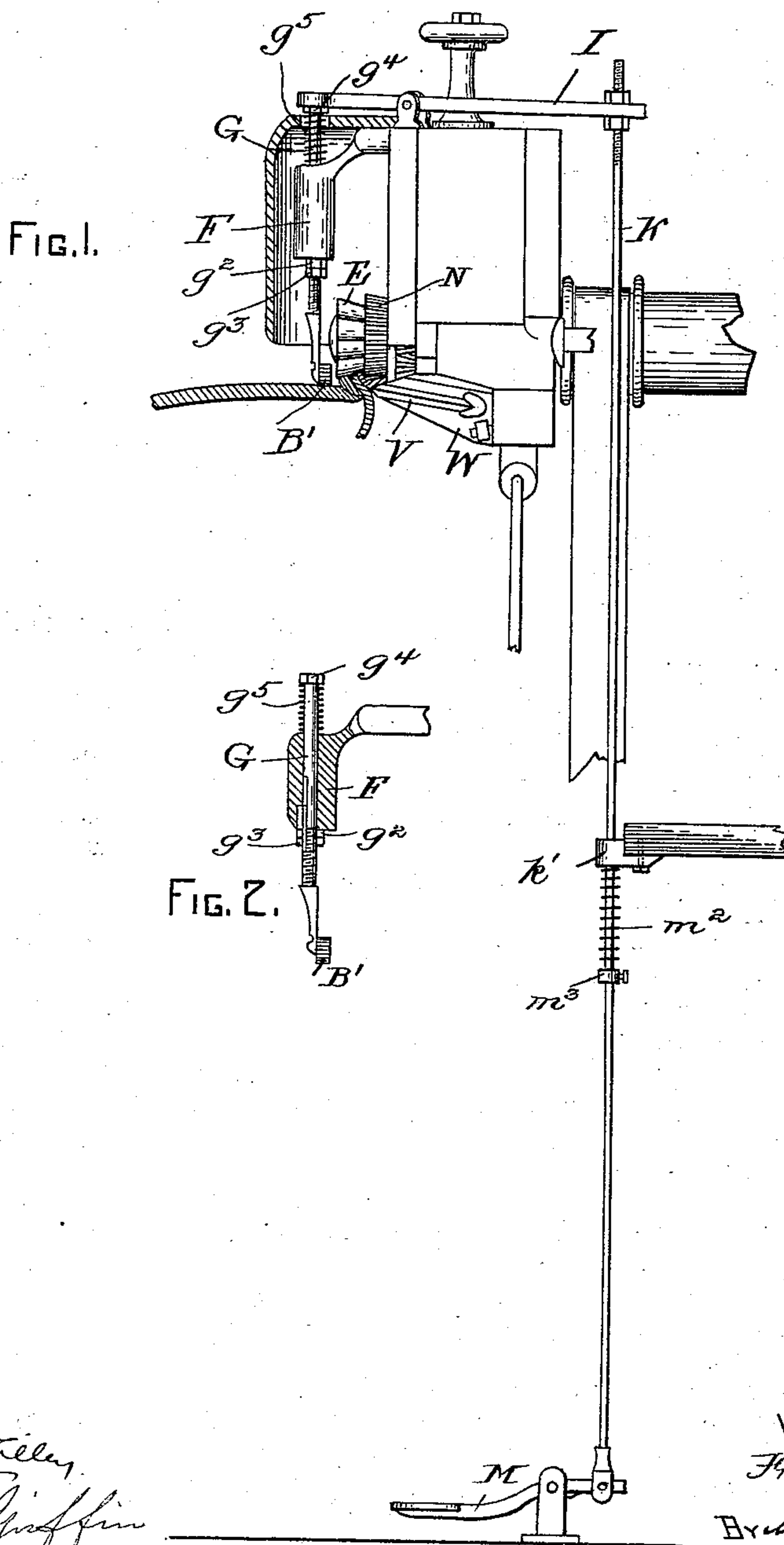


(No Model.)

F. H. WARREN.  
INSEAM TRIMMING MACHINE.

No. 488,591.

Patented Dec. 27, 1892.



WITNESSES.  
*Samuel Kelley*  
*Samuel Griffin*

INVENTOR.  
*Frank H. Warren*  
By *Maynard H. Beach*  
ATTYS.

# UNITED STATES PATENT OFFICE.

FRANK H. WARREN, OF LYNN, ASSIGNOR TO GEORGE H. P. FLAGG, OF  
BOSTON, MASSACHUSETTS.

## INSEAM-TRIMMING MACHINE.

SPECIFICATION forming part of Letters Patent No. 488,591, dated December 27, 1892.

Application filed June 25, 1892. Serial No. 437,997. (No model.)

*To all whom it may concern:*

Be it known that I, FRANK HERBERT WARREN, of Lynn, in the county of Essex and State of Massachusetts, have invented an Improvement in Inseam-Trimming Machines, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to inseam trimming machines for boots and shoes and is designed to be an improvement upon an apparatus set forth in Letters Patent No. 456,041, dated July 14, 1891, to Adolphus La Boute, and to which reference is hereby made for a clearer understanding of the present invention. In that patent there is shown a cutter head mounted upon a horizontal shaft, a feed wheel loosely mounted upon that shaft and rotated at a slower speed than the cutter head and means for pressing the welt of the shoe against the feed wheel. There is also shown a rest consisting of an upright spindle provided with a wheel or roller to bear upon the sole and arranged to be adjusted to a bracket secured to the head of the machine. By the present invention the rest is made adjustable by means of a treadle and connections so that a greater or less amount of leather may be trimmed from the up-turned edges at any point of the seam without stopping the operation of the machine.

In the accompanying drawings forming part of this specification, Figure 1 is a side view of the best form of my machine and Fig. 2 is a detail partly in section.

Secured to and rotated by a horizontal shaft B is a cutter E. Loosely mounted upon shaft A is a feed wheel N geared to shaft S by which said feed wheel is rotated at a slower speed than cutter E. Mounted upon a yielding support W is a disk V adapted to maintain the welt of a boot or shoe in engagement with feed wheel N all of which will be clearly understood by reference to the above mentioned Letters-Patent.

Secured to the head of the machine is a bracket F in which is a spindle G, splined therein so as to move vertically. This spindle

G is screw-threaded on its lower portion and provided with nuts  $g^2$   $g^3$  whereby its vertical play is limited as desired. Upon the spindle G is mounted an anti-friction roller or wheel B' whose periphery is roughened to engage the sole of the shoe. The upper end of the spindle which passes through the hood of the machine has a stop or nut  $g^4$  between which and the top of the bracket F is a spring  $g^5$  whose tendency is to lift the spindle from the shoe against the pressure of lever I. Lever I is fulcrumed in the head of the machine and acts against the spindle G. The opposite end of lever I is adjustably secured to rod K, which extends downwardly through guide  $k'$  on a suitable shelf or bracket, and is pivoted to treadle M. Spring  $m^2$  on rod K between guide  $k'$  and a set collar  $m^3$  depresses the rod as shown.

The operation of the improvement will be readily appreciated. The machine being in operation, the operator may depress rest B' at will thus varying the amount of leather cut from the inseam at any part; the advantages of the improvement being clearly understood by those skilled in the art to which the invention relates.

Having now fully described my invention, without limiting myself to the precise details shown I declare that what I claim is:

In a machine of the character described the combination of a yielding support, a feed wheel opposed to the support, a rotary cutter mounted outside the feed wheel, a bracket, a spindle reciprocating therein constituting a rest, check nuts upon the spindle below the bracket, a lever having one end connected with the spindle; a spring on the spindle between the bracket and the lever, a treadle and an adjustable connection between the treadle and the lever, as and for the purposes set forth.

F. H. WARREN.

Witnesses:

J. E. MAYNADIER,  
JOHN R. SNOW.