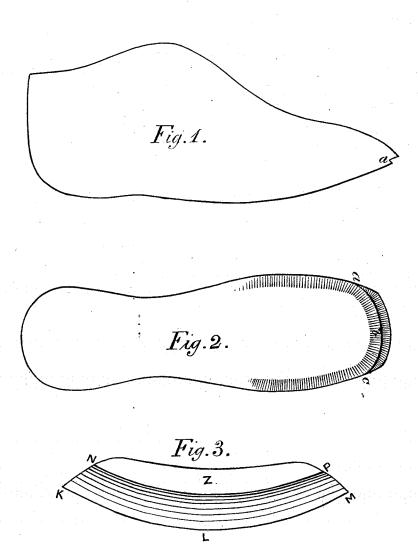
T. DANN. Lasts.

No. 199,963.

Patented Feb. 5, 1878.



Witnesses; Bheriault Lot Barthe I nventor; Thomas Dann for Fred! N. Poexes. Aug.

## NITED STATES PATENT OFFICE.

THOMAS DANN, OF MONTREAL, QUEBEC, CANADA.

## IMPROVEMENT IN LASTS.

Specification forming part of Letters Patent No. 199,963, dated February 5, 1878; application filed February 9, 1877.

To all whom it may concern:

Be it known that I, THOMAS DANN, of the city of Montreal, in the Province of Quebec, Dominion of Canada, shoemaker, have invented certain new and useful improvements in the method of constructing leather toe-tips for boots and shoes (not pressed into shape in a mold) so as to adapt them to single-sole boots or shoes, commonly called "turned pumps," of which the following is a specification:

The first part of my invention relates to the formation of a wood last suitable for the purpose required. For this purpose I select any ordinary turned last, a little longer than the size of the boot or shoe to be made, and, having marked off thereon on the sole a line, a bc, the distance of which line from the toe of the last is regulated by the size of the intended toe-top, I sink a groove in the toe of the last to the depth required. The depth and length of this groove are regulated by the distance over the toe of the shoe to which I wish to

carry the tip.

When it is required to extend the tip farther over the toe of the upper, the front of the last which extends beyond the groove is deepened a little in a slight concave form, diminishing to nothing at the sides, and the groove itself notched a little underneath to make room for the tip to sit close to its place. That portion of the toe of the last which projects beyond the line of the groove must be beveled inward to the bottom of the groove, and the edges of the sole of the last toward the toe and along the grooved line must also be beveled or skived off, in order to bring the last of the same uniform thickness at the toe as it was before the groove was sunk. The object of leaving a portion of the toe of the last to project beyond the groove is to form a tip, as well as to make a bed on which the tip rests while being sewed onto the leather sole. portion it would be better to make a little squarer at the corners than it is along the grooved line a b c.

The second part of my invention relates to the formation of the leather tip. This tip is not molded like those in use, but is made in the construction of the shoe out of a piece of sole-leather or other thick leather. This

in form to that shown on drawing z. It is not necessary that the leather for the tip should be exactly of this form. It can be varied at the pleasure of the workman. In the first place I take a piece of leather, and, after having trimmed it down to the shape and thickness required, I then skive one side down to a fine edge from the line N P toward the outer circle K L M. This is done in order to form this part to a thin edge where the tip turns in under the toe to the inside of the shoe, between the sole and the upper, leaving the thickest side of the leather to form that part which is to be turned over to make the toetip. The tip may be made heavy or light, according to the kind of shoe or boot to which it is applied.

If it is wished to extend the toe-tip farther over the top of the upper, it is only necessary to sink the groove deeper, which will then throw the tip more over the toe after the shoe has been turned. That part of the toe of the upper where it is sewed onto the tip may be skived down under the tip to make it easier to work in sewing. The tip itself should be attached to the top of the upper in a contracted form, which gives it a drooped shape, and which prevents it from puckering, and also makes it easier to sew. It should likewise be put on very exact, so that when the upper and tip are connected, and the upper drawn tight over the last, the part which is to form the toe of the tip shall fit into the groove formed to receive it. Thus the tip, when in position, sits on the sole of the last, resting on that part which projects in front of the groove.

The shape of the toe of the last should be marked upon the vamp of the upper by scribing it round, as a guide where to attach the tip, so that when the corners of the tip are brought round to fit this mark the upper may

conform exactly to it.

The tip should be worked damp, and can be attached to the upper either by a sewing-machine or by hand, and the stitches can be shown either ornamental on the outside or be hidden, as required.

When laying down the sole to the last the toe of the sole must be brought close to the line of the groove, and, when sewing on the leather should be of good quality, and similar | sole to the upper, care must be taken to keep -the corners of the tip exactly in line across the toe, and to draw in the corners very tight to prevent them from bulging after the shoe is turned. This may be done by tacking the tip tightly around the toe of the last before sewing it on. After the sole, upper, and toetip have been united, the shoe is turned rightside out, and finished on any ordinary last, which should, however, be a little shorter than the first last, by the usual process.
Figures 1 and 2 represent the last, showing

the groove or recess; Fig. 3, the toe-tip.

Having now described the construction and operation of my invention, to which I have given the name of "improved toe-tips for turned boots and shoes," I beg to state that I disclaim all other toe-tips in use.

What I claim is—

1. A last for turned shoes provided with the grooved or recessed portion a b c, with an end projection, all substantially as shown, for the purpose set forth.

2. The process herein described, consisting of forming and securing a toe-tip or protector to the upper and sole of a turned shoe by means of a groove or recess in the end of the last, all substantially as set forth.

Montreal, Province of Quebec, 13th August,

THOMAS DANN.

Witnesses: JOHN KELSEY, H. BRODIE.