

(No Model.)

C. J. LANGENBACH.

CAR COUPLING.

No. 285,042.

Patented Sept. 18, 1883.

Fig. 1.

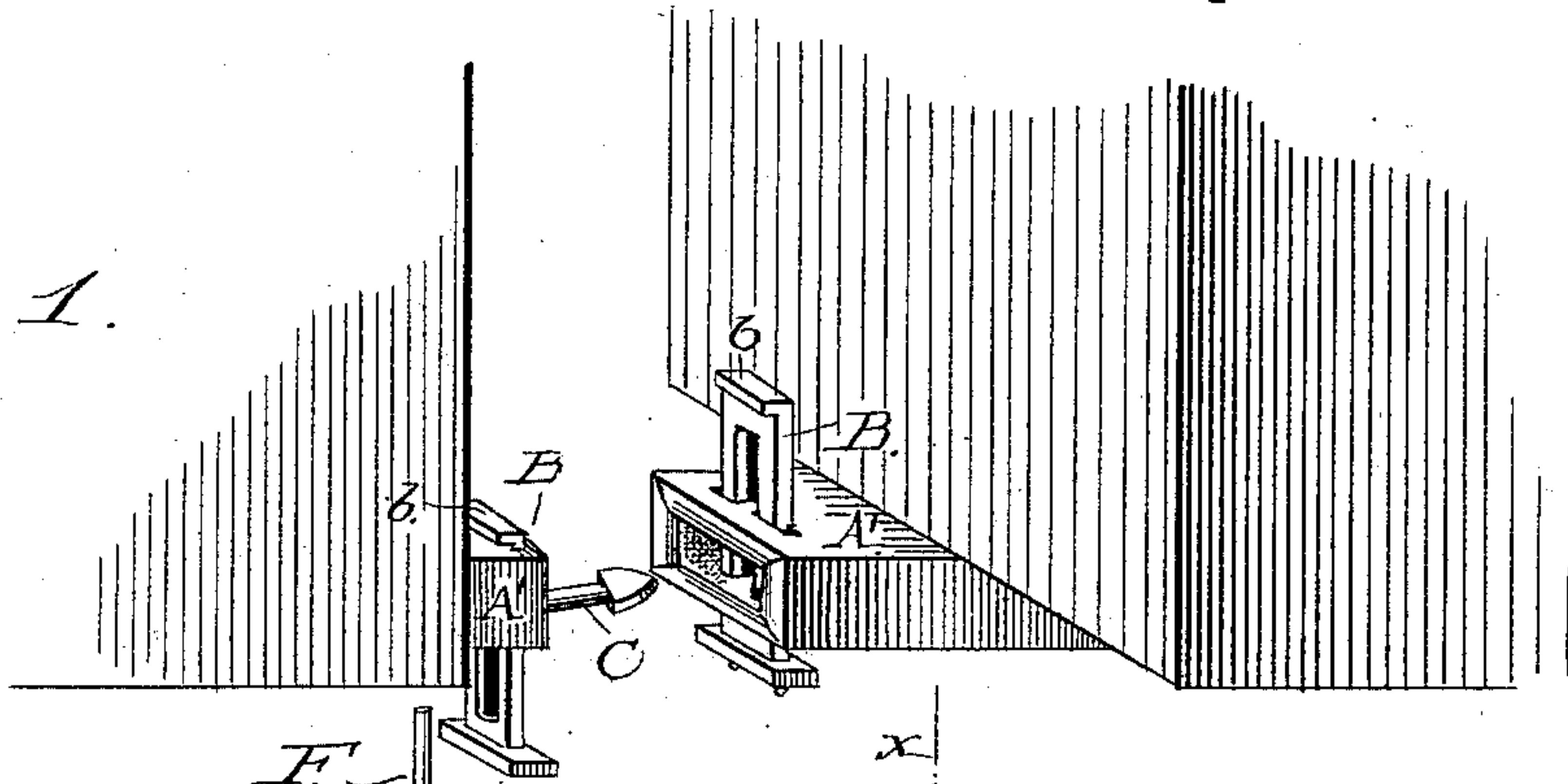


Fig. 2.

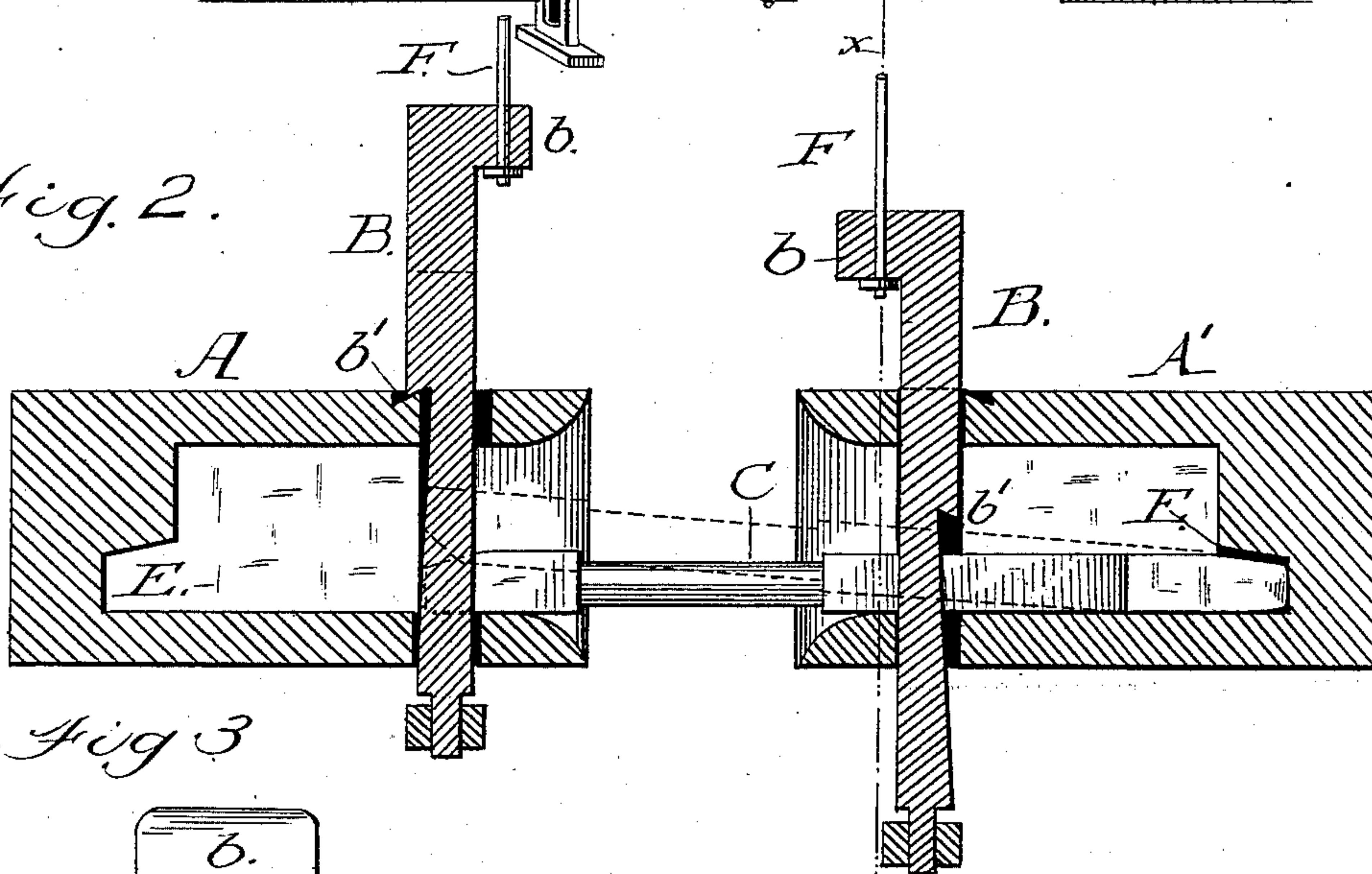


Fig. 3.

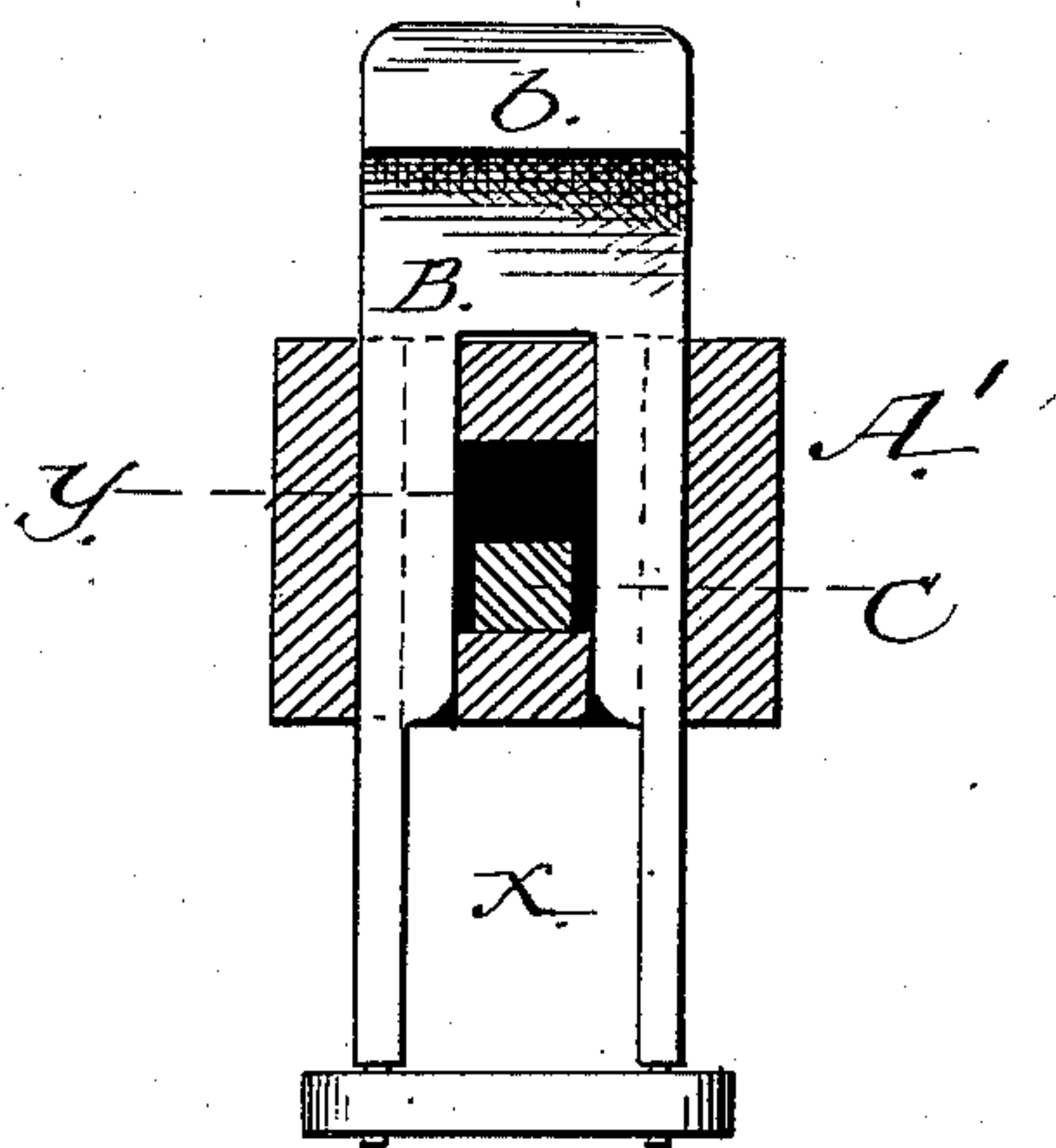
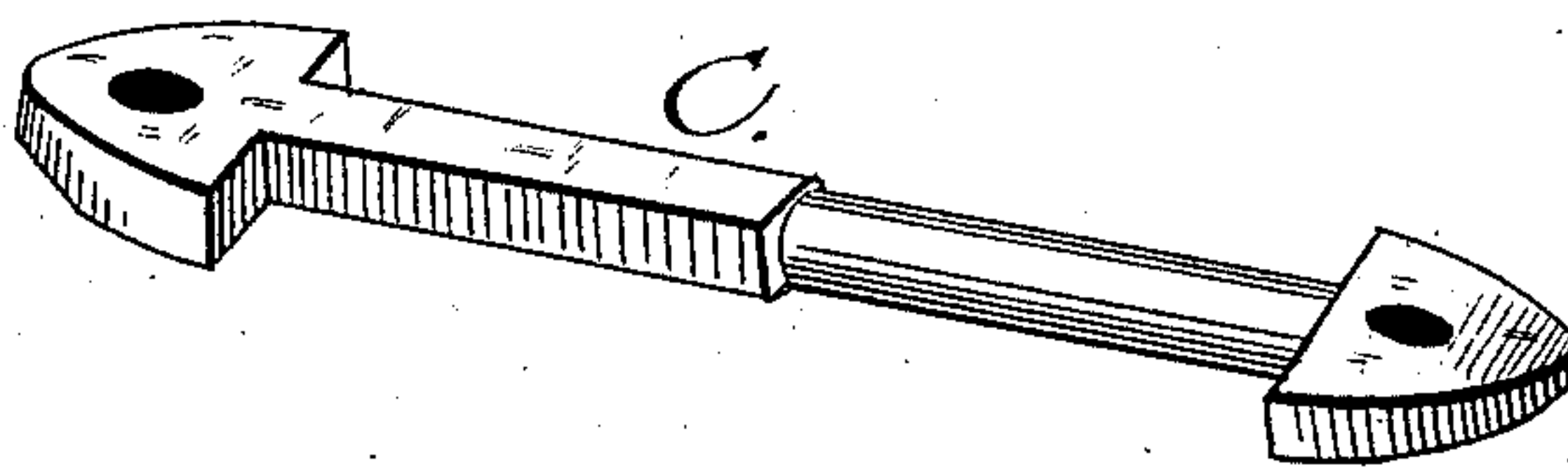


Fig. 4.



Attest;

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CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 285,042, dated September 18, 1883.

Application filed May 28, 1883. (No model.)

To all whom it may concern:

Be it known that I, CARLES J. LANGENBACH, of Dorchester, in the county of Allamakee and State of Iowa, have invented a new and useful Improvement in Self-Couplers for Freight-Cars, of which the following is a clear, full, and exact description, reference being had to the accompanying drawings, making a part of this specification, in which—

10 Figure 1 shows two draw-heads in position for coupling. Fig. 2 is a horizontal section through one of the draw-heads. Fig. 3 is a vertical section through the same. Fig. 4 is a separate view of the drawer C.

15 My invention relates to self-couplers for freight-cars; and it consists in the certain details of construction and combination of parts, as hereinafter described and claimed.

20 To enable others skilled in the art to make and use my invention, I will proceed to describe the exact manner in which I have carried it out.

In the drawings, A A' represent two draw-heads of freight-cars, vertically grooved on each side for the reception of the drop-catch B. This drop-catch is made with a loaded head, *b*, for a purpose hereinafter explained, and with the shoulder *b'* to catch on the top of the draw-head and sustain the weight of the catch and hold it in position when raised, as shown in Figs. 2 and 3. The peculiar configuration of my catch is shown in Fig. 4. When the catch is raised for coupling, the lower or wider opening, *x*, between the sides of the catch is presented at the mouth of the draw-head for the passage of the harpoon-shaped drawer C, and when the cars come in contact the jar throws forward the weighted head *b* of the catch, and being released at the shoulder *b'* the catch drops, and at its narrow part *y* steadies the drawer and secures it, as the head of drawer C cannot pass the narrower part of the catch, except under circumstances and for a purpose hereinafter explained. When the drawer is in position and both catches down, the cars are coupled. The bar of the drawer C is one-half round and one-half square, with a harpoon-shaped head on each end, the head on the round end of the bar being slightly thinner than the head on the square end.

55 When it is desired to couple two cars, the square end of the coupler is placed in position, and the flat face holds it steadily in place while it approaches and enters the other draw-

head. When the two come in contact, the jar causes the other catch to drop, and the coupling is complete.

In order to adjust the drawer to different heights of cars, the heads are made slightly tapering on one face, so as to enter the recess E in the bottom and rear of the draw-head. When the drawer is laid on the flat side and the point enters this recess, the drawer is held on a level and will enter a draw-head on its own level; but if the car to be coupled is higher than the car holding the drawer it is only necessary to turn the drawer over, and the incline entering the recess E necessarily raises the opposite end a little to adapt it to a higher car.

The drawer C is made half-round and half-square, for a purpose I will now explain. In case of an accident, where a car is tipped or thrown from the track, the square end of the draw-bar will turn with the car, and there resting at right angles to its normal position, will be withdrawn and relieve the other car, as the harpoon-head on the round end of the draw-bar is then far enough to be withdrawn from the catch when turned in the same plane with the slot.

When it is desired to uncouple from the top of the car, a rod or cord, F, may be used for raising the catch.

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

1. In a self-coupler for freight-cars, the draw-bar C, provided with harpoon-shaped heads, and having one half of the bar round and the other half square, substantially as and for the purpose set forth.

2. In a self-coupler for freight-cars, the draw-bar C, in combination with the drop-catch B, provided with openings *x* and *y*, of different widths, substantially as and for the purpose set forth.

3. The drop-catch B, provided with the weighted head *b* and shoulder *b'*, and having the openings *x* *y*, of different widths, substantially as and for the purpose set forth.

4. The drop-catch B, constructed as described, in combination with the draw-head A, provided with vertical grooves on each side, and having the recess E, substantially as and for the purpose set forth.

Witnesses: CARLES J. LANGENBACH.

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