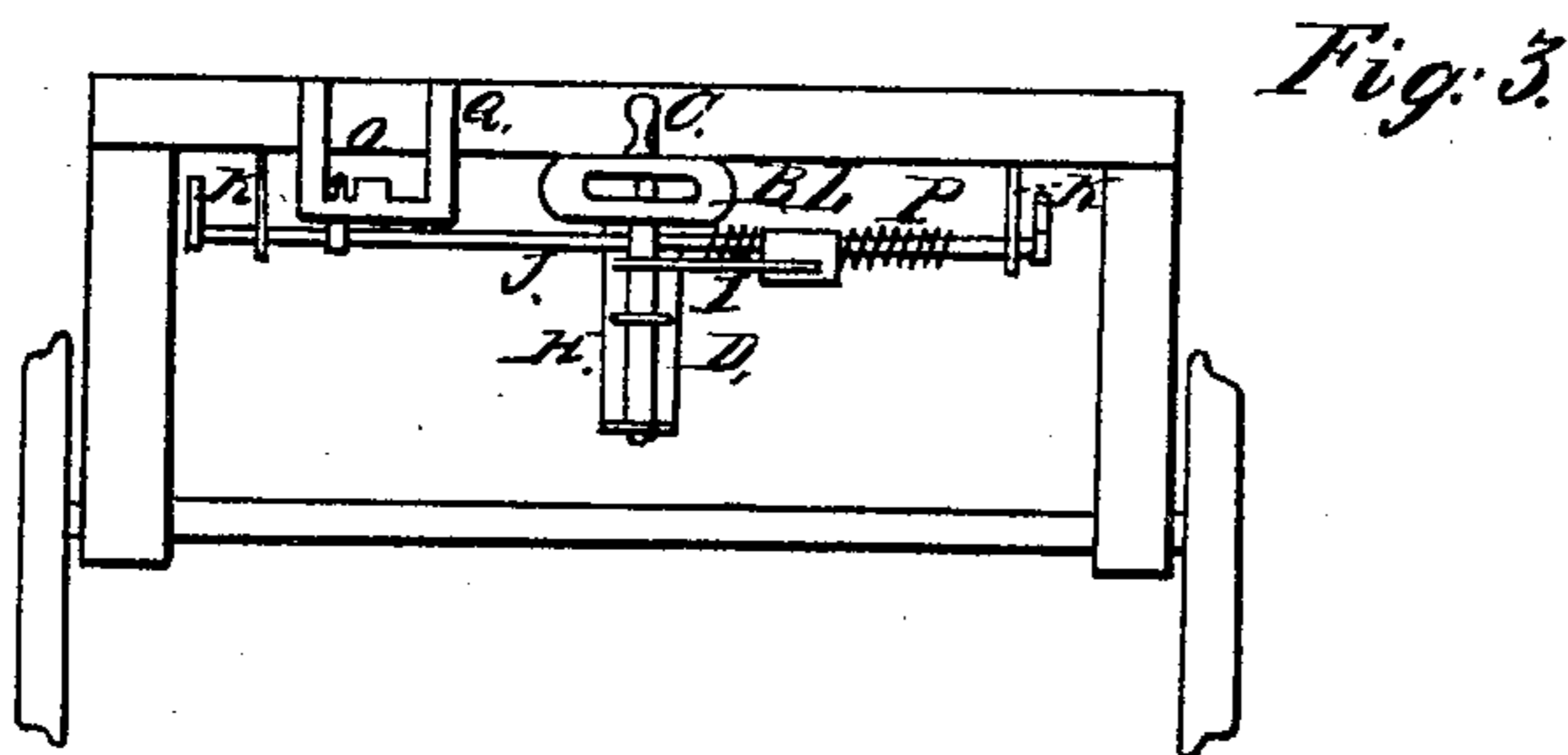
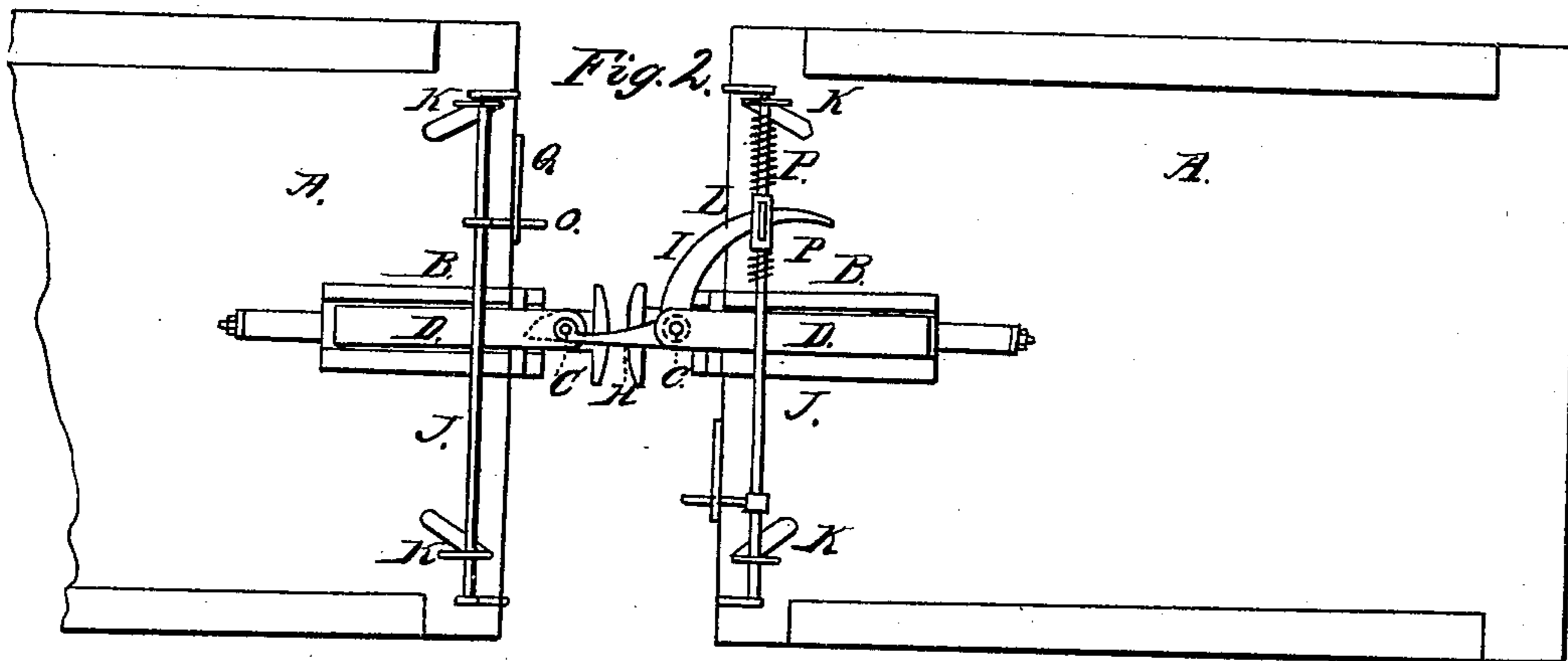
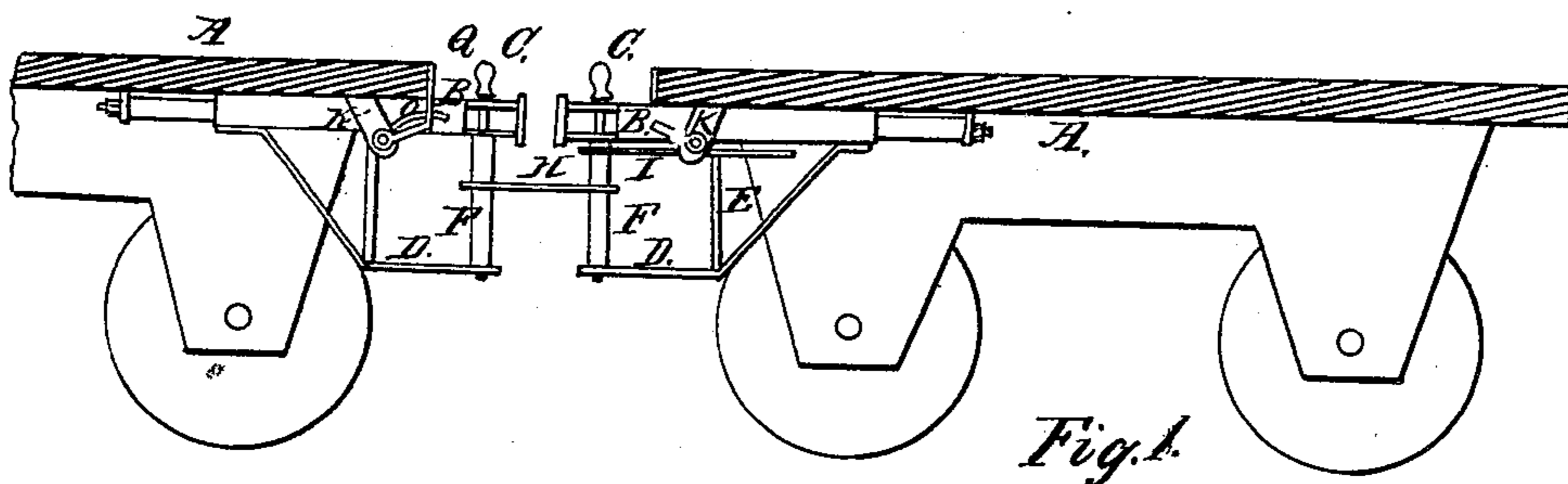


J. W. H. DOUBLER.
CAR COUPLING.

No. 100,272.

Patented Mar. 1, 1870.



Witnesses.

Saml. C. Hayes
Lewis L. Cotton

Inventor.

John W. H. Doubler

United States Patent Office.

JOHN W. H. DOUBLER, OF CHICAGO, ILLINOIS, ASSIGNOR TO HIMSELF, J. M. CLENDING, S. C. HAYES, AND THOMAS F. ROONEY, OF SAME PLACE.

Letters Patent No. 100,272, dated March 1, 1870; antedated February 16, 1870.

IMPROVED RAILWAY-CAR COUPLING

The Schedule referred to in these Letters Patent and making part of the same

To all whom it may concern:

Be it known that I, JOHN W. H. DOUBLER, of Chicago, in the county of Cook, and State of Illinois, have invented a new and useful Improvement in Car Couplers; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings and the letters and figures marked thereon, which form a part of this specification, and in which—

Figure 1 represents a side elevation of my invention;

Figure 2, a bottom view of the same; and

Figure 3, an end view, looking at the end of the car.

The nature of my invention consists in a car-coupler, in which a horizontal hook hooks automatically to a vertical pin, and couples the cars as they come together; also, in the combination with said hook, of a lever and spring for operating said hook; and, also, in the device hereafter specified, whereby the coupler is uncoupled by moving the rod or piece to which the spring is attached without overcoming the tension of the spring.

It further consists in attaching to the ordinary link-and-pin coupling an independent coupler, that couples the cars below the bumper-heads.

To enable those skilled in the art to understand how to manufacture and use my invention, I will proceed to describe the same with particularity.

The same letters of reference refer to the corresponding parts in the different figures.

In the annexed drawings—

A represents the ordinary railway-cars, and

B, the ordinary link-and-pin bumper-heads.

C C are pins which extend through the bumpers to the piece D below the bumpers.

The piece D is attached to the bumper and is braced by the upright piece E.

There is a sleeve, F, on the pin C, which serves to strengthen the pin, and to which the coupling-hook H is attached.

The lever arm I is also attached to the same sleeve.

J is a rod suspended beneath the car in hangers K in such a manner that it can be moved laterally as hereafter specified.

There is a sliding block, L, on this rod, through which the arm-lever I passes, the sliding block being held in place by the springs P.

The coupling-hook H and the arm-lever I are firmly attached to the sleeve F, and turn with it, and the hook is kept in a position to couple by means of the arm I and springs P, the springs P allowing it to give to pass by the coupling-pin as the cars come together,

and keep it coupled by holding the arm-lever I in the position shown in fig. 2, when it is coupled.

There is an arm, O, attached rigidly to the rod J that rests in a notch in the hanger Q, and keeps the rod from moving laterally; but when it is desired to uncouple the cars, the said arm O is raised from its place in the hangers Q, and the rod moved laterally, which vibrates the arm I and swings the coupling-hook H and uncouples the cars.

By moving the rod J in this way the springs P are also moved, and the car is uncoupled without overcoming the tension of the springs P, which keep the car coupled when the rod J is in the position above designated.

There can be a hook on the sleeve on each coupling-pin C, but one hook is sufficient for coupling the cars together.

The ordinary coupling-link can be used if desired, the hook-coupling above described not interfering with it in the least.

It will be observed that by placing the hook-coupling below the bumper it gives room to use long pins, and the cars will couple irrespective of the difference in height between the cars.

My car-coupler is simple, cheap, not liable to get out of repair, is easily uncoupled when desired, and will couple automatically cars irrespective of their difference in height.

Having thus fully described the construction and operation of my improved automatic car-coupler,

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

1. A spring, P, and movable block or rod J, when constructed and arranged so as to operate in a car-coupler, substantially for the purpose specified.

2. The arm-lever I and springs P, when constructed and arranged to operate the coupling-hook H, substantially as and for the purposes specified.

3. The piece D, bumper B, and hook H, when constructed and arranged substantially as and for the purposes specified and shown.

4. The sleeve F, when constructed and arranged so as to strengthen the coupling-pin, substantially as described and specified.

5. The combination of the ordinary link-and-pin bumper-head and hook-coupler above described, when so constructed and arranged that either or both can be used for coupling the cars, substantially as specified and shown.

Witnesses: JOHN W. H. DOUBLER.

SAML. C. HAYES,
LEWIS L. COBURN.