

C. A. ENSIGN.

CLAMPS FOR BOOT TREES OR FORMS.

No. 176,848.

Patented May 2, 1876.

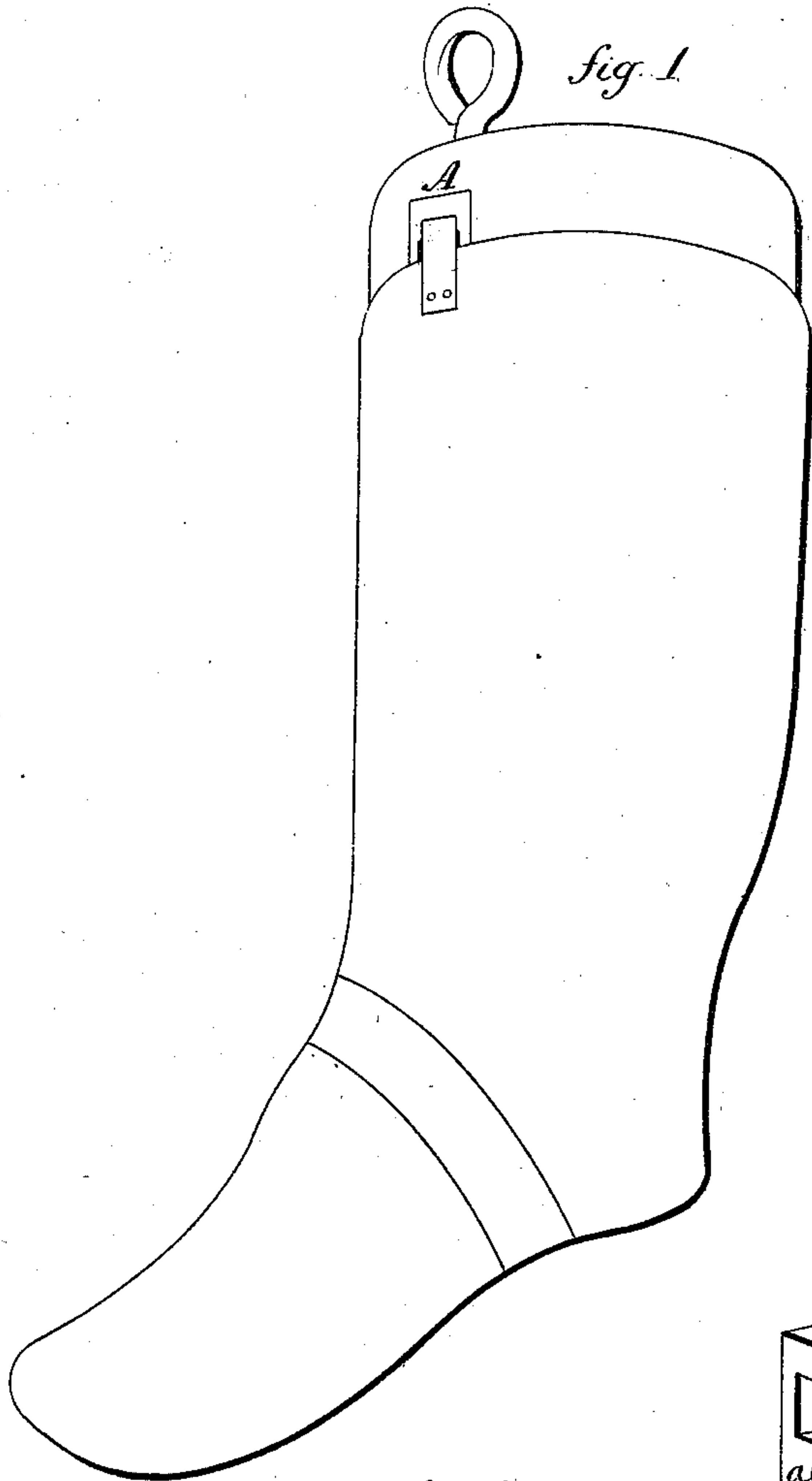


fig. 2.

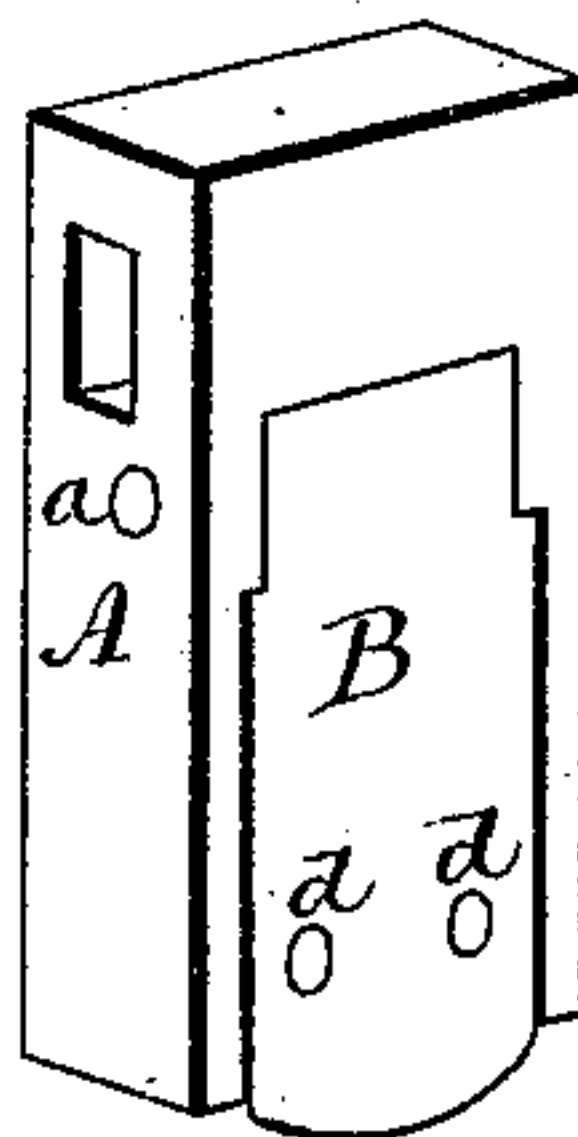
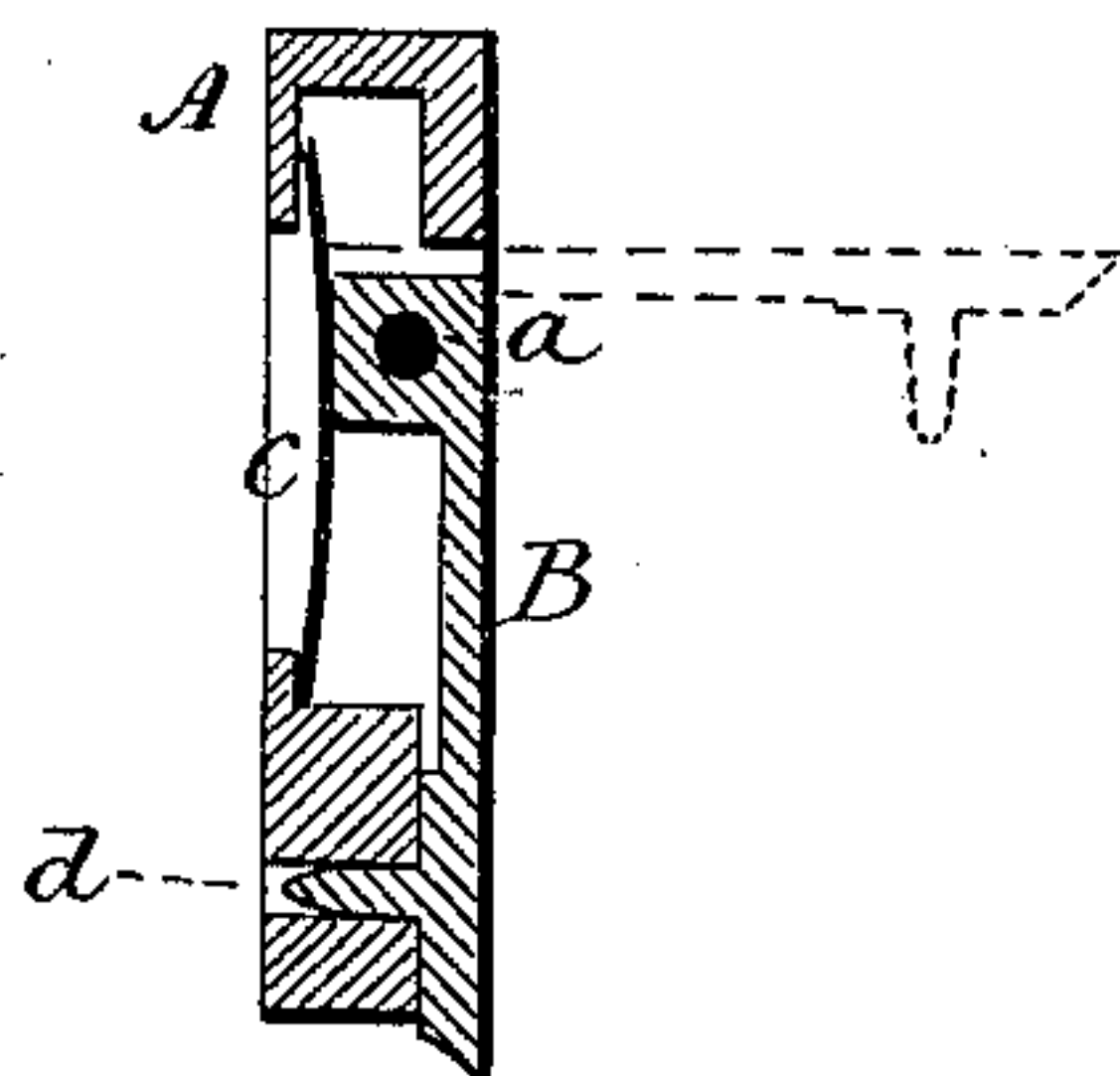


fig. 3.



Witnesses  
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# UNITED STATES PATENT OFFICE

CHARLES A. ENSIGN, OF NAUGATUCK, CONNECTICUT.

## IMPROVEMENT IN CLAMPS FOR BOOT TREES OR FORMS.

Specification forming part of Letters Patent No. **176,848**, dated May 2, 1876; application filed March 27, 1876.

*To all whom it may concern:*

Be it known that I, CHARLES A. ENSIGN, of Naugatuck, in the county of New Haven and State of Connecticut, have invented a new Improvement in Boot-Form Clamps; and I do hereby declare the following, when taken in connection with the accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, perspective view of the device as applied to a boot-form; Fig. 2, perspective view detached; Fig. 3, vertical section of the same.

This invention relates to an improvement in device for securing the lining to the form in the manufacture of India-rubber boots.

Heretofore it has been the usual practice to secure the lining by strips attached at the upper edge and carried to the top of the form by tacks, or otherwise.

The object of this invention is a device which may be made a permanent part of the form, and so as to engage the lining as it is brought to its position; and it consists in a hinged clamp provided with one or more pins, teeth, or other uneven surface, to engage the lining, as more fully hereinafter described.

A is the base, which is let into the form flush with its surface at the front, back, or other desirable points. Into this the clamp B is hinged, upon a pintle *a*. The hinge por-

tion of the clamp is made angular, and beneath this angular portion a spring, C, is arranged. The tendency of this spring is either to firmly hold the clamp in the closed position, as shown in Fig. 3, or in the open position, as shown in broken lines, same figure. The under side of the clamp near the lower end is fitted with teeth or pins *d*, or otherwise constructed, so that the engagement of the clamp will be strong and secure.

Onto a form provided with these clamps the lining is placed in the usual manner, the upper edge drawn up beneath the clamp B, which is turned up for the purpose, and when the lining is in the proper position the clamp is turned down upon the lining, the teeth or roughened surface *d* engaging the lining with sufficient firmness to hold it in its proper position; then the outer surface or covering of the boot is applied in the usual manner.

This clamp is adjusted much more readily than the usual device, so that a considerable saving of time is made in preparing the lining of each boot.

I claim—

In combination with a boot-form, the hinged clamp B, constructed with teeth or roughened surface, and provided with a spring, substantially as described.

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Witnesses:

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