

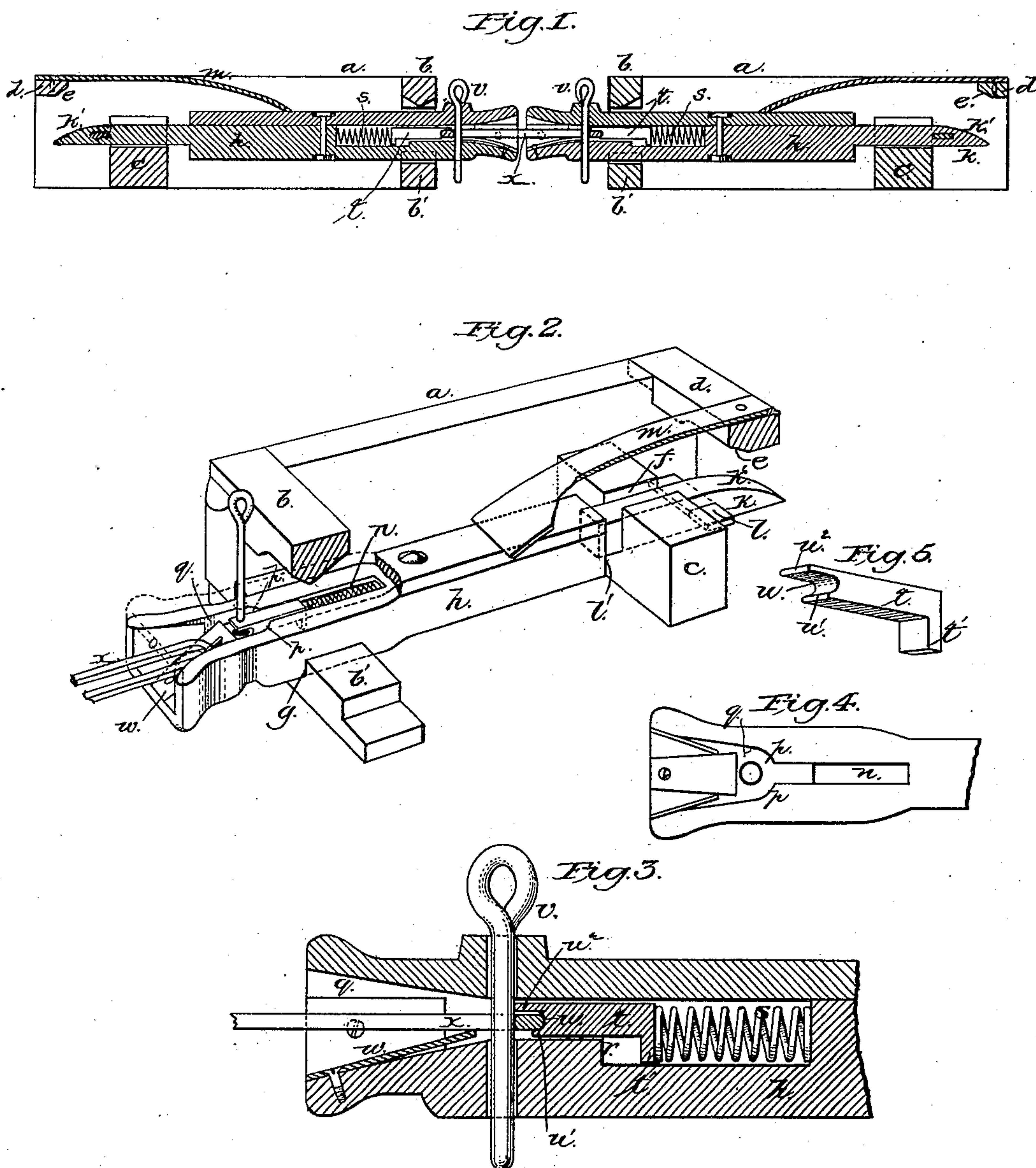
(No Model.)

J. F. LEWALLEN.

CAR COUPLING.

No. 245,521.

Patented Aug. 9, 1881.



WITNESSES

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UNITED STATES PATENT OFFICE.

JAMES F. LEWALLEN, OF NICHOLASVILLE, KENTUCKY.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 245,521, dated August 9, 1881.

Application filed June 11, 1881. (No model.)

To all whom it may concern:

Be it known that I, JAMES F. LEWALLEN, a citizen of the United States, resident of Nicholasville, in the county of Jessamine and State of Kentucky, have invented a new and valuable Improvement in Car-Couplers; 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 longitudinal section of the device. Fig. 2 is a perspective view, parts being broken away. Fig. 3 is an enlarged detail section. Figs. 4 and 5 are details.

This invention relates to improvements in car-couplings; and it consists in the construction and novel arrangement of parts, as hereinafter set forth.

In the annexed drawings, the letters *a a* represent the draft-timbers of a car, connected at their front ends by cross-beams *b b'*, and in rear of these by a block, *c*, and brace *d*. The brace is connected to the upper edges of the timbers, and has on its lower front corner a beveled surface, *e*. The block *c* is located in front of but below this brace, and has in its top the angular notch *f*. Aligned with this notch in the top of cross-beam *b'* is formed another notch, *g*. Seated in these notches is the draw-bar *h*, having its tail *k* beveled on top at *k'*, and provided with a transverse stop or key, *l*, in rear of block *c*. This key prevents the draw-bar from being drawn out too far by traction, and in front of block *c* the draw-bar is provided with a shoulder, *l'*, which prevents said draw-bar from being driven in too far by buffing.

Attached to brace *d* is a spring, *m*, arranged lengthwise of and bearing upon the draw-bar *h*, holding the latter in place.

If a car should jump the track, the pressure would force the spring up and allow the draw-

bar to slip from its notches, separating from the car, and avoiding the derailment thereof. The beveled surface *e* and curved top *k'* materially assist this action, for as the rear of the draw-bar rises the pressure on the bevel guides it forward, preventing the key from falling behind the block *c* and holding the draw-bar.

Inside the draw-head is formed an elongated seat, *n*, which opens at the shoulders *p* into a link-chamber, *q*. Back of these shoulders the seat drops, forming a stop, *r*, and the recess is deeper in rear of said stop. In this deeper portion is placed a spring, *s*, which bears against the rear of a pin-supporting block, *t*. At the rear end this block has the depending heel *t'*, which fits in the deeper portion of the seat, and in front the block is grooved transversely at *u*, forming a short under lip, *u'*, and a longer upper lip, *u''*. This block is thrust forward by the action of the spring, the heel bearing against the stop *r*, and the pin *v* supported on the front end. The incoming link *x* drives the block from under the pin, allowing the latter to fall into the said link. The link is caught in the groove *u*, and held closely against the pin, ready to enter the opposite draw-head.

In the mouth of the draw-head are placed the link-guide springs *w*, which are attached in front and extend rearward obliquely, and not only conduct the link centrally, but give a yielding pressure in traveling.

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

The combination, with a draw-bar arranged in open or notch seats *f g*, and having the transverse stop or key *l*, of the longitudinal spring *m*, bearing on the upper surface of said draw-bar, substantially as specified.

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

JAMES F. LEWALLEN.

Witnesses:

ARCHIE WOODS,
ROBERT B. CHOWNING.