

M. HERRENS.
Car-Coupling.

No. 220,146.

Patented Sept. 30, 1879.

Fig. 1.

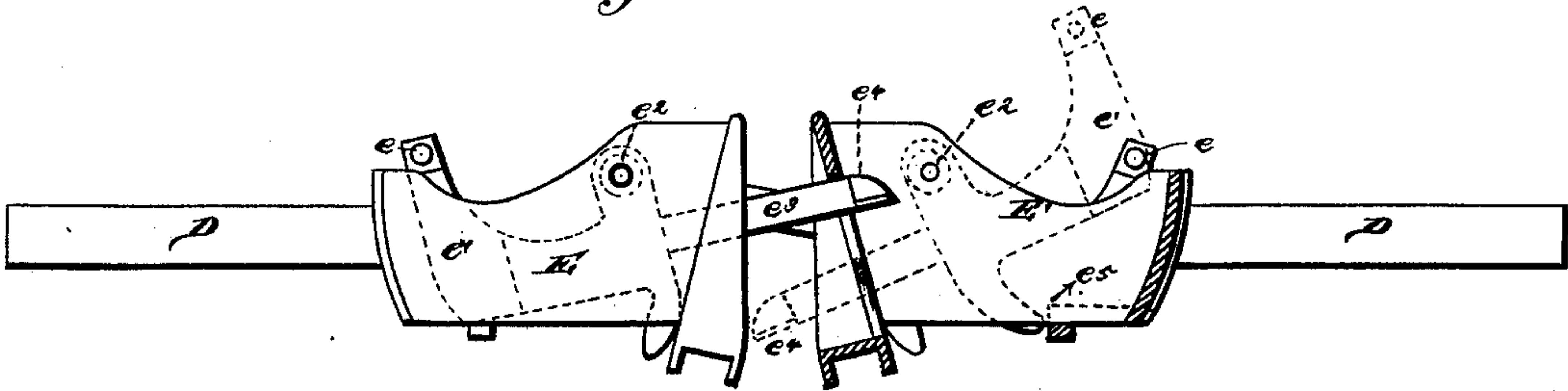


Fig. 2.

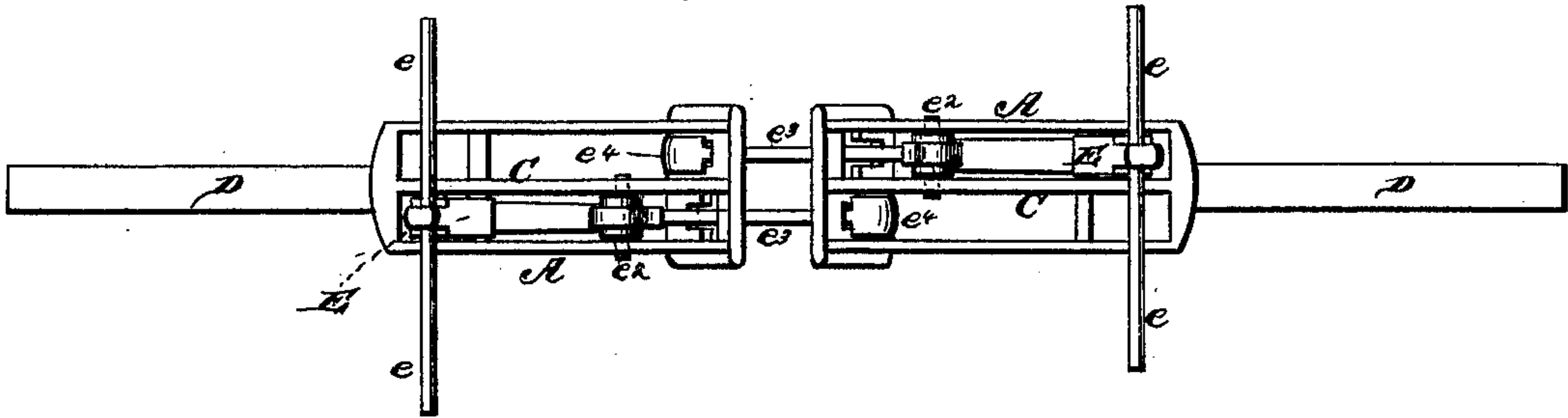
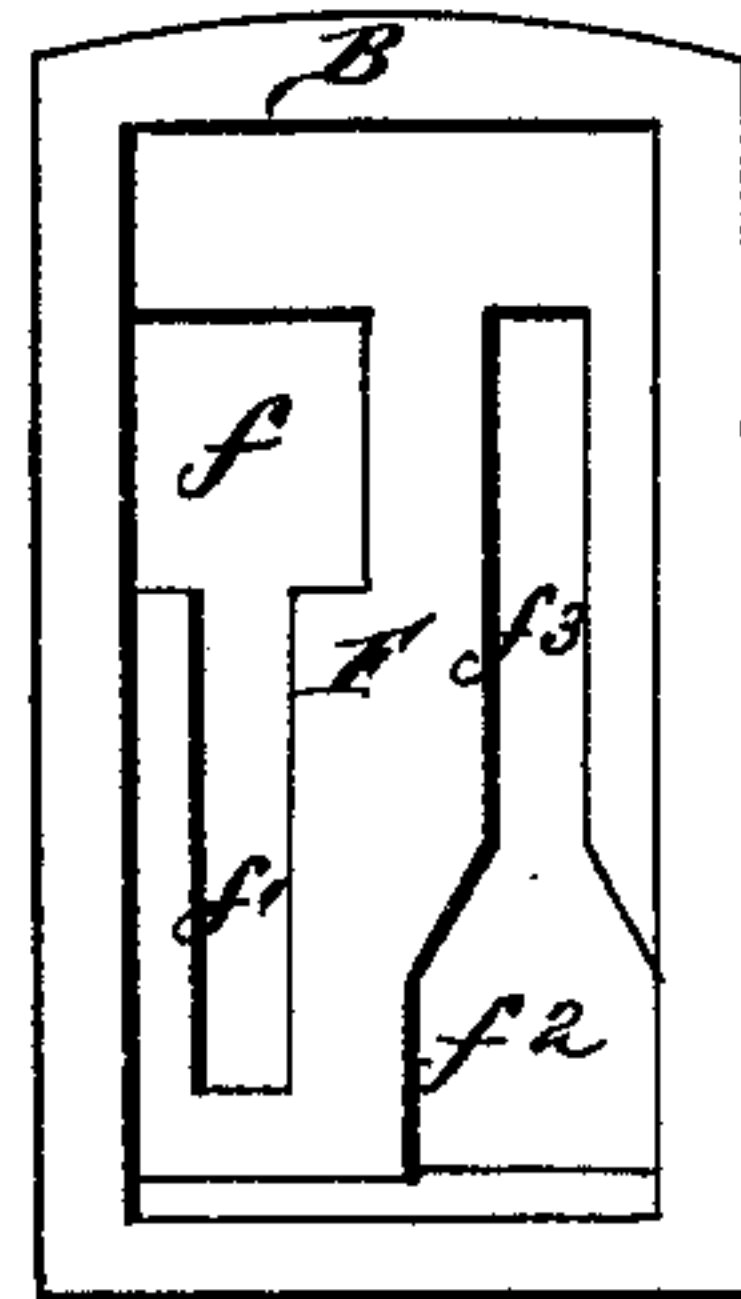
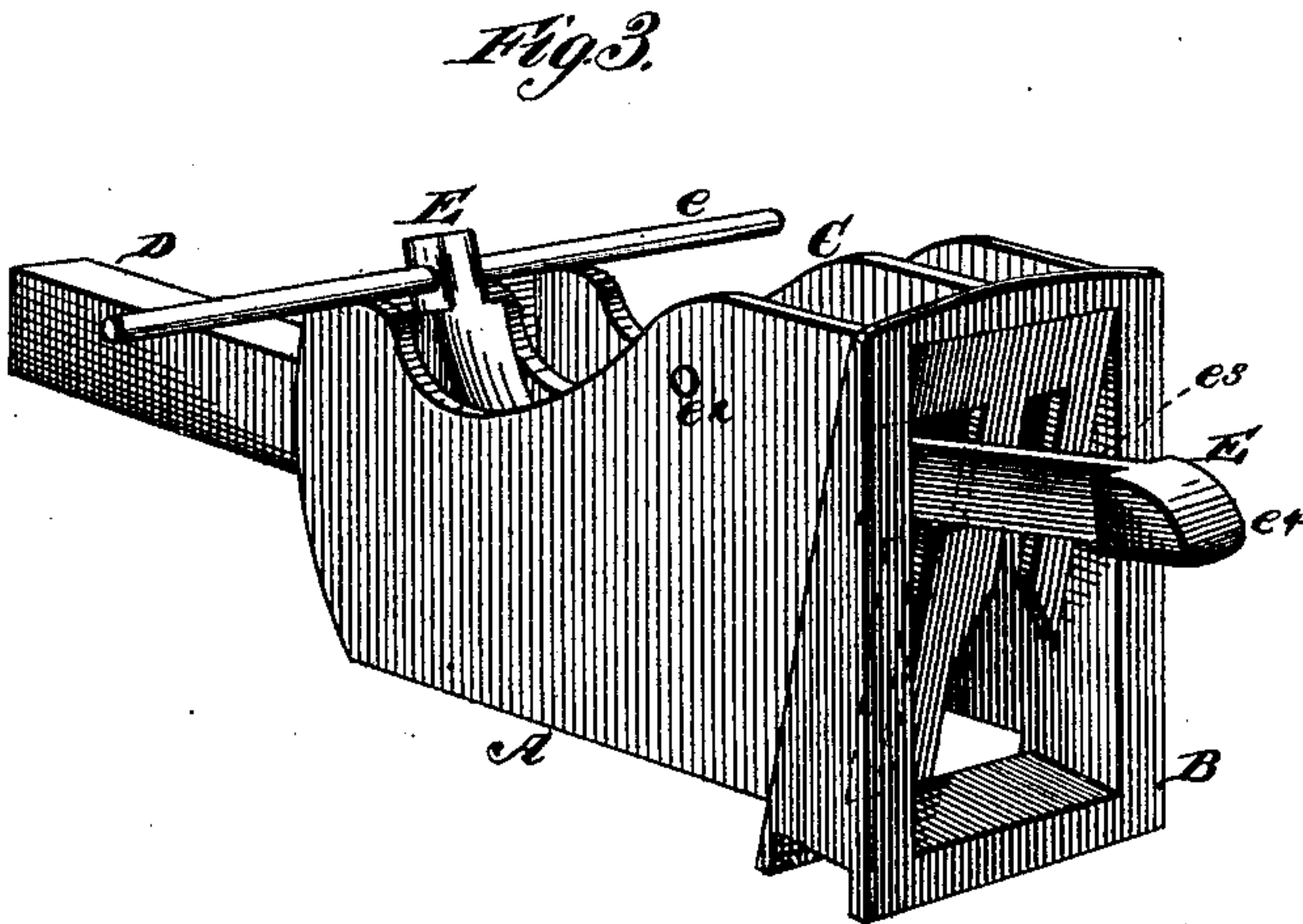


Fig. 4.



WITNESSES
Robert Enatt
W. N. Severance

INVENTOR
Michael Herrens
Gilmore, Smith & Co. ATTORNEYS

UNITED STATES PATENT OFFICE.

MICHAEL HERRENS, OF ST. LOUIS, MISSOURI.

IMPROVEMENT IN CAR-COUPPLINGS.

Specification forming part of Letters Patent No. **220,146**, dated September 30, 1879; application filed April 26, 1879.

To all whom it may concern:

Be it known that I, MICHAEL HERRENS, of St. Louis, in the county of St. Louis and State of Missouri, have invented certain new and useful Improvements in Car-Couplings; 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 representation of a side elevation, partly in section, of my car-coupling. Fig. 2 is a plan view of the same. Fig. 3 is a perspective view, and Fig. 4 is an end view.

Identical parts are designated and referred to by the same letters.

My invention relates to car-couplings; and it consists in a coupling-bar which is pivoted near its center to the draw-head, the projecting part of the lever being provided with a head, and the opposite or incased end being weighted, so as to retain it in the desired position for coupling.

It also consists in a draw-head having two chambers or spaces, one for receiving and holding the coupling-bar above described, and another space to receive the head of the coupling-bar of the car to be coupled; and it also consists in an inclined interior face in the rear of the buffer-face, which face is provided with two slots, with openings upon their reverse ends for the introduction and retention of the draw-bars, as will herein more clearly appear.

A is the draw-head. B is the buffer-face of the same; and C is a partition which divides the draw-head into two equal parts vertically, and D is the draw-bar proper.

E E' are the coupling-bars, the construction of which is shown in the dotted lines of Fig. 1. There are levers *e* extending from the rear or weighted end of the coupling-bar, which extend toward the side of the car far enough so an operator can safely reach in and raise the coupling-bar without danger to his person.

The weighted portion of the coupling-bar is represented by the enlarged part *e*¹. The pin *e*¹ retains the coupling-bar E in position and sustains the draft of the cars.

The coupling-bar is flattened, as shown at *e*³, and the head *e*⁴ consists of quadrantal lugs formed upon each side of the bar. The face of this coupling-head is inclined from the top outward and downward.

F is an inclined interior face or wall, set in rear of the buffer, and forming the front wall of the draw-head proper. In this wall there is an opening, *f*, sufficient to admit the head of the coupling-bar, and a vertical slot, *f*¹, to admit of its being moved up and down on its pivot. In this wall there is also an opening, *f*², to admit the head of the coupling-bar of the other car, and a slot, *f*³, to admit the neck or body of the coupling-bar to pass up and down, and retain the head at all positions except when opposite the opening *f*².

By employing two coupling-bars, I at once cause a double attachment or coupling of the cars, thus securing greater certainty of a coupling and strength of same, and provide a coupling which, being constructed alike, any two of the same will form a coupling.

The operation of my invention is as follows: The cars being provided with my invention, upon bringing the heads *e*⁴ of the coupling-bars in contact with the inclined walls or faces F, cause the coupling-bars to be depressed, so as to permit the heads of the same to enter openings *f*², when the weighted end will cause the head to be raised, where it will be securely retained in position, the draft having a tendency to hold it more firmly in proper position, as the shoulders of the head of the coupling-bar are upon the same incline as the walls F.

To uncouple the cars, raise the levers *e* and pass the cars from each other. In case the contact of coupling is very sudden, the projection *e*⁵ of the coupling-bar E engages the draw-head and prevents a displacement of the parts.

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

1. In a car-coupling, the coupling-bar E, provided with the head *e*⁴, body *e*³, weighted end *e*¹, and levers *e*, and projection *e*⁵, as and for the purposes substantially as and for the purposes set forth.

2. In a car-coupling, the draw-head A, provided with the partition C, the buffer B, and

the inclined face F, provided with the openings f and f^2 and the slots f^1 and f^3 , as and for the purposes substantially as set forth.

3. In a car-coupling, the draw-head A, provided with the partition C and inclined face F, in combination with the coupling-bar E, provided with the head e^4 , body e^3 , and weighted end e^1 , and levers e^2 as and for the purposes, substantially as set forth.

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

MICHAEL HERRENS.

Witnesses:

JAMES J. SHEEHY,
W. N. SEVERANCE.