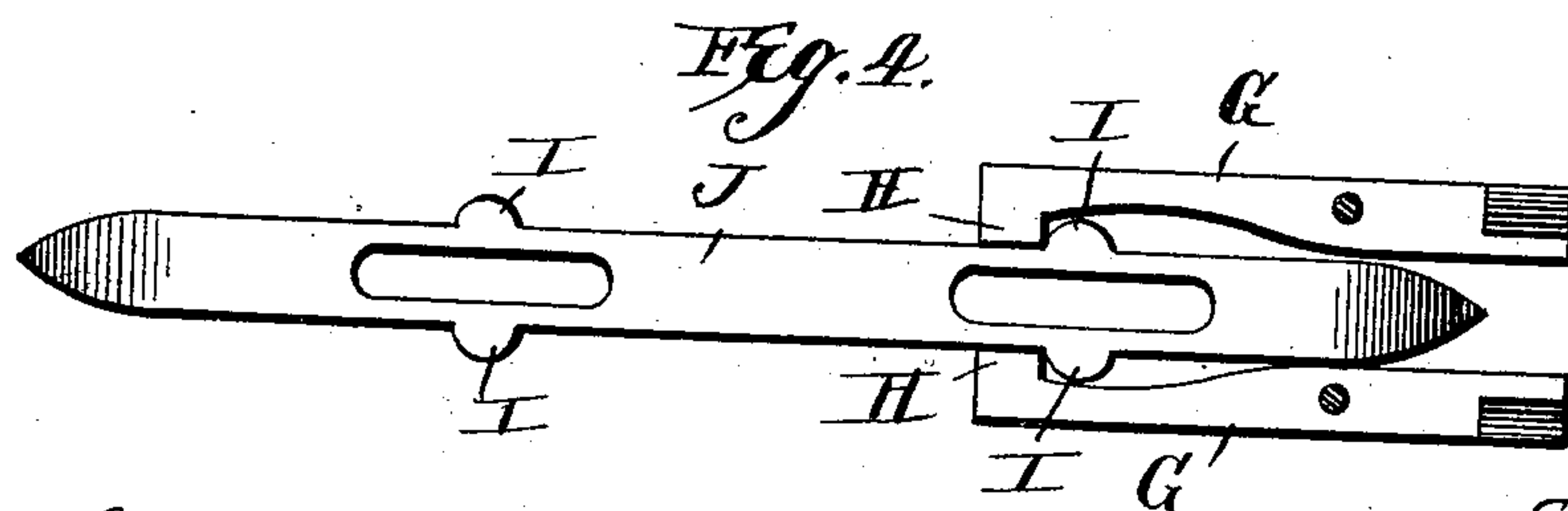
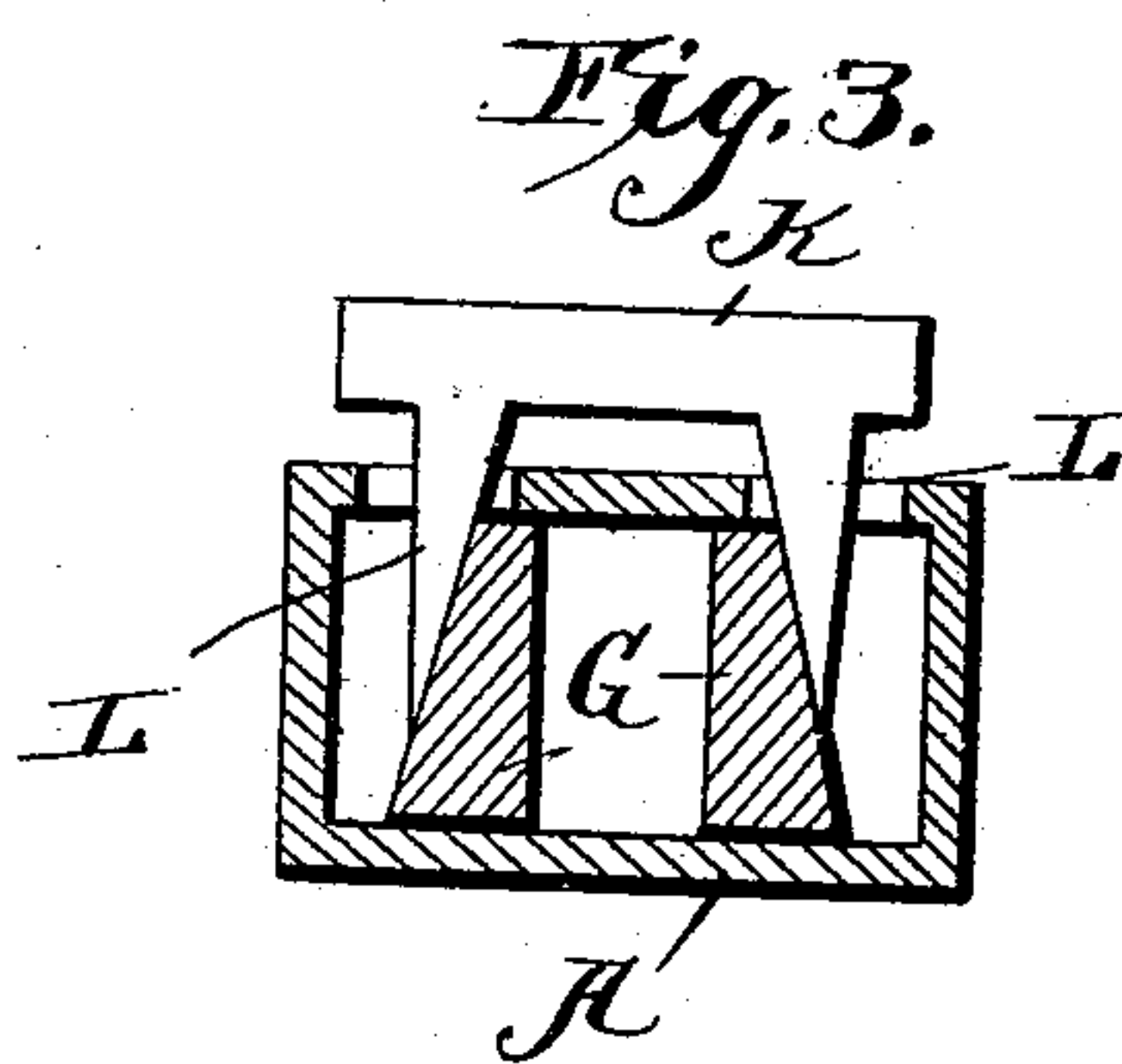
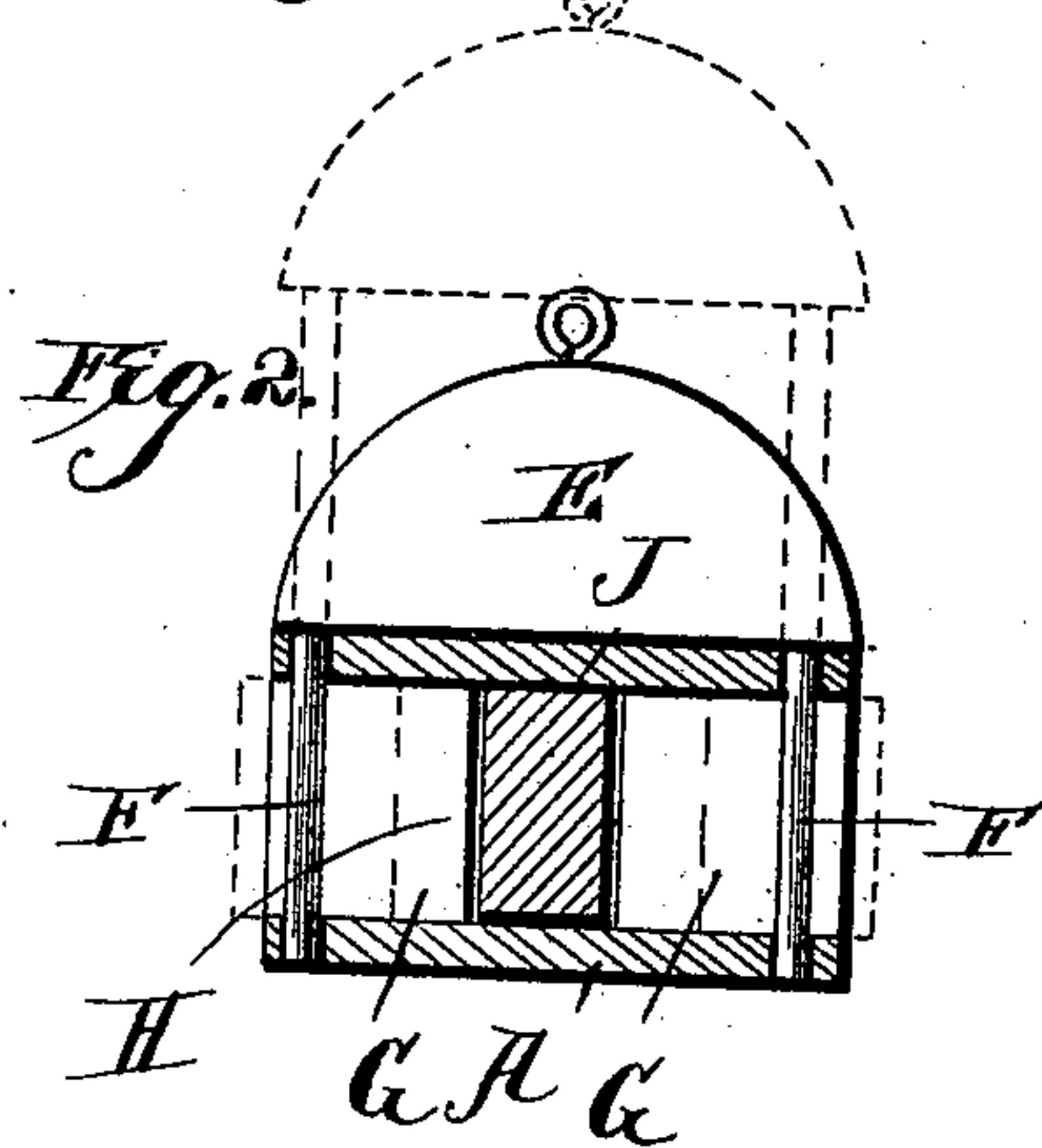
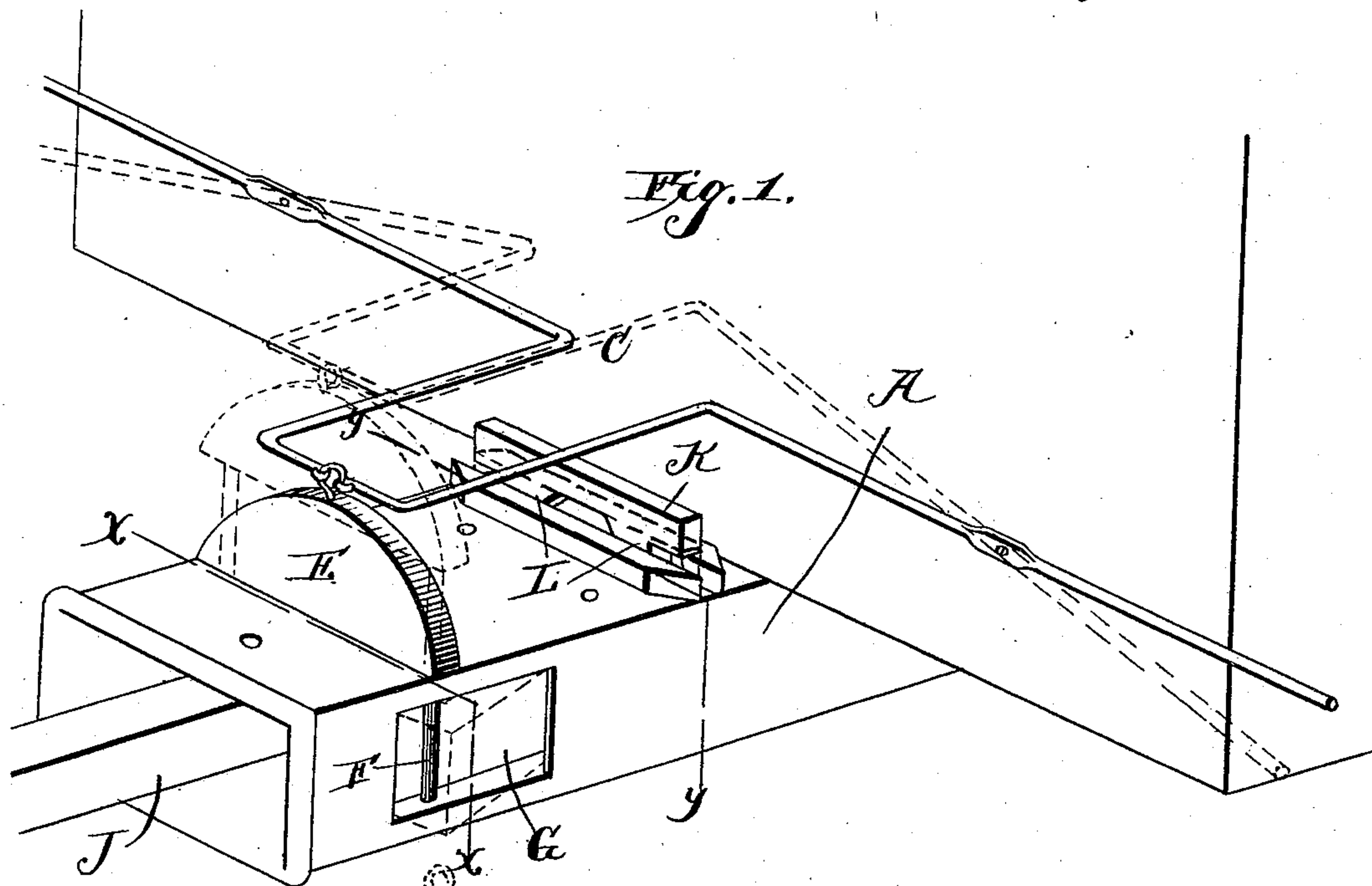


(No Model.)

C. B. MARVIN.
CAR COUPLING.

No. 407,361.

Patented July 23, 1889.



Witnesses
Henry J. Dietrich

R. W. Bishop,

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By his Attorneys

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UNITED STATES PATENT OFFICE.

CHARLES BUCHANAN MARVIN, OF HARTLAND, MICHIGAN.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 407,361, dated July 23, 1889.

Application filed March 21, 1889. Serial No. 304,172. (No model.)

To all whom it may concern:

Be it known that I, CHARLES BUCHANAN MARVIN, a citizen of the United States, residing at Hartland, in the county of Livingston and State of Michigan, have invented new and useful Improvements in Car-Couplings, of which the following is a specification.

My invention relates to improvements in car-couplings; and it consists in certain novel features hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a perspective view of a car-coupling constructed in accordance with my invention. Fig. 2 is a vertical section on the line $x x$ of Fig. 1. Fig. 3 is a similar view on the line $y y$ of Fig. 1. Fig. 4 is detail view of the link.

The draw-head A is secured to the end of the car in the usual manner, and an oscillating lever C is pivoted on the end of the car and has its inner end bent outward, so as to project over the draw-head, as shown. The front end of this lever C carries a locking plate or fork E, which is provided with the depending pins F, adapted to pass into the draw-head and lock the coupling-jaws in engagement with the link.

The coupling-jaws G are pivoted in the draw-head, and are provided on their opposing sides with the inwardly-projecting shoulders H, adapted to engage ribs or lugs I on the opposite sides of the coupling-link J, and thereby lock the said link in the draw-head. The coupling-jaws extend inward beyond their pivots, and the weighted locking-plate K is arranged in the rear portion of the draw-head and is provided with the depending prongs or arms L, having beveled inner edges which are adapted to extend downward into the draw-head and bear against the outer sides of the coupling-jaws, so as to press the rear ends of said jaws together, and consequently separate the front ends of the same.

In practice the coupling-link is engaged in the draw-head and will be locked therein by the pins F on the fork E, as before stated. When it is desired to release the link, the outer end of the lever is depressed, thereby raising the front end of the same

and lifting the fork E from the draw-head. The link can then be readily withdrawn, as the jaws will move apart, so as to allow the ribs to pass the shoulders thereon. When the front ends of the coupling-jaws are separated, the rear ends of the same will be caused to move toward each other and the locking-plate K will fall into the draw-head by reason of its own gravity. The fork E will be supported in a raised position by the pins F resting on the front ends of the coupling-jaws, as clearly shown. When it is desired to couple the cars, the coupling-link is made to enter the draw-head and is pushed backward therein, and will engage against the rear ends of the said jaws, so as to separate the same, and consequently draw the front ends thereof together to secure the link. As the rear ends of the coupling-jaws are separated they will act on the beveled edges of the prongs L of the locking-plate K, so as to cause the said locking-plate to move vertically from the draw-head.

From the foregoing description, taken in connection with the accompanying drawings, it will be seen that I have provided a very simple and efficient car-coupling in which the coupling can be automatically effected, and in which uncoupling can be effected from the side of the car without necessitating the attendant's going between the cars.

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

1. The combination, with the draw-head, of the coupling-jaws pivoted therein and adapted to engage the coupling-link, the locking-plate mounted in the rear end of the draw-head and adapted to hold the front ends of the coupling-jaws separated, and the fork mounted in the front end of the draw-head and adapted to hold the coupling-jaws in engagement with the coupling-link, as set forth.

2. The combination, with the draw-head, of the coupling-jaws pivoted therein and adapted to engage the coupling-link, the locking-plate mounted in the rear end of the draw-head and having depending beveled

arms acting on the rear ends of the coupling-jaws, the fork in the front end of the draw-head adapted to act on the front ends of the coupling-jaws, and the oscillating lever piv-
5 oted on the end of the car and connected to the fork, as set forth.

In testimony that I claim the foregoing as

my own I have hereto affixed my signature in presence of two witnesses.

CHARLES BUCHANAN MARVIN.

Witnesses:

JOHN MARVIN,
GEO. W. WILMOT.