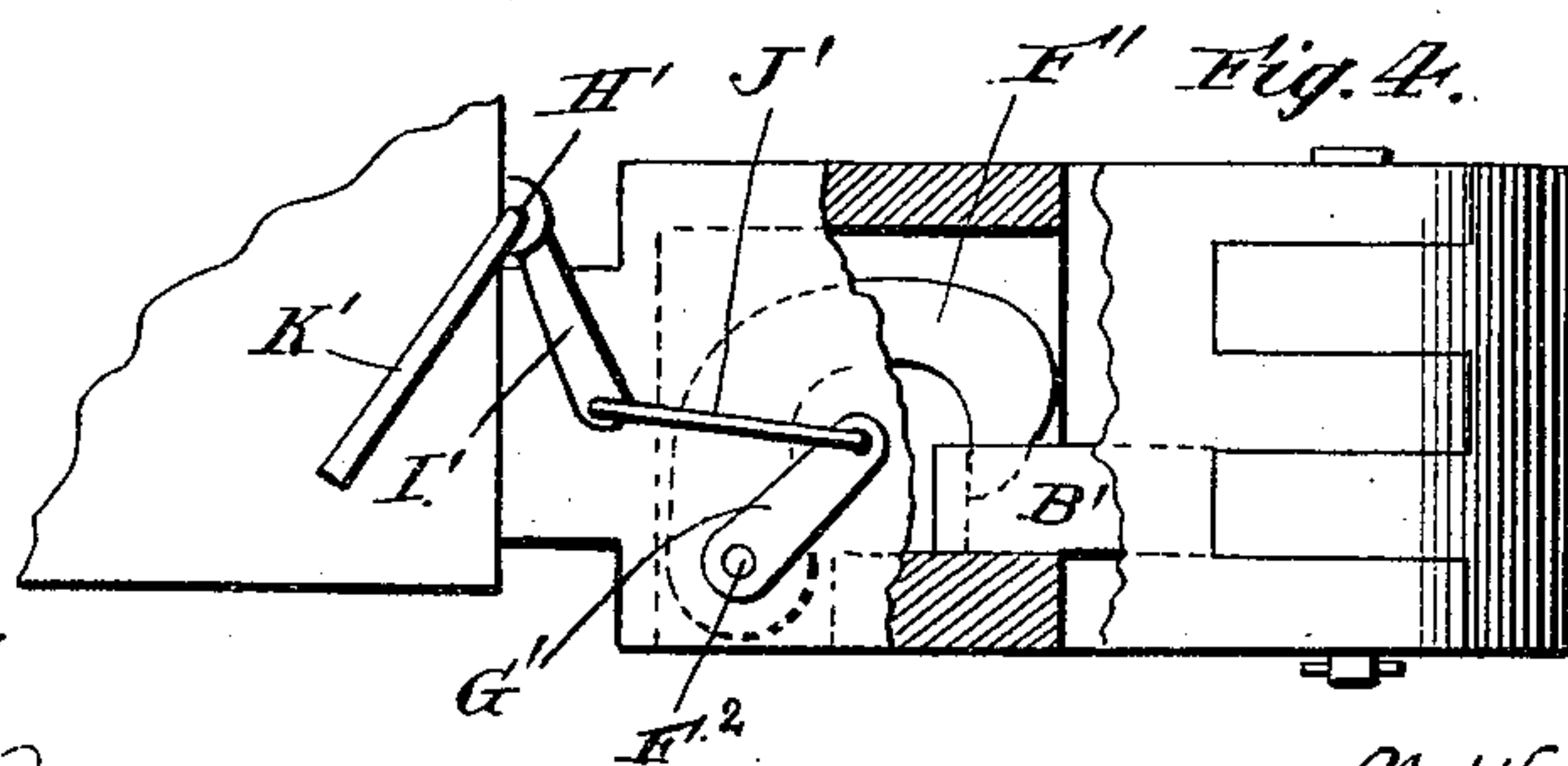
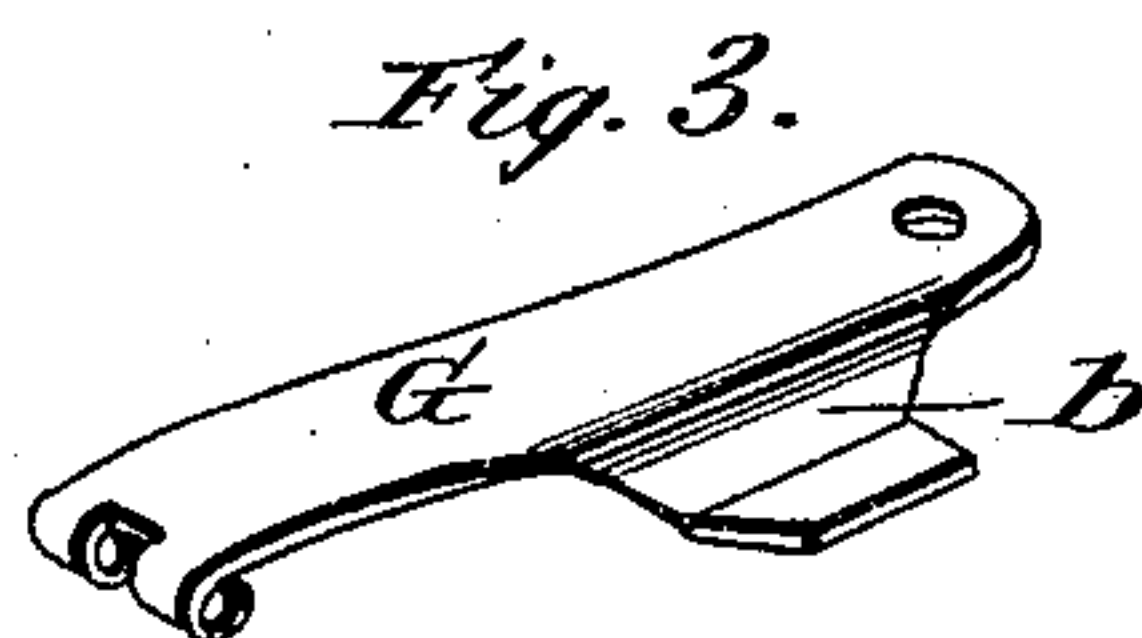
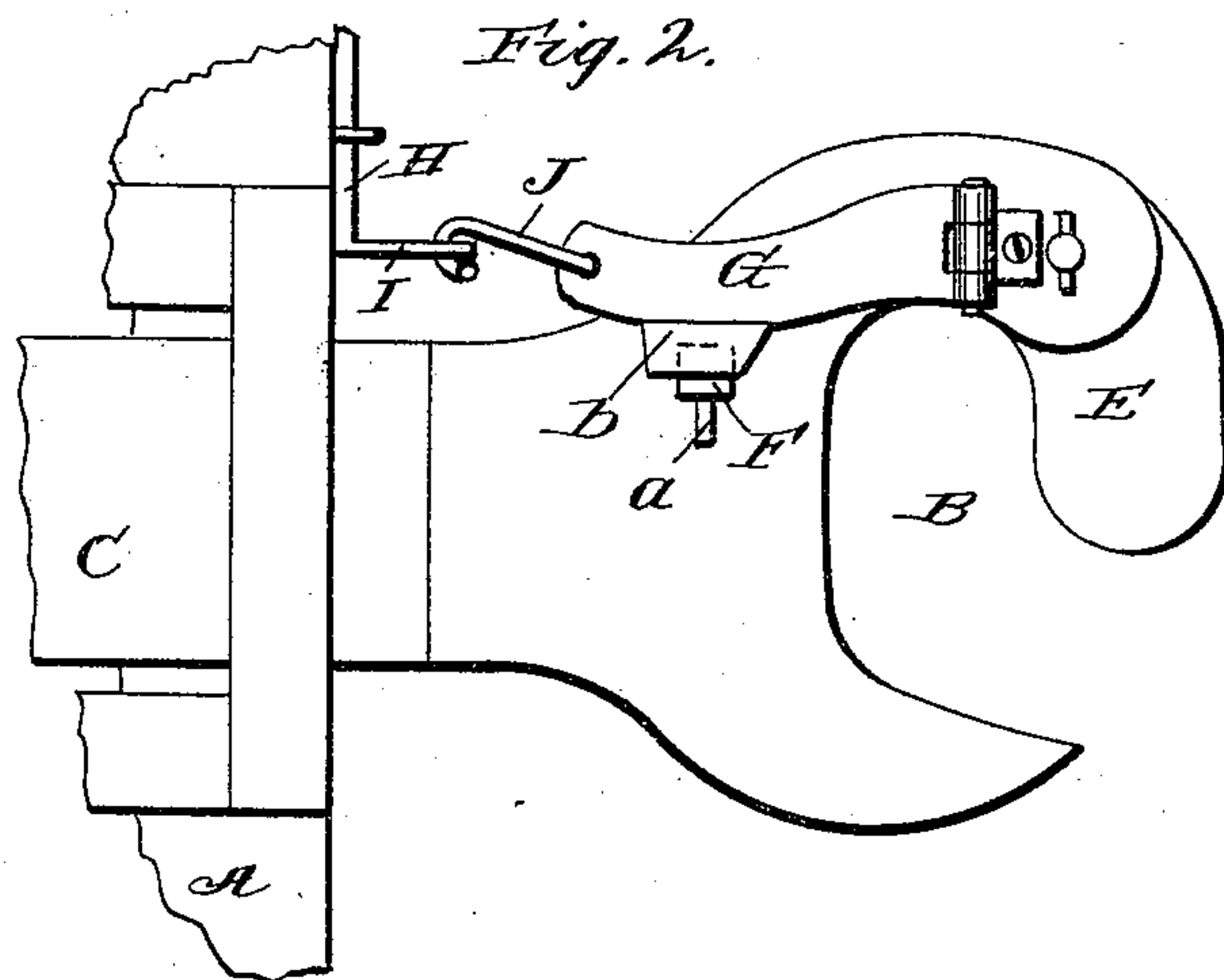
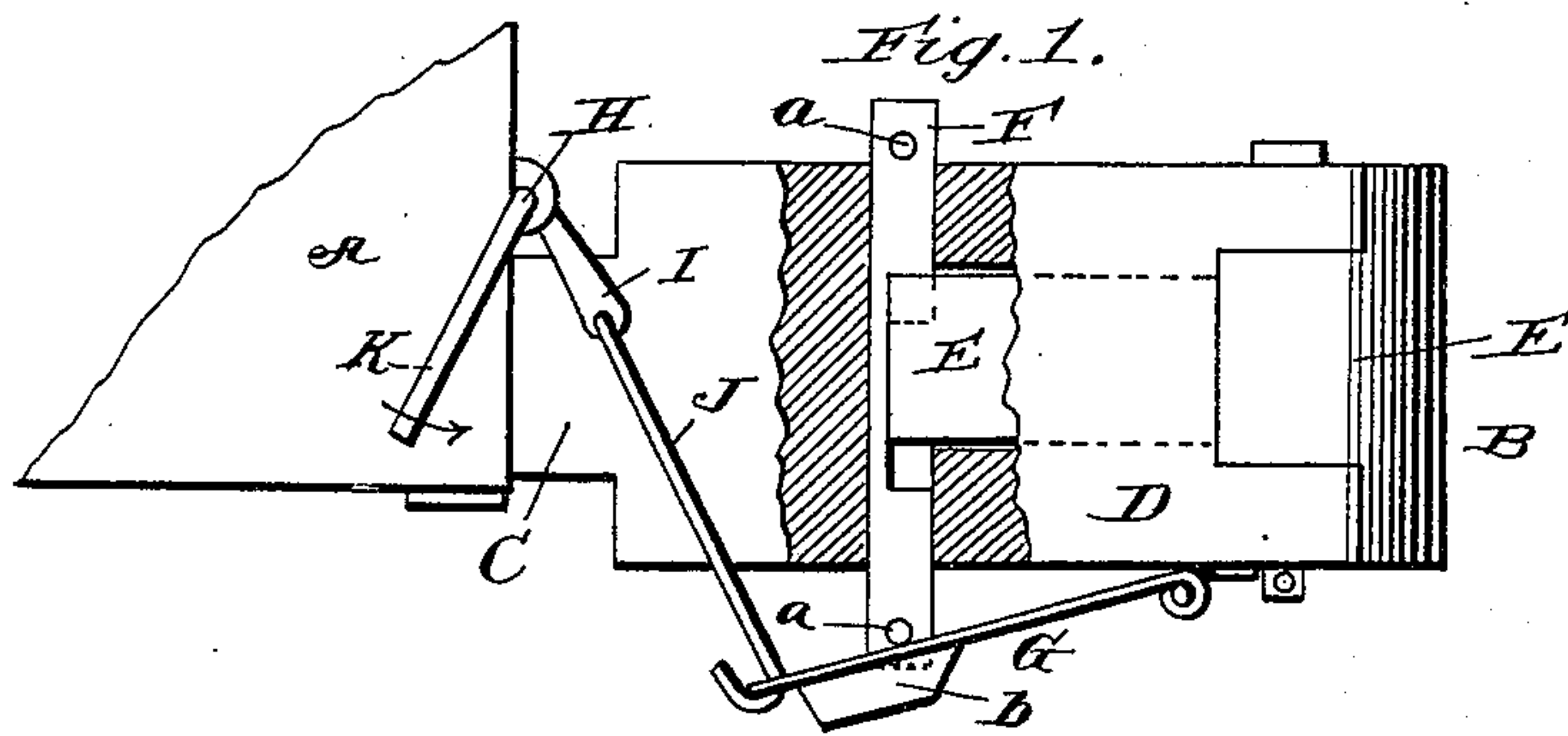


(No Model.)

N. W. AIGLER
CAR COUPLING.

No. 538,362.

Patented Apr. 30, 1895.



witnesses:

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UNITED STATES PATENT OFFICE.

NOAH W. AIGLER, OF BEAVERTOWN, PENNSYLVANIA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 538,362, dated April 30, 1895.

Application filed February 25, 1895. Serial No. 539,578. (No model.)

To all whom it may concern:

Be it known that I, NOAH W. AIGLER, a citizen of the United States, residing at Beavertown, in the county of Snyder and State of Pennsylvania, have invented certain new and useful Improvements in Car-Couplers; 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.

My invention relates to improvements in that class of car couplers which embody means for automatically disengaging a coupler from its fellow when it is disconnected from its car so as to prevent it from falling upon the track and derailing the train; and it consists in the peculiar construction, certain novel combination and the adaptation and arrangement of parts hereinafter described and particularly pointed out in the claim appended.

In the accompanying drawings, Figure 1, is a view partly in elevation and partly in section, illustrating a portion of a car and a "Janney" type coupler equipped with my improvements. Fig. 2, is a detail inverted plan view illustrating the draw head of the coupler and the latch lifter connected thereto. Fig. 3, is a detail perspective view of the latch lifter removed; and Fig. 4, is a view, partly in elevation and partly in section, illustrating a portion of a car and a "Janney type" coupler having a different latch from that of the coupler shown in Figs. 1 to 3, with my improvements in position.

Referring by letter to said drawings, and more particularly to Figs. 1 to 3 thereof, A, indicates a portion of a car which may be of any suitable construction, and B indicates a "Janney type" car coupler which comprises a draw bar C, designed to be connected in any suitable manner to the car, a draw head D, a swinging jaw E, and a vertically movable gravitating latch F, which is designed and adapted to automatically engage the swinging jaw E, and hold it in its closed position and is also adapted when raised to release the jaw in the ordinary manner. The said latch F, extends through the upper and lower walls of the draw head D, and is provided with pins *a*, to hold it against displacement and it is designed and adapted to be engaged at its lower end by the lifter or raising

device G, better illustrated in Figs. 2 and 3, of the drawings. This lifter or device G, may be cast or otherwise formed of metal, and it is pivotally connected or hinged at its forward end to the under side of the draw head and is provided at an intermediate point of its length with a depending lip *b*, which rests beneath the lower end of the latch F, whereby it will be seen that when its free end is raised, the latch will also be raised, and in consequence the swinging jaw E, will be released and allowed to swing open.

H, indicates a rock shaft which is journaled upon and connected to the front or other suitable part of the car body A. This rock shaft H, may be of any suitable length, and it is provided with a crank arm I, which is connected by a link J, with the rear free end of the latch lifter G, and is also provided at its outer end with a crank handle K. Thus it will be seen that when desired a person standing at the side of the car may release the swinging jaw and permit the disconnection of the couplers of two cars; it being simply necessary to raise the crank handle K, in the direction indicated by arrow (see Fig. 1), so as to raise the lifter G, and the latch F, and permit the jaw E, to swing open. It will also be perceived that in case the draw bar C, of the coupler is disconnected from the car and the coupler is drawn forward, the lifter G, being connected by the link with the rock shaft on the car will be raised and will lift the latch F, so as to release the jaw E, and prevent the coupler on another car from drawing the disconnected coupler from its supports and dropping it on the tracks where it would be likely to derail the train. In other words it will be perceived that I have provided an exceedingly cheap and simple mechanism through the medium of which a person may release the jaw of the coupler without the objectionable necessity of going between the cars, and that I have so arranged said mechanism that it will effect an automatic release of the swinging jaw in case the draw head is pulled forward, for the purpose before described.

While my improved mechanism is sure in its action it will be observed that it will not interfere with the ordinary movements of the latch F, to effect the automatic locking of the jaw when two cars come together, and will

not interfere with the ordinary movements of the coupler with respect to the car.

In Fig. 4, of the drawings, I have illustrated a modified coupler B, and modified mechanism for effecting an automatic release of the jaw thereof in the contingency described. The coupler B, is similar to that shown in Figs. 1 to 3, with the exception that it embodies a swinging jaw securing latch F, instead of a vertically movable one. The said latch F, is fixed on a transverse rock shaft F², journaled in the draw head, and said rock shaft is provided at its outer end with an arm G, for a purpose presently understood.

H, indicates a rock shaft which is journaled upon the front or other suitable part of the car. This rock shaft H, has a crank arm I, which is connected by a link J, with the arm G, of the shaft F², and said shaft H, also has a crank handle K, at its outer end through the medium of which it may be rocked by a person standing at the side of the car to raise the latch F, and release the swinging jaw of the coupler.

When the coupler is disconnected from the car, the modified construction just described operates to automatically release the swinging jaw in substantially the same manner as that shown in Figs. 1 to 3 does, that is to say when the coupler is drawn forward, the arm G, will be drawn in the direction indicated by arrow, and the latch will be raised and in consequence the swinging jaw will be permitted to swing forward.

All modern car couplers are provided with

means through the medium of which a person may, without going between the cars, release the jaws so as to effect an uncoupling, and it will be seen that my improved coupler may be produced as cheaply as those at present in use which is a desideratum.

It will also be perceived that my improvements may be readily applied to "Janney type" couplers which are similar to those illustrated in Figs. 1 and 4, at slight expense.

Having described my invention, what I claim is—

The combination of a car, a car coupler connected with the car and having a swinging jaw and a vertically movable gravitating latch normally depending below the draw head, and adapted to secure the said jaw in its operative or closed position, the latch lifting or raising device pivotally connected or hinged at its forward end to the under side of the draw head at a point in advance of the latch and extending in rear of the same, a rock shaft journaled on and connected with the car and having a crank arm, and a link connecting the rear end of the link lifting or raising device, and the crank arm of the rock shaft, substantially as and for the purpose set forth.

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

NOAH W. AIGLER.

Witnesses:

D. S. SPECHT,

W. O. STETLER.