

H. H. BIGELOW.

Machine for Making Boot and Shoe Heels.

No. 125,529.

Patented April 9, 1872.

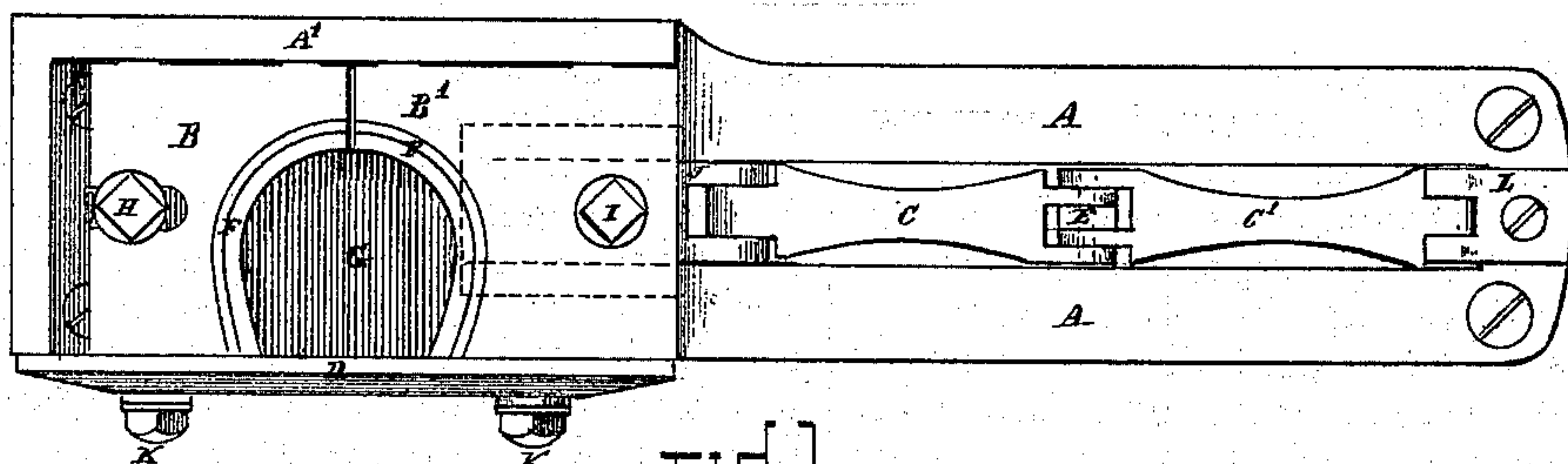


FIG. 1

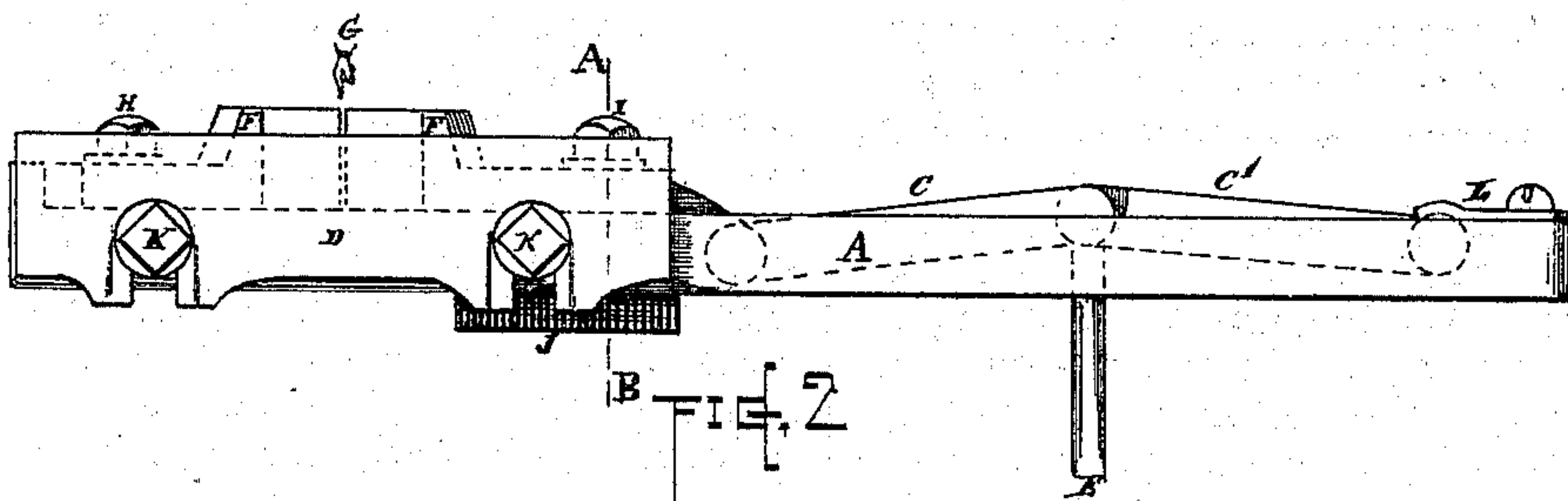


FIG. 2

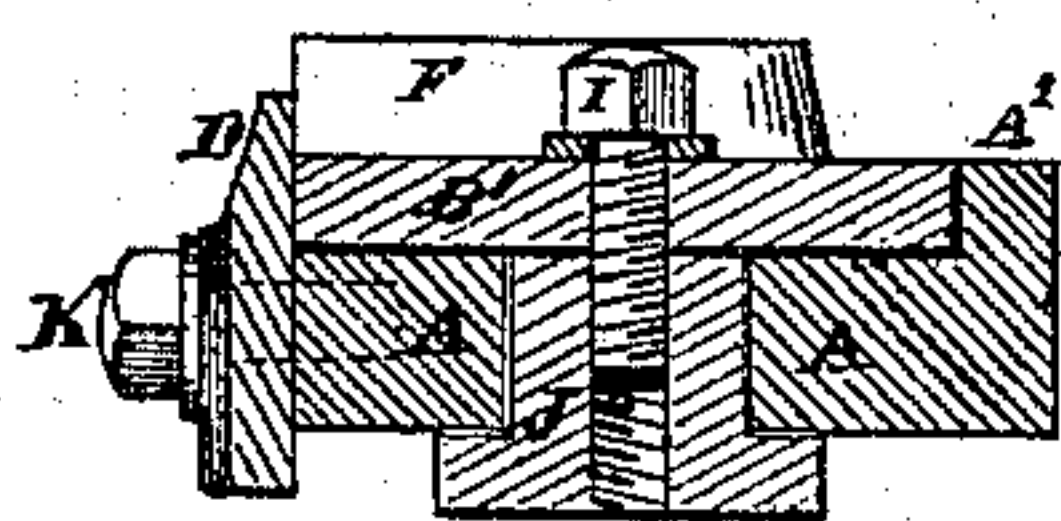


FIG. 3

Witnesses

Thos. H. Dodge
A. E. Rice.

Inventor

Horace H. Bigelow

UNITED STATES PATENT OFFICE.

HORACE H. BIGELOW, OF WORCESTER, MASSACHUSETTS.

IMPROVEMENT IN MACHINES FOR MAKING BOOT AND SHOE HEELS.

Specification forming part of Letters Patent No. 125,529, dated April 9, 1872.

To all whom it may concern:

Be it known that I, HORACE H. BIGELOW, of the city and county of Worcester and Commonwealth of Massachusetts, have invented certain new and useful Improvements in Machines for Facilitating the Manufacture of Pieced Heels for Boots and Shoes; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing which forms a part of this specification, and in which—

Figure 1 represents a plan view of a machine embodying my improvements. Fig. 2 represents a front view of the same; and Fig. 3 represents a transverse section at line A B, Fig. 2.

In the drawing, the parts marked A represent the supporting-frame. B B' indicate the holding-jaws; C C', the operating links; D, the gauge-plate; and E, the treadle-rod. The jaws B B' are, in this instance, made of flat pieces of metal of proper size to fit between the flange A' at the back of the frame and the gauge-plate D at the front. They are rounded out at one side, and the space surrounded by an upward-projecting flange, F, so that the two jaws B B', when together, form a matrix, G, of the shape of the heels, as shown in Fig. 1. One of the jaws, B, is in this instance held firmly in position upon the bed or frame A by means of the bolt H, which passes through a slot in said jaw B, which admits of the jaw being adjusted nearer to or further from the jaw B', or removed without taking the bolt H clear out, while the other jaw B' is secured by the bolt I to a sliding piece, J, attached by a hinge-joint to the link C, and arranged to work back and forth in a longitudinal slot in the frame, as indicated. The links C C' are hinged to each other, and the treadle-rod E is attached to them at their junction by the bolt of the hinge, which passes through the several ends. The opposite end of the link C' is hinged to the frame A by being fitted to a socket, and retained by a clasp, L, secured to the frame, as shown; and when the treadle-rod is raised, which may be effected by means of a spring or weight and cord,

it raises the center joint of the links and then draws back the slide piece J and jaw B'; then, when the treadle-rod E is depressed by the foot of the operator or otherwise, the joint of the links is drawn down and the jaw B' is forced forward onto the jaw B to close the matrix G and tightly compress the heels, which are arranged therein. The gauge-plate D is adjustable on the bolts K, and its upper edge is set at a height corresponding with the desired thickness of the heels above the bed or frame A, which forms the bottom of the matrix. The pieces of leather are packed into the matrix G, while the jaws are opened, until their top surface is level with the edge of plate D; the jaws are then closed, as above described, which forces the pieces compactly together, where they are retained until a sufficient number of nails or other fastenings are inserted through them to retain the parts of the heel together during any subsequent operation in finishing the heels, or until they are permanently attached to the boots or shoes.

Instead of making the machine with only two jaws, B B', a greater number may be used, and more than one of the said jaws can be made to move back and forth for compressing the pieces of the heel together.

Those skilled in the art to which my invention belongs can readily appreciate the importance of the same, since it obviates one of the principal objections to pieced heels, by enabling the operator to bring the pieces into close contact with each other by pressure applied to their outer edges before any fastening nails or pegs are driven or inserted therein.

Having described my improvement in machines for facilitating the manufacture of pieced heels for boots and shoes, what I claim therein as new and of my invention, and desire to secure by Letters Patent, is—

1. A machine for facilitating the manufacture of pieced heels for boots and shoes, having a heel-forming matrix open at the top, and one or more parts of its sides movable, and constructed essentially as described, so as to serve the purpose of closing or compress-

ing jaws, substantially as and for the purposes set forth.

2. The combination, with the jaws, in a machine for facilitating the manufacture of pieced heels, of the adjustable gauge-plate D, substantially as and for the purpose set forth.

3. The combination, with the jaws B B', gauge-plate D, operating links C C', and slide piece J, substantially as shown and described.

HORACE H. BIGELOW.

Witnesses:

THOS. H. DODGE,

A. E. PEIRCE.