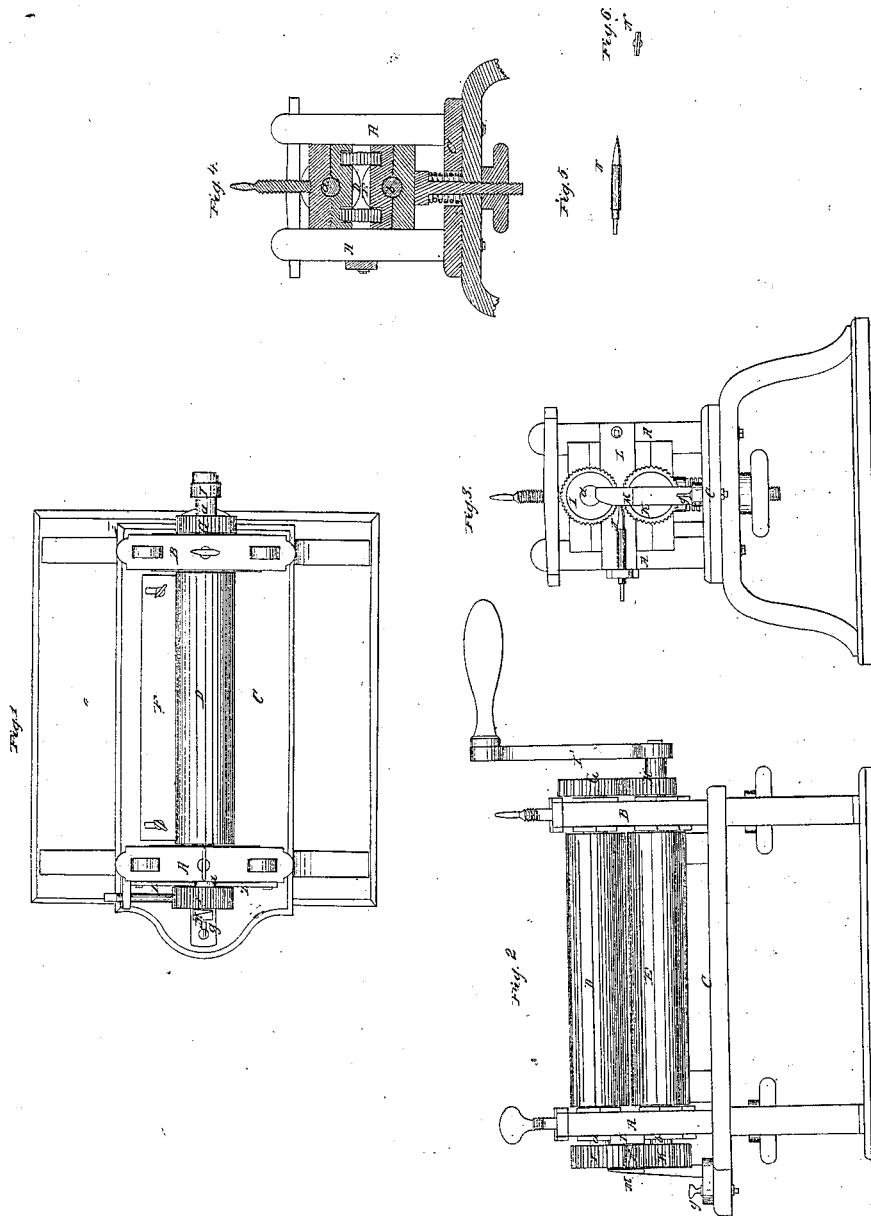


*J. E. Tucker,*

*Shoe-Sole Machine,*

*N<sup>o</sup> 6,890.*

*Patented Nov. 20, 1849*



# UNITED STATES PATENT OFFICE.

JOHN E. TUCKER, OF SUFFOLK COUNTY, MASSACHUSETTS.

## WELT CUTTING AND SPLITTING MACHINE.

Specification of Letters Patent No. 6,890, dated November 20, 1849.

*To all whom it may concern:*

Be it known that I, JOHN E. TUCKER, of the county of Suffolk and State of Massachusetts, have invented a new or Improved Machine for Splitting Welts from Whole Sheets of Leather or other Material at one Operation; and I do hereby declare that the same is fully described and represented in the following specification and accompanying drawings, letters, figures, and references thereof.

My welt machine I generally apply to one end of an ordinary machine for splitting leather and I have so represented it in the drawings. This application of it however is not necessary as it may be used or made separate therefrom.

Of the said drawings Figure 1, denotes a top view of a leather splitting machine having my improved welt machine applied to one end of it. Fig. 2, is a side elevation of the same. Fig. 3, is an end elevation of the welt machine.

In the said drawings A and B, represent two vertical standards erected on a horizontal bed or table C, the said standards being made in a proper manner for sustaining the boxes *a*, *b*, in which the journals of the rollers of the leather splitting and welt machinery are supported and revolve.

D, and E, are the rollers of the leather splitting machine, F, the knife thereof, G, H, the gears by which the rollers D, E, are connected, I, the crank on the shaft of the lower roller; the said crank being for the purpose of enabling a person to rotate the rollers in such a direction as will cause a piece of leather introduced between them to advance against the edge of the cutting knife.

Fig. 4, denotes a section of one of the standards A, B, and the mechanism connected with it for the purpose of regulating the distance of one roller from the other the same being essentially like that in common use. It therefore needs no description.

On the outer ends of two of the adjacent journals of the rollers two short rollers I, K fluted or not as occasion may require, are respectively fixed and arranged. The rear vertical faces of these short rollers are placed against a smooth bearing plate L, while against their front faces, the flat sides of a vertical knife M, is placed, the said knife being seen in Figs. 1, 2, and 3. It is fastened to the frame by a screw nut as seen at *g*.

A chisel N, (see Fig. 5, which represents

a side view and Fig. 6, which denotes an end view of it,) is arranged horizontally in rear of the two rollers and has its cutting edge disposed nearly in the junction or nearest place of meeting of the two rollers and in the plane of the diagonal of the rectangle thereof and so that when the rollers are revolved in the direction denoted by the arrows (as marked thereon in Fig. 3) and a piece of leather is introduced between them the said chisel while is forced against it will cut diagonally and into two equal parts the strip separated therefrom by the knife M, against the cutting edge of which and at the same time the piece of leather will be forced by the action of the rollers. The rollers are supposed to be near together as when revolved to grasp the leather and carry it forward with sufficient force to cause the knife M, not only to separate a strip from the piece of leather but at the same time the chisel to split the leather diagonally into two welts or pieces as specified.

I am aware that there is nothing new in splitting a strip of leather by two rollers and a chisel in the manner above described, the strip having been previously cut or made before being operated on by them. My machine makes the strip and cuts it diagonally into two equal portions, at one and the same time, from a large piece of leather, and in these respects its operation differs from other welt machines. By the employment of the two rollers I, K, the knife M, and chisel N, combined or arranged in the manner above set forth, I am enabled to produce such effects and a machine exceedingly convenient for making welts from pieces of leather of any width equal to or greater than the length of each of the feed rollers.

I therefore claim—

The combination and arrangement of the two short cylinders I, K, the knife M, and chisel N, arranged at one end of an ordinary leather splitting machine substantially in the manner and for the purpose of forming strips of leather and cutting them into welts at one and the same time and from larger pieces of leather as specified.

In testimony whereof I have hereto set my signature this fourteenth day of September A. D. 1849.

JOHN E. TUCKER.

Witnesses:

MELGAR F. HOBBS,  
F. GOULD.