(No Model.)

L. W. HAWKES.

LAST.

No. 389,468. Patented Sept. 11, 1888.

Fig. 4.

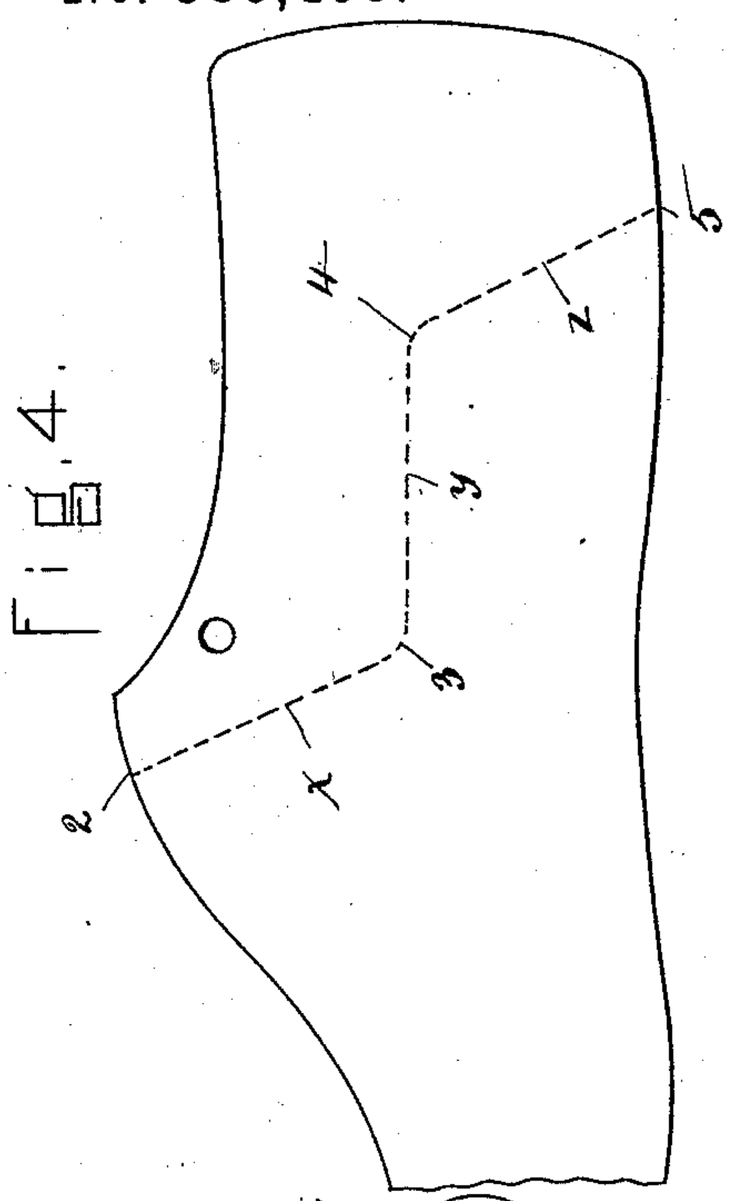


Fig. 1.

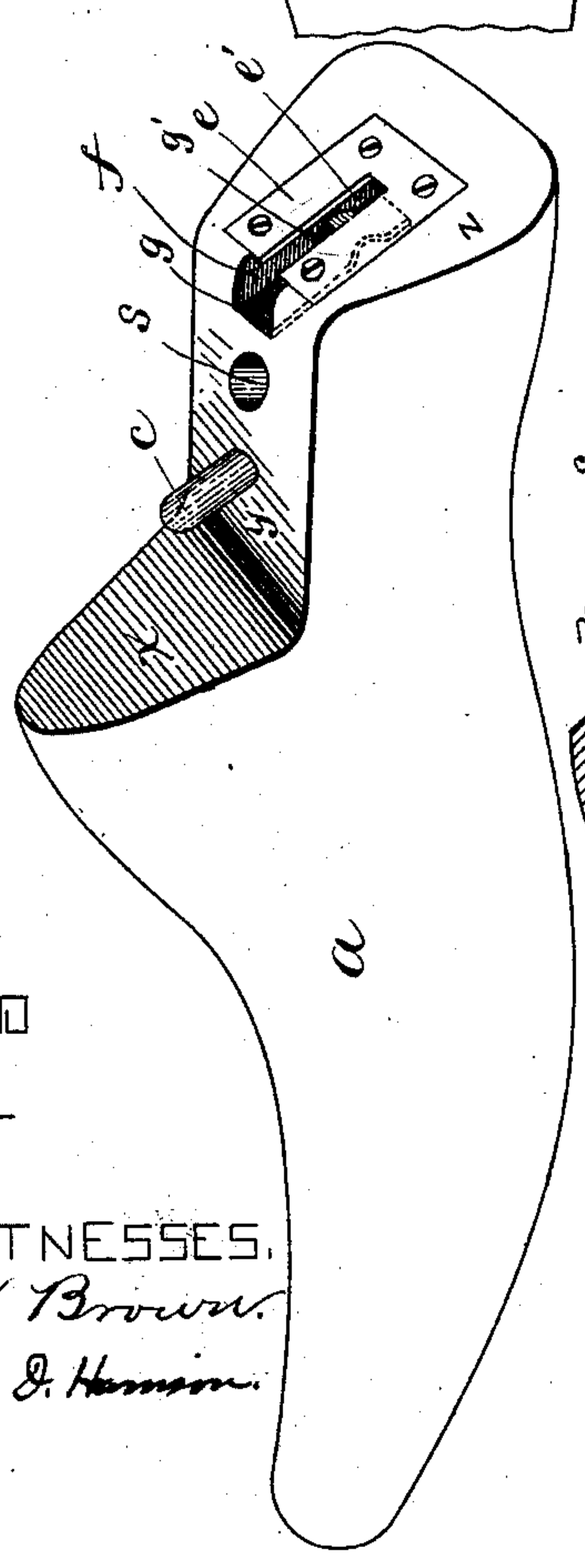


Fig. 2.

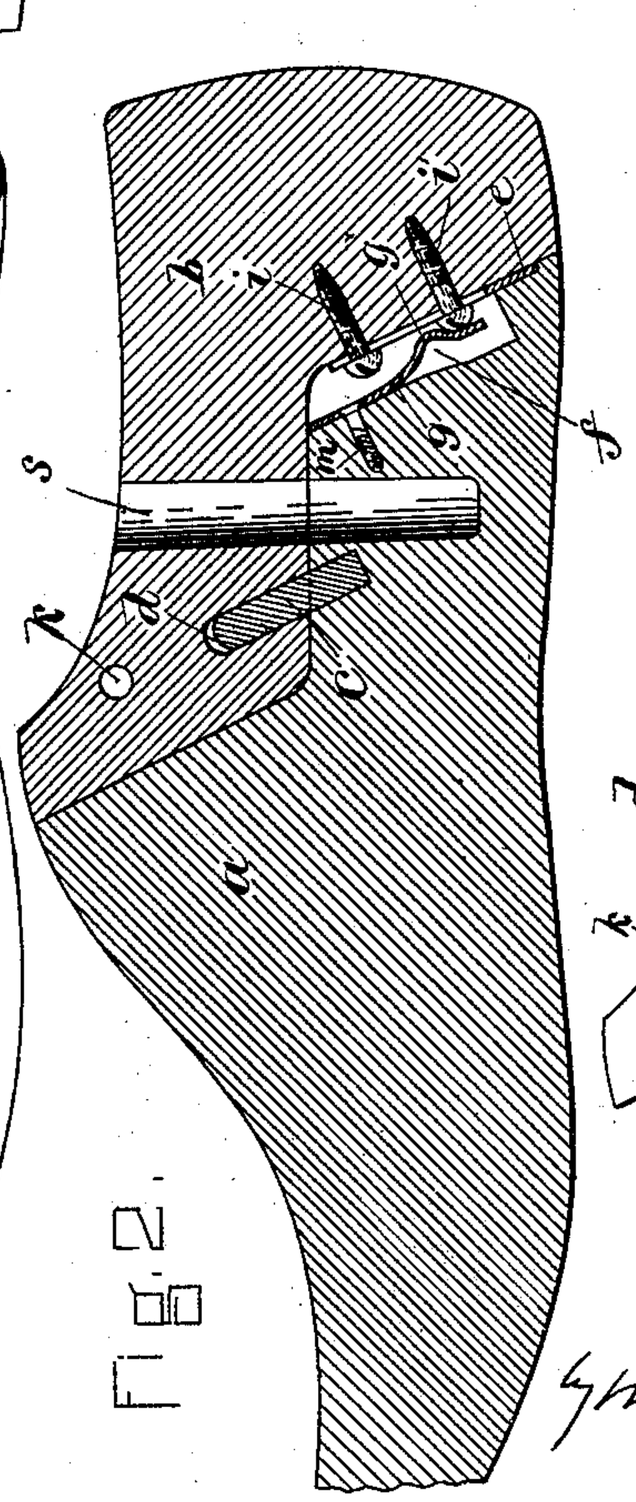
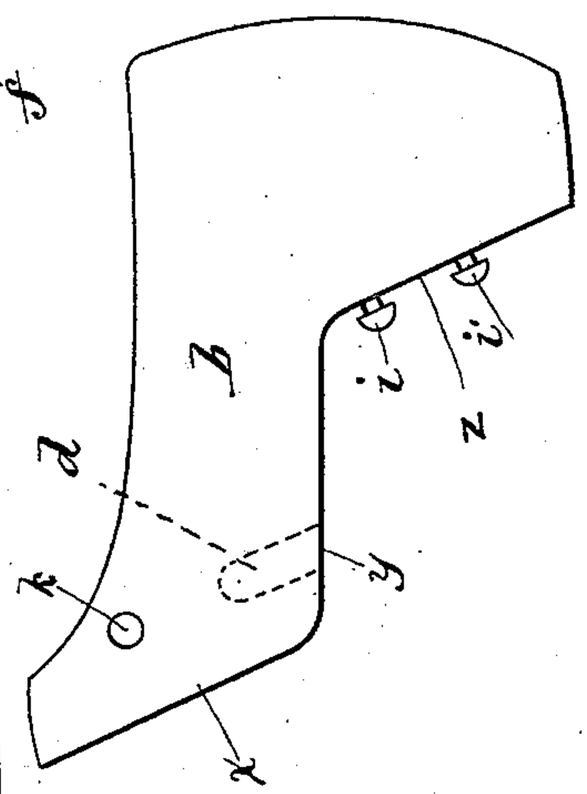


Fig. 3.



WITNESSES.
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UNITED STATES PATENT OFFICE.

LEANDER W. HAWKES, OF OLD ORCHARD, MAINE.

LAST.

SPECIFICATION forming part of Letters Patent No. 389,468, dated September 11, 1888.

Application filed May 4, 1888. Serial No. 272,769. (No model.)

To all whom it may concern:

Be it known that I, LEANDER W. HAWKES, of Old Orchard, in the county of York and State of Maine, have invented certain new and useful Improvements in Lasts, of which the following is a specification.

This invention has for its object to provide a two-part last of such construction that the heel end of the last can be easily removed from the boot or shoe made on the last, thus permitting the easy removal of the fore part of the last, and all without strain on the upper and shank of the boot or shoe, so that the upper can be fitted as closely to the last as may be desired without danger of injury in removing the last from it.

The invention consists in the improvements which I will now proceed to describe and claim.

Of the accompanying drawings, forming a part of this specification, Figure 1 represents a perspective view of the fore part section of my improved last. Fig. 2 represents a longitudinal section of the entire last. Fig. 3 represents a side view of the heel-section. Fig. 4 represents a side view of a solid last, showing the lines on which the same is divided into sections.

The same letters of reference indicate the same parts in all the figures.

In the drawings, *a* represents the fore part section, and *b* the heel-section of my improved last. Said sections are formed by cutting a solid last of ordinary form transversely on three lines—viz., the diagonal line 2 3 extending downwardly and backwardly from the instep portion, the line 3 4 extending horizontally from the bottom of the line 2 3 toward the heel, and the diagonal line 4 5 extending downwardly and backwardly from the rear end of the line 3 4 through the bottom of the last near the heel, the line 4 5 being substantially parallel with the line 2 3, so that the section *b* can be moved diagonally upward from within a boot or shoe.

To secure the sections *a b* together, so as to prevent lateral movement of either on the other and accidental upward movement of the section *b*, I provide the section *a* with a diagonal pin, *c*, which is substantially parallel with the surfaces *x z* and with a slotted plate, *e*, a recess, *f*, behind said plate and a spring-holding device, *g*, within said recess, the section *b* having a diagonal socket, *d*, formed to receive the pin *c*, and two headed studs or screws, *i i'*, projecting from its diagonal surface *z*. The shanks of said screws or studs are adapted to pass through the slot *e'* in the plate *e*, while the heads of the screws or studs are of greater diameter than the width of said slot and enter the recess *f* behind the slotted plate.

It will be seen that the engagement of the diagonal pin *c* with the socket *d* and the engagement of the studs *i i'* with the slotted plate *e* prevent independent lateral movement of either section, and a direct vertical movement of the section *b*, the only independent movement which said section can have being a diagonal upward movement parallel with the surfaces *x z* and pin *c*.

The spring *g* is attached near its upper end to the section *a* by a screw, *m*, its lower end being free and provided with a curve, *g'*, which normally bears against one of the studs or screws *i* within the recess *f*, as shown in Fig. 3, and forms a yielding latch, which bears against said screw with sufficient firmness to prevent accidental upward movement of the section *b*, but yields when force is applied to remove said section, the latter being provided in its upper portion with a transverse hole, *k*, to receive a hook, whereby the said section may be withdrawn.

s represents the socket for the jack-spindle. Said socket is formed partly in the section *a* and partly in the section *b*, so that when the jack-spindle is in place it aids in holding the sections in their proper relative positions.

I am aware that a last composed of two sections, each of substantially the form of my sections *a b*, is not new; hence I do not claim, broadly, a last divided as I have shown but;

What I claim is—

In a last, the section *a*, cut to form the surfaces *x y z* relatively arranged, as shown, and provided with a portion of the socket *s*, formed in the surface *y*, the diagonal pin *c*, projecting from the surface *y*, the groove or recess *f* in the surface *z*, the corrugated spring *g* at the bottom of said recess, and the plate *e*, having the slot *e'* attached to the surface *z* and partially covering the recess *f*, combined with the section *b*, having the surfaces *x y z*, formed

to fit the corresponding surfaces of the section *a*, and provided with a portion of the socket *s* coinciding with the portion of said socket formed in the section *a*, the diagonal socket *d*, formed to receive the pin *c*, and the headed studs *i i'*, projecting from the surface *z* and formed to be engaged with the slotted plate *e*, the stud *i'* being arranged to engage the corrugation *g'* of the spring *g*, as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses, this 30th day of April, A. D. 1888.

LEANDER W. HAWKES.

Witnesses:
C. F. BROWN,
A. D. HARRISON.