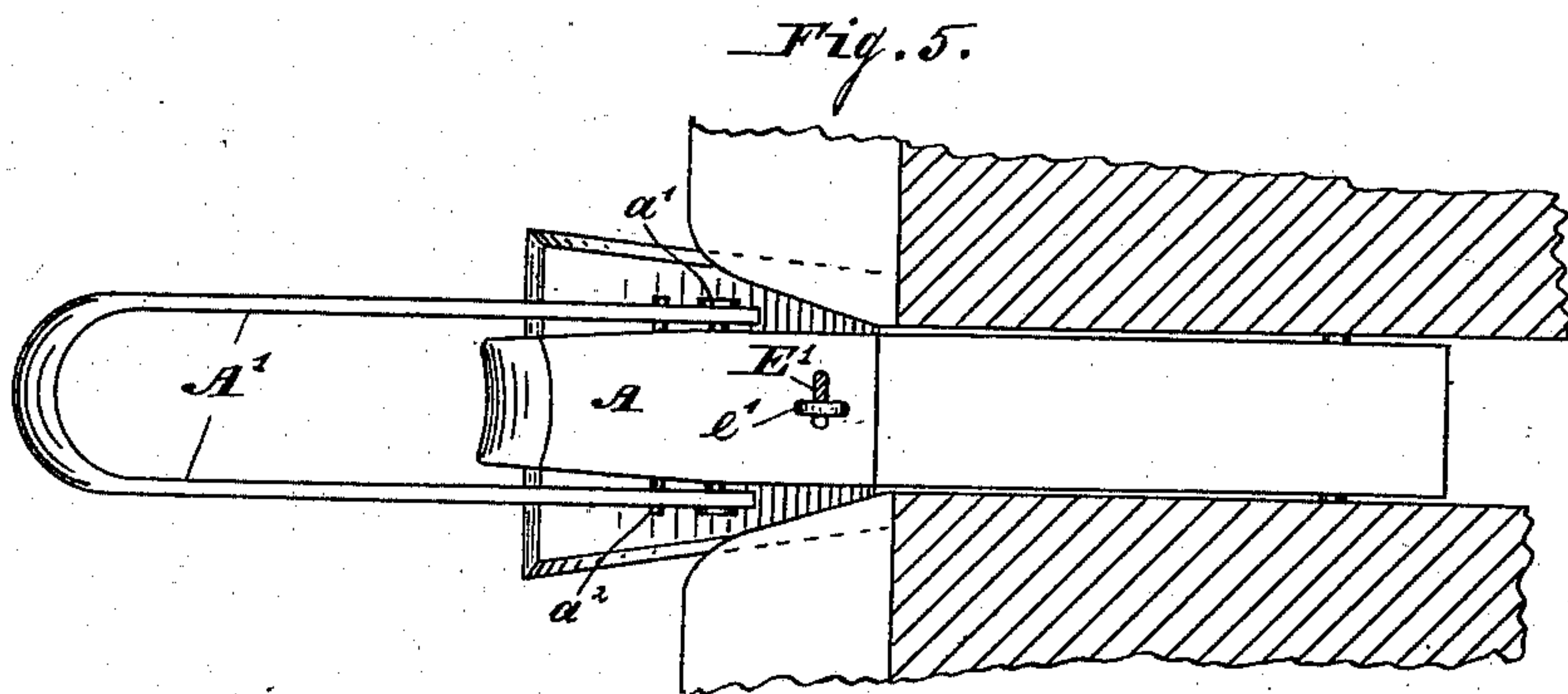
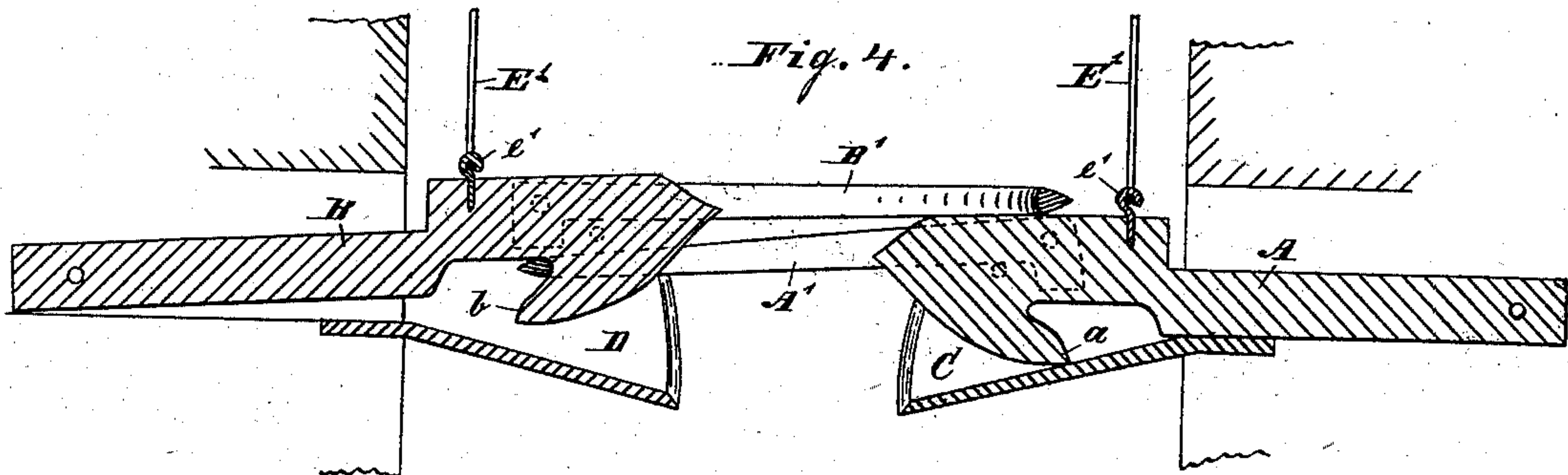
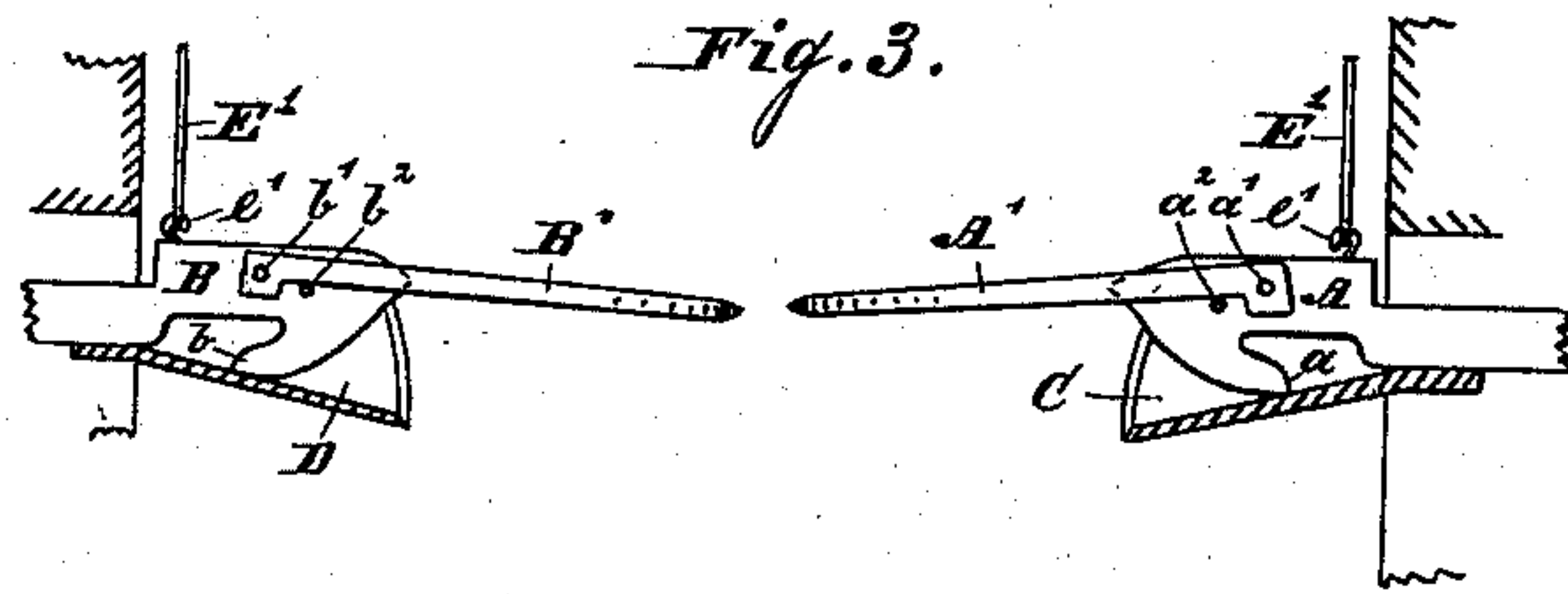
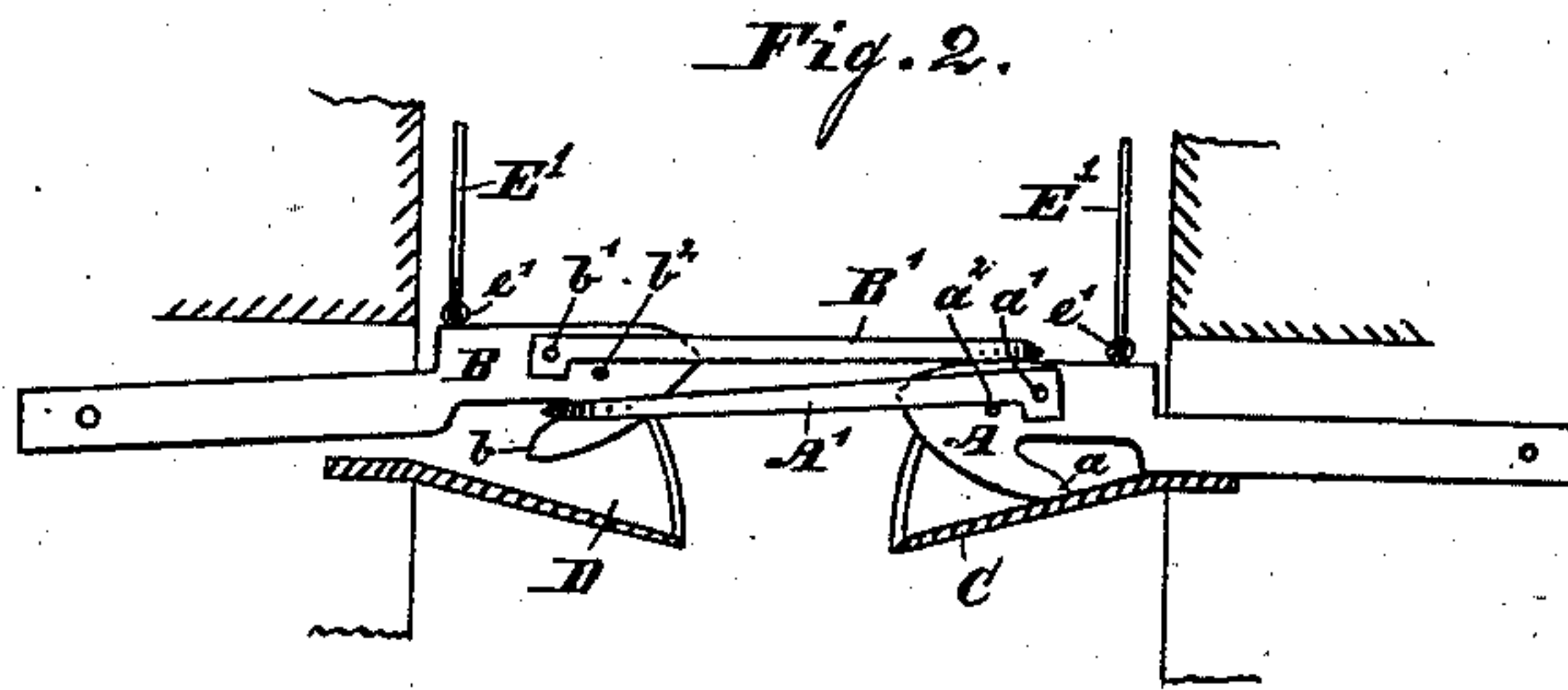
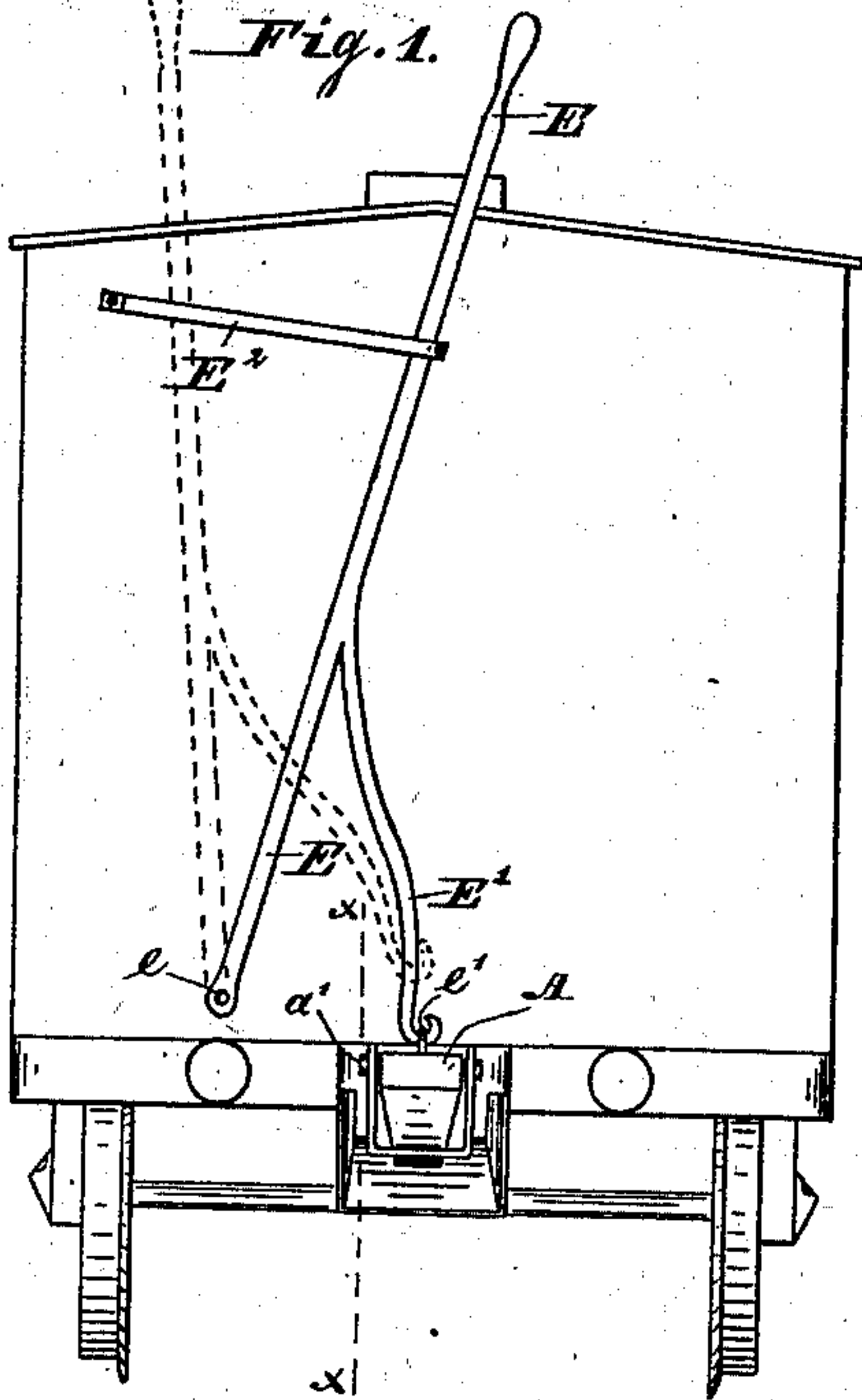


(No Model.)

L. T. GOSE.  
CAR COUPLING.

No. 254,766.

Patented Mar. 7, 1882.



WITNESSES.

James B. Lizius.  
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INVENTOR.

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PER  
C. Bradford  
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# UNITED STATES PATENT OFFICE.

LYSANDER T. GOSE, OF RENO, INDIANA, ASSIGNOR OF ONE-HALF TO  
HENRY VICKREY, OF SAME PLACE.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 254,766, dated March 7, 1882.

Application filed December 13, 1881. (No model.)

*To all whom it may concern:*

Be it known that I, LYSANDER T. GOSE, of the town of Reno, county of Hendricks, and State of Indiana, have invented certain new and useful Improvements in Car-Couplings, of which the following is a specification.

My said invention consists of a car-coupling in which each draw-head is provided with a hook and a link or eye into which the hook on the other shall enter, each of said draw-heads being provided with guides and guard-pins for said links, as will hereinafter be particularly shown and described.

It also consists in combining with said coupling a means for uncoupling the same, which consists of a pivoted lever having a branch attached to the draw-head, and, further, in the general combination of parts, all as will hereinafter be more specifically described.

Referring to the accompanying drawings, which are made a part hereof, and on which similar letters of reference indicate similar parts, Figure 1 is an end elevation of a car provided with my improvements; Fig. 2, a side elevation of the coupling when the two draw-heads are coupled together, as seen from the dotted line *x x*; Fig. 3, a similar view when the draw-heads are uncoupled; Fig. 4, a vertical section of Fig. 2 on an enlarged scale, and Fig. 5 a top plan of one of the draw-heads and accompanying parts.

In said drawings, the portions marked A B are the draw-heads, which are provided with the hooks *a b*, which are integral therewith, and with the eyes or links A' B', which are pivoted thereto by pivots *a' b'*, as shown. Guard-pins *a<sup>2</sup> b<sup>2</sup>* are also used to prevent the links from being thrown too far in either direction, as will be understood from the drawings.

The portions marked C D are guides, which are of considerable size, and are flaring, so as to insure that the points of the opposite draw-heads shall be guided into place and interlock with each other.

The portion marked E is a lever, which is used in uncoupling the draw-heads. It is pivoted to the end of the car at *e*, and is provided with a branch, E', which is attached to the draw-heads by the eye *e'*. It is held in position by the guide-rail E<sup>2</sup>, which may also be provided with teeth upon its inner side, with which said lever may be engaged when it is desired to hold the draw-head up, and thus prevent it from entering into engagement with another.

The operation of my said invention is as follows: When the cars come together, if the draw-head A is higher than the draw-head B the link B' will pass under the head A, between it and the bottom portion of the guide C, and engage with the hook *a*. If, on the other hand, the draw-head B is higher than the head A, the link A' will pass under the head B and engage with the hook *b*. The space between the point of the draw-heads and the lower edges of the guides being as great as the greatest usual variation between the heights of cars, this insures an automatic coupling of the cars, no matter which is the highest.

When it is desired to uncouple the cars, the train being "slack," one of the levers E on each car which it is desired to uncouple is thrown back in the position shown by the dotted lines in Fig. 1 and the cars will readily separate. On flat cars a simple straight lever running across the end of the car is commonly used instead of the lever E.

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

1. The combination of the draw-head A, provided with the hook *a*, loop A', and guard-pin *a<sup>2</sup>*, the draw-head B, provided with the hook *b*, loop B', and guard-pin *b<sup>2</sup>*, and the guides C D, all substantially as shown and specified.

2. The combination, in a car-coupling, of two draw-heads, each partially surrounded by a flaring guide and provided with both an eye and a loop, arranged as shown, whereby either one may pass under and engage with the other, being guided to its place by said guide, all substantially as shown and specified.

3. The combination, in a car-coupling, with a draw-head which is moved vertically during the operation of being uncoupled, of the lever E, pivoted to the car at *e*, and having a branch, E', which is attached to the draw-head at *e'*, substantially as shown and described, and for the purpose specified.

In witness whereof I have hereunto set my hand and seal at Indianapolis, Indiana, this 7th day of December, A. D. 1881.

LYSANDER T. GOSE. [L. s.]

In presence of—

C. BRADFORD,  
CHAS. L. THURBER.