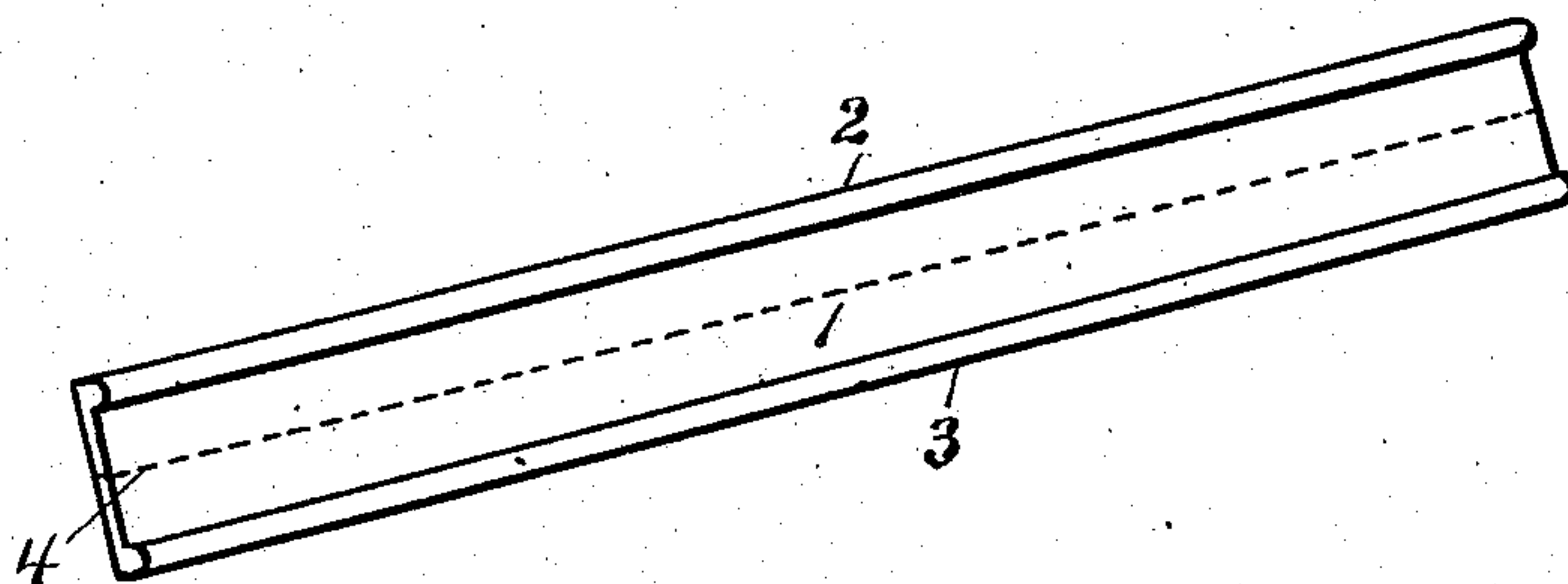


J. R. REYNOLDS.
MATERIAL FOR WATERPROOF WELTS.
APPLICATION FILED SEPT. 21, 1905.

924,106.

Patented June 8, 1909.



Witnesses
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UNITED STATES PATENT OFFICE.

JOHN R. REYNOLDS, OF HARTFORD, CONNECTICUT, ASSIGNOR TO THE WATERPROOF WELT AND FILLER COMPANY, OF HARTFORD, CONNECTICUT, A CORPORATION OF DELAWARE.

MATERIAL FOR WATERPROOF WELTS.

No. 924,106.

Specification of Letters Patent.

Patented June 8, 1909.

Application filed September 21, 1905. Serial No. 279,409.

To all whom it may concern:

Be it known that I, JOHN R. REYNOLDS, a citizen of the United States, residing at Hartford, county of Hartford, and State of Connecticut, have invented certain new and useful Improvements in Material for Waterproof Welts, fully described and represented in the following specification and the accompanying drawings, forming a part of the same.

This invention relates to a novel manufacture for forming water-proof welts which are used in water-proof boots and shoes.

It has been found desirable to employ in the manufacture of water-proof boots and shoes a welt of water-proof material, this welt being used in addition to the ordinary leather welt, being located between this welt and the upper and being secured in position by the threads which form the seam which secures the welt to the upper. The form of welt which has been found satisfactory consists of a strip of elastic material such as rubber, this strip having a bead on that edge which is to become the exposed edge when the welt is in position in the shoe. As boots and shoes are now almost entirely made by machinery, it is practically necessary that these strips be made in long lengths, say from fifteen to thirty yards, and that they be uniform in their dimensions, so that they can be readily fed to the shoe making machinery in connection with and simultaneously with the leather welt ordinarily employed. Difficulty has, however, been experienced in making the welt in the long lengths referred to. Attempts have been made to form these welts by vulcanizing strips in molds. These attempts have not, however, been heretofore successful for reasons which it is not necessary to here state. Attempts have also been made to form this welt by forcing plastic material through a die so shaped as to produce a flat strip having a rib or bead on one edge. These attempts were also unsuccessful for the reason that because of the unequal dimensions of the die on its opposite edges, the plastic material would flow faster through one side of the die than the other, thus producing a strip which was longer on one edge than the other, which strip could not be properly handled in the shoe sewing machines.

The present invention has for its object to

produce a novel material for forming welts by the use of which uniform welts may be readily and cheaply produced.

With this and other objects in view, the invention consists in the material hereinafter described and then more particularly pointed out.

The drawing illustrates in perspective a length or section of the preferred form of material for forming welts.

The novel material from which the welts are to be formed consists of a strip of water-proof substance, such, for instance, as rubber, or a compound into which rubber largely enters. This strip consists of a flat central portion provided on its edges with beads or rounds, the strip being intended and being adapted to be cut substantially midway between its edges to form two welts. The first central portion is wide enough to provide each welt formed by the cutting with a surface or part through which the securing stitches may pass to secure the welt in position in the shoe, either between the upper and the sole or, more usually, between the upper and the ordinary leather welt, and yet permit the rounded or beaded edge to be exposed. In the particular construction illustrated, the strip is shown as having a flat central portion 1 and beaded edges 2, 3. It has been found by experience that a strip having rounds or beads can be readily produced by forcing plastic water-proof material through a suitable die, a suitable process for making this strip being disclosed in Patent No. 811,793, granted February 6, 1906, and the strip thus produced will have uniform edges and be uniform in thickness along its central portion. This strip can be readily converted into welts by cutting it substantially midway between the edges. In the particular form of strip illustrated, the line on which the strip is to be cut is indicated by the dotted line 4.

While the particular form of strip illustrated embodies the invention in what is regarded as its best form, it is apparent that some changes and variations may be made from this form without departing from the invention.

What is claimed is:—

1. A strip of vulcanized rubber for forming welts for boots and shoes, said strip having a flat central portion and being provided

with rounds on its edges, the strip being adapted to be cut between the rounds to form two welts and the flat central portion being wide enough to provide a stitching surface for each welt after the strip is cut.

2. A strip of vulcanized rubber for forming welts for boots and shoes, said strip having a flat central portion 1 wide enough to form two welts and beaded edges, as 2, 3,
10 the strip being adapted to be cut substan-

tially midway between the edges to form two welts.

In testimony whereof, I have hereunto set my hand, in the presence of two subscribing witnesses.

JOHN R. REYNOLDS.

Witnesses:

AUGUSTA WHITE,
PHILIP N. TILDEN.