S. E. MOWER.

Lasting-Machine.

No. 212,815. Patented Mar. 4, 1879.

Fig. 1.

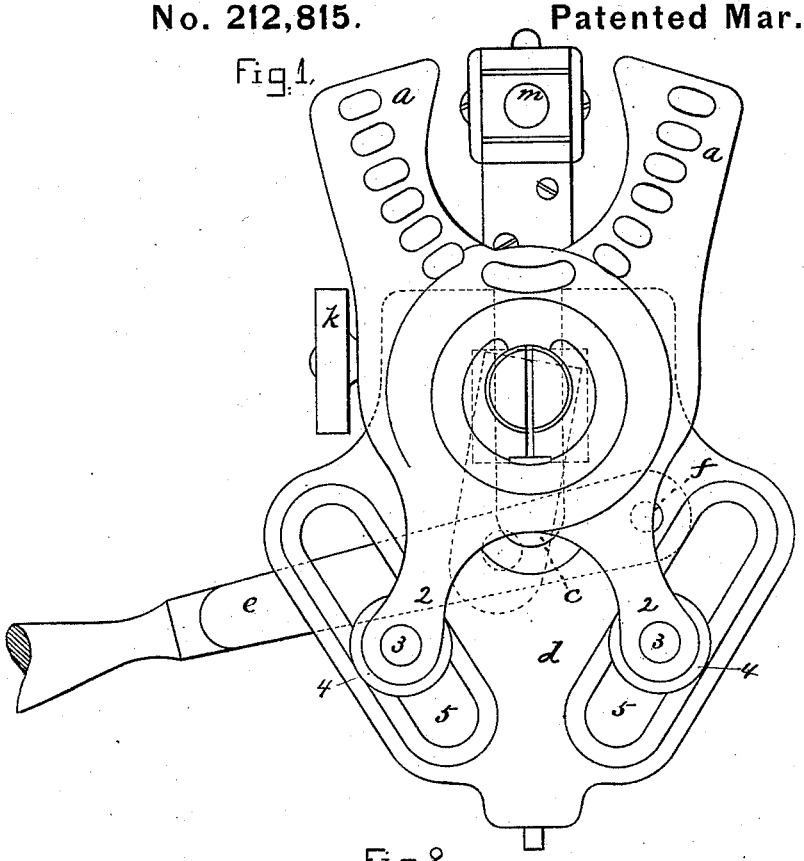

Fig. 4.

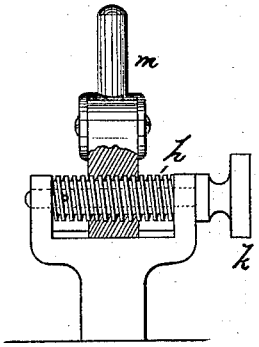

Fig. 2.

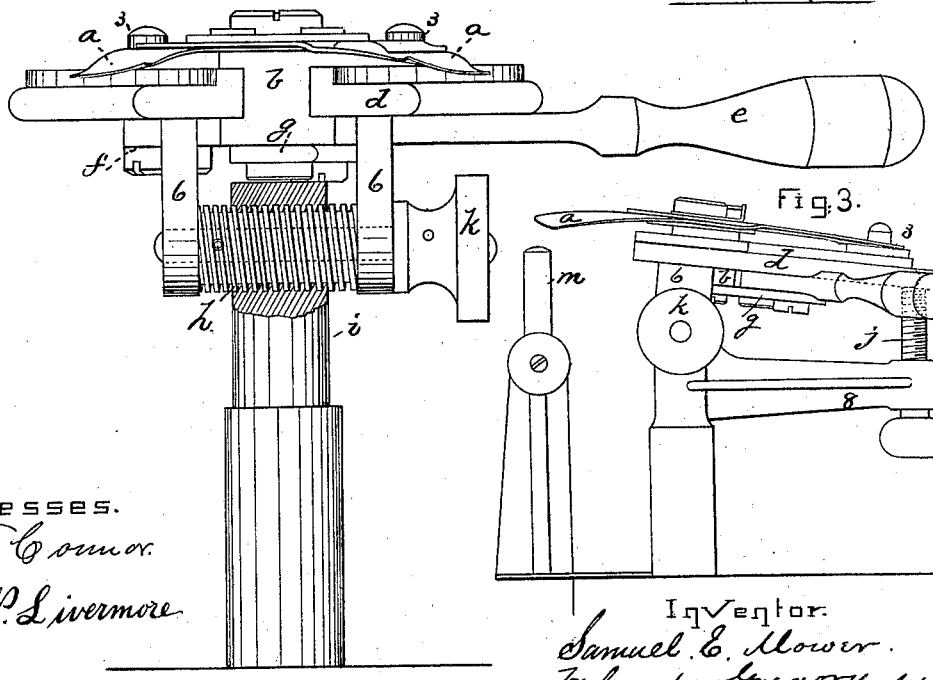

Fig. 3.

Witnesses.

L. F. Conner.

Jos. P. Livermore

Inventor.

Samuel E. Mower.

by Crosby & Gregory Attys

UNITED STATES PATENT OFFICE.

SAMUEL E. MOWER, OF MILFORD, CONNECTICUT, ASSIGNOR TO HENRY G. THOMPSON, TRUSTEE OF THE MAGNETIC LASTING MACHINE ASSOCIATION, OF SAME PLACE.

IMPROVEMENT IN LASTING-MACHINES.

Specification forming part of Letters Patent No. **212,815**, dated March 4, 1879; application filed January 8, 1879.

To all whom it may concern:

Be it known that I, SAMUEL E. MOWER, of Milford, county of New Haven, State of Connecticut, have invented an Improvement in Lasting-Machines, of which the following description, in connection with the accompanying drawings, is a specification.

This invention relates to certain improvements upon the lasting-machine described in United States Letters Patent No. 203,673, to which reference may be had.

This my invention consists, chiefly, in so mounting the tipping plate which carries the jaws that it and the jaws may be adjusted laterally with relation to the last-holding pin or toe-support, to thereby place the axis about which the pullers or jaws turn in line with the center of the last at its heel or toe, thereby adapting the jaws to the shape of the last-bottom or to varying positions of different lasts of the same size, but in which the holes for the last-holding pins of the lasting-machine are in different positions.

Figure 1 represents, in top view, a sufficient portion of a lasting-machine to illustrate my present invention; Fig. 2, a front elevation, partially in section, of Fig. 1, the last-holding pin being removed. Fig. 3 represents, on a smaller scale, a side elevation of Fig. 1, the pullers being omitted; and Fig. 4, a modification.

The jaws or pullers *a a*, pivoted upon a block, *b*, fitted to slide in the direction of their length in a slot, *c*, in a tipping plate, *d*, are of spring metal or steel, and preferably curved in the direction of their length, from their pivotal point forward to their front ends, as described in the said patent.

The rear ends, 2, of these jaws or pullers have pins 3, upon which are rollers or anti-friction pulleys 4, which are extended through the diagonal guide-slots 5 of the tipping plate *d*. These jaws are moved backward and forward by means of a lever, *e*, pivoted at *f* upon the under side of the tipping plate, and connected by a link, *g*, with the block *b*, upon which the jaws are pivoted, and as the jaws are moved horizontally forward and backward they are closed and opened by the pins or rollers in the slots 5. This simple lever and link take the place of the toggle-levers and other parts described in the said patent.

The lugs 6, at the forward end of the tipping plate, take their bearing loosely upon reduced portions of a screw, *h*, which will preferably have a double thread, and which is shown as fitted into a screw-threaded portion of the upright *i*, which corresponds in function and purpose with the so-called "plate-carrying slide" of the said patent.

The said upright also has a rearwardly-projecting arm, 8, in which is fitted the adjusting device or set-screw *j*, which acts upon the rear end of the tipping plate, and consequently adapts the position of the jaws or pullers to last-bottoms of different spring or curvature at heel and toe.

The screw *h*, denominated by me the "lateral or side-adjusting device for the tipping plate and jaws," has a separable milled head, *k*, attached to it, and as the said screw or adjusting device is turned to the right or left, certain shoulders upon it, acting upon the lugs 6 of the tipping plate, move it, with the jaws, laterally with relation to the last-holding pin *m*, (see Fig. 1,) which is to enter the usual hole at the heel end of the last.

If the toe-lasting jaws or pullers are so moved laterally it will be with relation to the usual toe-support.

In Fig. 4 I have shown a modification, in which the heel-supporting pin is made laterally adjustable with relation to the jaws or pullers by means of a screw or adjusting device.

I claim—

1. In a lasting-machine, a last-support and jaws or pullers to turn over the upper at the heel or toe of the last, combined with mechanism to adjust the said jaws or pullers and last-support laterally with relation to each other, to operate substantially as described.

2. The tipping plate and jaws or pullers thereon, combined with an adjusting-screw, made longitudinally movable in the direction of the width of the last, the said screw moving with it, the tipping plate, and pullers, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

SAMUEL E. MOWER.

Witnesses:
ARTHUR G. THOMPSON,
H. GRANT THOMPSON.