Aug. 23, 1949. C. J. GRIMLAND 2,479,741

METHOD OF MAKING SPURS

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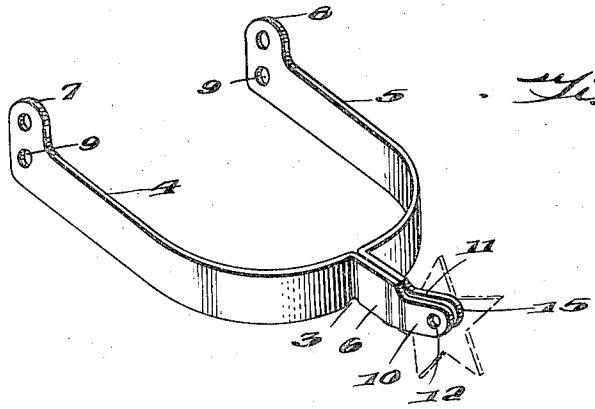


Fig. 1.

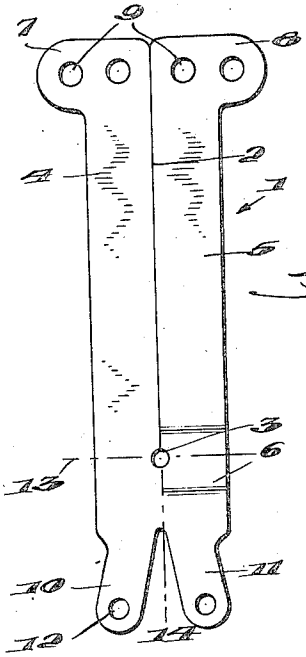


Fig. 2.

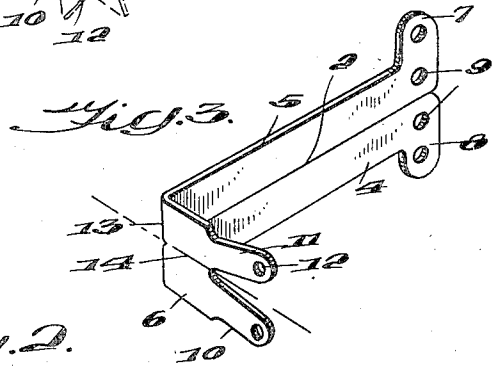


Fig. 3.

Fig. 4.

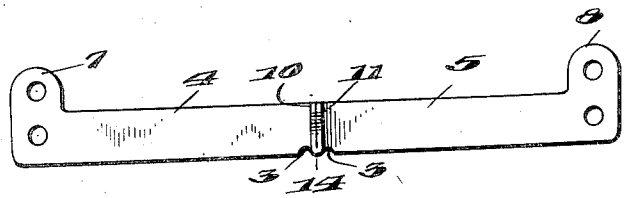


Fig. 6.

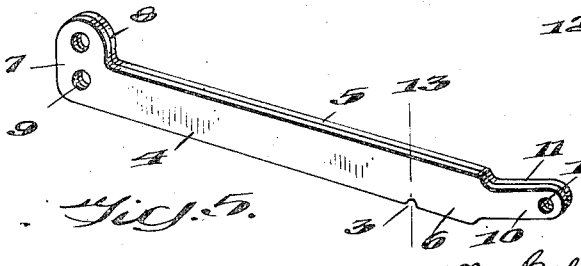
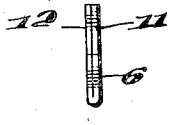


Fig. 5.



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2,479,741

METHOD OF MAKING SPURS

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1 Claim. (Cl. 113—116)

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My invention relates to new and useful improvements in riding spurs and the method of forming the same, and although the particular embodiment herein described is primarily directed to light weight children's spurs, the principle involved may be employed with equal effect in the manufacture of regular riding spurs.

The object of my invention is to provide a simple and inexpensive method of making spurs of sheet metal or the like, wherein the entire structure, with the exception of the rowel, is formed in one piece, preferably from a suitably stamped blank.

Another object of my invention is to provide an improved method of forming a blank for the manufacture of spurs, which is initially cut or stamped in a shape which may be bent and curved at predetermined points with a minimum of effort, so as to form a spur which is not only pleasing to the eye but is strong and durable.

A further object of my invention is to provide an improved spur and method of making the same from a blank, so shaped as to minimize waste of stock in the stamping and cutting operation.

With the above and other objects in view which will appear as the description proceeds, my invention consists in the novel features hereinafter set forth, illustrated in the accompanying drawings and more particularly pointed out in the appended claim.

Referring to the drawing in which numerals of like character designate similar parts throughout the several views,

Figure 1 is a perspective view of a completed spur showing the rowel in dotted lines;

Figure 2 is a plan view of the blank from which the spur is formed;

Figure 3 is a perspective view showing the first bending step in one method of forming my improved spur;

Figure 4 is an end view showing the second bending step in said method;

Figure 5 is a perspective view showing the first bending step in a modified method of forming the spur from the same blank; and

Figure 6 is an end view of the bent blank shown in Figure 5.

In the drawing:

The numeral 1 represents a blank, preferably composed of aluminum or other light, easily workable metal, which is either stamped or cut in the form shown in Figure 2. The blank is severed from one end, longitudinally through its center as at 2, to a predetermined point 3 where an aperture is provided to facilitate in the bending operation as will later appear. The severing of the blank forms two oppositely disposed strips or legs 4 and 5 lying in a common plane and integral at one end with a connecting web 6, formed by the body of the blank. The free ends of the legs

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4 and 5 terminate in oppositely disposed ears 7 and 8 respectively, which serve as strap supporting lugs for the finished spurs, said ears being preferably provided with apertures 9 for receiving suitable strap securing means.

The opposite end of the blank 1 is bifurcated to form two diverging rowel supporting arms 10 and 11, provided with apertures 12 adjacent their outer extremities, said apertures being so positioned as to register with one another, to receive suitable rowel supporting means when the blank is bent longitudinally on its center line.

One method of forming my improved spur from the blank just described, consists in first bending the blank 1 at right angles, transversely on a line indicated at 13, Figure 2, which extends through the center of the aperture 3 at the terminus of the cut 2. The blank thus bent is illustrated in Figure 3. The web 6 of the blank is then bent longitudinally upon itself on a line shown at 14, Figure 3, bringing the legs 4 and 5 into longitudinal alignment on opposite sides of the blank and placing the diverging arms 10 and 11 in juxtaposition with respective apertures 12 in register, as shown in Figure 4.

By the use of a suitable form or templet, the legs 4 and 5 are then curved to jointly form a U-shaped heel band for the spur, as shown in Figure 1. Any desired form of rowel 15, shown in dotted lines in Figure 1, may be secured between the rowel supporting arms 10 and 11, by means of a rivet or screw, and a strap may be secured to the ears 7 and 8 in a similar manner to complete the spur.

In a modified method of forming this same spur from the blank shown in Figure 2, the blank 1 is first bent upwardly upon itself on a longitudinal line 14, bringing the legs 4 and 5 and the rowel supporting arms 10 and 11 in registering juxtaposition, as shown in Figure 5. The legs 4 and 5 are then bent at right angles in opposite directions on line 13 as shown in Figure 4, after which, by the use of a suitable form or templet, the legs 4 and 5 are curved to form the U-shaped heel band of the spur.

It is desirable to space the arms 10 and 11 to permit free rotation of the rowel 15, and to this end these arms may be initially bent and slightly offset in the stamping operation so that when the blank is later bent upon itself, said arms will be spaced apart as shown in Figure 1.

It will be observed that in the present embodiment of the invention, the divergent angle of the arms 10 and 11 at the bifurcated end of the blank, provides a rowel support which is tilted upwardly to the desired degree as shown in Figures 1 and 5. However, it will be apparent that the rowel supporting arms 10 and 11 need not be cut on a divergent angle in forming the blank which may be so formed as to provide a rowel support di-

rected in the same plane as the body of the spur.

Furthermore, the spur may be formed without any rowel, in which event the rowel supporting lugs 10 and 11 would be replaced by any suitable goading element.

It will thus be seen that I have provided a method of forming a spur which is extremely simple and which consists essentially of four steps, first, the stamping of the blank to the desired shape, second and third, the two bending operations just described, in the desired order, and fourth, the step of curving the arms 4 and 5 to form the heel band.

From the foregoing, it is believed that my invention may be readily understood by those skilled in the art without further description, it being borne in mind that numerous changes may be made in the details disclosed, without departing from the spirit of the invention.

What I desire to claim and secure by Letters Patent is:

The method of making a spur including the steps of forming a blank of sheet metal, slit longitudinally to form two juxtaposed strips lying parallel to one another and in a common plane, and connected at one end by a web, then bending said strips in a common direction, at right angles to the web, on a line running transversely of the web and passing through the inner end of said longitudinal slit, then bending said web upon itself on a central line running longitudinally thereof to bring said strips on opposite sides of the web in longitudinal alignment, and then curving said strips to form opposite legs of a substantially U-shaped heel band.

CHARLES J. GRIMLAND.

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The following references are of record in the file of this patent:

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