## J. BÄUMLE.

HOOP FLARING MACHINE.

No. 291,273.

Patented Jan. 1, 1884.

Hig. 1.

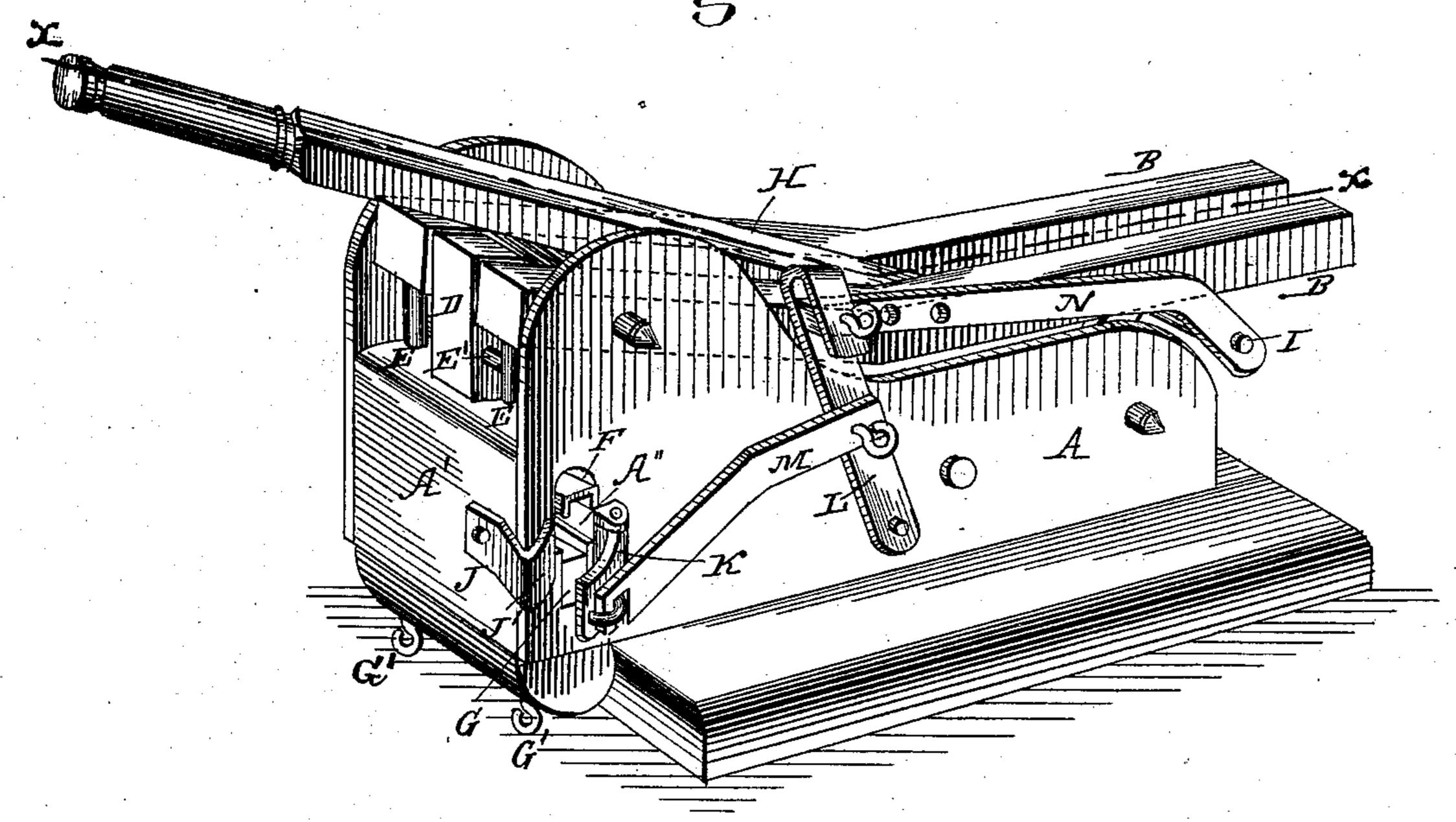
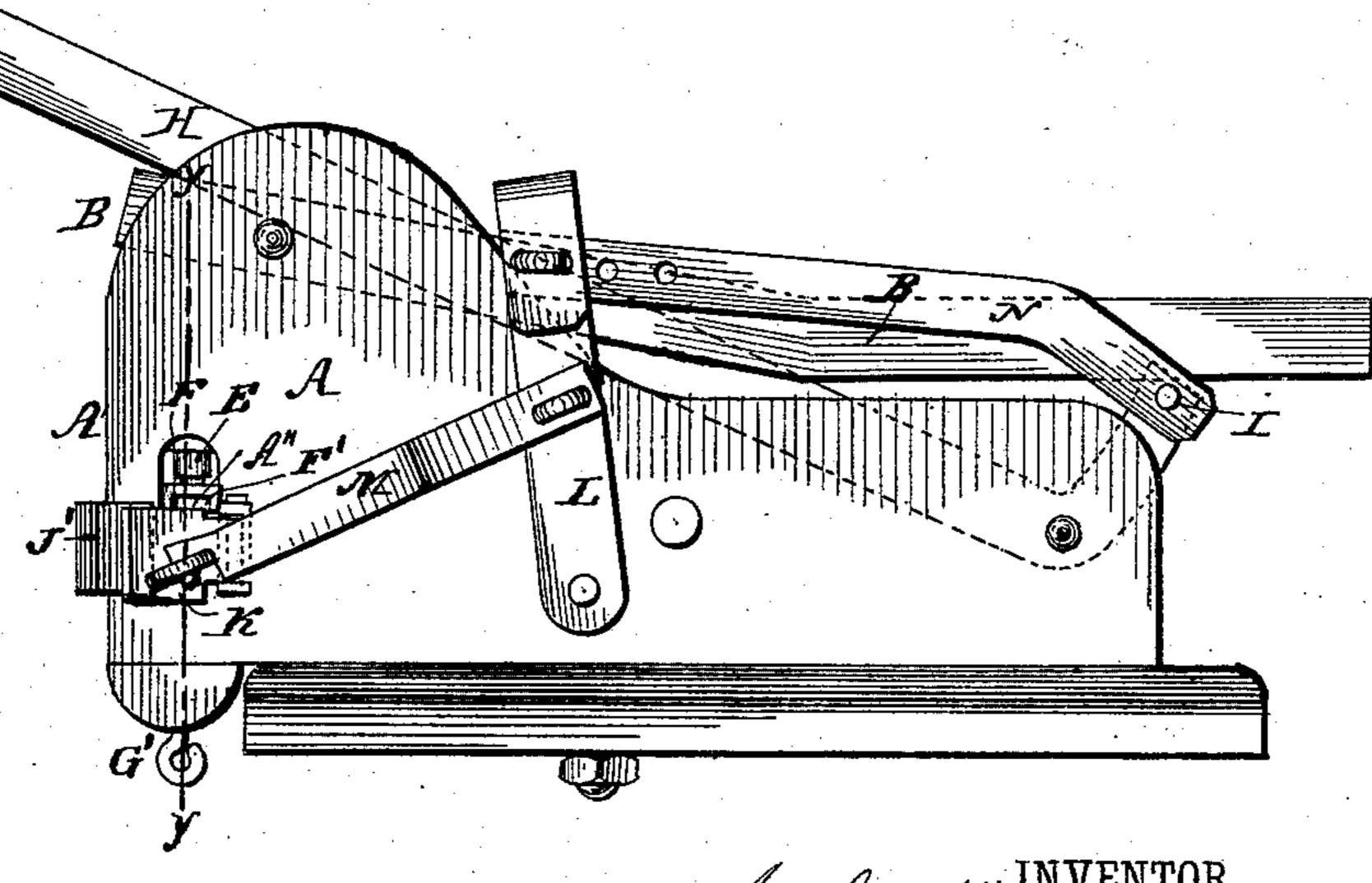


Fig. 2.



WITNESSES:

Red & Dieterich.

John Boumle

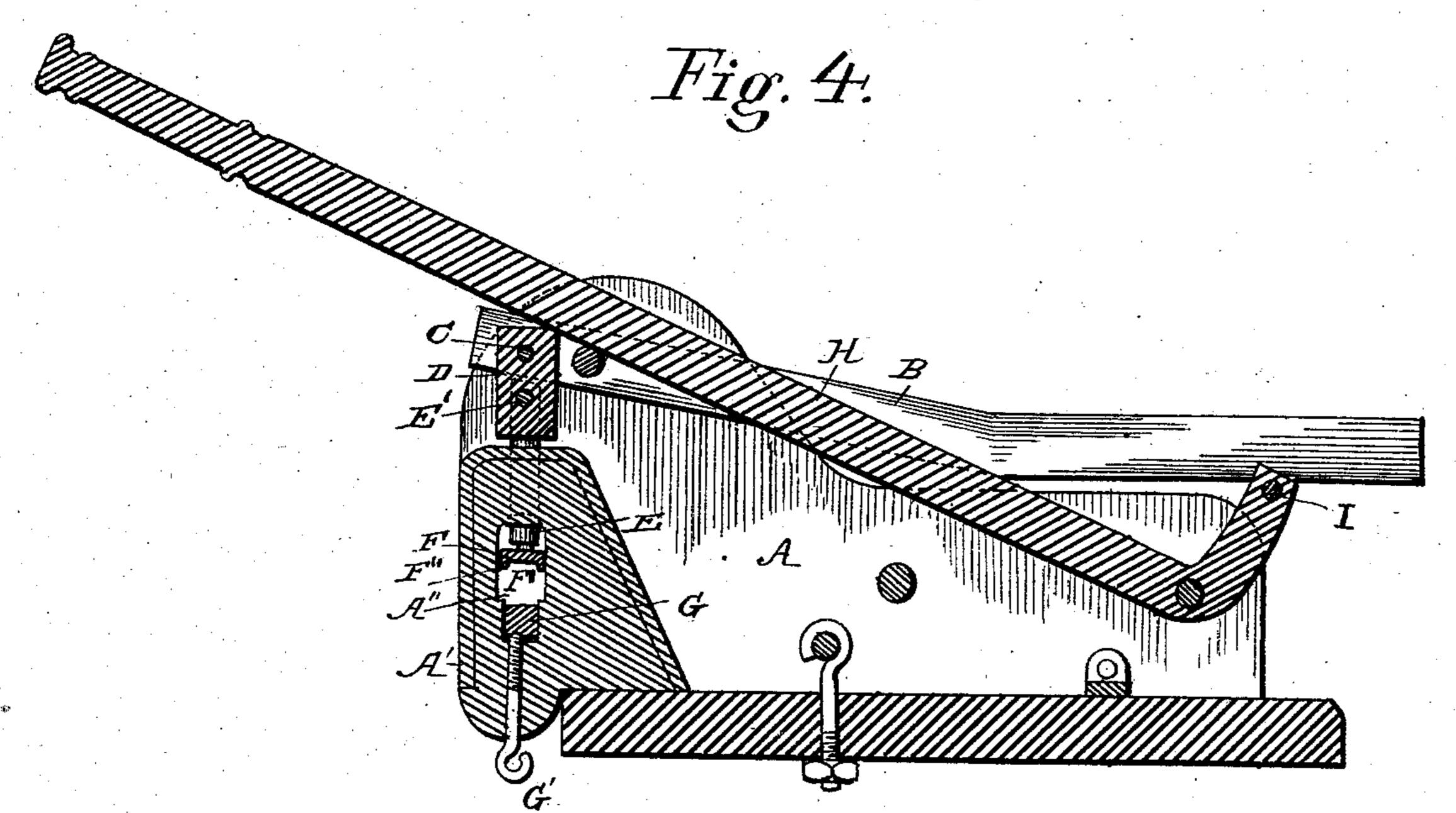
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ATTORNEYS.

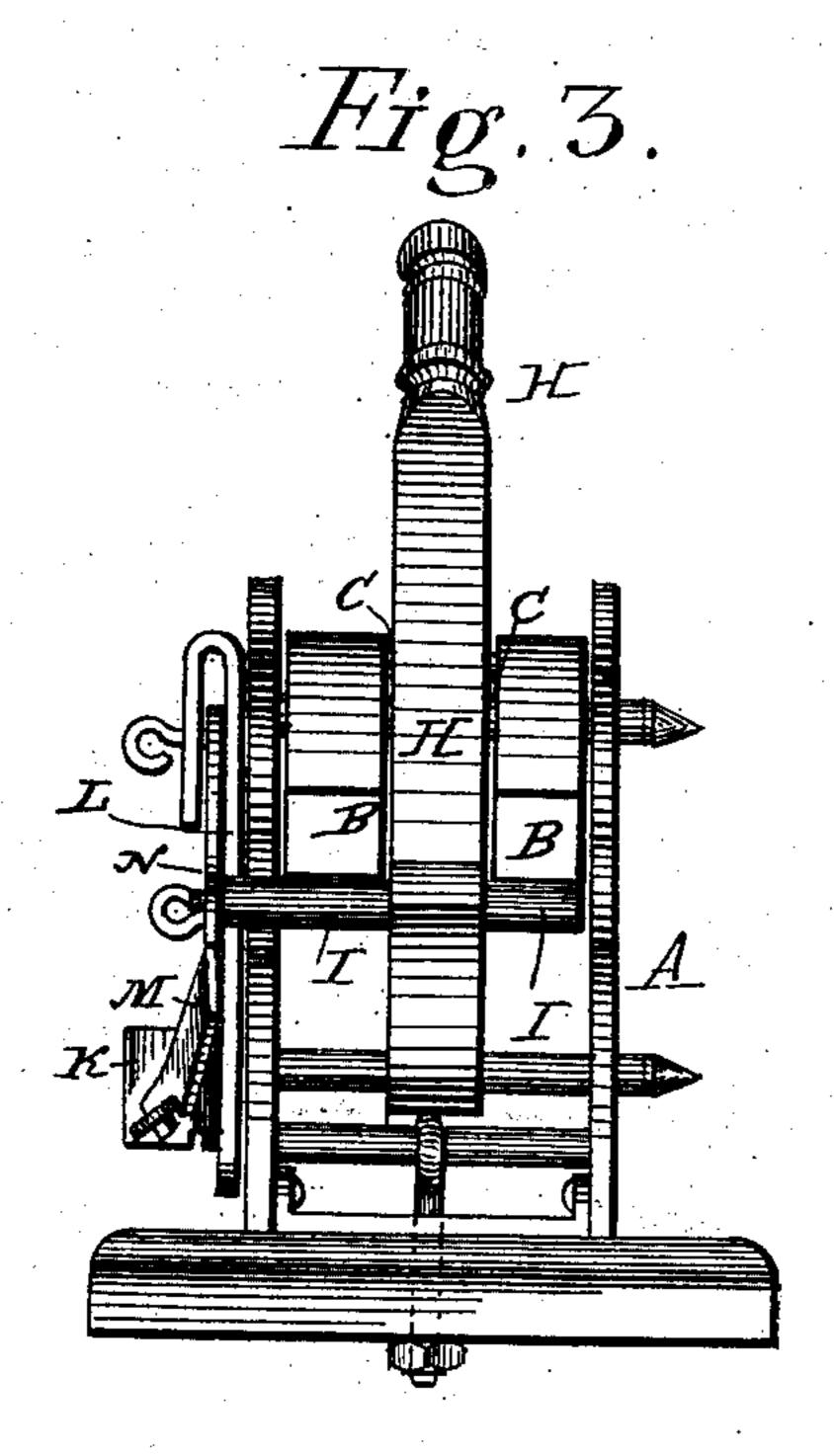
### J. BÄUMLE.

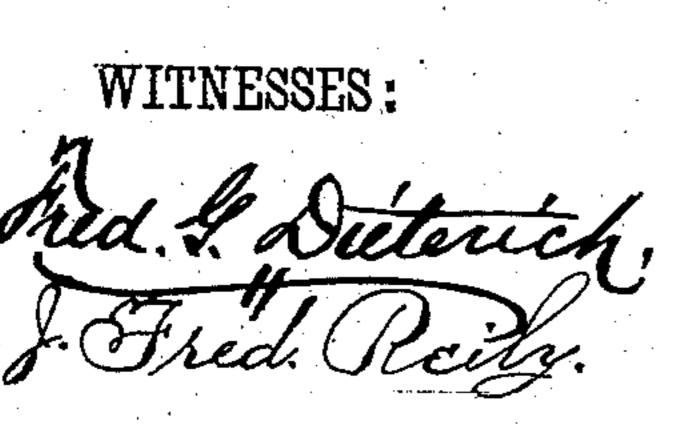
HOOP FLARING MACHINE.

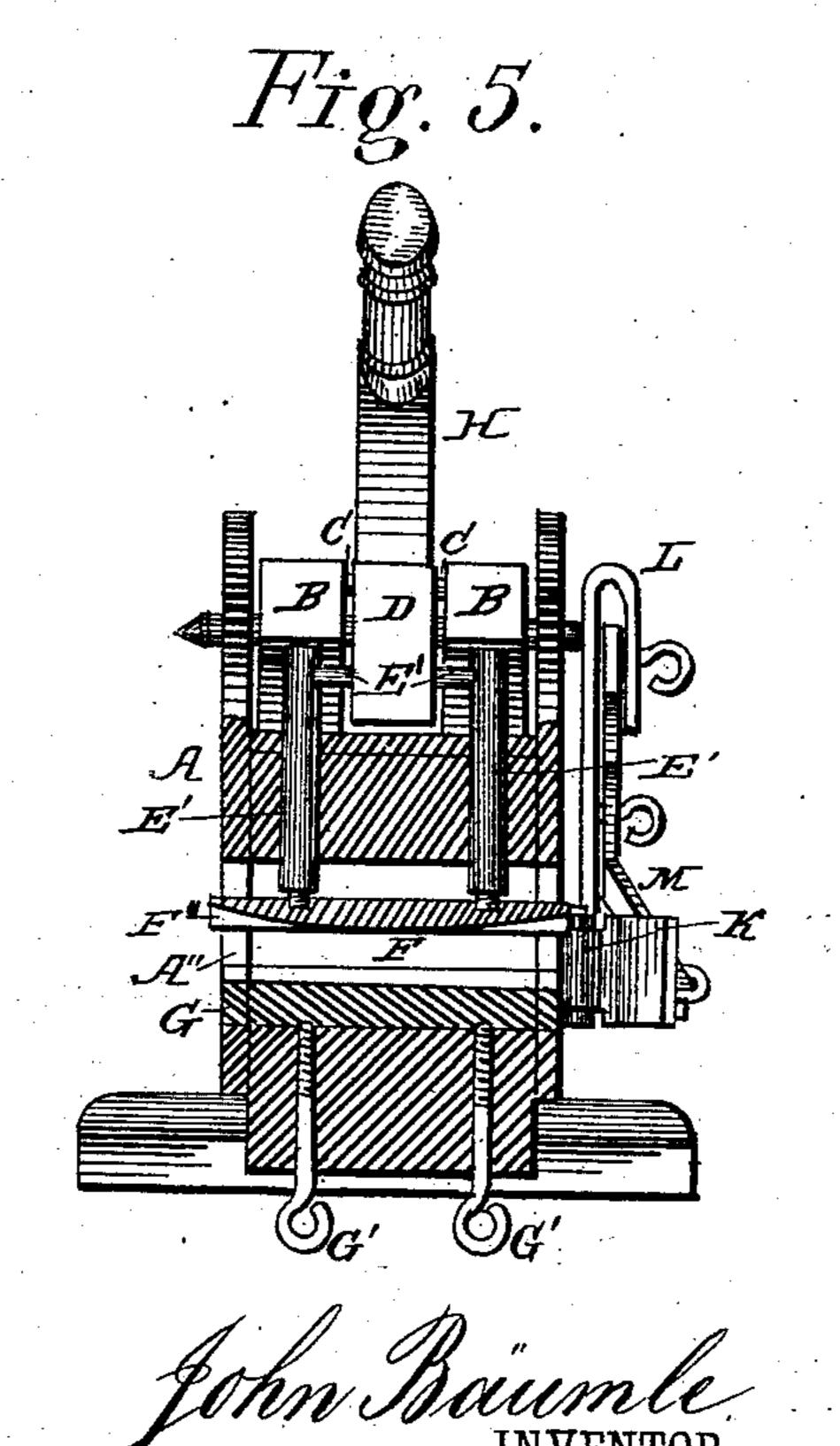
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John Baumle
INVENTOR.

Sy

Louis Bagger + Co

ATTORNEYS.

# UNITED STATES PATENT OFFICE.

### JOHN BÄUMLE, OF MILWAUKEE, WISCONSIN.

#### HOOP-FLARING MACHINE.

SPECIFICATION forming part of Letters Patent No. 291,273, dated January 1, 1834.

Application filed October 26, 1883. (No model.)

To all whom it may concern:

Be it known that I, John Bäumle, of Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented certain new and useful Improvements in Flaring-Machines; and I 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, which form a part of this specification, and in which—

Figure 1 is a perspective view of my improved machine for flaring and bending bartel-hoops. Fig. 2 is a side view of the same. Fig. 3 is a rear end view. Fig. 4 is a vertical sectional view on line  $x \, x$ , Fig. 1; and Fig. 5 is a similar view on line  $y \, y$ , Fig. 2.

Similar letters of reference indicate corre-

20 sponding parts in all the figures.

My invention consists in the detailed construction and combination of parts of a machine for flaring one edge of a barrel-hoop, and at the same time bending the hoop, as will be hereinafter more fully described and claimed.

In the accompanying drawings, A represents the frame of my improved machine. A' indicates the forward end piece or end block of the same, the said block being provided with a 30 transverse slot or aperture, A", through which the hoop or hoops pass. In the upper part of the forward end of frame A is pivotally secured one end of each of the arms BB, the said arms having journaled in the extremities of their up-35 peror forward ends an axle, C, passing through an aperture in the upper end of a metal block or cross-head, D. Through the lower end of this block D passes a bolt or pivot, E', the extremities of which are journaled in the upper 40 ends of vertical sliding posts E, the lower extremities of which are rigidly secured to the upper side of the flaring-block F, at an equal distance from the center of the same. This block is more clearly shown in Fig. 5 of the 45 drawings, having its lower side or face curved to form the segment of a circle, and being recessed longitudinally at F', so as to leave a flange or rib, F", extending along either side,

vertically by means of set-screws G' G'.

H represents the operating-lever, which is

for the purpose hereinafter specified. In the

is a metal bed-plate, G, adapted to be adjusted

50 lower part of the transverse slot or opening A"

pivolally secured at one end in the rear part of the frame A, the pivoted end of the lever 55 being curved or bent upward, and having a bolt, I, extending through it. The free ends of the arms B B bear upon this bolt I on either side of the pivoted end of the lever.

Upon one side of the frame A, immediately 60 in front of the slot A", is rigidly secured a block, J, having a curved side, J', while immediately upon the rear side of the same slot is pivoted one end of a curved metal plate, K, connected by means of a pivoted lever, L, and 65 pitmen M N to one end of the pivot or bolt I, in the bent or curved end of the operating lever H.

The manner in which my improved machine for flaring and bending barrel-hoops operates 70 is as follows: One end of the hoops is inserted in that end of the slot or aperture A" which is to the right hand in Fig. 3, the bed-plate G being adjusted vertically by means of the setscrews G' G', according to the size of the par- 75 ticular hoops being operated upon. By now raising and lowering the operating-lever H the flaring-block F will be alternately forced down upon the upper edges of the hoops passing through the transverse slot A", so as to flare 80 or spread the said upper edges, and then raised to allow of the hoops being advanced a little. By constructing the flaring-block with the flanges F", I cause the upper edges of the hoops to be bent perfectly straight, which would not 85 be the case if the lower face of the block were made perfectly smooth. By this arrangement the hoops are also prevented from sticking in the aperture A". The block J and curved metal plate K, through the intervening mech- 90 anism previously described, serve to bend or curve the hoops as they issue from the slot A", after having had their upper edges flared, to adapt them to be more readily placed around the barrel.

From the foregoing description, taken in connection with the accompanying drawings, the construction and operation of my improved machine for flaring and bending hoops will readily be understood without requiring furmore ther explanation.

It will be seen that my improved machine is simple in construction, and, being devoid of all complicated parts, is not liable to break or get out of order.

Having thus described my invention, I claim

and desire to secure by Letters Patent of the United States—

1. The combination, in a hoop-flaring machine, of a frame provided at its head or for-5 ward end with a transverse slot or opening through which the hoops are passed, a bedplate adjustably secured in the bottom of the said slot or opening, adjusting-screws by which the said plate is vertically adjusted, a flaringto block working in the upper part of the transverse slot or opening, and provided with flanges upon either edge of its lower curved face, and means or mechanism by which the said block

is operated.

15 2. The combination, in a hoop-flaring machine, of a frame provided at its head or forward end with a transverse slot or opening through which the hoops are passed, a bedplate adjustably secured in the bottom of the 20 said opening, adjusting-screws by which the said plate is vertically adjusted, a flaring-block working in the upper part of the transverse slot or opening, and provided with flanges upon either edge of its lower curved face, two 25 vertical sliding posts having their lower ends rigidly secured to the upper side of the flaringblock at an equal distance from either end, and having their upper ends pivotally connected by means of a movable metal block to the for-30 ward end of two pivoted weighted arms, a metal block pivotally connecting the vertical

posts and the forward ends of the two pivoted weighted arms, two pivoted weighted arms having their forward ends connected to the upper ends of the vertical sliding posts, and a 35 pivoted operating-lever by which the free ends of the said arms are operated, all constructed and combined to operate substantially in the manner and for the purpose shown and set forth.

3. The combination, with a hoop-flaring machine of the described construction, of a metal block provided with a curved side, and rigidly secured upon one side of the frame of the machine immediately in advance of one end of the 45 transverse slot or opening through which the hoops pass, a curved metal plate hinged at one end to the rear side of one end of the transverse slot or opening, and a pivoted lever and suitable pitmen for connecting the said hinged 50 plate to the end of the main operating-lever, all constructed and arranged to operate substantially in the manner and for the purpose shown and described.

In testimony that I claim the foregoing as 55 my own I have hereunto affixed my signature

in presence of two witnesses.

JOHN BÄUMLE.

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Witnesses: CHAS. HOLZHAUER, GERHARD HEUP.