

Machines for Making Heel-Stiffeners.

Patented Nov. 25, 1873.

[illegible]

Fig. 5.

The diagram shows a cross-section of a mechanical component. On the left is a large, curved, flange-like structure labeled 'E'. A central shaft, labeled 'F' at its right end, passes through the center of the flange. The shaft has several circular features along its length, including a small circle near the flange and a larger circle further to the right.

S. W. Piper
L. A. Holler

by his attorney:
R. W. Eady

UNITED STATES PATENT OFFICE.

JAMES SAMUELS, OF VINELAND, NEW JERSEY, ASSIGNOR TO WILLIAM G. HILL, OF CAMBRIDGE, AND L. B. RUSSELL, OF LYNN, MASSACHUSETTS.

IMPROVEMENT IN MACHINES FOR MAKING HEEL-STIFFENERS.

Specification forming part of Letters Patent No. **145,017**, dated November 25, 1873; application filed February 17, 1873.

To all whom it may concern:

Be it known that I, JAMES SAMUELS, of Vineland, of the county of Cumberland and State of New Jersey, have invented a new and useful Machine for Making Boot or Shoe Heel Stiffeners; and do hereby declare the same to be fully described in the following specification and represented in the accompanying drawings, of which—

Figure 1 is a top view, Fig. 2 a side elevation, and Fig. 3 a longitudinal section, of it. Fig. 4 is a top view of the movable clamp. Fig. 5 is an under-side view of the crimper.

The invention consists in a former or furcated clamp and a crimper, arranged, constructed, and combined together, and provided with operative mechanism, all substantially as hereinafter explained, the whole being for the reduction of a strip of leather or suitable proper material of the proper size to a heel-stiffener.

In such drawings, A denotes the former projecting upward from a frame, B, such former having the necessary shape for the formation of a heel-stiffener, through the agency of the crimper. A forked clamp, C, embraces the former A in manner as shown, and is fixed to a slide, D, extending horizontally through the frame B. A toothed sector, *g*, carried by a lever, *h*, works in a rack, *i*, fixed to the slide D, the lever being arranged within and pivoted

to the frame B. By means of such lever the slide may be moved longitudinally in the frame. The crimper E is arranged, as shown, upon the end of a slide-bar, F, duly supported in bearings *a a*, and provided with a toothed rack, *b*, to engage with a toothed arc, *c*, applied to a lever, *d*, as represented. Such lever is pivoted to the frame B, and on being moved will cause the crimper to be forced forward or drawn backward, as occasion may require.

In using the machine, a strip of leather, or other material to be crimped or reduced to a heel-stiffener, is to be bent around the former A, between it and the clamp, after which the said clamp is to be drawn forward so as to firmly secure the strip to the former, with the strip projecting somewhat above the said former. Next, the crimper is to be advanced, and in so doing it will bend down the upper surface of the former, all the part of the strip which may extend above such, at the same time crimping it, as may be required.

I claim—

The former A, the furcated clamp C, and the crimper E, arranged, constructed, combined together, and provided with operative mechanism, all substantially as described.

Witnesses: JAMES SAMUELS.

JAMES SAWYER,
W. A. HOUSE.