METHOD OF MAKING BUCKLES

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2 Claims. (Cl. 29—3)

1. My present invention relates to the buckle art, and more particularly to a novel method of manufacturing buckles.

The principal object of the present invention is to provide a novel method of manufacture and assembly of a shoe buckle or similar object.

Another object of the present invention is to provide a method of assembling a buckle which reduces the number operations and handling of parts.

A further object of the present invention is to provide a method of assembling buckles which reduces errors and promotes uniformity.

With the above and other objects and advantageous features in view, my invention consists of a novel method of manufacture, more fully disclosed in the detailed description following, in conjunction with the accompanying drawings, and more particularly defined in the appended claims.

In the drawings:
Fig. 1 is a plan view of a metallic strip ready for stamping;
Fig. 2 is a plan view of the strip after the first stamping operation;
Fig. 3 is a plan view of the strip after the first assembly operation;
Fig. 4 is a plan view of the strip after the second assembly operation;
Fig. 5 is a plan view of the strip after the second stamping operation; and
Fig. 6 is a perspective view of the finished buckle.

Shoe buckles and similar types of buckles are usually made by first cutting a blank from sheet stock, attaching the roller and tongue to the blank by hand or on a foot press, and then tumbling, polishing or plating the finished buckle. This requires the individual handling of each buckle and the separate manufacture of the individual parts.

The present invention provides a novel method which overcomes these disadvantages and materially speeds production on an "assembly line" basis.

Referring to the drawings, the desired buckle is shown in Fig. 6. It comprises an upper loop portion 11 for attaching to a strap, and the buckle portion 12 which comprises two side arms connected by the integral bar 13. A roller 14 is loosely mounted on the bar 13, and a tongue 15 is pivotally mounted at the center of the buckle with the free end resting on the roller 14 in the conventional manner.

To manufacture the buckle 10, I start with a conventional strip of metal 16, Fig. 1. The first step is to feed the strip through a stamping press to cut out open parts of buckles successively along the strip as shown at 17 and 18 in Fig. 2.

The strip 16, now in the form shown in Fig. 2, is then fed to a foot or power operated press for attaching the rollers 14 to the successive bars 13, as shown in Fig. 3. The rollers 14 may be performed for a foot press operation, or may be die cut by the same power press used in the assembly, where an automatic operation is used.

The strip 16, with the rollers 14, is now fed to another foot or power press and the tongues 15 successively attached as shown in Fig. 4. As in the case of the rollers 14, the tongues may be performed or cut and attached by the same press. While this operation may precede the attachment of the rollers, it is preferable to attach the rollers first as the tongues may interfere with the attachment of the rollers.

The strip 16, with tongues and rollers attached, is then passed through a conventional stamping press which successively cuts out the finished buckles as shown in Fig. 5.

By the use of the above method of assembly, accuracy and speed is accomplished by eliminating the handling of small, individual buckle blanks. This method also permits assembly of the rollers and tongues by automatic means.

While I have described a specific method of assembly, it is obvious that changes may readily be made within the spirit and scope of my invention as defined in the appended claims.

I claim:
1. The method of manufacturing a buckle comprising the steps of stamping a continuous metallic strip with successive buckle openings, having an end bar and a cross bar extending longitudinally of the strip at each buckle opening, attaching successive buckle rollers to each end bar on said strip, and subsequently stamping successive finished buckles from said strip.

2. The method of manufacturing a buckle comprising the steps of stamping a continuous metallic strip with successive buckle openings having an end bar and a cross bar extending longitudinally of the strip at each buckle opening, attaching successive buckle rollers to each end bar on said strip, and subsequently stamping successive finished buckles from said strip.

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