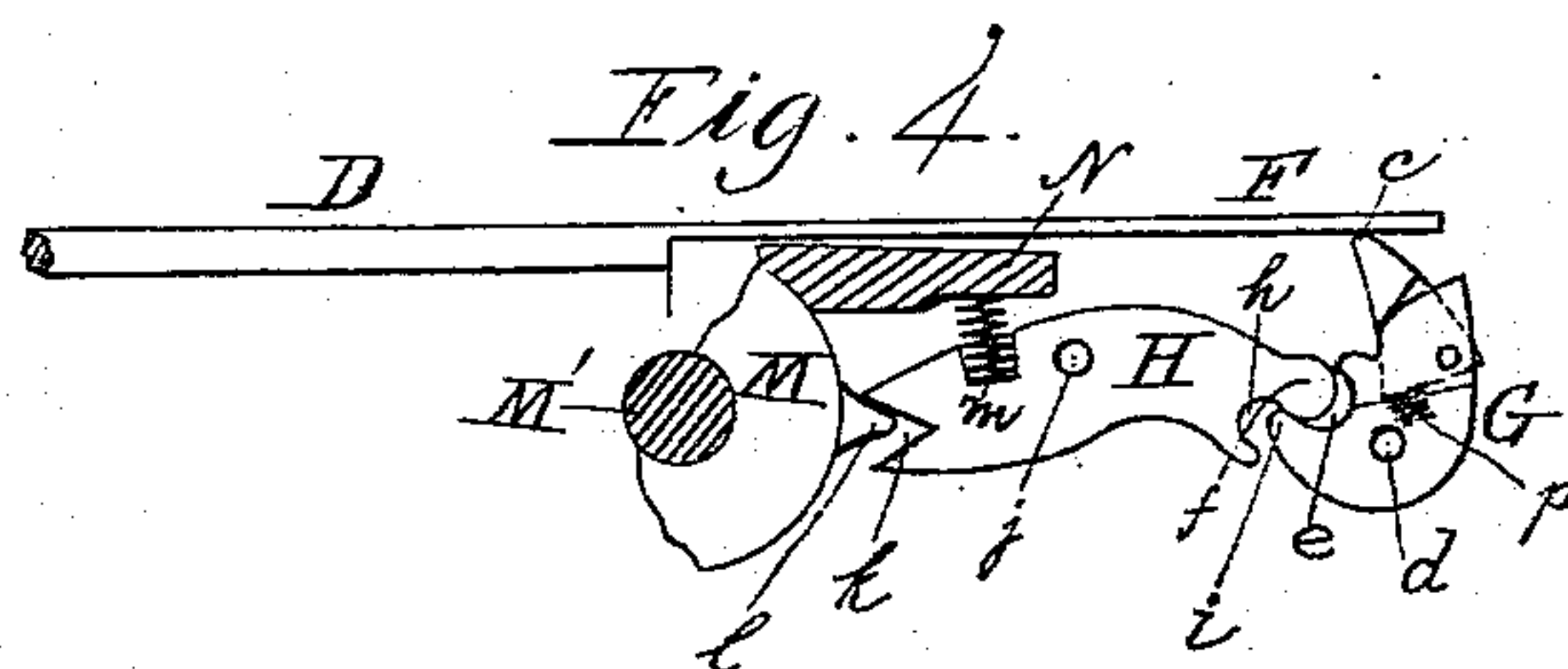
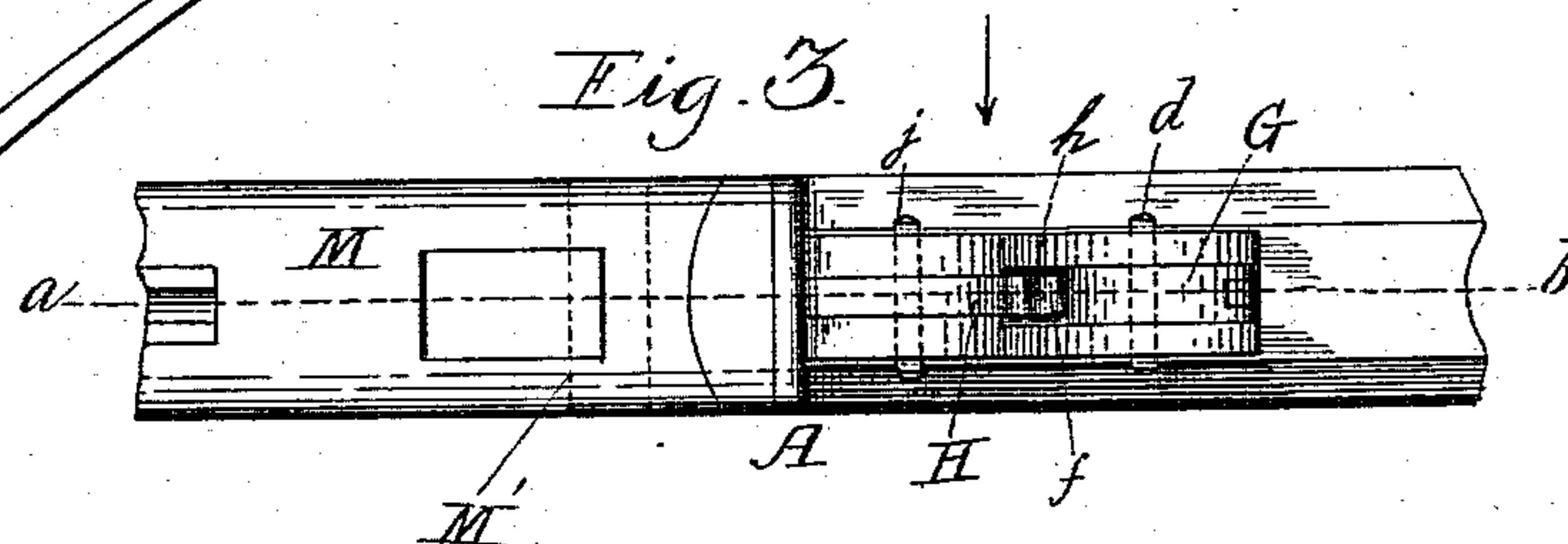
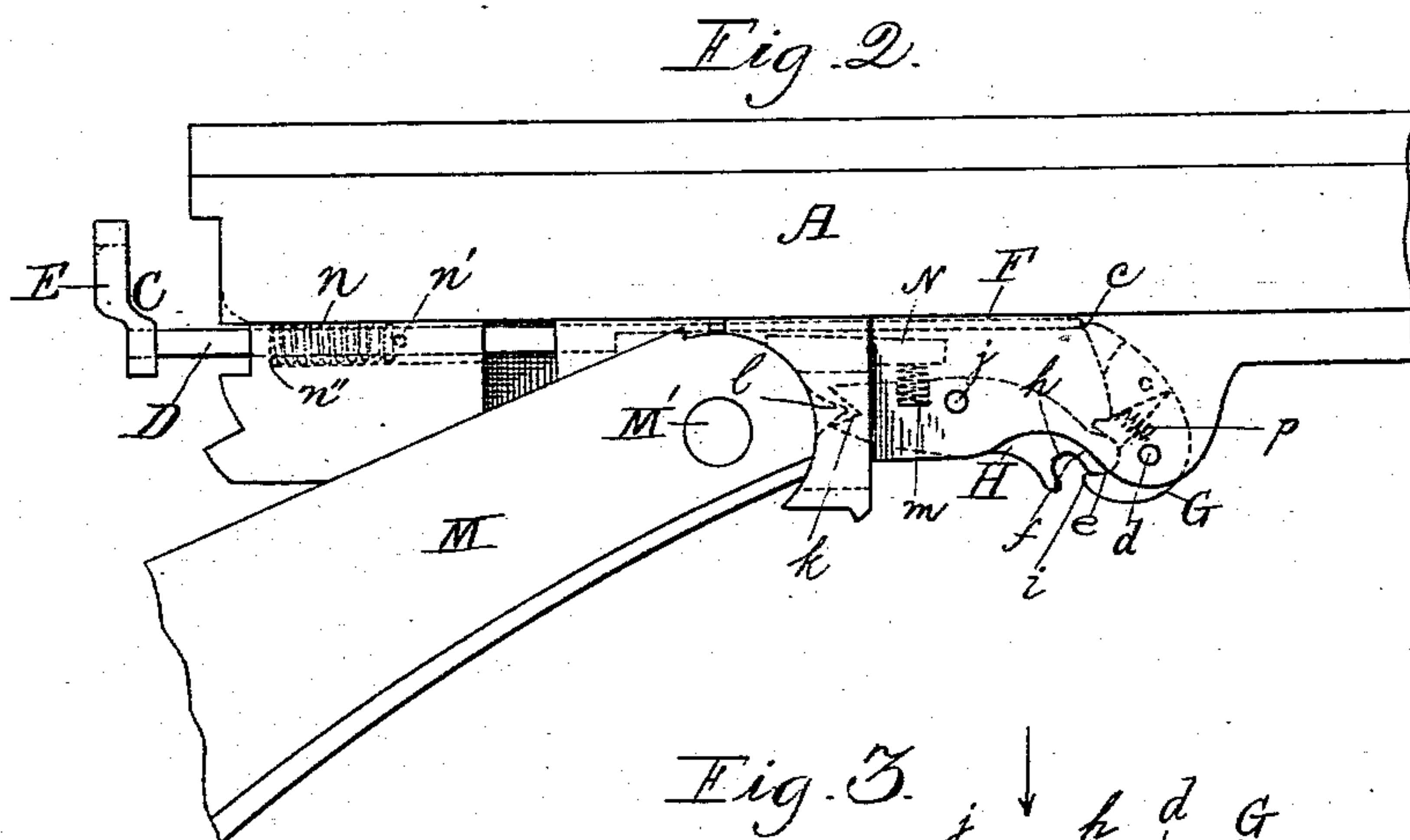
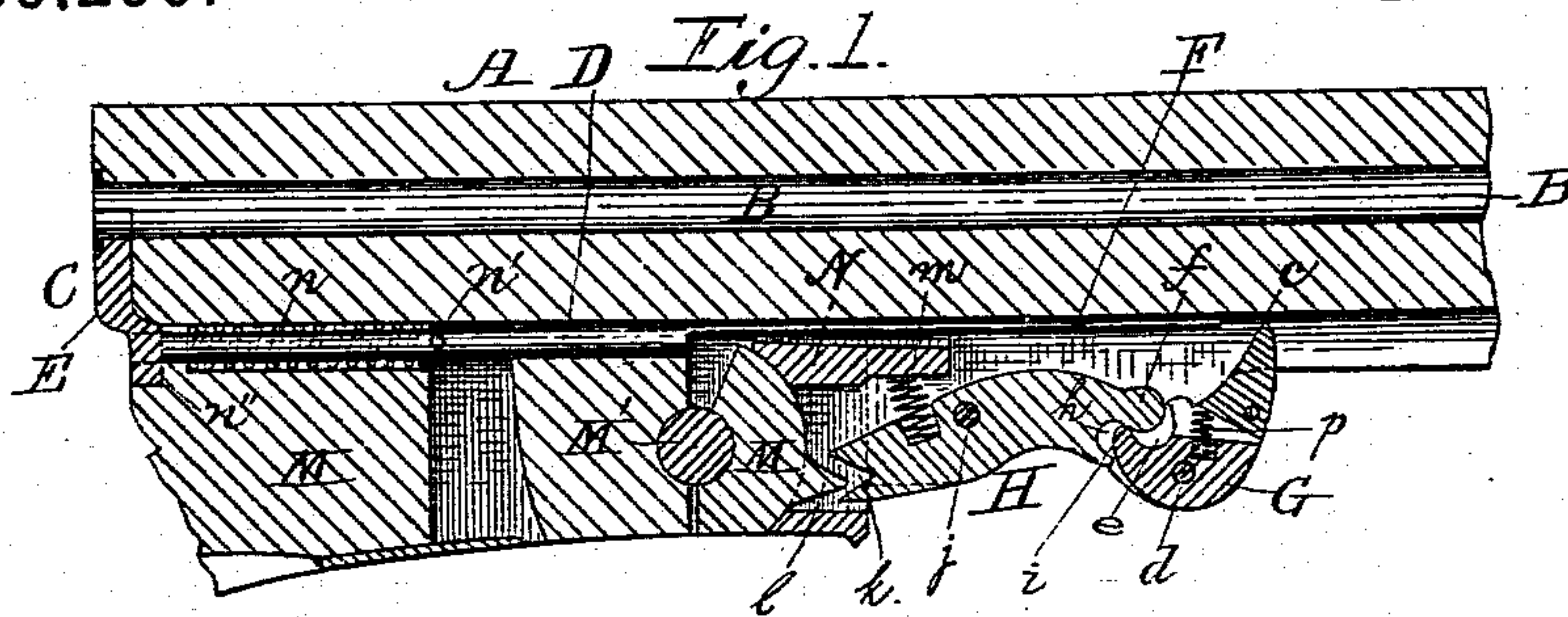


(No Model.)

I. JOHNSON.
EJECTOR FOR FIRE ARMS.

No. 339,299.

Patented Apr. 6, 1886.



Witnesses;

Thos. C. Dodge
Henry L. Miller.

Inventor;

Ives Johnson

UNITED STATES PATENT OFFICE.

IVER JOHNSON, OF WORCESTER, MASSACHUSETTS.

EJECTOR FOR FIRE-ARMS.

SPECIFICATION forming part of Letters Patent No. 339,299, dated April 6, 1886.

Application filed September 14, 1885. Serial No. 177,111. (No model.)

To all whom it may concern:

Be it known that I, IVER JOHNSON, of the city and county of Worcester, and Commonwealth of Massachusetts, have invented an Improved Ejector for Fire-Arms; and I do hereby declare that the following is a full, clear, and exact description of my said invention, reference being had to the accompanying drawings, and the letters of reference marked thereon, forming a part of this specification, and in which—

Figure 1 represents a longitudinal section through so much of a fire-arm as is necessary to illustrate my present improvements, the section being taken on line *a b*, Fig. 3, looking in the direction of the arrow, same figure. Fig. 2 represents a side view of certain parts shown in Figs. 1 and 3. Fig. 3 represents a bottom view of the parts shown in Figs. 1 and 2, and Fig. 4 a side view of certain parts detached, as will be hereinafter more fully described.

My present improvements relate particularly to the mechanism for ejecting cartridge-shells from the arm, and therefore the description will be confined to those parts, as the invention is applicable to various styles of breech-loading fire-arms.

In the drawings, A represents a section of the breech of the barrel; B, the bore; C, the cartridge-extractor, which may be made in the usual manner with an ejector-rod D and head E for operating upon the flange of the cartridge-shell. It will be understood that the head E has combined with it a secondary guide-rod, in the usual manner, for retaining it in the proper position as it is moved back and forth. Ejector-rod D is fitted to and works in a groove in the under side of the barrel A, as fully indicated in Figs. 1 and 2 of the drawings. The front end, F, of rod D is flattened in this instance, and is operated upon to eject the cartridge-shell by the hinged point *c* of the discharge-dog G, which turns on a pivot, *d*, and is provided with a groove, *e*, into which fits the front end, *f*, of the lever H, said lever having a curved opening, *h*, to receive the hooked end *i* of discharge-dog G, as fully shown in the drawings. Rod D F may be made in different forms. Lever H is pivoted at *j*, and is provided with a V-shaped open-

ing, *k*, at its rear end to receive the V-lug *l* on the end of the hinged fore hand M, a section only of which is shown in the drawings. The lower end of a spiral spring, *m*, is fitted in a notch in the upper side of lever H, the upper end of said spring bearing against the stationary projection N, whereby the front end of lever H is forced down when the hinged fore hand is turned up, as shown in Fig. 1. By this arrangement it is not necessary to have the V-lug *l* fit closely the V-opening in lever H, and consequently lever H is not acted upon at the commencement of the lowering of the fore hand M, which is hinged at M', thus enabling the constructor to give any desired throw to the cartridge-ejector by providing for a greater or less movement of the V-lug *l* before acting upon lever H. The less movement there is of such lug before acting upon such lever the greater will be throw of the ejector-rod D and head E. A spiral spring, *n*, is arranged upon the ejector-rod D, one end bearing against a pin, *n'*, and the other end against a shoulder, *n''*. Consequently, when rod D is forced out said spring is compressed by pin *n'*, and as soon as point *c* is rotated sufficiently to pass the end F of rod D the latter is forced back by spring *n* into its normal position, and when the hinged fore hand is closed again dog G is rotated back, the point *c* springing forward, as shown in Fig. 4, as it passes under end F; but as soon as it passes beyond the end F it is thrown up into position by means of a small spiral spring, P, ready to act again upon the ejector-rod, as before explained, as fully indicated in Fig. 1 of the drawings.

In lieu of hinged point *c*, the end F may be arranged with a spring or hinged part for the purpose of allowing the point *c* to pass under it, even when the latter is made rigid with the body of dog G; or point *c* may be made to slide up and down in a groove in the body of dog G, if preferred, whereby the same result can be obtained.

Having described my improvement in cartridge-ejector for fire-arms, what I claim therein as new, and desire to secure by Letters Patent, is—

1. The combination, with the front end of hinged fore hand M, provided with lug *l* on

the forward end, and cartridge-ejector rod D F, of hinged lever H, provided with a V-shaped opening, *k*, to receive lugs *l* on the forward end of fore hand M, and a curved opening, *h*, on its forward end, and hinged dog G, provided with hooked end *i* to enter opening *h* in the front end, *f*, of lever H, said parts being arranged in relation to each other substantially as described, whereby, when the fore hand of the arm is depressed, hinged lever H and hinged dog G will be operated as described, and the ejector-rod D F moved out by point *c* of hinged dog G to eject the cartridge-shells, substantially as described.

2. The combination, with fore hand M, provided with lug *l*, of ejector-rod D F, lever H,

and hinged dog G, provided with hinged point *c* and spring *p*, substantially as and for the purposes set forth.

3. The combination, with hinged fore hand M, lug *l*, and cartridge-ejector rod D F, provided with a V-shaped opening, *k*, in its rear end, and a curved opening, *h*, in its forward end, of hinged dog G, provided with groove, *e*, hooked end *i*, hinged point *c*, and spring *p*, said parts being constructed and arranged in relation to each other substantially as and for the purposes set forth.

IVER JOHNSON.

Witnesses:

THOS. H. DODGE,
H. L. MILLER.