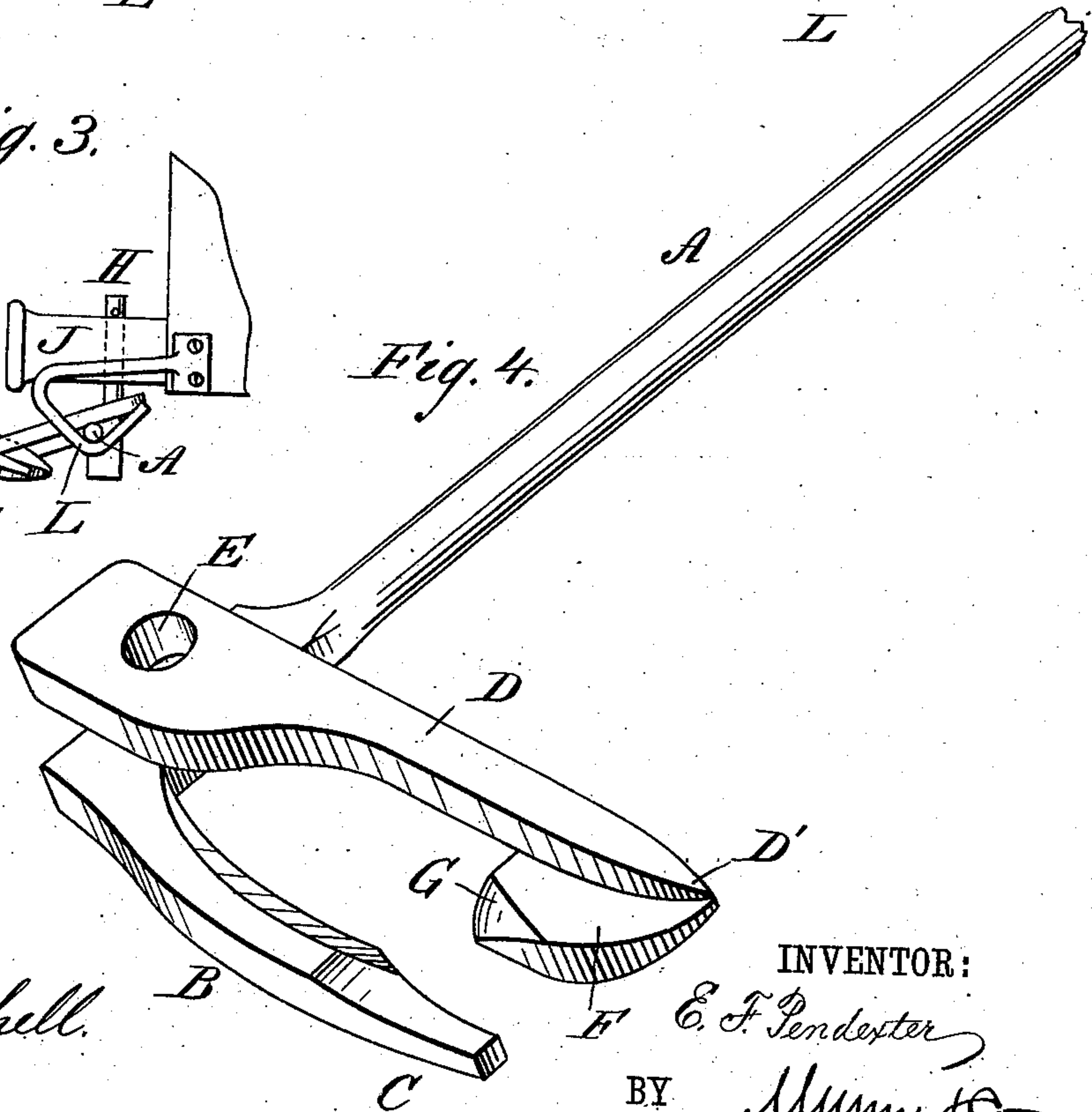
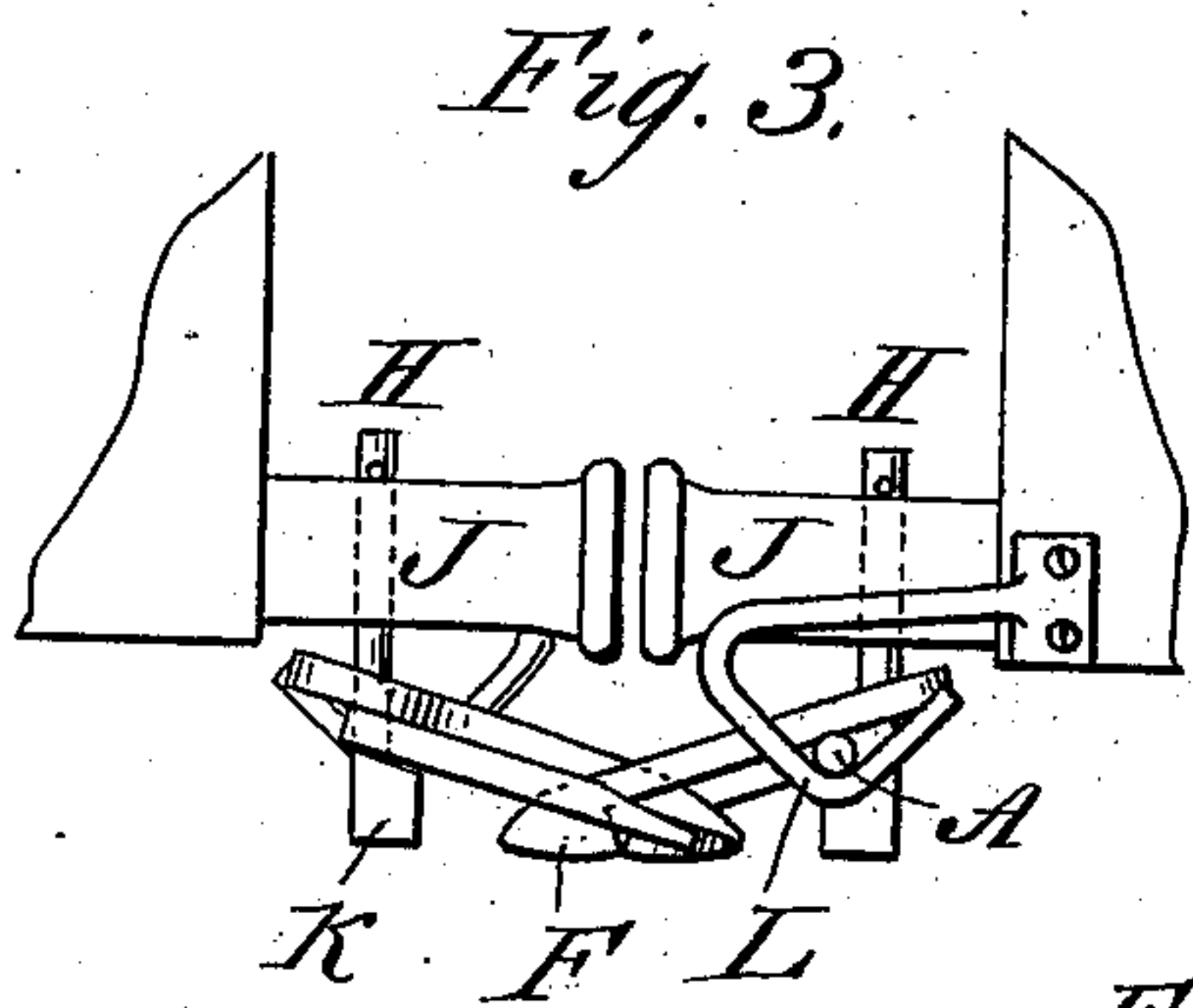
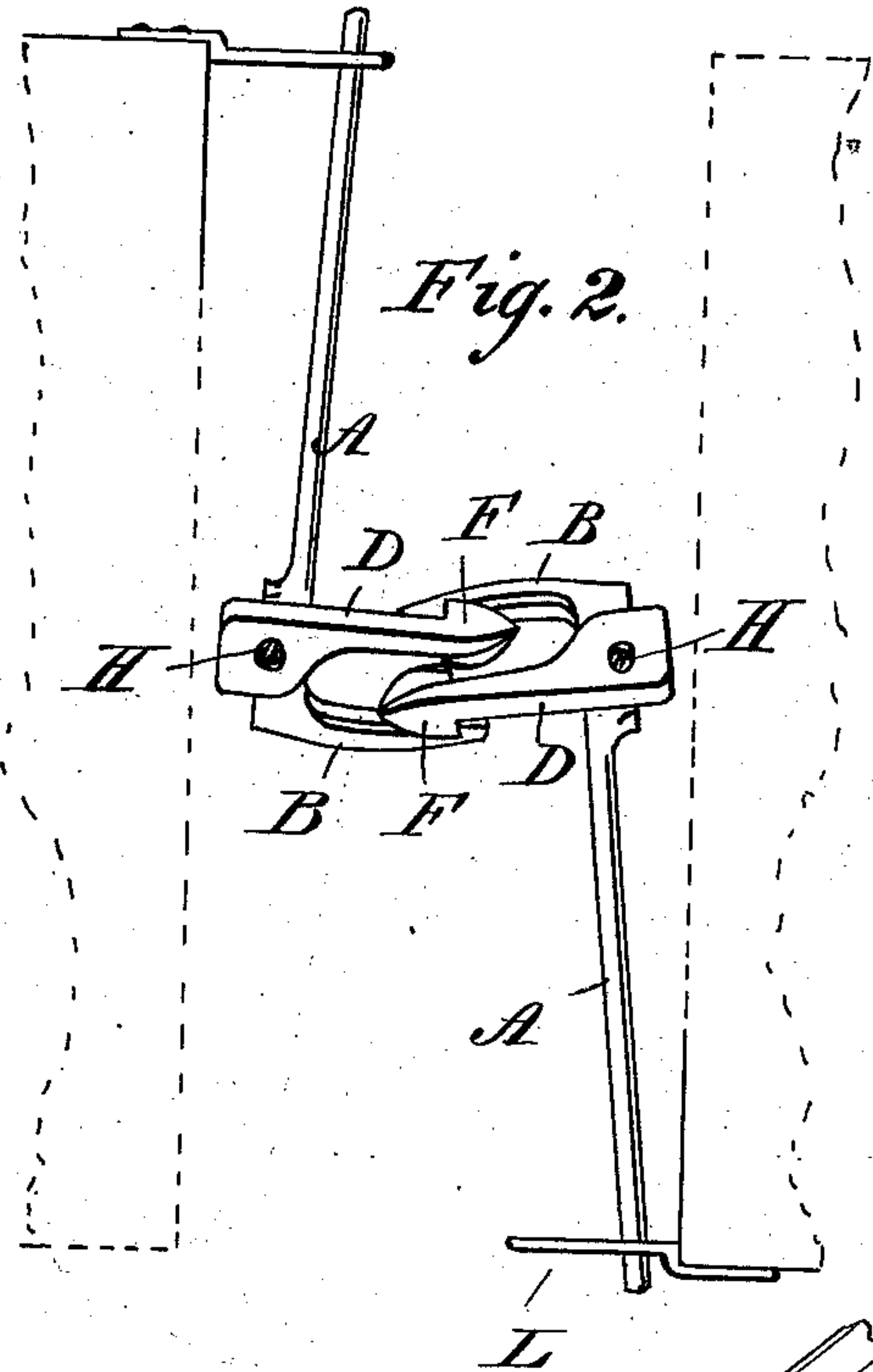
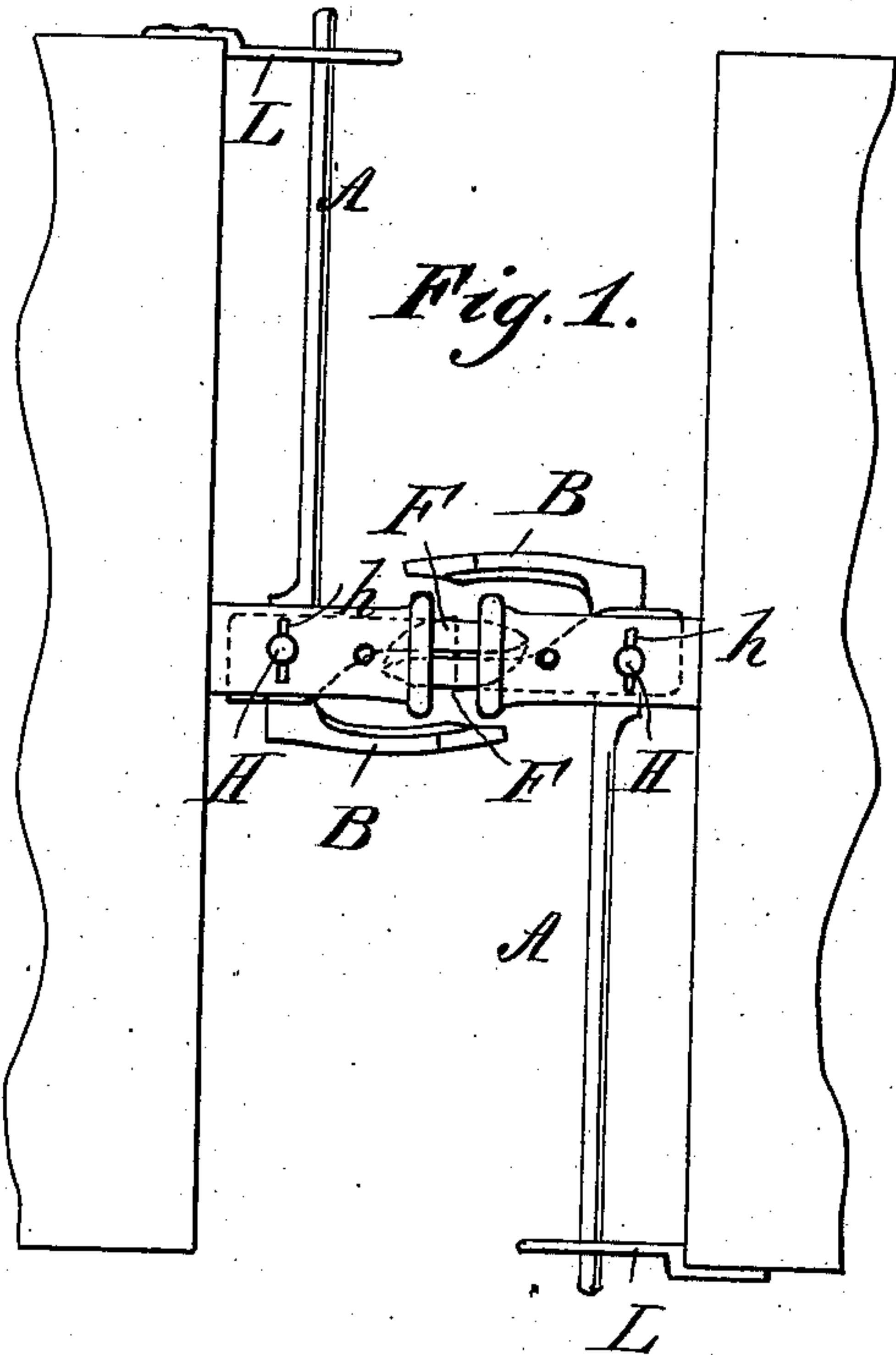


(No Model.)

E. F. PENDEXTER.
CAR COUPLING.

No. 294,502.

Patented Mar. 4, 1884.



WITNESSES:

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UNITED STATES PATENT OFFICE.

EDWARD F. PENDEXTER, OF MILFORD, MASSACHUSETTS.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 294,502, dated March 4, 1884.

Application filed September 19, 1883. (No model.)

To all whom it may concern:

Be it known that I, EDWARD F. PENDEXTER, of Milford, in the county of Worcester and State of Massachusetts, have invented a new and Improved Car-Coupling, of which the following is a full, clear, and exact description.

This invention consists in a lever held at its inner end on a draw-head and provided at the said inner end with two prongs, one of which is provided at its outer end with a lug on the bottom surface, which lugs of two opposite prongs engage with each other, and thereby couple the cars. The outer ends of the levers to which the prongs are fastened pass through V-shaped frames secured to and projecting from the sides of the cars at the ends, which frames keep the levers in the proper position, and also guide them while manipulating the device to uncouple the cars.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a plan view of my improved car-coupling, showing two cars coupled. Fig. 2 is a plan view, showing the coupling in the position when the cars are being uncoupled, the draw-heads being removed. Fig. 3 is a side view of the coupling attached to the cars; and Fig. 4 is an enlarged perspective view of the coupling detached.

I will first describe the coupling, and then the connection of the same with the draw-head.

To one end of a lever, A, a prong, B, is fastened, which projects at about right angles to the end of the lever A, which prong has a segmentally-curved outer edge, and has its inner edge curved about parallel with the outer edge to within a short distance of the outer end, C, where the top and inner side of the said prong are beveled, as shown. The upper edge of the inside of the said prong is also beveled, as shown. On the upper edge of the lever A a prong, D, is fastened, the bottom of which is on the same plane as the upper surface of the prong B. The said prong D is provided at its inner edge with an enlargement, having an aperture, E. The outer edge of the prong D is made straight, and the inner edge is rounded and tapered to the outer edge, gradually coming to a point, D', at the

outer end of the prong. A lug, F, is made integral with the outer end of the prong D, which lug F projects from the bottom and inner surface of the said prong D, the upper surface of the said lug being flush with the bottom surface of the prong D. The lug F is provided at its inner back end with a bevel, G. The bottom of the lug is beveled upward from the inner end toward the point D' of the prong D, the front of the lug being rounded, as shown. A bolt or pin, H, is passed through the draw-head J, of the usual construction, and the said bolt is also passed through the aperture E at the inner end of the prong D, so that the under side of the inner end of the lever A—which inner end is squared—rests upon the upper beveled edge of a head, K, formed on the lower end of the pin H, so that when the coupling is in its normal position the prongs D and B will be inclined downward and outward from the car. A pin, h, passing through the bolt H above the draw-head retains the bolt in place. The outer end of the lever A—that is, the end at the side of the car—passes through a V-shaped frame, L, attached to and projecting from the side of the car. I have shown the frame L formed as a bracket; but it can be constructed in any other suitable manner.

My improved coupling can be attached to any draw-head of the usual construction, and requires no further change in the same than an aperture for the pin H. When my improved coupling is attached to a draw-head, a link can be passed into the end of the draw-head in the usual manner, and held therein by means of the ordinary coupling-pin.

The operation is as follows: When the two cars that are to be coupled come together, one lug F slides over the upper surface of the other until the lugs have passed each other and the outer ends of the prongs drop. The inner ends of the lugs F then catch on each other, as shown in Fig. 3, and keep the cars coupled. The prongs B serve as guards to prevent the prongs D from moving laterally to such an extent that the lugs F become disengaged. When the cars are coupled, the outer ends of the levers A rest in the lowest points of the V-shaped frames L.

If the cars are to be uncoupled, the outer ends of one or both levers A are moved upward on the outer inclined side of the frame L, whereby

the longitudinal axis of one pair of prongs will be at an angle to the longitudinal axis of the other pair of prongs, and the prongs can be separated, the beveled surface G of that lug F on that prong D on the lever that has been inclined in the manner described sliding along the inner surface of the prong D of the other coupling device.

It will be seen that the outer end of the lever A acts as a counter-balance in the operation of coupling, being raised vertically in the frame L as the couplings engage, and falling after engagement, thereby securing them in lock, as also when the draft-strain on the coupling relaxes.

In practice I prefer to give the prongs B and D a slight downward curve, to better insure the coupling of cars varying in height.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

1. A car-coupling device made substantially as herein shown and described, and consisting of a lever provided with two prongs at its inner end, one of which prongs is provided with a lug on the outer end, substantially as herein shown and described, and for the purpose set forth.

2. In a car-coupling, the combination, with the lever A, provided at its inner end with a curved prong, B, having its end C beveled, of the prong D, secured on the lever A at the outer end, and provided on the under surface of its outer end with a lug, F, substantially as herein shown and described, and for the purpose set forth.

3. In a car-coupling, the lug F, having a rounded front side and bottom tapered toward the point of the prong D, which lug is provided with a lever, G, at its inner upper corner, substantially as herein shown and described, and for the purpose set forth.

4. In a car-coupling, the combination, with the lever A, having a prong, B, of the prong D, provided with an aperture, E, at the inner end, and a lug, F, at the outer end, substantially as herein shown and described, and for the purpose set forth.

5. The combination, with a car, of a lever, A, suspended from the draw-head, the prongs B D, formed on the lever, the lug F on the end of the prong D, and of the V-shaped frame L, secured to the side of the car, substantially as herein shown and described, and for the purpose set forth.

6. The combination, with a car and its draw-head, of the pin H, provided at the lower end with a head, K, having a beveled upper edge, the lever A, having prongs B D, of which the latter is provided at its inner edge with an aperture, E, and at its outer edge with a beveled lug, F, and of the V-shaped frame L, secured to the side of the car, substantially as herein shown and described, and for the purpose set forth.

EDWARD F. PENDEXTER.

Witnesses:

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