

(No Model.)

J. H. QUACKENBUSH.
Car Coupling.

No. 235,648.

Patented Dec. 21, 1880.

Fig. 2.

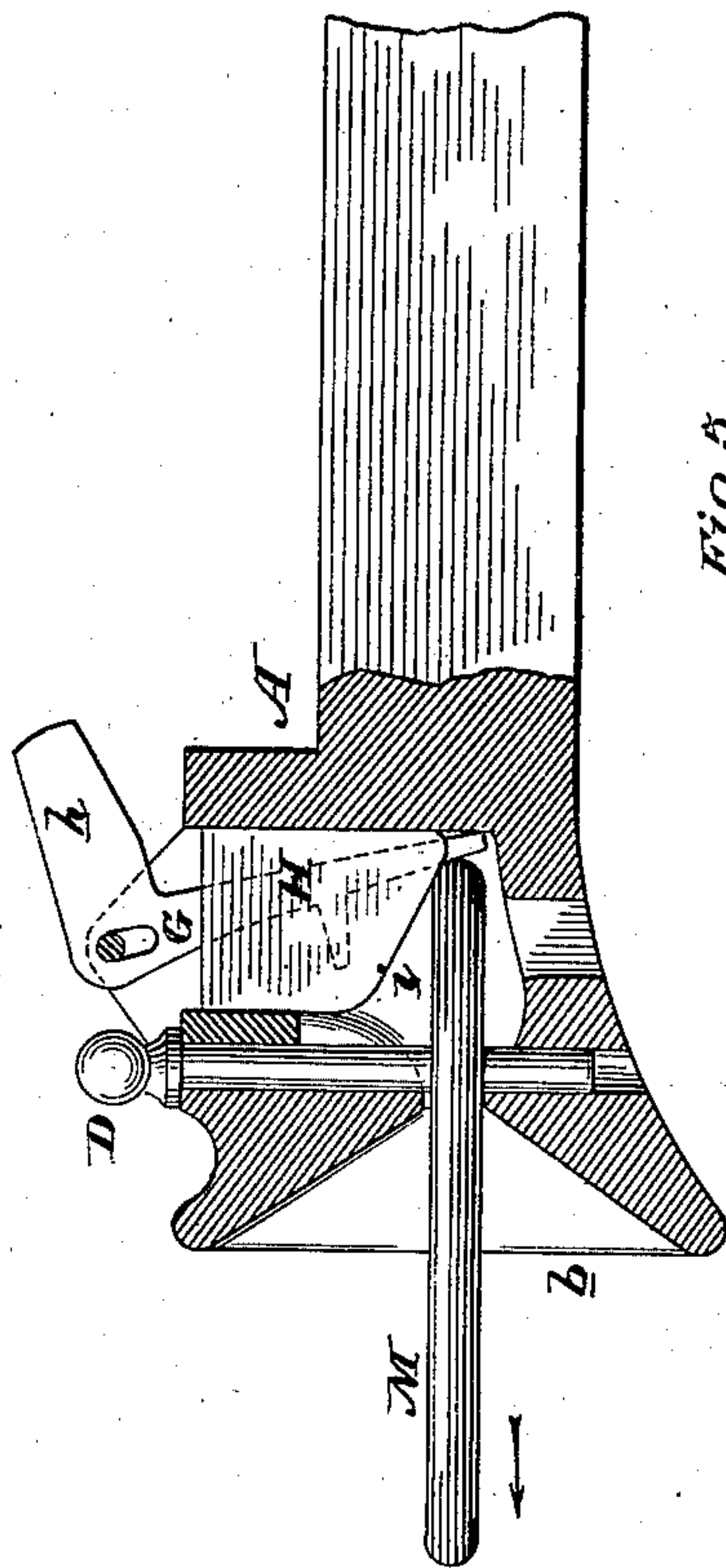


Fig. 3.

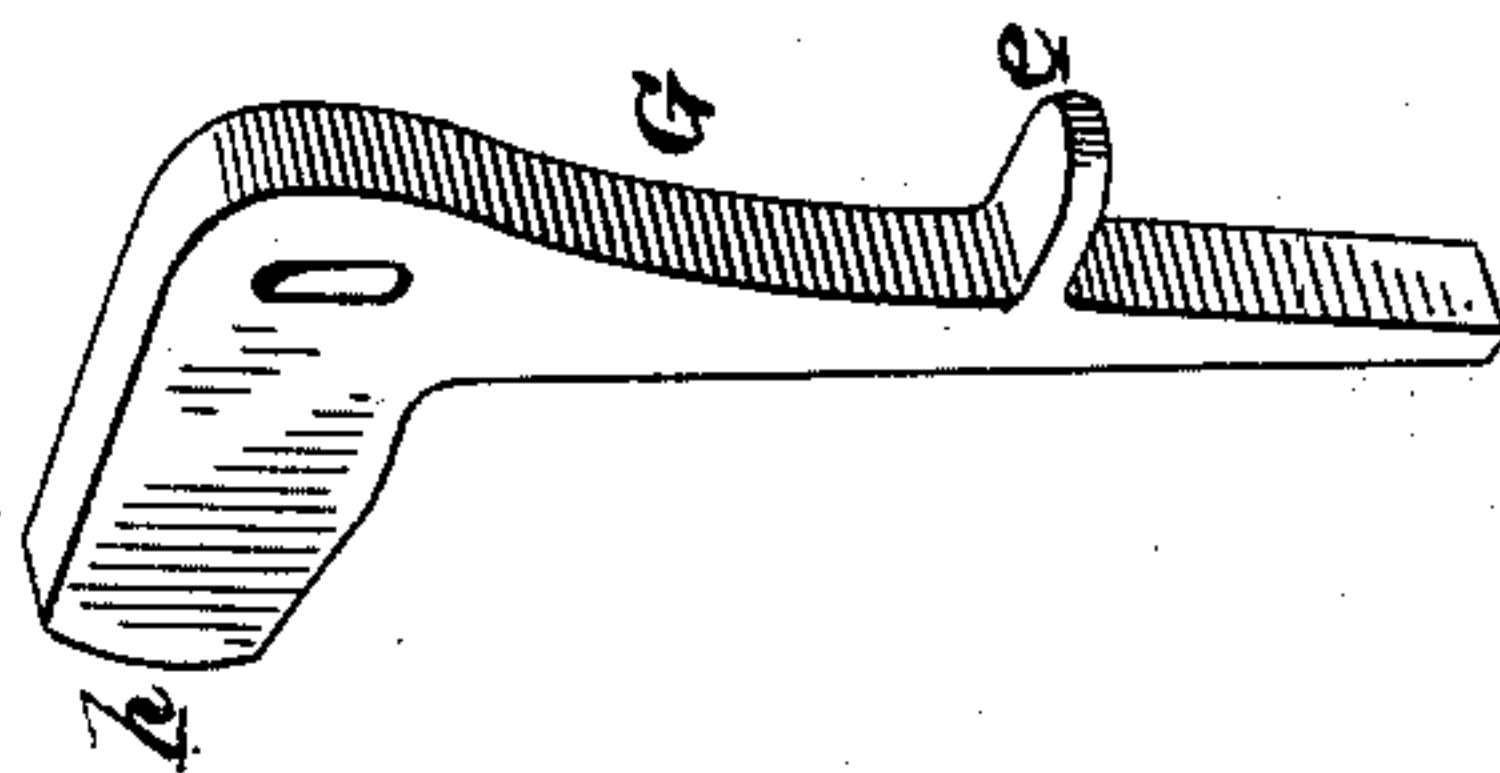


Fig. 4.

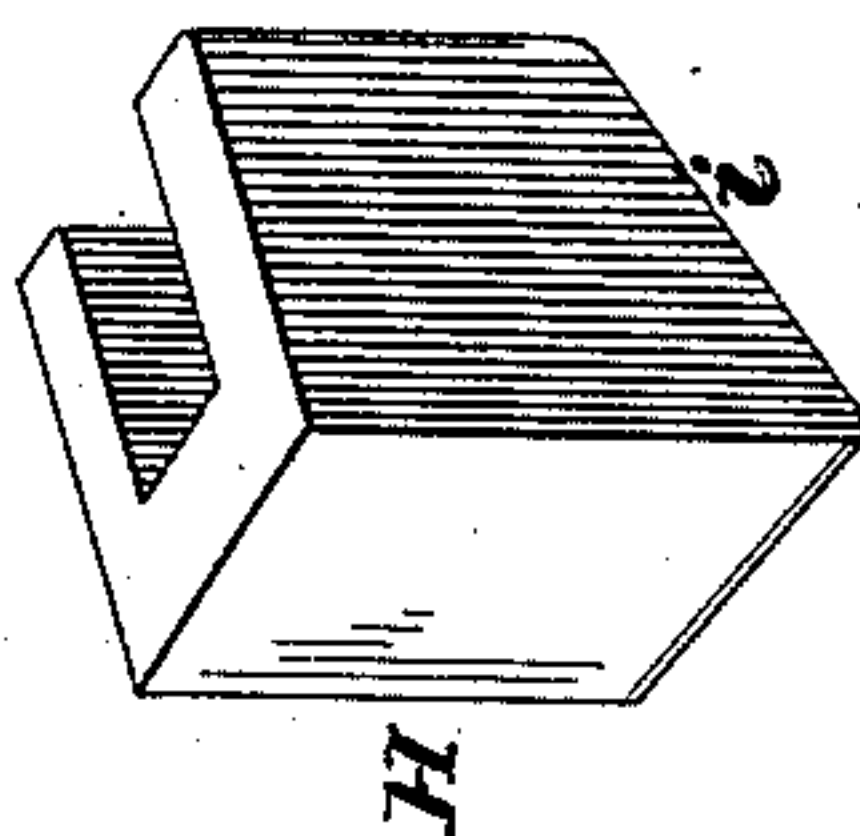


Fig. 1.

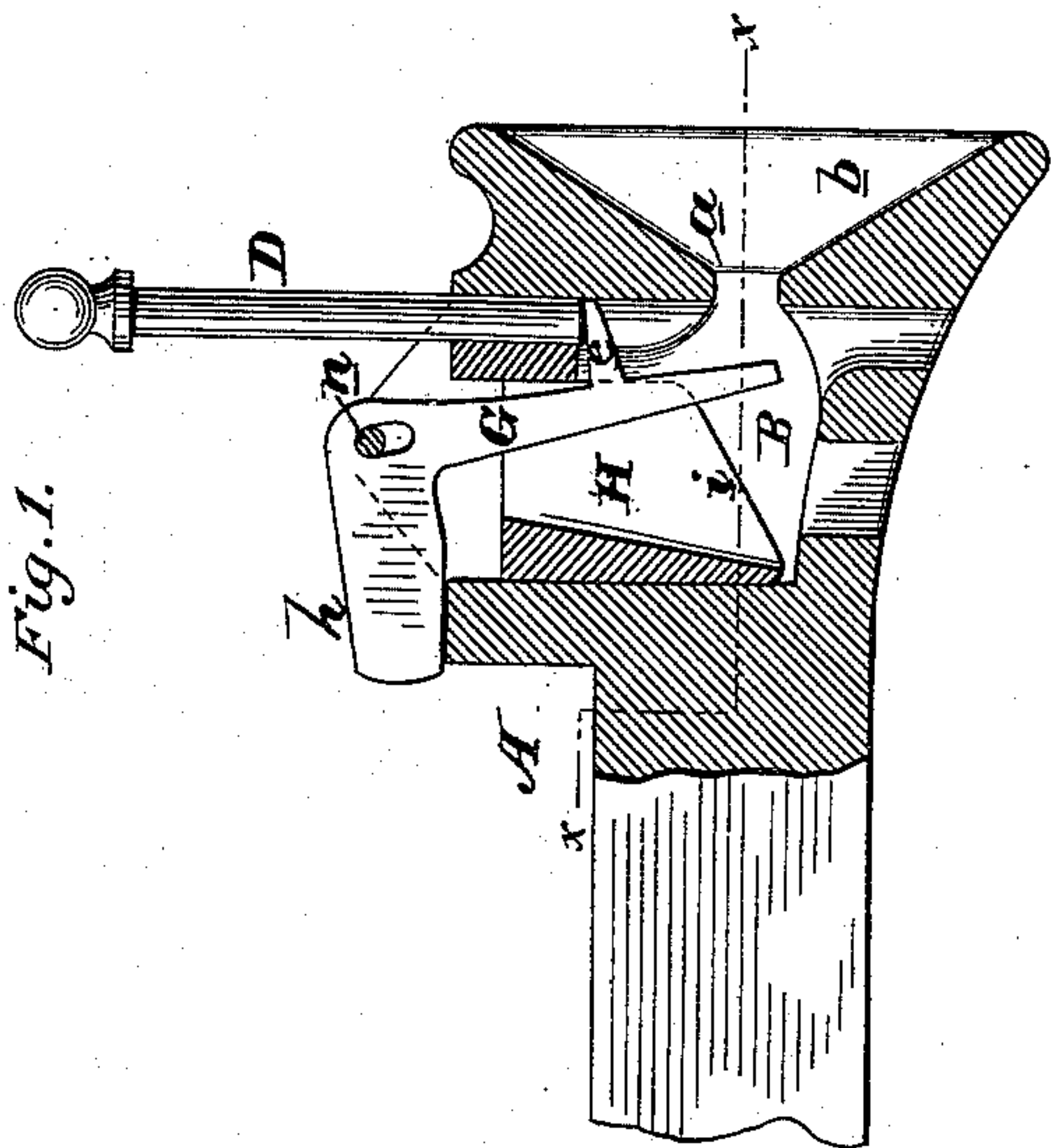
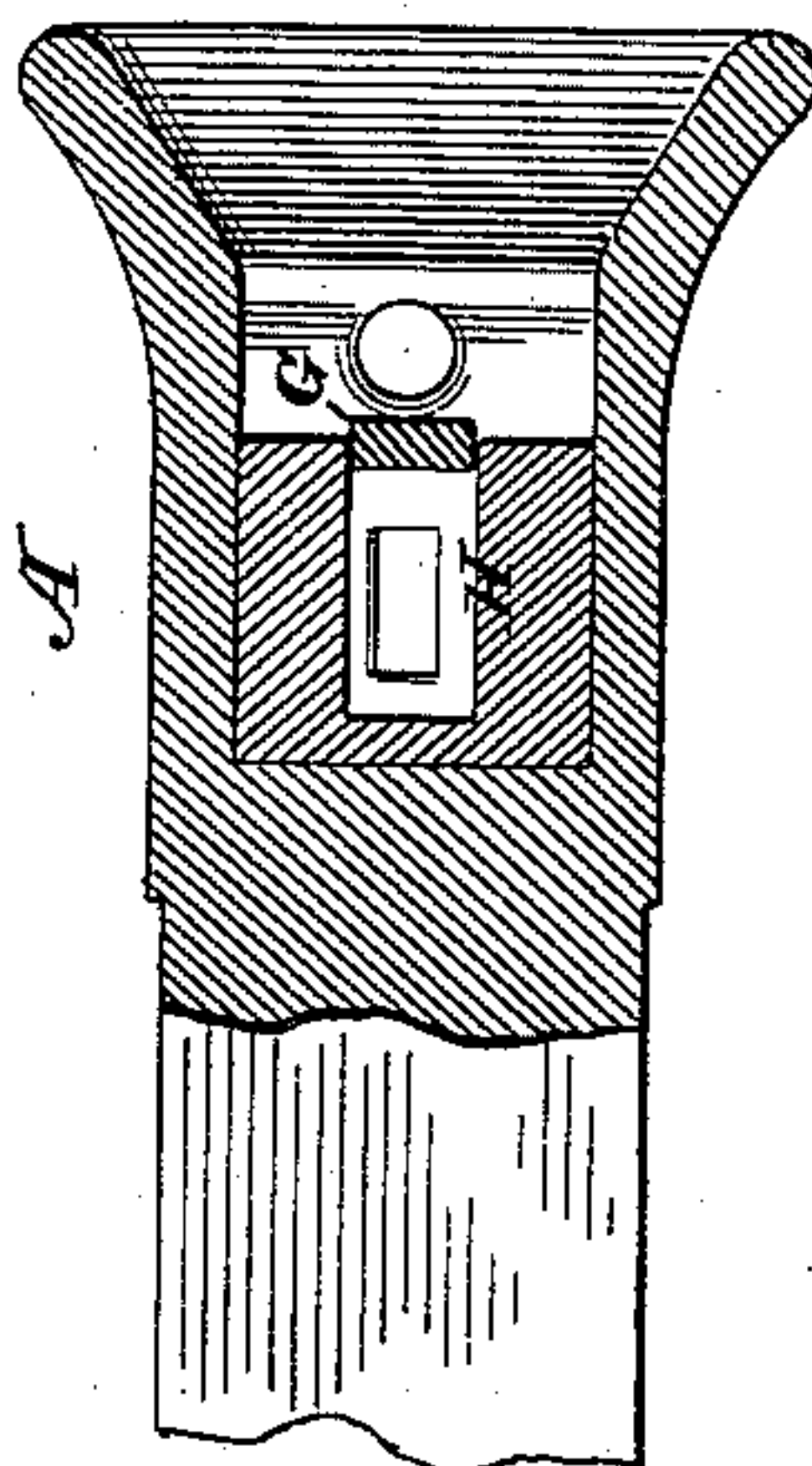


Fig. 3.



Attest:

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Jesse H. Quackenbush
by his attorneys
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UNITED STATES PATENT OFFICE.

JESSE H. QUACKENBUSH, OF EAST SAGINAW, MICHIGAN.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 235,648, dated December 21, 1880.

Application filed November 20, 1880. (No model.)

To all whom it may concern:

Be it known that I, JESSE H. QUACKENBUSH, a citizen of the United States, residing at East Saginaw, Michigan, have invented an
5 Improvement in Car-Couplings, of which the following is a specification.

My invention relates to improvements in automatic car-couplings in which ordinary coupling links and pins are used, and in which
10 the link of one coupling-head is caused to release the coupling-pin of the other head, my improvements consisting of certain devices, fully described hereinafter, whereby the link
15 of one coupling-head is maintained in a proper position for entering the other head, and whereby the link on one head is permitted to enter the other head to any extent which the length of the link may demand.

In the accompanying drawings, Figures 1
20 and 2 are vertical sections of my improved draw-head, showing the coupling devices in different positions; Fig. 3, a sectional plan on the line *x x*, and Figs. 4 and 5 detached perspective views of parts of the coupling
25 device.

A is a draw-head, constructed for attachment to a freight-car in the usual manner, and in this draw-head is a chamber, B, for receiving the devices referred to hereinafter, this
30 chamber communicating, through a throat, *a*, for the admission of the link, with the flaring entrance *b* of the head.

An ordinary coupling-pin, B, is adapted to the draw-head, and when the parts are in the
35 position shown in Fig. 1 this pin rests on a lip, *e*, projecting from an arm, G, which is pivoted at its upper end to the draw-head, and which is maintained in the position shown in the said figure until the link disturbs it by
40 the weight of a rear protuberance, *h*, forming a part of or attached to the said arm.

A block, H, is fitted loosely within the chamber B, but so that it can slide freely in a vertical direction only, the block being slot-
45 ted, as shown in Fig. 4, to admit the arm G and permit its free play independently of the block, which is beveled or curved on the under side, for a purpose rendered apparent hereinafter.

50 As shown in Fig. 1, the operating parts of the coupling-head are set for the reception of the link M, carried by the other head, (shown in Fig. 2.) When the car to which the latter

head is attached moves in the direction of the arrow the link M will enter the throat *a* of
55 the coupling-head A and strike the arm G, thereby releasing the pin D, which will drop through the link and through the lower portion of the draw-head, the slot in the block H permitting this free rearward movement of
60 the arm. After the coupling-pin has been thus released the link will penetrate farther into the head A than is absolutely necessary to effect a coupling, and will strike the inclined or curved under side of the slotted
65 block, thereby raising the latter and permitting the link to pass beneath it. When the coupling-heads are moved apart the block will fall, but will continue to bear on the link, as shown in Fig. 2, for it is important that the
70 link connected to one head should be held in such a position that it will freely enter the throat of the other head, this position being indicated in Fig. 2, where it will be observed that the link rests on the bottom of the throat
75 *a* and is held down by the block H.

I prefer to make in the arm G a vertically-elongated slot for admitting the pivot-pin *n* of the said arm, so that the latter will be at liberty to rise to a limited extent should the
80 link accidentally so strike it that freedom to rise would prevent any accident to the arm.

I do not desire to claim, broadly, a pivoted and weighted arm for supporting a coupling-pin and releasing the same; but
85

I claim as my invention—

1. The combination, in a coupling-head, of the weighted arm G, pivoted at its upper end to the head and constructed for supporting and releasing a coupling-pin, the slotted block
90 H, disconnected from and free to move vertically within the head, and inclined or curved at the bottom, so as to be raised by and rest on the link, all substantially as set forth.

2. The combination, in a coupling-head, of
95 an ordinary coupling-pin, D, the pivoted and weighted arm G, having a lip, *e*, for supporting the said pin, and the slotted block H, all substantially as described.

In testimony whereof I have signed my
100 name to this specification in the presence of two subscribing witnesses.

JESSE H. QUACKENBUSH.

Witnesses:

AUG. A. NICHOLSON,
JAS. L. SKIDMORE.