

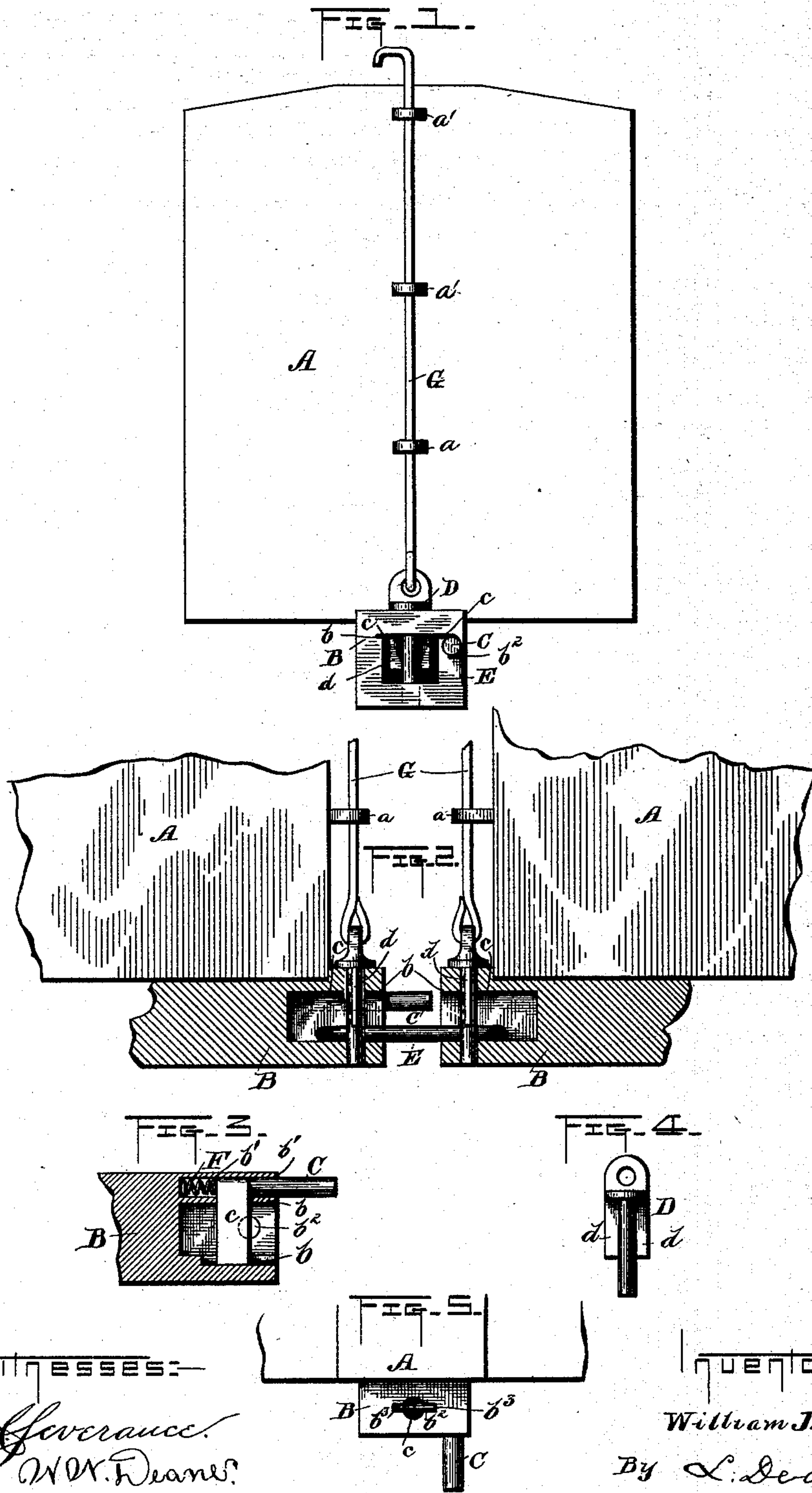
(No Model.)

W. J. PONTO.

CAR COUPLING.

No. 413,549.

Patented Oct. 22, 1889.



WITNESSES:

Gloverance.
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UNITED STATES PATENT OFFICE.

WILLIAM J. PONTO, OF NEW ROCKFORD, DAKOTA TERRITORY.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 413,549, dated October 22, 1889.

Application filed July 11, 1889. Serial No. 317,112. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM J. PONTO, a citizen of the United States, residing at New Rockford, in the county of Eddy and Territory of Dakota, have invented certain new and useful Improvements in Car-Couplings; and I do hereby 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.

Figure 1 is an elevation of the end of the car, showing my invention; Fig. 2, a vertical central section of the draw-heads; Fig. 3, a horizontal section in detail of one of the draw-heads; Fig. 4, a detail in elevation showing the coupling-pin, and Fig. 5 a top view of one of the draw-heads.

This invention belongs to that class of devices known as "car-couplers;" and the novelty consists in the construction of the several parts and their combination together, all as will now be more fully set forth and explained, reference being had to the accompanying drawings.

In the drawings, A denotes any freight or similar car, and B the draw-heads. Except as qualified by the present invention, these are of the usual description. In the mouth of the draw-head, and preferably near its roof, is the supporting-plate *c*, supported by and sliding in the slots *b*. This movement is obtained by means of the bolt C, which slides in slot or opening *b'* at the side of the draw-head, and to which bolt the plate *c* is attached. When two cars approach each other, the bolts C in each meet and the one on the car to be coupled is moved back and carries with it the plate *c*. Thus the coupling-pin D, which has rested on said plate, is released and falls by its gravity into the draw-head and through the coupling-link E. The pin in this position holds the plate *c* back, and also prevents the bolt C from moving outward under the influence of the spring F at its rear end; but when the pin is drawn up, as when the cars are uncoupled, the spring F will force the bolt out, and thus the plate *c* is placed in its position underneath the coupling-pin and supporting the same. The coupling-pin D has a fin *d* on each side that is laterally opposite extending from the head down about two-thirds the

length of the pin. The pin-hole *b*² in the draw-head is preferably made with side and laterally-opposite extensions *b*² or enlarged to a proper shape for the fin to fit snugly into it. The use and advantage of these fins are that they will rest upon the link and hold the same horizontal and in proper position to enter the draw-head of the approaching car that is to be coupled. To aid in this, the head of the pin may be made quite heavy, or the lower end of the rod G on the front of the car, which is connected to the pin and by which it is operated, may be made heavy, or a supplemental weight can be attached to the rod.

To prevent the displacement of the pin, as when it is being drawn up in coupling, there is placed on the front of the car a lip or projection *a* at a suitable height to measure the proper range of the movement of the pin to clear the link and the plate *c*. The rod G can be passed through this as well as through the guide-brackets *a'*; but a mere projection from the face of the car will answer all the desired purposes.

In using this device it is not necessary for the brakeman to touch the coupling-link or step between the cars. The link is held in the proper position to enter the approaching draw-head and the support of the pin in it is automatically removed, so that the pin will fall into the draw-head and through the link; nor does my device present any costly or cumbersome structure. The detail of the changes over the ordinary draw-head are few and not costly; nor is my device easily liable to get out of repair. It is strong and durable in every part. The plate which supports the pin is operated by means outside the mouth of the draw-head, so that this mouth is almost entirely free and unobstructed.

Having now described my invention, what I claim is—

1. The draw-head B, having slots *b* and *b'*, the bolt C, and plate *c*, connected to it, and the spring F behind the bolt, whereby the pin is held up by means mostly outside the mouth of the draw-head.

2. The combination, with the draw-head having its upper pin-hole provided with lateral opposite extensions, of the sliding plate *c*, to uphold the pin, the pin having lateral

opposite fins to fit in said extensions, and the coupling-link, which, when in the draw-head, is horizontally held by the said pins which bear on its opposite side bars, substantially
5 as specified.

3. The combination, with the draw-head having the slots *b b'* and provided with an upper pin-hole having opposite lateral extensions, the bolt C, the spring F in rear of said
10 bolt, and the sliding plate *c*, attached to the

bolt, of the coupling-link and the pin D, having opposite lateral fins *d*, substantially as specified.

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

WILLIAM J. PONTO.

Witnesses:

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