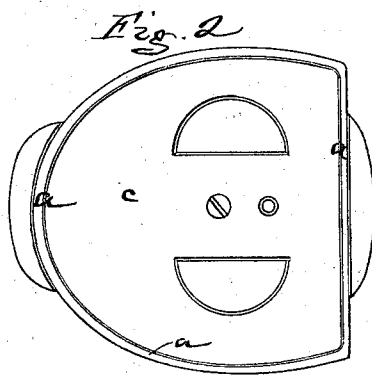
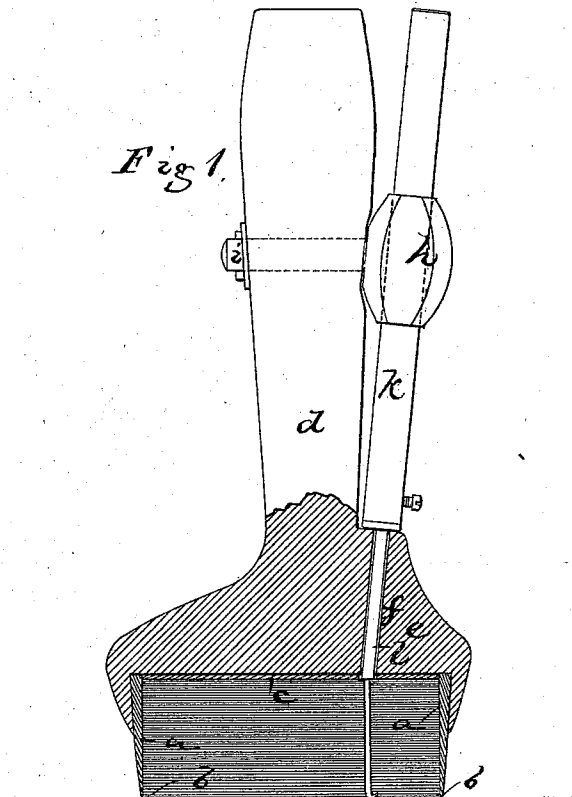


S. L. RIKER.

Hand-Tools for the Manufacture of Heels.

No. 143,718.

Patented Oct. 14, 1873.



Witnesses.
M. W. Frothingham.
L. H. Catimer.

Inventor.
Smith L. Riker,
By his Atty.
Cross & Gould

UNITED STATES PATENT OFFICE

SMITH L. RIKER, OF NEW YORK, N. Y.

IMPROVEMENT IN HAND-TOOLS FOR THE MANUFACTURE OF HEELS.

Specification forming part of Letters Patent No. **143,718**, dated October 14, 1873; application filed August 16, 1873.

To all whom it may concern:

Be it known that I, SMITH L. RIKER, of the city, county, and State of New York, have invented an Improvement in the Manufacture of Heels; and I do hereby declare that the following, taken in connection with the drawings which accompany and form part of this specification, is a description of my invention sufficient to enable those skilled in the art to practice it.

The invention relates particularly to a method of punching and piling heel lifts or layers, formed of thin leather, and securing such lifts together.

In my method, I use a hand-punch having a head which forms a gage for filling the punch, and having extending through and from this head a nail-tube, over which is a nail-driver, the handle of this driver sliding in a pivoted bearing, and being forced down to drive the nail through the lifts, the handle and bearing swiveling, when the driver is drawn up, to enable the nail-hole to be exposed for reception of a nail. My invention consists in this method of forming heels or heel-blanks, and in the construction of the tool employed in such method.

The drawing represents a construction embodying the invention. Figure 1 represents a side and sectional elevation of the tool. Fig. 2 is a bottom view of it.

a denotes a punch, formed of a band of steel, with a cutting-edge, *b*, as in similar punches. At the top of the punch is a head, *c*. The punch is fixed to a handle, *d*, and through the part *e* is formed the nail-tube *f*, which extends down through the head *c*. Over this nail-tube is a bearing, *h*, on the end of a pin, *i*, extend-

ing horizontally through the handle *d*. In this bearing slides a stock or holder, *k*, having inserted in its end the driver *l*, and by bringing the driver over the tube *f*, and forcing it down, (a nail being in the tube *f*,) the nail will be driven through the heel-lifts within the punch, while, by raising the holder and turning the bearing, as shown by the dotted lines, a nail may be dropped into the tube, the driver being then returned to position to drive said nail.

In using the tool thin upper stock and skivings are employed to form the layers, and these are cut out by the punch until the punch is filled. A nail is then dropped into the tube *f*, the point of the nail lodging upon the top of the lifts. The driver is then brought to position and the nail driven by it through the lifts. The driver being then withdrawn the nailed blank is removed and lifts for a new blank punched. Then the driver is swung up, a new nail is dropped into the tube, the driver is returned to position, and the nail is driven, as before. By this method such heel-blanks may be rapidly and perfectly formed and nailed.

I claim—

1. The improvement in forming heel-blanks with a hand-tool, by punching and retaining the lifts in the same holder, and uniting them in the manner substantially as described.

2. The punch having the nail-tube *f*, driver *l* and swiveling driver-stock *k*, arranged to operate substantially as described.

S. L. RIKER.

Witnesses:

W. J. ADAMS,
HARVEY J. STETSON.