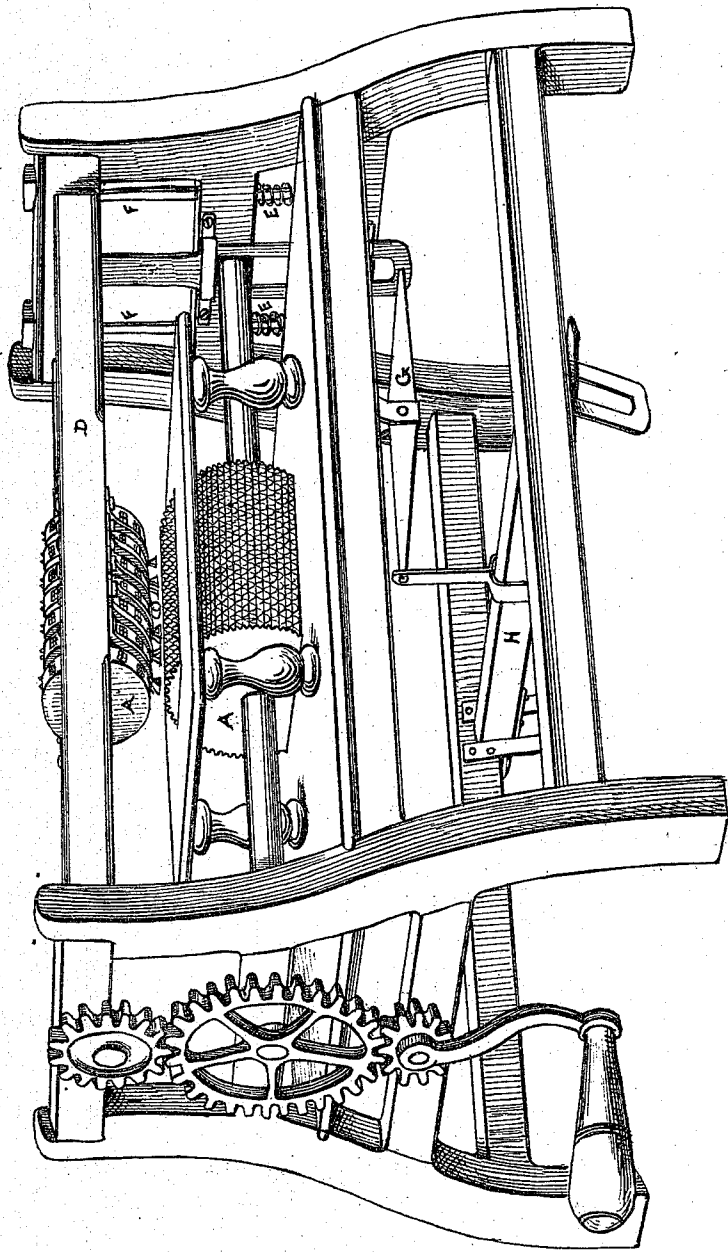


*E. Thomas, 2, Sheets, Sheet 1.*

*Dressing Leather.*

*No. 105,998.*

*Patented Aug. 2, 1870.*



WITNESSES:

*William Graf*  
*Chas. R. Haig*

INVENTOR:

*Edwin Thomas*

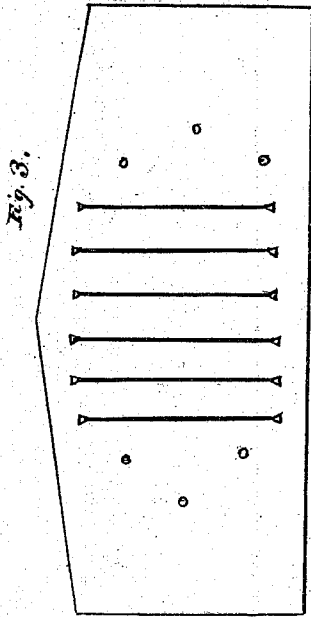
*E. Steets, Steel. 2*

*E. Thomas,*

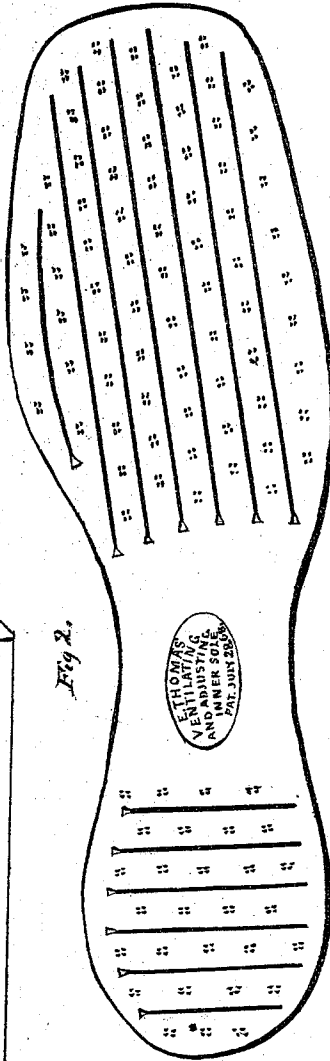
*Dressing Leather.*

*No. 105,998.*

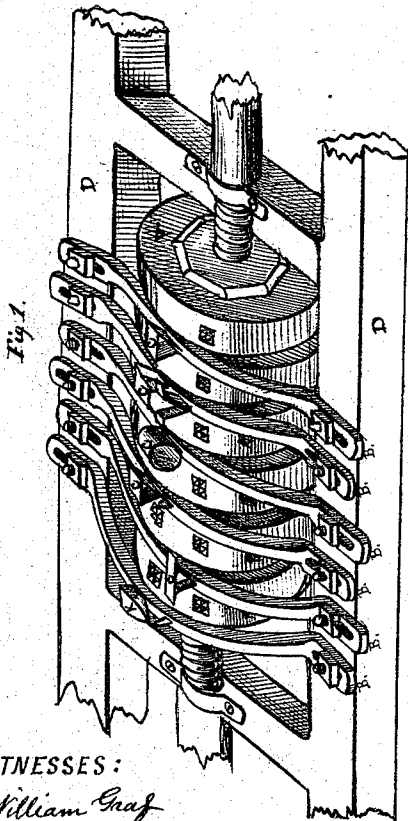
*Patented Aug. 2, 1870.*



*Fig. 3.*



*Fig. 2.*



*Fig. 1.*

WITNESSES:

*William Graf*

*Chas R. Craig*

INVENTOR

*Edwin Thomas*

# United States Patent Office.

EDWIN THOMAS, OF PHILADELPHIA, PENNSYLVANIA.

Letters Patent No. 105,998, dated August 2, 1870.

## IMPROVEMENT IN MACHINE FOR CUSHIONING AND VENTILATING LEATHER.

The Schedule referred to in these Letters Patent and making part of the same

*To all whom it may concern :*

Be it known that I, EDWIN THOMAS, of the city and county of Philadelphia and State of Pennsylvania, have invented a Machine for Cushioning and Ventilating Leather; and I do hereby declare the following to be a full and correct description of the same, reference being had to the accompanying drawing.

Plate 1 represents the machine complete.

Plate 2 shows part of the machine, showing the adjustable bars, with grooving bits or cutters, and the inner sole and counter of a boot or shoe, as grooved by the said machine.

Figure 1 represents the bars, with slotted ends, and bolted to a framed lever, which forms a part of the machine.

Figure 2 represents the inner sole, with grooves, as made by this machine.

Figure 3 shows the counter for a boot or shoe, grooved in the same manner.

The nature of my invention consists of a machine with a series of cutters or grooving-bits, of any suitable shape, and attached to a framed lever, which is held down by screw-bolts and springs, for the purpose of pressing the groove-cutters into the leather, and is raised by a treadle and lever, as may be required, to raise the cutters out of the grooves.

The leather is fed to the cutters by toothed cylinders, propelled by hand or any motive power.

To enable others to understand my invention, I refer to the drawing, in which—

Letters A A mark the toothed cylinders for propelling the leather to the cutters.

Letters B, the adjustable bars, with the cutters attached.

Letters C, the cutters of different shape, such as may be needed for cutting grooves for the same purpose.

Letter D marks the framed lever.

Letters E are the springs, to hold down the lever and press the cutters into the leather.

Letters F are bolts to connect the lever with the spring.

Letter G, a lever that connects with a treadle, for the purpose of raising the framed lever and the cutters.

Letter H marks the treadle.

Letter K, fig. 1, represents a punch, to form a groove by compressing the leather, instead of removing a strip, as done by cutters C.

The object of this machine is for grooving or channeling sole-leather, to be used for the inner soles and counters of boots and shoes, thereby making the soles elastic, self-adjusting, and ventilating.

### *Claim.*

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

A machine, having a series of adjustable bars, with groove-cutters, as herein described, for the purpose of cushioning and ventilating leather, for the inner soles of boots and shoes, substantially as herein set forth.

The above specifications of my said invention signed and witnessed at Philadelphia this 26th day of February, A. D. 1870.

EDWIN THOMAS.

Witnesses:

MICHAEL QUIRK,  
THOS. WELHAM.