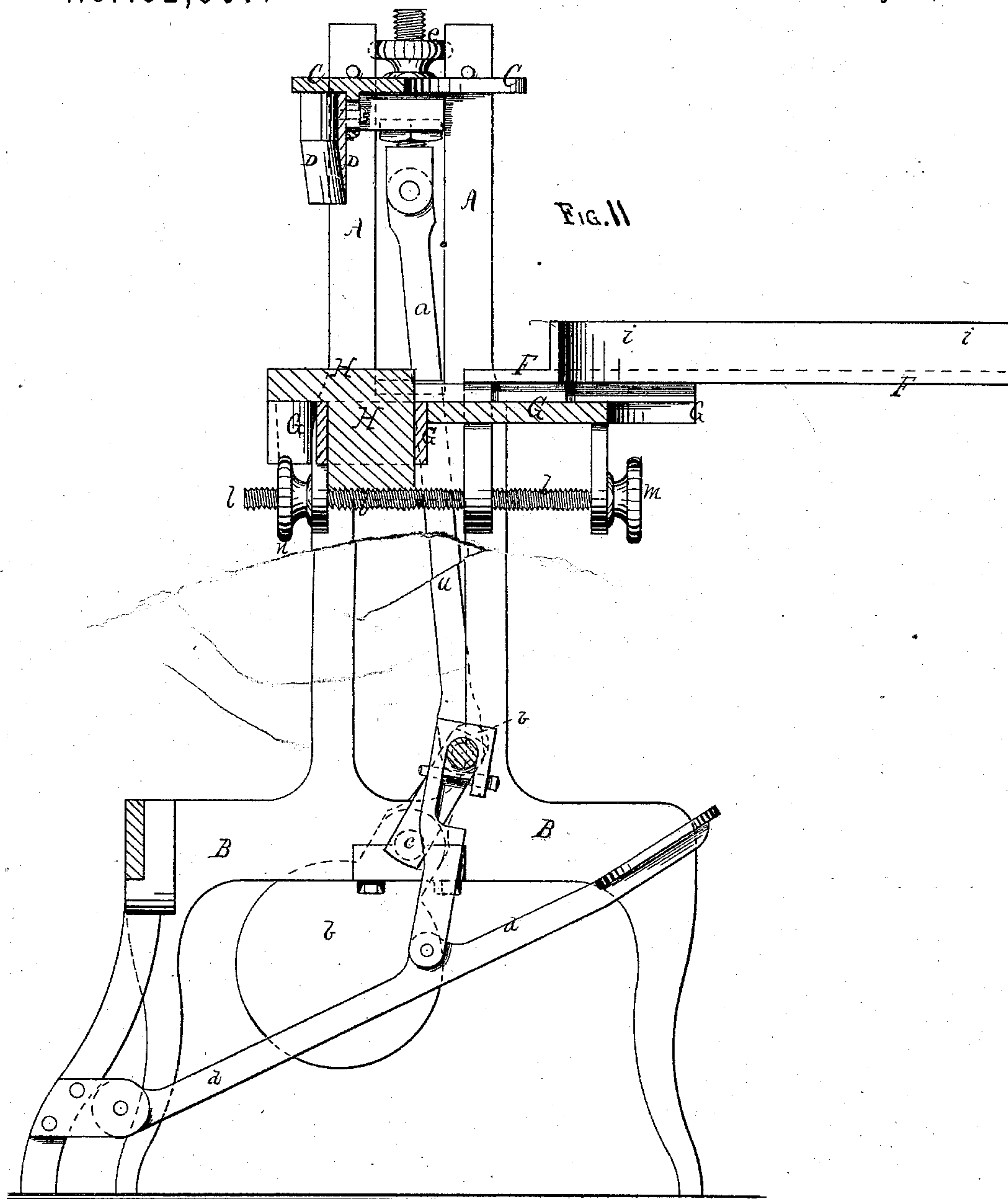




**D. LYNAHAN.**  
**Machines for Cutting Boot Legs.**

No. 152,907.

Patented July 14, 1874.



WITNESSES.  
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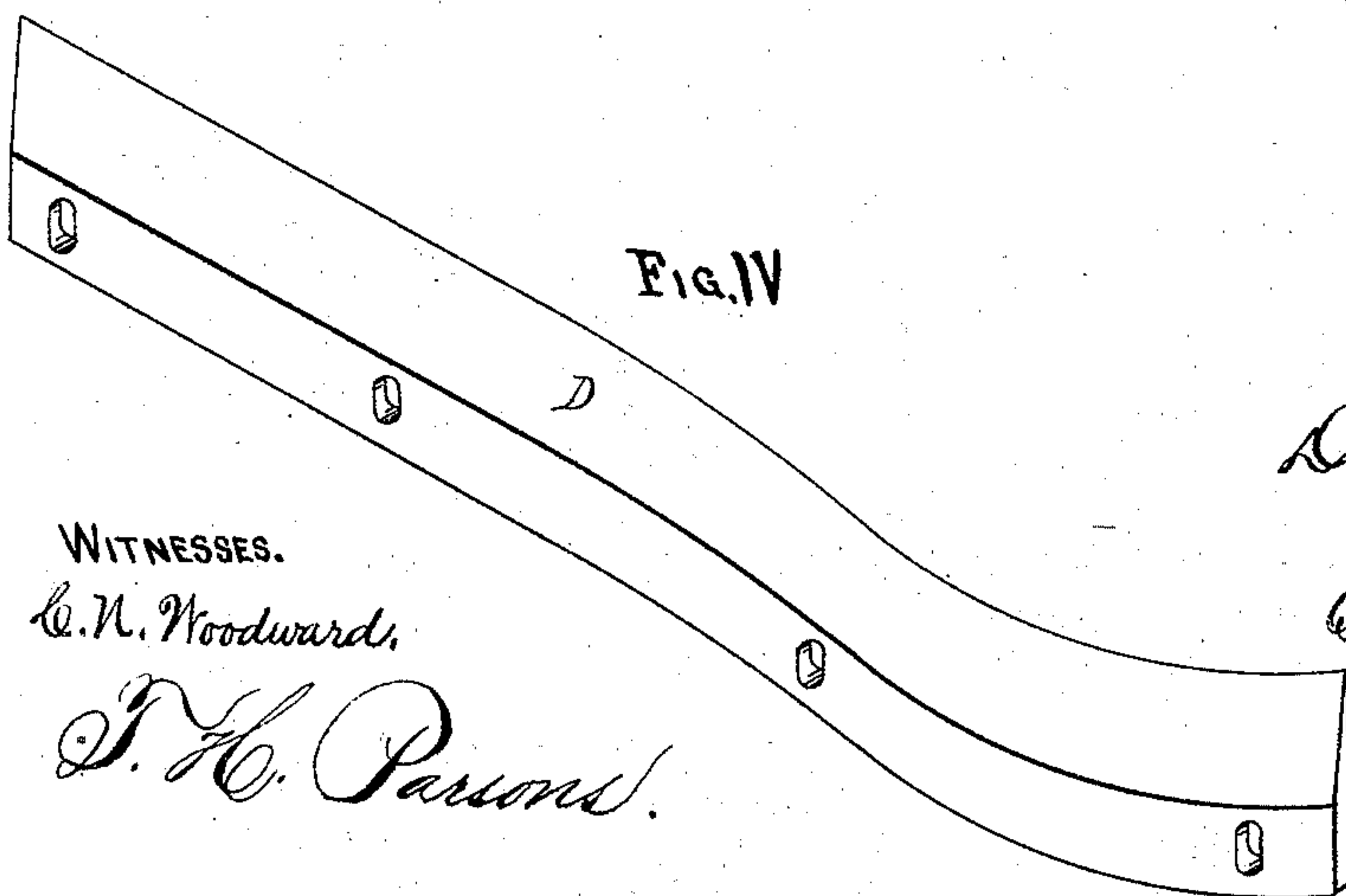
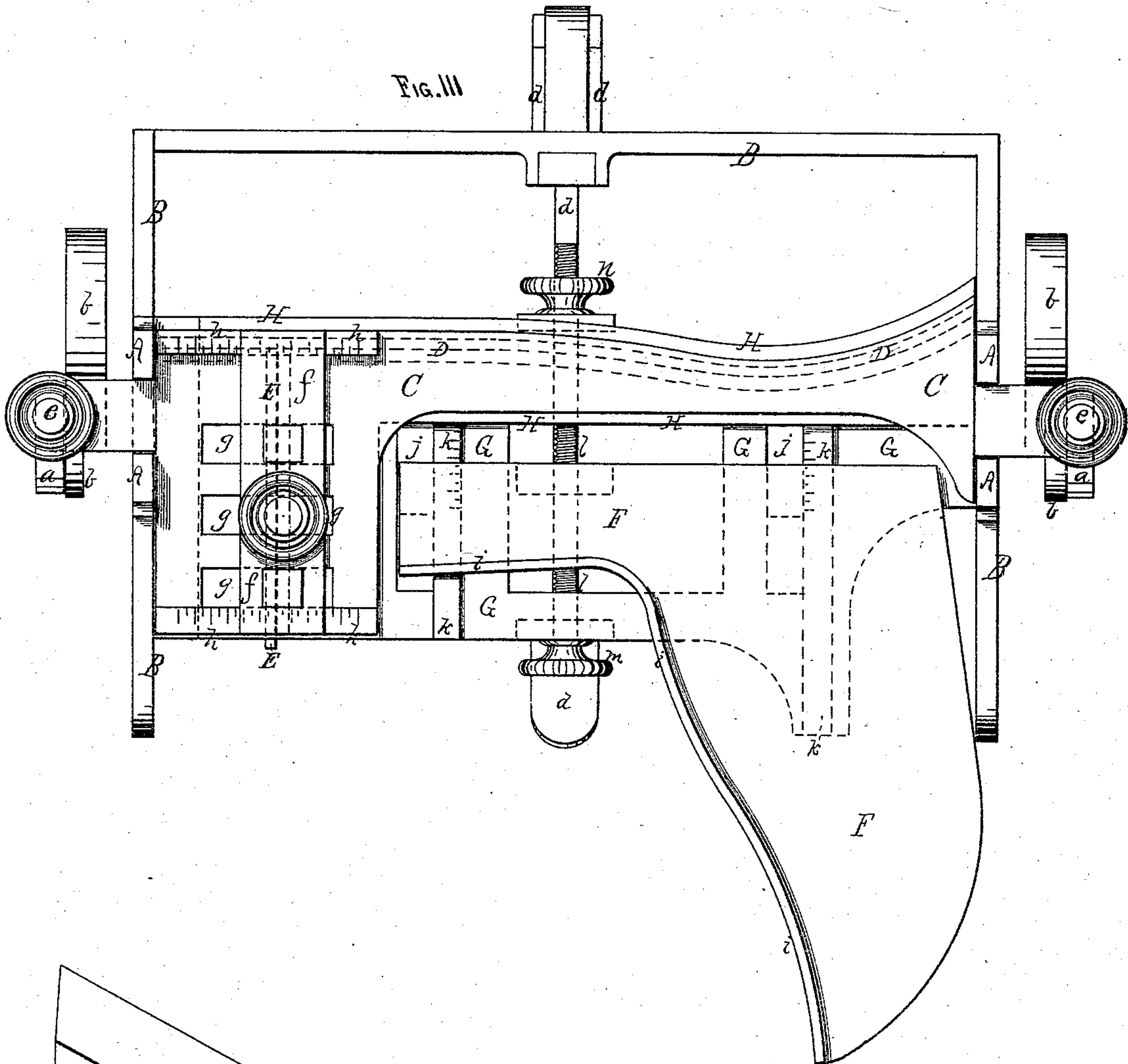
Daniel Lynahan,  
INVENTOR, BY  
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# UNITED STATES PATENT OFFICE.

DANIEL LYNAHAN, OF BUFFALO, NEW YORK.

## IMPROVEMENT IN MACHINES FOR CUTTING BOOT-LEGS.

Specification forming part of Letters Patent No. **152,907**, dated July 14, 1874; application filed April 29, 1874.

*To all whom it may concern:*

Be it known that I, DANIEL LYNAHAN, of Buffalo, in the county of Erie and State of New York, have invented certain Improvements in Machines for cutting Boot-Legs, of which the following is a specification:

The object of this invention is to provide a machine that will cut out the backs and tops of boot-leg fronts of any size, after they have been crimped, several being cut in one operation.

The improvements are fully hereinafter described and claimed.

In the drawings, Figure 1 is a front elevation; Fig. 2, a vertical section through the middle of the machine; Fig. 3, top-plan view; Fig. 4, perspective view, showing the shape of the back-knife.

A A' represent the side standards of the main frame B. In the standards is a longitudinal frame, C, working up and down by means of outside crank-shafts *a a*, one each side, and attached to counter-weight cranks *b b*, operated by shaft *c* and treadle *d*, or any other power desired.

The longitudinal frame C is made adjustable higher or lower by means of nuts *e e*, thereby lengthening or shortening the crank-shafts *a a*. This frame C, which is the knife-frame, carries a curved knife, D, of peculiar form, as shown in Fig. 4, which conforms in outline to the form of the front of a boot-leg.

The shape of this knife is one of the important features of my invention, as it cuts, in one operation, from one to any desired number of legs, thereby saving greatly in hand-labor, &c., as hereinafter more particularly explained.

In addition to the curved-back knife D, I provide an end knife, E, which sets at right angles to the other in a frame, *f*, of its own, in connection with the frame C, and cuts the top off the boot-legs at the same moment that the fronts are cut.

This knife is made adjustable back or forward, to cut longer or shorter legs, by means of slots *g* and guides *h*; and one or more of the latter are divided off into sizes, and marked with lines and figures to denote the different sizes of boots.

F indicates the form or leg-holder, conforming in shape to boot-leg fronts after they have been crimped, and which, when laid

on this form, are kept in place by a vertical flange, *i*, constructed around the outer edge of the form, as shown.

By reference to Fig. 3, it will be seen that the form F and knife D give the exact shape of a crimped boot-front. This form or leg-holder is made adjustable out or in, to accommodate the different sizes of boot-fronts to be cut, by means of slots *j j* and guides *k k* in the metal table G, the form having downwardly-projecting lugs moving in the slots *j j*. It is operated or kept in position by a screw-rod, *l*, and thumb-screw *m*, winged nut *n*, or their equivalents.

The guides *k* are marked in sizes, like guides *h*, so that the form F can be set to cut any sizes desired.

On top of the metal table G is set a wooden knife-bed, H, so that when the knife cuts through the leather it is kept from being dulled, as is common in other machines.

By my device the fronts of a number of boot-legs are cut in one operation, as fast as they can be put in and taken out, doing away with all hand-labor; the usual method being to employ patterns, which are laid on each leg, and cut out by hand separately.

I claim—

1. The combination of the curved knife D, attached to the frame C, with the crank-shaft *a*, crank *b*, and shaft *c*, for moving the knife vertically, substantially as described.

2. The combination of the curved knife D and the adjustable end knife E, with a bed, H, and mechanism, substantially as described, for imparting a vertical movement to the curved and end knives D and E, as set forth.

3. The form F, having the flange *i*, as and for the purpose specified.

4. The adjustable form or front holder F, with the flange *i*, in combination with the knives D and E, as and for the purpose described.

5. The table G, bed H, guides *k*, slots *j j*, and adjusting screw-rod *l*, in combination with the form F and knives D E, as and for the purpose specified.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

Witnesses: DANIEL LYNAHAN.

J. R. DRAKE,

JOHN C. BROWN.

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