

H. A. & W. TRIPP.
Hoop-Lock Cutter.

No. 223,824.

Patented Jan. 27, 1880.

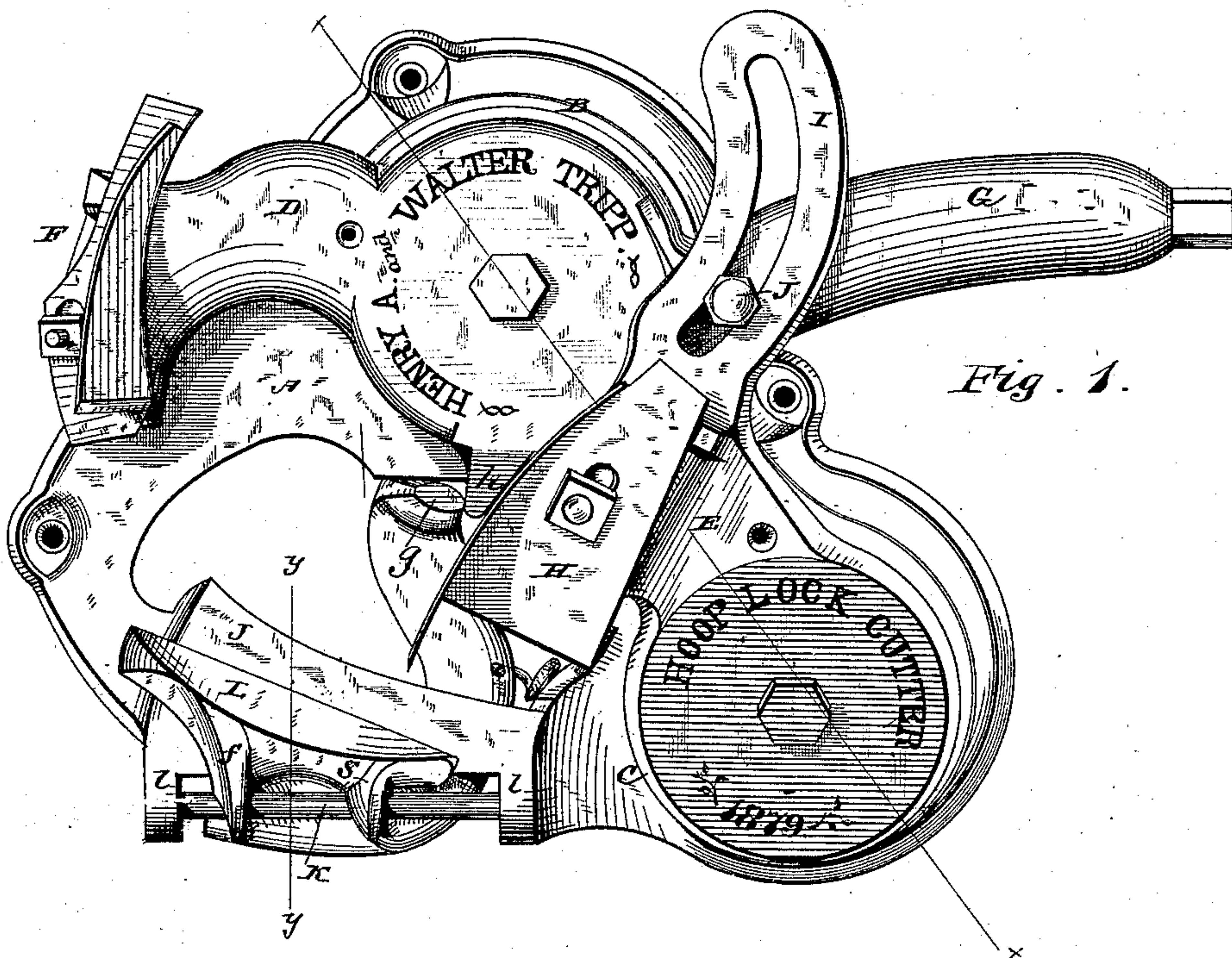


Fig. 1.

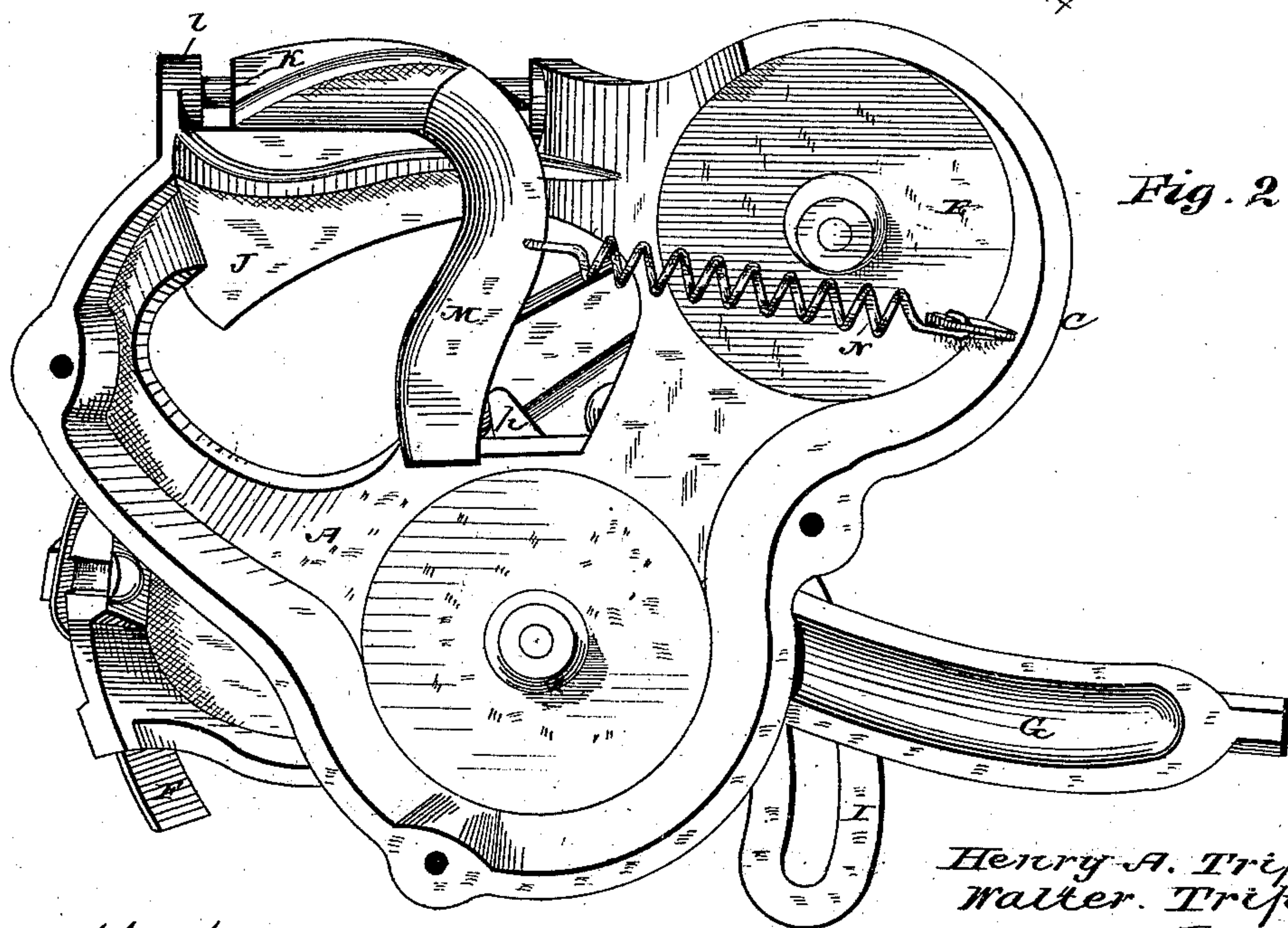


Fig. 2.

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Fig. 3.

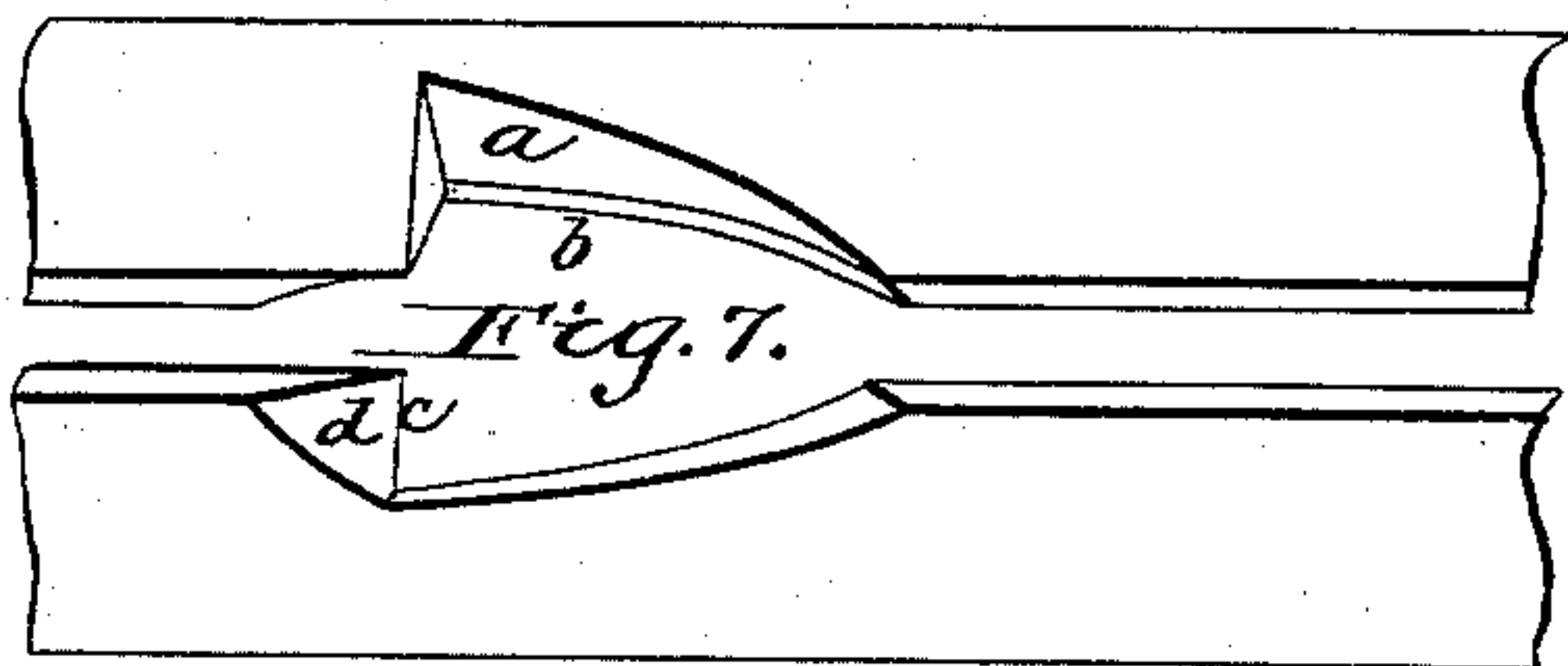
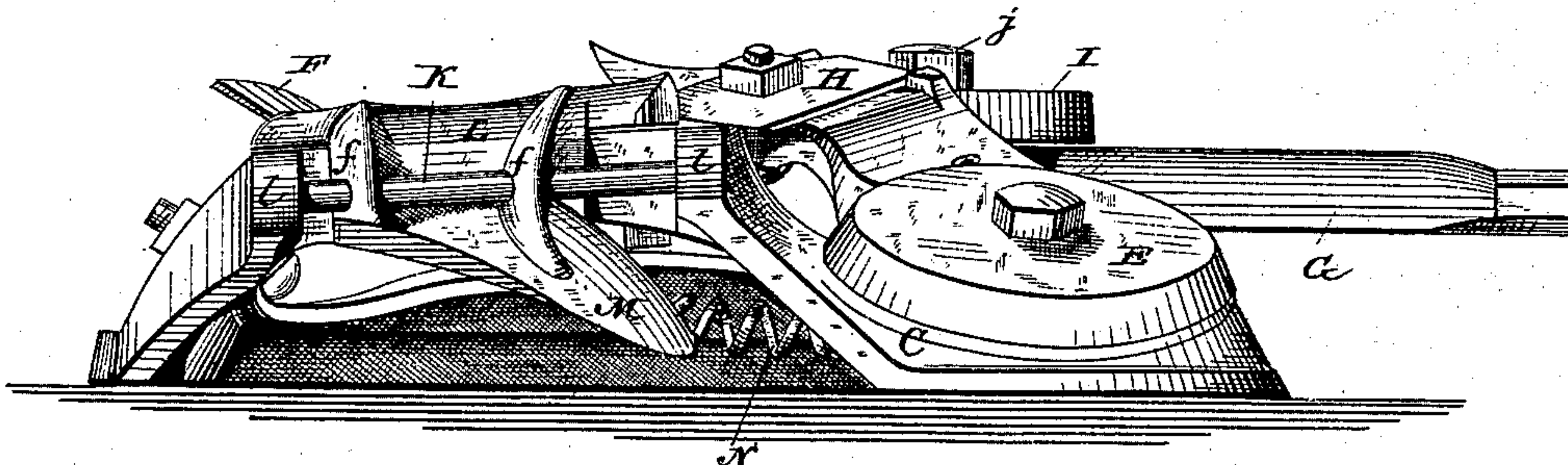


Fig. 6.

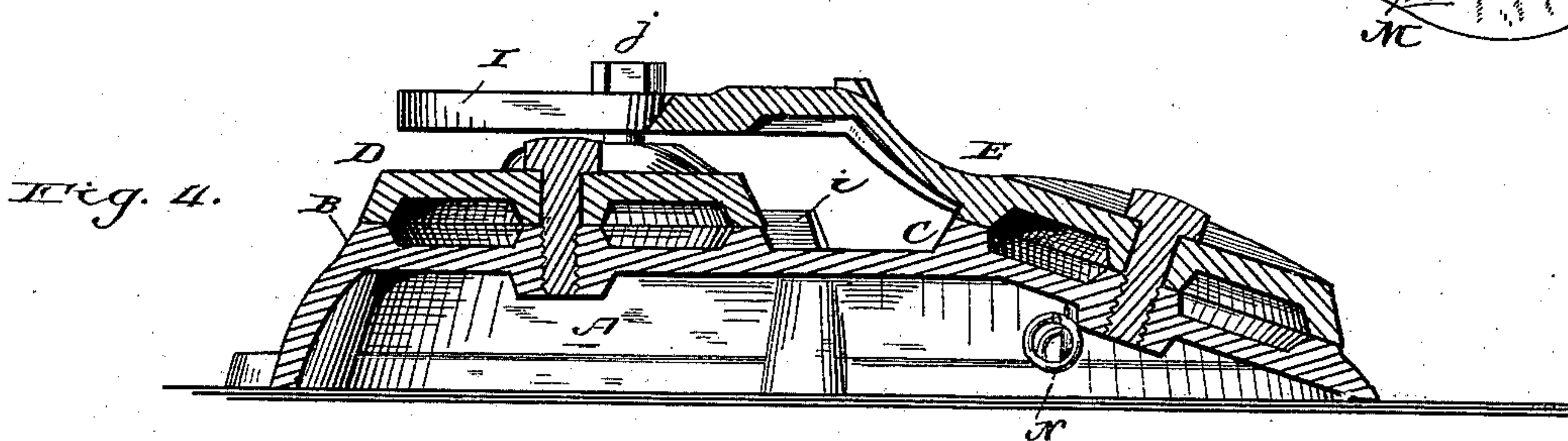
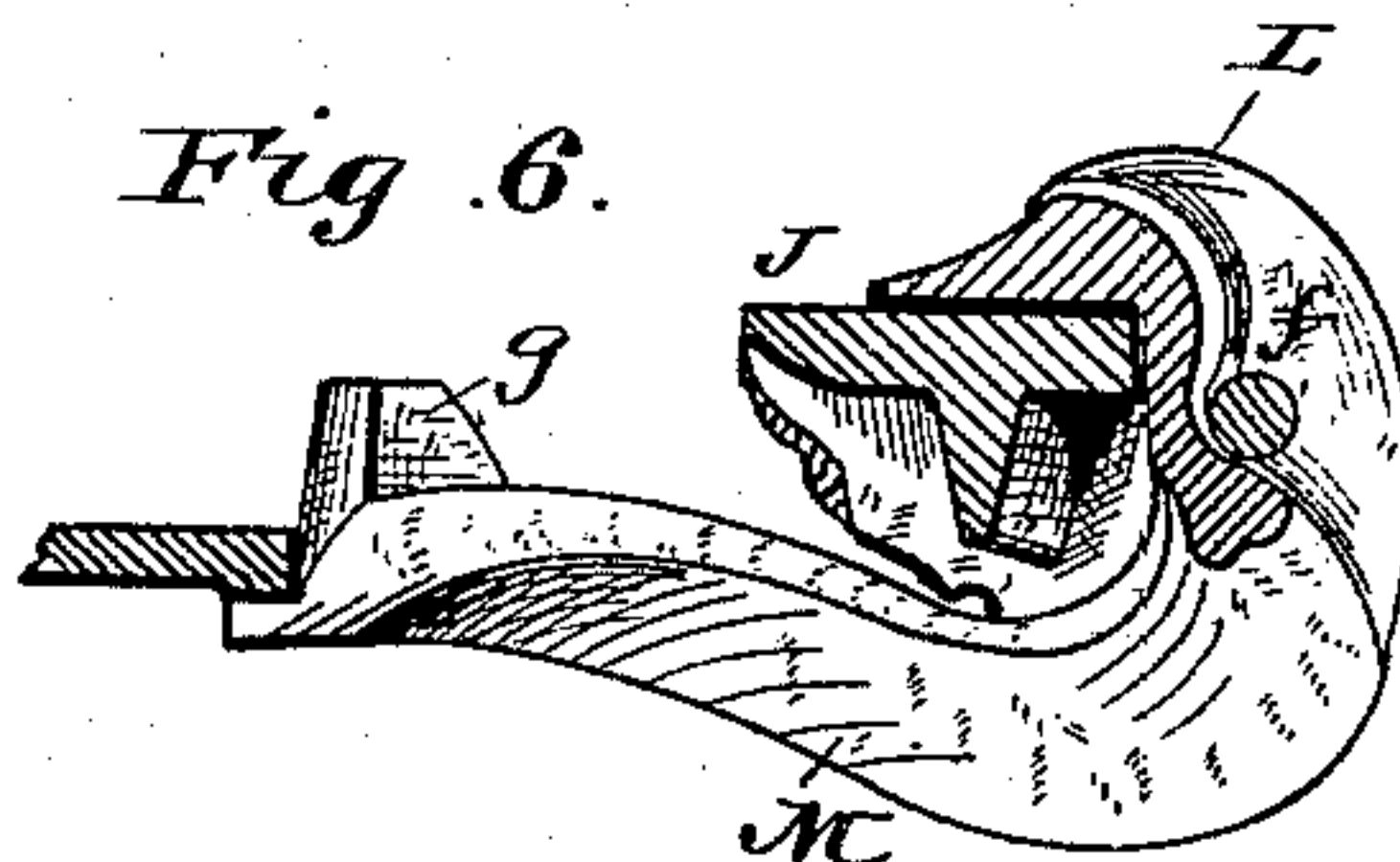
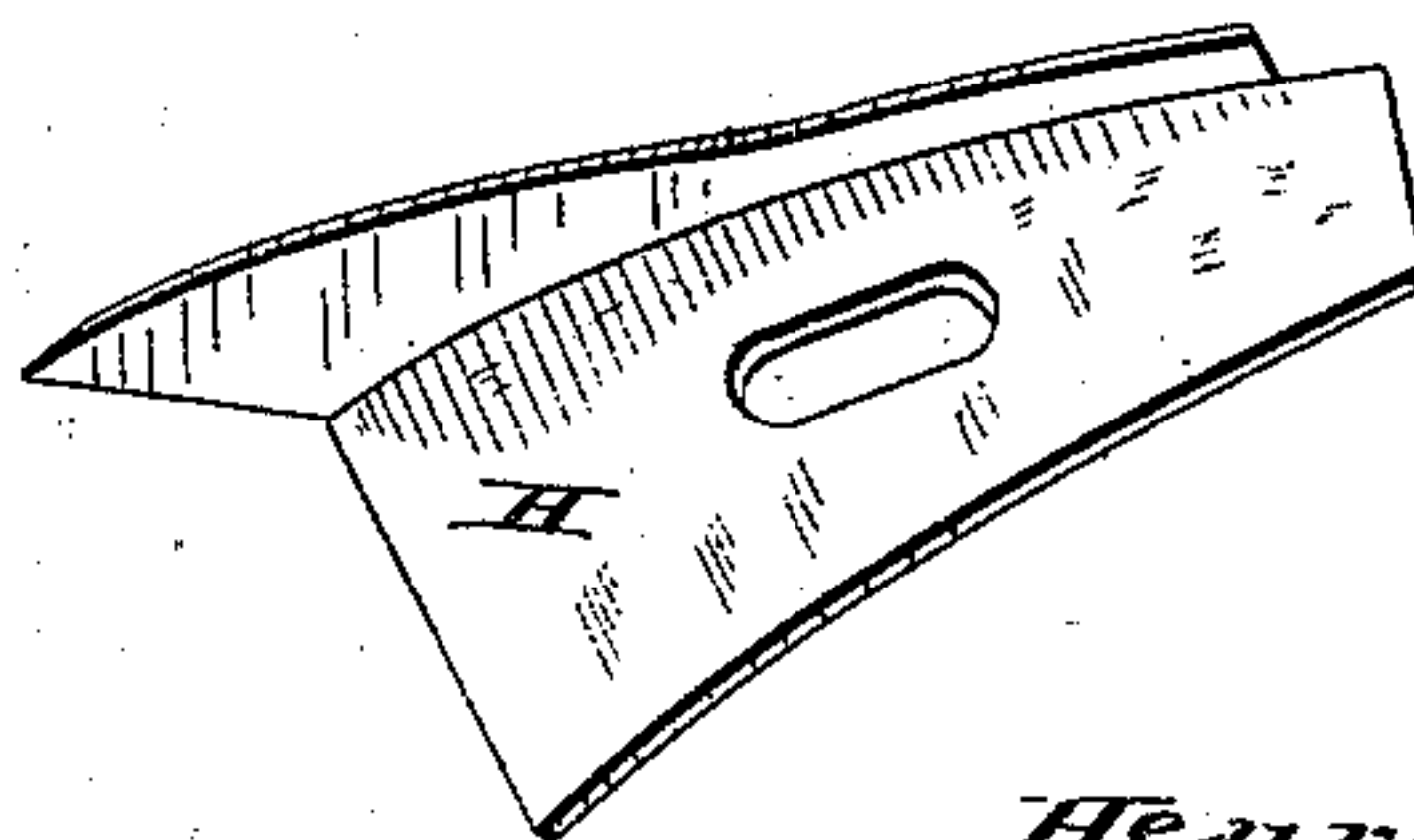
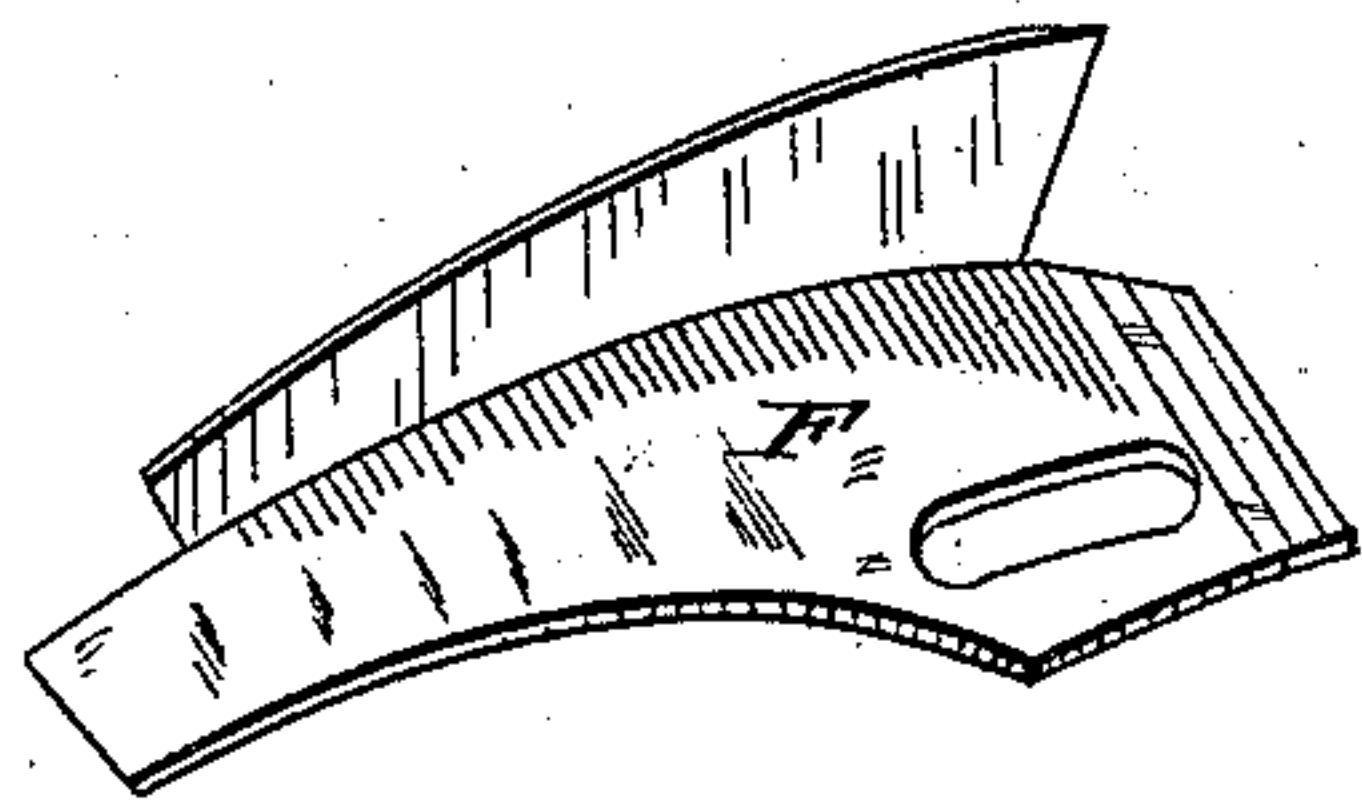


Fig. 5.



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UNITED STATES PATENT OFFICE.

HENRY A. TRIPP AND WALTER TRIPP, OF EAST WILLIAMSON, NEW YORK.

HOOP-LOCK CUTTER.

SPECIFICATION forming part of Letters Patent No. 223,824, dated January 27, 1880.

Application filed November 15, 1879.

To all whom it may concern:

Be it known that we, HENRY A. TRIPP and WALTER TRIPP, of East Williamson, in the county of Wayne and State of New York, have invented certain new and useful Improvements in Hoop-Lock Cutters; and we do hereby declare that the following is a full, clear, and exact description of the invention, which 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 of reference marked thereon, which form a part of this specification, in which—

Figure 1 is a plan view of the cutter; Fig. 2, an end view, looking at the rear of the adjusting-gage. Fig. 3 is a side elevation; Fig. 4, a cross-section through *xx* of Fig. 1; Fig. 5, perspective views of the knives detached; Fig. 6, a cross-section through *yy* of Fig. 1; and Fig. 7, detached side views of the lock as cut.

Our invention relates to hoop-lock cutters, and is an improvement on the cutter patented by us October 1, 1872, the improvement consisting in the self-adjusting gage, and also in the construction of the bed-plate, as hereinafter described.

In the accompanying drawings, the letter A indicates the bed-plate, which is provided with a horizontal and an inclined flange, B and C, to the first of which is pivoted a lever, D, and to the other a lever, E, both of which are, by preference, of the form shown, but not necessarily restricted thereto.

To one end of lever D there is bolted or otherwise secured a knife, F, which in form is made as shown in Fig. 5, so as to form a curved and beveled or V-shaped cut, *a b*, in the hoop, the knife being bolted to the end of the lever, as shown in Fig. 1, the slot through which the bolt passes being elongated, so that the knife may be adjusted endwise for the purpose of taking up the wear or to adjust it to different sizes of hoops, or for whatever other purpose it may be found necessary. The other lever, E, is also provided with a knife, H, at one end, and back of the knife with an arm, I, which is formed with a longitudinal curved slot, as represented in Fig. 1. A pin, *j*, passes through this slot into lever D and connects

the two levers together. The knife that is connected to this lever E is preferably of the form shown in Fig. 5, one cutting-edge being at right angles to the other, and the perpendicular edge preferably projecting beyond the one that is in a horizontal plane. This knife is also formed with an elongated slot, for the same purpose that the other knife is formed with one, and is bolted to the lever, as shown in Figs. 1 and 3, so as to be at a slight inclination to a horizontal plane, and is constructed and applied as described, so as to cut the transverse shoulder *c* and bevel *d* in the hoop, as shown in Fig. 7.

The bed-plate A has cast as a part of it, or otherwise rigidly secured thereto, a small and elevated platform, J, upon which the hoop is rested while being cut by the bringing together of the two knives.

On the rear of this platform, at both ends, there are formed ears *l*, which support the two ends of a rod, K, on which slides a gage, L. This gage is cast or otherwise formed preferably with a beveled and curved face, as illustrated in Fig. 1, a portion of it resting on the platform, as shown in Fig. 6, and is provided on its rear with orificed lugs *f*, through which the rod K passes, and is provided with a forwardly-extending arm, M, which has a knob or lug, *g*, at its forward end, the same being designed to come in contact with a lug, *h*, formed on lever D, so that when the two lugs are in contact and the lever is turned the gage will be moved backward, permitting of the placing of a hoop of wider or narrower dimensions upon the platform between the face of the gage and the cutter or knife H. This arm M is connected by a spiral or other suitable spring, N, with some part of the bed-plate A, an illustration of a good way of connecting the same being shown in Fig. 2, so that when the hoop has been placed in position on the platform and the knives are being brought together to cut the hoop the spring will draw the gage back in the direction of its normal position, both gage and knife H moving simultaneously toward each other and binding the hoop between the two, and holding it firm until it has been properly cut by the knives and they released. A lug, *i*, formed on bed-plate A under lever E, at a point near lever D, and against

which lug *h* will strike when the two knives are brought together, limits the inward movement of the lever *D*, thereby preventing it from being forced against the vertical blade of knife *H*.

In operation, handle *G* is grasped and pulled toward the operator, whereby the two levers are turned in contrary directions, enlarging the space between the two knives and moving the gage backward, this last being effected by lug *h* striking and bearing against lug *g*, thereby exposing a wide surface on top of platform *J*. A hoop is next laid on said platform, and handle *G* is pushed from the operator, whereby the knife *F* is brought toward knife *H* and enters the hoop-cutting curved and beveled surfaces therein, while at the same time the knife *H* and gage *L* are moved toward each other, clasp- ing the hoop between them, the vertical blade of the knife cutting a transverse shoulder in the hoop and the horizontal blade a beveled surface to the under part of it next to said shoulder.

The gage, by the construction described, is made self-adjusting, and as soon as knife *H* comes in contact with the hoop the pressure that it exerts against it is equal to that exerted by the spring, and prevents the spring from drawing the gage forward, so that the latter may be said to be fastened and the knives made to cut to the proper depth in hoops of different widths.

By constructing the bed-plate as described, the necessity of forming slots for the levers to work in is removed, and the device can be made at much less cost than before.

Having described our invention, what we claim is—

1. In a hoop-lock cutter, the combination of

a platform on which to rest the hoop, knives for cutting the lock, and a self-adjusting gage, acting conjointly with knife *H*, for proportioning the depth of lock or notch to the width of hoop, all substantially as set forth.

2. In a hoop-lock cutter, the combination of two levers carrying the cutters, a platform on which to rest the hoop, and a gage for regulating the platform to the width of the hoop, the gage moved backward by a lug on a lever engaging with an arm of the gage and moved forward by a spring, all substantially as set forth.

3. The bed-plate *A*, provided with horizontal and inclined flanges *B C*, in combination with levers *D E*, platform *J*, and adjustable gage *L*, substantially as set forth.

4. In a hoop-lock cutter, the combination of a platform on which to rest the hoop and a self-adjustable gage and two levers with cutters connected thereto, one of the levers being limited in its play by a lug thereon and a lug on the bed-plate, substantially as set forth.

5. The within-described hoop-lock cutter, composed of a bed-plate, *A*, provided with platform *J*, in combination with levers *D E*, provided with cutters and connected together, as described, gage *L*, provided with arm *M*, spring *N*, and lugs *g* and *h*, substantially as set forth.

In testimony that we claim the foregoing as our own we affix our signature in presence of two witnesses.

HENRY A. TRIPP.
WALTER TRIPP.

Witnesses:

E. W. KELLY,
E. HALLOCK.