W. Snell,

Upper Machine,

No. 6,300, Patented Apr. 10, 1849.

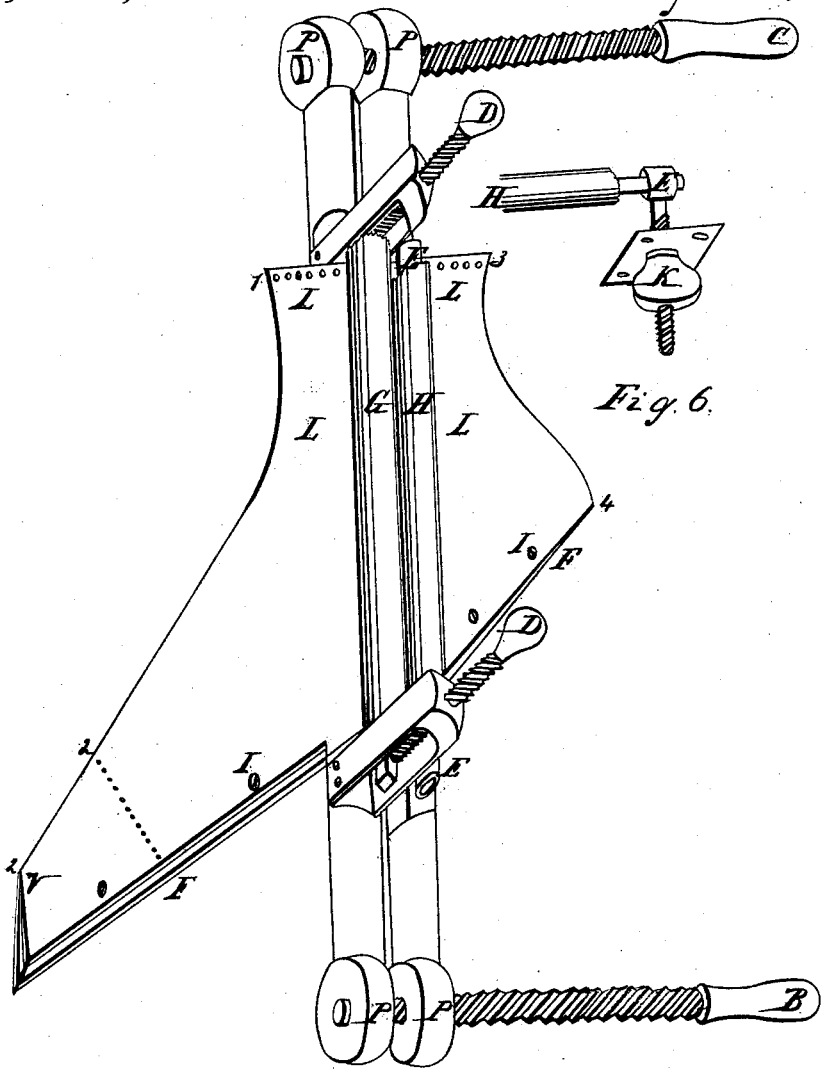

Fig. 6.

N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

WILLIAM SNELL, OF EASTON, PENNSYLVANIA.

MACHINE FOR CUTTING GAITER-BOOTS.

Specification of Letters Patent No. 6,300, dated April 10, 1849.

To all whom it may concern:

Be it known that I, WILLIAM SNELL, of the borough of Easton, in the county of Northampton and State of Pennsylvania, have invented a new and useful Machine for Manufacturing Ladies' and Gentlemen's Gaiter and Half-Gaiter Boots Without a Seam, which machine is capable of molding the boot of any size in exact proportions, and that the following is a full and exact description thereof.

The principle of the machine consists in a compound metallic block, of the gaiter form with projecting heads at top and bottom made to a sixes in size having in itself all the combined proportions such as ankle heel and length—this block is divided in two, the division being in the center between the projecting heads, with a groove in each part to receive rollers G H, A A being the front and back parts of the block, the projecting heads P P being added to receive the screws B C. By means of screws B C, other parts A A can be extended to elevens or twelves size without violating its proportions. When intended for ladies' size it should be set to a two's size gaiter with the projecting heads P P, to receive screws B C which by their means can extend A A to sixes or sevens as above described.

D D are screws to raise the roller G which roller revolves on an iron rod and when raised admits the material under.

E E represent a step and screw (Fig. 6) to receive the neck of roller H on which it revolves as seen in the accompanying drawing, the screw passing through A A; the nut K which works the step and screw E E are secured by the pedestal being screwed to A A and attached to the back of E E—F F the bottom of the block A A having a groove one inch deep to contain wood two inches in width to back the material to, the wood being secured by the screws I I passing through A A.

L L are plug holes thread drilled to receive wood to tack the material to, which tacking might be substituted by pincers attached to the machine at No. 1.

Some feet require a last with a spring. Should a spring be required to the boot I cause A, A to extend by means of screw B. If a drop be required I extend A A by screw C.

When the boot is off the block it will be a quarter of an inch larger than when on—this varies according to the bulk of the machine—hence it is necessary to set it a quarter of an inch under the required measure in order to obtain it correctly.

To enable others to use my invention I will proceed to describe its operation. Figs. 1, 2, 3, 4, which are on the accompanying drawing represent the parts where the trenching patterns are to be tacked, they being numbered also; the trenching patterns belong to and are part of the invention, every pair of machines being supplied with a set to suit the different sizes. By having one pair of patterns of any size, all the others may be obtained by cutting them one quarter of an inch all around, making them larger or smaller. Patterns may be obtained by molding the material to the machine, then taking it off and working the boot from out of it, making it lie flat. I cut my material to the trenching patterns. I make it thoroughly wet and crease it as the numbers on the pattern from 1, to 22, 3, 4, then tack the material to the numbers on A A passing the ends under the rollers G and H both ends of the material coming up between them, drawing it over A A till quite smooth, then securing its smoothness by screws D D and E E pressing down the rollers G H. If the material be of wool, cotton, or silk, I press it over while on the machine with a hot iron, drying it as speedily as possible. If patent leather, calf, kip, &c., I let it dry of its own accord. Thus by molding the material to the machine, I dispense with the cutting, fitting and more than half the binding.

The other mode of applying the principle is, by having a pair of blocks with heads, to every size, without a division with grooves to receive rollers G and H being the same in every other respect—thereby dispensing with the screws B C.

I therefore claim as my invention, and desire to secure by Letters Patent—

The machine with heads, with or without a division—with patterns adapted to its use consisting of cutting and molding ladies' and gentlemen's gaiter and half gaiter boots to any size of any material without a seam—thereby saving fifty per cent in labor and surpassing the old plan in neatness and durability.

WILLIAM SNELL.

Witnesses:
ROBERT SNELL,
ROBERT I. SMITH.