

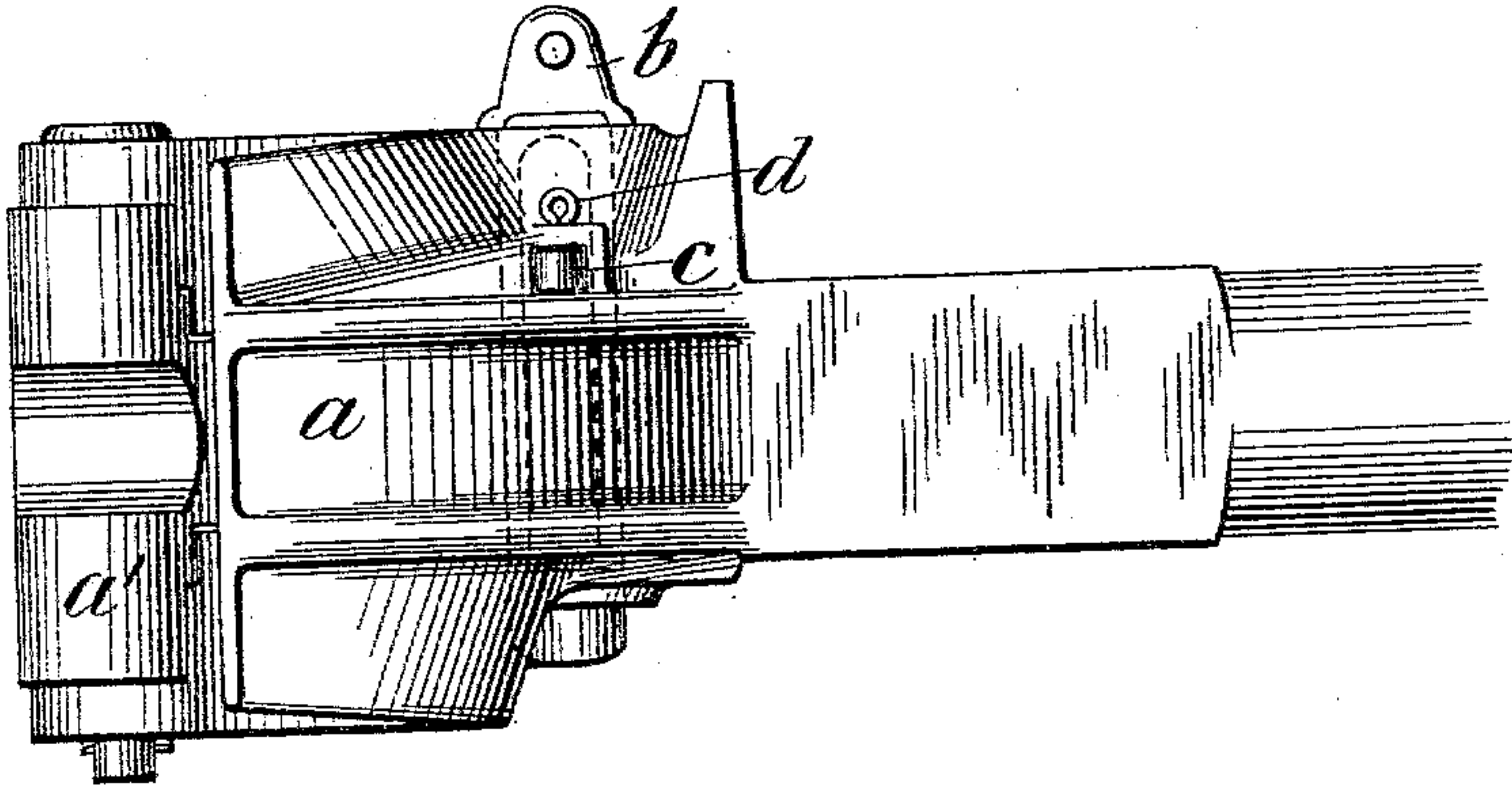
(No Model.)

G. MEEKER.  
CAR COUPLING.

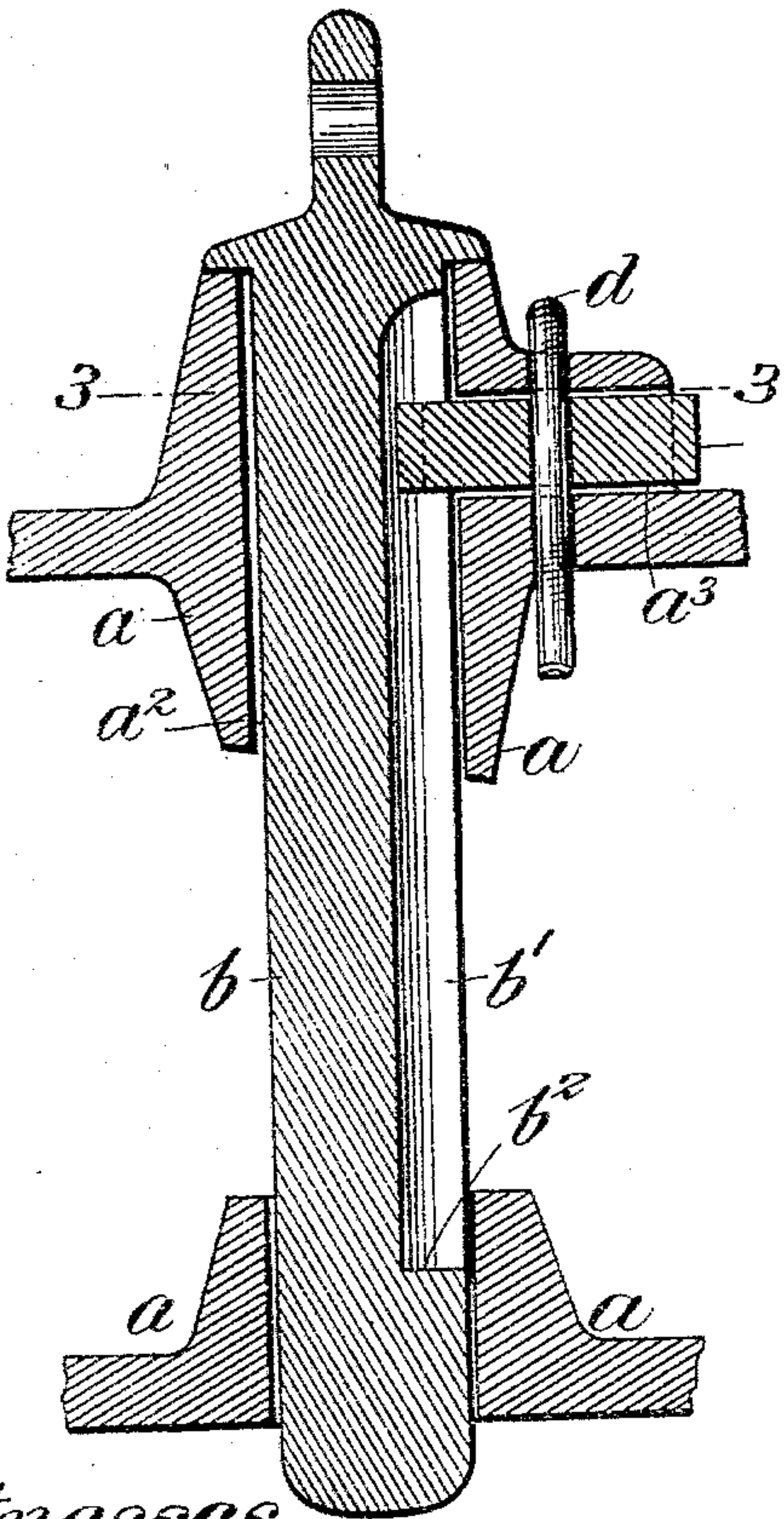
No. 556,827.

Patented Mar. 24, 1896.

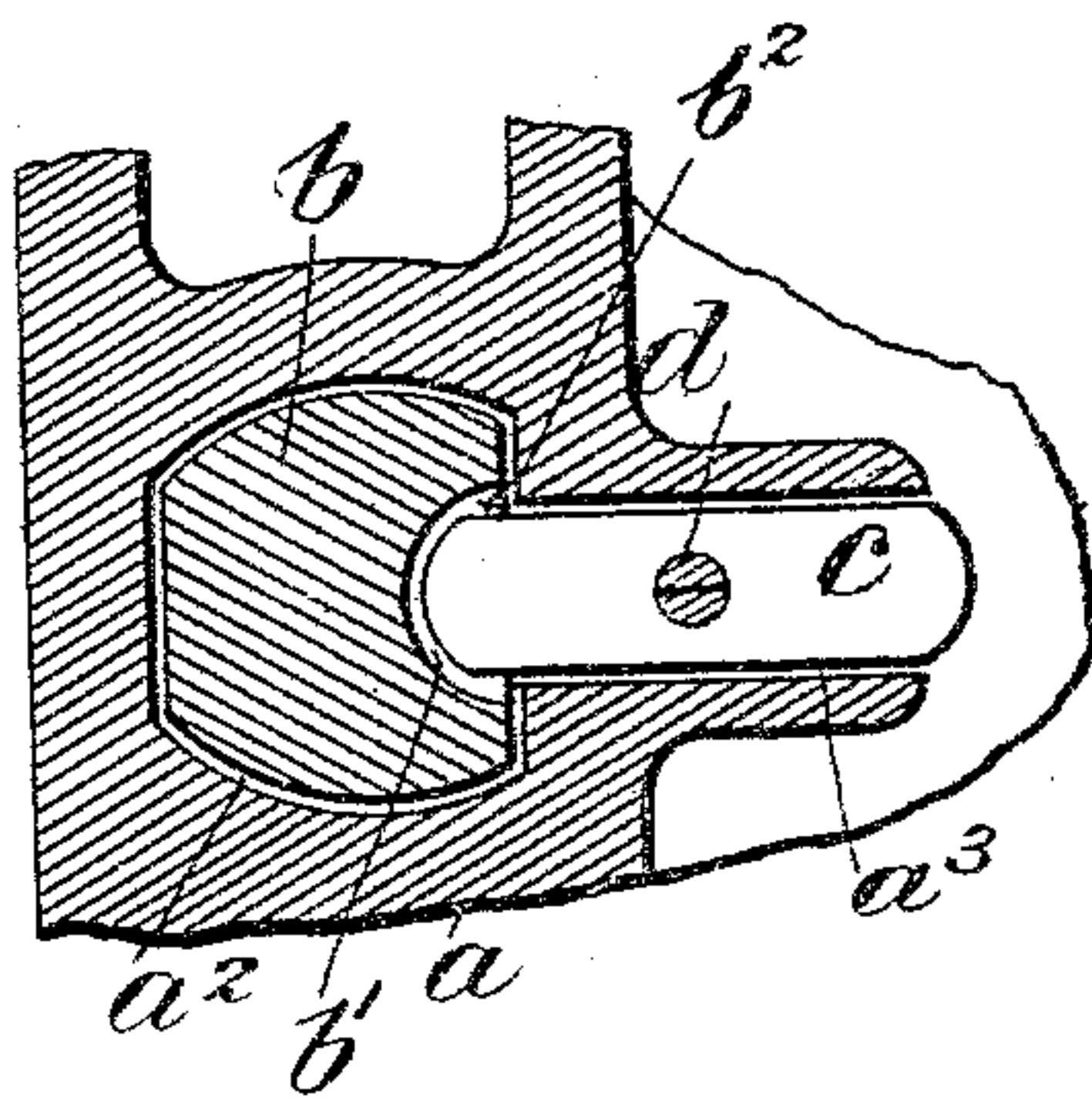
*Fig. 1,*



*Fig. 2,*



*Fig. 3,*



*Witnesses*

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*By Chas. F. Davis*  
*att'y*



# UNITED STATES PATENT OFFICE.

GARDNER MEEKER, OF NEWARK, NEW JERSEY, ASSIGNOR TO THE SMILLIE COUPLER AND MANUFACTURING COMPANY, OF NEW JERSEY.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 556,827, dated March 24, 1896.

Application filed July 19, 1895. Serial No. 556,493. (No model.)

*To all whom it may concern:*

Be it known that I, GARDNER MEEKER, a citizen of the United States, and a resident of Newark, in the 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 particularly to that class of car-couplers employing a vertically-operating pin or bolt as the means for locking the coupling hook or knuckle in a closed position, and has for its object to provide a cheap and simple device or means for limiting the upward movement of the said locking-pin when being raised to release the coupling-hook to prevent its being withdrawn from the opening in the draw-head in which it operates. This object I secure by means of the construction and arrangement of parts forming my invention, as hereinafter set forth in detail and pointed out in the claims.

Referring to the drawings, Figure 1 represents a side elevation of a coupler embodying my invention; Fig. 2, a vertical section through the coupling-pin and the adjacent part of the draw-head, (the latter being broken away,) also showing the stop device for limiting the upward movement of the pin; and Fig. 3, a cross-section through a part of the coupler at a point through line 3 3 of Fig. 2.

To explain in detail, *a* represents the draw-head of the coupler, *a'* the pivoted horizontally-moving knuckle, and *b* the vertically-operating locking-pin which is supported within an opening *a<sup>3</sup>* in the draw-head and adapted to engage with the inner arm of the knuckle to lock the latter in a closed position in the usual manner, as well understood by those skilled in the art.

In the present instance and according to my invention the locking-pin *b* is provided with a longitudinal groove *b'* in one side thereof, which terminates at a point above the lower end of the same, whereby a wall or projection *b<sup>2</sup>* is formed, with which a stop device *c* is adapted to engage to limit the upward movement of the pin, as will be described.

The stop device *c* consists of a straight bar, as shown, which is removably supported in a

fixed position in an inclosed seat or pocket *a<sup>3</sup>* in the draw-head, with one end projecting into the said longitudinal groove *b'* in the locking-pin at a suitable point to engage with the stop *b<sup>2</sup>* when the pin has been raised to the proper height, as shown by dotted lines in Fig. 2, to release the inner arm of the knuckle and allow the latter to open.

The stop device *c* is securely held in position by means of a pin *d*, which is supported in the draw-head and passes through an opening located in said stop device at a point central between its ends, as clearly shown in Figs. 2 and 3. Said stop device is of the same form or construction at each end, and being removably supported in its seat and secured at its center, as described, it is thereby capable of being reversed in position both as to its upper and lower sides and also end for end, and thus allow for any wear occasioned by the continuous contact therewith of the projection or engaging surface *b<sup>2</sup>* on the locking-pin.

In the present instance shown the groove *b'* in the locking-pin is of a semicircular form and the ends of the stop device *c* of a like shape to conform thereto, as more clearly shown in Fig. 3. The ends of the stop device might, however, in lieu of being rounded, as shown, be made square and the groove in the locking-pin be made to conform thereto, if desired, and by this change of construction the stop device be rendered capable of being reversed to employ any of its four sides in lieu of the two as allowed by the construction shown.

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 coupling hook or knuckle, of a vertically-moving locking-pin for engaging with said knuckle, provided with a projection thereon, and a stop device for limiting the vertical movement of said pin, consisting of a bar having like ends and removably supported in a seat or pocket in the draw-head so as to be capable of being reversed in position and having one end thereof extend into a position to engage with said projection on the locking-pin, substantially as described and for the purpose set forth.



2. In a car-coupler, the combination with the coupling hook or knuckle, of a vertically-moving locking-pin for engaging with said knuckle, provided with a projection thereon, and a stop device for limiting the vertical movement of said pin, consisting of a bar having like ends removably supported within an inclosed seat or pocket in the draw-head by means of a retaining-pin passing through a centrally-located opening therein, the said bar having one end thereof extending into a position to engage with said projection on the locking-pin, substantially as described and for the purpose set forth.

GARDNER MEEKER.

Witnesses:

CHAS. F. DANE,

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