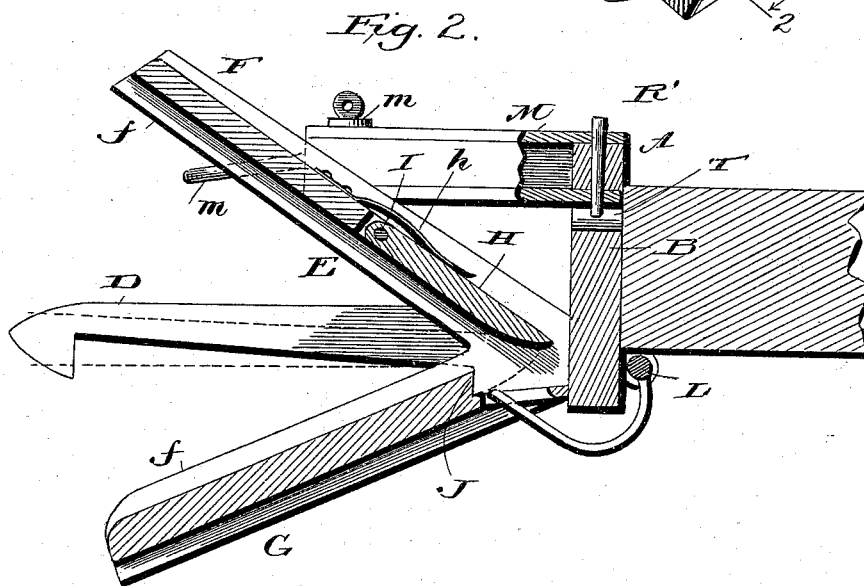
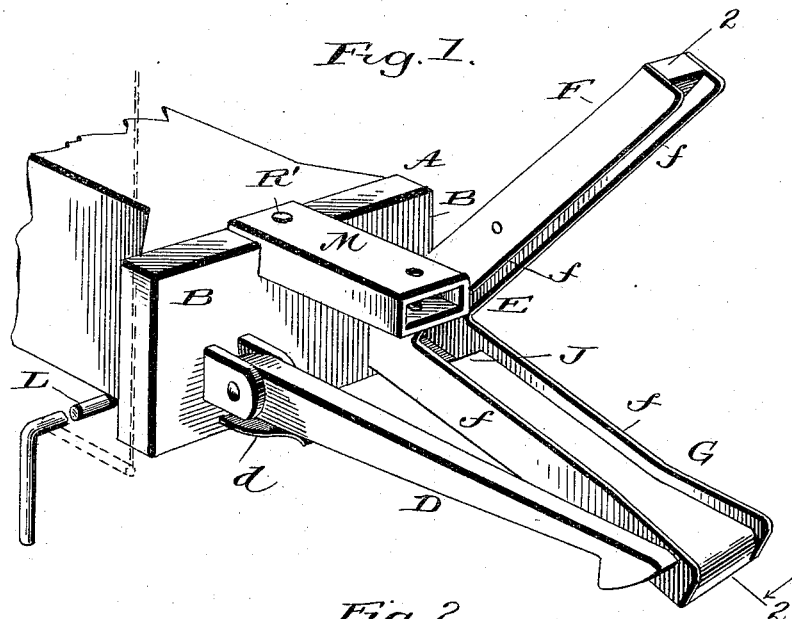


(No Model.)

J. H. & G. T. HAGAN & N. H. PRICE.
CAR COUPLING.

No. 547,429.

Patented Oct. 8, 1895.



Witnesses:

L. C. Hills
A. J. Anderson

Inventors

John H. Hagan, George T.
Hagan & Nathan H. Price
By Franklin H. Hough
Att'y.

UNITED STATES PATENT OFFICE.

JOHN H. HAGAN, GEORGE T. HAGAN, AND NATHAN H. PRICE, OF DUE WEST, SOUTH CAROLINA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 547,429, dated October 8, 1895.

Application filed January 21, 1895. Serial No. 535,718. (No model.)

To all whom it may concern:

Be it known that we, JOHN H. HAGAN, GEORGE T. HAGAN, and NATHAN H. PRICE, citizens of the United States, residing at Due West, in the county of Abbeville and State of South Carolina, have invented certain new and useful Improvements in Car-Couplers; and we do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to certain new and useful improvements in car-couplings, and especially to the class known as "hook-and-catch couplers," in which the hooks are automatically guided as the two ends of cars to be coupled approach, so that the hooks will come into an engaging relation with the spring-actuated catch-keepers held in a projecting portion of the draw-head, which catches are connected with suitable levers whereby the uncoupling may be effected by a person at the sides or at the top of the car without the necessity of the operator going between the cars.

Another object of the invention is the provision of the V-shaped extension, forming guides which will force the hooks, if they approach and are disposed at different angles to a horizontal, into a locking relation with the catches.

To these ends and to such others as the invention may pertain the same consists, further, in the novel construction, combination, and adaptation of the parts, as will hereinafter more fully appear, and which will be specifically defined in the appended claims.

I clearly illustrate my invention in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this specification, and in which drawings similar letters of reference indicate like parts throughout both views, in which—

Figure 1 is a perspective view of the couplers in an engaging relation. Fig. 2 is a vertical section through one of the V-guide extensions and a hook in engaging relation.

Reference now being had to the details of the drawings by letter, A designates a draw-head, having pivoted to the plate B at one side the hook D, having the spring-actuated support *d*. At the opposite end of said plate is rigidly secured the V-shaped guide E, having the upwardly-extending portion F and the downwardly-extending portion G, each being provided with the extended sides *f*.

H is a spring-actuated keeper pivoted to the bar I of the guide, and *h* is a spring provided for holding the hook-engaging part of the opposing hook in a locking relation with the end of the member J of the other extension of the guide. The outer ends of the V-shaped extensions flare out, so as to make more sure of its catching the hook.

L is a rod provided for releasing the catch, and is extended so as to be within convenient reach of the operator either at the top or side of the car.

M is a plate secured to the draw-head and is provided with a link-and-pin coupling *m* as an emergency-coupler. The said member M has its lower rear end inserted in an aperture of the draw-head and a pin R, passed through the ends thereof, holds the said member to the draw-head.

The great advantage of providing the V-shaped guide will be readily seen, as it frequently occurs that cars of different make have couplers disposed at different heights, and my improved construction allows for this variation, readily allowing cars having couplers secured at various heights to be easily and quickly coupled.

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

1. An improved hook and catch coupler having in combination with a drawhead, a hook pivoted thereto, and a keeper pivoted in a V-shaped guide extension, substantially as shown and described.

2. As an improved article of manufacture, a hook and catch car coupler having in combination with a drawhead a spring actuated hook pivoted thereto, a V-shaped projection rigidly secured to the said drawhead, carrying in one of the V-shaped extended arms a spring

actuated keeper, adapted to hold the head of an opposing hook in an engaging relation with the end of the member J, and means for releasing the said dog, substantially as shown
5 and described.

3. As an improved article of manufacture a car coupler having a spring actuated hook pivoted to a drawhead, combined with a V-shaped guide projection carrying a spring
10 actuated keeper, the said guides widening at their outer extremities, and means for releas-

ing the coupler, substantially as shown and described.

In testimony whereof we affix our signatures in presence of two witnesses.

JOHN H. HAGAN.
GEO. T. HAGAN.
NATHAN H. PRICE.

Witnesses:

W. J. DONNARD,
J. C. HADDON.