

(No Model.)

W. H. JONES.

CAR COUPLING.

No. 291,911.

Patented Jan. 15, 1884.

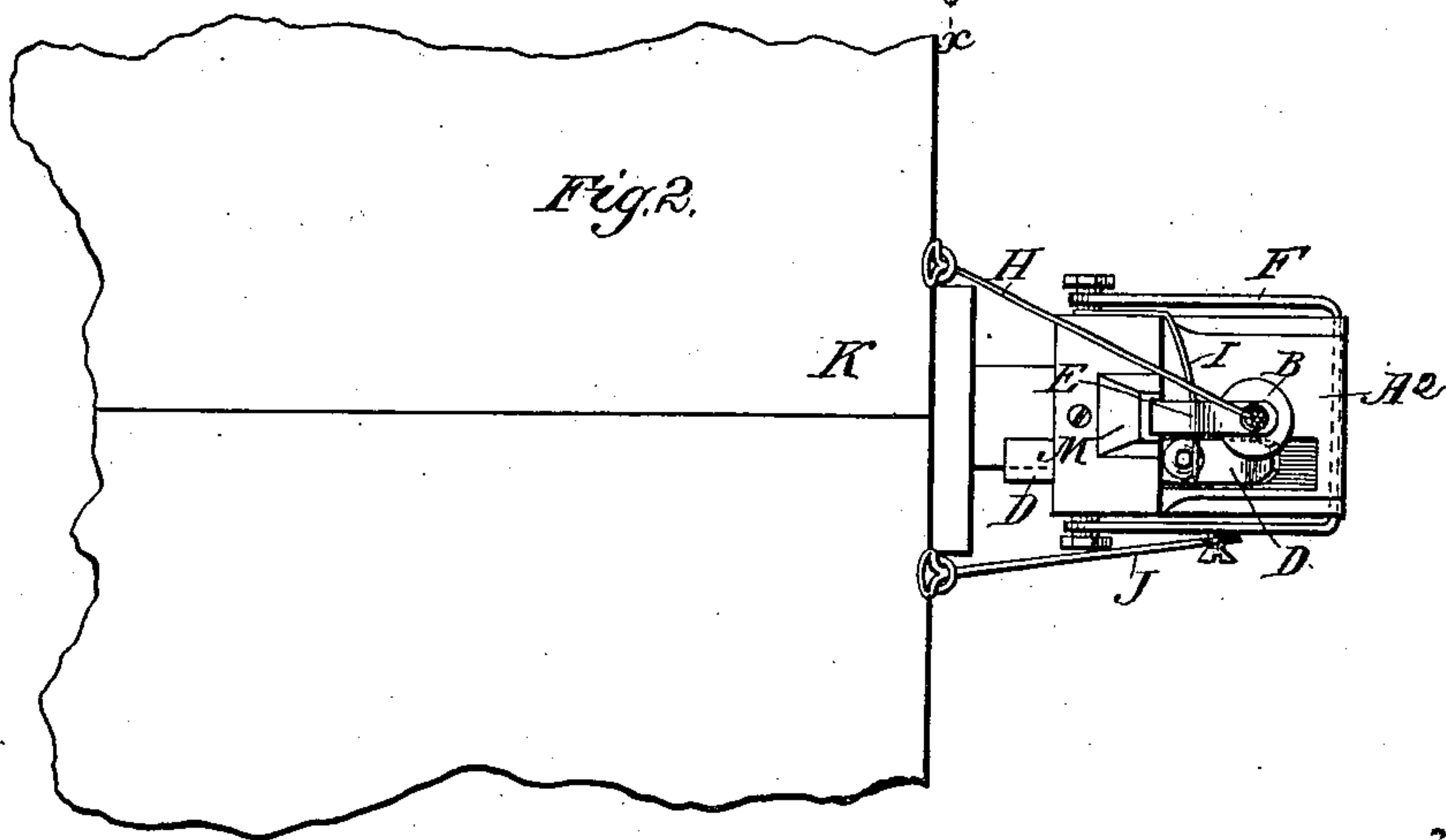
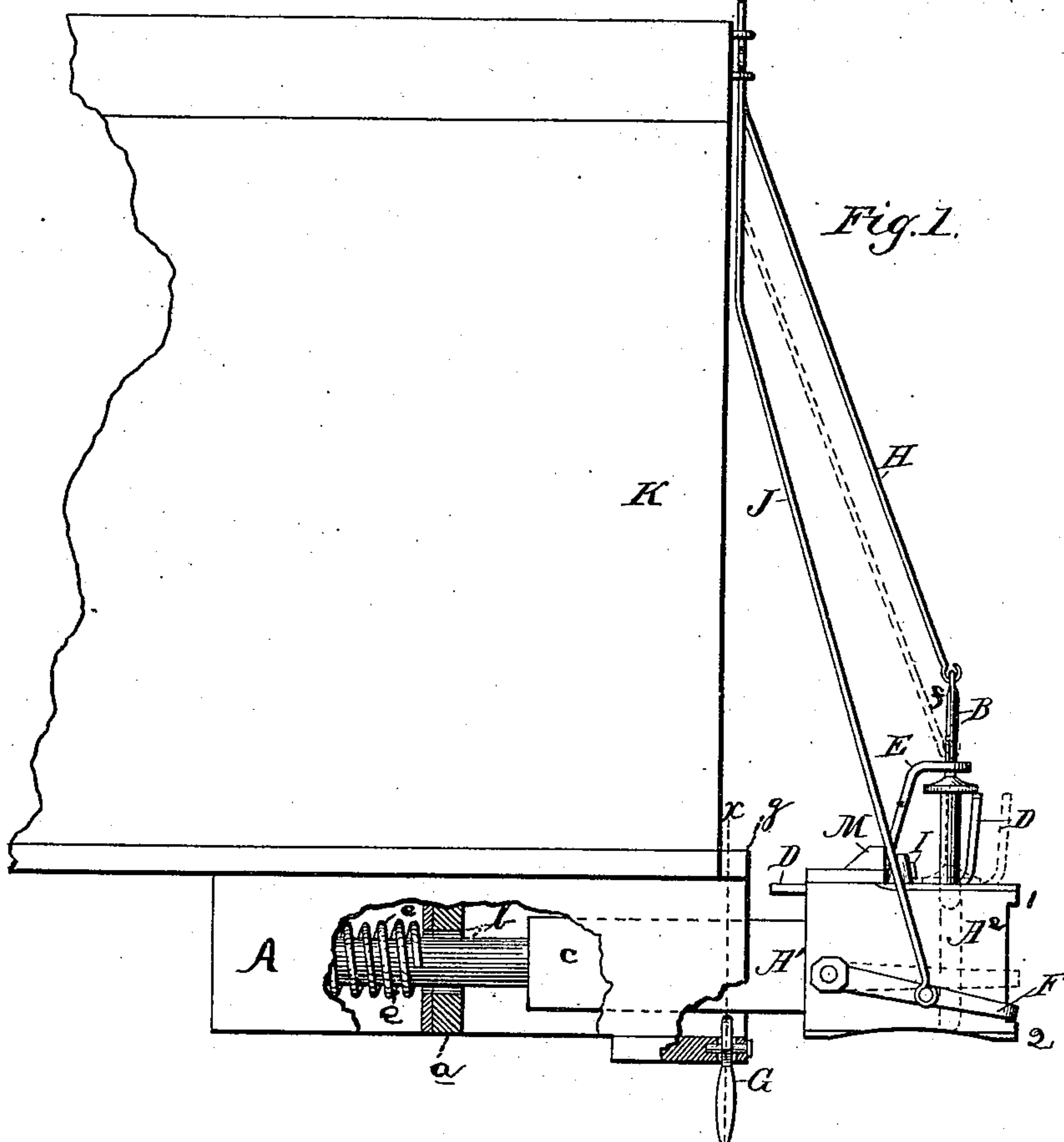
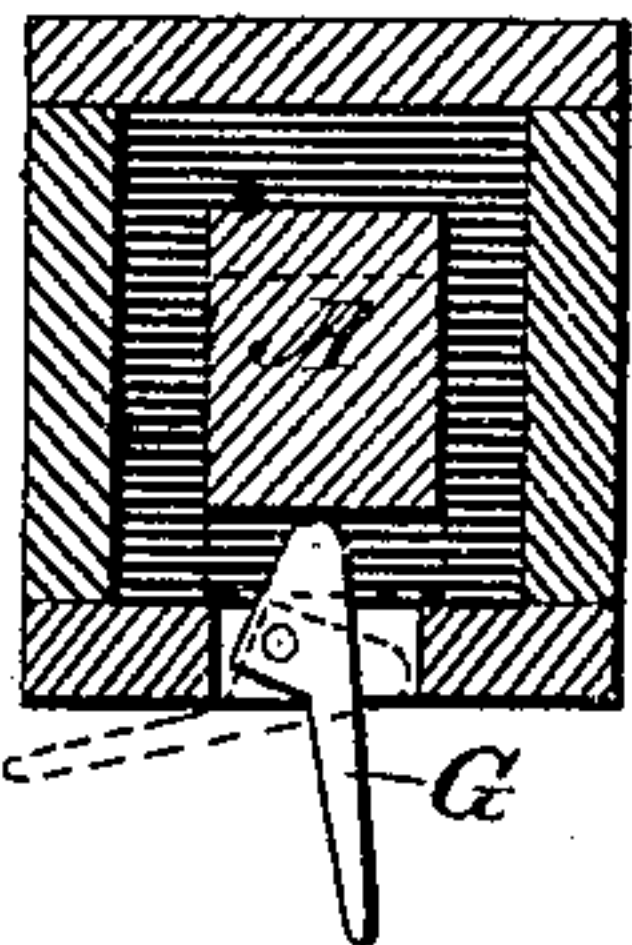


Fig. 3.



Witnesses:
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UNITED STATES PATENT OFFICE.

WILLIAM H. JONES, OF MARTINSBURG, IOWA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 291,911, dated January 15, 1884.

Application filed October 12, 1882. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. JONES, a citizen of the United States of America, residing at Martinsburg, in the county of Keokuk and State of Iowa, have invented a new and useful Improvement in Car-Couplings, of which the following is a specification.

My invention relates to improvements in car-couplings, and the object is to provide an improved coupling by which cars of different heights can be connected by contact of the bumpers or draw-heads without endangering the person of the workman.

My invention consists in the novel construction and combination of parts, as will be hereinafter more fully described and specifically claimed.

In the accompanying drawings, Figure 1 is a side view of my improvement applied to the car. Fig. 2 is a top plan view of the same, and Fig. 3 is a cross-sectional view, showing the lever to adjust the draw-head, taken through the line *xx* of Fig. 1.

The letter A represents a box fixed by any suitable means to the timbers of the car. The forward end of this box is formed to admit the passage of the draw-bar, and about midway of its length has fixed therein a strong partition, *a*, formed with a passage-way, *b*, to admit the rear part of the draw-bar, substantially as shown in Fig. 1 of the drawings.

The letter A' represents the draw-bar, the forward portion, *c*, of which is adapted to fit in cross-section the width of the interior of the box, and the rear portion, *d*, thereof is drawn round and formed with a suitable head on the end, which is not shown in the drawings, in order to form a pulling-seat. On the arm or rear portion, *d*, between the partition in the box and the head of the arm, is placed a strong coil-spring, *e*, the office of which is readily perceived and well known. The draw-bar in the portion *c*, as stated, corresponds to the width of the interior of the box, but in vertical section it is smaller than the height of the interior of the box, in order that a limited vertical movement of the draw-bar may be permitted, so that it may be adapted to cars of different heights. The head of the draw-bar A² is made larger than the draw-bar, and may correspond in cross-section to the dimensions of the box in which the draw-bar moves, in

order that the sides of the draw-head shall register with the sides of the box when driven back by the stroke of the engaging cars. The head A² is chambered to receive the link, and the face is formed with transverse projecting ribs 1 2, as seen in Fig. 1 of the drawings, for the purpose of limiting the movement of the stirrup in both directions.

The letter F represents a stirrup fitted over the front and to the sides of the draw-head and pivotally attached thereto, as shown. This stirrup is lifted by a bar, J, pivotally connected to it and extending to the top of the car, where it is passed through a staple or ring. The operation and uses of this stirrup are obvious, its principal use being to guide the draw-link in the proper place or direction.

The letter B represents the draw-pin having the upward extension *f* above the head, and the lower portion made as usual. This upward extension *f* passes through a perforation in the end of the guide-brace E, which is fixed on the top of the draw-head by bolts or any other suitable means. The draw-pin is raised by the bar H, attached to the end of the extension *f*, and from thence passes to the top of the car, where it is kept in place by a staple or ring.

The letter D represents a support for the draw-pin when the pin is drawn up to its limit. One arm of this support extends back beyond the rear end of the draw-head, as shown in Fig. 1, and works in a way formed in the draw-head and plate M, bolted on the draw-head. The support is drawn back into engagement with the head of the pin by a spring, I, fixed on the draw-head so that its upward-extending arm, coming under the head of the draw-pin, holds the pin up in the position seen in Fig. 1 of the drawings, and when the draw-head is driven back, so that the extended end of the sliding arm of the support strikes the face of the box under the car, the upward-extending arm is forced from under the head of the pin, and the pin falls of its own weight in place. As the draw-head might be raised so that the rear extension of this sliding arm would strike above the face of the box, I fix a piece, *g*, on the box, and thus obviate the difficulty.

The letter G represents a cam-lever pivotally secured in the lower portion of the box

under the car. This lever serves as the means to lift the draw-head to any desired height and sustain it thereon, because of the weight of the bar and head.

5 What I claim as my invention, and desire to secure by Letters Patent, is—

1. In combination with the box or casing A and draw-bar A', arranged in said box so as to admit of vertical movement, the cam-lever G,
10 pivotally secured in the end of said box, substantially as and for the purpose set forth.

2. In combination with the draw-bar A', having the draw-head A², formed with upper and lower transverse ribs, 1 2, the stirrup F, pivot-

ally secured to the draw-head, and suitable 15 lifting means, substantially as described.

3. In combination with the box A, draw-bar, and head, and coupling-pin having a suitable guiding-brace and lifting means, the sliding coupling-pin support D, having spring I, and 20 so arranged and secured to the upper face of the draw-head that its engagement with and releasement from the pin-head shall be effected substantially as described.

WILLIAM H. JONES.

Witnesses:

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