(No Model.)

M. L. STERLING.

CAR COUPLING.

No. 285,701. Patented Sept. 25, 1883.

Fig. 1.

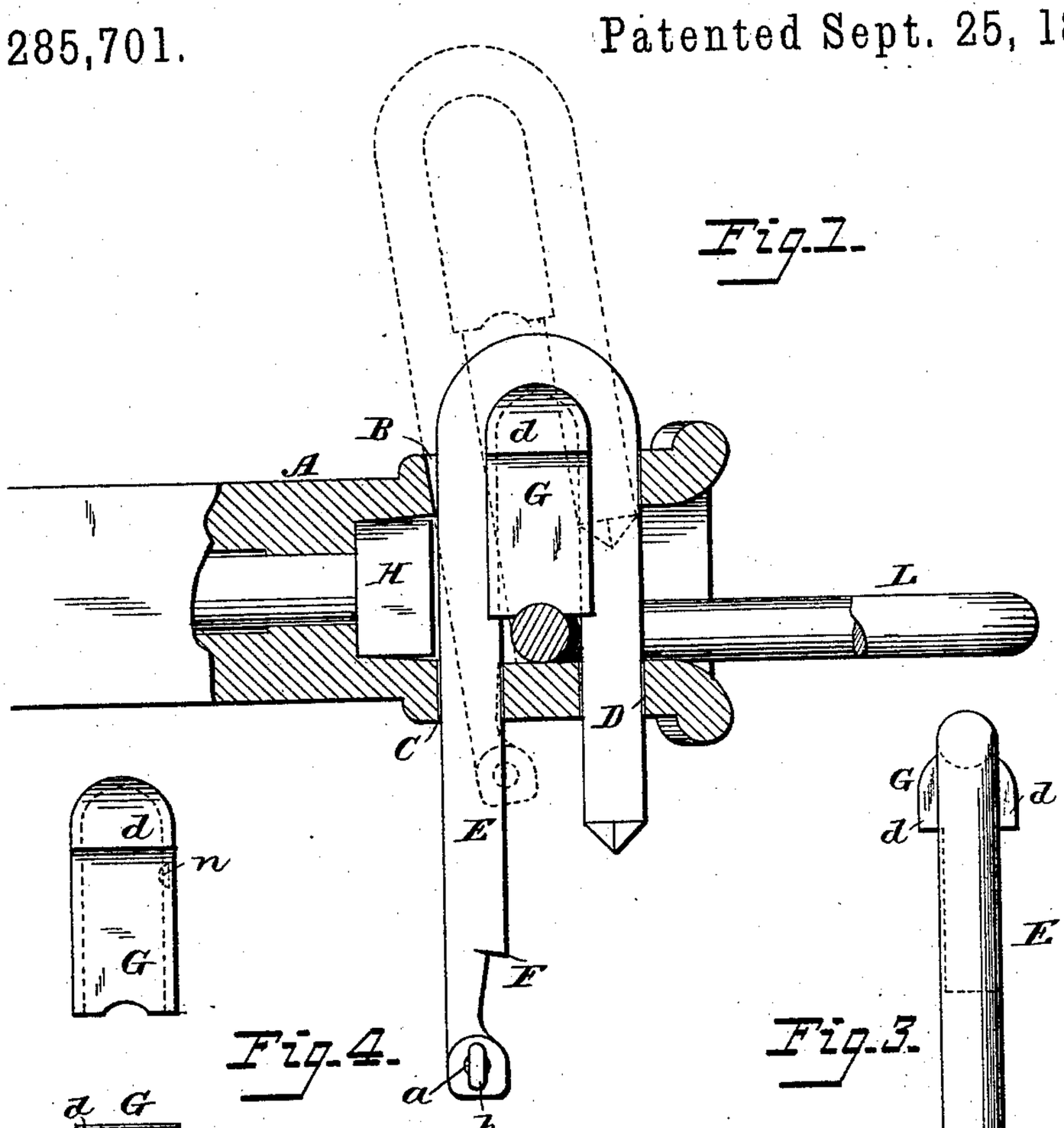


Fig. 4.

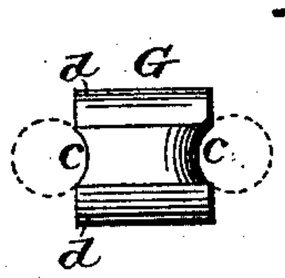


Fig. 3.

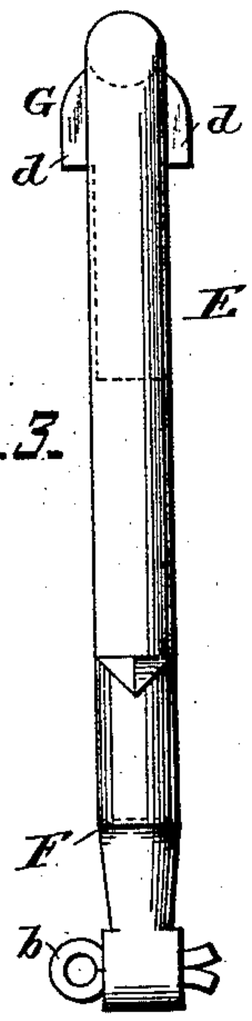
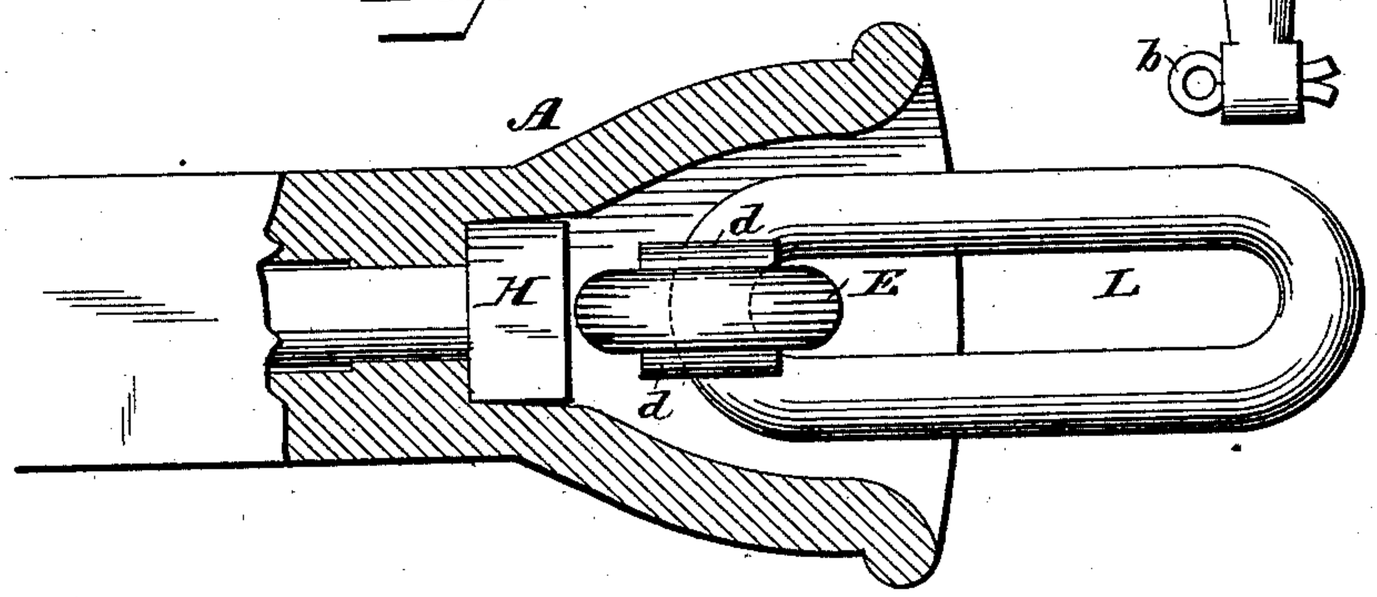


Fig. 2.



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MARK L. STERLING, OF DENVER, COLORADO.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 285,701, dated September 25, 1883.

Application filed August 15, 1883. (No model.)

To all whom it may concern:

Be it known that I, MARK L. STERLING, a citizen of the United States, residing at Denver, in the county of Arapahoe and State of Colorado, have invented certain new and useful Improvements in Car-Couplings; 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 car-couplings of the class in which the coupling-pins are secured to the draw-heads; and it consists in certain peculiarities of construction, more particularly pointed out hereinafter.

The draw-heads are of any well-known or convenient form, with the usual flaring opening in the end. In the upper side, instead of the usual circular opening, a longitudinal slot is formed, and in the under side are two circular openings corresponding with the extremities of the slot in the upper side.

The coupling-pin consists of a rod of suitable metal bent into the form of a U, with one leg longer than the other. Into the upper part of the recess formed by bending the pin, as described, is secured a solid piece of chilled casting or steel, having grooves to fit the legs of the pin, and also provided on the sides with flanges projecting beyond the plane of the sides of the double pin. The long arm of the pin is cut away, forming a shoulder in the front side, and has a perforation near its end for the reception of a small securing-pin.

Referring to the drawings, Figure 1 is a vertical section of the draw-head, showing the pin and link in position in solid lines, and also showing the pin in position to receive the link in dotted lines. Fig. 2 is a horizontal section of the draw-head, showing the parts in position. Fig. 3 is a front elevation of the bent coupling-pin, and Fig. 4 is an end and side view of the strengthening-piece of iron or steel.

The draw-head A may be of any usual construction, the form shown being well adapted to my invention. In the upper part of the draw-head is the longitudinal slot B, and in the under side are two circular openings, C D.

The coupling-pin E consists of a rod or bar of metal, bent as shown and having legs of unequal length, the longer one being provided with an offset or shoulder, F, and a perforation, *a*, for the reception of the securing-pin *b*. A block of chilled iron or steel, G, is secured in the bend of the coupling-pin, as shown. This block is recessed on the edges, at *c*, to fit the pin, being locked thereto by forcing a portion of the metal of the pins into a notch, *n*, in the side of the block, and has projections *d*, extending beyond the sides of the pin.

H is the ordinary draw-bolt to hold the draw-head to the car.

In using the coupling the pin is inserted in the slot B and the legs project into the openings C D. When it is desired to couple the cars, the pin is drawn up into the position shown in dotted lines in Fig. 1, with the shoulder F resting upon the edge of the opening C, the short arm of the pin being above the opening of the draw-head. The link L is held in a similar draw-head with the pin down upon it, as shown in full lines in Fig. 1, when the weight of the block G, added to the pin, will hold the link in a horizontal position, ready to enter the draw-head of the car to which it is to be coupled. As the link enters the draw-head with the pin in the position shown in dotted lines, Fig. 1, it will strike the long arm of the pin and displace it from its resting-place, when it will fall into position shown in full lines and secure the link. When the link L is not in the draw-head, the pin rests in the slot, the projections *d d* on the sides of the block preventing it from slipping in too far. A pin, *b*, is secured in the bail *a* in the lower end of the long arm of the pin, to prevent the pin from becoming detached and lost.

By this construction it will be seen that the workman need not hold the link while the cars are being coupled, nor, indeed, expose himself to danger in any manner, while the device is simple, cheap, and substantial, and can be applied to cars of ordinary construction with very little expense. The piece of iron or steel secured in the pin, as shown, will greatly strengthen the pin, and in case the link should

forcibly enter the draw-bar with the pin down the block will enable the pin to withstand the shock without danger of binding.

Having thus described the invention, what is claimed is—

1. A coupling-pin consisting of a bent bar having a piece of chilled iron or steel secured thereto, as set forth.

2. A draw-bar provided with a slot, B, in the upper side and holes C D in the lower, in combination with a bent pin having a strengthening-block, G, of chilled iron or steel, secured thereto, provided with flanges *d d*, as and for the purpose set forth.

3. The combination, with a draw-bar provided with a slot, B, and holes C D, of a coupling-bar bent as described, and having the strengthening-piece, G, of chilled iron or steel, secured thereto, the long arm of the pin being provided with a shoulder, F, and securing-pin *b*, as set forth.

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

MARK L. STERLING.

Witnesses:

J. CAMPBELL,

A. E. HANSMANN.