

J. BRADY.  
Car Coupling.

No. 201,644.

Patented March 26, 1878.

Fig. 1.

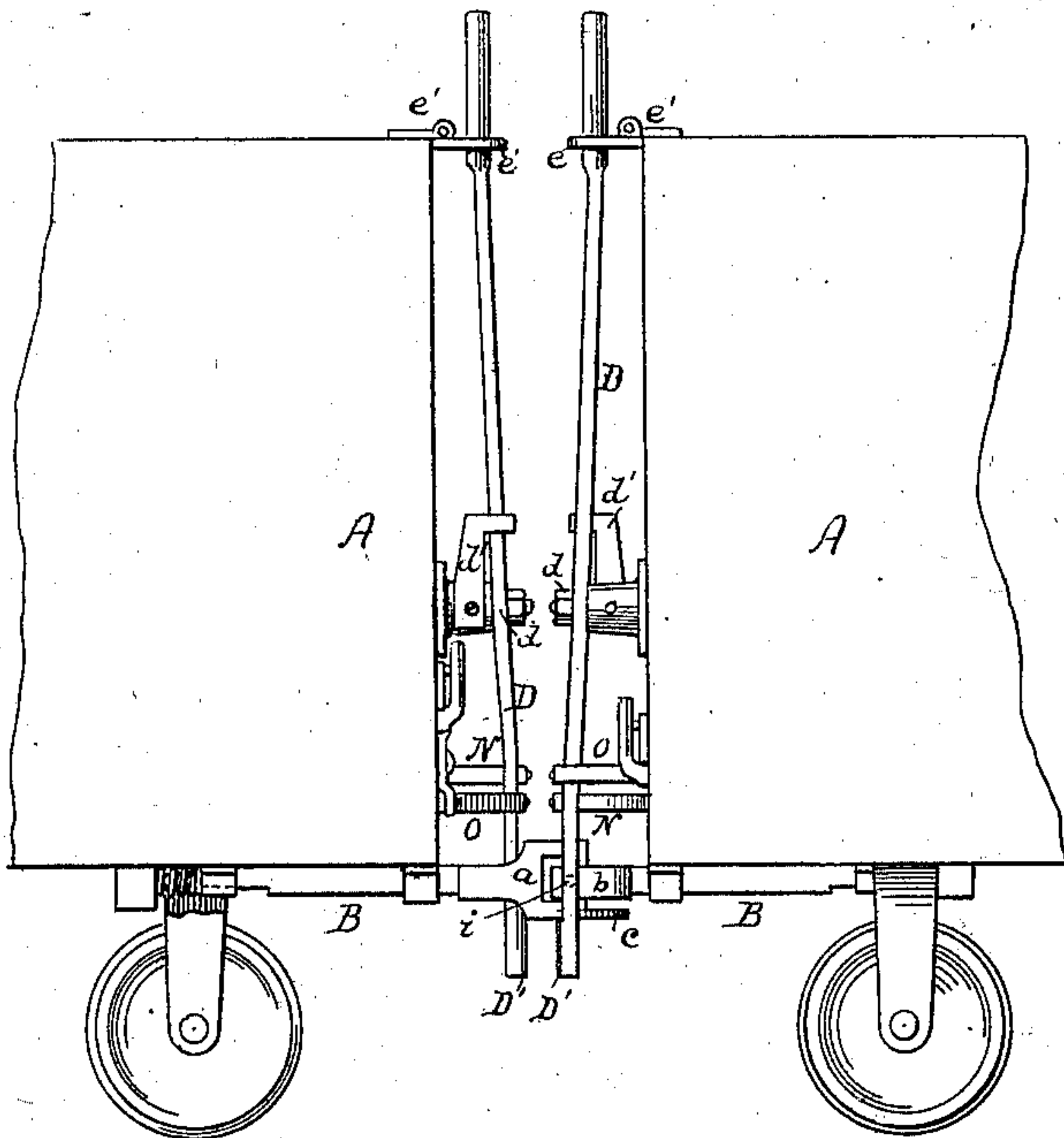


Fig. 2.

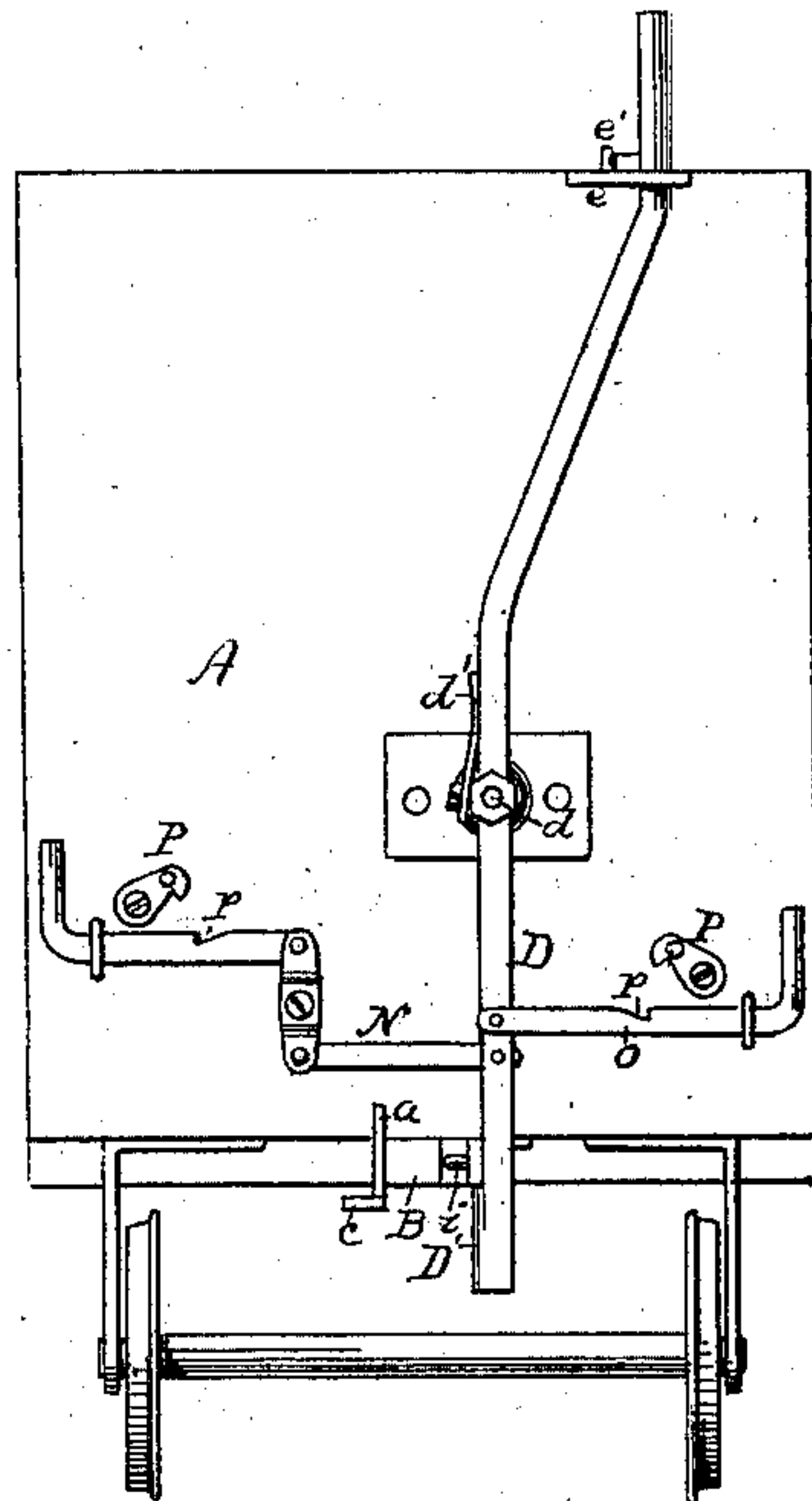


Fig. 3.

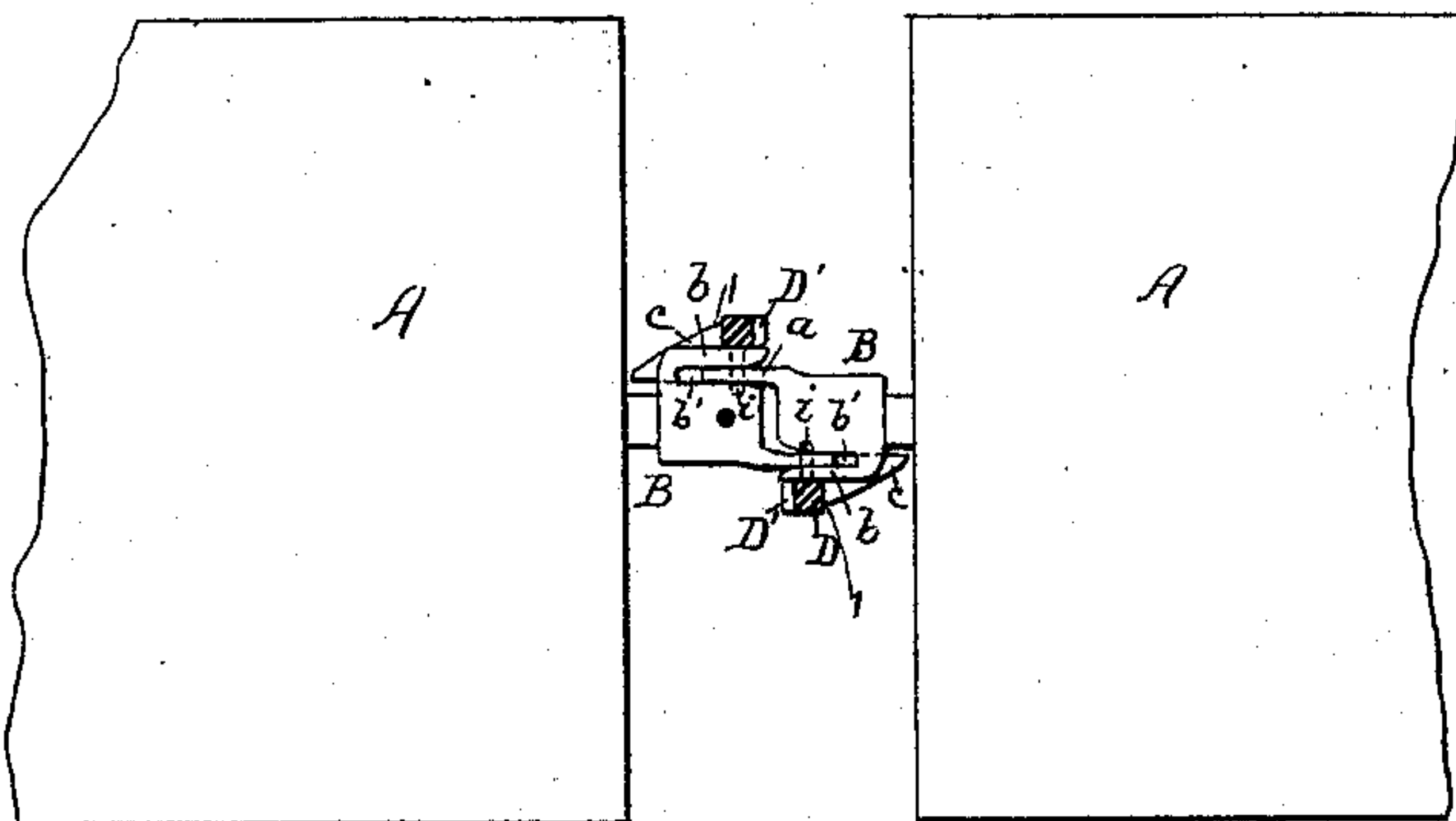
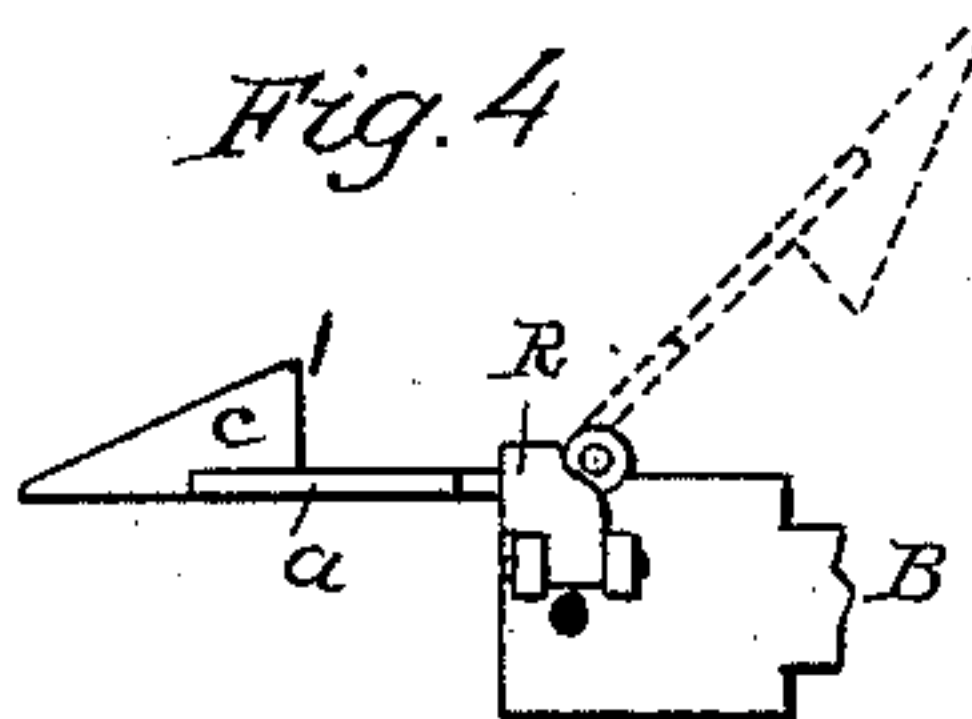


Fig. 4.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

JOHN BRADY, OF DETROIT, MICHIGAN.

## IMPROVEMENT IN CAR-COUPPLINGS.

Specification forming part of Letters Patent No. **201,644**, dated March 26, 1878; application filed February 28, 1878.

*To all whom it may concern:*

Be it known that I, JOHN BRADY, of Detroit, in the State of Michigan, have invented a new and Improved Car-Coupling Device; and I hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a side elevation, showing two cars coupled. Fig. 2 is an end elevation of the car, showing the lever-connections. Fig. 3 is a plan view of two cars coupled together. Fig. 4 is a detail, to be referred to.

The object of my invention is to provide an automatic car-coupler which can be uncoupled by some one standing outside the ends of the cars, so as to be in no danger. If desirable, the cars may be coupled by the same means.

My invention consists in two interlocking draw-heads, provided with spring-levers carrying pins to hold the heads together, and the heads being provided with wedge-shaped projections for operating the spring-levers.

It also consists in certain details for operating, locking, and unlocking the spring-levers, as hereinafter more fully described and claimed.

In order that those skilled in the art may make and use my invention, I will proceed to describe the manner in which I have carried it out.

In the said drawings, A A are two box-cars, provided with the usual spring-bumpers, but carrying on their ends peculiarly-constructed draw-heads B B. These heads are made with central openings, like the common link-couplers, and are provided on one side with a leg, *b*, not projecting beyond the face of the head, and on the other side they are provided with projecting eyes or links *a*, having a wedge-shaped spur, *c*, on their lower edges, and the spur has its greatest superficial area in a plane at right angles to the plane of links *a*.

A lever, D, is pivoted at *d* on the end of the car, and provided with a spring, *d'*, to keep its upper end thrown outward, where it works in a slotted plate, *e*, provided with a latch, *e'*, to keep the lever fixed in any de-

sired position. The lower end of lever D bears a coupling-pin, *i*, which passes through leg *b* across the opening and the body of the draw-head. Below the draw-head proper, lever D has a rounded projection, D', against which, when the cars come together, impinges the wedge-shaped projection or spur *c* of link *a*, and, overcoming the force of spring *d'*, presses the lever to one side until links *a* pass into the slots or openings *b'* between *b* and the draw-head. The shoulder 1 on spur *c* having by this time passed beyond the portion D' of lever D, the spring acts on the lever, and the coupling-pin *i* is thrown into position through link *a*. As the links *a* and slots *b'* alternate, each pair of cars is held by two links and two pins.

In order to operate my device from the side of the car, I provide hand-levers N O, attached to perpendicular lever D below its pivot, and also fasten to the side of the car dogs P, which are to be used for locking said levers in position through means of notches *p* in their upper edges, restraining the operation of the springs *d'*.

When it is desired to use these draw-heads indiscriminately with the old-fashioned link-coupling, I prefer to hinge link *a* and projection or spur *c* to the edge of the forward portion of the head, and hold it in or out of position, as desired, by means of a rectangular dog, R. (Seen in Fig. 4.) This modification enables the gradual introduction of my improved coupler on roads where only a small amount of rolling-stock can be withdrawn at one time.

By the foregoing description it will be readily seen that the cars can be easily coupled or uncoupled without going between their ends, and that levers D and N O can be locked in a coupled or uncoupled position, as desired.

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

1. The draw-head constructed with the leg *b* and projecting eyes *a*, provided with spurs *c*, substantially as and for the purpose set forth.



2. In combination with a draw-head provided with the leg *b*, projecting eyes *a*, and spurs *c*, the vertical spring-lever *D*, bearing a horizontal coupling-pin, and provided with a rounded elongation, *D'*, substantially as described.

3. Side levers *N O*, provided with holding-dogs, in combination with lever *D*, spring *d'*,

and draw-heads constructed as described, all arranged and operating substantially as set forth.

JOHN BRADY.

Witnesses:

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