

(No Model.)

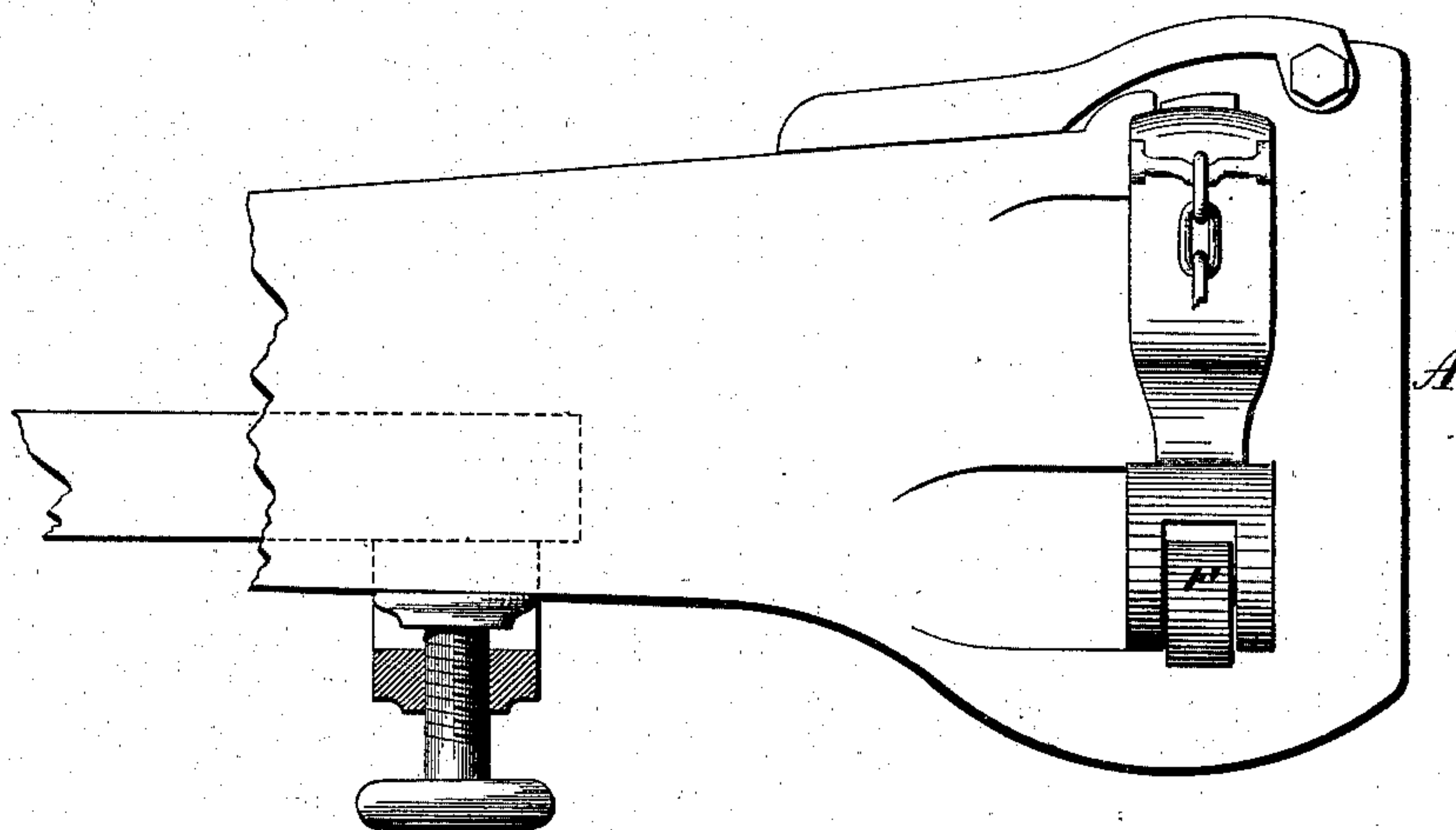
W. L. EVERIT.

CAR COUPLING.

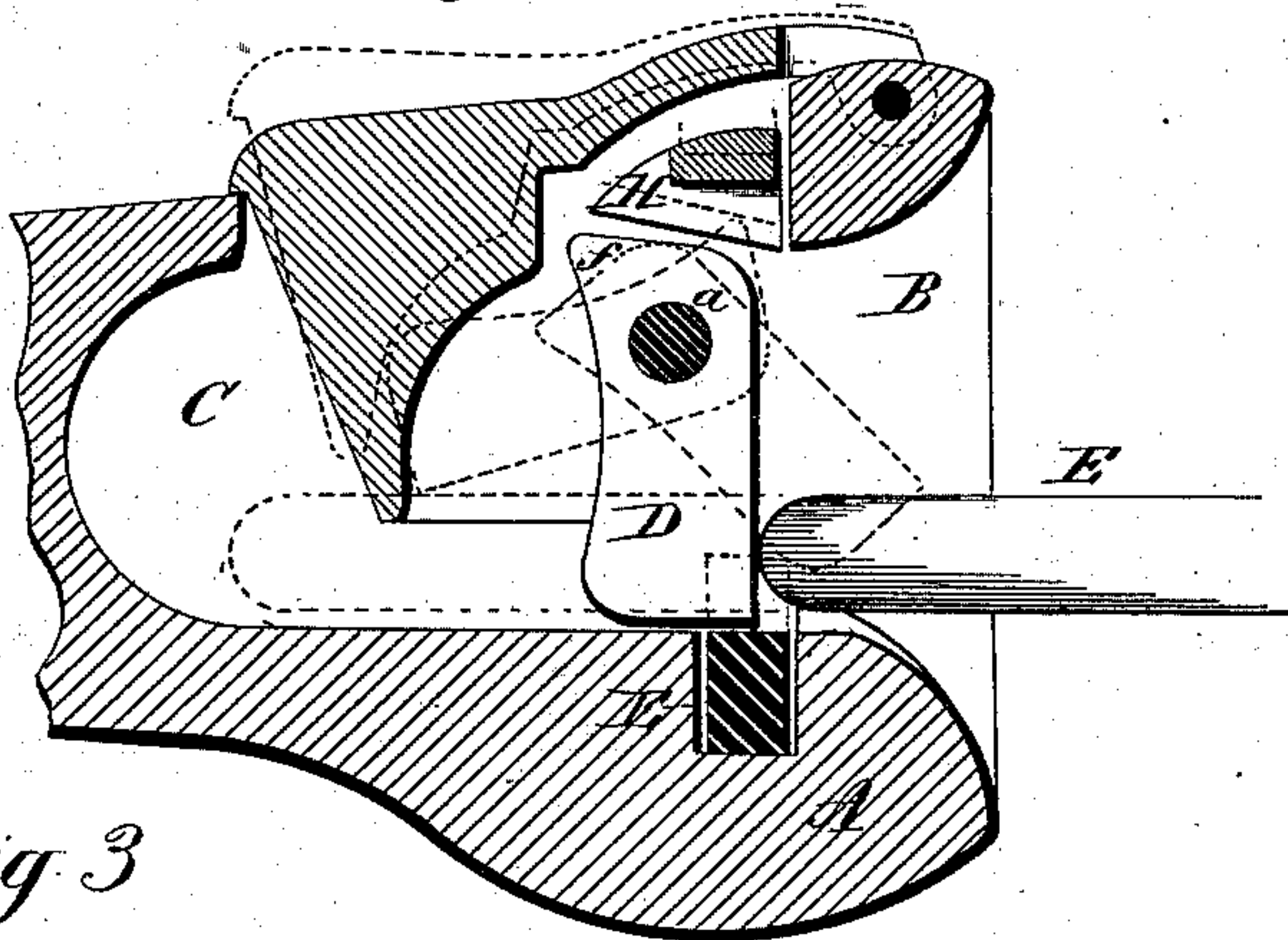
No. 258,039.

Patented May 16, 1882.

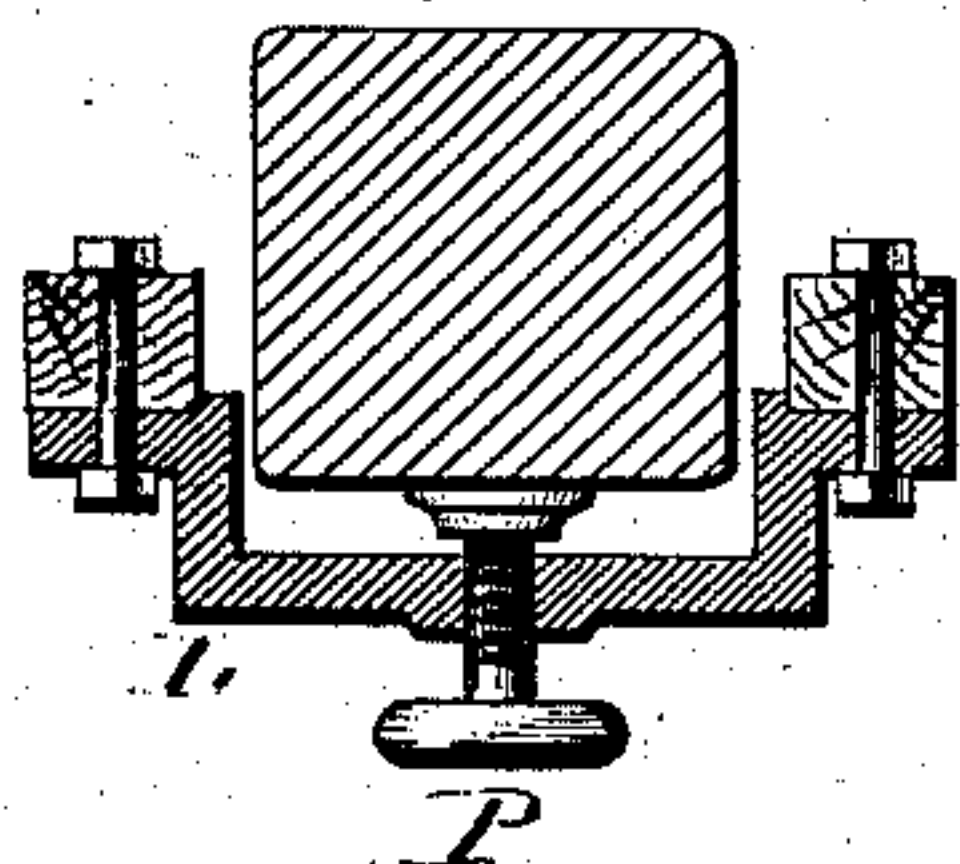
*fig 1*



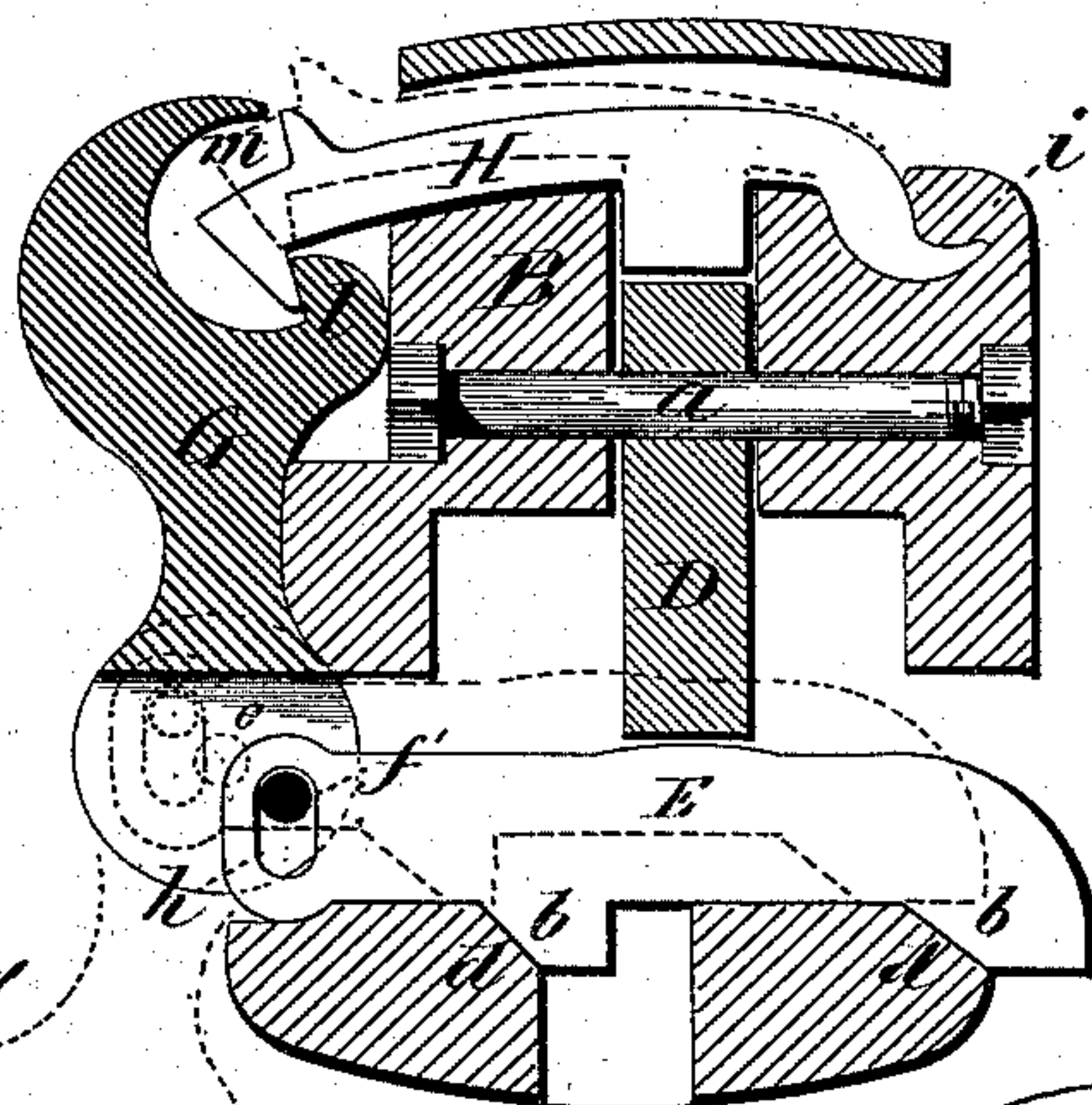
*fig 2*



*fig 4*



*fig 3*



Witnesses.

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# UNITED STATES PATENT OFFICE.

WILLIAM L. EVERIT, OF NEW HAVEN, CONNECTICUT.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 258,039, dated May 16, 1882.

Application filed January 16, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, WM. L. EVERIT, of New Haven, in the county of New Haven and State of Connecticut, have invented a new Improvement in Car-Couplings; and I do hereby declare the following, when taken in connection with accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a side view; Fig. 2, a longitudinal central section; Fig. 3, a vertical section cutting in front of the locking-lever; Fig. 4, a transverse section through the adjusting-screw.

This invention relates to an improvement in the car-coupling for which Letters Patent of the United States were granted to me dated October 5, 1880, No. 232,953. In that patent the lever which locks the bolt after the link has been introduced was hinged upon one side of the head, extended across in front of the bolt to the opposite side, where it was hung to a latching-lever, so that when the latch was disengaged it would raise that end of the lever and bring it up in front of the bolt. This gave to the locking-lever a vibratory movement, it turning on a pivot or fulcrum at one end, and necessitates a bolt to make that pivot. In practice I find such bolts or hinged connections to be objectionable.

The object of my present invention is principally to overcome this objection and raise the lever or bar bodily upward, instead of a vibratory movement; and it consists in arranging the bar upon inclined seats, and so that when the latching-lever is disengaged it will draw the locking-bar toward that side and up the inclines, raising it bodily in front of the bolt; and it also consists in a device for adjusting the coupler so as to engage cars of widely-different elevations.

A represents the head having a mouth, B, of usual form. In rear of the mouth is a chamber, C. In this chamber, above the mouth, on a pivot, *a*, the bolt D is hinged, so that its own gravity holds it in substantially a vertical position, and so that when a link, E, is entered, as seen in Fig. 2, its end will strike the bolt D and turn it to the rear until the link has passed so far in (as indicated in broken lines, Fig. 2) that the bolt D can fall within the link.

Thus, unless prevented, the bolt will be turned forward by drawing upon the link until the link will escape from the bolt, as indicated in broken lines, Fig. 2.

Below the mouth B, and forward of the bolt, the transverse locking-bar F is arranged. This bar, instead of being hinged at one side, as in my previous patent, is constructed upon its under side with two inclines, *b b*, and the seat in which it rests in its normal condition, as seen in Fig. 3, is constructed with two corresponding inclines or shoulders, *d*. The bar extends across to the opposite side, where it is hung to the lower end of the latch-lever G. The said latch-lever G is arranged to swing upon a pivot, *e*. It is engaged with the bar F by a stud, *f'*, on the latch-lever working in a slot, *h*, in the end of the bar. The latch-lever G is engaged at the upper end by a latch, H, hinged upon the opposite side, as at *i*, so as to engage a shoulder, *l*, on the latch-lever when the said latch-lever is turned into its upright position, as seen in Fig. 3. In this condition the bar F lies below the bolt D, and so that the bolt will swing free of it to permit the link to be drawn out. The stud *f'* on the lever G is eccentric to the pivot *e* or center of motion on which it turns. Hence when the lever G is dropped, as indicated in broken lines, Fig. 3, it turns and draws the bar F toward it. The bar riding up the inclines rises bodily upward, and so as to bring it in front of the bolt, as seen in broken lines, Figs. 2 and 3.

The upper end of the bolt D is made cam-shaped, as at *f*, so that when the link E is forced inward and turns the bolt, as seen in Fig. 2, the cam-shaped end of the bolt strikes the latch H and lifts it, as indicated in broken lines, Fig. 3. In thus rising, the back of the latch, as its nose passes from the shoulder *l*, strikes an incline, *m*, on the lever G above and forces it away until it has passed its center of gravity. Then the lever G falls of its own weight and raises the bar F, as before described, into its position in front of the bolt, and thus holds the bolt within the link and prevents the link from being drawn out. When it is desired to disengage the link the lever G is turned up, the latch H automatically engaging with it, as seen in Fig. 3, which causes the bar F to fall down the inclines and release the bolt, as before described.



The construction and operation, aside from the arrangement of the bar F, are substantially the same as in my patent before referred to.

In freight-cars the height of the platform or coupler from the ground is much greater on some roads than on others, and because of the unavoidable interchange of cars it is essential that the coupler shall be of such a construction that a car with the highest coupler may be engaged with a car with the lowest coupler. This is usually done by means of bent links, which occasion little inconvenience if they happen to be at hand, but they are seldom so readily to be found.

To adjust the coupler to different elevations I arrange a yoke, L, across beneath the body of the coupler, and through that is an adjusting-screw, P, upon which the coupler will rest. Then by turning the screw in one direction or the other the coupler may be raised or lowered accordingly, and thus the coupler is readily

adapted to other couplers of different elevations without the change of links.

What I claim as an improvement on my Patent No. 232,953 is—

1. The combination of the bolt D, the latch-lever G, and its latch H with the bar F, arranged transversely across in front of and below the bolt, constructed with inclined seats below and engaged with the said latch-lever G, so that as the said latch-lever G is turned in one direction it will draw the bar toward it and up the inclines to raise the bar bodily, and in the opposite direction permit the bar to fall down the inclines, substantially as described.

2. In a car-coupling, the yoke L and adjusting-screw P, for the adjustment of the elevation of the coupler, substantially as described.

WILLIAM L. EVERIT.

Witnesses:

JOHN E. EARLE,

JOS. C. EARLE.