

(Model.)

D. KEETHLER.  
Car Coupling.

Patented Nov. 2, 1880.

No. 234,111.

Fig 1.

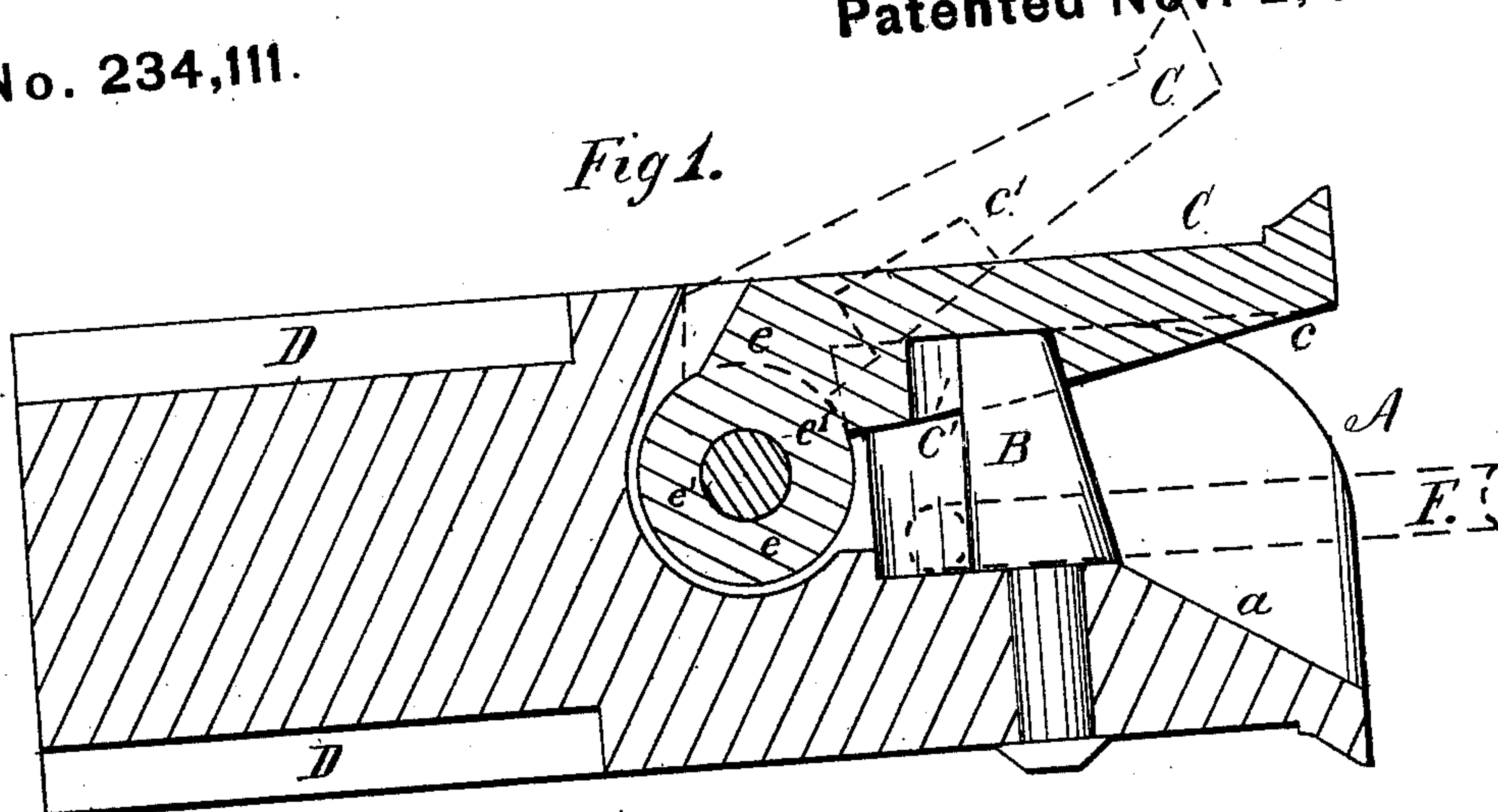


Fig 2.

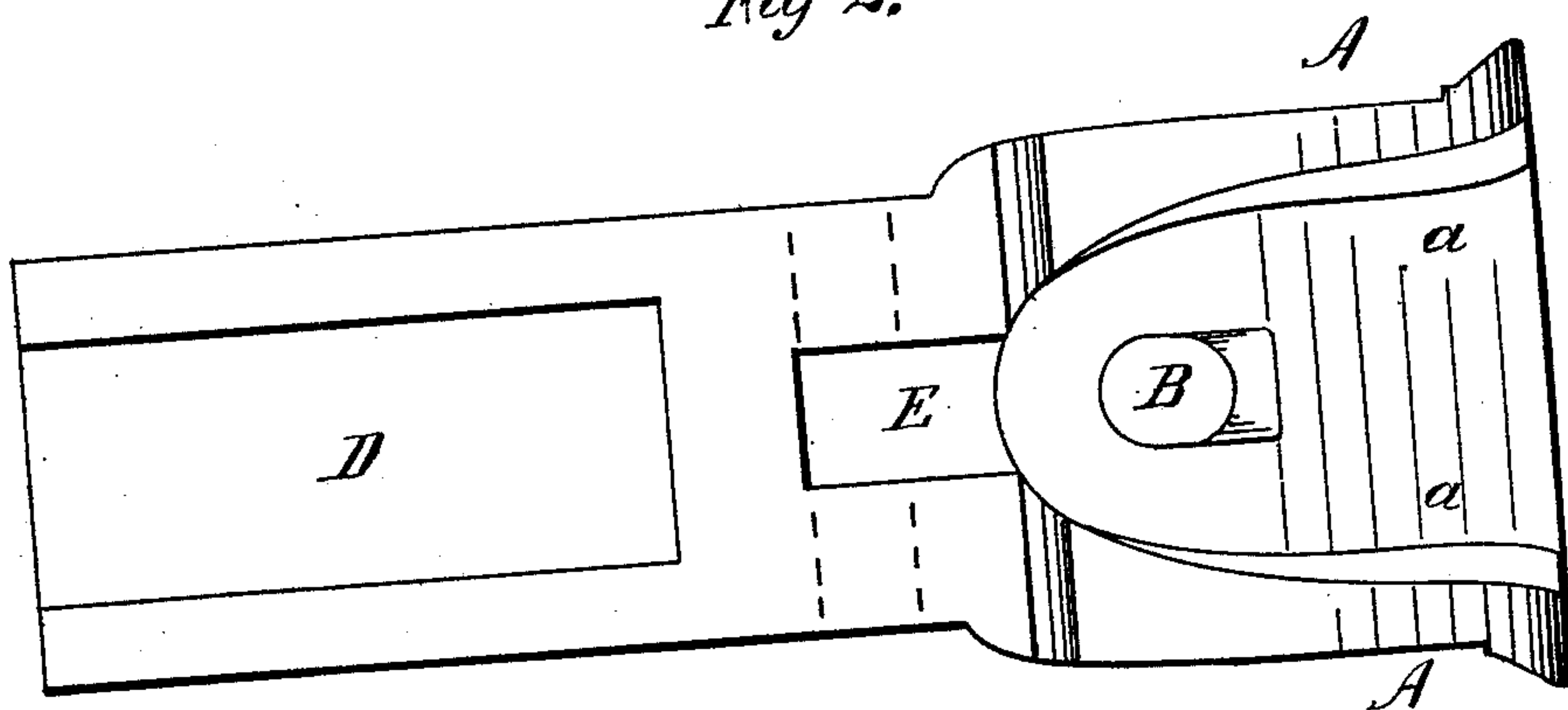
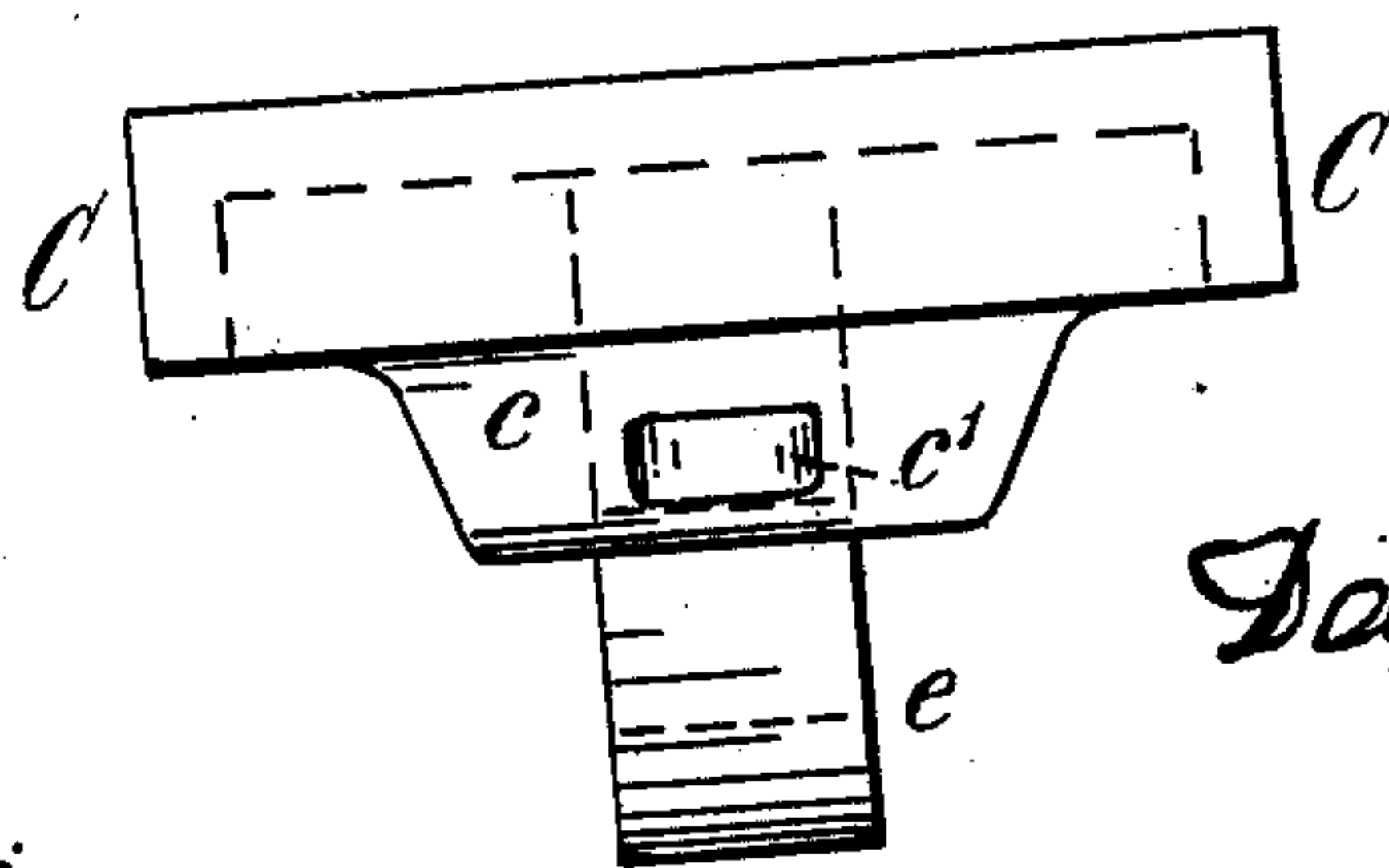


Fig 3.



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# UNITED STATES PATENT OFFICE.

DANIEL KEETHLER, OF MOUNT ORAB, OHIO.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 234,111, dated November 2, 1880.

Application filed October 2, 1880. (Model.)

*To all whom it may concern:*

Be it known that I, DANIEL KEETHLER, of Mount Orab, in the county of Brown and State of Ohio, have invented a new and useful Improvement in Car-Couplings; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, forming a part of this specification, in which—

Figure 1 is a sectional elevation of the coupling, showing the lid in section and in dotted lines. Fig. 2 is a plan of the coupling with lid removed. Fig. 3 is a front elevation of the lid.

My invention has for its object to provide a coupling which will couple itself, and in case a car is thrown from the track by accident it can conveniently uncouple itself; and the nature of my invention consists in the novel construction and arrangement of the several parts hereinafter more fully described.

Referring to the drawings, A is the buffer-head, which is made so as to form a part of the connection, or that portion to which the car is attached, each side of said buffer-head describing a curve from the front portion thereof to the rear at its top, the inner sides of the same being so beveled off that it may admit of the link being removed from the pin. Extending from the front or face of the buffer-head, and on the bottom of the same, and between the sides thereof, is cut an inclined surface, *a*, terminating near about midway the opening.

B is a steel pin, oval in cross-section, and having a reduced portion, *b*, which fits in a corresponding opening in the bottom of the buffer-head. This pin is beveled on its front face, and forms, with the incline *a* of the buffer-head, a continuous surface to guide the link when it enters.

C is a lid, which covers the opening in the buffer-head, and is provided with an incline surface on its under side to assist in guiding the link. The lid is also provided with a re-

cess, *c'*, which fits over the top of the pin and affords a support to the pin, and enables it to resist the strain to which it is subjected in use. The buffer-head is provided with grooves D D, into which the draw-straps are fitted, and which draw-straps are attached to the frame-work of the car in the ordinary manner.

E is a slot in the buffer-head into which fits the tongue *e* of the lid C. The lid is pivoted in the slot by the fulcrum-pin *e'* in such a manner that it may be raised sufficiently to allow the link to be removed from the pin in uncoupling, as shown in dotted lines in Fig. 1.

F is the coupling-link, shown in dotted lines in the same figure.

The operation of my invention is as follows: In the backing of one car against the other which is connected by the link the link is raised up the double incline, which is formed by the bevel of the buffer-head and pin, to a sufficient height to raise the lid and allow the link to pass over the top of the pin, and thus couple the car; and if the car, by accident, should be thrown from the track, the link will gradually rise up the inclined surfaces of the buffer-head and pin to the top, and over the pin and curved sides, raising the lid simultaneously therewith, thus uncoupling the car, said link falling over and out to one side of the buffer-head.

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

The buffer-head A, having secured therein the steel pin B, in combination with the pivoted lid C, having the recess *c'*, adapted to close down over the top of pin B and afford a support to the same, substantially as herein described.

In testimony whereof I affix my signature in presence of two witnesses.

DANIEL KEETHLER.

Witnesses:

THOS. G. DOUGLAS,  
H. A. DANIELS.