

(No Model.)

P. CAMPBELL.

CAR COUPLING.

No. 373,336.

Patented Nov. 15, 1887.

Fig. 1.

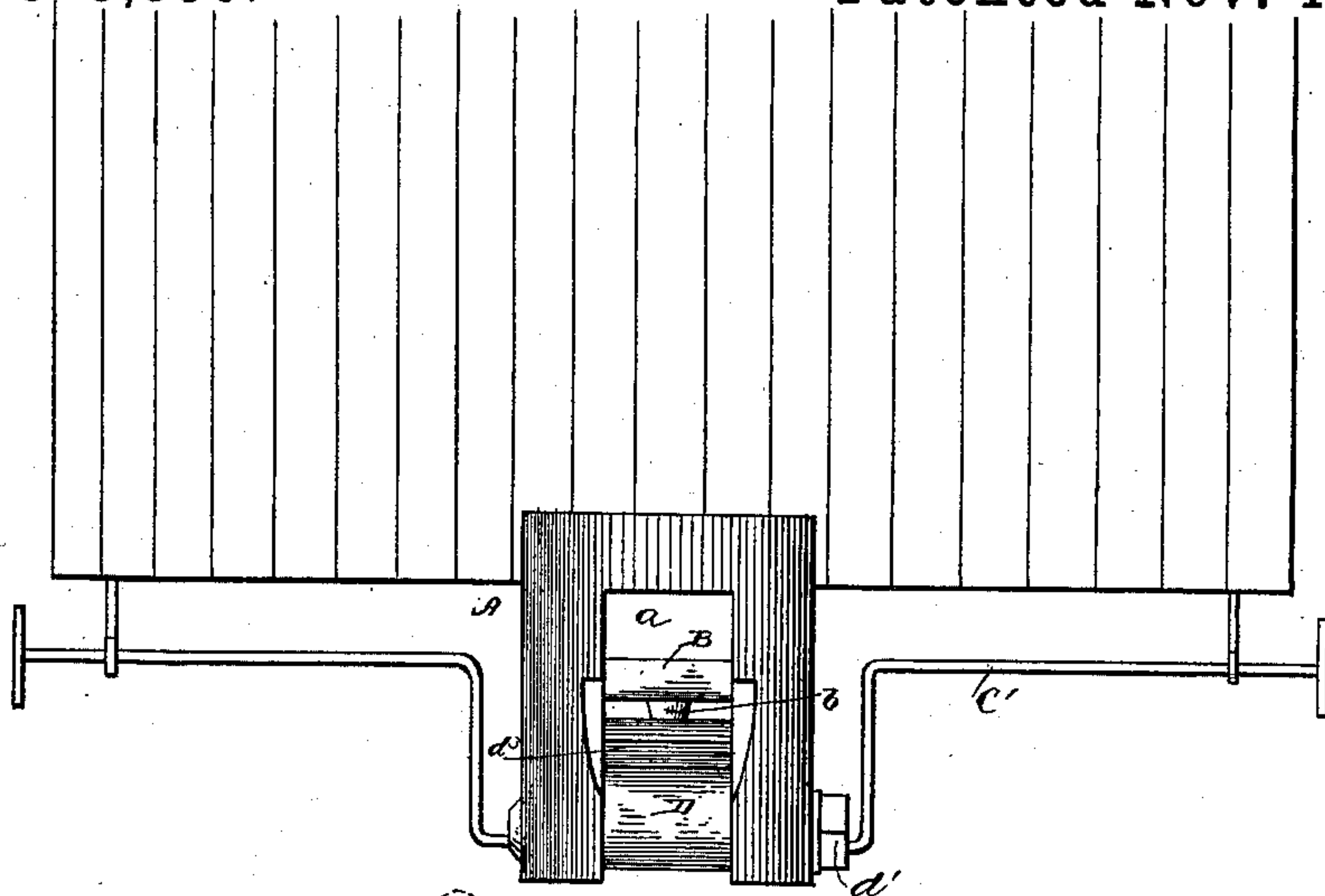


Fig. 2.

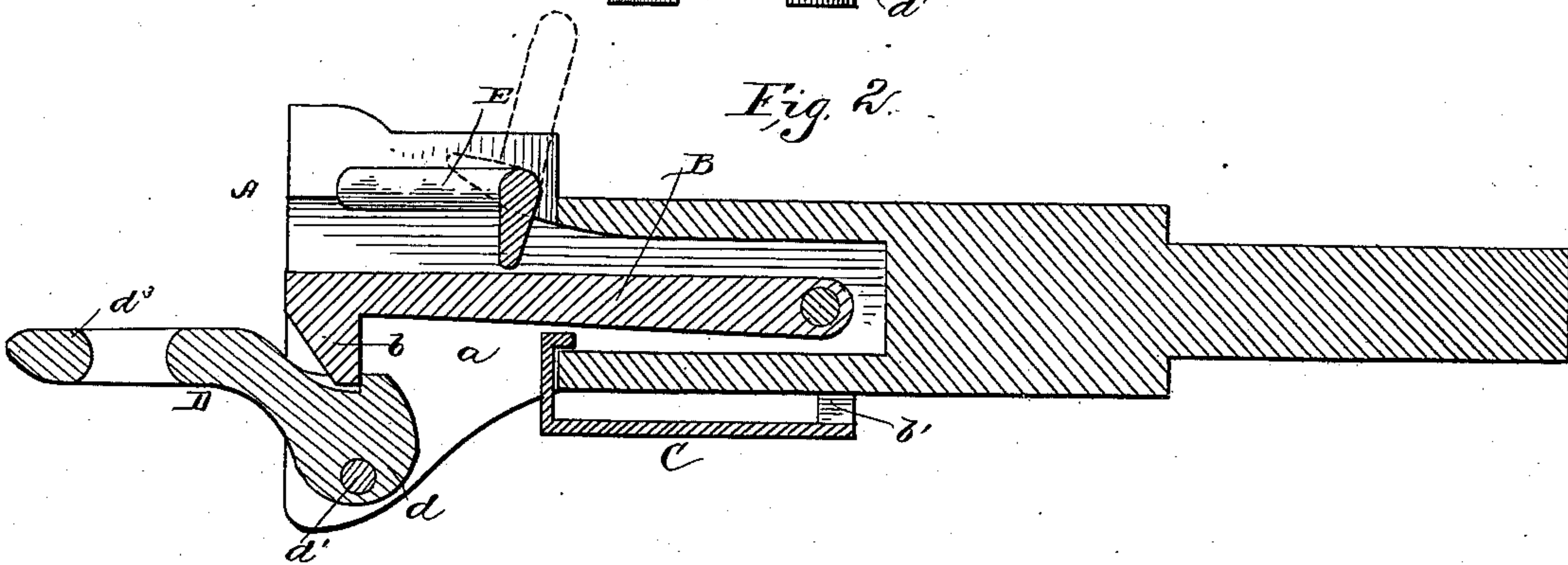
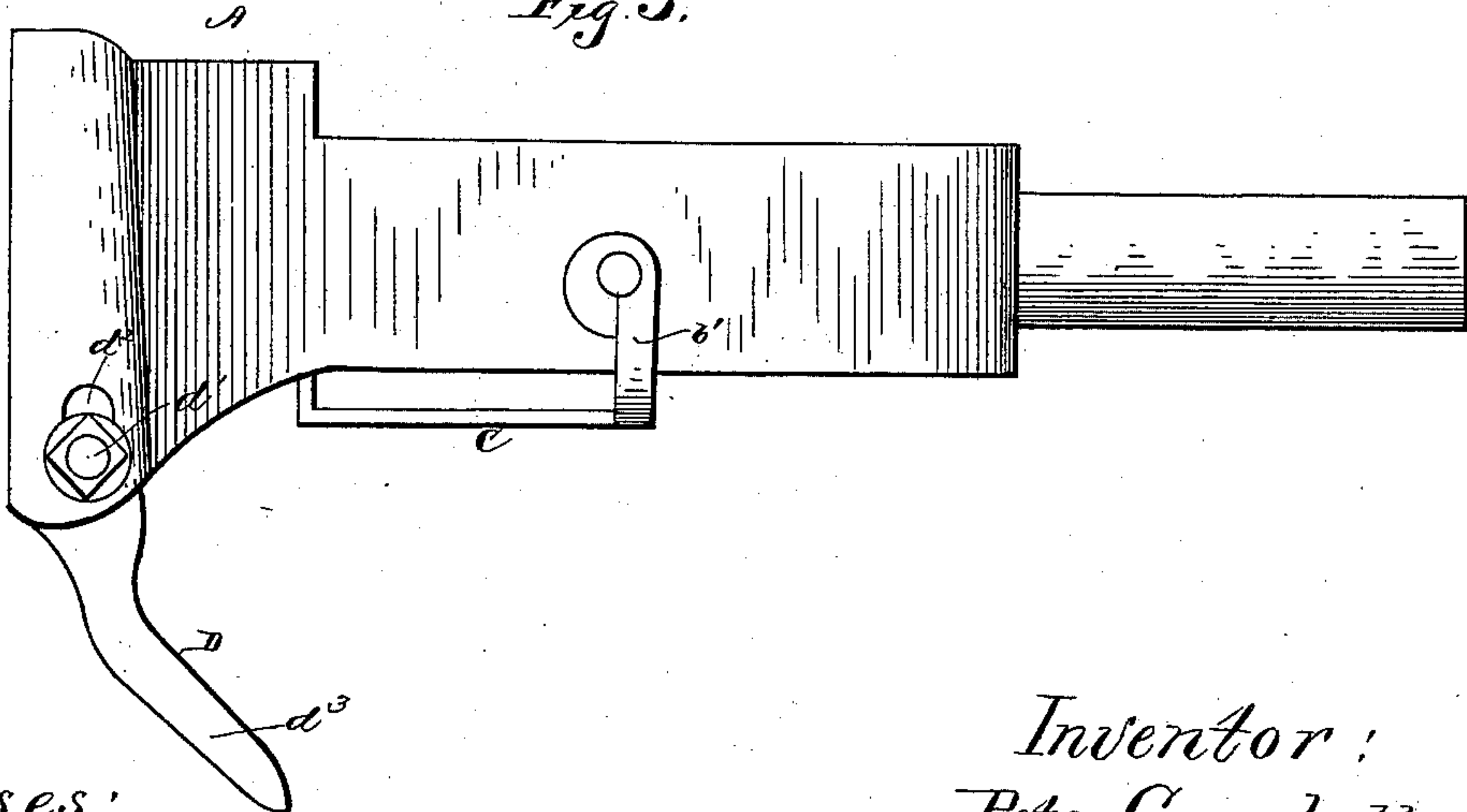


Fig. 3.



Witnesses:

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PETER CAMPBELL, OF CARROLLTOWN, PENNSYLVANIA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 373,336, dated November 15, 1887.

Application filed April 9, 1887. Serial No. 234,282. (No model.)

To all whom it may concern:

Be it known that I, PETER CAMPBELL, a citizen of the United States of America, residing at Carrolltown, in the county of Cambria and State of Pennsylvania, have invented certain new and useful Improvements in Car-Couplings, of which the following is a specification, reference being had therein to the accompanying drawings.

10 This invention pertains to certain new and useful improvements in car-couplings; and it consists in the detailed construction, combination, and arrangement of the parts, substantially as hereinafter fully set forth, and particularly pointed out in the claims.

15 In the accompanying drawings, Figure 1 is an end elevation of my invention. Fig. 2 is a longitudinal sectional view thereof, and Fig. 3 is a side view.

20 In carrying out my invention I employ a draw-head, A, which has a long central aperture or chamber, *a*, and the lower portion of this draw-head has its forward end removed, forming an aperture between two downwardly-projecting ends of the sides of the draw-head.

25 B is an approximately horizontally-disposed bar, pivoted at its rear ends by means of a bolt or pin passed therethrough and through apertures in the sides of the draw-head, and this bar has a small downwardly-projecting hook or tongue, *b*, on its forward end. On the ends of this pin or bolt are secured the upwardly-bent arms *b'* *b'* of a right-angularly-shaped bar, C, the forward vertical end of which is passed up through the aperture in the lower forward end of the draw-head, and has its extreme upper end slightly bent and bearing against the under side of the bar B, the purpose of which will appear farther on.

30 40 Between the lower forward ends of the sides of the draw-heads is pivoted the inner cam-like end, *d*, of a connecting-bar, D, the same being secured by means of a nutted bolt, *d'*, passed through an aperture in said cam-like end and through oblong slots *d''* in the said ends of the sides, whereby the point of adjustment of said connecting-bar can be made higher or lower, as may be desired. This connecting-bar has a link-like end, *d'''*, as shown, 45 50 which is slightly beveled on its outer edge, and in the normally upper surface of the cam-

like end *a'* is formed a slot or recess, wherein the hook or tongue *b* is designed to rest in securing the connecting-bar in its horizontal position for its connection with the draw-head 55 of the adjoining car.

It will be understood, of course, that suitable rods are connected to the right-angular bar C and extend to each side of the car, as shown at C', Fig. 1, the purpose of which will soon appear. 60

In practice, when it is desired to couple a car having my coupling with a car provided with the ordinary link-and-bolt draw-head, the same is effected by first turning the connecting-bar on its pivot so as to cause the same to occupy a vertical position and the hook or tongue to enter the recess in the cam-like end of the connecting-bar, thus securely holding the same in a horizontal position, and upon its entrance into the said opposite draw-head it is secured therein by means of the ordinary coupling-bolt dropped through the aperture in the link-like end of the connecting-bar. 65 70 When, however, a car having my coupling is to be coupled with a car also having my coupling, (assuming the connecting-bar of the approaching car to be in a horizontal position,) one of the rods C' is slightly turned so as to elevate the forward end of the right-angular plate C, which will raise the horizontal bar B, causing its hook or tongue to be removed from the recess in the cam-like end of the connecting-bar, permitting the latter to drop down in under the draw-head to nearly a horizontal 75 80 position, and upon the approach of the cars the raised connecting-bar of the approaching car will strike against the upper surface of the cam-like end of the lowered connecting-bar, raising the forward end of the bar B, and upon passing thereunder the hook or tongue of the bar will drop into the aperture of the link-like end of the connecting-bar. 85 90

As before stated, the inner end of the connecting-bar can be raised or lowered by means of the nutted bolt projecting through the apertures in the sides of the draw-head, which is desirable in coupling cars of different altitudes. 95

I have shown in Fig. 2 a device for retaining the horizontal bar B in position and preventing the same rising a greater distance than is 100

necessary for the proper operation of my invention. The device consists of a bar, E, of approximately L shape in side view, the same being pivoted at its right-angular corners, and
5 having its pivotal bearing projecting through apertures in the sides of the draw-head, and the forward normally-horizontal portion of this retaining device rests in an aperture formed in the upper surface of the draw-head,
10 and the lower end of the vertical portion comes within a short distance of the upper surface of the bar B. This retaining device can be elevated out of the way, as shown in dotted lines, Fig. 2.

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

1. A car-coupling consisting of a draw-head, the connecting-bar having a cam-like inner
20 end and a link-like outer end, the horizontal bar having a hook or tongue, and the pivoted

right-angular bar, all arranged substantially as shown and described.

2. The combination, with the chambered draw-head and the right-angular bar, of the
25 horizontal bar having a hook or tongue and the connecting-bar provided with a cam-like end having a recess therein, substantially as shown and described.

3. The combination, with the draw-head, 30 the right-angular bar, and the horizontal bar having a hook or notch, of the connecting-bar having a cam-like end, and the nutted bolt passed through said end and through apertures in the sides of the draw-head, substan- 35 tially as shown, and for the purpose set forth.

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

PETER CAMPBELL.

Witnesses:

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