

(No Model.)

J. P. CHAMPION.

CAR COUPLING.

No. 285,228.

Patented Sept. 18, 1883.

Fig. 1.

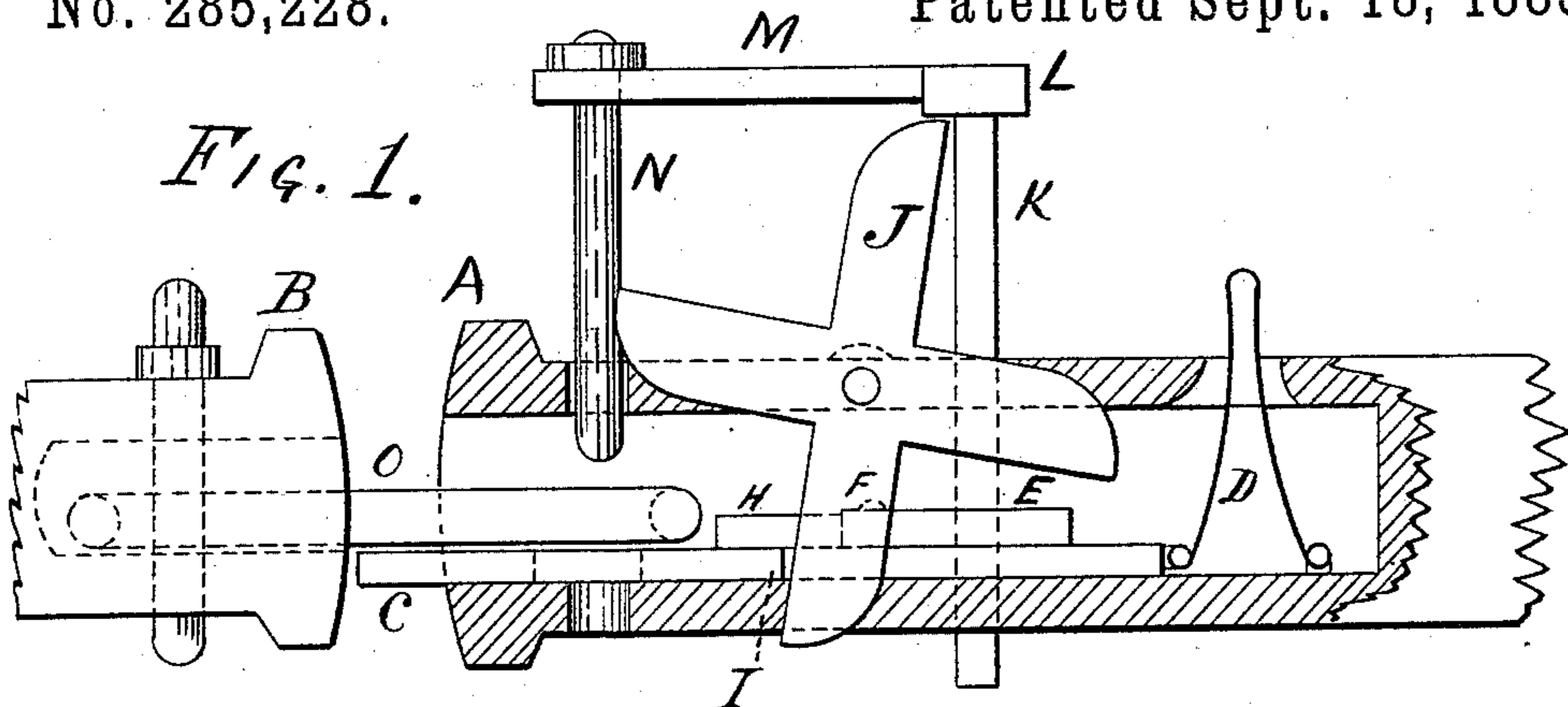


Fig. 2.

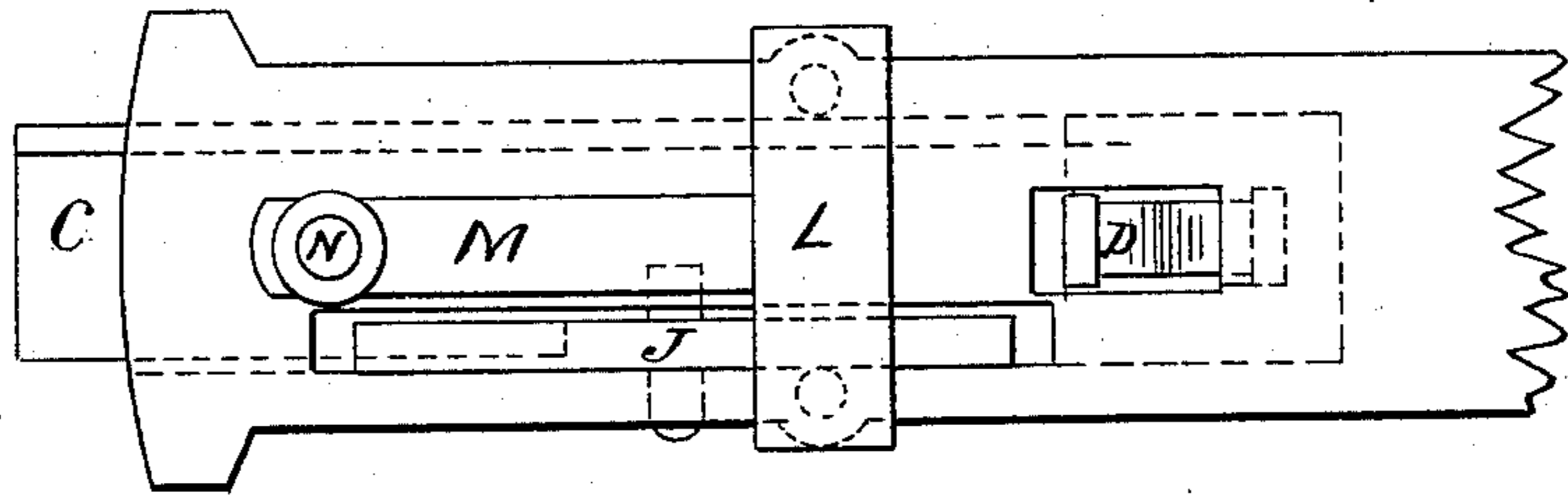
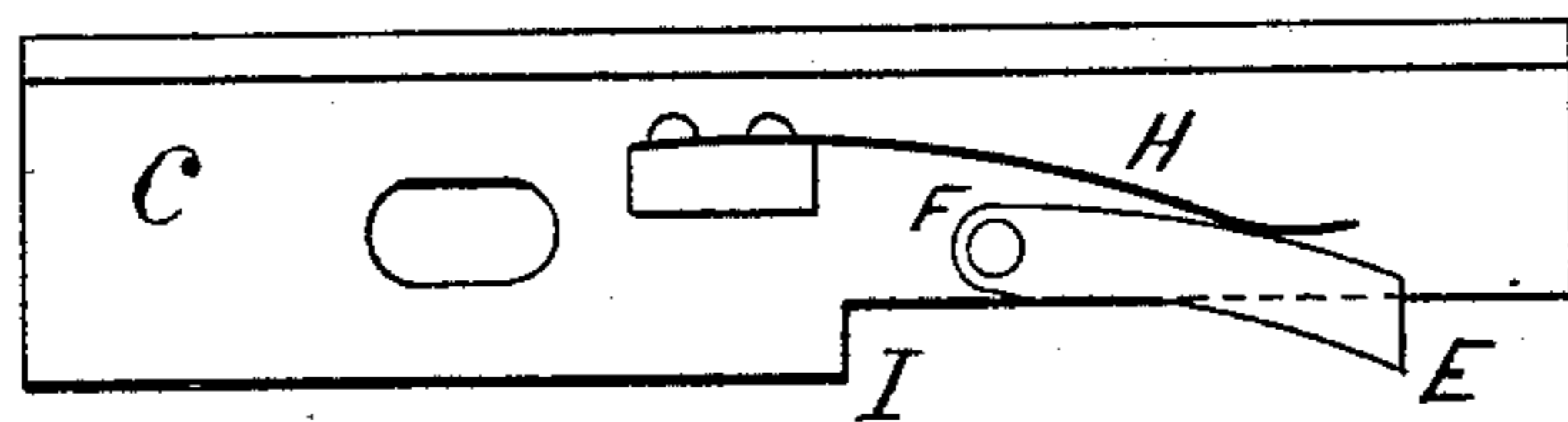


Fig. 3.



WITNESSES:

William R. Brooks.

Richard M. Green.

INVENTOR:

Joshua P. Champion

# UNITED STATES PATENT OFFICE.

JOSIAH P. CHAMPION, OF PHELPS, NEW YORK.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 285,228, dated September 18, 1883.

Application filed June 18, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, JOSIAH P. CHAMPION, residing at Phelps, in the county of Ontario and State of New York, have invented an Improved Automatic Car-Coupling, of which the following is a specification.

Referring to the drawings accompanying this specification, Figure 1 represents a side view of my invention; Fig. 2, a top view, and Fig. 3 a separate top view of the slide C.

The same letters of reference refer to like parts.

A and B represent the buffers—B of the ordinary kind, A longer than usual, and shown partly in section. Projecting from the buffer A is the slide C, which in its normal position extends some distance beyond the end of the buffer, being pushed out by the spring D or its equivalent. On one edge of this slide is a dog, E, pivoted at F and pressed outward by the spring H.

At I is a shoulder formed on the edge of the slide.

J is a four-armed cam-wheel turning on a pivot through a slot in the buffer.

K is a gate working perpendicularly, formed of the cross-piece L and upright bars, working freely through holes in the buffer. Rigidly attached to the cross-piece L is an arm, M, supporting loosely the pin N, which engages with the link.

The operation of the invention is as follows: When the cars are to be coupled, the link O enters the buffer A. At the same time the projecting slide C is pushed in by the buffer B the front end of the dog E pushes against

one of the arms of the cam-wheel J, followed by the shoulder I against another arm, partly turning the wheel. Another arm engages with the cross-piece L of the gate, raising the same, and, by means of the arm M, the pin N, to permit the passage of the link under the pin. A continuation of the same motions disengages the arm of the cam-wheel from the cross-piece L, when the gate and pin immediately fall, the latter passing through the link and its lower end through a slot in the slide C and a hole in the under side of the buffer, thus securely coupling the cars together.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In an automatic car-coupling, the slide C, constructed with the dog E, spring H, and shoulder I, operating in combination with the four-armed cam-wheel J and spring D, or its equivalent, substantially as described.

2. In an automatic car-coupling, the four-armed cam-wheel J, in combination with the gate K, with its arm M, operating the pin N, substantially as described.

3. In an automatic car-coupling, the combination of the slide C, constructed as described, spring D, or its equivalent, four-armed cam-wheel J, and gate K, with its arm M, operating the pin N, substantially as and for the purposes herein set forth and described.

JOSIAH P. CHAMPION.

Witnesses:

WILLIAM R. BROOKS,  
WM. B. HOTCHKISS.