

D. J. Tanley,
Shoe-Sole Machine,
No. 22,095, Patented Nov. 16, 1858.

Fig. 1.

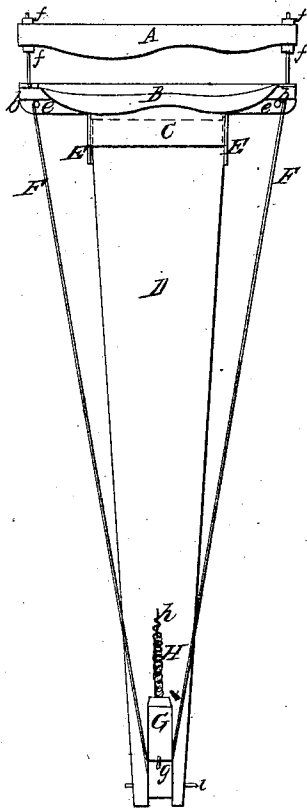


Fig. 2.



UNITED STATES PATENT OFFICE.

DANL. J. TAPLEY, OF DANVERS CENTER, MASSACHUSETTS.

MACHINE FOR MOLDING BOOT AND SHOE SOLES.

Specification of Letters Patent No. 22,095, dated November 16, 1858.

To all whom it may concern:

Be it known that I, DANIEL J. TAPLEY, of Danvers Center, in the county of Essex and Commonwealth of Massachusetts, have invented a new and useful Improvement in Machines for Molding Boot and Shoe Soles; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings, forming a part of these specifications.

To enable others skilled in the art to make and use my invention I will now proceed to describe its construction and operation.

I am aware that a large and expensive machine (Stratton's patent) is in use to a small extent in shoe manufactories to mold whole sets at a time, by "striking them up in nests between formers and counter formers," and then subjecting them to a heavy pressure by means of a screw; but the objection to this arrangement is that the soles (or some of them) are liable to get too dry before the workman has finished his set, which added to its great expense and the slowness and awkwardness of the operation when it is attempted to mold with it but one sole at a time, renders it comparatively valueless and beyond the pecuniary reach of those for whose especial benefit it was designed.

The object of my invention has been to produce a machine for molding, or shaping, soles, by which a workman can conveniently and rapidly mold his soles, every day, and one at a time, so that they may always be in proper season to work—and at the same time a machine which shall be compact, simple, and so cheap that every workman, or shop's crew, can afford to have one.

Figure 1 represents a front view of the machine, in which

A is the convex former the under side of which is shaped nearly like the bottom of a last, and, when depressed, fits into the concave former on the upper side of B; both of these formers being made of cast iron or other suitable material and of any size required.

C is a socket in the lower part of B, (as represented by the dotted lines) to receive the upper end of the wooden standard, D, which is about four feet high, more or less.

E E are side ears through which holes are made for letting screws into the standard,

D, and thereby confining it to the lower former, B.

e e are small holes in the back flange (a top view of which is seen in Fig. 2) through which holes screws are passed to confine the machine to the side of a bench or shop, while the lower extremity of D rests on the floor.

F F is a rod of iron the lower part of which is bent, as seen in Fig. 1, so as to pass under the under side of the foot lever, G, through staple, g; the upper ends passing loosely through guide holes in the ears b b, and upward through the ends of the convex former, A, which is held in place by means of the set nuts, f f f f.

H is a spiral spring the lower end of which is fast to the foot-lever G, a few inches from the fulcrum, i, while the upper end is fast to the staple, h. The action of this spring is to raise the foot-lever with the rods, F, F, and former, A, into the position represented in Fig. 1, whenever it is not depressed by the operator's foot.

The operation of the machine is so obvious as to hardly need an explanation. The workman stands before the machine, places a sole in proper position to be molded between the formers, A, B, and then presses one foot on the top of lever, G,—and the work is done, and (as both hands are at liberty) it is done with great despatch.

I do not claim pressing soles between a concave and convex former in order to shape them to the last, as that is old; nor do I claim any one particular part of the machine independently of its combination; but,

What I do claim as my invention and desire to secure by Letters Patent is—

1. Providing, substantially as described, the lower former, B, with a socket, C, to receive the upper end of the wooden standard, D, and also with projecting ears, b b, to guide the rods, F F, and holes, e e, in the back flange, to admit screws for confining the machine to a bench or the side of a shop.

2. The combination of the spring, H, lever, G, and connecting guide rods, F, F, with the upper former, A, substantially as set forth and for the object specified.

DANIEL J. TAPLEY.

Witnesses:

CHARLES H. BUNDLET,
DAVID B. FOSS.