T. & B. HARTLEY.

LAST STAND FOR SHOE MAKERS' USE.

No. 311,315.

Patented Jan. 27, 1885.

FIG:1.

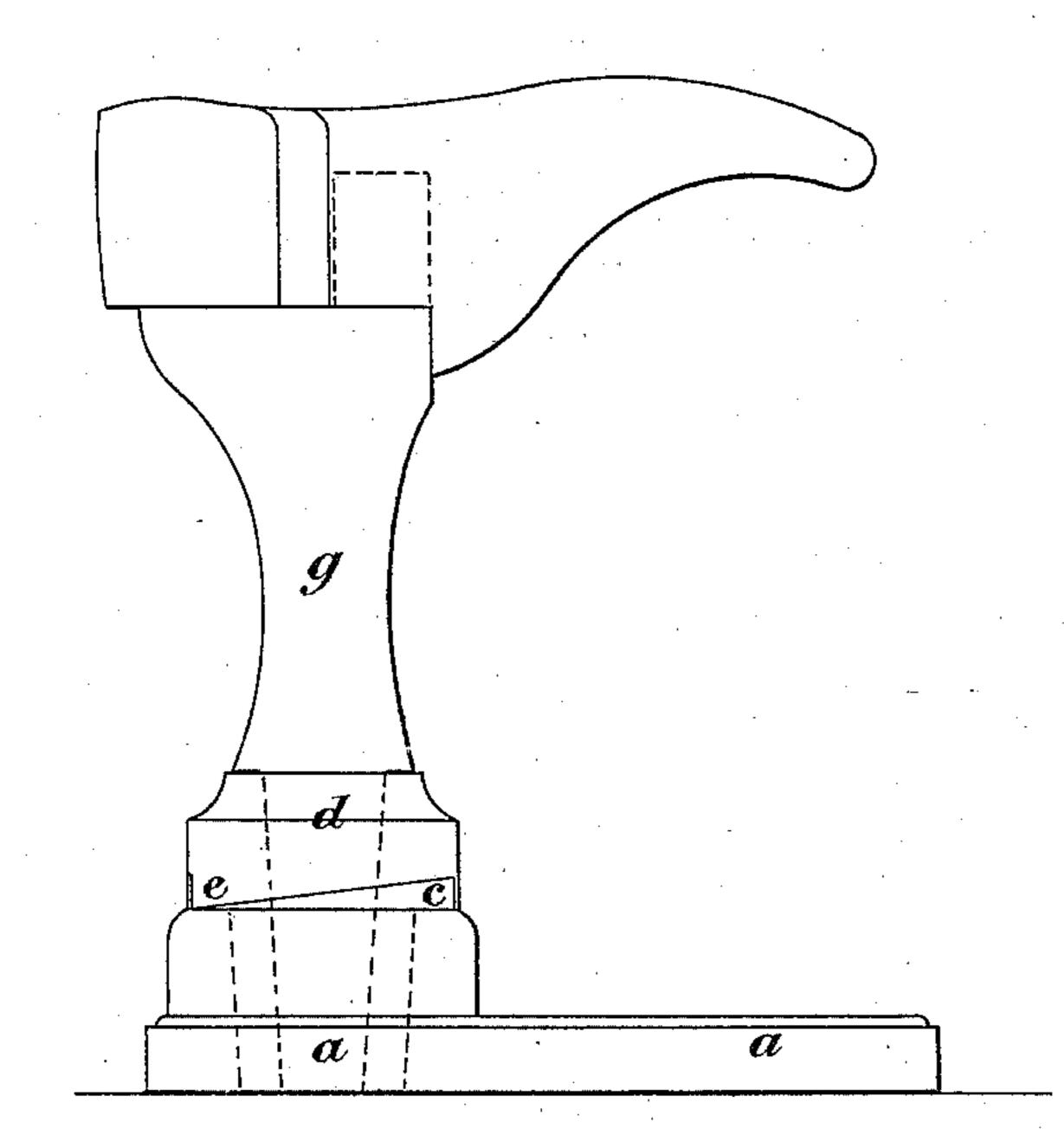


FIG:5.

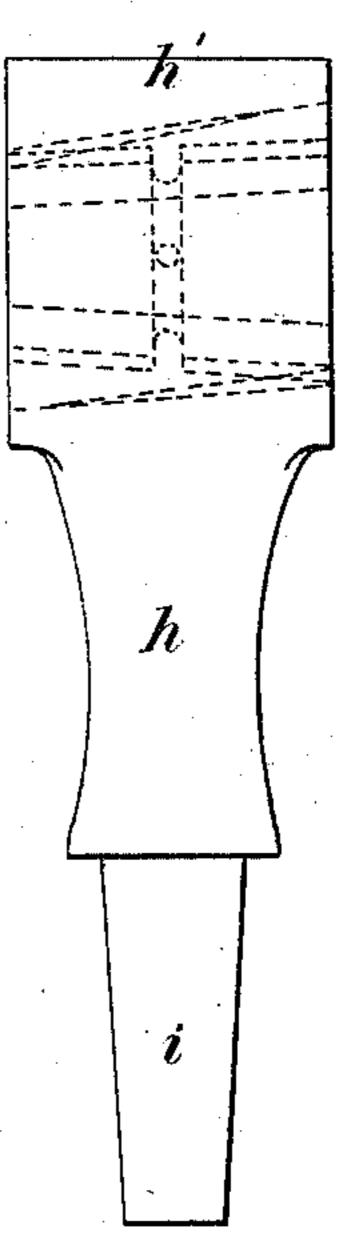


FIG:2.

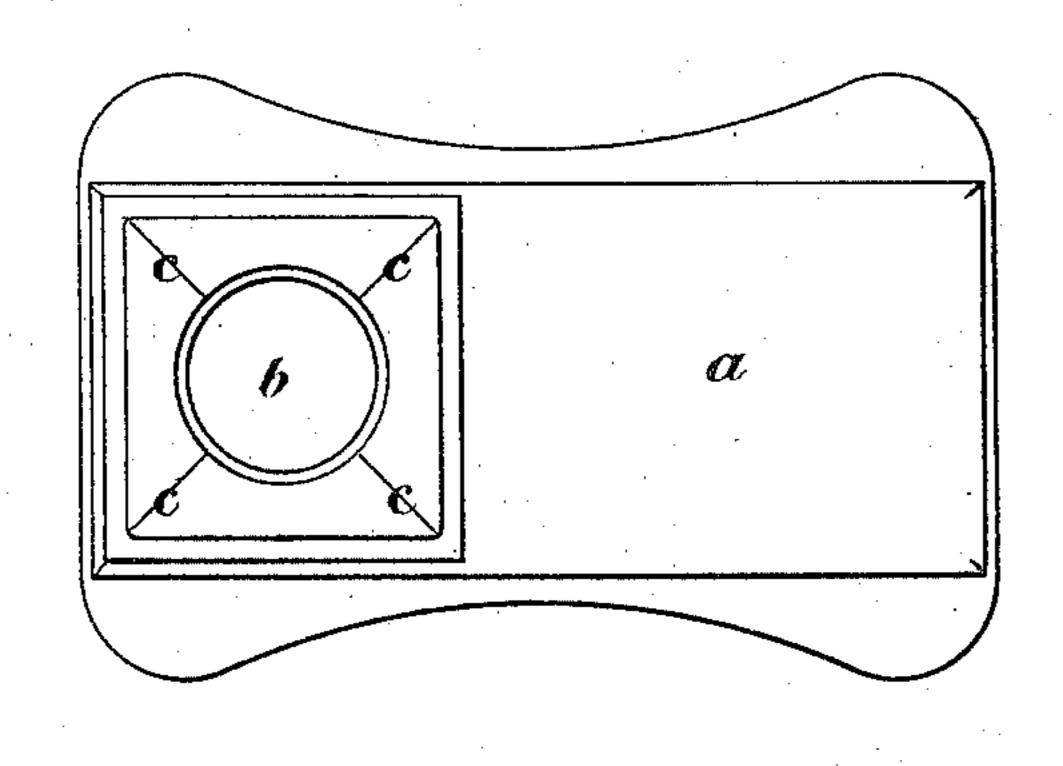


FIG:3.

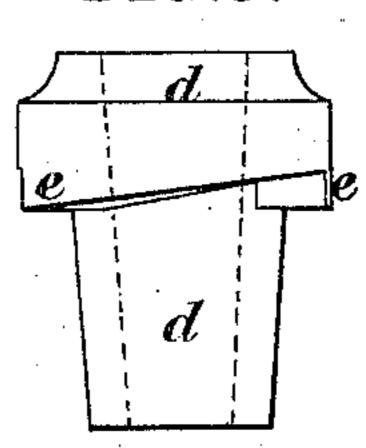
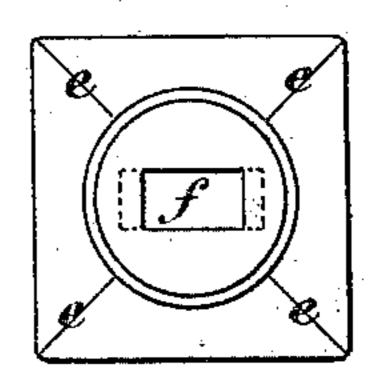


FIG:4.



Witnesses.

John M blayton Harry Drury

Inventors. Thomas Hartley
Bernard Hartley
by their attorneys

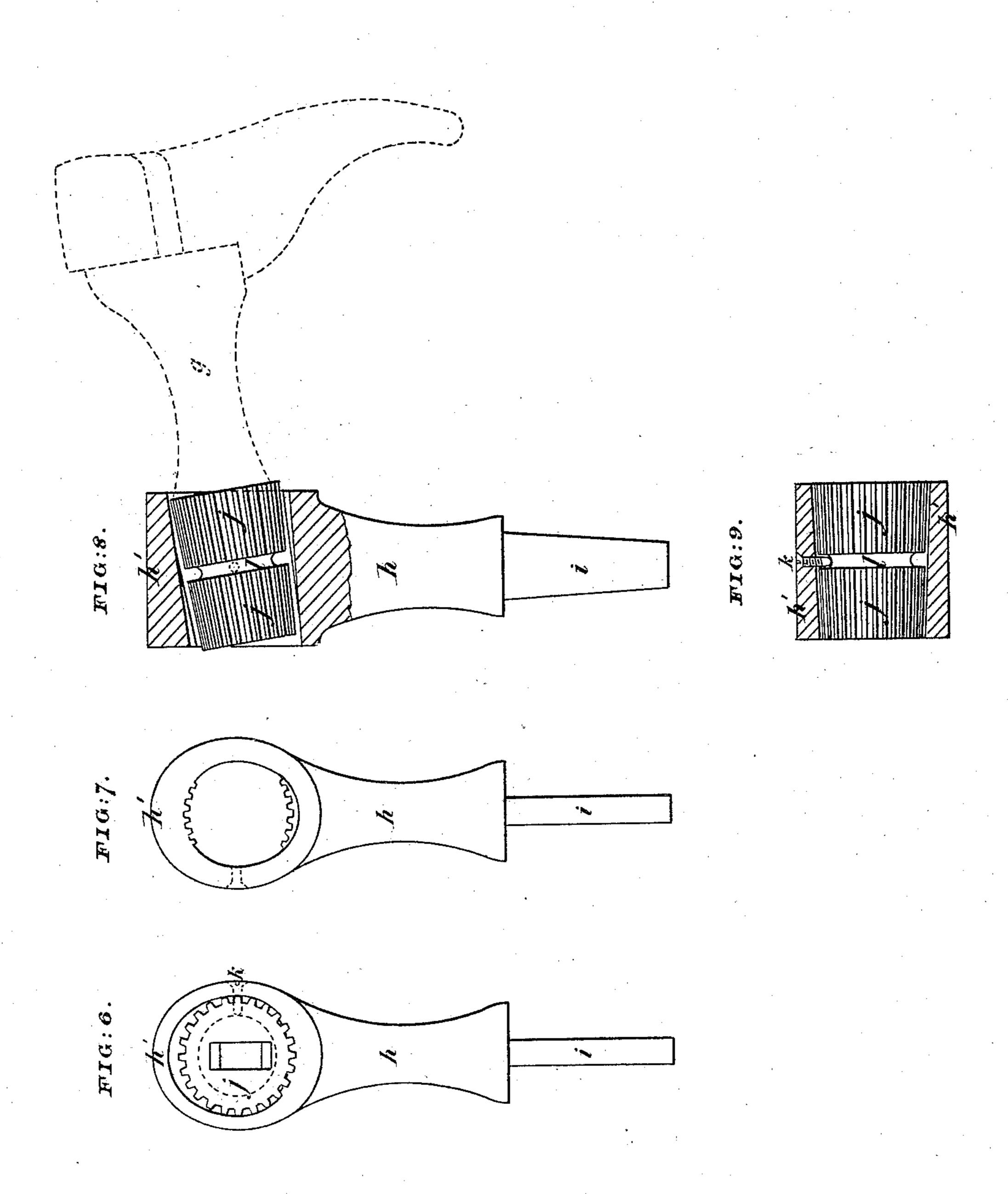
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United States Patent Office.

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

LAST-STAND FOR SHOE-MAKERS' USE.

SPECIFICATION forming part of Letters Patent No. 311,315, dated January 27, 1885.

Application filed October 9, 1884. (No model.) Patented in England July 14, 1884, No. 10,111.

To all whom it may concern:

Be it known that we, THOMAS HARTLEY and BERNARD HARTLEY, subjects of the Queen of Great Britain and Ireland, and both resid-5 ing at Accrington, in the county of Lancaster, England, have invented Improvements in Last-Stands or Shoe-Makers' Use, (for which we have applied for a patent in Great Britain, No. 10,111, dated July 14, 1884,) of which the 10 following is a specification.

The object of this invention is to construct a stand that will hold the last firmly in any required position without the use of set-screws, but will at the same time allow of its position 15 being readily changed either horizontally or

vertically, or both.

In the accompanying drawings, Figure 1 is a side view of our improved last. Fig. 2 is a plan view of the base. Fig. 3 is a view of a 20 detachable block, and Fig. 4 a plan view of the same. Fig. 5 is a side view of a stand to be used in connection with the base. Figs. 6, 7, and 8 are front, rear, and sectional views of the same, respectively; and Fig. 9 is a sec-

25 tional plan.

The improved stand in its simplest form is shown in elevation at Fig. 1 in the annexed drawings. The base a a (see plan view, Fig. 2) is made with a round hole, b b, and four 30 inclined projections or steps, cccc, like the teeth of a ratchet-wheel, on its upper face. In this base fits a block, dd, (see Fig. 3,) the upper part of which has similar inclined steps or teeth, e e e e, formed beneath it, and in the 35 center of this block is a rectangular hole, ff, into which fits the leg or stem g g, which supports the last. (See underneath plan view of this block, Fig. 4.)

It is well known to shoe-makers that in using 40 a stand of this kind the tendency is always to force the stand round on its vertical axis in one direction, and the teeth or inclined steps or teeth c and e are so formed as to resist this tendency at the same time that they allow the 45 stand to be turned round in the other direction, so as to alter the position of the last, as may be required. When the last is required to be held in the reverse position—as, for instance, when trimming and dressing the edges 50 of the soles and heels—I remove the leg or stem g g from the block d d, and I substitute

therefor the stand h h, (see Fig. 5,) which has a tang, ii, at its lower part, fitting into the rectangular hole ff in the block dd. The upper part of this stand h h is made with a hori- 55 zontal socket, h', having a slightly-inclined hole through it. One end of this hole (say the right-hand end) is grooved at the bottom, as seen at the end view, Fig. 6, and the other end is grooved at the top. (See end view, Fig. 7.) 60 Into the hole of this socket is fitted a barrel, jj, grooved at both ends, (see Figs. 8 and 9.) and having through it a rectangular hole, in which fits the tang of the leg or stem g g of the last; and it will be evident that the weight of 65 the last will cause the grooves of the barrel and the socket to interlock, so that the barrel cannot revolve so long as the leg or stem g gis horizontal. Upon raising this up, however, into the position shown by the dotted lines in 70 Fig. 8, it will be seen that the barrel j j can be turned and the position of the last changed, and on releasing it and allowing it to fall into the horizontal position it will remain fixed by the interlocking of the grooves. The barrel 75 jj is kept in its place lengthwise by means of a set-screw, k, one end of which takes into a circumferential groove, l l, made round the center of the barrel. (See Fig. 9.)

We claim as our invention—

1. The combination of the base of a last or stand having steps c with a block having corresponding steps and a stem adapted to said block, to allow of the adjustment of the said stem around its vertical axis and hold the 85 same when adjusted, substantially as set forth.

2. The combination of the base and block with a stand adapted to said block, and having a horizontal socket partially grooved at top and bottom, and grooved barrel adapted to said 90 socket and to receive the stem of the last, whereby the said last may be adjusted on its horizontal axis, substantially as described.

In testimony whereof we have signed our names to this specification in the presence of 95

two subscribing witnesses.

THOMAS HARTLEY. BERNARD HARTLEY.

Witnesses:

CHARLES DAVIES, JNO. HUGHES.