

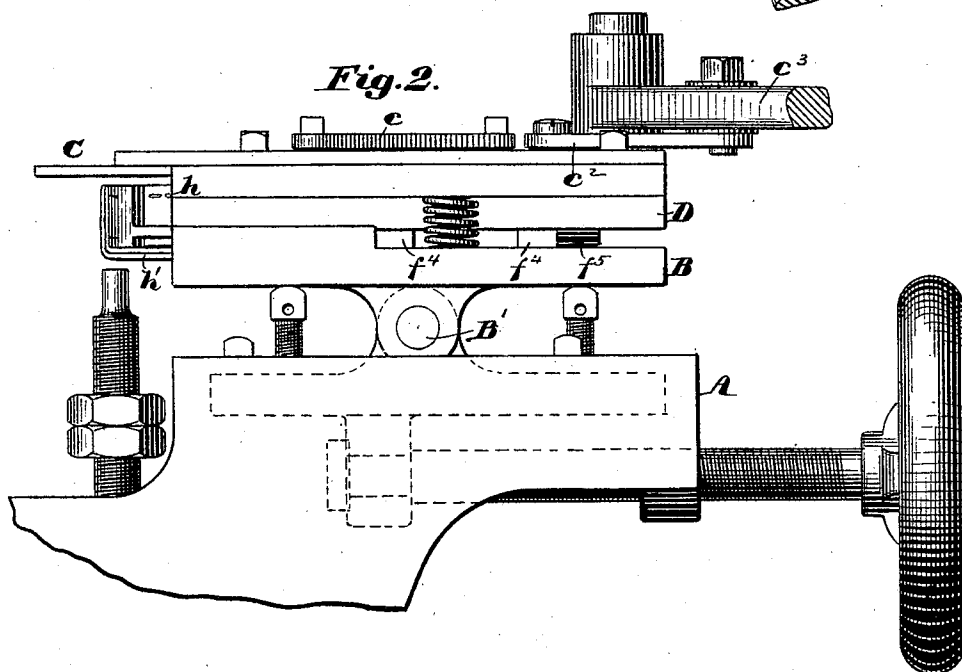
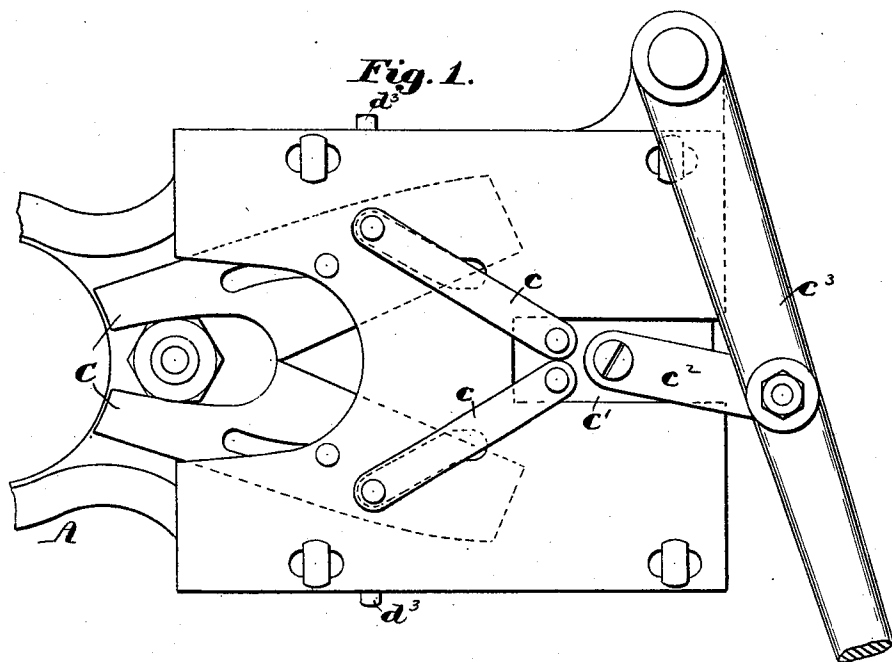
(No Model.)

2 Sheets—Sheet 1.

T. K. KEITH & H. G. FARR.
LASTING MACHINE.

No. 579,928.

Patented Mar. 30, 1897.



Witnesses:

Walter E. Lombard.
Thomas J. Drummond.

Inventors:

Thomas K. Keith,
Hiram G. Farr,

by *Ernest Gregory, Atty's.*

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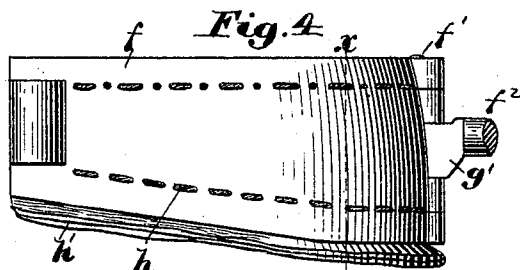
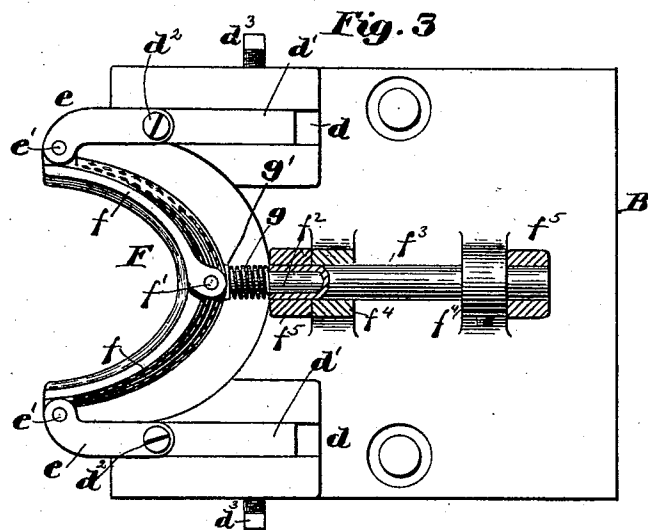
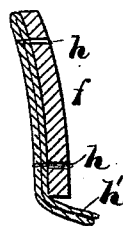


Fig. 5.



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UNITED STATES PATENT OFFICE.

THOMAS K. KEITH, OF BOSTON, AND HIRAM G. FARR, OF WINCHESTER,
MASSACHUSETTS, ASSIGNORS TO THE KEITH LASTING MACHINE COM-
PANY, OF KITTERY, MAINE.

LASTING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 579,928, dated March 30, 1897.

Application filed July 27, 1896. Serial No. 600,632. (No model.)

To all whom it may concern:

Be it known that we, THOMAS K. KEITH, of Boston, county of Suffolk, and HIRAM G. FARR, of Winchester, county of Middlesex, State of Massachusetts, have invented an Improvement in Lasting-Machines, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

This invention has for its object the production of an improved counter-clamp to grasp and hold firmly the heel of the upper about the usual heel-counter, while suitable slides or arms act to wipe the edges of the heel-covering part of the upper over on the inner sole on the last. Prior to this invention clamps for this purpose have been made as bands, and they have been composed of leather and of metal.

In accordance with our invention we have devised a rigid two-part metallic clamp, the central part of the said clamp being hinged together and to a guide-rod, while the outer ends of the clamp are hinged to links mounted to turn on pivots fixed with relation to the carriage carrying the said clamp.

Figure 1, in top or plan view, shows one of the tipping carriages of a lasting-machine; Fig. 2, a side elevation of the parts shown in Fig. 1; Fig. 3, a top or plan view of our improved clamp and its supporting and guiding devices; Fig. 4, a side elevation, enlarged, of the clamp; and Fig. 5, a vertical section of the clamp on the line *x*, Fig. 4.

The framework A, the forwardly and backwardly tipping plate B, mounted on the pivot B', the blades or wipers C, the links *c*, slide *c'*, link *c''*, and lever *c'''* to move the wipers are and may be all as common in usual lasting-machines.

The sidewise-tipping plate D has at its upper side grooves *d*, in which are placed blocks *d'*, having fulcrum-studs *d''*, said blocks being held in adjusted position by suitable set-screws *d'''*. The studs *d''* have mounted on them links *e*, which by pins *e'* are jointed to the outer ends of a clamp F, composed of two metallic shells *f f*, slotted at their inner ends

to leave ears, which are jointed together by a pin *f'*, said pin being carried by one end of a slide-rod *f''*, extended through a tube *f'''*, in turn extended through ears *f''''* on the under side of the plate D and ears *f'''''* at the upper side of the plate B. A spring *g*, surrounding the rod *f''*, acts at one end against a collar *g'* on said rod and at its other end on the said sleeve, the latter having no longitudinal motion.

The two-part clamp is made from two cast-metal plates concaved at their inner sides, as best shown in Fig. 5, and of a depth from bottom to top to fit well about the heel end of the shoe and its contained counter, and preferably, as shown, said clamp has a series of holes for the reception of a cord *h*, by which to attach to the inner side of the said clamp a non-metallic lining *h'*, said lining being preferably of leather or india-rubber, which will not mar the upper.

When the shoe is being lasted, its heel end is pushed back into the curved recess in the plate D, made to receive it, and meeting the interior of the clamp moves it back, the guide-rod sliding in the tube and compressing the spring *g*, and as the clamp is so moved back the pivotal points *e'* are carried toward each other, which results in crowding the outer ends of the two rigid parts of the clamp firmly against the shoe, thus holding the shoe and the ends of the counter well in against the last preparatory to moving the wipers C forward to act against and turn over the edges of the upper at its heel end over on the inner sole on the last.

Having described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. In a lasting-machine, a clamp to embrace the heel end of the shoe and its contained counter, said clamp being composed of two rigid metallic shells pivoted together at their inner ends and having concaved inner sides, combined with pivoted links to support the outer ends of said rigid shells, a guide-rod to which the inner ends of the said shells are pivoted, and means to guide the said guide-rod, to operate substantially as described.

2. In a lasting-machine, a clamp to embrace
the heel end of the shoe and its contained
counter, said clamp being composed of two
rigid metallic shells pivoted together at their
5 inner ends and having concaved inner sides,
combined with pivoted links to support the
outer ends of said rigid shells, a guide-rod to
which the inner ends of the said shells are
pivoted, means to guide the said guide-rod,
10 and a non-metallic lining secured to said

shells at their inner sides, substantially as described.

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

THOMAS K. KEITH.
HIRAM G. FARR.

Witnesses:

GEO. W. GREGORY,
MARGARET A. DUNN.