

(No Model.)

2 Sheets—Sheet 1.

J. E. DICKERSON.

CAR COUPLING.

No. 276,229.

Patented Apr. 24, 1883.

Fig. 1.

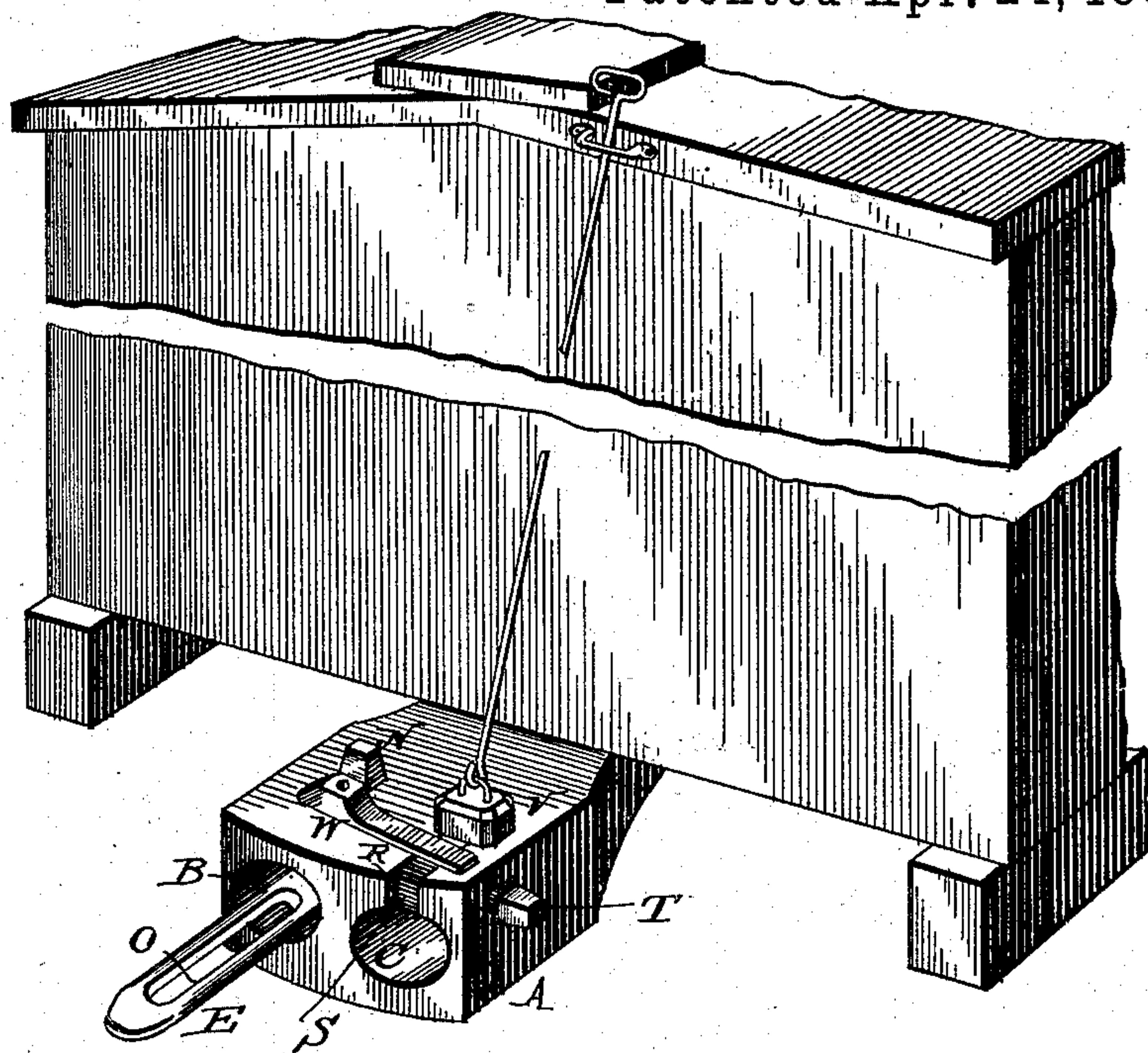
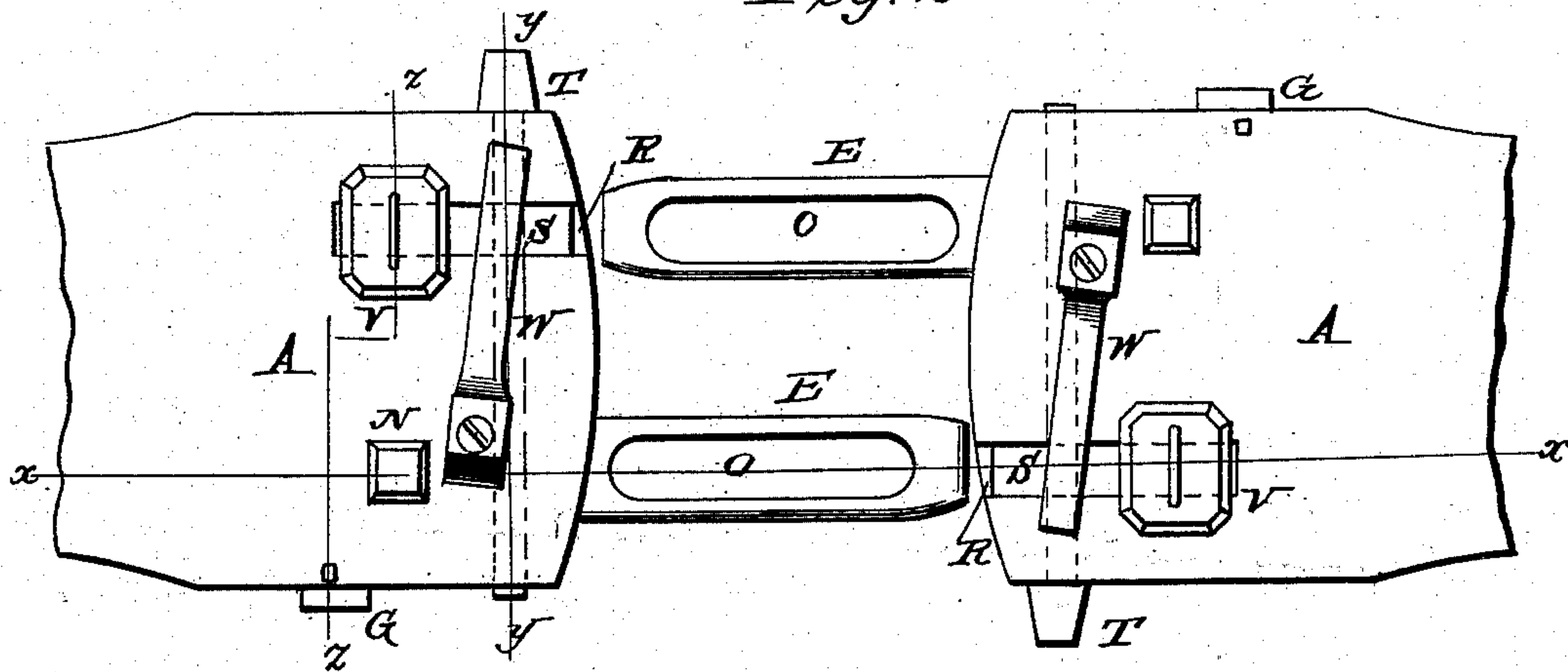


Fig. 2.



WITNESSES:

Wm. L. Dieterich
Wm. G. Hinkel

John E. Dickerson,

INVENTOR.

by C. A. Snow & Co.

ATTORNEYS

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2 Sheets—Sheet 2.

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Fig. 3

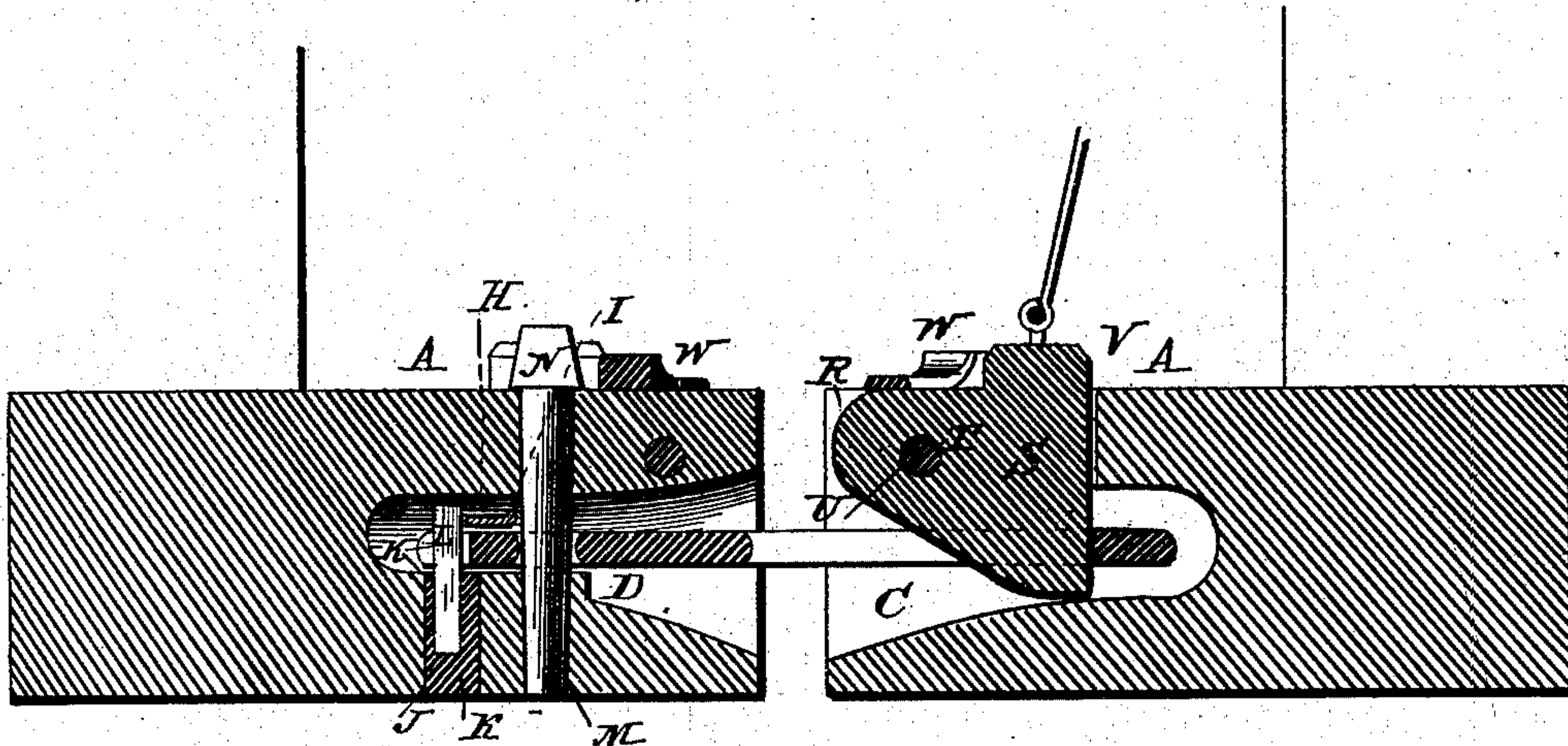


Fig. 4

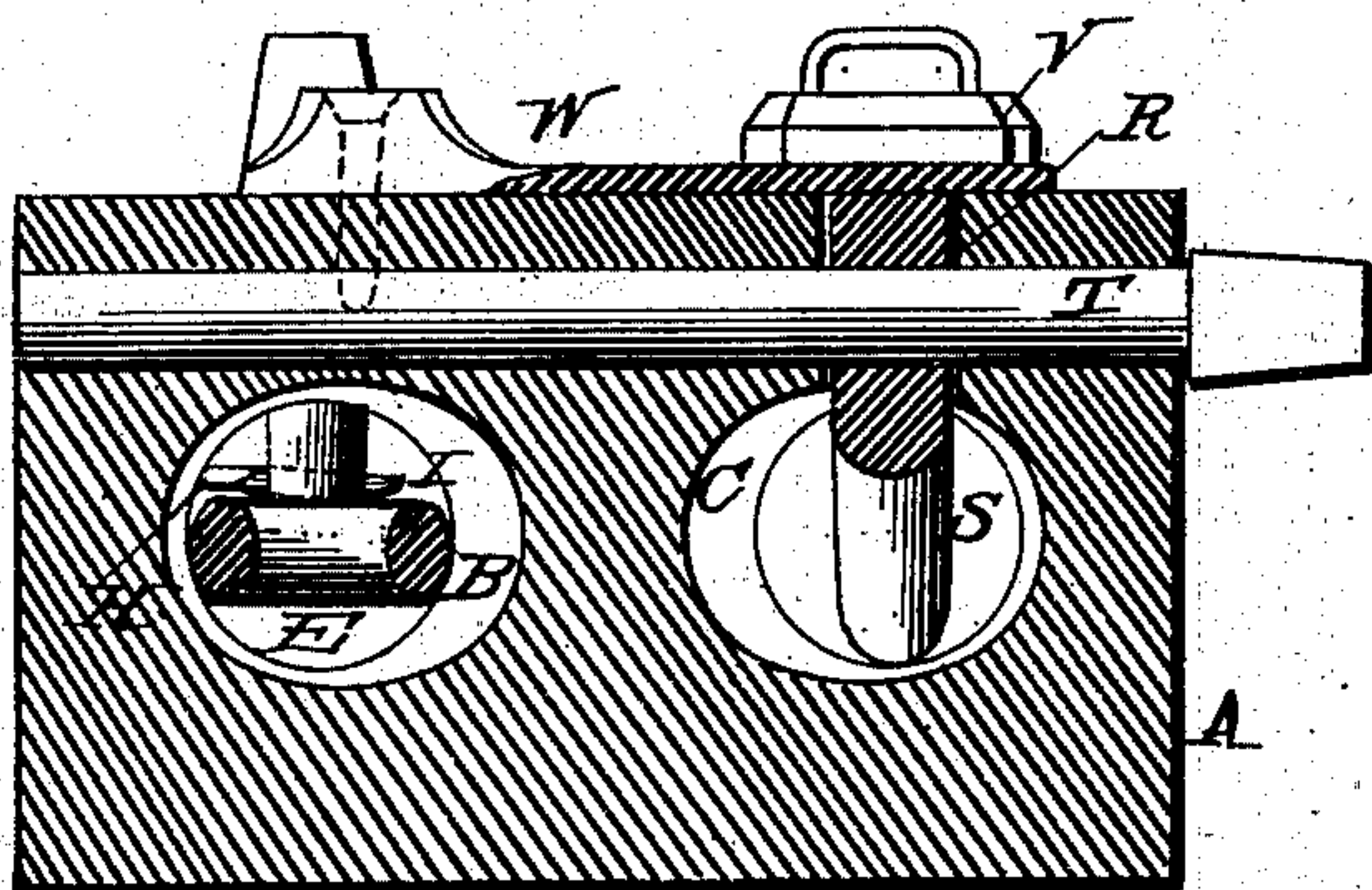


Fig. 5

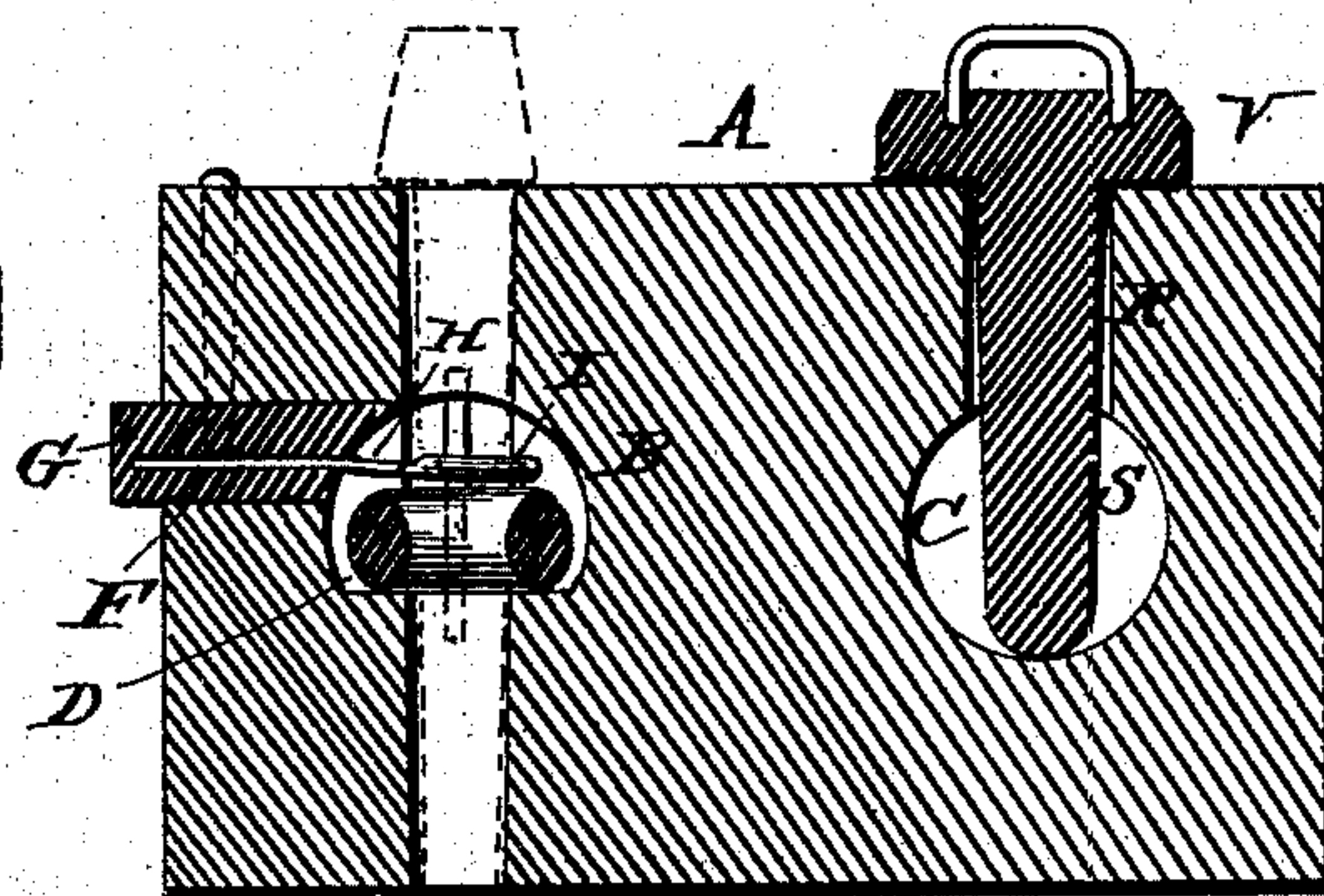


Fig. 6

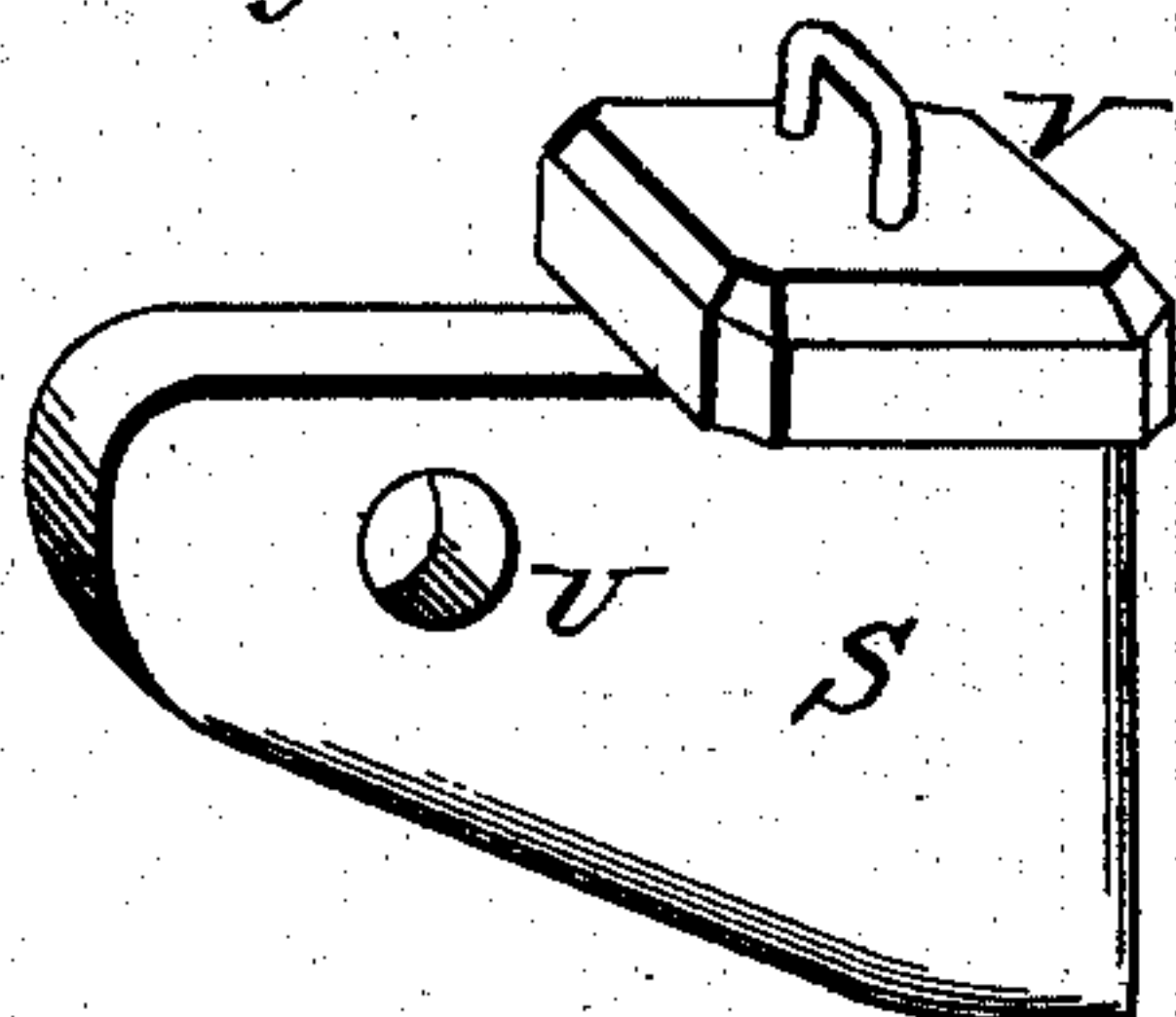
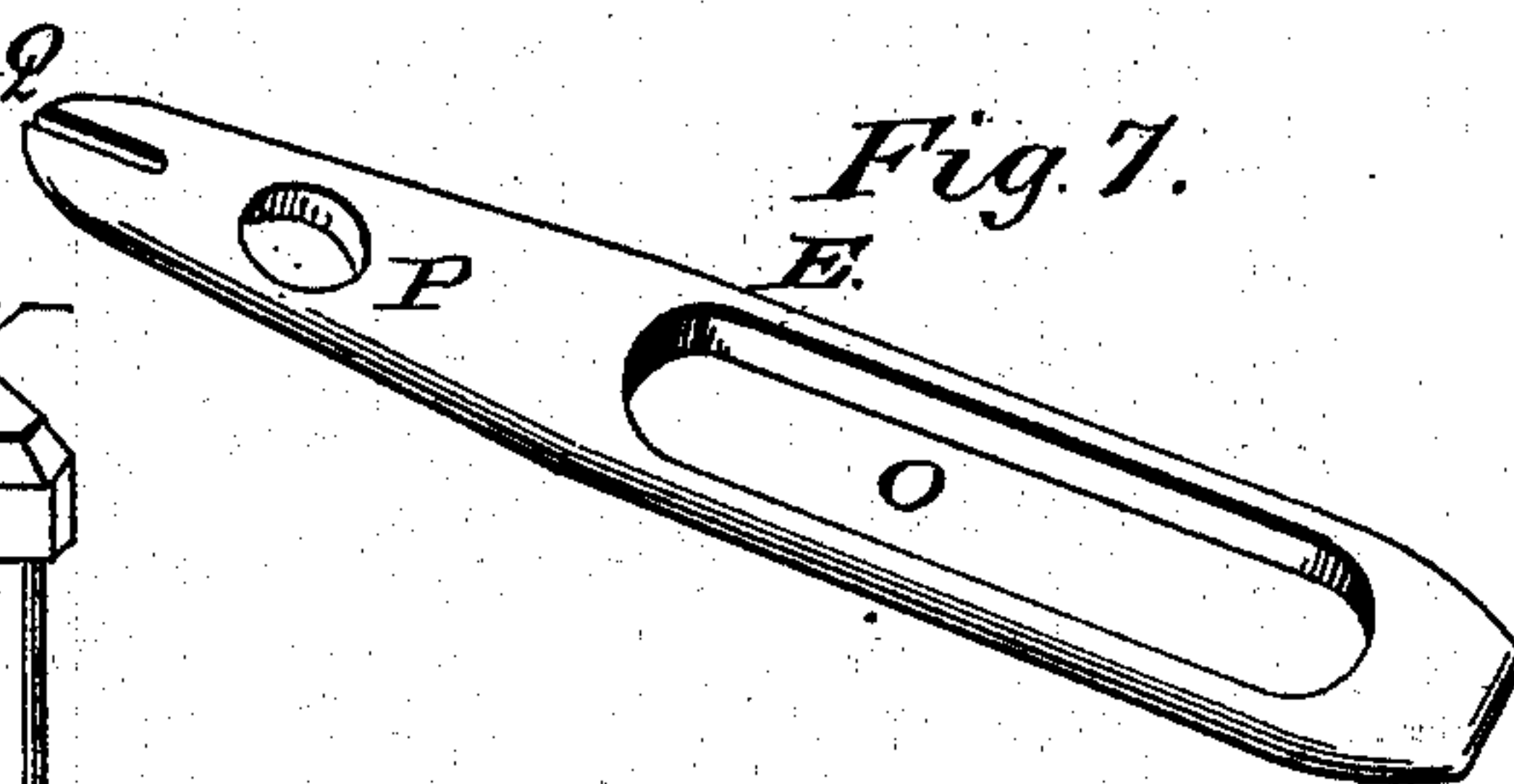


Fig. 7.



WITNESSES:

Wm. L. Dieterich
Geo. G. Hinkel

INVENTOR.

by C. A. Snow & Co.

ATTORNEYS

UNITED STATES PATENT OFFICE.

JOHN E. DICKERSON, OF IBERIA, MISSOURI.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 276,229, dated April 24, 1883.

Application filed January 19, 1883. (No model.)

To all whom it may concern:

Be it known that I, JOHN E. DICKERSON, a citizen of the United States, residing at Iberia, in the county of Miller and State of Missouri, have invented a new and useful Car-Coupling, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to that class of couplings for railroad-cars which are operated automatically by the cars coming together; and it consists in certain improvements in the construction of the same, the object of which is to provide a simple, durable, cheap, and efficient coupling, as will be hereinafter fully described, and particularly pointed out in the claims.

In the drawings hereto annexed, Figure 1 is a perspective view of my improved car-coupling. Fig. 2 is a plan view of the same, showing two draw-heads in position for coupling. Fig. 3 is a longitudinal vertical sectional view on the line *x x* in Fig. 2, but showing the draw-heads coupled. Fig. 4 is a transverse sectional view on the line *y y* in Fig. 3. Fig. 5 is a transverse vertical sectional view on the line *z z* in Fig. 3. Fig. 6 is a detail view of the coupling-hook detached, and Fig. 7 is a detail view of the coupling-link detached.

The same letters refer to the same parts in all the figures.

In the drawings hereto annexed, A A represent the draw-heads, each of which is constructed with two longitudinal mouths or recesses, B and C, located beside each other, as shown. The recess B is provided at its inner end with a shoulder, D, to support the coupling-link E, which, for operation, is located permanently in said recess, as will be presently more fully described. The outer side wall of the recess B is provided above the front end of the shoulder D with an opening or perforation, F, in which is fitted a plug, G, having an inwardly-projecting flat spring, H, which is thus held over the shoulder D. The front edge of the said spring is upturned or beveled, as at I, so as to permit the coupling-link to be easily inserted. The bottom of the recess B likewise has an opening, J, in rear of the spring H, and in which is secured a plug, K, having an upwardly-projecting flat spring, L, the edge of which is presented toward the front of the mouth or recess. The part of the draw-head

comprising the said recess B has a vertical perforation, M, to receive the coupling-pin N.

The coupling-link E consists of a flat, suitably-proportioned plate, having a slot, O, at its front and a perforation, P, near its rear end. The extreme rear end of the coupling-link has a vertical notch or recess, Q. When the coupling-link is inserted into the mouth or recess B, the notch Q at its inner end is fitted upon or made to engage the vertical spring L, while the link itself is inserted under the flat horizontal spring H. By the combined action of the two springs L and H, the coupling-link is held or supported upon the shoulder D, not only in a true horizontal position, or as nearly so as may be desired, but also in line with the mouth or recess C, so that it will be certain to enter the draw-head of the opposite car when the cars come together. The link is held by the coupling-pin N, which passes through the perforation P.

The upper side of the recess C in the draw-head has a slot, R, in which the coupling-hook S is pivoted upon a transverse horizontal pin, T. The said coupling-hook consists of a triangular plate having a perforation, U, at its front corner, by which it is pivoted upon the pin T. At its rear upper corner it has a lug, V, which rests on top of the draw-head, so as to sustain the "hook" in the proper position for coupling. A suitably-arranged cord, chain, lever, or other mechanism is to be attached to the upper rear corner of the coupling-hook for raising the latter in uncoupling, so as to allow this to be done without stepping between the cars. A flat spring, W, of suitable construction, may be arranged on top of the draw-head to press upon the coupling-hook, as shown, and assist in keeping the latter in position for coupling in case its own weight should not be sufficient for the purpose.

The operation of this invention will be readily understood from the foregoing description, taken in connection with the drawings hereto annexed. When the cars come together, the link of each draw-head will enter the recess or mouth C of the draw-head of the opposite car, thus raising and engaging the coupling-hook and effecting the coupling. To uncouple, it is only necessary to raise the coupling-hooks so as to release the links. By this construction the links, pins, and other parts of the

coupling are always in place, and not liable to belost. The coupling is a double one, and therefore possesses great strength. The springs L and H, while they serve at all times to retain the coupling-link in its proper position, at the same time permit it to play or move freely in any direction, thus lessening the liability of its being strained or broken.

I claim as my invention and desire to secure by Letters Patent of the United States—

1. In a car-coupling, a draw-head having a recess or mouth provided at its inner end with a shoulder, in combination with a vertical and a horizontal spring, arranged substantially as described, for the purpose of supporting the coupling-link, substantially as set forth.

2. In a car-coupling, the draw-head A, having mouth or recess B, provided with openings F and J, in combination with the plugs G and K, having springs H and L, arranged substantially as described, for the purpose set forth.

3. The herein-described coupling-link, consisting of a plate having slot O, perforation P,

and the notch Q at its rear end, substantially as set forth.

4. The combination, with the draw-head A, having recess B, provided with the shoulder D, springs H L, and the perforation M, of the coupling-link having slot O, perforation P, and notch Q, and the coupling-pin N, substantially as set forth.

5. As an improvement in car-couplings, the draw-head A, having recesses B C, shoulder D, springs H L, and slot R, in combination with the coupling-hook S, pivoted in the said slot, the spring W, and the link E, having slot O, perforation P, and notch Q, and the coupling-pin, all constructed and arranged substantially as set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

JOHN E. DICKERSON.

Witnesses:

JOHN K. GROFF,

JAMES J. DICKERSON.