

(No Model.)

2 Sheets—Sheet 1.

R. I. HAMPTON.
CAR COUPLING.

No. 401,160.

Patented Apr. 9, 1889.

Fig. 1.

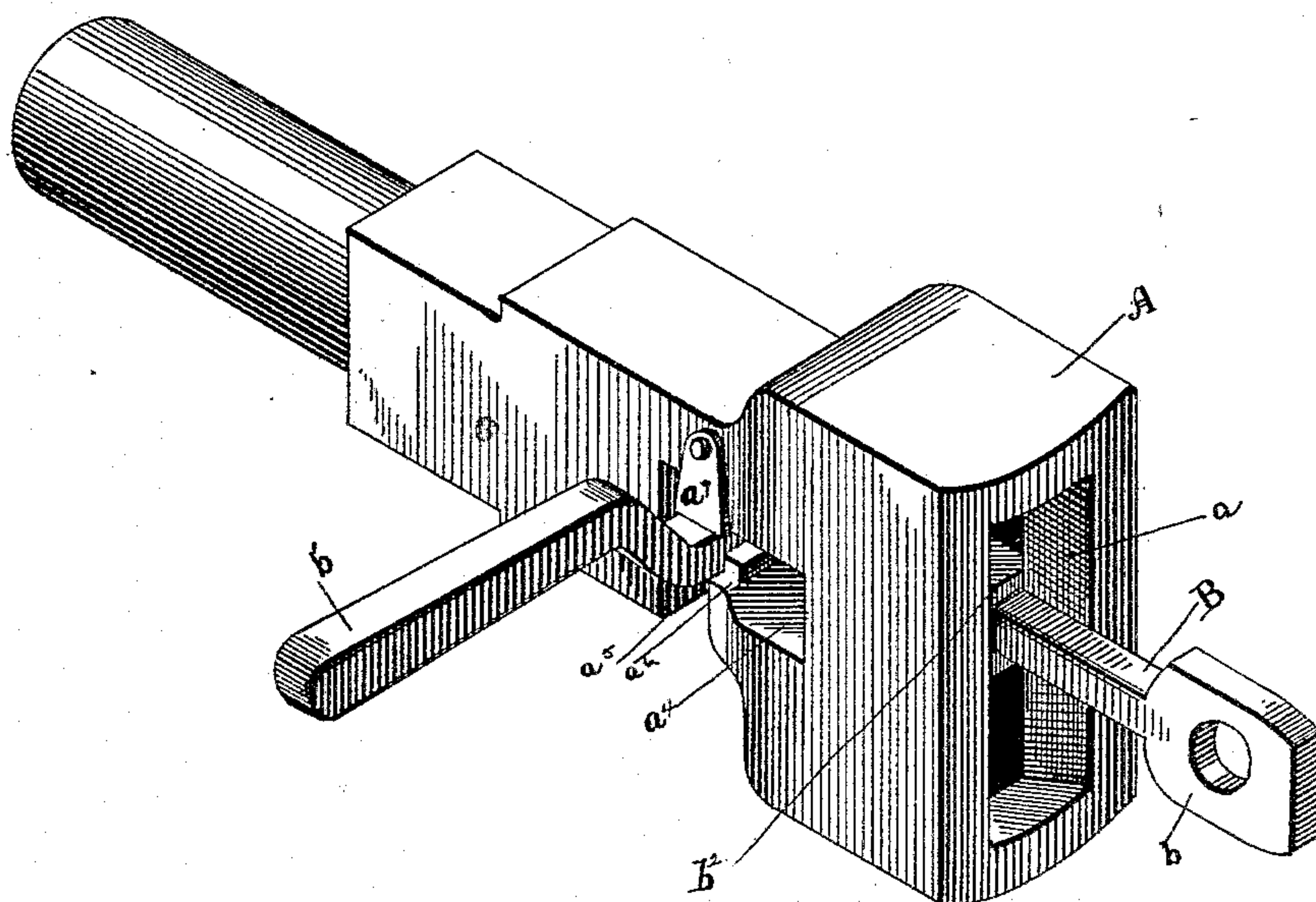
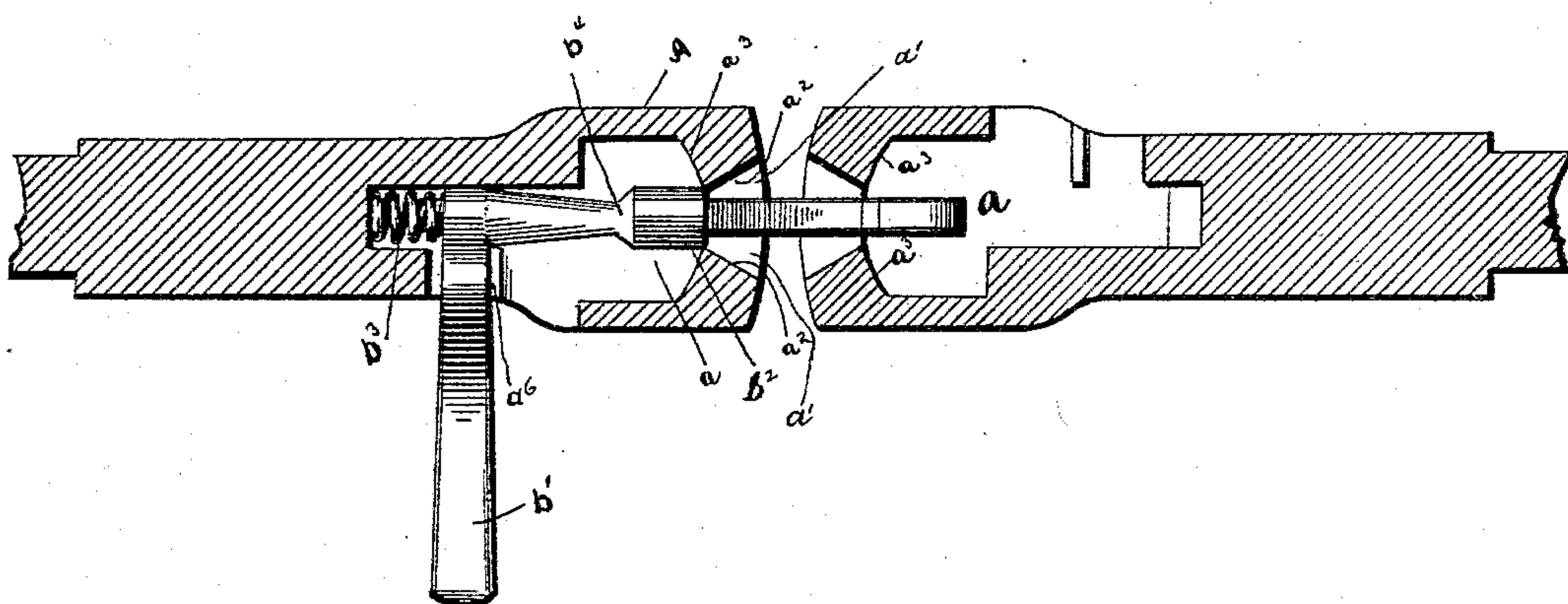


Fig. 2.



Witnesses:

N. W. Mortimer

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Inventor:

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by *A. S. Greenforth*

his Attorney

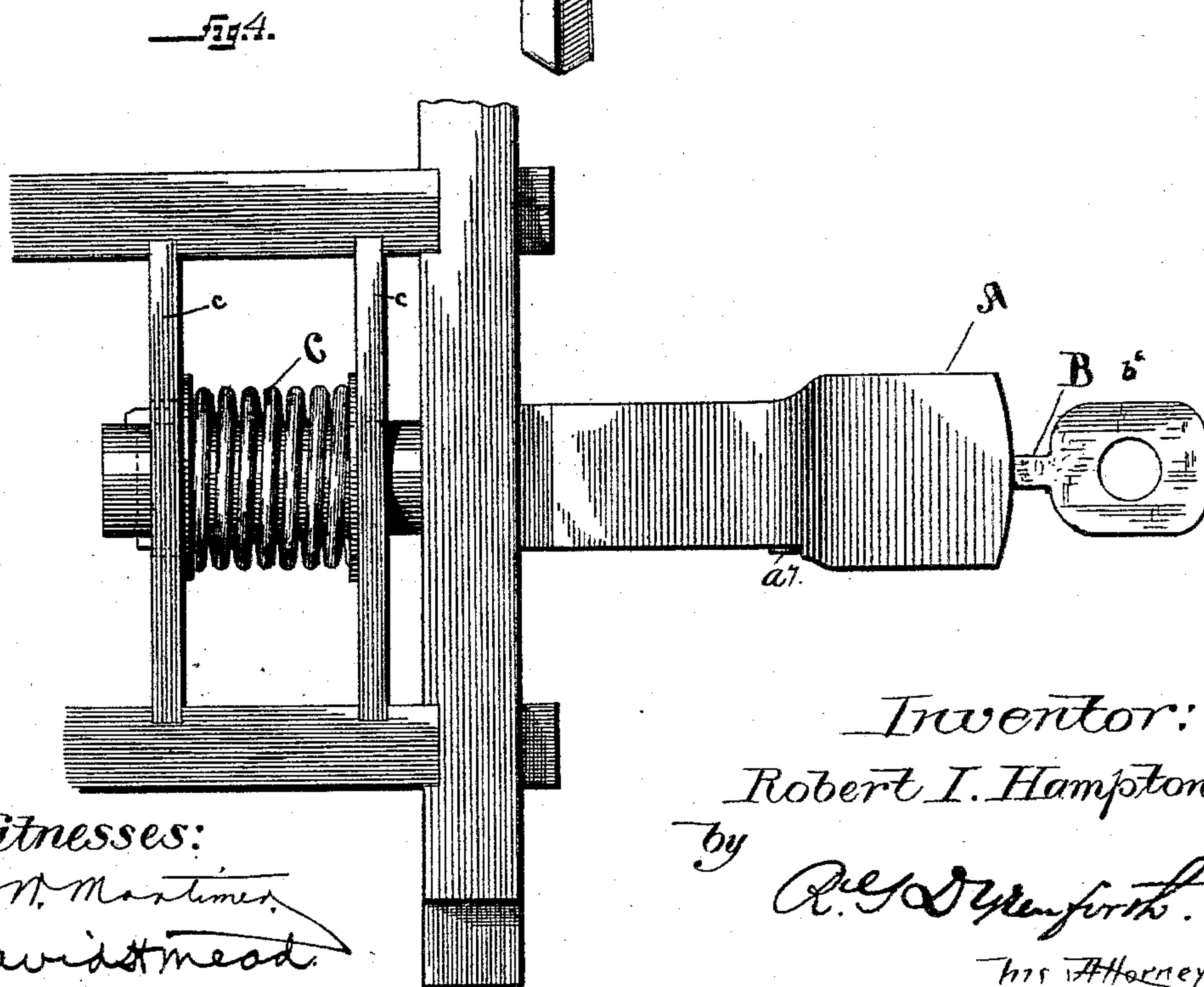
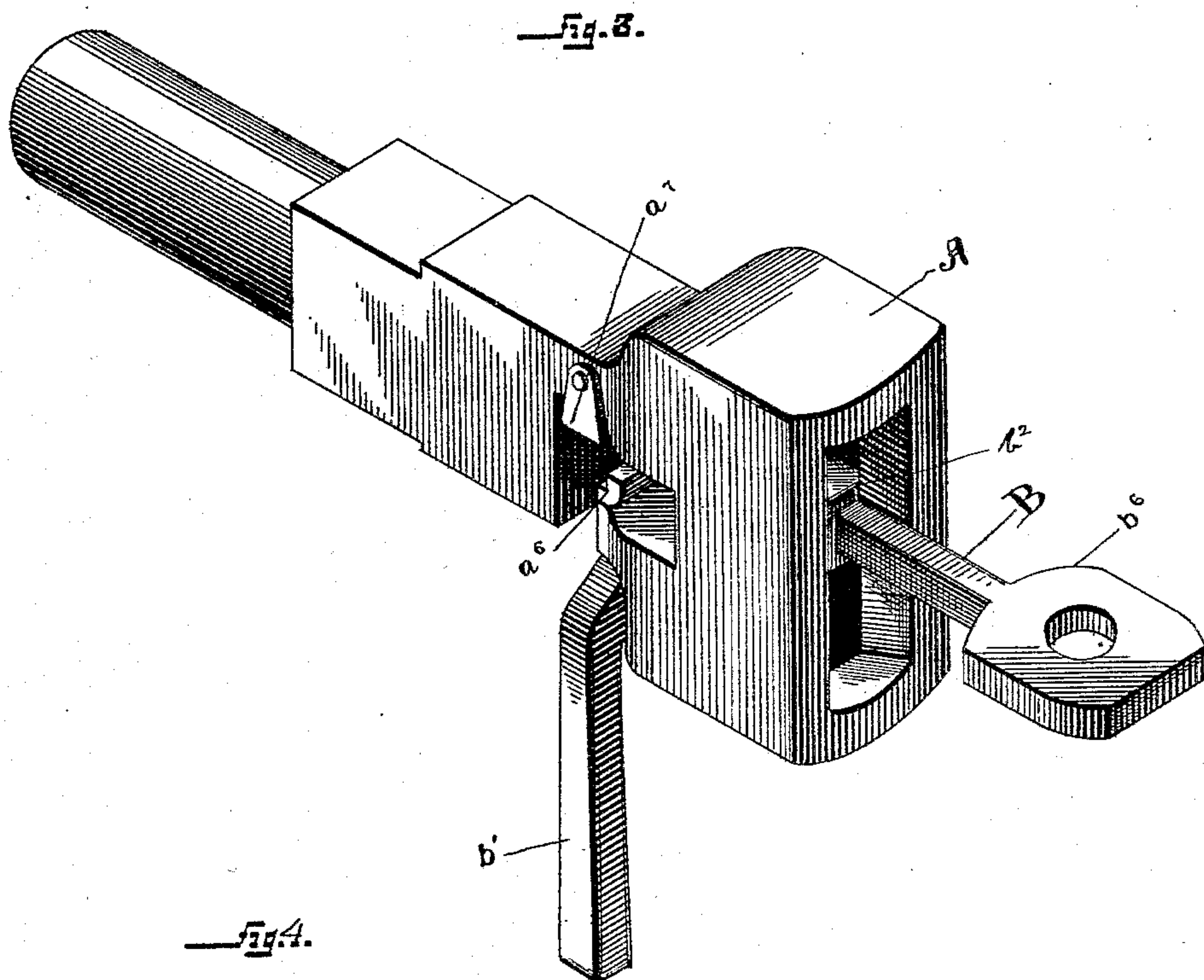
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No. 401,160.

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Witnesses:
M. N. Mortimer,
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Inventor:
Robert I. Hampton,
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UNITED STATES PATENT OFFICE.

ROBERT ISBELL HAMPTON, OF ATHENS, GEORGIA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No 401,160, dated April 9, 1889.

Application filed July 25, 1888. Serial No. 281,013. (No model.)

To all whom it may concern:

Be it known that I, ROBERT ISBELL HAMPTON, a citizen of the United States, residing at Athens, in the county of Clarke and State of Georgia, 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.

This invention relates to car-couplings.

The object is to produce a device by means of which cars may be automatically coupled upon coming together, thereby obviating the necessity of the presence of a person between the cars and consequent endangerment of life and limb.

The invention resides in the novel construction for coupler-head and coacting link and its operating devices, as hereinafter set forth.

In the accompanying drawings, in which like letters of reference indicate corresponding parts in all the figures, Figure 1 represents a perspective view of one of my coupler-heads or draw-heads with coupling-link in position ready for coupling. Fig. 2 represents a central horizontal section of the same, the coupling-link being in position within a coupler-head similarly formed. Fig. 3 represents a perspective view of a coupler-head or draw-head and coupler-link, showing the position occupied by the coupling-link when in engagement with another coupler-head, and Fig. 4 represents a plan view of the same.

In the drawings, the coupler-head or draw-head is designated by A, and has an enlarged interior opening, recess, or chamber, a , and a mouth, a' , the sides a^2 of which are inclined, so that the rear end of the mouth is narrower than its forward end, thus forming a narrow throat with curving shoulders a^3 .

Leading rearward from the interior opening or chamber, a , is a passage, a^4 , extending through the side, terminating in an opening, a^5 , through the bottom, and on one side of the passage a^4 is formed a projection or shoulder, a^6 . Above the opening a^5 , on one side of the draw-head, is a latch, a^7 .

The coupling-link is designated by the letter B, and has at one end an enlarged flattened head, b , with a hole through it, its opposite end having an arm or lever, b' , preferably

ably weighted and adapted to be turned up or down in the opening a^5 . By turning this lever the head b is turned, and, when in engagement with a coupler-head formed as shown, will be brought to bear against its shoulders a^3 , preventing withdrawal.

A shoulder or taper, b^2 , is also formed upon the coupler-link B by reducing the shank, but the shoulder is not intended to engage the draw-head during draft, the whole of the draft at the rear end being thrown upon the right-angled lever. At the extreme inner end of the coupling-link may be placed a spring, b^3 , serving to force the coupling-link forward while uncoupling; but instead of the spring I may provide the rear of the opening a^5 with a cam-face, in which case the latch a^7 may be dispensed with.

A portion of the coupling-link is cut away, as shown at b^4 , in order to permit vertical movement of the coupling-link when necessary. When the coupling-link is set in position for coupling, the lever is raised to a horizontal position, as shown in Fig. 1, the spring b^3 or cam-face forcing it forward into position against the lug or shoulder a^6 , the latch a^7 , when used, preventing the lever from being raised too high and passing over the shoulder a^6 . Upon the cars coming together the front end of the link comes in contact with the rear of the recess or chamber in the opposite draw-head, forcing the lever back out of engagement with the shoulder a^6 , its weight causing it to fall to a vertical position and to turn the enlarged head within the opposite draw-head.

It will be seen that the coupling is accomplished entirely without the aid of hand, the uncoupling being accomplished by raising the lever into proper position.

While but one coupler of each pair is provided with a coupling-link, all of the coupler-heads are similarly constructed.

The coupling-link may be applied to any coupler-head or draw-head in a few seconds. The link is provided at its outer end with a hole, as shown, so that it may be coupled to an ordinary coupling by simply introducing the link into a draw-head and inserting the ordinary coupling-pin. The shock caused by the cars being brought together is taken up by the buffer-spring C, which is suitably

mounted in cross-pieces *c* in the frame of the car in which the rear end of the draw-head is mounted. The spring also serves to prevent any shock to the car in starting, as the force
5 of the start comes upon the spring.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The combination, with a draw-head having
10 an oblong mouth with inclined sides leading into a larger interior opening provided with the lug or shoulder forming a seat, of the

coupling-link provided with the weighted lever designed to rest against the lug or shoulder when in an uncoupled position, and to
15 drop and turn the coupling-link to bring it to the position of coupling, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

ROBERT ISBELL HAMPTON.

Witnesses:

G. A. MELL,
A. L. HULL.