

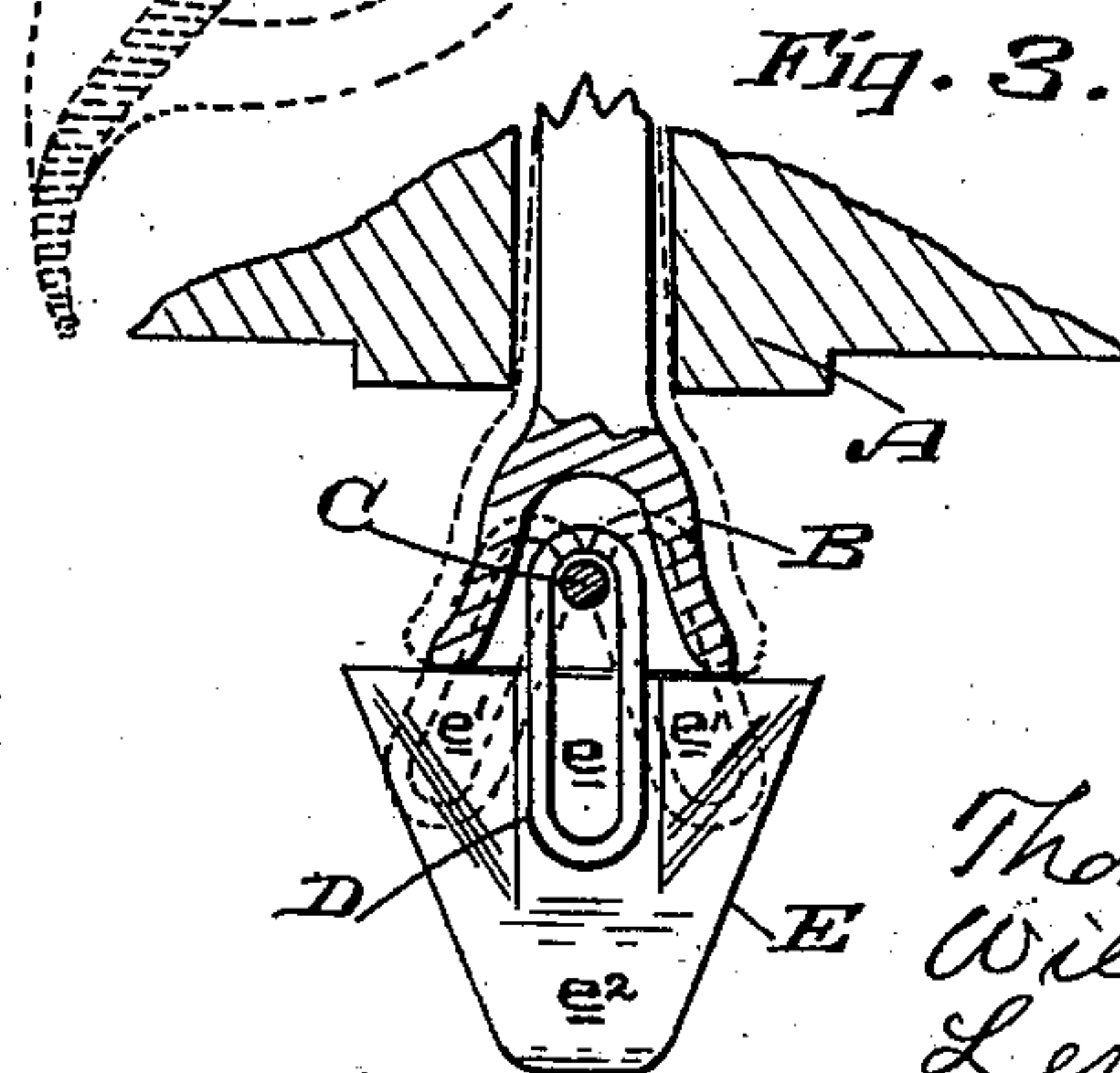
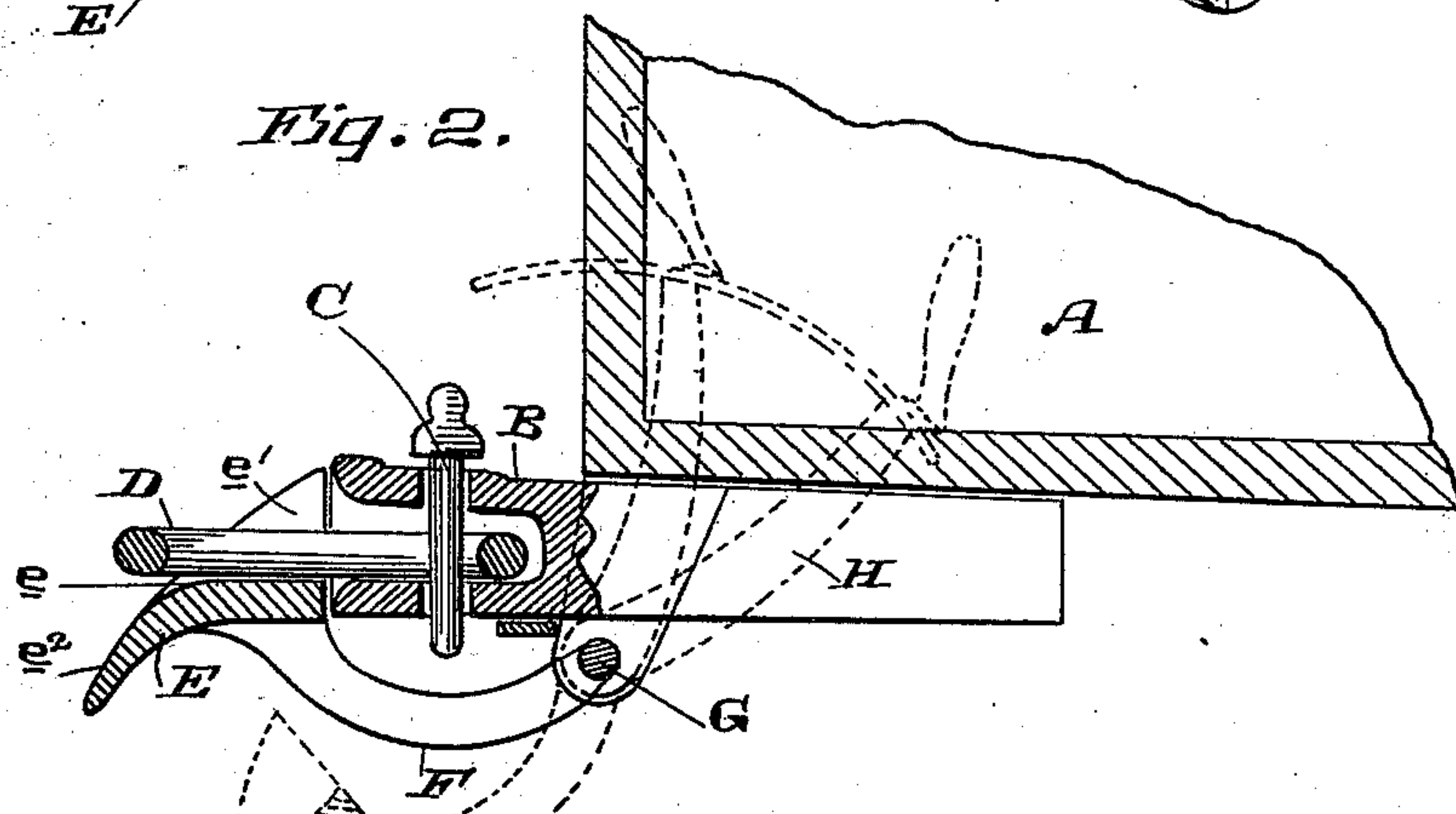
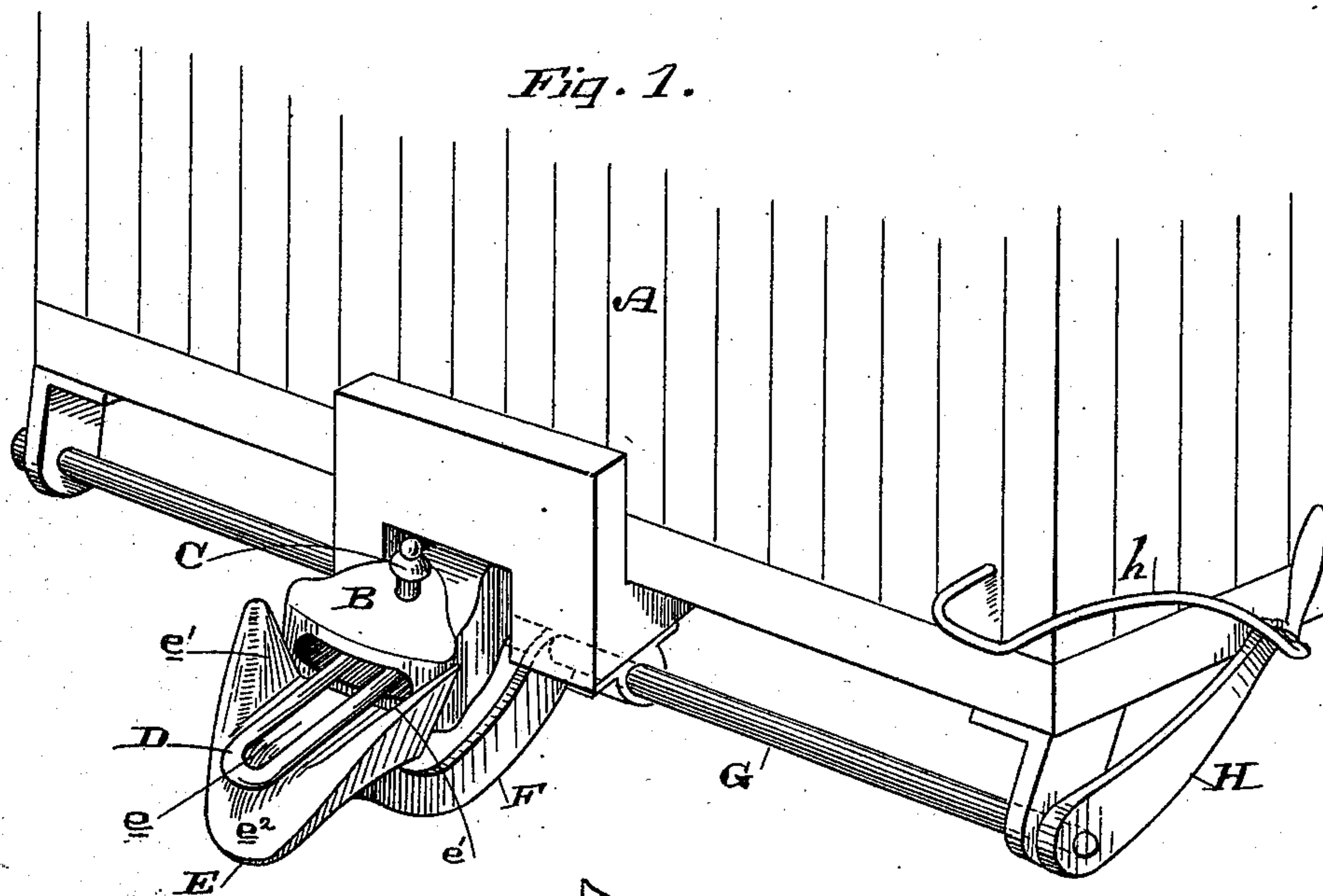
(No Model.)

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LINK ADJUSTER FOR CAR COUPLINGS.

No. 412,381.

Patented Oct. 8, 1889.



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UNITED STATES PATENT OFFICE.

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LINK-ADJUSTER FOR CAR-COUPPLINGS.

SPECIFICATION forming part of Letters Patent No. 412,381, dated October 8, 1889.

Application filed May 9, 1889, Serial No. 310,179. (No model.)

To all whom it may concern:

Be it known that we, THOMAS H. GILHAM, WILLIAM C. ECKERT, and LEROY GILHAM, of Beowawe, of the county of Eureka, State of Nevada, have invented an Improvement in Link Adjusters and Guides for Car-Couplings; and we hereby declare the following to be a full, clear, and exact description of the same.

Our invention relates to that class of devices used in connection with car-couplings in which an arm is moved up under the coupling-link and supports and guides it into the opposing draw-head chamber; and our invention consists in the novel construction and arrangement of the link adjuster and guide and the means for operating it, hereinafter fully described, and specifically pointed out in the claims.

The objects of our invention are to accurately move and adjust the link to the central perpendicular plane, no matter in what position it may be lying on each side of said plane, and to lift it to and hold it in a proper plane or position, whereby it is guided accurately into the opposing draw-head.

Referring to the accompanying drawings for a more complete explanation of our invention, Figure 1 is a perspective view of our link adjuster and guide in position. Fig. 2 is a longitudinal vertical section of same. Fig. 3 is a plan of same.

A is the end of a car, and B is the draw-head suitably connected therewith.

C is the coupling-pin, and D is the coupling-link.

E is the link adjuster and guide having an arm F, which is connected to a rock-shaft G, mounted transversely under the car end and having on one or both ends a lever H, playing in a guide h.

The general operation of the device is obvious. By moving lever H the shaft G is rocked, the arm F is raised, and the adjuster and guide E are thrown up under the coupling-link D, so as to center it and hold it at a proper height.

The peculiar construction of the adjuster and guide E, by which it effects the objects desired, is as follows: It consists of a piece or block the back edge of which is straight, and

when in operative position bears against the lower front edge of the draw-head. Its upper surface has a level bed or plane portion *e*, flanked or bordered on each side by raised flanges *e'*, the inner surfaces of which flare outwardly—that is, incline upwardly and outwardly from their lower edges to their tops. The forward edges of these flanges incline downwardly to the front and merge into the forwardly and downwardly inclined lip portion *e''*, extending across the front and joining the forward edge of the bed portion *e*. The distance between the points or apices of the side flanges *e'* is greater than the distance between the extreme limits of combined side movement of draw-head and link—that is to say, the draw-head has a limited play in its bearings on each side of a central perpendicular plane and the coupling-link has a similar side play in the draw-head chamber. When both plays are combined, the link is moved and may lie off the central perpendicular plane several inches on one side or the other, and the distance between these extreme limits is less than the distance between the points or apices of the side flanges *e'* of the adjuster and guide E. Herein lies the cause for the accurate adjusting function of the device, for no matter in what position on either side of the central perpendicular plane the coupling-link may be lying the piece E, when thrown up under it, will pass the point or apex of one or the other of its side flanges *e'* on the outside of the link, and then the inclined inner surface of this flange will force the link toward the central plane until it accurately centers and adjusts it upon the bed or plane surface *e*. This bed-surface, being now thrown up to a proper height, holds the link in a position or plane adapting it to be accurately guided into the opposing draw-head, no matter what may be the variation in height of the two cars.

Both the adjusting and the guiding function of the device are accomplished by the single movement of the lever H, the link not being directly handled at all, it being centered and adjusted automatically by the shape of the side flanges and held up and guided accurately by the bed-surface.

The object of the downwardly-inclined

front lip e^2 of the adjuster and guide is by coming in slanting contact with the lower edge of the opposing draw-head to cause said adjuster and guide to swing downwardly and backwardly out of the way and allow the full and perfect entrance of the coupling-link into the opposing draw-head chamber.

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

1. An adjuster and guide for the links of car-couplings, consisting of the swinging piece or block E, having a central bed or plane surface for holding and guiding the link, and upwardly-flaring side flanges for centrally adjusting said link, the distance between the tops of said flanges being greater than the distance between the limits of side play of the coupling-link, substantially as described.

2. An adjuster and guide for the links of car-couplings, consisting of the swinging piece or block E, having a central bed or plane surface for holding and guiding the link, upwardly-flaring side flanges for centrally adjusting said link, the distance between the tops of said flanges being greater

than the distance between the limits of side play of the coupling-link, and a downwardly-inclined front lip joining the front edges of said flanges and the front of the bed-surface, substantially as described.

3. In an adjuster and guide for the links of car-couplings, the combination of the piece or block E, having a central bed or plane surface for holding and guiding the link, upwardly-flaring side flanges for centrally adjusting said link, said flanges having inclined fronts, and a downwardly-inclined front lip joining the inclined fronts of the flanges and the front of the bed-surface, the rock-shaft under the car, the lever for rocking said shaft, and the arm connecting the piece or block with said shaft, whereby it is thrown up under the link, substantially as described.

It witness whereof we have hereunto set our hands.

THOMAS H. GILHAM.
WILLIAM C. ECKERT.
LEROY GILHAM.

Witnesses:

WILLIAM CHRISTIAN,
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