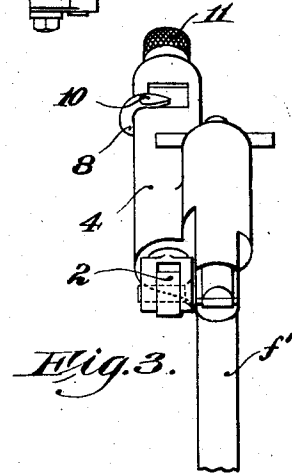
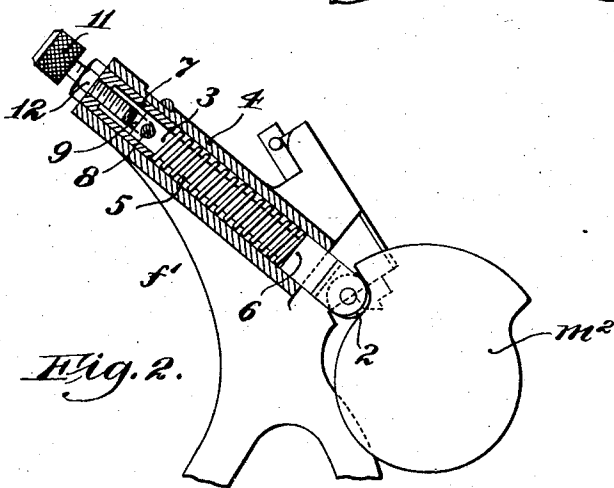
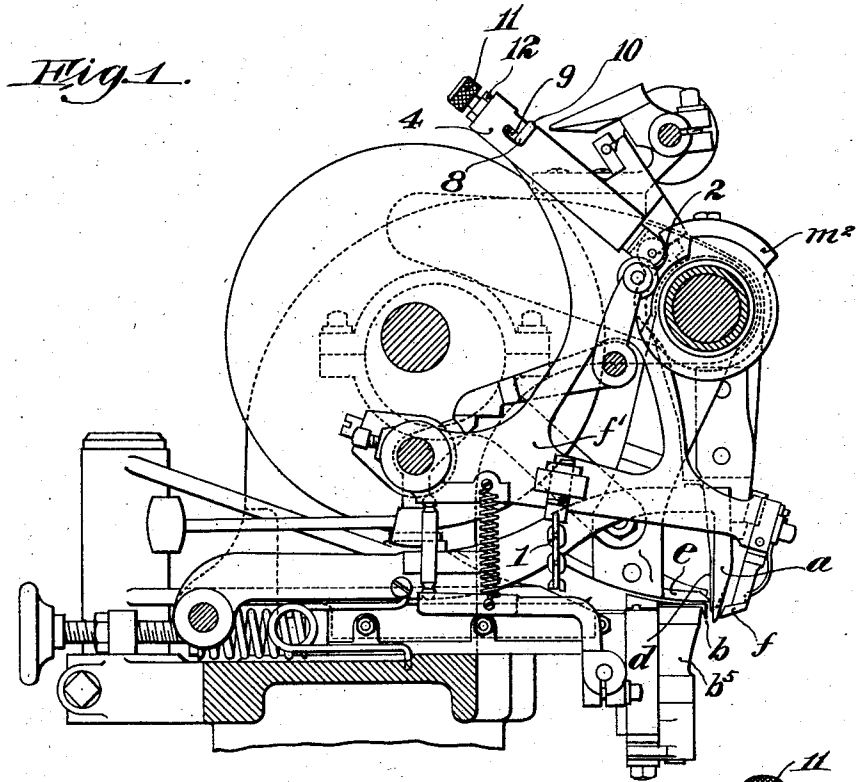


C. J. CADY.
 ROUNDING MACHINE.
 APPLICATION FILED JAN. 27, 1908.

1,010,854.

Patented Dec. 5, 1911.



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UNITED STATES PATENT OFFICE.

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ROUNDING-MACHINE.

1,010,854.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, CARSON J. CADY, a citizen of the United States, residing at Rochester, in the county of Monroe and State of New York, have invented certain new and useful Improvements in Rounding-Machines; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The present invention relates to an improvement in rounding machines.

The Goodyear universal rounding and channeling machine which is illustrated with substantial accuracy in Letters Patent of the United States granted to French and Meyer, No. 599,602, is provided with a so-called "extension edge attachment", by means of which the sole may be rounded with a variable width edge, but the machine of said patent is not adapted, without a change of the cam, to trim shoes in which the width of the extension varies both on the inside and the outside of the forepart of a sole. As a consequence, in trimming such shaped soles the operator guides the shoe by hand during the trimming of the forepart. The variations in the shapes of the soles used necessitate changes in the cams for different styles, and rather than take the pains to change the cams the operators have found it convenient to dispense with the use of the cam altogether and rely solely upon the eye in trimming the forepart. This, however, requires considerable skill on the part of the operator in order to present the shoe by hand without other support than that given by the sole support.

The object of the present invention is to produce a construction by means of which the operator is assisted in guiding the shoe by means of a guide, the position of which may be varied by the operator during the continued operation of the machine.

In the illustrated embodiment of the invention it is shown as a modification of the

construction of the said Goodyear universal rounding and channeling machine.

In the accompanying drawings illustrating so much of said machine as is necessary for an understanding of this invention; Figure 1 is a sectional elevation, and Figs. 2 and 3 illustrate details of construction herein-after referred to.

The illustrated embodiment of the invention is described as follows:—The chopping knife *e*, the sole support *b*⁵, channeling knife *b*, the clamp plate *d*, the guide *a* which acts continuously along the shank and forepart, and the forepart guide *f*, are supported, arranged, actuated and operated as in said patent, except that the forepart guide *f* supported upon the guide arm *f'* is arranged to be brought down by a treadle connected with the chain *l* to a normal position in which it engages the upper of the shoe and presents the sole to the chopping knife so as to trim the sole at what may be termed its normal width. This normal position, or position of minimum sole edge width, of the forepart guide is secured by a stop which consists of the roll 2 mounted on the plunger 3 which is supported in a sleeve 4 carried by the arm *f'*, best illustrated in Fig. 2. This roll 2 engages the cam *m*² which is automatically moved in the operation of the machine step by step to vary the position of the forepart guide during the trimming of the sole. The plunger 3 is surrounded by a spring 5 which engages the shoulder 6 at one end and the pressure adjusting sleeve 7 at the other. A pin 8 passes through the plunger 3 and extends out through a slot 9 in the sleeve 4. The spring pressing on the shoulder 6 tends to force the plunger downwardly and the pin 9 by engagement with the end of the slot limits the downward movement of the plunger. The spring 5 is a rather stiff spring and normally holds the plunger in the position illustrated in Fig. 1, and under these circumstances the cam *m*² acts to move the arm *f'* and thereby to vary the position of the forepart guide *f* during

the trimming operation. The operator may, however, by exerting additional pressure on the treadle, compress the spring and thereby move the forepart guide *f* independently of the cam *m*². The end of the pin 8 extends from its point of emergence in the slot 9 in the side of the sleeve 4 up and over the top of the sleeve, where its end 10 forms an index pointer which the operator may observe as he depresses the treadle and note the extent of compression of the spring and consequently determine the width of the forepart sole edge. It has been found convenient to determine the maximum variation which may be given by the operator in compressing the spring, and to this end an adjusting screw 11 is screwed through the end of the sleeve 7; its end, by engagement with the pin 8, limits the movement of the plunger 3, thereby determining the maximum variation from the normal, which can be accomplished by the operator with a given adjustment. A set nut 12 is provided for locking this adjusting screw in position.

In the foregoing description the illustrated embodiment has been described as used in connection with the device when used in the manner referred to in the said patent for trimming Baltimore edge soles. Thus the cam *m*² would be used to determine the variation of the extension widths on the outside of the forepart of the sole, and the operator would by a treadle compress the spring and vary the extension width of the sole on the inside of the forepart by eye.

The present device may also be used in connection with the machine as used in trimming Scotch edged soles; that is, without the use of the cam *m*² acting in other capacity than as a stop to determine the normal position of the forepart guide. In this case the operator would determine the variation of the extension width on both the inside and the outside of the forepart by the treadle and connections described.

The present invention is not limited to use in connection with a rounding machine of this sort, as it may be used in connection with other and different forms of rounding machines and irrespective of whether it be provided with an automatic means for varying the extension width of the sole.

Having described the invention, what is claimed is:—

1. A rounding machine, having, in combination, a knife, a guide and coöperating means for normally positioning the guide with relation to the knife, having provision, under control of the operator, for moving the guide beyond its normal position during the continued operation of the machine, substantially as described.

2. A rounding machine, having, in com-

bination, a knife, a guide for the work, a stop for positioning the guide with relation to the knife, and means, under control of the operator, for moving the guide beyond the position normally determined by the stop, substantially as described.

3. A rounding machine, having, in combination, a knife, a guide for the work, means, including a spring, for positioning the guide with relation to the knife acting to hold the guide in normal position and having provision, under control of the operator, for moving the guide beyond its normal position during the continued operation of the machine, substantially as described.

4. A rounding machine, having, in combination, a knife, a guide for the work, automatic means for moving the guide with relation to the knife, and means, under control of the operator, for varying the operation of the automatic means, substantially as described.

5. A rounding machine, having, in combination, a knife, a guide for the work, a cam device for automatically moving the guide with relation to the knife, and having provision, under control of the operator, for moving the guide beyond its normal position during the continued operation of the machine independently of the cam device, substantially as described.

6. A rounding machine, having, in combination a knife, a guide for the work, a cam, a support for the guide having a portion engaging the cam and means for moving the guide independently of the cam while the support is in engagement therewith, substantially as described.

7. A rounding machine, having, in combination, a guide for the work, a cam, a pivoted arm supporting the guide and provided with a yielding portion engaging the cam and normally acting to move the guide to vary its position with relation to the knife in conformity with the shape of the cam but adapted to yield at the will of the operator to vary the position of the guide with relation to the knife irrespective of the shape of the cam, substantially as described.

8. A rounding machine, having in combination, a knife, a guide, and coöperating means for normally positioning the guide with relation to the knife to determine the minimum sole edge width, having provision, under control of the operator, for moving the guide from its normal position to increase the sole edge width, and a stop for determining the maximum width, substantially as described.

9. A rounding machine, having, in combination, a knife, a guide, and coöperating means for normally positioning the guide with relation to the knife for determining

the minimum sole edge width having provision, under control of the operator, for moving the guide to increase the sole edge width, and an adjustable stop for determining the maximum width, substantially as described.

5 10. A rounding machine, having, in combination, a knife, a guide, and cooperating means for normally positioning the guide with relation to the knife, having provision,
10 under control of the operator, for moving

the guide beyond its normal position during the continued operation of the machine, and a pointer for indicating the position of the guide, substantially as described.

In testimony whereof I affix my signature, 15
in presence of two witnesses.

CARSON J. CADY.

Witnesses:

FRANCIS JOSEPH NUGENT,
WALTER IRVING GILLETTE.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."