

(No Model.)

S. J. MEEKER.
CAR COUPLING.

No. 461,906.

Patented Oct. 27, 1891.

Fig. 1.

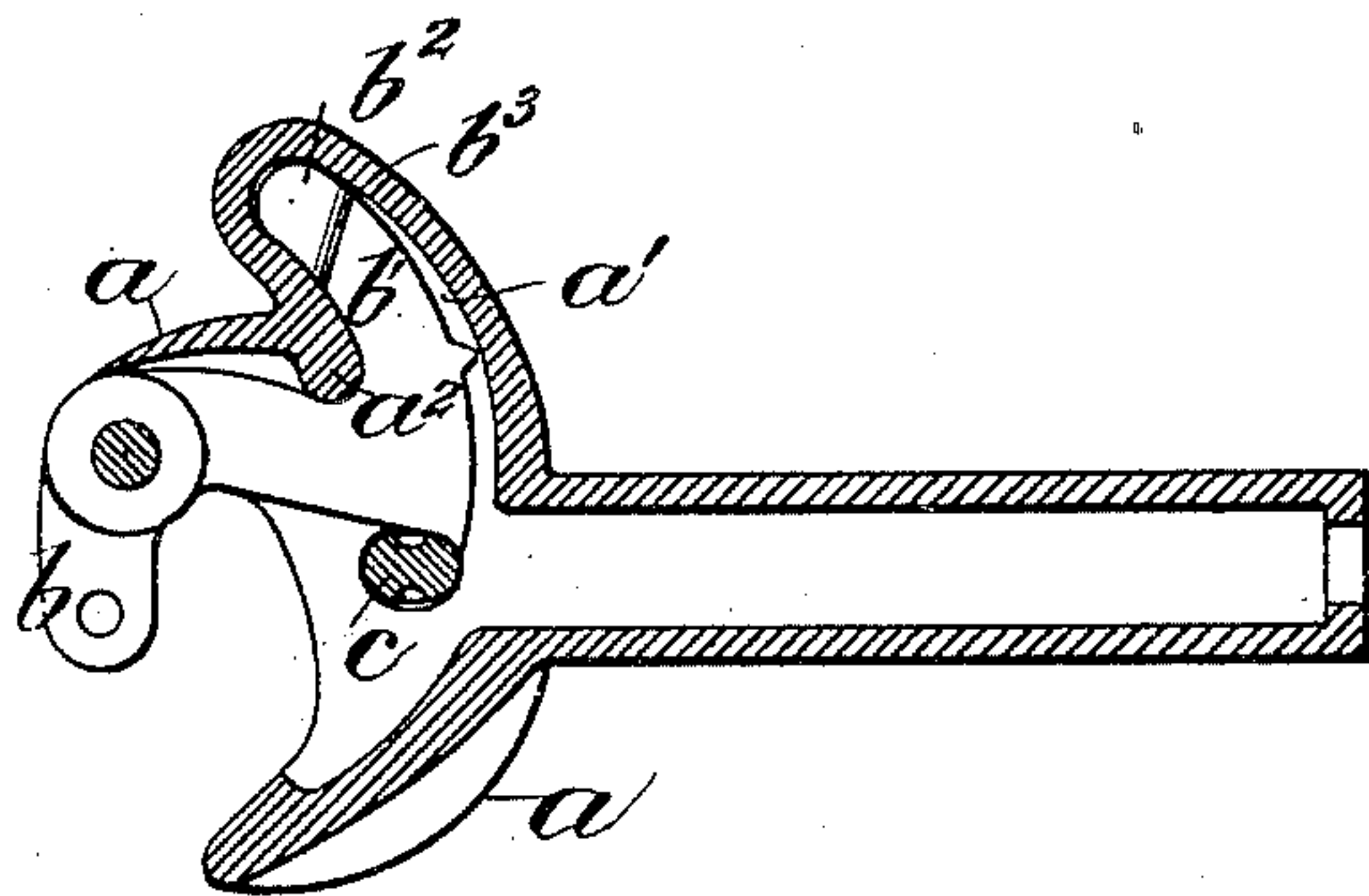


Fig. 2.

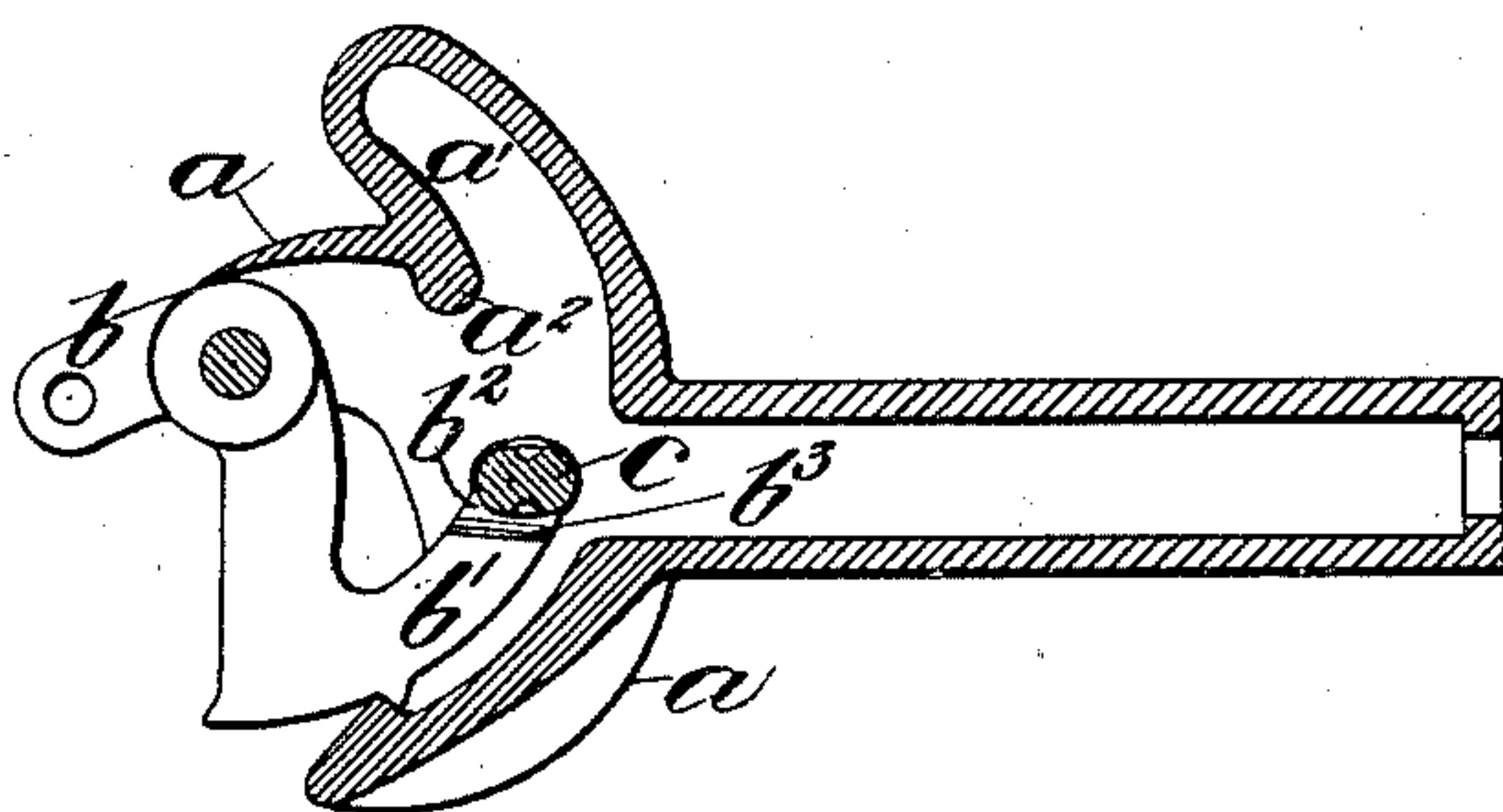
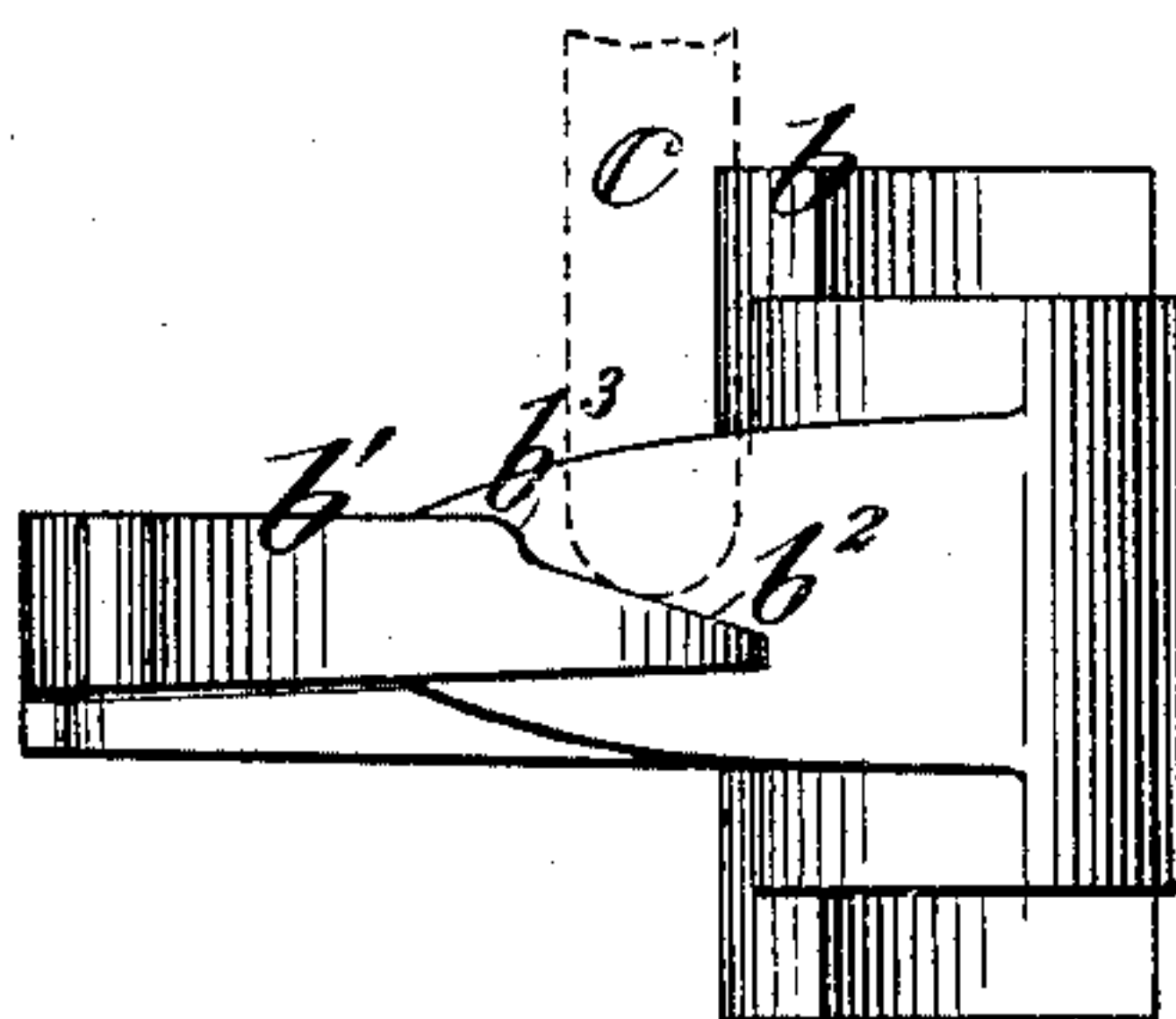


Fig. 3.



Witnesses:-

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Inventor:-

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UNITED STATES PATENT OFFICE.

STEPHEN J. MEEKER, OF NEWARK, NEW JERSEY, ASSIGNOR TO THE
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CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 461,906, dated October 27, 1891.

Application filed June 12, 1891. Serial No. 395,981. (No model.)

To all whom it may concern:

Be it known that I, STEPHEN J. MEEKER, a citizen of the United States, residing in the city of Newark, county of Essex, and State of New Jersey, have invented new and useful Improvements in Car-Couplers, of which the following description, taken in connection with the drawings herewith accompanying, is a specification.

My invention relates to car-couplers of that class known as the "vertical-plane" coupler; and it consists of certain improvements upon Letters Patent No. 416,187, granted to George W. Smillie, December 3, 1889, the object of my present invention being to provide a simple and positive means for holding the pivoted hook or knuckle in an open or extended position to engage with the corresponding part of another coupler and prevent any liability of its being closed by the jolting or other movement of the car when being drilled or otherwise moved about until it engages with said corresponding part of another coupler and is automatically closed thereby in a manner well understood by those skilled in the art. To this end I provide the rear arm of the pivoted hook or knuckle, and that upon which the coupling pin or device is supported and rides when raised from engagement with the knuckle, with a rest or step located at a point below its upper surface and provided with an inclined surface on which the coupling-pin is adapted to drop and rest when the hook or knuckle is opened to its limit and adjustably hold the latter open in a manner as will hereinafter be described in detail.

Referring to the drawings, Figure 1 represents a plan view of a coupler embodying my invention with the upper part of the draw-head removed, showing the hook or knuckle in a closed position; and Fig. 2 represents the same with the hook or knuckle open. Fig. 3 represents a rear view of the hook or knuckle enlarged and detached from the draw-head, showing a section of the coupling-pin in dotted lines in position on the inclined rest.

In the drawings, the draw-head a , provided with the recess or opening a' and the projection a^2 , the pivoted rotating hook or knuckle

b , provided with the rearwardly-extending arm or projection b' , adapted to engage with the said projection a^2 in the draw-head, and the coupling-pin c , adapted to engage with the said hook or knuckle b to lock the same when closed and be supported on the said rearwardly-extending arm b' when raised from engagement with said hook or knuckle to allow the same to open, are all constructed and adapted to operate in the same manner as the corresponding parts in the coupler illustrated and described in the above-mentioned Patent No. 416,187.

In the present instance and according to my invention I provide the rear end of the arm b' of the hook or knuckle b with a step b^2 , located at a point below its upper surface and extending at an incline therefrom in the direction of its length, forming a rest on which the coupling-pin c is adapted to drop and be supported when the hook or knuckle has been opened to its limit by the withdrawal of the hook in the coupler of the connecting-car, as will be readily understood by those skilled in the art. The hook or knuckle is held open in this position by means of the shoulder b^3 (formed by the step b^2) engaging the coupling-pin to prevent its being raised by the jolting or other motion of the car upon the upper surface of the arm b' , and thereby allow the hook or knuckle to close or partially close and incur the liability of its being broken or otherwise damaged by the contact of the engaging coupler. To prevent any liability of the coupling-pin being thus jarred from the step or rest b^2 to the upper surface of the arm b' , the surface of the said step or rest extends at an incline from said shoulder b^3 , as before described, in such manner that the weight of the coupling-pin and its usual connections upon said inclined surface tends to force the said arm, and thereby the knuckle, forward and open, as will be readily understood.

The upper edge of the shoulder b^2 and the lower end of the coupling-pin c are both rounded, as clearly shown in Fig. 3, in order that the pin may ride over said shoulder when the hook or knuckle is engaged and closed by the corresponding part of an engaging

coupler when two cars are brought together, in a manner well understood by those skilled in the art.

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

1. In a car-coupler, the combination, with the draw-head, of a hook or knuckle hinged thereto and provided with a step or rest located at or near the end of its inner arm, having an inclined surface extending in the direction of its length to act in combination with the coupling pin or device, substantially as described, and for the purpose set forth.

2. In a car-coupler, the combination, with the draw-head, of a hook or knuckle pivoted thereto provided with an arm having a step

or rest located at a point below its upper surface to form a shoulder at right angles, or nearly so, to its line of travel and engage with the coupling pin or device, substantially as described, and for the purpose set forth.

3. In a car-coupler, the combination, with the draw-head, of a rotating knuckle hinged thereto provided with a rearwardly-extending arm or hook provided with an inclined surface at or near its end extending in the direction of its length, and a coupling pin or device, substantially as described, and for the purpose set forth.

STEPHEN J. MEEKER.

Witnesses:

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