Sept. 2, 1941. R. R. CAMPBELL 2,254,351

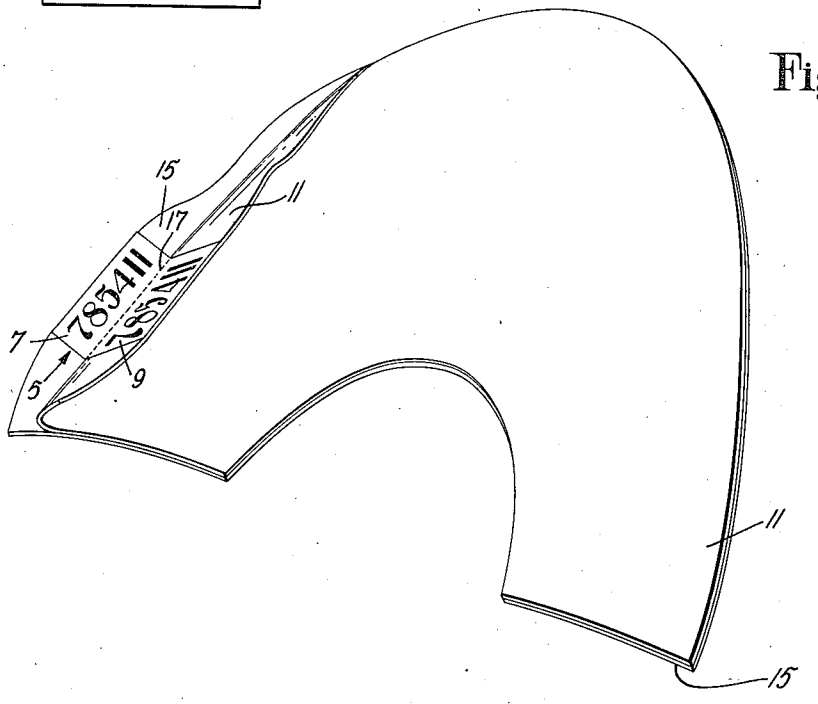
METHOD OF MAKING SHOES

Filed March 27, 1940

Fig.1



Fig.2



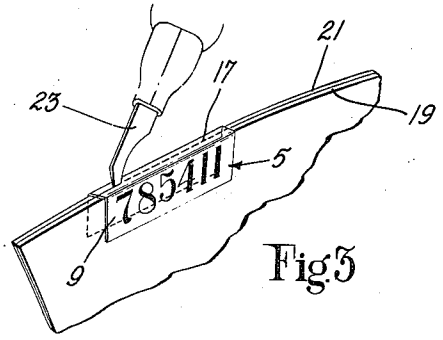


Fig.3

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METHOD OF MAKING SHOES

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10 Claims. (Cl. 12—146)

This invention relates to shoemaking and is particularly concerned with a method of identifying the several parts of different pairs of shoes to facilitate their assembly during the shoemaking operations.

In the manufacture of shoes, the completed uppers are assembled from a plurality of parts, such as vamps, quarters, tips, etc. which, after being cut from the upper stock materials, are arranged into groups of matched pairs of corresponding parts for right and left shoes. To facilitate the proper assembly of these parts into completed uppers, and also to insure a matching-up of the completed uppers when they are assembled on their lasts, it is common practice to mark the parts of the matched pairs with indicia identifying the pair and also often with symbols indicating size, width, and case number. This kind of marking, commonly called "match-marking," is generally accomplished by printing the identifying indicia, and the symbols where used, directly on the lasting margins of the parts by machines designed for performing this operation.

With most materials the machine method of marking is satisfactory. However, there are several materials, frequently employed in the manufacture of shoes, such as, for example, Suva cloth, Basket weave material and certain reptiles, on which good marking cannot be obtained by direct printing, due to the uneven surfaces and the inability of these materials to take ink. Hand marking by means of colored pencil or crayon is usually resorted to for marking these materials, in spite of the additional time and labor involved in such procedure. Also, with materials which will take ink, uniform legibility is not always obtained on many colors and it often becomes necessary to use special colored inks to give the contrast required.

An object of this invention is, therefore, to provide an improved method for marking shoe parts by means of which uniformly legible markings may be readily and rapidly applied to all kinds and colors of materials.

With this object in view, the improved method contemplates the marking of shoe parts by means of a strip, or piece of paper, or similar material, on which the identifying indicia are directly applied. This strip is selected to provide a sharply contrasting background for the marking ink and is attached to the lasting margin of the part to be marked in any suitable manner as by adhesive or mechanical fastenings.

Preferably, and to facilitate the match-marking of pairs of corresponding parts which have been previously brought together, the strip is provided with two sets of like indicia and is simultaneously attached to the lasting margins of the two parts in such a manner that one of the sets of indicia lies on one of the parts while the other set lies on the other part. Upon severance of the strip along a line between the two sets of indicia the two parts are left bearing the identifying indicia, i. e., match-marks, which are uniformly legible upon the background provided by the strip, regardless of the nature or color of the material. By using the strip marked with two sets of indicia the parts may be handled in pairs, as received from the cutting room, and the marking process appreciably expedited.

Various manipulative steps may be employed in attaching the marked strips, and, as is illustrated in the accompanying drawing, a strip may be applied to matched parts by inserting it between the contiguous edges of a pair and attaching it to the inner surfaces of the parts, or it may be folded over the edges of a pair and attached to outer surfaces of the parts.

In the drawing,

Fig. 1 is a plan view of a marking strip before application to the parts;

Fig. 2 is a perspective view of a pair of shoe parts showing a marking strip after it has been applied to the contiguous edges of the parts; and

Fig. 3 is a perspective view of a portion of a pair of shoe parts with a marking strip applied to the outer surfaces of the parts and about to be severed to separate the parts.

Referring to the drawing, a match-marked strip **5** is first prepared by printing, or otherwise providing, two like sets of identifying indicia **7**, **9** on a piece of paper, or similar material. Where the strip is to be attached by sticking it to the parts the paper is preferably gummed on the side opposite to the markings. The marking of the strip may be done by hand or by a suitable machine.

In applying the strip **5**, where the parts **11**, **15** of the pair are assembled with the surfaces to be marked in face-to-face relation, it is first folded upon itself along a line **17** between the two sets of indicia. The gummed back of the strip is now activated, if necessary, as by moistening, or, if plain ungummed paper was used in making the strip, adhesive is applied, and the folded strip inserted between the parts and stuck to their lasting margins. As will be seen from Fig. 2, in which the top part of the pair has

been turned back to expose the attached strip, one of the sets of indicia, or match-marks, lies on one of the parts while the other set lies on the other part. The strip is now severed along the line 17 and the parts separated, each with a portion of the strip 5 bearing match-marks which are clearly legible on the background provided by the strip material.

If the pairs of parts are received with the surfaces to be marked facing away from each other, the strip may be applied in the manner illustrated in Fig. 3. In applying the marked strip under these conditions its gummed back is first activated, or adhesive is applied if the strip is not gummed, and then the strip is folded over the edge of the pair of parts 19, 21, and secured to the outer surfaces of the parts, as shown. This positions one portion of the strip bearing the indicia on each of the parts and, upon severance along the line 17, as indicated, for example, by the knife 23, these parts are match-marked by the portions of the strips attached thereto.

Instead of printing the indicia on the strips by means of inked type they may be marked in the following manner. The strip is formed of material having one side coated with thermoplastic adhesive containing ink and is pressed against marking dies which, while not cutting through the strip, make deep impressions thereon. When the strip is applied to the parts it is subjected to heat which activates the adhesive and also causes the ink to seep through the impressions thereby bringing out the markings on the other side of the strip.

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

1. In shoemaking, that improvement in methods of marking which comprises the steps of attaching to the two parts of a pair of parts a strip bearing two like sets of identifying indicia, and severing said strip between said sets of indicia.

2. That improvement in methods of match-marking shoe parts which comprises the steps of attaching to the two parts of a pair of shoe parts a strip bearing two like sets of match-marks, and severing said strip between said sets of marks.

3. In shoemaking, that improvement in methods of marking which comprises the steps of arranging a pair of parts in surface to surface contact and with their marginal edges in substantial registration, attaching to corresponding portions of the marginal edges of said parts a strip bearing two sets of like identifying indicia, and severing said strip along a line between said sets of indicia to separate said parts.

4. That improvement in methods of match-marking shoe parts which comprises the steps of arranging a pair of matched parts in surface to surface contact and with their marginal edges in substantial registration, attaching to corresponding portions of the marginal edges of said parts a strip bearing two sets of like match marks, and severing said strip along a line between said sets of marks to separate said parts.

5. In shoemaking, that improvement in methods of marking which comprises the steps of marking a strip with two sets of like identifying indicia, attaching said strip to the two parts of a pair of parts, and severing said strip along a line separating said sets of indicia.

6. That improvement in methods of match-marking shoe parts which comprises the steps of marking a strip with two sets of like match-marks, attaching said strip to the two parts of a pair of shoe parts so that one of said sets of match-marks lies on one of said parts and the other set lies on the other part, and severing said strip between said sets of marks.

7. That improvement in methods of match-marking shoe parts which comprises the steps of marking a strip with two sets of like match-marks, folding said strip along a line between said marks to bring said marks together, inserting said strip between the marginal edges of a pair of matched shoe parts arranged in face-to-face relation, attaching said strip to both of said parts, and severing said strip along said line to separate said parts.

8. That improvement in methods of match-marking shoe parts which comprises the steps of marking a strip with two sets of like match-marks, folding said strip over the edge of a pair of matched shoe parts arranged in back-to-back relation, attaching said strip to both of said parts, and severing said strip along a line between said set of marks to separate said parts.

9. That improvement in methods of match-marking shoe parts which comprises the steps of marking a gummed strip with two sets of like match-marks, folding said strip along a line between said sets of marks to bring said marks together, moistening the gummed sides of said folded strip, inserting said strip between the marginal edges of a pair of matched shoe parts arranged in face-to-face relation to stick said strip to both of said parts, and severing said strip along said line to separate said parts.

10. That improvement in methods of match-marking shoe parts which comprises the steps of marking a gummed strip with two sets of like match-marks, moistening the gummed side of said strip, folding said strip over the edge of a pair of matched shoe parts arranged in back-to-back relation to stick said strip to both of said parts, and severing said strip along a line between said set of marks to separate said parts.

ROUEL R. CAMPBELL.