

No. 692,442.

H. S. HALLWOOD.
CAR COUPLING.

(Application filed June 2, 1899.)

(No Model.)

Patented Feb. 4, 1902.

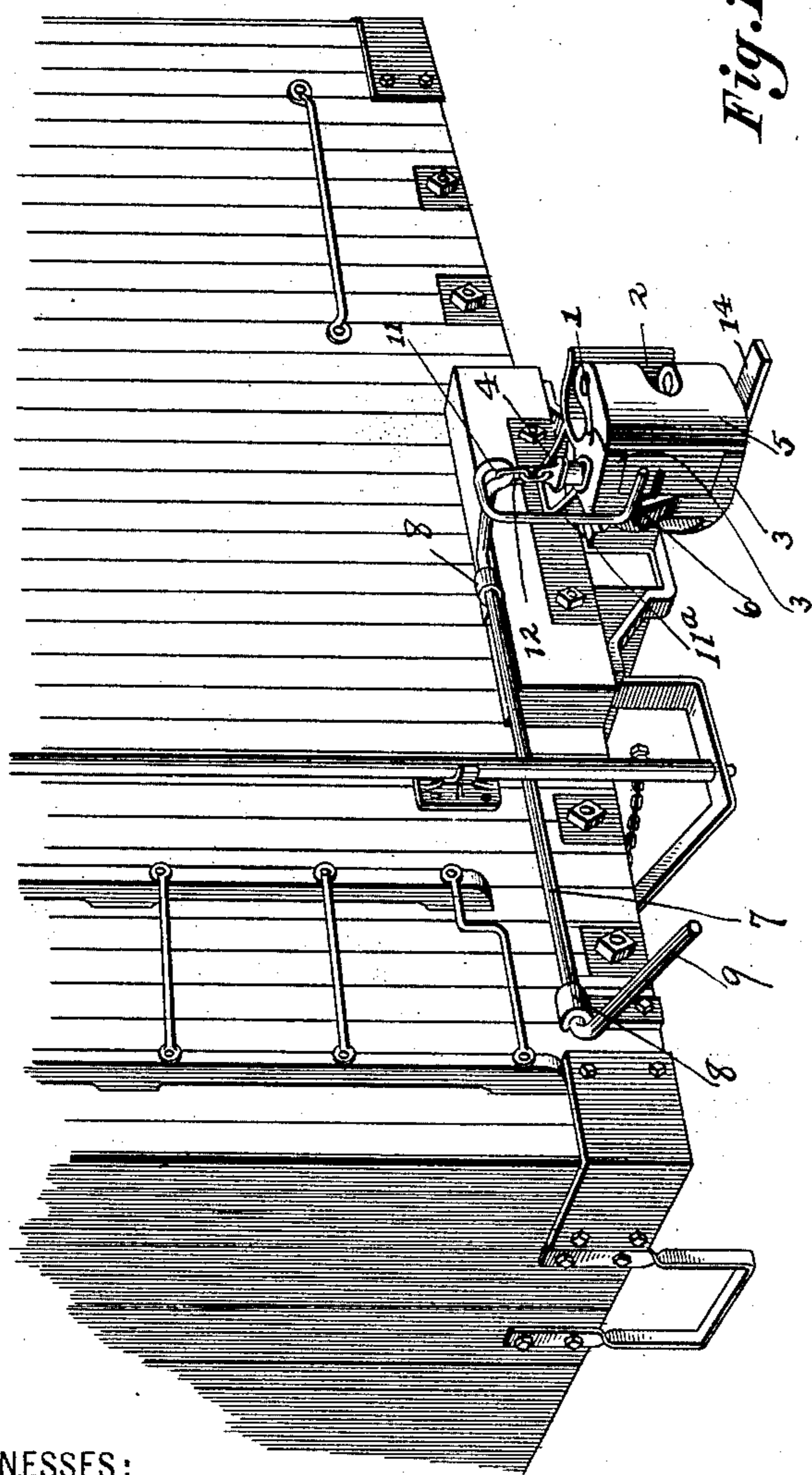


Fig. 1

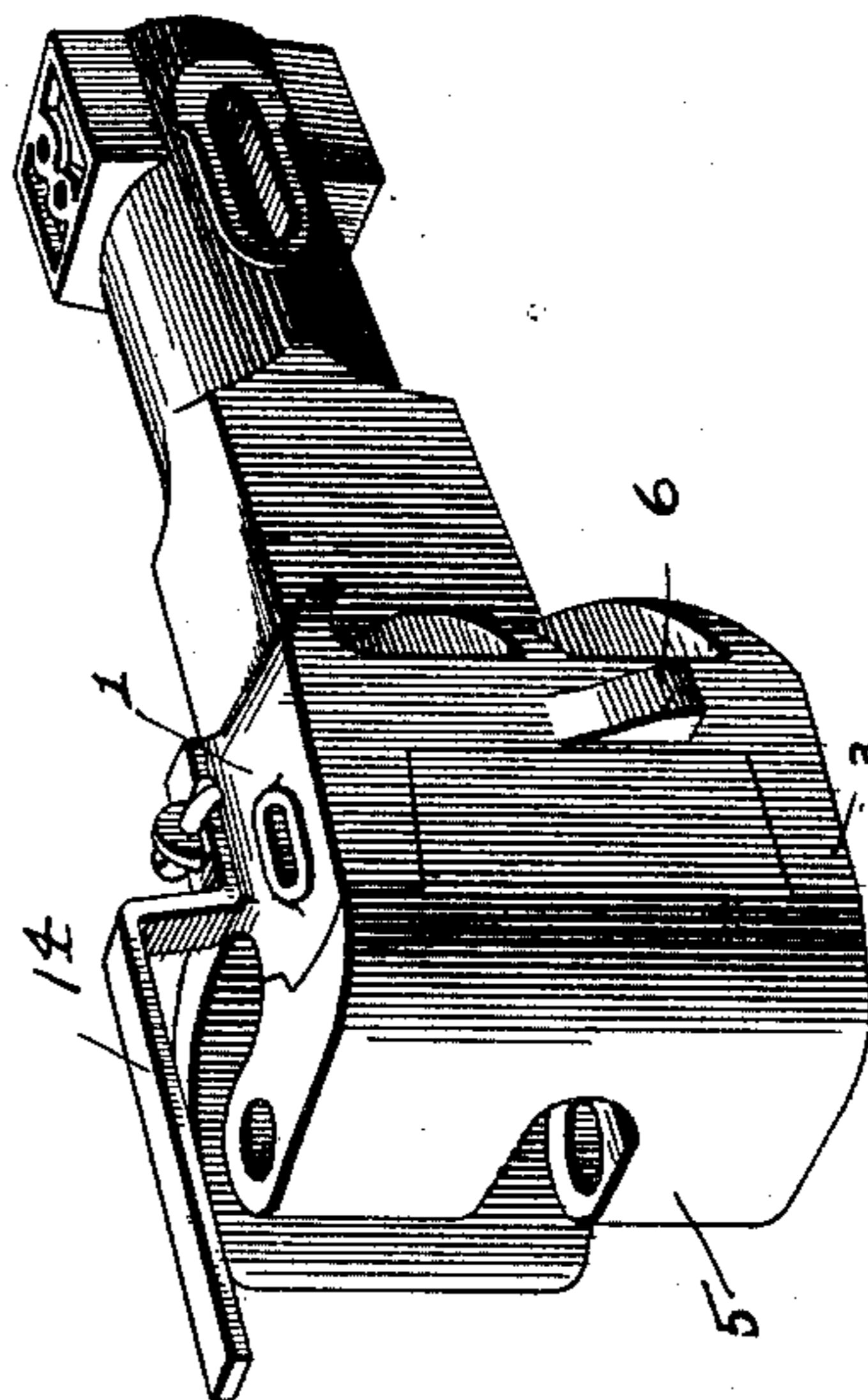


Fig. 2

WITNESSES:

J. H. Fernald
H. B. Bradshaw

INVENTOR

INVENTOR
Henry S. Hallwood.

BY

C. C. Shepherd
ATTORNEY

UNITED STATES PATENT OFFICE.

HENRY S. HALLWOOD, OF COLUMBUS, OHIO.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 692,442, dated February 4, 1902.

Application filed June 2, 1899. Serial No. 719,062. (No model.)

To all whom it may concern:

Be it known that I, HENRY S. HALLWOOD, a citizen of the United States, residing at Columbus, in the county of Franklin and State of Ohio, have invented a certain new and useful Improvement in Car-Couplers, of which the following is a specification.

My invention relates to the improvement of car-couplers, and has particular relation to that class of car-couplers in which recessed draw-heads are provided with hinged coacting knuckles adapted to engage one with the other.

The objects of my invention are to provide improved means in connection with the draw-head and hinge-pin lifting-lever in retaining the knuckle-hinge pin in a sufficiently-elevated position to admit of the opening of the knuckle, to automatically drop said pin as the knuckle is opened, to provide an attachment for the draw-heads of such construction and arrangement as to prevent a draw-bar which has become disconnected from a car from dropping to the trackway, and to produce other improvements the details of construction and arrangement of which will be more fully pointed out hereinafter. These objects I accomplish in the manner illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of a portion of a car end having my improved coupler thereon; and Fig. 2 is a detail view in perspective of one of the draw-bars, showing the same inverted.

Similar numerals refer to similar parts throughout both views.

1 represents the draw-bar head, which is provided with the usual mouth 2 and which at one side of the center is formed with jaws 3, within which is hinged through the medium of a vertical pin 4 the shank of an angular coupling-knuckle 5.

The class of couplers to which my improvements apply is that in which the pin 14 is adapted through the medium of an operating-lever to be lifted to such height as to permit the outward swinging movement of the knuckle thereon, this type of coupler being illustrated in the patent to Dowling, No. 608,764, dated August 9, 1898. That side of the draw-head body on which is hinged the

knuckle is formed with a laterally-projecting shoulder or lug 6, said lug presenting a horizontal upper face or ledge and an inclined outer face, as shown.

7 represents the pin-operating lever, which, as usual, is journaled horizontally in brackets 8, which project from the end of the car and which has its outer end portion turned at right angles with the direction of the length of the lever to form a handle 9. In the present instance the inner and outturned arm 10 of the lever 7, which ordinarily connects with the hinge-pin, is turned downward and thence upward and outward to form a partial loop or eye 11, the laterally-extending arm thereof being bent vertically downward and being of the L form indicated at 11^a. As shown in the drawings, the loop portion 11 is adapted to engage the upper link of a short chain-section 12, which is connected with the upper end of the pin 4. In Fig. 1 of the drawings the lever-rod 7 is shown pushed inward with its handle 9 raised to project outward. The parts being in this position, it will not only be observed that the pin 4 is elevated to permit of the knuckle 5 being opened outward, but that the lug 6 forms a bearing for the outturned lower end of the lever-arm extension 11^a, this latter bearing serving to hold the pin in the elevated position shown. As is usual in this class of couplers, a coupling can only be effected after the knuckle is drawn outward, and it is obvious that the outward swinging movement of the knuckle 5 in the present instance must result in a contact of the latter with the lower portion of the lever extension 11^a, causing the latter to move out of contact with the lug 6 and the lever-rod 7 to slide outward in its bearings 8. The disconnecting of the lever extension 11^a from the lug 6 also results in a dropping of the lever extension, the handle 9, and pin 4. In the operation of returning the pin to the raised position indicated, the lever-handle 9 is first turned outward and upward to elevate the pin, after which the lever-rod is forced inward until its extension 11^a is again in contact with the upper side of the lug 6.

From the construction and operation described it will be seen that simple, reliable, and effective means are provided for retain-

ing the pin in an elevated position and for automatically dropping the same when the knuckle is opened.

A further part of my invention consists in
5 providing the under side of the draw-head with a forwardly-extending bar, which is indicated at 14. This bar, which projects, as shown, in front of the draw-head, is adapted
10 in case the draw-bar of an adjoining car should pull out or become disconnected to form a temporary support for said draw-bar and prevent the same from dropping onto the tracks, and thereby causing a derailment of the cars.

15 Having now fully described my invention, what I claim, and desire to secure by Letters Patent, is—

In a car-coupling, the combination with the draw-head, a knuckle and a vertically-movable hinge-pin connecting said knuckle 20 and draw-head and a laterally-projecting shoulder or lug 6 on said draw-head, of a journaled and sliding pin-operating lever, the latter having a jointed connection with said hinge-pin and a downward extension 25 formed with said lever and having an out-turned end portion which is adapted to engage with or pass said lug 6, substantially as specified.

HENRY S. HALLWOOD.

In presence of—

H. B. BRADSHAW,
ANNA G. BAGLEY.