

No. 816,601.

PATENTED APR. 3, 1906.

G. E. ROLLINS.
WELT.

APPLICATION FILED APR. 4, 1904.

Fig. 1.

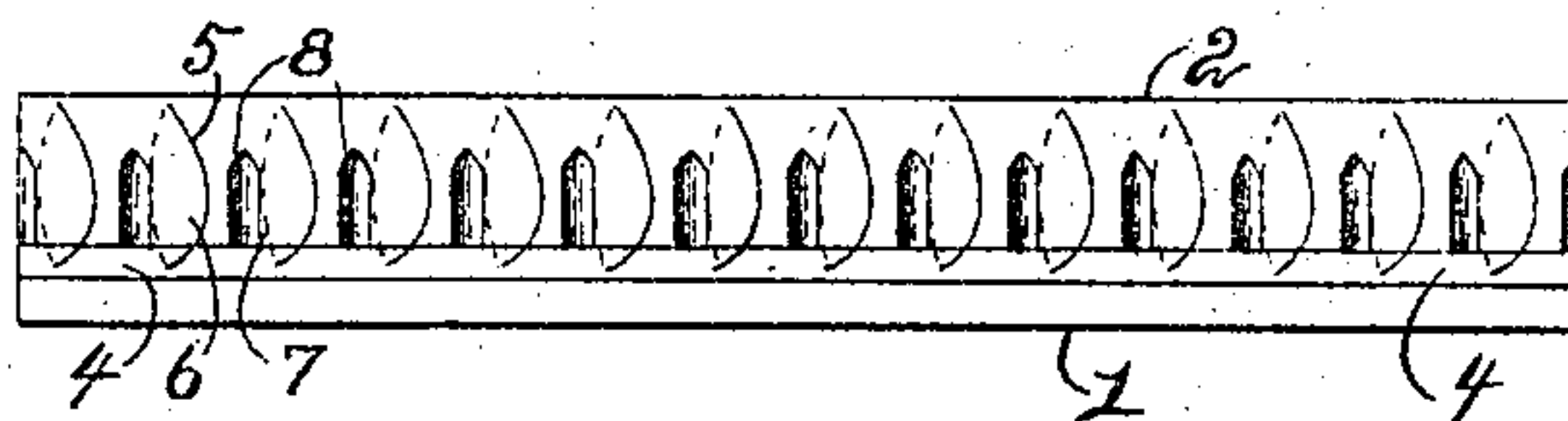


Fig. 2.

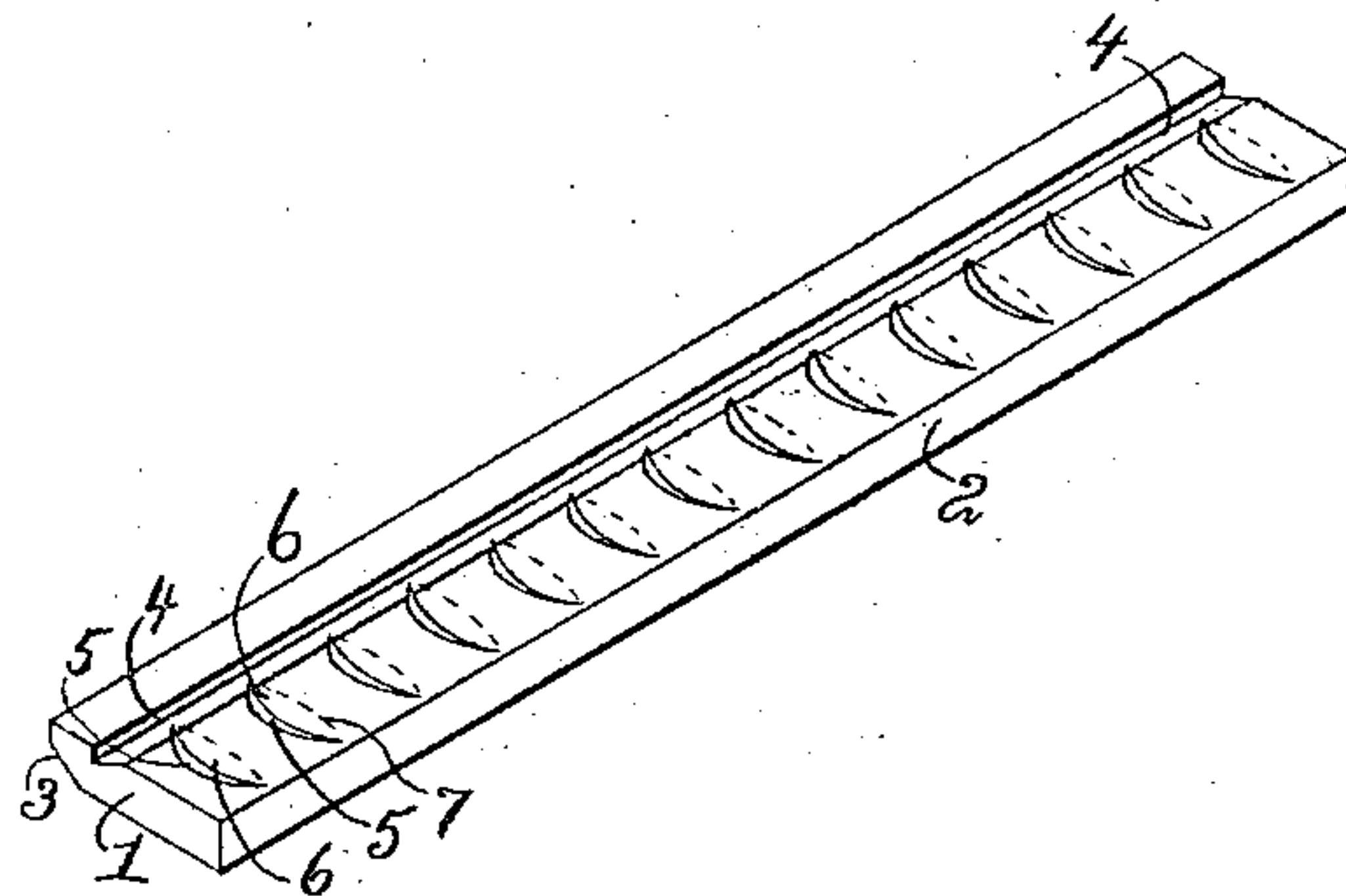
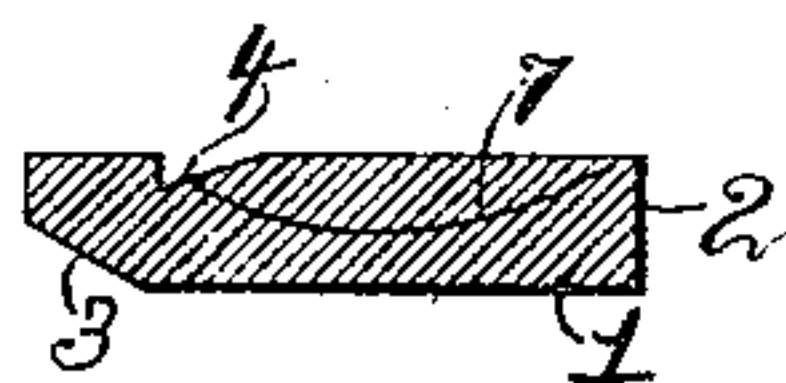


Fig. 3.



Witnesses.
Howard G. Davis.
John C. Porter.

Inventor:
George E. Rollins.
by Geo. S. Maxwell
Atty.

UNITED STATES PATENT OFFICE.

GEORGE E. ROLLINS, OF EAST BRIDGEWATER, MASSACHUSETTS,
ASSIGNOR TO BROCKTON FOLDING MACHINE COMPANY, A COR-
PORATION OF MASSACHUSETTS.

WELT.

No. 816,601.

Specification of Letters Patent.

Patented April 3, 1906.

Application filed April 4, 1904. Serial No. 201,586.

To all whom it may concern:

Be it known that I, GEORGE E. ROLLINS, a citizen of the United States, and a resident of East Bridgewater, in the Commonwealth of Massachusetts, have invented an Improvement in Welts, of which the following description, in connection with the accompanying drawings, is a specification.

My invention is a welt particularly intended for making Goodyear-sewed boots and shoes, although not confined exclusively thereto.

In making a shoe by the Goodyear method peculiar strains and difficulties are encountered with reference to the welt. It has to be sewed fast about the lower edge of the upper and then bent, hammered, and forced as nearly as possible flat with the sole which it is to retain; but, as is evident, this result is not readily accomplished, as the leather is awkward to handle, hard to flatten out, tends to recover its former position, the stitches frequently break or tear out, and, in short, the problem is full of practical difficulties.

My invention aims to obviate these difficulties. To accomplish this, I provide means for permitting the welt not merely to shrink or contract on its inner or sewed edge, but to broaden or expand inwardly widthwise when laid down about the toe, while at the same time retaining a firm strong edge beyond the vamp-stitches, and likewise beyond the sole-stitches, for it is necessary that the welt shall remain strong and that its substance shall remain in proper position for receiving and strongly holding all the stitches. Accordingly I provide cuts or grooves across one side of the welt-strip, terminating short of the outer edge of the strip and slanting or overlapping, without, however, severing or weakening the strip widthwise, the result being that the welt can be readily turned down flat around the toe and yet preserves its original stitch-holding strength and edge integrity.

My invention will be further explained in connection with the accompanying drawings, in which I have illustrated a preferred embodiment of my improved welt, and in which—

Figure 1 is a top plan thereof. Fig. 2 is a perspective view of the welt in its simpler form, and Fig. 3 is a transverse sectional view.

The strip may have any general or preferred shape in cross-section, being herein shown as comprising a piece of leather 1, having a vertical edge 2 and a beveled edge 3, adjacent which is a stitch-receiving groove 4.

In one side of the strip 1 I cut a series of oblique grooves or slashes 5—that is to say, the cuts are in a plane oblique to the plane of the side or surface of the strip, thereby providing an overlapping wedge-shaped shingle-like fin of leather, having a thin outer lip or edge 6 and integral with the strip at both of its ends and base. In the form shown in the drawings the lip 6 is crescent-shaped and the cut extends nearly or quite through in a curved line 7, so that the cut gets shallow toward the outer edge 2, and also in some instances I provide grooves 8, from which the leather is removed down to the longitudinal groove 4, as shown in Fig. 1. In the latter case the oblique cuts 5 are not made as close together as when there are no grooves 8.

In use after the welt has been first stitched to the shoe-upper through the groove 4 and edge 3 in usual manner it is found that instead of being exceedingly difficult to bend or turn it down flat to receive the sole my improved construction enables the welt to assume the desired position readily, so that the inner edge 3 contracts or is condensed, and the welt changes widthwise as well as lengthwise, owing to the peculiar cuts and combination of grooves, and yet it remains strong and firm to withstand all pulls and strains both longitudinally and transversely. In other words, it retains the integral solid character of the old uncut welt, and hence is capable of use for Goodyear work, and yet is without the stiffness and unmanageable character of said old welt. It is pliable and adaptable without being weak.

I regard the provision of a welt having an uncut or whole surface on one side and at the outer edge and a series of transverse incisions on the opposite side shallower than the thickness of the welt and terminating short of the outer edge of the welt as of decided importance, especially in Goodyear-sewed shoes. This formation gives internal pliability and outer-edge resistance or strength, so that when the welt is turned down (after having been sewed to the vamp and inner sole) it

is compelled to gather in or pucker along the inner portion, thereby releasing and preventing tension and strain on the stitches. Moreover, the uncut or whole outer edge gives not only the strength to resist stretching and to compel the easy relaxed condition above explained, but my welt provides, in connection with the extreme flexibility and pliability above mentioned, a smooth integral exposed surface. The uncut outer edge is capable of receiving the same high degree of edge finishing as the old style of welt and yet has the desired pliability and adaptability, while the smooth uncut top surface of the welt leaves all the leather for holding the stitches and maintains a solid level surface for the stitch-separating process, &c. It will be observed, however, that in the claims various restrictions are made and others omitted, so that although in the most complete embodiment of my invention I prefer to employ the entire construction shown; yet for some purposes I may vary or omit certain features—as, for instance, I do not limit myself (excepting in the particular claims so restricted) to having the slashing or cuts crescent-shaped nor to having them oblique or fin-like, &c.

Various modifications and other embodiments of my welt come within the proper scope of the invention, as will be apparent from the following claims.

Having fully described my invention, what I claim, and desire to secure by Letters Patent of the United States, is as follows:

35 1. A welt, having a series of transverse cuts, oblique to the plane of the welt, said cuts at their ends terminating short of the

edges of the welt and less in length than the width of the welt.

2. A welt for Goodyear-welted shoes, one side thereof being whole and the opposite side being provided with a series of transverse cuts made without removing any of the leather, said cuts being shallower than the thickness of the welt, and terminating short of the edges of the welt.

3. A welt, having a series of transverse cuts, extending partially through the welt obliquely to the plane of the welt and terminating at their ends short of the edges of the welt.

4. A welt, having a series of transverse crescent-shaped cuts, each less in length than the width of the welt and extending obliquely to the plane of the welt, said cuts being shallow at their opposite ends, and the opposite edges of the welt being whole.

5. A welt, having integral edges, and containing a series of transverse cuts extending obliquely to the plane of the welt and deepest intermediate their ends.

6. A welt, having integral edges, and containing a series of transverse grooves, and a plurality of oblique cuts interspersed between said grooves and terminating short of the edges of the welt.

In witness whereof I have signed my name to this specification in the presence of two subscribing witnesses.

GEORGE E. ROLLINS.

Witnesses:

H. A. POOLE,
SEWELL P. HOWARD.