

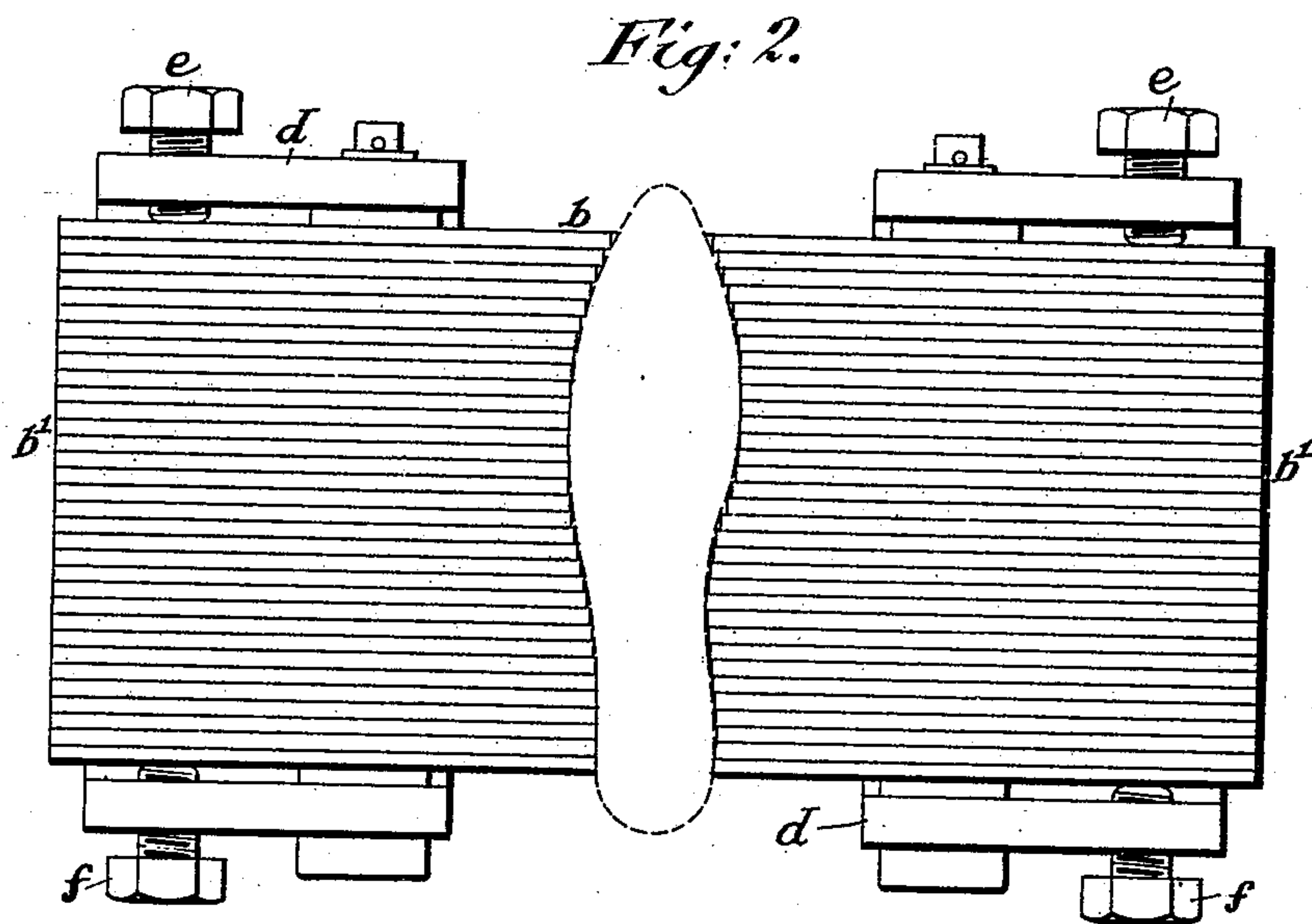
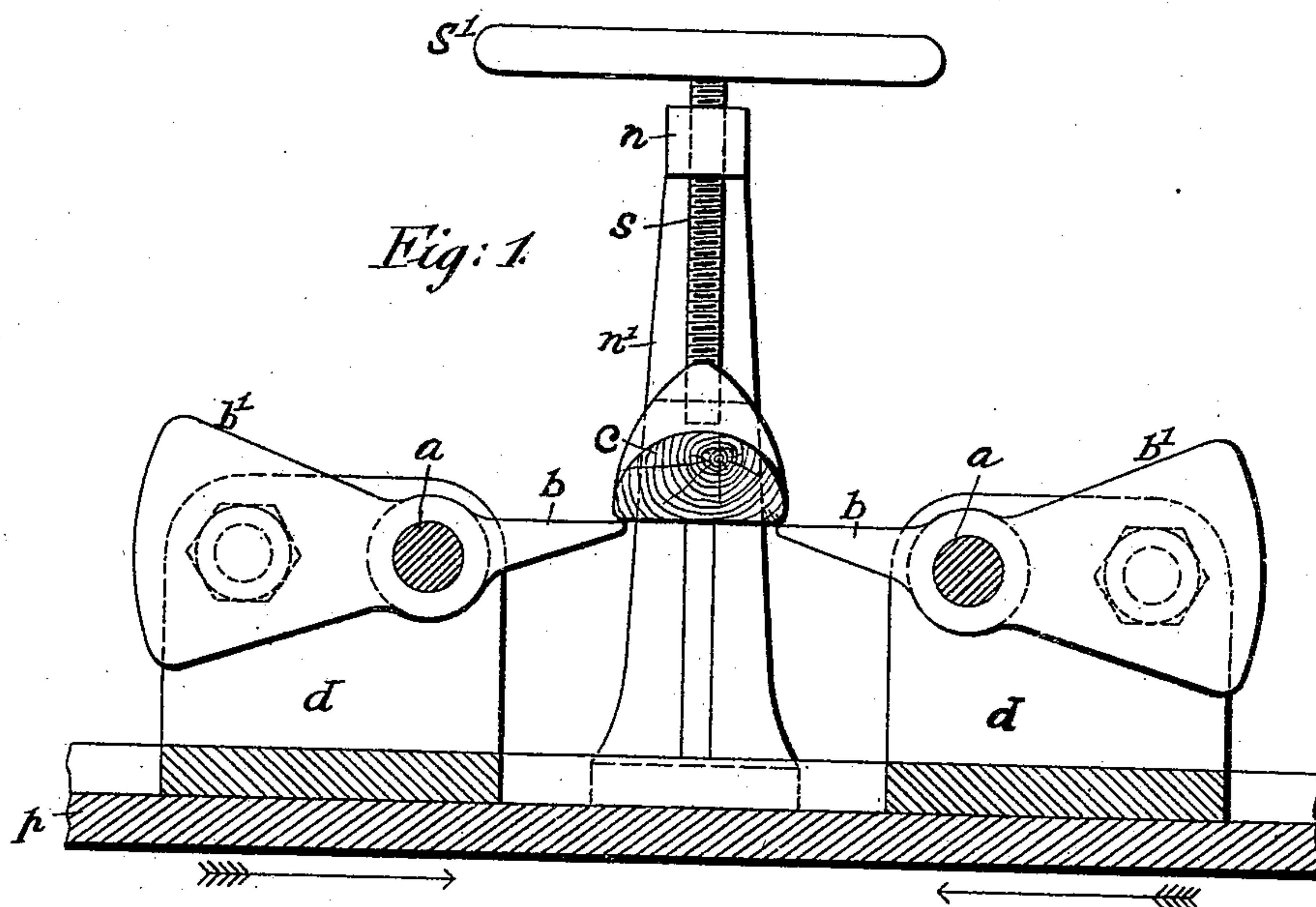
No. 689,691.

Patented Dec. 24, 1901.

D. SCHANZER.  
LASTING MACHINE.

(Application filed Oct. 6, 1900.)

(No Model.)



WITNESSES:

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# UNITED STATES PATENT OFFICE.

DAVID SCHANZER, OF MALMO, SWEDEN.

## LASTING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 689,691, dated December 24, 1901.

Application filed October 6, 1900. Serial No. 32,241. (No model.)

*To all whom it may concern:*

Be it known that I, DAVID SCHANZER, a subject of the King of Sweden and Norway, residing at Malmo, Sweden, have invented certain new and useful Improvements in Pulling and Lasting Machines, of which the following is a specification.

This invention relates to pulling and lasting machines used in the manufacturing of shoes and the like; and the object of the present invention is to provide means by which the insole and upper may be connected together by the use of any quickly-binding agglutinant.

Referring to the drawings, Figure 1 is a sectional end elevation showing my improved pulling and lasting machine; and Fig. 2 is a plan view, parts of the same being omitted for clearness sake, the last being indicated in dotted lines.

The machine consists mainly of two systems of plates, each lettered *b b'*. The plates belonging to each system are all loosely mounted upon a common pivot shaft or bolt *a*, so that they may turn thereon, and the last *c* is located between the two systems of plates, it being supported and adjusted by means of a screw-spindle *s*, provided with a hand-wheel *s'* and turning in an internally-screw-threaded neck *n* at the outer end of a frame *n'*, mounted on the bed-plate *p*. The parts *b* of the plates pointing toward the last *c* are made in the form of fingers, and the other parts *b'* of the plates are flat and are heavier than the parts *b*. The plates of each system are all arranged close together.

The bearings for the pivot-shaft *a* are arranged in movable frames *d*, that are suitably guided on the bed-plate *p*. Each shiftable frame *d* is provided at the sides with two binding-screws *e f*, the inner ends of which bear against the plates lying between their extremities, so that the said binding-screws are adapted to press the plates firmly together in any desired position. When the two bind-

ing-screws *e f* have been loosened, the said plates on account of the ends *b'* being heavier than the other ends will turn in such manner that the points of the fingers *b* will bear equally and exactly against the lower surface of the last *c*. When in this position, the plates *b b'* are kept firm by tightening up the binding-screws *e f*. The sticking together of the insole and upper is effected after the last has been lifted through a distance corresponding to the thickness of the leather by the pushing of the two systems of plates toward each other. As all the effective parts are exactly at the same distance from the lower surface of the last, the effect on the material will be perfectly uniform and even, whereby a very solid connection between the insole and the upper is obtained.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a lasting-machine, the combination with a frame, of two systems of plates each mounted at opposite sides thereof, said plates each provided with a finger at one end and a heavy opposite end, a pivot-shaft in each frame, said plates being pivotally mounted thereon, and means for adjusting and securing said plates, substantially as set forth.

2. In a lasting-machine, the combination with a bed-plate, of movable frames at opposite ends thereof, a pivot-shaft secured in each frame, a system of plates pivotally mounted on said shaft, said plates being each provided with a finger at its inner end and a heavy outer end, means for adjusting each system of plates and means for securing said plates, substantially as set forth.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

DAVID SCHANZER.

Witnesses:

OTTO OTTOSSON,  
ANTON HOLMGREN.