

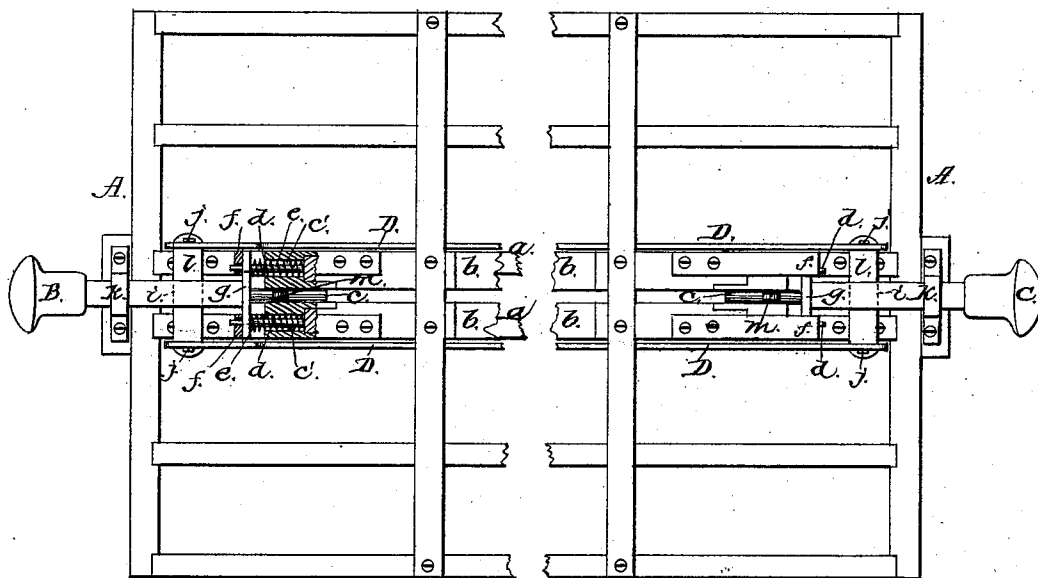
(No Model.)

T. HIBBERT.  
Railway Continuous Draw Bar.

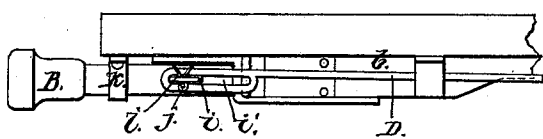
No. 230,549.

Patented July 27, 1880.

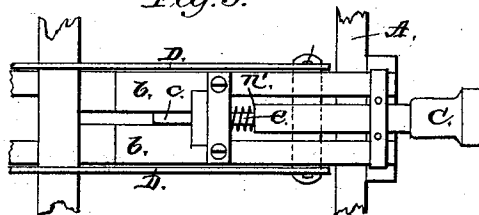
*Fig. 1*



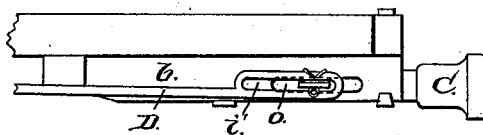
*Fig. 2.*



*Fig. 3.*



*Fig. 4.*



WITNESSES

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# UNITED STATES PATENT OFFICE.

THOMAS HIBBERT, OF COCHRAN, INDIANA.

## RAILWAY CONTINUOUS DRAW-BAR.

SPECIFICATION forming part of Letters Patent No. 230,549, dated July 27, 1880.

Application filed June 12, 1880. (No model.)

*To all whom it may concern:*

Be it known that I, THOMAS HIBBERT, of Cochran, in the county of Dearborn and State of Indiana, have invented a new and valuable Improvement in Continuous Draw-Bars for Car-Bumpers; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a bottom view of my improved draw-bar. Fig. 2 is a side view of the same, and Figs. 3 and 4 are respectively bottom and side views of a modification thereof.

This invention has relation to improvements in that class of draw-bars wherein the coupling-boxes are connected together by longitudinal rods extending under the bottom of the car.

The nature of the invention will be hereinafter more fully set forth.

In the accompanying drawings, the letter A designates the frame-work of the bottom of a car, having at its middle portion the parallel beams *a a'*, to the under sides of which are secured the parallel wooden beams *b*, that support the rabbeted ends *c* of the draw-head B. In the ends of beams *b*, which terminate short of the end of the car-frame, are formed recesses *c'*, projecting out centrally from which are pins *d*, around which are arranged the coil-springs *e*. The outer ends of the pins *d* are supported by metallic brackets *f*, secured to beams *b* and to the beams *a a'* of the car-frame, and the said pins serve as guides to a follower, *g*, which bears upon the ends of the springs, and which is traversed by the rabbeted end *c* of the draw-head B, as shown. The front portion of this draw-head is supported by a stirrup, K, in the usual manner, and it has free endwise motion through the same.

The draw-head C at the other end of the car, and its appliances, are precisely the same in construction as draw-head B and its connections.

The draw-heads B C, between the stirrups

and brackets *f*, are provided with a transverse horizontal slot, *i*, of oblong form, in each of which is seated a metallic key, *l*, projecting equally from both sides, the ends of which are connected by the longitudinal draw-rods D. The ends of these rods are provided with oblong slots *i'*, which are passed over the projecting ends of these keys and secured thereon by means of pins *j* extending through said keys.

When the draft is applied by the engine the strain thereof is transferred to the rear end of each car of the train, thus relieving its frame of all stress lengthwise, owing to the yielding of the buffer-springs at the rear end of the car and the abutting of the follower thereat against the extremities of the buffer beams or blocks caused by the draw-rods D.

In backing the draw-heads are pressed inward, the followers pressed against the ends of the blocks *b*, and the springs *e* pressed back into their recesses, when they are relieved of further compression, which would result in injury to their resilient qualities.

In backing the train the inward movement of the draw-heads B C occurs without bending the rods D, owing to the engagement of the keys *l* in the longitudinal slots of the ends of the said rods.

Should the rods break the draw-heads are prevented from pulling out of the frame of the car by means of a key, *m*, extending through the rabbet of the said heads behind the followers, which then transfer the strain to the brackets *f*.

When it is deemed expedient to use but one buffer-spring the blocks *b* are carried out to the ends of the car-frame and the spring is arranged between them in a recess formed about midway of their length.

The rabbeted end of the draw-bar extends through the spring and its recess, and bears with its shoulder *n'* against the outer end of the former, and the transverse key extends through longitudinal horizontal slots *o* in the blocks *b*. This modification is clearly illustrated in Figs. 3 and 4.

What I claim as new, and desire to secure by Letters Patent, is—

The combination, with the car-frame having

the parallel buffer-blocks *b*, springs *e*, recessed  
into the ends of said blocks, the guide-pins *d*,  
the brackets *f*, followers *g*, and stirrups *k*, of  
the rabbeted draw-heads B C, extending  
5 through the stirrups and followers and pro-  
vided with the transverse keys *l*, and the draw-  
rods D, having longitudinal slots *i* in their  
ends and passed over and secured on the ends  
of said keys, substantially as specified.

In testimony that I claim the above I have 10  
hereunto subscribed my name in the presence  
of two witnesses.

THOMAS HIBBERT.

Witnesses:

D. A. ROBERTSON,  
H. B. SHUTTS.