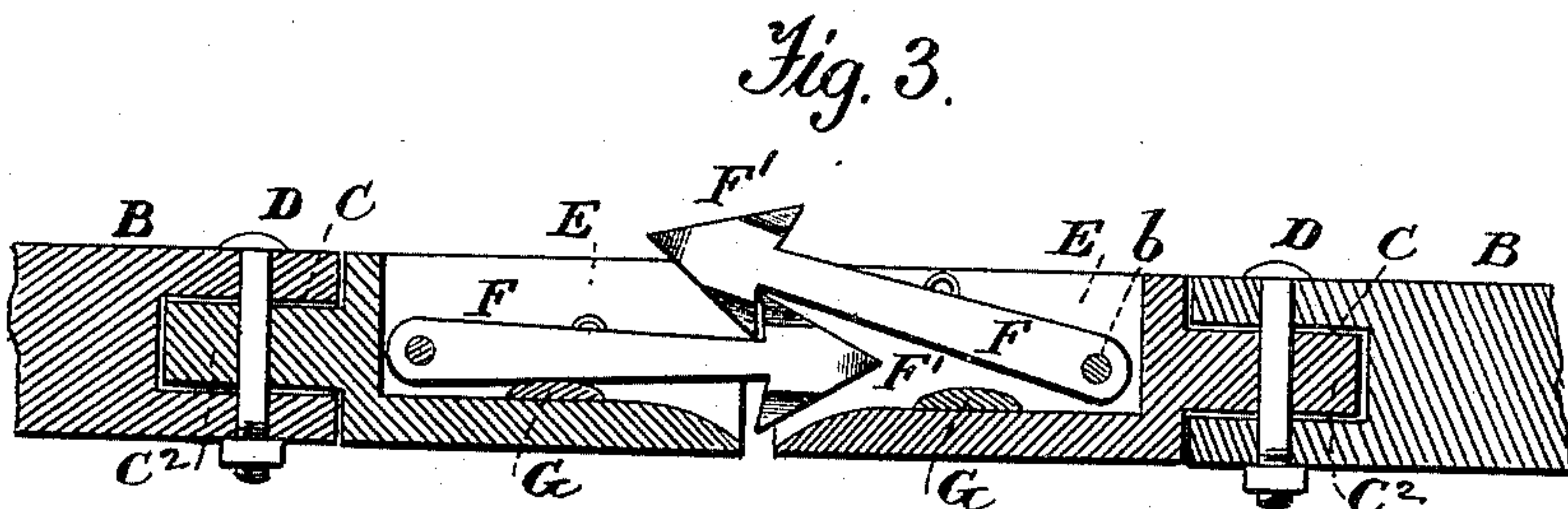
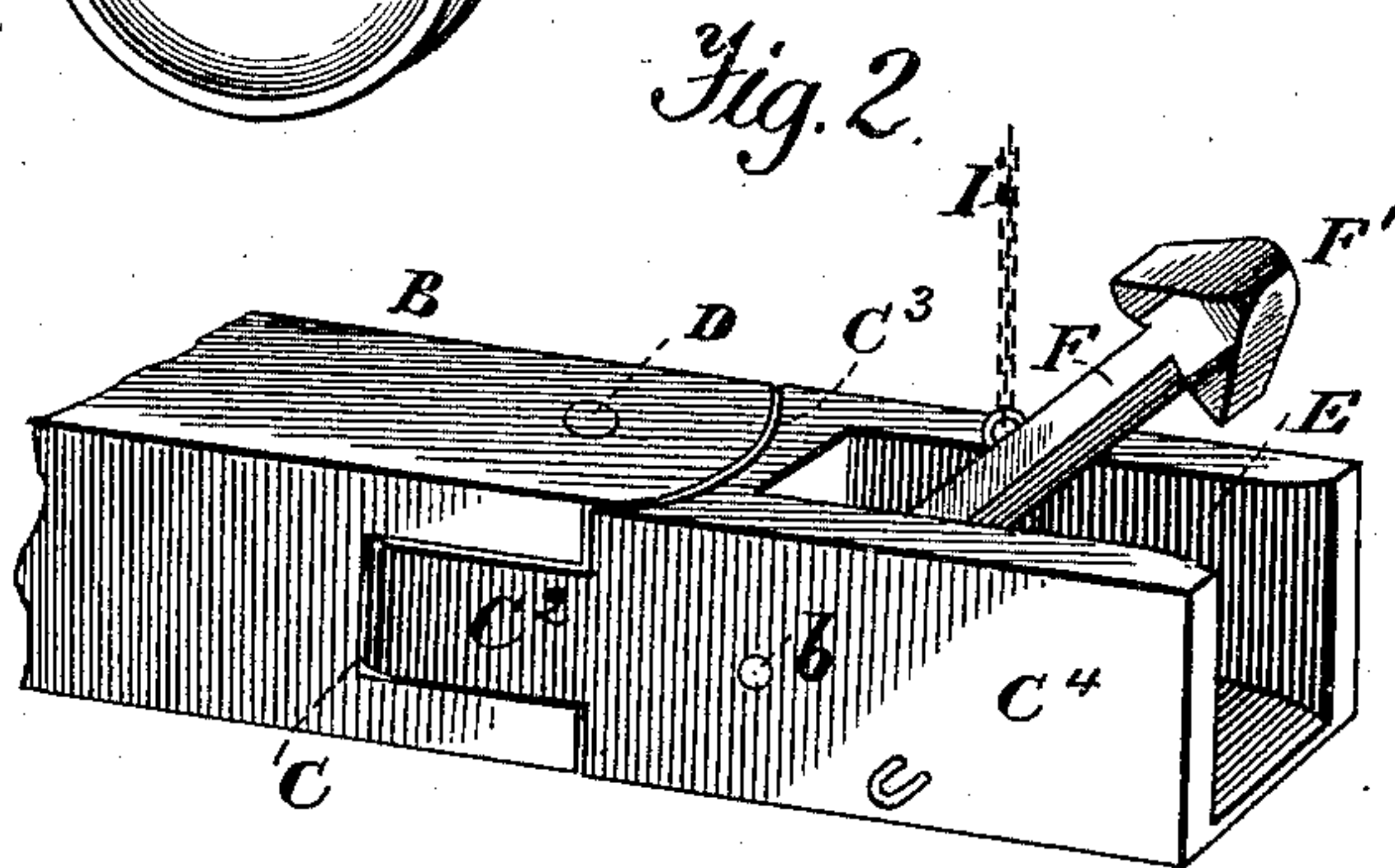
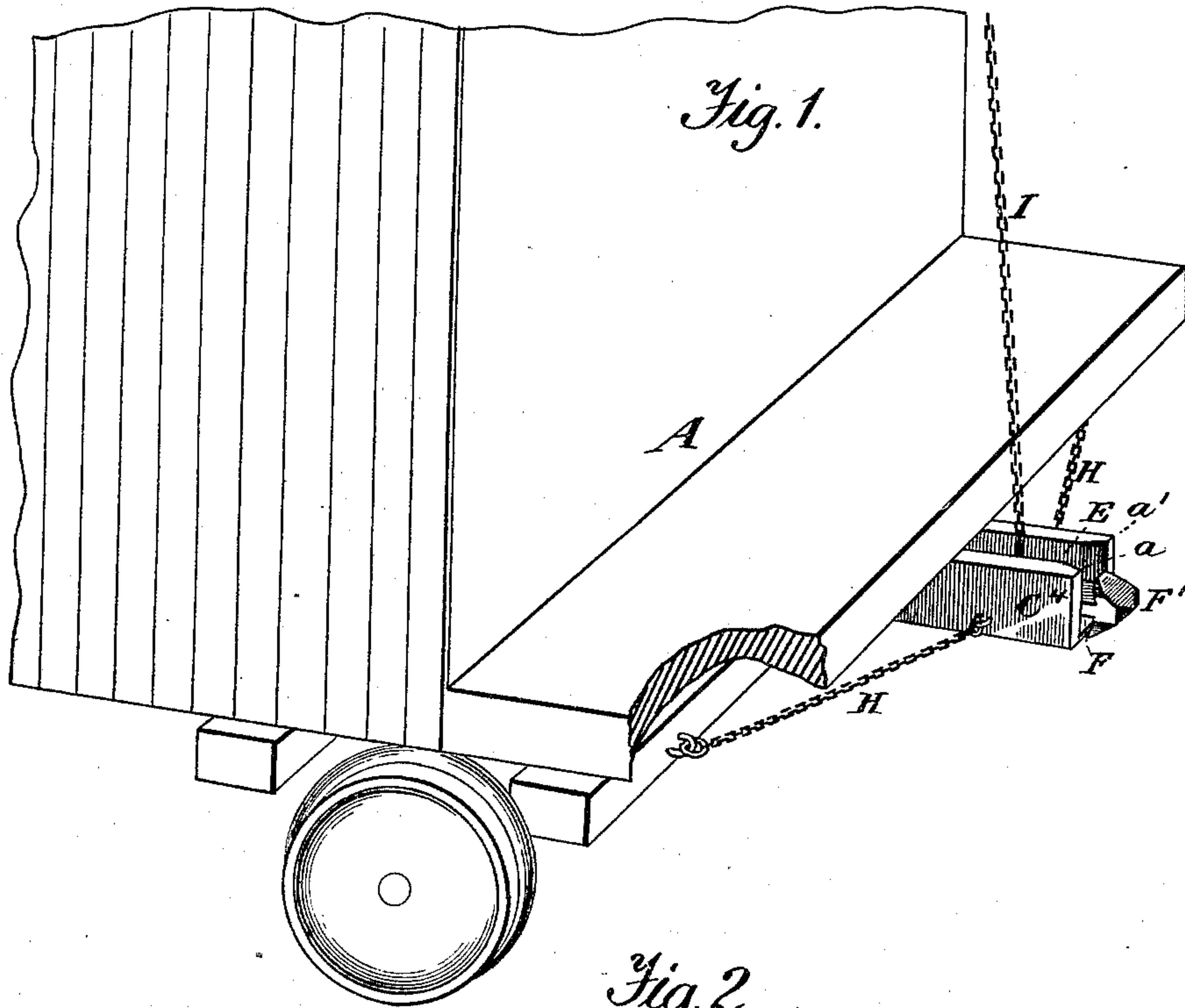


(No Model.)

A. McLEAN.
CAR COUPLING.

No. 397,600.

Patented Feb. 12, 1889.



Witnesses.
A. Ruppert.
J. B. Webb.

Inventor.
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UNITED STATES PATENT OFFICE.

ARTHUR McLEAN, OF BELINGTON, ASSIGNOR OF ONE-HALF TO JEFFERSON VALENTINE KNIGHT, OF ORPHA, WEST VIRGINIA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 397,600, dated February 12, 1889.

Application filed November 28, 1888. Serial No. 292,107. (No model.)

To all whom it may concern:

Be it known that I, ARTHUR McLEAN, a citizen of the United States, residing at Belington, in the county of Barbour and State of West Virginia, have invented certain new and useful Improvements in Car-Coupling Devices; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to certain new and useful improvements in car-coupling devices; and it has for its object to provide a simple and efficient and at the same time durable and inexpensive car-coupling device, by the use of which cars may be automatically coupled and with equal facility and certainty upon either a straight or a curved track, and which may be uncoupled without the necessity of going between the cars.

The invention has for its further object to generally improve upon the construction and render more efficient in operation this class of devices.

To these ends, and to such others as the invention may pertain, the same consists in the peculiar combinations and in the novel construction, arrangement, and adaptation of parts, all as more fully hereinafter described, shown in the accompanying drawings, and then specifically defined in the appended claim.

The invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this specification, like letters referring to the same parts throughout the several views, and in which—

Figure 1 is a perspective view of a portion of a car provided with my improved coupling device. Fig. 2 is a perspective view of a portion of the draw-head and bumper with the coupling-head raised. Fig. 3 is a vertical longitudinal section through two coupling devices, showing the manner in which they are attached.

Reference now being had to the details of the drawings by letter, A represents the end of a railway-car of any well-known construction.

B is the draw-head, the outer end of which is rounded, as shown, and is provided with a horizontal recess, C, to accommodate the corresponding tenon, C², and cut-away portion C³ upon the adjacent end of the bumper C⁴, which bumper is held in place by the vertical bolt D, which bolt also serves as a pivot and permits a free horizontal movement of the bumper. The bumper C⁴ is cast in a single piece, and is provided with the recess or chamber E, which is open at its end and top, as shown. The inner edges of the outer end of the chamber E are cut away or beveled, as shown at *a a'*, for a purpose which will presently appear.

F is the coupling latch or link. This latch is pivoted at one of its ends within the inner end of the chamber E upon a pivot, *b*, passed horizontally through the same, and the free end of the latch is provided with an arrow-shaped head, F', the edges of which are slightly beveled, as shown, in order that it may freely enter the open end of the chamber E of an adjacent bumper when in use.

G is an oval block or raised portion, which is placed transversely across the bottom of the chamber E a short distance from the outer end of the same, and it serves the purpose of raising the latch F slightly above the bottom of the chamber, so as to permit the free passage of the corresponding latch when in use.

H H are chains connecting the bumper with the truck of the car. One of these chains is provided upon each side of the bumper, and it will be seen that they serve to guide the same in its horizontal movements, so that the device will at all times be held in readiness for coupling, whether upon a straight or a curved track.

I is a chain, one end of which is attached to the upper face of the latch F, and its other end is carried to the top of the car, where it serves to raise the latch from its engagement with the latch of the adjacent car when it is desired to uncouple the same.

The operation of the device is simple and will at once be understood by reference to the foregoing description.

Having thus described my invention, what I
5 claim as new is—

The combination, with a car and its truck, of a draw-head secured to the truck and having its free end rounded and provided with a horizontal recess, a bumper cast in a single
10 piece and provided with a horizontal tenon adapted to fit within the horizontal recess in the draw-head, a chamber open at its top and end formed within the bumper, a latch piv-

oted at one of its ends within said chamber and provided at its free end with an arrow-shaped head, chains II, connecting the bumper with the truck, and chain I, connecting the latch with a point upon the roof of the car, substantially as described. 15

In testimony whereof I affix my signature in
presence of two witnesses. 20

ARTHUR MCLEAN.

Witnesses:

PORTER L. LOVETT,
J. V. KNIGHT.