(No Model.)

T. & B. HARTLEY.

LAST.

No. 303,512. Patented Aug. 12, 1884.

FIG:1.

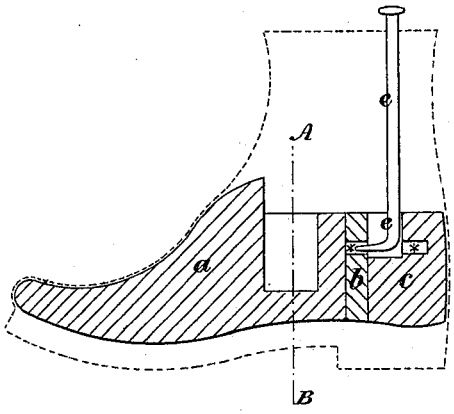


FIG:2.

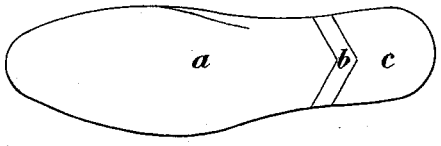


FIG:3.

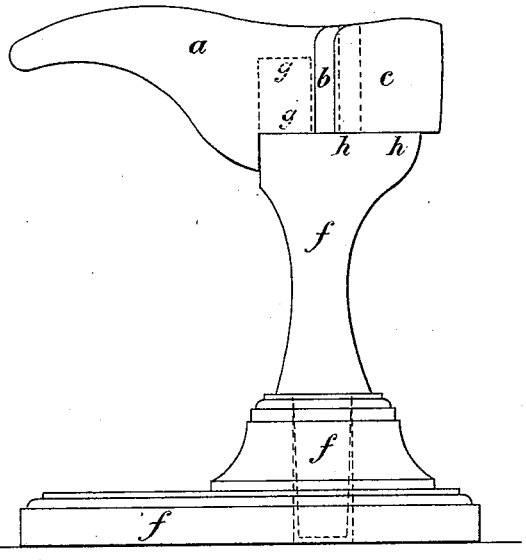
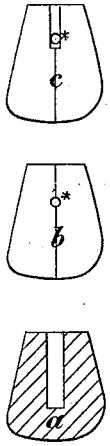


FIG:4



Witnesses.
John E. Parker
James F. Tobin

Inventors.
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and
Bernard Hartley
by their Attorneys
Hodgson & Sons

UNITED STATES PATENT OFFICE.

THOMAS HARTLEY AND BERNARD HARTLEY, OF ACCRINGTON, COUNTY OF LANCASTER, ENGLAND.

LAST.

SPECIFICATION forming part of Letters Patent No. 303,512, dated August 12, 1884.

Application filed February 25, 1884. (No model.) Patented in England February 6, 1884, No. 2,809.

To all whom it may concern:

Be it known that we, THOMAS HARTLEY and BERNARD HARTLEY, both of Accrington, in the county of Lancaster, England, and subjects of the Queen of Great Britain and Ireland, have invented Improvements in Lasts and Stands Used in Manufacturing and Repairing Boots and Shoes, of which the following is a specification.

Our invention consists of certain improvements in sectional lasts and stands therefor, designed, mainly, with the view of facilitating the insertion of the last into a shoe to be repaired and its withdrawal therefrom, or from a new shoe made on the last.

In the accompanying drawings, Figure 1 is a vertical section of the last with the outline of a shoe indicated in dotted lines. Fig. 2 is a view of the bottom of the last. Fig. 3 is a view of the last and its supporting-stand, and Fig. 4 is a view illustrating the several parts of the last detached, the part *a* being shown in section on the line A B, Fig. 1.

Our invention consists, principally, in the combination of a stand, hereinafter described, with metal lasts in two or three sections, divided vertically, or nearly so, as shown in Figs. 1 and 2, so that the pieces *a b c* may be inserted into the boot or shoe separately and removed therefrom by means of an ordinary last-hook *e e*, inserted in holes * * in the sections *b* and *c*, Figs. 1 and 4. By leaving out the section *b* the same last may be used to fit different sizes of boot or shoe. The joint between the sections is made in the form of an obtuse angle, as shown in Fig. 2, in order to prevent any lateral displacement of the pieces.

The stand *f f* (see Fig. 3) is made of metal, preferably in two parts, and is provided with a peg or pin, *g*, fitting into a hole in the part *a* of the last, and a projecting shoulder or arm, *h h*, at or near the top, which supports the loose sections *b* and *c* of the last firmly and efficiently as though the last were solid.

The projecting shoulder or arm *h h* may be made solid, as shown in the drawings, (which we prefer), or it may be made in the form of a prong or prongs.

We claim as our invention—

The combination, with a metal last made in two, three, or more vertical or nearly vertical sections, as described, of a metal stand provided at or near the top with a projecting shoulder or arm to support the loose sections of the last.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

THOMAS HARTLEY.
BERNARD HARTLEY.

Witnesses:
GEORGE DAVIES,
CHARLES DAVIES.