

(No Model.)

J. B. RIDDLE.
CAR COUPLING.

No. 497,213.

Patented May 9, 1893.

Fig. 1.

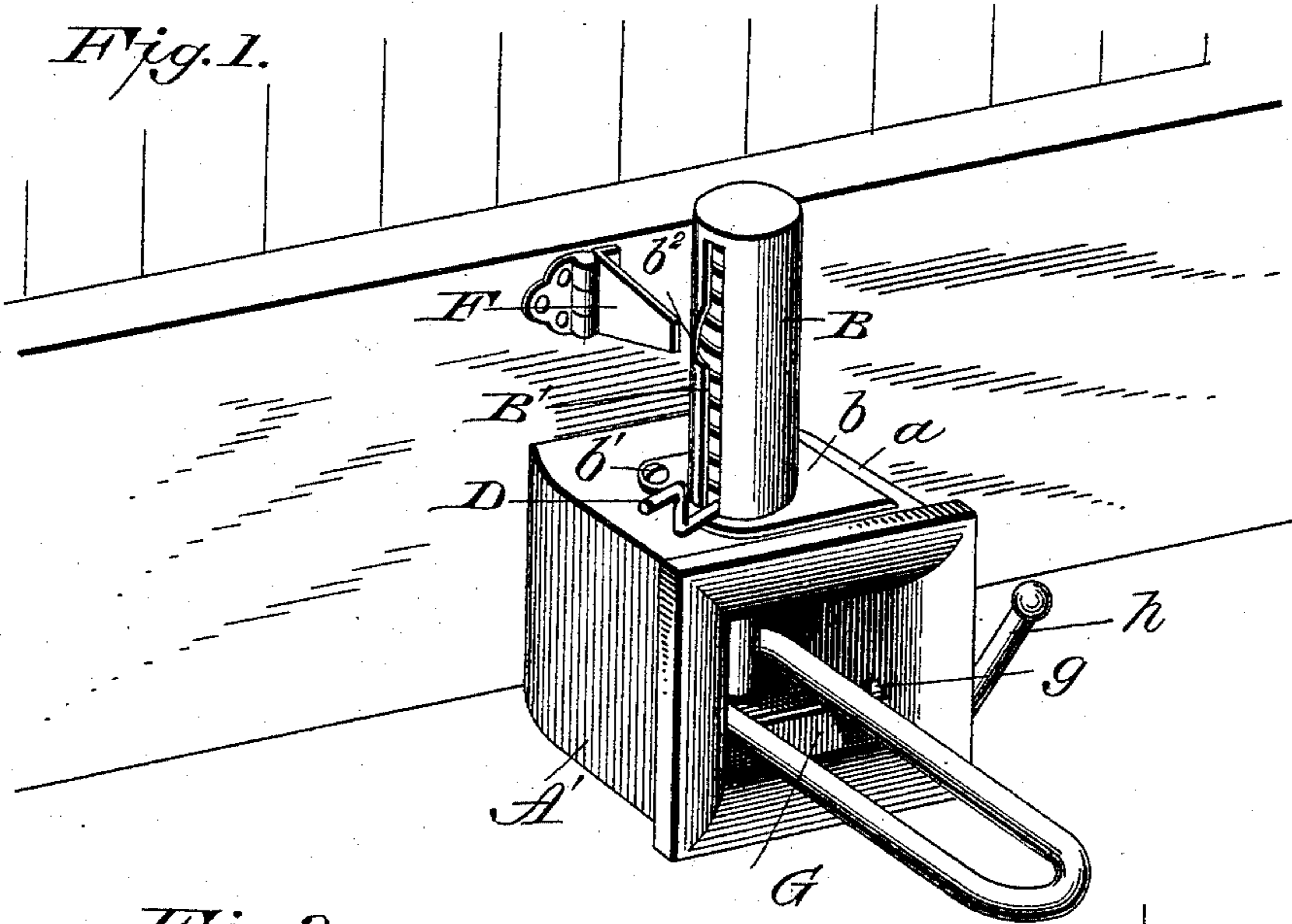


Fig. 2.

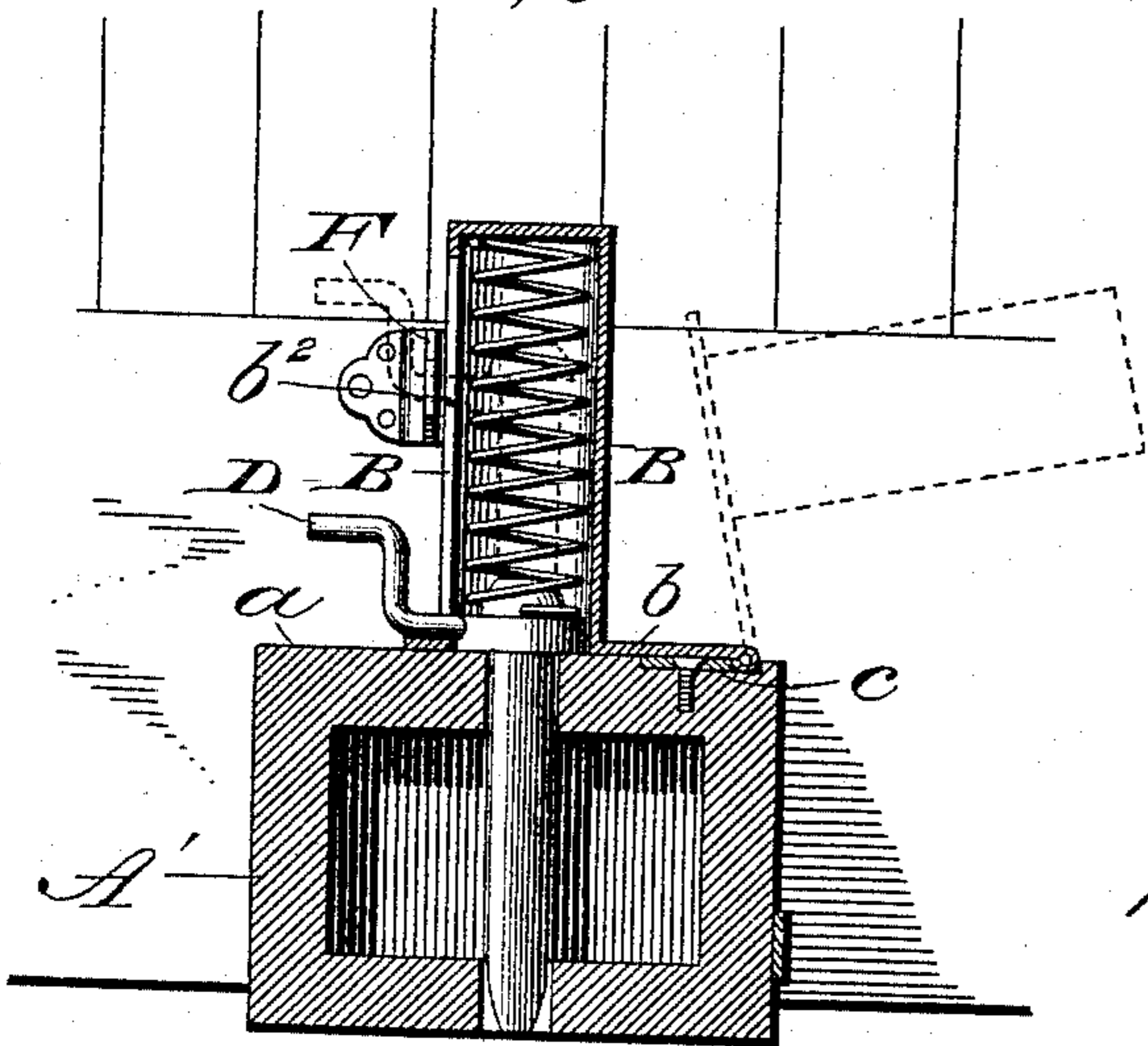


Fig. 3.

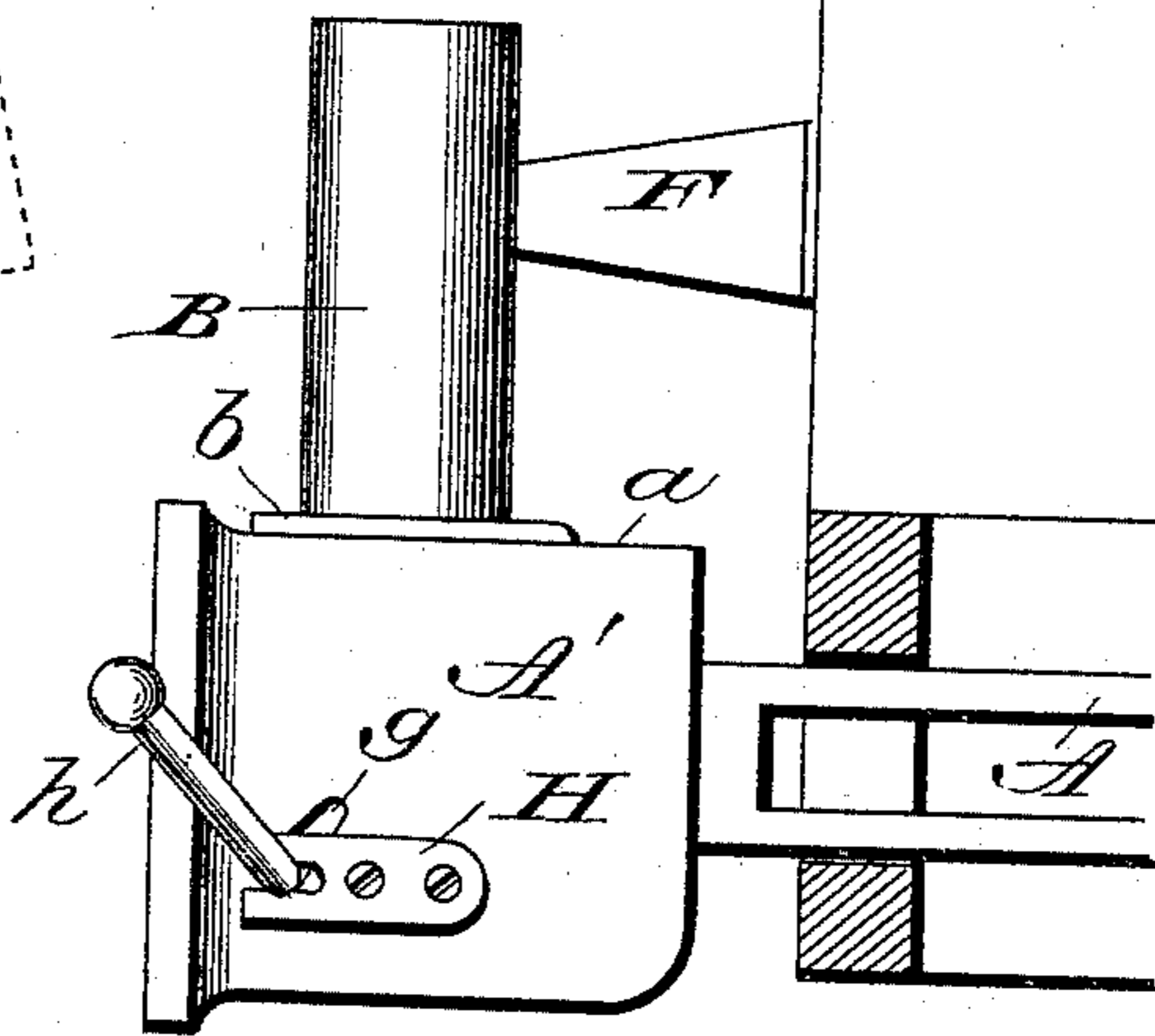
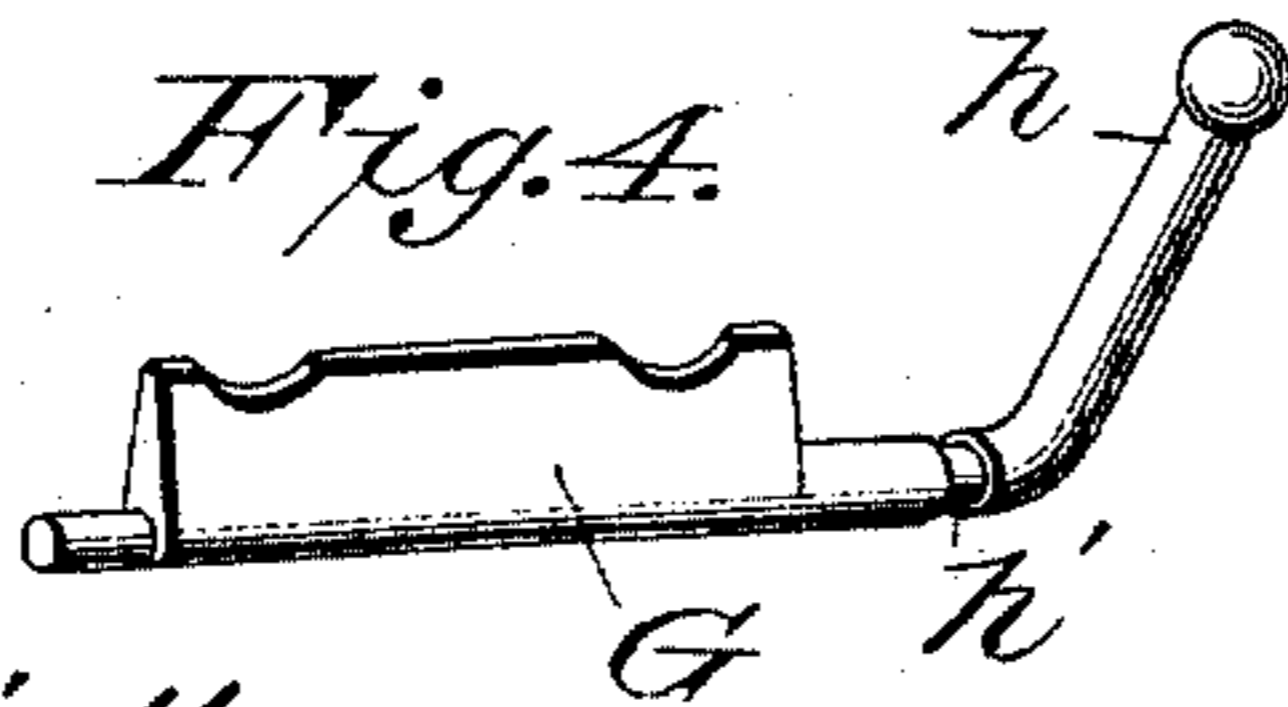


Fig. 4.



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UNITED STATES PATENT OFFICE.

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CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 497,213, dated May 9, 1893.

Application filed February 2, 1893. Serial No. 460,664. (No model.)

To all whom it may concern:

Be it known that I, JOHN B. RIDDLE, a citizen of the United States of America, residing at Morganfield, in the county of Union and State of Kentucky, 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, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

This invention relates to improvements in car couplings.

The object of the invention is to provide a car coupling of improved construction, in which the pin may be set to automatically engage with the link when the draw-heads come together; the invention also embodying certain improvements which will be hereinafter fully set forth, and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a perspective view of a car coupling constructed in accordance with my invention. Fig. 2 is a vertical sectional view. Fig. 3 is a side elevation. Fig. 4 is a detail perspective view of the link support detached.

A designates the draw-bar, which is attached to the car body so as to have a slight spring movement rearwardly, and to the forward end of this draw-bar is rigidly secured the draw-head, A'. The draw-head is chambered in the usual manner, and upon the upper side or top, *a*, is hinged a tube or housing, B, the leaf or plate, *b*, to which it is attached being pivoted to a leaf *c* rigidly attached to the draw-head; thus permitting the housing to be swung to one side, as shown in Fig. 2, when it is desired to do so. The plate *b* is apertured for the passage of the bolt *b'*, which secures the housing in a vertical position.

The housing is provided on one side with a slot, B', one of the side walls of which is cut away to form a catch, *b*², with which an arm D, carried by the head of the coupling-pin, is adapted to engage, when said coupling pin is raised and slightly turned.

F designates a plate, which is attached to the car body in rear of the housing B and a little to

one side of the same; this plate is preferably hinged to the car body, so that it can be swung to one side when it is desired to throw it out of a position for use.

The draw-head is provided through one of its side walls with an opening *g*, through which may be passed a link elevating device, G, the opposite wall having a perforation to form a bearing for the other end of the device, and adjacent to the operating handle *h* is provided a groove, *h'*, within which the members of a bifurcated plate H lie to retain the link-elevating device in position.

In operation, when it is desired to couple cars together, the plate F is turned to project outward or at right angles with the car body and the coupling-pin raised so that the arm may engage with the catch; now as the cars come together the link will enter the draw-head, and the draw-head being forced rearward will cause the arm to be disengaged by contacting with the plate F, and permit the coupling-pin to drop in place.

A helical spring may be placed within the housing above the coupling-pin, to help the downward movement of said coupling-pin.

The spring plate H will exert a force upon the link-guide G, so as to hold the link in an adjusted position.

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

1. In a car coupling, the combination, of a draw-head having a tube or housing attached thereto, said housing having a slot with a catch formed in one of its side walls, a coupling-pin having an arm which is adapted to engage with said catch, together with a plate or projection carried by the car body, said plate being adapted to contact with the arm of the coupling-pin, substantially as shown, and for the purpose set forth.

2. In a car coupling, the combination, of a draw-head having the usual chamber and pin-aperture, a tube or housing attached to the draw-head above the pin-aperture and having a slot with a catch, a coupling pin located within the housing and provided with an outwardly projecting arm which is adapted to move in the slot and engage the catch, a spring located in the housing above the coupling-pin, together with a plate carried by the car body,

which is adapted to disengage the coupling-pin from the catch, substantially as set forth.

3. In a car coupling, the combination with the draw-head of a slotted tube closed at its
5 upper end and provided with a base-plate, said base-plate being pivotally attached to the draw-head; a coupling-pin having an outwardly projecting arm which is adapted to engage a notch or catch formed to one side of
10 the slot in the tube to maintain the pin in an elevated position; a helical spring located within the housing and bearing upon the head of the coupling-pin; together with a plate hinged to the car body on a line with the arm
15 of the coupling-pin, substantially as shown, and for the purpose set forth.

4. In a car coupling, the combination, of a link-guide, constructed substantially as shown and provided beyond the draw-head with a groove h' , of a bifurcated plate attached to
20 the draw-head and located in the groove h' formed in the link-guide, whereby one of the projecting portions of the link-guide will be forced in frictional contact with the inner side
25 of the draw-head, as set forth.

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

JOHN B. RIDDLE.

Witnesses:

W. T. CANNON,
M. R. WALLER.