G. W. COPELAND & J. E. CRISP.

Lasting-Machine.

No. 209,232. Patented Oct. 22, 1878.

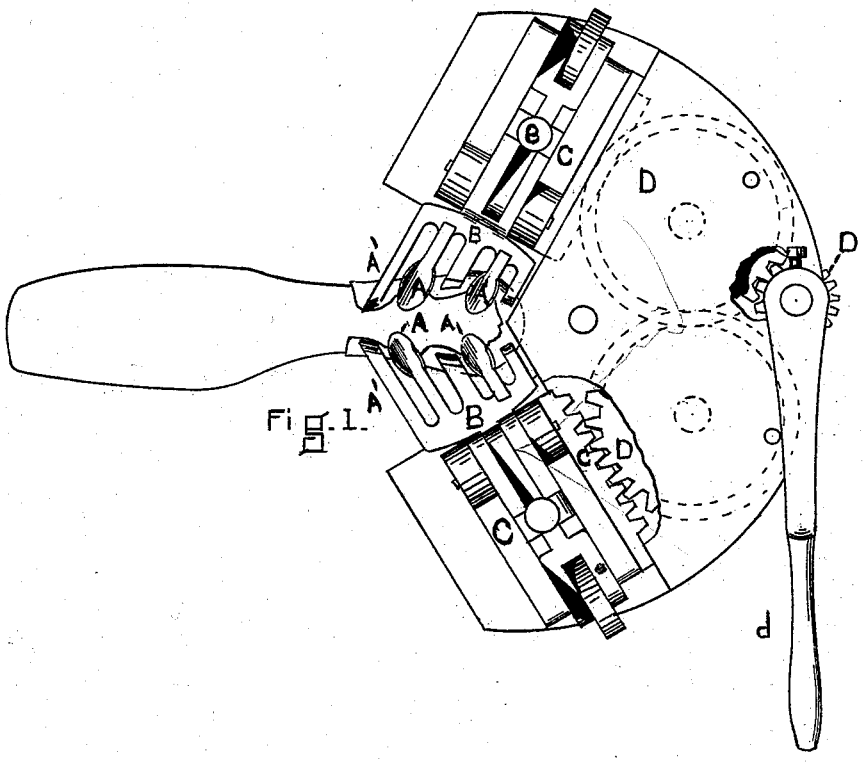

Fig. 1.

WITNESSES

F. F. Raymond 2d

George F. Walker

INVENTOR

Geo. W. Copeland

Joseph E. Crisp

UNITED STATES PATENT OFFICE.

GEORGE W. COPELAND, OF MALDEN, AND JOSEPH E. CRISP, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN LASTING-MACHINES.

Specification forming part of Letters Patent No. **209,232**, dated October 22, 1878; application filed March 1, 1878.

To all whom it may concern:

Be it known that we, GEORGE W. COPELAND, of Malden, in the county of Middlesex, in the Commonwealth of Massachusetts, and JOSEPH E. CRISP, of Boston, in the said Commonwealth, have invented an Improvement in Lasting-Machines, of which the following is a specification:

This invention consists in a machine for lasting the uppers of boots or shoes, having two or more gouge-shaped knives arranged to automatically gouge or cut V-shaped sections or scallops from the edge of an upper, in connection with folding-plates adapted to be closed upon the insole in folding the edge of the upper during the operation of lasting, hereinafter more fully described.

In the drawing, Figure 1 represents our invention.

In lasting the upper by machinery which operates to fold its margin upon the insole, fitted upon a last, considerable difficulty is experienced from the fact that upon some portions of the bottom of a last, particularly at the toe and heel, the upper has had to be folded over or crimped upon itself by the action of the folding-plates, necessitating a very nice adjustment of the lasting mechanism. At the toe and heel the amount of upper which has to be removed is increased, from the fact that the counter is folded or turned upon the insole with the upper. It is also necessary, before applying an outsole to the insole, to skive off, dress, or trim the unequal portion from the folded edge of the upper and counter, in order that the surface upon which the outsole is fitted shall be as level as possible. If, however, V-shaped sections or scallops are removed from the edge of an upper, thereby depriving it of its fullness, the lasting-plates can be closed much more easily and without liability of damage to the upper or to the plates with the herein-described mechanism for removing the same during the lasting process.

In an application which we are about to make we shall claim the preparation of the upper by cutting V-shaped scallops therein at certain intervals along the edge thereof before the same is lasted.

Our device consists in the gouge-shaped knives A, supported upon the jaws B, and pivoted at *b* to the carriages C, which are provided with a closing and opening movement by means of the rack *c*, gearing D, and the handle *d*.

By pivoting the frame or jaw carrying the knives in the manner shown, a vertical adjustment in relation to the insole is provided by means of a set-screw, *e*, that bears upon the arm or lever which carries a friction-roll at its end, to give the knife-blade increased vertical automatic adjustability by the contact of said roll with the plate *g*.

In operation it is intended that the V-shaped knives shall advance during the folding of the upper upon the insole and remove V-shaped sections from the edge of the upper.

The advantages of this invention consist in the means described for automatically removing such portions of the edge of the upper as may be necessary either to lessen the strain upon the lasting-plates, or to prepare the upper for the reception of the outsole or for both.

We claim and desire to secure by Letters Patent—

In a machine for lasting the uppers of boots and shoes, the combination of two or more gouge-shaped knives, arranged to automatically gouge or cut V-shaped sections or scallops from the edge of an upper, with folding-plates adapted to be closed upon the insole in folding the edge of the upper during the operation of lasting, substantially as specified.

GEO. W. COPELAND.
JOSEPH E. CRISP.

Witnesses:
F. F. RAYMOND, 2d,
GEORGE F. WALKER.