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SHOE COATING APPARATUS

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Fig. 1

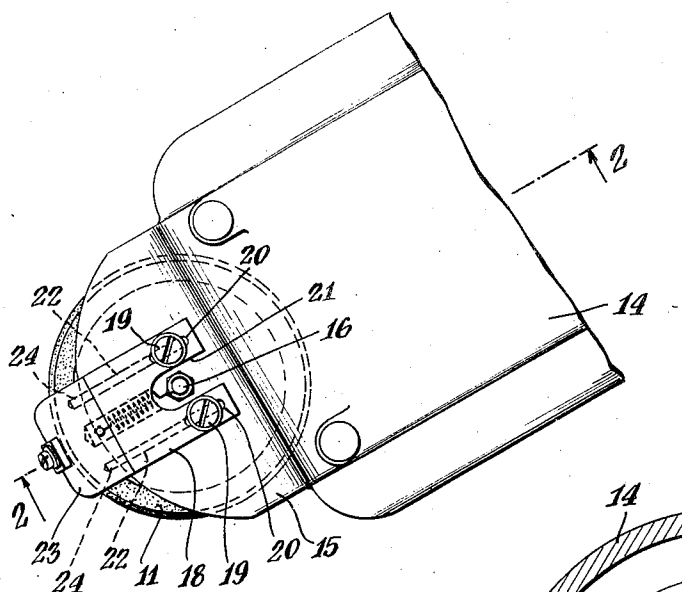
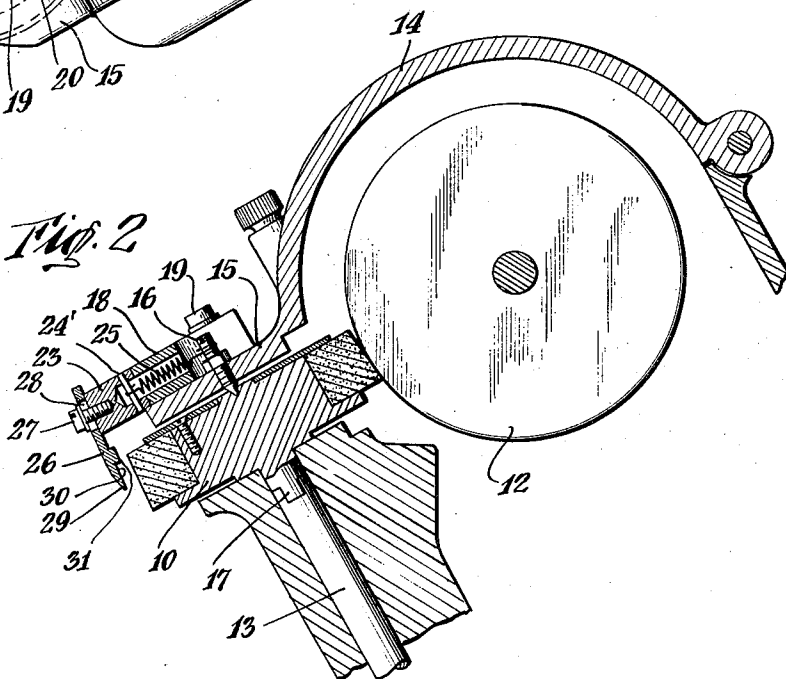


Fig. 2



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UNITED STATES PATENT OFFICE

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SHOE COATING APPARATUS

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Application July 19, 1935, Serial No. 32,137

5 Claims. (Cl. 12—80)

This invention relates to fluid coating machines of the kind used in the manufacture of footwear, and more particularly to a cementing machine for applying cement to welt lasted uppers prior to affixing an outsole thereto.

A general object of the invention is to provide a bottom cementing machine which is adapted to handle welted uppers so as to apply a coating of cement to the welt and in seam portions thereof.

More specifically, objects of the invention are to provide a cement applicator having a work support which is adapted to hold the extended edge of a welt against the applicator surface to insure proper fluid applying contact between it and the welt.

A further object of the invention is to provide a welt supporting attachment which may be used with existent forms of bottom cementing machines.

Other objects of the invention will in part be obvious and will in part appear hereinafter.

The invention accordingly comprises the features of construction, combination of elements, and arrangement of parts, which will be exemplified in the construction hereinafter set forth and the scope of the invention will be indicated in the claims.

For a fuller understanding of the nature and objects of the invention reference should be had to the following detailed description taken in connection with the accompanying drawing, in which:

Fig. 1 is a fragmentary top plan view of a bottom cementing machine equipped with a welt support constructed in accordance with the principles of the present invention; and

Fig. 2 is a vertical sectional view taken along line 2—2 of Fig. 1.

It is now becoming the practice to affix the outsoles of welt type shoes to welted uppers by means of cement instead of by stitching. In following this recently developed practice, the upper is lasted in the usual or any suitable manner, for example by the familiar steps used in constructing a Goodyear welted shoe, and the in seam thereof is closely trimmed. The in seam and welt are roughed to provide a suitable surface for cementing. The cement is applied to such roughed in seam and to the bottom of the welt and preferably also marginally around an outsole. These parts are then stuck together in a sole press. The cement may be applied by any suitable type of bottom cementing machine now in use for handling non-welted uppers of

McKay or related types, provided it has an applicator capable of covering the welt and in seam area.

When cementing welts, care must be taken to see that the extended welt edge, which is unsupported by the last, is held in cement receiving relationship against the face of the applicator. The present invention provides a device especially suited for doing this which is capable of being mounted on any suitable type of bottom cementing machine, being herein illustratively shown mounted on a cementer of the kind shown in the copending application of William C. Card, Ser. No. 705,180, filed January 4, 1934.

Referring more particularly to the drawing, there is shown the upper portion of a cement applying machine having an applicator 10 with a rim 11 of rubber or like compressible material which is adapted to have cement deposited on its periphery by means of a cement transfer wheel 12 which in turn has cement deposited thereon by any suitable means, for example that shown in the above mentioned Card application. A drive shaft 13, which is adapted to be driven in any suitable manner, is provided for the applicator 10, and the shaft and applicator 10 are preferably mounted in inclined position, as shown in Fig. 2, so that the lower work engaging periphery of the latter is positioned so as to enable the operator to see the work at the point of cement application. A hinged cover 14 is provided, which has a forwardly extending portion 15 closely overlying and covering the upper end of the applicator 10.

A threaded pintle 16 is provided in such cap portion and is adapted to provide a bearing about which the applicator may be rotated, and also to hold such applicator in position with respect to its drive shaft, there being a slot and tenon connection 17 between these parts which permits removal of the applicator when desired. These above disclosed parts are constructed in accordance with the showing in the mentioned Card application.

In order to handle welted work in an improved manner, a block 18 is screwed to the cover extension 15 by means of screws 19 which are extended through slots 20 to enable the block to be adjustably positioned on the cover. Such block is recessed as at 21 to accommodate the pintle 16 and it has a pair of hollow bores 22 extending longitudinally thereof. A removable welt support holder 23 is provided with pins 24 which extend slidably into bores 22 to permit guided movement of such holder with respect

to the block 18. A tension spring 25 is provided between a pin 24' on the holder and pintle 16 so as to give the holder a normal bias in a direction toward the applicator rim 11. The spring 25 is accommodated in a suitable bore or recess in the block 18.

A welt support 26 is screwed to holder 23 by means of a screw 27 passing through a slot 28 which permits vertical adjustment of the support in respect of its holder. The downwardly extending portion of this support terminates in a tapered finger 29 which is adapted to enter the welt crease of a lasted welted upper so that its face 30 serves to hold the extended edge of the welt in cement receiving contact with the applying periphery of the applicator, spring 25 acting to give the welt a slight spring tension against the applicator face and also yielding to accommodate different thicknesses of work. A guide shoulder 31 is provided on the welt support in position to engage the edge of the welt and prevent it from moving upwardly, beyond the cement bearing surface of the applicator.

In operation the welt support and holder are pulled outwardly by hand and the welt and in-seam portions of the lasted upper are placed against the applicator periphery with the finger of the welt support located in the welt crease, after which the support is released in order to enable the spring 25 to hold the welt against the applicator. The shoe is held in this position by the operator during ensuing feeding and applying movements, until a band of cement is deposited on the welt and in-seam portions of the shoe from the heel breast line at one side entirely around its forepart and back to the heel breast line at the other side.

Since certain changes may be made in the above construction and different embodiments of the invention could be made without departing from the scope thereof, it is intended that all matter contained in the above description or shown in the accompanying drawing shall be interpreted as illustrative and not in a limiting sense.

Having described my invention, what I claim as new and desire to secure by Letters Patent, is:

1. A bottom cementer for welted shoe uppers comprising a rotatable yieldable applicator roll having a portion of its periphery exposed for contacting work presented thereto, means for delivering cement to said applicator, and a welt support engageable in the welt crease of a welted

upper comprising a finger having its welt engaging face substantially parallel with and located opposite to said work contacting portion, said support being slidably and yieldably mounted in operating position for straight-line movement toward and away from said applicator.

2. A bottom cementer for welted shoe uppers comprising a casing, a rotatable applicator having a peripheral portion extending from said casing for contacting work presented thereto, means for delivering cement to the periphery of said applicator, a welt support engageable in the welt crease of a welted upper and slidably mounted on said casing, and spring means giving said support a bias toward said applicator.

3. A bottom cementer for welted shoe uppers comprising a casing, a rotatable applicator having a peripheral portion extending from said casing for contacting work presented thereto, means for delivering cement to the periphery of said applicator, guide means mounted on said casing, a welt support engageable in the welt crease of a welted upper and slidably mounted on said guide means, and spring means giving said support a bias toward said applicator.

4. A bottom cementer for welted shoe uppers comprising a housing, a rotatable applicator mounted thereon, means for depositing cement on the periphery of said applicator, a block mounted on said housing, a welt support holder, guide pins slidably holding said holder on said block, a spring normally urging said holder toward said block, and a welt support extending from said holder in position to enter the welt crease of a welted upper having its welt opposed to the cement bearing periphery of said applicator so as to hold such welt thereagainst.

5. A bottom cementer for welted shoe uppers comprising a housing, a rotatable applicator mounted thereon, means for depositing cement on the periphery of said applicator, a block mounted on said housing, a welt support holder, guide pin slidably holding said holder on said block, a spring normally urging said holder toward said block, a welt support extending from said holder in position to enter the welt crease of a welted upper having its welt opposed to the cement bearing periphery of said applicator so as to hold such welt thereagainst, and a guide shoulder on said welt support for engaging the edge of such welt.

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