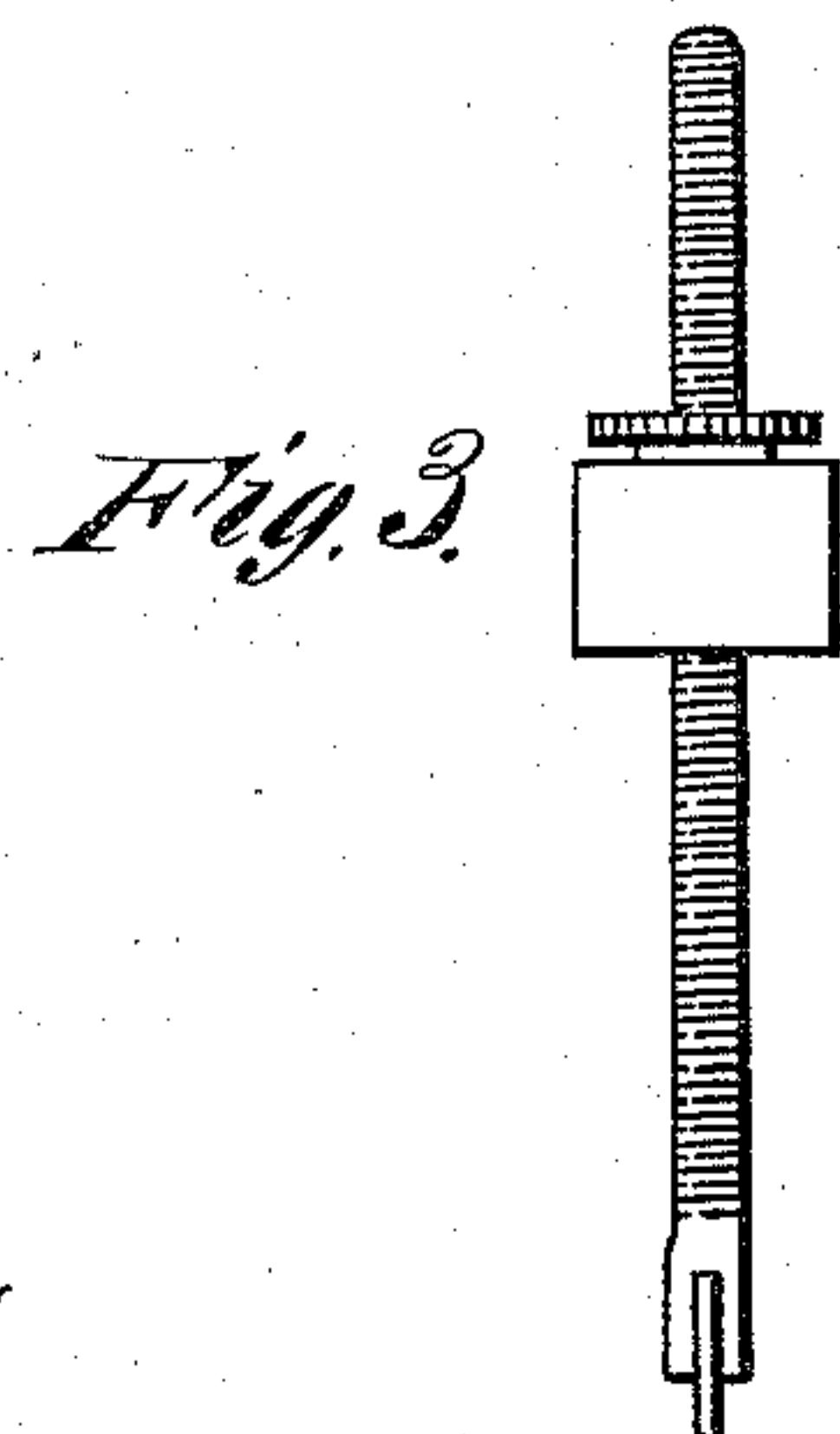
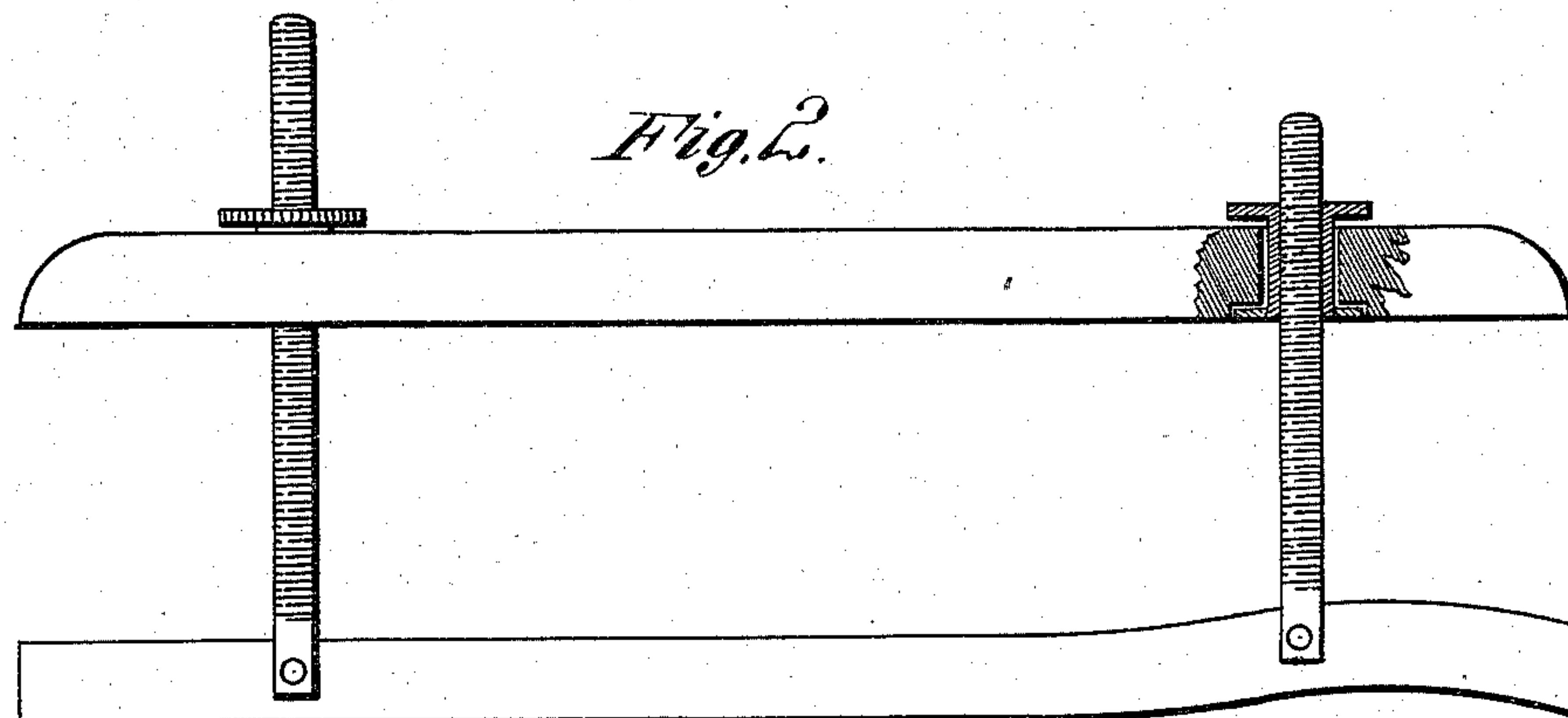
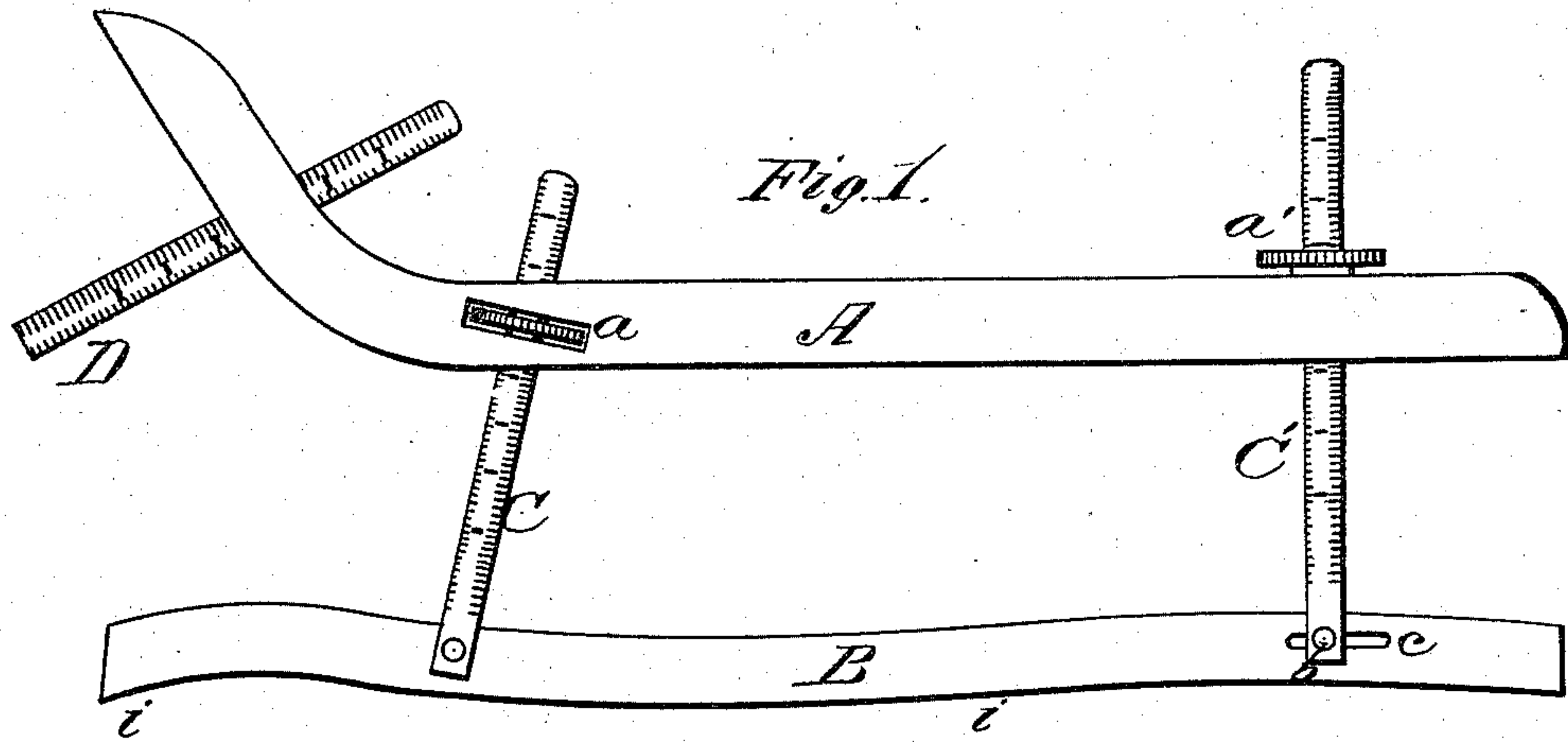


J. S. DOUGHERTY.  
Boot-Patterns.

No. 157,383.

Patented Dec. 1, 1874.



WITNESSES  
*E. H. Bates*  
*Geo. C. Upham.*

INVENTOR  
*James S. Dougherty,*  
*Chipman & Son & Co*

Attorneys

# UNITED STATES PATENT OFFICE.

JAMES S. DOUGHERTY, OF HENRIETTA, PENNSYLVANIA.

## IMPROVEMENT IN BOOT-PATTERNS.

Specification forming part of Letters Patent No. **157,383**, dated December 1, 1874; application filed July 18, 1874.

*To all whom it may concern:*

Be it known that I, JAMES S. DOUGHERTY, of Henrietta, in the county of Blair and State of Pennsylvania, have invented a new and valuable Improvement in Boot-Patterns; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawing is a representation of a plan view of my boot-pattern. Fig. 2 is a modification of my boot-pattern. Fig. 3 is a detail view of the same.

This invention has relation to devices which are designed for facilitating the drafting and cutting out boot-legs; and it consists in combining adjustable rulers of a curved form with gages and adjusting-screws, as will be hereinafter explained.

The following is a full, clear, and exact description of my invention:

In the annexed drawings, Fig. 1, A designates a wooden gage of a curved form corresponding to the shape of the front edge of the leather after it has been removed from the stretching-tree. B designates a thin metal ruler, which has one of its edges curved to conform to the shape of the edges of the leather, where the front and back portions of the leg are sewed together. C C' designate two screw-threaded rods, which connect the ruler B to the gage A, and which are tapped through nuts *a a'*. The nut *a* for the rod C is inserted into a slot made through the gage A, and is designed for adjusting the lower part of the ruler. The nut *a'* is flanged, and is designed for receiving through it the rod C', and allowing the upper part of the ruler to

be adjusted. The ruler is pivoted to the rod C, and connected to the rod C' by means of a pin, *b*, that passes freely through a slot, *c*, made through the ruler B in a longitudinal direction. D designates a gage-screw, which is tapped through the instep portion of the gage A, and suitably marked off, for the purpose of determining the proper width of the front leather across the instep part of the foot. When the front leather has been removed from the stretching-last it is adjusted against the gage A, the ruler having been previously adjusted for the proper size, and with a suitable point the leather is marked off by following the edge *i*. The leather may be at once cut by using a knife instead of the marking-point. The rods C C' should be properly marked off to indicate inches and fractions of inches, by which the adjustment of the ruler is quickly and accurately made.

For marking out or cutting the leather piece for the back of the boot leg and heel, a similar device is used, as shown in Fig. 2, with the exception that the bar or gage A is straight and the screw D is omitted, as shown in Fig. 2.

What I claim as new, and desire to secure by Letters Patent, is—

The gage A, having one of its ends curved, in combination with the curved ruler B, provided with the slot *c*, graduated adjusting-rods C C', nuts *a a'*, and gage-screw D, substantially as described, and for the purpose set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

JAMES S. DOUGHERTY.

Witnesses:

D. L. MARTIN,

JOSEPH WINELAND.