaft formed or provided with a cam, a vertical lever secured to the end of the transverse shaft and extending upward above the roof of the car, and a laterally - extending guideway through which said lever passes, substantially as set forth.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of four witnesses.

GEORGE WASHINGTON POWELL.

Witnesses:

THOMAS FRANCIS GODBALD,
ALEX. HESTLE,
R. G. SOUTHALL,
J. B. CURRY.