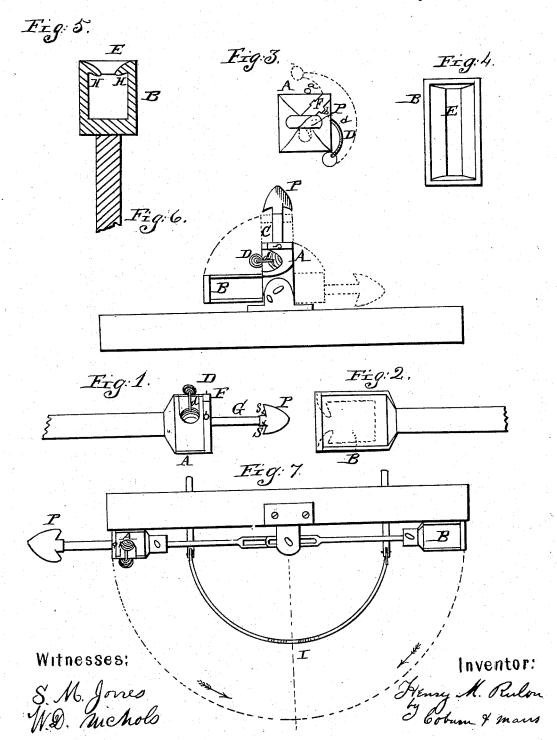
H. M. RULON. OAR COUPLING.

No. 47,985.

Patented May 30, 1865.



## UNITED STATES PATENT OFFICE.

HENRY M. RULON, OF MONMOUTH, ILLINOIS.

## IMPROVEMENT IN CAR-COUPLINGS.

Specification forming part of Letters Patent No. 47,985, dated May 30, 1865.

To all whom it may concern:

Be it known that I, HENRY M. RULON, of Monmouth, in the county of Warren and State of Illinois, have invented a new and useful Improvement in Car-Couplers; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings and letters of reference marked thereon, which form a part of this specification, and in which—

Figures 1 and 2 are top views of the two draw-heads or bunters; Figs. 3 and 4, end views of the same; and Figs. 5 and 6 show how said draw-heads are attached to the engine so as to enable either kind to be used.

The nature of my invention consists in coupling cars together by the use of a single connecting pin, in connection with peculiarly constructed draw heads so arranged that they are coupled by simply running the cars together.

To enable those skilled in the art to manufacture and use my invention, I will proceed to describe the same with particularity.

A is one of the draw-heads, and B a mate to it. They being constructed differently, it is necessary to make them in pairs.

C is the connecting pin, and it is intended to let that remain permanently attached to the draw-head A. It is attached, or, rather, put in its place in said draw-head, by removing the key F, the key F being a removable part of the draw-head and being held in its

place by the lips b and the pin a.

D is a weight connected with the connecting-pin C by means of the rod d, and its purpose is to keep the said connecting-pin C in a certain position, or, when it is turned, to bring it back into that position, as I will here-inafter more fully describe. The draw-head B is made hollow, with the opening E, the sides of the face of the draw-head being sloping toward said opening. The end P of the coupling pin is made somewhat the same shape of an arrow-head, only not as pointed, and the edges are made thinner than the center by chipping off on one side only of each edge and upon opposite sides of the head, thus making it bit-shaped, so that when the cars come together and the coupling-pin head P strikes the sloping sides of the face of the draw-head B it is immediately turned up edgewise, so as to pass through the slot E, when the weight D, which is raised by the turning of the coupling-pin, turns the pin back to its

original position, and the barbs or shoulders s catch on the draw-head at H H and the cars are coupled together. The slant shown on the coupling-pin head at sand the corresponding slant on the draw-head at H H are to provide for the side motion of the cars. The draw-head A is made hollow, as shown, so as to hold the head of the coupling-pin, and there is also a side opening for the weight D to work in. The cars are uncoupled by raising the weight D, which turns the coupling-pin and allows the head P to draw out of the draw-head B. This may be done by the brakemen, by means of a rod and hook, from the top of the cars, or by simply raising the weight in any method. There are square shoulders x xon the coupling-pin C, to keep said pin from turning only as it is turned by raising the weight D. The draw-head or bunter B is constructed much longer than A, to provide for the difference in the height of cars, for the coupling takes place the same, whether the pin C strikes the slot E near its bottom or near its top. In coupling an engine to cars it is liable to be driven to the end of a car that has either kind of a draw-head attached to it, and to obvizte the difficulty of two drawheads of the same kind coming together I attach to the rear of the engine a double drawhead containing one of each kind, that can be turned, as indicated by dotted lines in Fig. 6, so that either can be used, as required; and also on the front of the engine, over the cowcatcher, there is a draw-head of each kind, arranged so that either may be swung out for use, as indicated by dotted lines in Fig. 7.

Having thus fully described the construction and operation of my improved car-coupler, what I claim as my invention, and desire to secure by Letters Patent, is—

1. The coupling-pin C, when constructed and operating substantially as and for the pur-

pose set forth.

2. The combination and arrangement of the coupling pin C, the weight D, and the drawhead A, when all constructed and operating as herein delineated and set forth.

3. The combination of the draw-head B with the coupling-pin C, constructed, arranged, and operating substantially as and for the purposes herein specified and shown.

HENRY M. RULON.

Witnesses:

JOHN GORTER, A. J. ALLREA.