METHOD OF MAKING CORK WELTING

This invention relates to an improved form of beaded member adapted to be secured between the welt and shoe upper.

There is a large demand for shoes of the beaded or cork welt type in which a bead forming strip is secured in the crease of a shoe between the welt and shoe upper, and a number of different forms of beaded or cork welting have been proposed heretofore.

In some of the constructions proposed heretofore the beaded member is formed of fabric or other non-leather material, while in other proposed constructions the beaded member is formed of a small strip of leather arranged in the crease of the shoe so that a cut outer edge is exposed in the finished shoe. It is apparent, however, that if the beaded member is formed of material other than leather, or if formed of leather the exposed surface of which is cut leather rather than the grain surface, the beaded member cannot be given a finish that will closely resemble in appearance the finish of the grain leather of the shoe upper.

The present invention therefore relates to a beaded member for use in cork welt shoes and is provided with a thin narrow strip of grain leather secured to its outer edge so that the exposed edge of the beaded member may be given a finish practically identical in appearance with that of the shoe upper.

A further feature of the invention resides in a narrow strip of leather having a thin narrow sheet of grain leather secured to its opposite edges so that two bead forming strips each having its outer edge covered with grain leather may be readily formed by severing the strip longitudinally by a diagonal cut.

It is apparent that it would be a tedious and difficult operation to cut a thin sheet of grain leather into narrow strips having a width corresponding to the thickness of the bead forming member and then secure these thin strips to the edge or edges of the bead forming member. Another important feature of the present invention therefore resides in an extremely simple method of firmly securing a thin sheet of grain leather to an edge of the bead forming strip.

In accordance with this method a narrow strip of leather of any convenient length is wound into a coil or disk. A thin sheet of grain leather of sufficient area to cover a face of the coil or disk is then adhesively secured to an edge of the coiled strip, and a second thin sheet of grain leather may be similarly secured to the opposite face of the coil or disk.

The thin sheets are then severed between the adjacent coils, preferably by providing a knife at the point where the strip is unwound from the coil or disk, whereupon a strip of leather having a thin sheet of grain leather firmly secured to each edge is produced. This leather strip may then be split diagonally in the direction of its length to provide two bead forming strips each having a strip of grain leather secured to its outer edge.

Still a further feature of the invention resides in a bead forming strip having its width increased by securing a thin piece of grain leather to one or both of its edges.

The various features of the invention and novel method will be more fully understood from the following description when read in connection with the accompanying drawings illustrating one embodiment of the invention.

In the drawings:

Fig. 1 is a perspective view of a sheet of leather stock shown partly split close to the grain or hair surface.

Fig. 2 is a perspective view of a narrow strip of leather cut from the lower sheet of stock of Fig. 1.

Fig. 3 is a plan view of a thin sheet of grain leather having two disks cut therefrom.

Fig. 4 is a perspective view of a coil or roll of a leather strip such as shown in Fig. 2.

Fig. 5 is a side elevation with parts in sec...
tion of leather unwinding and severing means to be described.

Fig. 6 is an end view of the construction of Fig. 5.

Fig. 7 on an enlarged scale is a perspective view of a leather strip having a thin narrow sheet of grain leather secured to each edge thereof, in accordance with the present invention.

Fig. 8 is a perspective view showing the strip of Fig. 7 split diagonally to form two strips of bead forming members; and

Fig. 9 is a perspective sectional view through the forepart of a shoe having one of the beaded members of Fig. 8 secured between the welt and shoe upper.

The present invention, as above pointed out, contemplates a beaded member comprising a leather strip having a thin narrow sheet of grain leather secured to its outer edge, and while any suitable leather of substantial thickness and relatively thin sheet of grain leather may be employed in constructing the beaded member of the present invention, both sheets of leather may readily be secured from a single sheet of leather stock by splitting the stock close to the hair or grain surface, as shown in Fig. 1 of the drawings.

The thickness of the grain leather 11 may be a thirty-second of an inch, or less, whereas the thickness of the flesh leather 10 is several times that of the grain leather.

In carrying out the present invention the sheet of leather 10 or any other sheet from which the grain surface may have been removed is cut into narrow strips of leather 12. The ends of the strip 12 are then united in a well known manner to form a long narrow strip of leather of any length found convenient for subsequent handling. This long strip of leather 12 is then tightly wound into a roll, coil or disk, as shown in Fig. 4.

A portion of a sheet of grain leather can then be easily secured to one or both edges of the coil strip 12, in accordance with the present invention, by cutting from the sheet 11 of grain leather or other similar sheet, the leather disks 13, and then firmly securing a disk 13 to each face of the tightly wound coil of Fig. 4, as will be apparent from Figs. 5 and 6. Each disk preferably has a shaft receiving hole formed at its center as shown in Fig. 3. A strong waterproof adhesive is preferably employed to secure the thin sheets of grain leather 13 to the opposite faces of the leather coil 12, and while several well known adhesives may be employed for this purpose excellent results are obtained by using latex, (obtained by treating the milky sap of the rubber tree with a preservative, such as ammonia) as the adhesive employed to secure the sheets 13 to the opposite edges of the strip 12.

The bead forming material of Fig. 7 having the narrow sheet of leather 13 adhesively secured to each edge thereof is readily produced from the coil shown in Figs. 5 and 6 by unwinding the strip of leather from the coil, and at the same time severing the disk-like sheets 13 between the coils. This is readily accomplished by employing the simple construction shown in Figs. 5 and 6 in which the coil 12 has mounted in its central opening 14 a shaft 15 forming an axis about which the coil may rotate as it is unwound. The coil 12 may then be placed upon the supporting stand 16 of the unwinding device so that the ends of the shaft will lie in the guide slots 17 provided between the spaced uprights 18, secured to and extending upwardly from the supporting base 16.

The arrangement is such that the shaft will move downwardly in the slots 17 as the size of the coil 12 decreases. It is desirable to sever the thin sheets of leather 13 between the coils as the strip 19, having a layer of grain leather secured to its opposite edges, is unwound from the roll. This is readily accomplished in the construction shown by forming a groove 20 in the upper face of the base 16 of a depth and width to snugly receive the strip 19 as it is unwound from the coil 13. A knife 21 is firmly secured to the upper face of the base 16, as shown in Fig. 5 so that the strip 19 may be drawn along the slot 20 below the knife 21, as it is unwound from the coil 13. The edge of the knife will serve to sever the disk-like sheets 13 between the roll 12 and the strip 19 as the coil is rotated by the pull which is exerted upon the strip 19 to unwind the same from the coil. It is desirable to maintain a continuous downward pressure upon the shaft 15 during the unwinding and severing operation, and this is readily accomplished by securing a tensioned spring 22 to each end of the shaft 15 so that they will exert a continuous downward pull upon the shaft and maintain the work properly positioned with respect to the knife 21.

The cross sectional configuration of the beaded member having a strip of grain leather secured to its outer face may be varied to a substantial degree depending upon the construction employed to secure the beaded member in the crease of the shoe, and the shape and appearance that the beaded member shall present in the finished shoe. A desirable form of beaded member which is easy to secure in the crease of the shoe and which serves to form a tight joint between the welt and shoe upper and helps support the upper is produced by severing the strip 19 of Fig. 7 diagonally, as shown in Fig. 8, to provide the two bead forming strips 23 and 24, each of which is triangular or wedge shaped in cross section and has the thin sheet of grain leather 13 adhesively secured to its outer
edge, in accordance with the present invention.

It is desirable in many cases to split the strip 19 diagonally as shown in Fig. 8 so that a thin leather edge is formed of the thread-like piece of grain leather that is removed from the sheet 18 during the cutting operation. By cutting the strip 19 diagonally in this manner the width of each bead forming strip obtained therefrom is increased by two thicknesses of the grain leather 13, and in this manner a saving in the leather stock 12 is secured.

The beaded members 23 and 24 need not be secured to the welting 25 before the welting is presented to the shoe as has been the usual practice heretofore, but as a result of the construction of the bead member of the present invention the same may be readily secured to the shoe by the insole 26 at the time the welting 25 is sewed to the insole 27 and shoe upper 28, as will be apparent from Fig. 9. The outsole 29 may then be secured to the welting 25 by the usual outsole 30.

It will be understood from the foregoing that the novel bead forming member of the present invention may readily be produced by utilizing the same sheet of leather stock to provide both the bead forming strip 12 and grain leather 13, secured to the outer exposed edge thereof. It will also be seen that through the employment of the method of the present invention, in which the thin sheets 13 of grain leather are secured to the opposite edges of the tightly coiled strip 12 and are then secured between the coils, an extremely simple and satisfactory method of securing the grain leather to the opposite edges of the strip 12 is provided. It will further be seen that when a beaded member constructed in accordance with the present invention is secured in the crease of a shoe between the welt and shoe upper, which consists in winding a strip of leather into a coil or disk, adhesively securing to each edge of the tightly coiled strip a thin sheet of grain leather to cover the opposite faces of the disk, then severing said thin sheets between the adjacent coils of the strip, and severing the strip longitudinally to provide two bead forming strips each having a thin narrow sheet of grain leather secured to its outer edge.

3. The method of forming bead strips adapted to be secured in the crease of a shoe between the welt and shoe upper, which consists in winding a strip of leather into a coil or disk, adhesively securing to each edge of the tightly coiled strip a thin sheet of grain leather to cover the opposite faces of the disk, then severing said thin sheets between the adjacent coils of the strip, and severing the strip longitudinally to form two bead strips each wedge shaped in cross section and having a thin narrow sheet of grain leather secured to its wider edge.

4. The method of forming a bead member adapted to be secured in the crease of a shoe between the welt and shoe upper, which consists in winding a narrow strip of leather into a coil or disk, cutting from a thin sheet of grain leather a disk of a size to cover one face of said coil, adhesively securing the disk of grain leather to an edge of the coiled strip to cover one face of the coil, and then cutting the grain leather between the coils of the strip to provide a bead forming strip having one edge covered with a narrow thin sheet of grain leather.

5. The method of forming a narrow strip of leather of indeterminate length having a thin narrow sheet of grain leather secured to an edge thereof, which consists in winding a strip of leather into a coil or disk, adhesively securing to an edge of the coiled strip a thin sheet of grain leather to cover a face of the disk, then severing said thin sheet between the adjacent coils of the strip to provide a narrow strip of leather having one edge covered with grain leather.

6. The method of forming a narrow strip of leather of indeterminate length having a thin narrow layer of sheet material secured to an edge thereof, which consists in winding a strip of leather into a coil or disk, adhesively securing to an edge of the coiled strip a thin layer of sheet material so as to cover a face of the disk, then severing said thin sheet between the adjacent coils of the strip to provide a narrow strip of leather having a narrow covering sheet firmly secured to one edge thereof.

7. The method of forming a narrow strip of leather of indeterminate length having a thin narrow sheet of grain leather secured to
an edge thereof, which consists in winding a strip of leather into a coil or disk, adhesively securing to an edge of the coiled strip a thin sheet of grain leather to cover a face of the disk, then unwinding the strip from the coil and at the same time severing the sheet between the adjacent coils by presenting a knife between the coil and strip being unwound therefrom and drawing the strip tangentially from the coil.

In testimony whereof, I have signed my name to this specification.

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