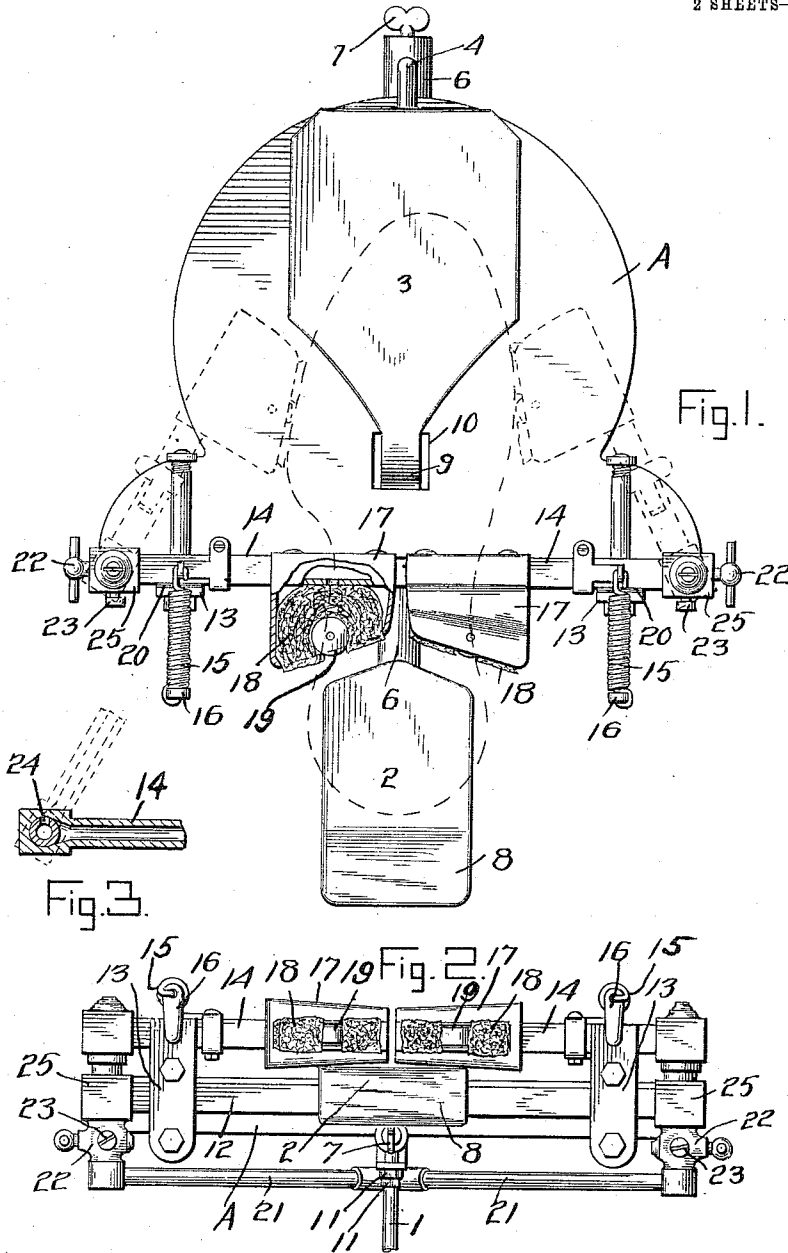


A. WEST & C. C. JACKMAN.
 AUTOMATIC SHOE OR EDGE WETTER.
 APPLICATION FILED JULY 1, 1908.

995,507.

Patented June 20, 1911.

2 SHEETS—SHEET 1.



Witnesses

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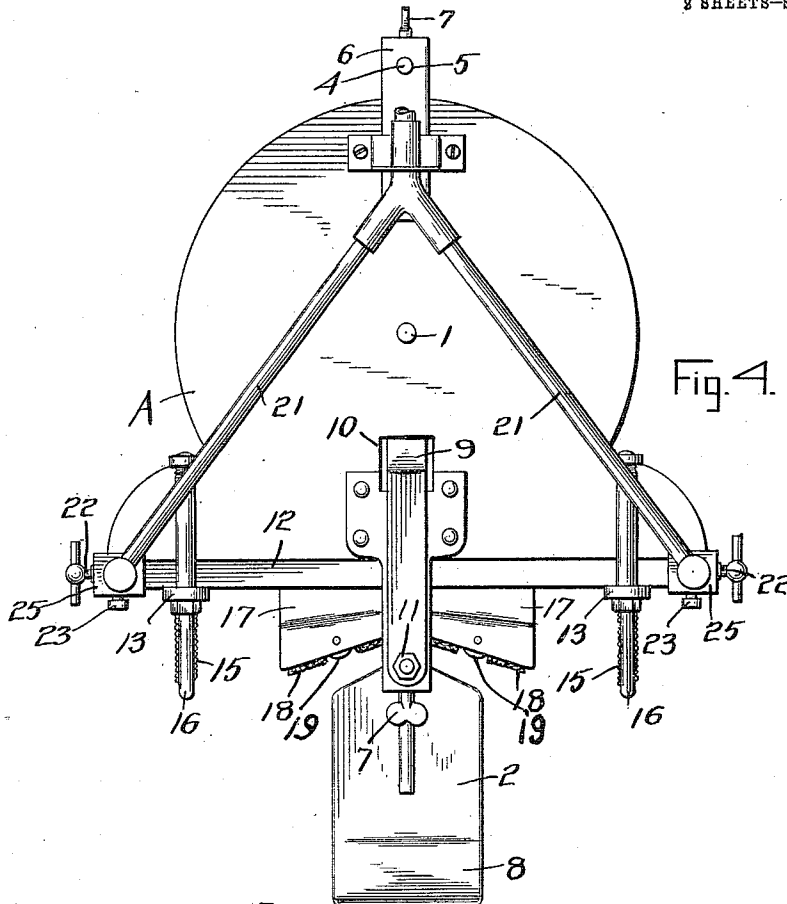


Fig. 4.

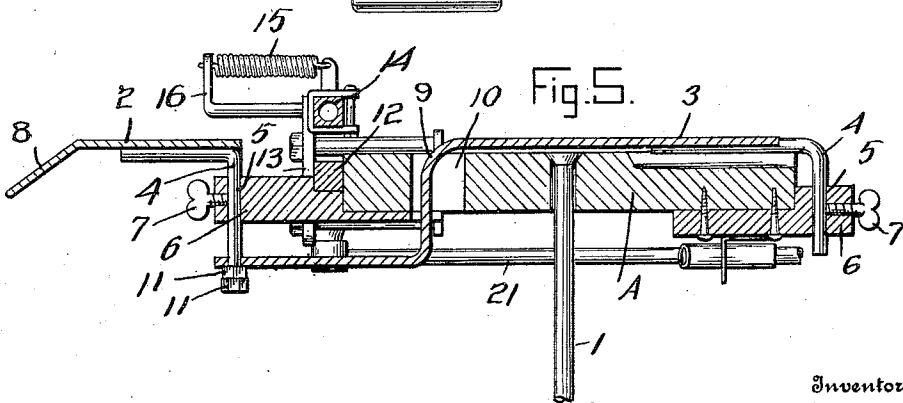


Fig. 5.

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UNITED STATES PATENT OFFICE.

ALONZO WEST AND CHARLES C. JACKMAN, OF PORTSMOUTH, OHIO, ASSIGNORS OF
ONE-THIRD TO PEARL E. SELBY, OF PORTSMOUTH, OHIO.

AUTOMATIC SHOE OR EDGE WETTER.

995,507.

Specification of Letters Patent. Patented June 20, 1911.

Application filed July 1, 1908. Serial No. 441,501.

To all whom it may concern:

Be it known that we, ALONZO WEST and CHARLES C. JACKMAN, citizens of the United States, residing at Portsmouth, in the county of Scioto and State of Ohio, have invented certain new and useful Improvements in Automatic Shoe or Edge Wetters, of which the following is a specification.

Our invention relates to an improvement in automatic shoe or edge wetters, the object being to provide a simple mechanism, as the name implies, to wet or color the edges of shoe soles or heels.

Modern shoe factory requirements demand accuracy and speed, and accordingly our invention provides means permitting the operator to pass a shoe through the machine with great rapidity and yet without any liability either of wetting the upper or of failing to wet the edge of the sole. The wetting of the side edges of a sole is comparatively simple but it is equally important that the sole edge shall be wetted at the point of the toe and also at the opposite shank portions, and accordingly our invention aims to provide means for accomplishing the proper wetting of the edge of a sole under all the varying conditions of shape, curvature, height, etc., met with in shoe manufacture. To this end we provide pads or brushing members maintained properly moist and held yielding in position to engage and moisten the toe and all other edge portions of the shoe without liability of wetting the upper. In the preferred embodiment of our invention, the apparatus is arranged to permit the shoe to be slid or moved quickly forward in an approximately straight line between these pad portions, which are provided with means for automatically compelling them to follow in wetting contact with the curved edge surfaces of the sole as the shoe is moved forward.

Preferably also our invention includes means for preventing an undue squeezing out or depositing of moisture on the sole, said means also preventing the undue wearing away of the pads.

The further constructional features and advantages of our invention will be pointed out more at length in the course of the following description considered with reference to the accompanying drawings, in which we have shown one of the preferred embodiments of the invention.

In the drawings, Figure 1 is a top plan view of the machine, parts being broken away for clearness of illustration and the operation further exemplified by showing the shoe and wetting members in dotted line position; Fig. 2 is a view thereof in front elevation; Fig. 3 is a horizontal sectional view of the means provided for controlling the delivery of fluid to the pads; Fig. 4 is a bottom plan view of the machine; and Fig. 5 is a central vertical longitudinal section thereof.

On a suitable base A supported or clamped in position on a work bench or the like by bolts 1 are rests or shoe-directing plates 2, 3, held in desired vertical adjustment by angle rods or arms 4 clamped in vertical holes 5 in the brackets or base extensions 6 by thumb screws 7. As shown, the two rests are inclined at their forward ends at 8, 9, to facilitate the free movement of the shoe, the latter being indicated in dotted lines in Fig. 1, and the narrow inclined portion 9 of the rest 3 passes through an opening 10 in the base and rests at its forward end on nuts 11 on the rod 4. The superposed moisture supplying and applying mechanism is shown as carried by a cross bar 12 held by clamps 13 immovably on the base, and consists primarily of arms 14 pivoted at their outer ends to swing from approximate alinement with each other across the machine, as shown in full lines, to the dotted line position Fig. 1, said arms being retained in their full line position against the upper ends of the members 13 as stops, by springs 15 secured to said arms at one end and at their other ends to stationary brackets 16 projecting from the upper ends of the members 13. The arms 14 are provided at their inner meeting ends with brush hoods 17 in whose cavities are moisture-receiving and delivering devices, preferably sponges 18, which absorb the moisture and extend forward in the path of the sole edge beyond the edge of the hoods sufficiently to apply the right amount of moisture. Hard surfaces, preferably rotary in the form of anti-friction rollers 19, are provided to engage the sole edge of the shoe so as to restrict the pressure and frictional abrading contact of the shoe against the sponges or other absorbent material 18. After the shoe has passed through the machine and the moistening or wetting devices

are released therefrom, they fall back from their dotted position Fig. 1 to their full line position as therein shown, striking preferably against pads 20 of rubber or other soft material at the front sides of the stops 13. As the arms 14 and their moistening devices are swung by the engagement of the shoe from the full line position to the dotted line position the water or other liquid is supplied thereto through pipes 21 leading from a reservoir (not shown) through controlling cocks 22 held adjustably by set screws 23 in such position that the valve openings 24 in the stationary posts 25 will permit the flow of the liquid into the hollow pipes 14 at the proper time in the opening movement of the moisteners to maintain the sponges or other moisture holding devices 18 properly supplied. The valve openings or orifices 24 aline with the hollow pipes or arms 14 only when the latter are swung away from normal position, and are automatically closed when said arms are in normal position as shown in full lines in the drawings.

The manner of using our invention has already been briefly set forth in the course of the description of the construction of the machine, but it may be well to point out a few further features.

In the first place the open construction of the machine enables an operator to take the shoes in rapid succession from a usual rack and pass them quickly and almost carelessly through the machine with the practical certainty that the sole edges will be properly wetted and that the moisture will be confined thereto. This rapid and efficient result is secured by simply placing the toe of the shoe on the shoe-directing plate 2 and shoving it quickly forward. The toe engages the moisture-laden wetting devices, which simultaneously yield so as to permit the forward movement of the shoe, and, in their yielding, follow the edge of the sole automatically, just the right amount of moisture being squeezed from the sponges to wet the shoe exactly as desired. The wetting follows the curvature because the springs 15 hold the wetting devices forcibly against the sole-edge all the time until the shoe escapes from the machine. The angle at which the shoe engages the wetters depends upon the relative position of the two rests or shoe-directing plates 2, 3, and in order to permit extreme styles of shanks or other special curves in the sole to be wetted quickly, the operator gives a slight swing to the shoe one way or the other as may be required as he passes the shoe through the machine. If it is desired to color the edges at the same time that they are wetted, proper coloring liquid may be employed.

It will be understood that although the

mechanism herein shown and described is preferred, many variations and changes in the constructional details, combination, and arrangement of parts, may be resorted to without departing from the spirit and scope of our invention.

Having fully described our invention, what we claim as new and desire to secure by Letters Patent is:

1. A machine for wetting the sole-edge of a shoe in the process of its manufacture, comprising mechanism for applying a thin narrow line of fluid confined to the sole-edge of the shoe, means for controlling the relative position of the shoe when in the machine and said applying mechanism to restrict the wetting of the shoe to the sole-edge only, said applying mechanism including means for delivering the fluid directly against the sole-edge in such limited amount as is required for the edge wetting, and edge-engaging means for receiving the edge of the shoe and keeping the friction thereof from said delivering means.

2. A machine for wetting the sole-edge of a shoe in the process of its manufacture, comprising opposite brush hoods containing sponge-like fountain pads having relatively long and vertically narrow edges projecting slightly from said hoods, adapted to bear upon and traverse the edge of a shoe sole, shoe supporting and guiding means for maintaining the shoe in, and restricted to, said sole-edge engagement during relative movement of the shoe and pads, yielding means normally holding said pads transversely across the front end of the toe of the shoe and permitting the pads to separate and follow the varying curvatures of the sole-edge about the shoe, and means to deliver moisture to said pads.

3. A machine for wetting the sole-edge of a shoe in the process of its manufacture, comprising fluid-delivering pads constructed and arranged to engage solely the sole-edge of the shoe to wet said edge, spring-held pivoted arms extending normally substantially in longitudinal alinement with each other transversely of the path of movement of the shoe, said arms supporting said pads at their inner meeting ends in position to engage the extreme toe of the shoe when at rest, and shoe supporting and guiding means for maintaining the shoe in, and restricted to, said sole-edge engagement during said movement of the shoe.

4. The combination with a base, of fountain pads, hollow arms connected to the pads, means for supplying liquid to the arms through which it is conducted to the pads, said pads adapted to bear upon and traverse the edge of a shoe sole or heel as the shoe is forced between the pads.

5. The combination with a base, of yieldable fountain pads adapted to bear upon

and traverse the edge of a shoe sole and heel, and rests mounted on the base for guiding the shoe between the pads during the wetting operation.

5 6. The combination with a base, of yieldable fountain pads adapted to bear upon and traverse the edge of a shoe sole or heel as the latter is forced between said pads, rests for the shoe sole and heel over which
10 the shoe passes in the operation, and means for adjusting the position of said rests.

7. The combination with a base, of rests adjustable with respect thereto and pivotally supported yieldable fountain pads located between said rests in the path of the
15 surface to be brushed.

8. The combination with a base, of rests adjustable with respect thereto and pivotally supported yieldable fountain pads located between said rests in the path of the
20 surface to be brushed and means for supplying liquid thereto.

9. The combination with a base, of rests adjustable with respect thereto and pivotally supported yieldable fountain pads located between said rests in the path of the
25 surface to be brushed, means for supplying liquid thereto and means for automatically controlling said supply.

10. The combination with a base, of rests adjustable with respect thereto and pivotally supported yieldable fountain pads located between said rests in the path of the surface to be brushed, means for supplying liquid thereto, means for automatically controlling said supply, and cocks for regulating the volume of the material supplied. 35

11. The combination with a base and rests, of a bar secured to the base, hollow posts at the ends of the bar, hollow arms pivoted to the posts, fountain pads carried at the outer ends of said arms said arms adapted to conduct liquid therethrough to the pads, stops, and springs for normally returning the arms against said stops. 40

12. In a machine for wetting and coloring the edges of shoe soles and heels, fountain pads comprising hoods, having absorbent material in their operative edges and anti-friction rollers mounted at said edges. 45

In testimony whereof we affix our signatures, in the presence of two witnesses. 50

ALONZO WEST.
CHARLES C. JACKMAN.

Witnesses:

J. ADAM BURKEL,
W. B. ALTSMAN.