A. STORY.

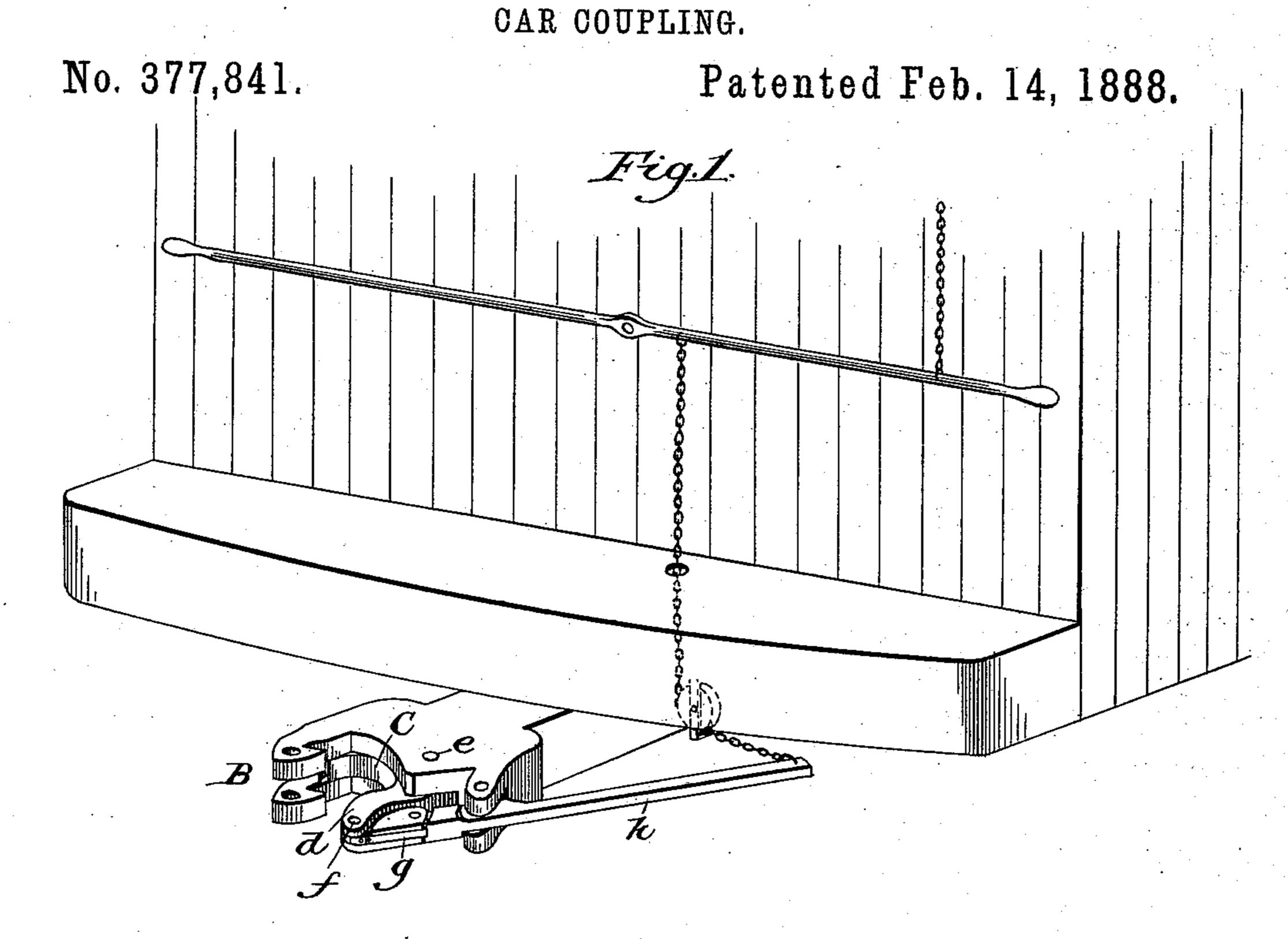
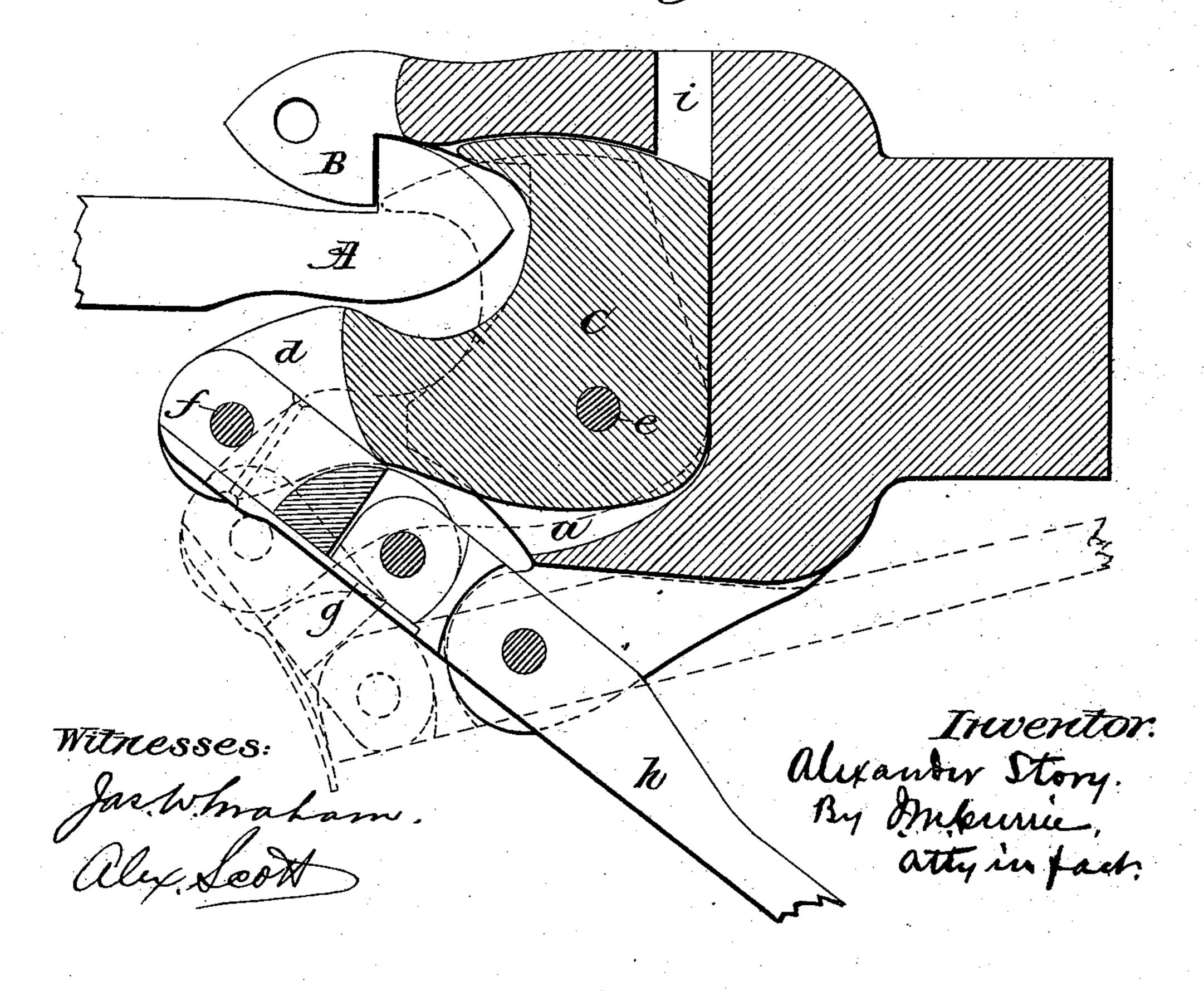


Fig. 2



United States Patent Office.

ALEXANDER STORY, OF WASHINGTON, IOWA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 377,841, dated February 14, 1888.

Application filed November 29, 1887. Serial No. 256,465. (No model.)

To all whom it may concern:

Be it known that I, ALEXANDER STORY, a citizen of the United States, residing at Washington, in the county of Washington and State of Iowa, have invented certain new and useful Improvements in Car-Couplings; and I do hereby 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.

My invention is an improvement in carcouplings so arranged that cars coming together will couple automatically, also so arranged that it can be made not to couple. It is simple, durable, and reliable at all times.

Figure 1 is a perspective view of the draw-head. Fig. 2 is a view of the movable appliance to fit in the draw-head for holding the two hooks of the two draw-heads together to keep from uncoupling, also to effect un-

coupling.

The draw head consists of, first, a hook, A, by which the coupling is made with the hook in the opposite draw-head; second, a guard, 25 B, (a solid part of the draw-head,) by means of which the entering hook is guided into position for coupling. It is curved where the entering hook strikes it, so as to guide or force this hook into a position for coupling. 30 This guard and stem of the hook are provided with a recess or opening, a', in which the movable appliance C is inserted, except the prong or arm d, which extends beyond the guard. The back of this prong, when open 35 for coupling, fits up against the guard, and the outer edge of the inner prong is even with the hook. The incoming hook strikes the long prong, glides along and strikes the curved surface of the guard, and is forced against 40 the inner prong, driving it back into the recess, when it meets its companion hook. As the inner prong is forced into the recess the outer prong is brought into position to prevent uncoupling. This movable appliance is 45 loosely pivoted to the draw-head at e.

h is a hinge-like appliance. One end is loosely pivoted to the end of the longer prong, d. Near the other end it is pivoted to the guard at f. This hinge has a spring attochment, g. One end is riveted to the front end of the hinge, the other end movable and

working into the connecting part of the hinge in such a manner as to spring the hinge straight when the entering hook is forced into position for coupling, thus, as it were, 55 locking it and preventing uncoupling. The handle or lever h, (part of the hinge,) extending back from the guard, is for the purpose of uncoupling. By forcing this handle inward the middle of the hinge proper is forced outfoward, the outer prong is drawn back, and at the same time the inner prong presses against the hook, forcing it apart from its connecting-hook and effecting the uncoupling, all substantially as set forth.

A chain extends from the end of the lever round a pulley to a lever across the end of the car, which lever is pivoted to the car near the middle of the car, so that by raising one end of this lever the uncoupling takes place. 70 By lowering or forcing downward the other end of the lever the uncoupling takes place. A chain or iron rod extending from the end of the lever to be raised to the top of the car will enable the brakeman to uncouple when 75

on top of the car.

To prevent coupling, a bolt is placed in an opening in the draw-head back of the movable appliance i.

The hook may be provided with an opening 80 to admit a link from a link-coupler and fast-ened with a pin dropped through the perpen-

dicular hole.

I claim—

1. In a car-coupling, a horizontally-movable 85 draw-head provided with a guard-hook, B, a pointed unlocking device, C, being an operating-toe and long arm d, operated by the lever h, and connecting-link and spring g, all as shown and described.

2. A double-pronged uncoupling appliance, C, having operating-lever h and connecting-link g, and pivoted, as described, in the recess of the draw-head, in combination with the hook A and hook B, as shown and described. 95

3. In a car-coupling, the combination of the draw-head having the hook B upon one of its sides, the U-shaped uncoupling appliance pivoted near its center and having the long arm d, the link connecting this arm with the 100 operating-lever, the spring attached to the link and bearing upon the hinge-joint formed by

the lever and link, the lever-extension beyond its pivot, and the operating-chain, substan-

tially as shown and described.

4. In a car-coupling, the draw-head having the hook B, and uncoupling device C, having link-connection with the lever h, in combination with the lever-extension, the pulley and chain, and the centrally-pivoted lever across the end of the car, having the chain extending to the top thereof, whereby the car may be uncoupled from either side or from the top, as set forth.

5. In a car-coupling having the hook B and double-pronged uncoupling device pivoted near its center, the combination, with said uncoupling device, of a horizontal recess in the draw-head, whereby a wedge or bolt may hold the parts in uncoupled position, for the purpose described.

ALEXANDER STORY.

Witnesses:

W. V. McCausland, V. E. Duncan.