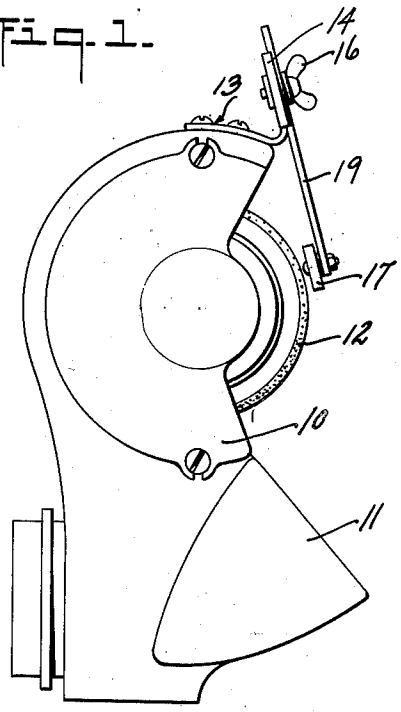
Aug. 12, 1952 R. SEMINARA 2,606,404

SHOE TREATING MACHINERY

Filed Feb. 14, 1950

Fig. 1.



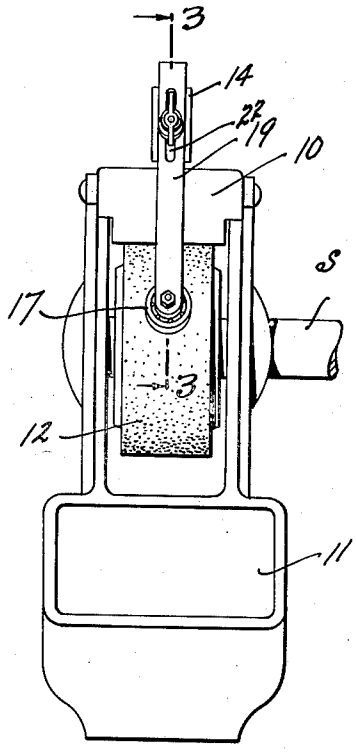


Fig. 2.

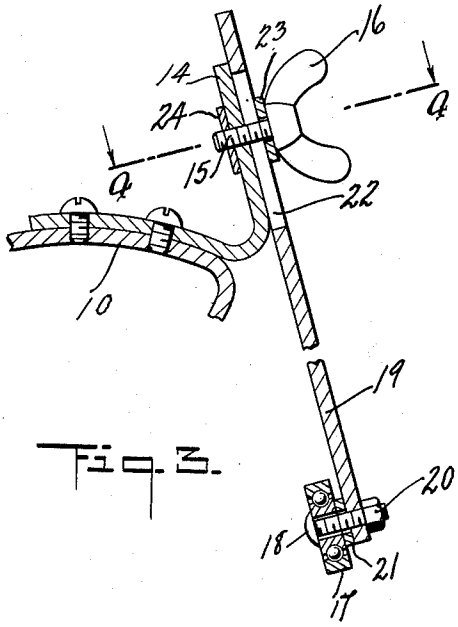


Fig. 3.

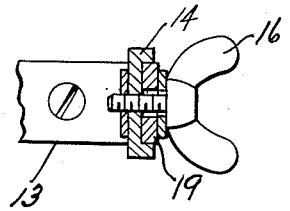


Fig. 4.

INVENTOR.
Robert Seminara
BY
S. Stephen Baker
ATTORNEY

Patented Aug. 12, 1952

2,606,404

UNITED STATES PATENT OFFICE

2,606,404

SHOE TREATING MACHINERY

Robert Seminara, New York, N. Y., assignor of fifty per cent to Edward W. White, Brooklyn, N. Y.

Application February 14, 1950, Serial No. 144,062

3 Claims. (Cl. 51—102)

1

This invention relates to shoe treating machinery employed in roughening the bottom of a shoe preparatory to applying the sole thereto. The apparatus is generally used at the factory although it may be used elsewhere where a sole is to be applied to a shoe.

Prior to the cementing or other securing of a sole to a shoe, the bottom thereof is generally roughened, particularly around the edges or margins. For this purpose, the shoe bottom is held against a rotating roughening or abrading wheel. The operator holds the shoe so that its bottom makes contact with the rotating wheel, and, in particular, he generally holds the margin of the shoe bottom against the wheel, rotating it to insure suitable roughening of the entire margin.

In effecting the above mentioned roughening step, operators have generally encountered difficulties in suitably maintaining the shoe against the wheel because of the rapid rotation of the wheel and its tendency to displace the shoe in opposition to the action of the operator. The operator must adjust his own applied pressure in relation to the tendency of the wheel to throw the shoe downwardly, and the roughening action is often quite erratic. The shoe, under the influence of the diverse or opposing forces may slip from the operator's hand since there is no method of holding or guiding it except by the unaided hands of the operator.

With the foregoing in mind, I have devised an apparatus to be used in connection with an abrading or roughening wheel of the type hereinabove described which serves as a stabilizer or guide for the shoe while it is acted upon by the wheel. Such apparatus takes the form of a roller which is mounted so as to rotate in a plane perpendicular to the plane of rotation of the roughening wheel and is disposed adjacent to said wheel so that the edge of the shoe bottom may bear against the roller while the shoe bottom is being roughened, the roller permitting convenient and facilitated rotation of the shoe so as to properly treat the marginal edges of the shoe bottom. The roller is arranged to be longitudinally adjustable so that it may accommodate abrading wheels of different sizes or as may suit the convenience of the operator.

The invention will be further understoon from the following describtion and drawings in which:

Fig. 1 is a side elevational view of a shoe bottom roughening apparatus provided with the device of the instant invention.

Fig. 2 is a front elevational view thereof.

Fig. 3 is a fragmentary, enlarged cross-sectional view as taken along the lines 3—3 of Fig. 2.

2

Fig. 4 is a cross-sectional view as taken along the lines 4—4 of Fig. 3.

The housing 10, including the waste receptacle 11, is conventional as is the abrading or roughening wheel 12. Wheel 12 is mounted for rotation within the housing generally by a shaft S actuated by an electric motor as will be evident to those skilled in the art. Wheel 12 has an exposed front operating surface and generally rotates downwardly in conventional mechanisms, although, if desired, the wheel may rotate upwardly without interfering with the operation of the invention.

To the top of the casing 10 is first applied a bracket 13 having a substantially upstanding arm 14 formed with sides so that arm 14 is channelled. An opening is formed therethrough for receiving the threaded shank 15 of a set screw 16 for purposes to be hereinafter described.

A guiding roller or stop 17 is maintained adjacent to the working surface of wheel 12. Roller or stop 17 includes a ball bearing as illustrated in Fig. 3 and it rotates in a plane perpendicular to the plane of rotation of wheel 12. Bolt 18 secures roller 17 to an elongated arm 19 by a nut 20, a washer 21 being disposed between the roller 17 and arm 19.

In the form shown, the arm 19 is flat and the roller 17 rotates in a plane parallel to the flat surface of the arm 19.

Arm 19 is formed with an elongated slot 22 through which the shank 15 of set screw 16 penetrates for securing the arm 19 to the bracket arm 14. A washer 23 may be employed for insuring proper tightening action while the nut 24 engages the shank 15 when the set screw is applied and tightened. Arm 19 is received within the edge channels of bracket arm 14 when it is connected thereto so that the assembly is rendered sturdy and stable. The presence of elongated slot 22 provides for longitudinal adjustment of arm 19 and consequently of roller 17 so that the roller may be disposed immediately adjacent the wheel 12 or at a height satisfactory to the requirements or wishes of the operator.

When a shoe bottom is to be roughened around its margins, the operator holds the bottom flatly against the periphery of wheel 12 with the bottom or sole edges in contact with the roller 17 which is positioned offset from and above the center of the operating surface of the wheel 12 and which, it will be noted, extends past the

lower end of arm 19 so as to permit such contact. He then turns or rotates the shoe so that the entire margin becomes roughened by the wheel. During the rotating operation, the shoe bottom edge is always in contact with the roller 17, the roller rotating pursuant to the rotation of the shoe bottom. In this way, the operator is provided with a perfect guide for rotation of the shoe, which guide does not present any resistance pursuant to the operator's action in rotating the shoe bottom in a plane parallel to the normal plane of rotation of roller 17. It is thereafter unlikely that the shoe will fall from the operator's hands or will slide about erratically since he need merely place the bottom edge against the roller 17 while the wheel 12 is rotating. This will provide such stability and certainty of operation as to result in a more workman-like job performed with greater speed and dexterity.

After the shoe bottom has been roughened in this manner, the sole will be applied and secured in conventional fashion to complete the operation.

What is claimed is:

1. The combination with a shoe bottom roughening machine having a housing and a rotatable roughening wheel within said housing and having an exposed, front operating surface, of a guide device for guiding the roughening of shoe bottoms, said device comprising a bracket connected to said housing and having an upstanding arm, an elongated arm slidably adjustable longitudinally against said bracket arm, and means at the top of said elongated arm for securing it in various positions of longitudinal adjustment, and a roller at the lower end of said arm and opposite to the secured portion thereof and positioned adjacent to and above the center of the front operating surface of said rotatable roughening wheel, said roller being freely rotatably mounted on said arm so as to rotate in a plane perpendicular to the plane of rotation of said roughening wheel when a moving shoe bottom is moved against said front operating surface and against said roller, said roller extending past said lower end of said arm in the direction of its length.

2. The combination with a shoe bottom roughening machine having a housing and a rotatable roughening wheel within said housing and having an exposed, front operating surface, of a guide device for guiding the roughening of shoe bottoms, said device comprising an elongated arm one end of which is connected to said housing, and a roller at the other end of said arm and extending past said arm in the direction of its length, the axis of the elongated arm being perpendicular to the axis of the roller, said roller being positioned adjacent to, and offset from, the center of the front operating surface of said rotatable roughening wheel, said roller being freely rotatably mounted on said arm so as to rotate in a plane perpendicular to the plane of rotation of said roughening wheel when a shoe bottom is moved against said roughening wheel and against said roller.

3. The combination according to claim 2 and wherein said roller is positioned above the center of said front operating surface of said rotatable roughening wheel.

ROBERT SEMINARA.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
436,156	Simpson	Sept. 9, 1890
1,042,773	Ellison	Oct. 29, 1912
1,353,821	Bassett et al.	Sept. 28, 1920
1,983,591	Bazzoni	Dec. 11, 1934
2,213,413	Shaw	Sept. 3, 1940
2,294,715	Bruno	Sept. 1, 1942
2,358,959	Brown	Sept. 26, 1944
2,424,415	Perri	July 22, 1947
2,465,528	Goodwin	Mar. 29, 1949
2,489,453	Fouquet	Nov. 29, 1949

FOREIGN PATENTS

Number	Country	Date
416,667	Great Britain	Sept. 18, 1934
88,620	Sweden	Feb. 23, 1937