

(No Model.)

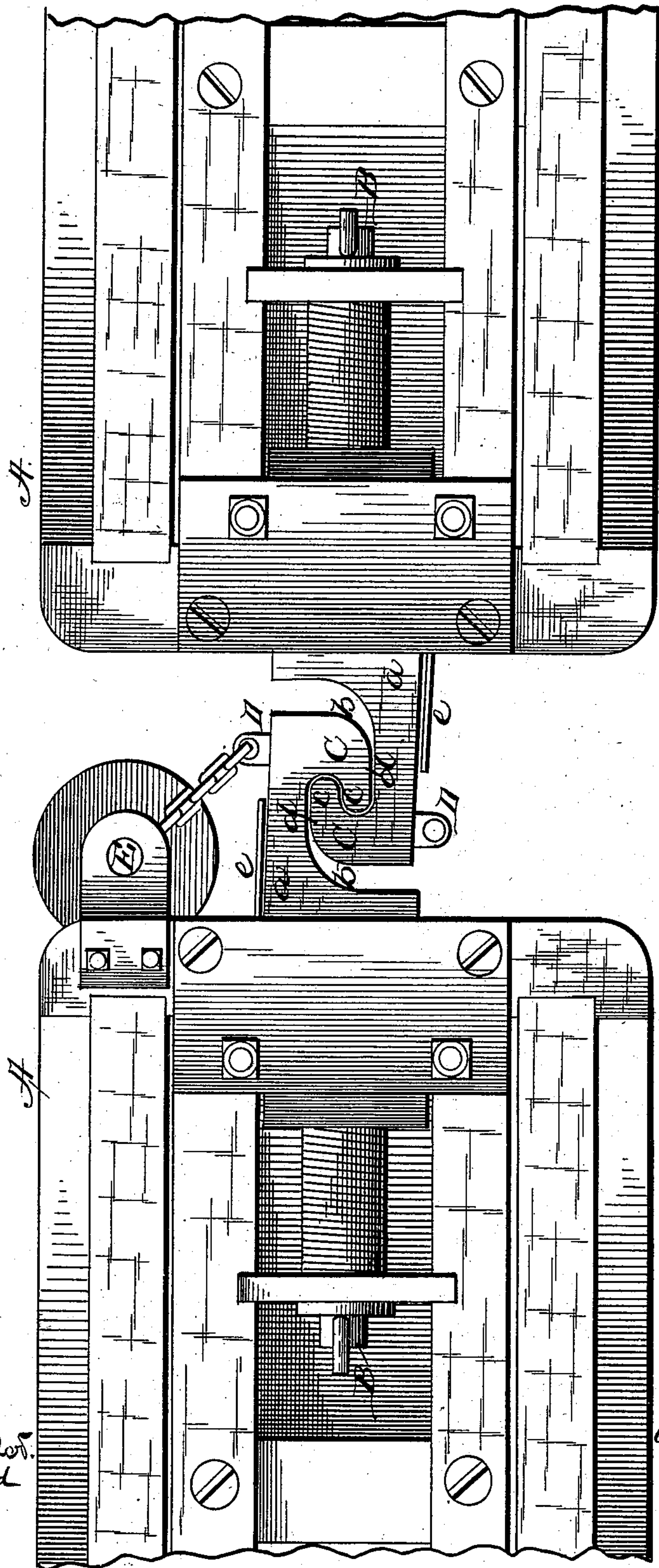
2 Sheets—Sheet 1.

V. R. DAVIS.
CAR COUPLING.

No. 376,734.

Patented Jan. 24, 1888.

Fig. 1.



Witnesses
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(No Model.)

2 Sheets—Sheet 2.

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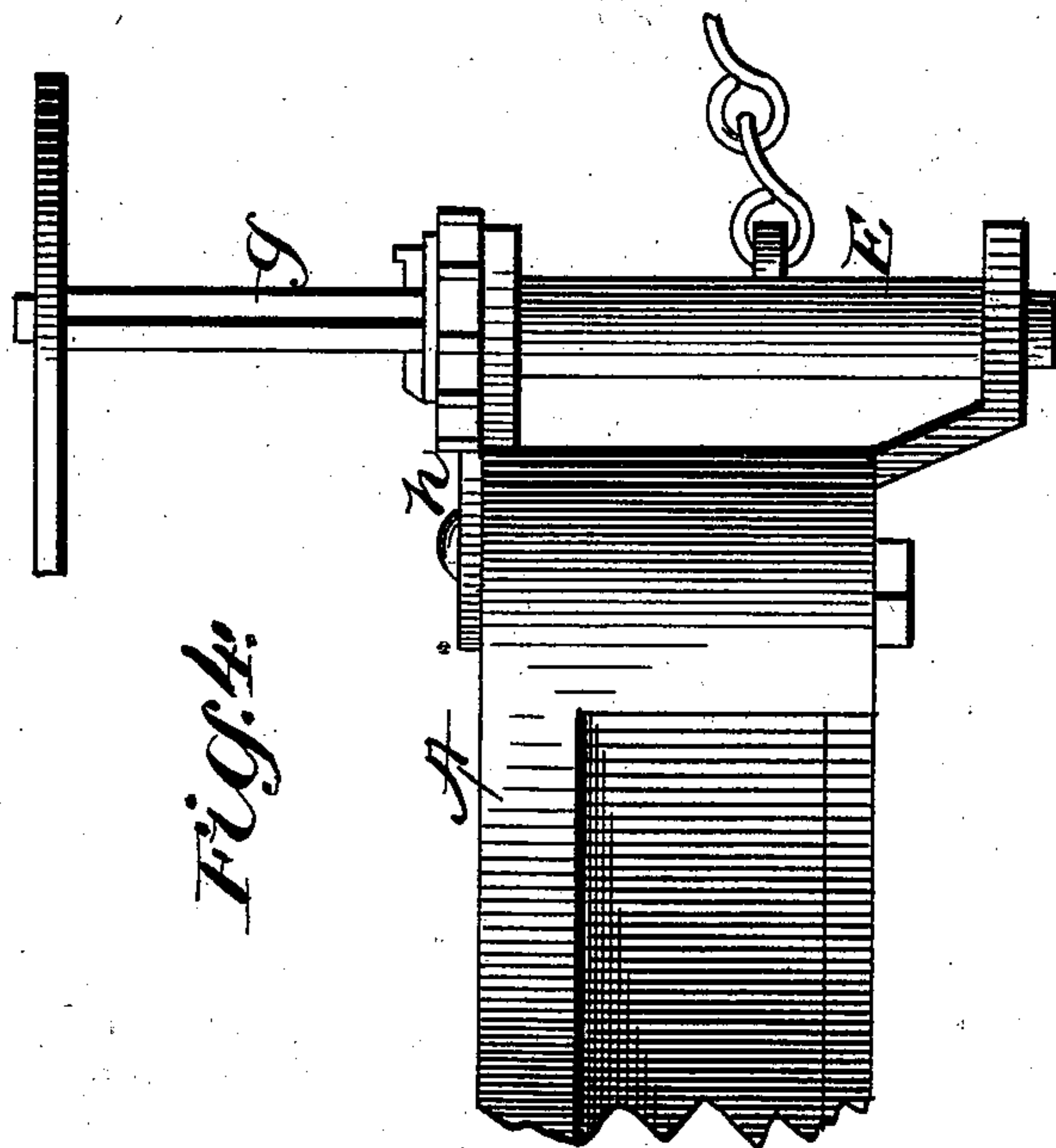


Fig. 4.

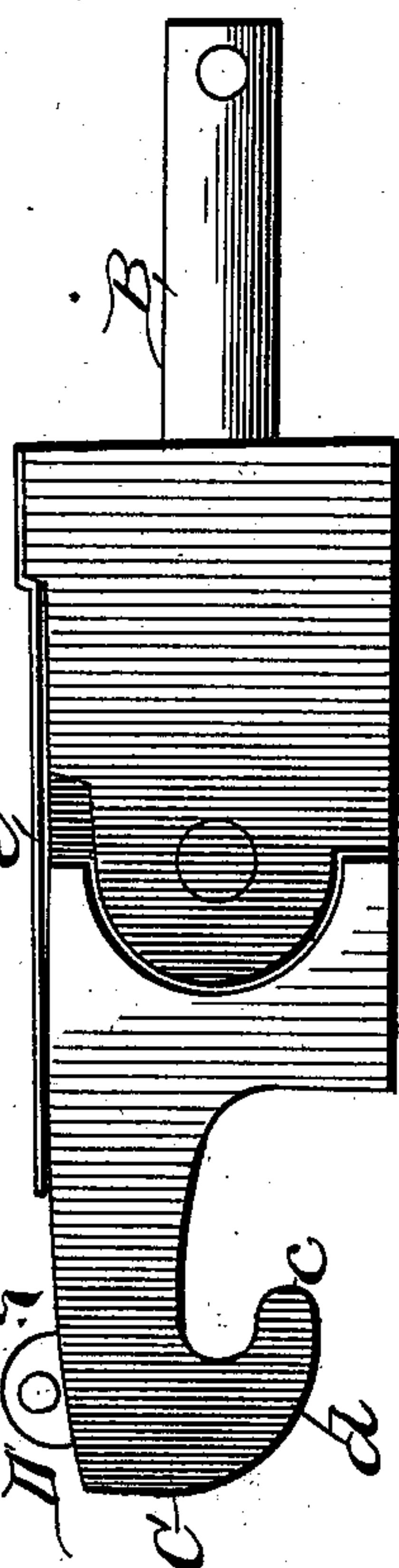


Fig. 2.

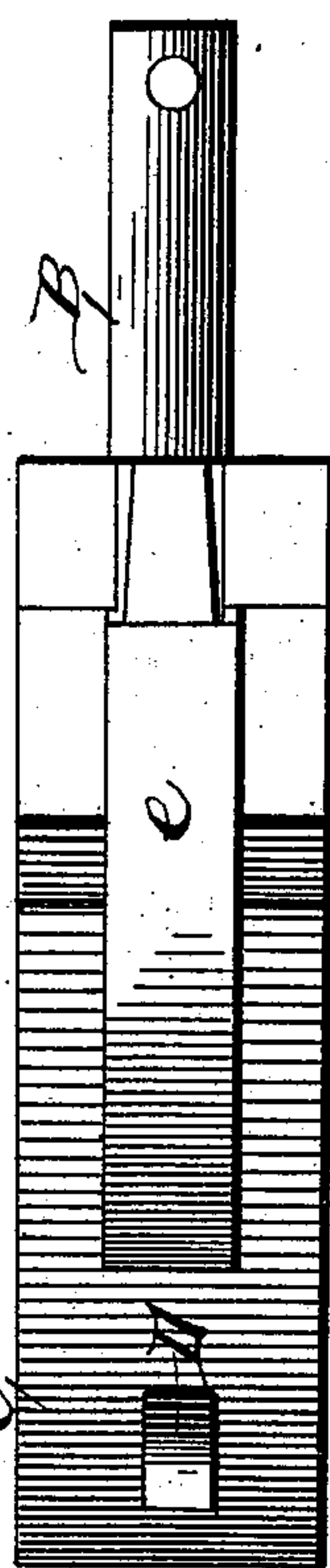


Fig. 3.

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UNITED STATES PATENT OFFICE.

VAN R. DAVIS, OF TEMPLE, GEORGIA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 376,734, dated January 24, 1888.

Application filed October 6, 1887. Serial No. 251,644. (No model.)

To all whom it may concern:

Be it known that I, VAN R. DAVIS, a citizen of the United States, residing at Temple, in the county of Carroll and State of Georgia, have invented certain new and useful Improvements in Automatic Car-Couplers; and I do 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 the letters and figures of reference marked thereon, which form a part of this specification.

My invention relates to certain improvements in car-couplers; and it has for its objects to provide for automatically coupling and uncoupling the cars, so as to prevent the necessity of a road-hand from entering between the cars, and thus prevent the accidents attendant upon the ordinary methods of coupling and uncoupling. These objects I attain by the means illustrated in the accompanying drawings, in which—

Figure 1 is a bottom plan view showing the coupler joined. Fig. 2 is a top plan view of the coupler detached. Fig. 3 is a side elevation of the same, and Fig. 4 is a side elevation of wheel-shaft and chain connection.

The letter A indicates the truck of the car, and B the draw-bar, secured thereto in the ordinary manner. The draw-bar does not extend quite to the end of the truck, and at its outward end it is slotted horizontally, as shown in the drawings, the slot forming a recess wherein the shank of the coupling-link C is pivoted. The outward end of the draw-bar is squared for about two-thirds of its width, as indicated by the letter *a*, the remaining portion of its width being rounded, as indicated by the letter *b* in the drawings. The coupling-link at the part adjoining the shank is shouldered, as indicated, about two-thirds of the width of the shoulders being squared, so as to set firmly against the squared portion of the end of the draw-bar and relieve the pivot-pin

of the link from sudden shocks when the cars are stopped, which would be apt to injure or break it. The curved portions of the respective parts of the draw-bar and link permit the link to move laterally for the purpose of coupling and uncoupling. The link at its forward end is hooked, as indicated by the letter *c*, so as to engage the similarly-hooked end of the link of the connecting car. The extremity of each link is beveled, as indicated by the letter *d*, so that when two come together they move each other laterally until the hooked portions pass and are in position to be engaged. The engagement is effected by means of the flat springs *e*, which press the links toward each other.

To the outer ends of the link is secured an eye or staple, D, from which extends a chain to an upright shaft, E, which is journaled in the truck of the car. The said shaft projects above the floor of the car and has a hand-wheel at its upper end, by which it may be turned. The said shaft is also squared at *g*, and has a ratchet-wheel secured to it at that point, which is engaged by a pawl, *h*, whereby the wheel and the link may be locked to hold the link back out of engaging position when required.

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

In a car-coupler, the draw-bar B, horizontally pivoted to the shank C, backed by the flat spring *e*, secured horizontally to said draw-bar, and the inward rear-extension grip-piece, *c*, in combination with the eye D, connected by chain to square shaft E, having ratchet adapted to engage with pawl *h* on platform of car, all arranged and operated substantially as shown and specified.

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

VAN R. DAVIS.

Witnesses:

JOEL PHILLIPS,

THOS. B. GRIFFIN.