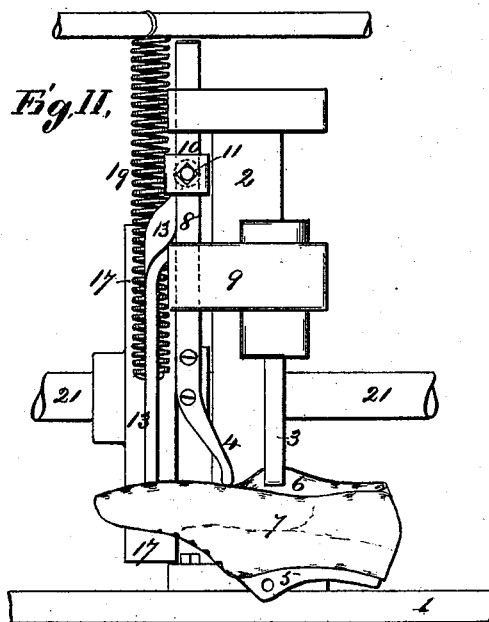
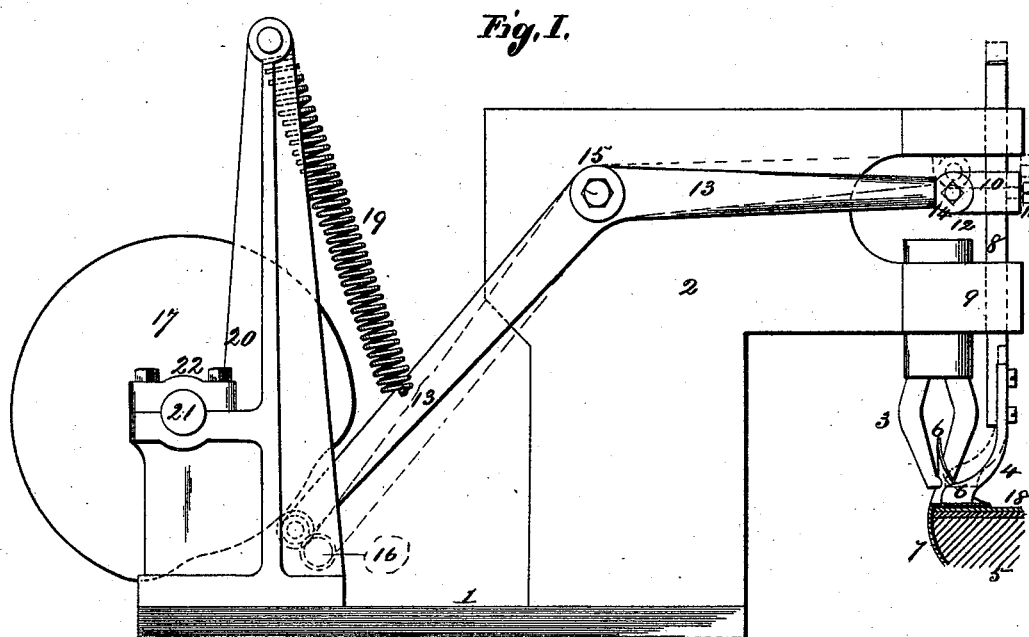


(No Model.)

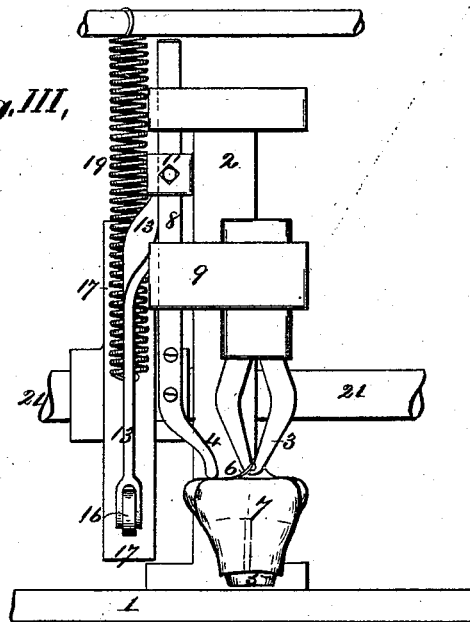
C. SINNING.  
LASTING MACHINE.

No. 456,228.

Patented July 21, 1891.



Attest;  
E. Arthur.  
George E. Lane



Inventor;  
Charles Sinning.  
By Knight Bros.  
Atty.

# UNITED STATES PATENT OFFICE.

CHARLES SINNING, OF ST. LOUIS, MISSOURI, ASSIGNOR TO THE SINNING  
LASTING MACHINE COMPANY, OF EAST ST. LOUIS, ILLINOIS.

## LASTING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 456,228, dated July 21, 1891.

Application filed June 24, 1889. Renewed January 20, 1891. Serial No. 378,420. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES SINNING, of the city of St. Louis, in the State of Missouri, have invented a certain new and useful Improvement in Lasting-Machines, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

The improvement relates to a spring presser-foot by which the edge of the upper is held down on the last to prevent the drawing-nippers from drawing it from position after it has been tacked to the insole.

Figure I is a side elevation of the improvement. Figs. II and III are front elevations showing the last in different positions.

1 is the table, which is supported in any suitable manner.

2 is a standard carrying the nippers 3 and presser-foot 4 to one side of and behind the nippers.

5 is the last.

No novelty is claimed in the nippers *per se*.

In relation to them it need only be said that they are constructed and arranged to descend and nip the edge 6 of the upper 7 and to draw it into position and to crimp it when needed by a rotary movement which is imparted to them. Their action tends to tear the edge of leather from the tack last driven, or at least to draw the edge 6 from position. The presser-foot 4 is adapted to prevent this injurious action of the nippers by pressing down the edge 6, which has already been fixed in position. The presser-foot 4 is attached to a vertically-moving stem 8, which works through the projection 9 of the standard 2. The upper end of the stem passes through a collar 10, which is secured to the stem by a set-screw 11. The collar has a lug or lugs at 12, by which it is jointed to the end of a bent lever 13 by means of a pintle-bolt 14. The bent

lever is fulcrumed to the standard 2 at 15. The rear end of the lever carries an anti-friction roller 16, which runs on the periphery of the cam 17. The construction is such that while a fresh part of the edge 6 is being folded down upon the insole 18 the presser-foot is raised from the edge by the cam 17, and as soon as the tack is driven through the edge 6 the presser-foot descends upon the part of the edge which has been made fast, being forced down by a spring 19, by which the rear arm of the lever 13 is connected to the standard 20, the cam at this time, being in the position seen in Fig. I, allowing the lifting of the rear end of the lever. The cam-shaft is seen at 21, having bearing on the standard 20 at 22.

The upward motion of the presser-foot will be seen to be positive, while its downward pressure is caused by the spring 19, so that it is self-adjusting and accommodates itself to the position of the work, exercising a practically uniform pressure on the edge 6 in all cases.

I claim as my invention—

1. In a lasting-machine, the combination of the nippers 3, a spring-pressed presser-foot 4, adapted to bear resiliently upon the edges of the leather already tacked and arranged at a distance to one side of and behind the nippers, and positive means for retracting it, substantially as set forth.

2. In a lasting-machine, the combination of crimping-nippers 3, a presser-foot 4, lever 13, to which it is connected, a cam 17, acting on the lever to give it a positive upward movement, and spring 19, acting in the other direction to give it a resilient movement, substantially as set forth.

CHARLES SINNING.

In presence of—

SAML. KNIGHT,  
BENJN. A. KNIGHT.