ORNAMENT AND METHOD OF MAKING SAME

Filed Oct. 9, 1933

Lewis S. Chilson

INVENTOR.

BY

ATTORNEYS.
This invention relates to an ornament; and has for one of its objects the provision of an ornament in the shape of a game ball which may be formed less expensively and of a more attractive appearance than the ornaments produced at the present time.

Another object of the invention is the provision of an ornament which will be of a more finished appearance than the ornaments which have hitherto been produced.

Another object of the invention is the forming of a seam representing the seam of a game ball at the junction of two pieces which go to make up the ornament and causing the plate of the stock from which the parts are made to extend into the seam and present a more finished appearance.

Another object of the invention is the provision of an ornament representing a game ball of a hollow construction with its halves secured together and in which the halves will be more securely fastened by reason of the enlargement of the securing surfaces at the engaging edges.

A further object of the invention is the provision of an enlarged engaging surface at the meeting edges with solder flux applied only to the enlarged surfaces, whereby solder may be limited in its flowing so as to prevent its running from the inside of the seam outwardly onto the plated surface.

With these and other objects in view, the invention consists of certain novel features of construction, as will be more fully described, and particularly pointed out in the appended claims.

In the accompanying drawings:

Fig. 1 is a side elevation of an ornament representing a game ball.

Fig. 2 is an end view thereof.

Fig. 3 is a side elevation looking at the opposite side of the ball from that shown in Fig. 1.

Fig. 4 is a sectional view of one half after it has been cupped by suitable dies or tools.

Fig. 5 is a sectional view on line 5—5 of Fig. 4.

Fig. 6 is a view similar to that shown in Fig. 5 with the edges of the cup thinned.

Fig. 7 is a view similar to Fig. 6, showing these thinned edges as rolled inwardly.

Fig. 8 illustrates a cup after these thinned edges have been surfaced to present the meeting edges in a single plane.

Fig. 9 is a sectional view of two of the cups secured together along their surfaced meeting edges.

Fig. 10 is an enlarged fragmental view illustrating the rolled-in edge of Fig. 7 and showing the plated stock as being carried inwardly about this rolled edge.

Fig. 11 is a fragmental view similar to Fig. 3 on an enlarged scale, showing the edge of the cup as surfaced to present it in a single plane.

Fig. 12 is an enlarged fragmental view of the means for suspending the ornament.

Ornaments are frequently worn in the form of game balls, such as foot balls, soccer balls, volley balls, basket balls, or the like, by the players of these respective games, in the form of pendants from watch chains, or the like. These balls are usually formed of a hollow construction so as to reduce their weight with a body of base metal having a plated outer surface, such as gold plate or the like and it has been customary to form these balls in halves and secure these halves together by solder forming a seam. In the more expensive balls, after the soldering is completed, a burring tool or a file has been used to cut out or remove some of the solder along the meeting edges of the halves and to at the same time form a recess which would represent the seam of the ball as it would appear where the inturned edges of the leather cover were sewed together. This burring operation required skilled workmen and was an expensive operation to perform. Moreover, this removal of the solder along the joint or meeting edges also removed the plate of the stock at these meeting edges requiring a re-plating of the entire device, if a finished job were to be formed.

In order that these expensive operations, now being used in this art, may be minimized or eliminated, I have caused the edges of the cups to be thinned and rolled inwardly to carry this plated surface into the seam and I have then surfaced by filing or grinding the rolled-in edges to cause them to be in a flat or single plane and have then applied solder flux to these surfaced edges only so that the solder will be limited in its movement outwardly from within the hollow body and will not run onto the plated surface, by which arrangement I am enabled to carry the plating into the seam and eliminate the necessity of scraping the solder from the seam and replating the body to present the desired ornamental effect; and the following is a more detailed description of the present embodiment of this invention illustrating the preferred means by which these advantageous results may be accomplished:

With reference to the drawing, 10 designates one of the halves of the body which is cupped up in suitable tools to provide one half of the game.
ball. The other half of this ball will be identical with the first half except in one of the halves there will be formed indentations to represent the edges of the ball. The cup 10 will have its edges 12 thinned as at 13, as shown in Fig. 6, which operation will maintain the plating 14, see Fig. 10, extending out to the end of the thinned edge 13. This thinned edge of the cup, as shown in Fig. 6, will then be laid upon a tool having a curved recess substantially the shape of the ball, and by forcing the same towards this tool the edge will be rolled inwardly, as illustrated at 14, in Figs. 7 and 10, so as to carry the plating inwardly and form a curve 16, as shown in Fig. 10.

I then position the cup with its edge downwardly upon some abrasive surface and grind or file this rounded edge to present a flat surface 17 in a single plane which, of course if carried to the extent shown in the lackey's drawing, removes the plating 14 therefrom. It is, however, necessary to provide a flat surface in order that the meeting edges may contact continuously their full extent. It also extends this surface so that a larger area to be soldered is presented for strengthening it.

After the edges of the cups are thus surfaced, I apply solder flux to these surfaced edges. If the body is to be soft soldered I will place the cup with its edges downwardly upon a glass or smooth surface over which there is a thin film of acid. This acid will then engage and stick only to the flat surfaced edge. If hard solder is to be used the flux, usually borax, will be applied either in this described manner or will be placed about the edges carefully with a brush; solder is applied therefrom. The acid will then begin to work its way in between the cup and the body and will prevent them from coming apart. The acid will then begin to work its way in between the cup and the body and will prevent them from coming apart.

Thus I am enabled to provide a groove 18 at the meeting edges of the halves of the body with a firm joint at these meeting edges due to the enlarged contacting surface, while the plating 14 extends into this groove and to the bottom thereof providing a finished appearance for the structure without the necessity of additional plating or additional operations. In order to present the seams of the ball which will cooperate with this seam at the joint of the halves, I impress into the surface of each of the halves as the cups are formed, a groove 19 which will be curved to conform to the curved shape of the seams of the actual game ball which is to be represented, the same forming ribs on the inner surface of the device.

In order that the ornament may be suspended I provide an ear 20 integral with the edge of each cup. This ear is first a projection shaped substantially as illustrated in Fig. 4, with a recess 21 extending into this projection. When the halves are assembled the projections will align, as shown in Fig. 12, and after the soldering has been completed a drill will be passed thru the bottom of the depressed part 21 to cut out this bottom and form an opening thru the projections 20 thus providing registering ears for suspension of the ornament on a watch chain or the like. The accurate piercing at point 21 will leave surrounding meeting side walls with plated surfaces and form an air tight hollow body which because of the heat conditions in formation will be a partial vacuum and many of the balls thus formed are found to be lighter than water and will float on the surface thereof.

By this arrangement a finished appearance with the minimum number of operations may be had and additional plating will be eliminated and the structure will be an improvement over the manner in which devices are similarly formed at the present time.

It will, of course, be apparent that when the ornament is made of the precious metals no plating will be necessary and yet an improved joint and desirable seam may be formed in the manner described.

The foregoing description is directed towards the method and construction illustrated, but I desire it to be understood that I reserve the privilege of resorting to all the equivalent changes to which the construction and method are susceptible, the invention being defined and limited only by the terms of the appended claims.

I claim:
1. A small hollow ornament formed in a plurality of pieces, the meeting edges of these pieces extending inwardly at the seam to provide a recess or groove in the surface of the ornament, the meeting edges of the pieces being enlarged by the inward extending edges and each being provided in substantially a single plane and solder joining said meeting edges together.
2. A small hollow ornament formed in a plurality of pieces, each having an outer plated surface, the meeting edges of the pieces extending inwardly at the seam to provide a recess or groove in the surface of the ornament with the plated surface extending thereinto, the meeting edges of the pieces being enlarged by the inward extending edges and each being provided in substantially a single plane, solder joining said meeting edges together, the meeting edges at one point being provided with integral ears registering to provide a means of suspension for said ornament.
3. A small hollow ornament formed in a plurality of pieces, each having an outer plated surface, the meeting edges of the pieces extending inwardly at the seam to provide a recess or groove in the surface of the ornament with the plated surface extending thereinto, the meeting edges of these pieces being enlarged by the inward extending edges and each being provided in substantially a single plane, solder joining said meeting edges together, and additional recesses in the surface of said ornament cooperating with said seam recess and shaped to present the appearance of a game ball.
4. The method of forming a small hollow ornament, which consists in forming two cups, each substantially one half of the finished ornament, thinning the edges of each cup, rolling the thinned edges inwardly, surfacing the rolled-in edges to present them in a single plane, and soldering the surfaced edges to form a small hollow ornament.
5. The method of forming a small hollow ornament, which consists in forming two cups, each substantially one half of the finished ornament, rolling the edges inwardly, grinding the rolled-in edges to present them in a single plane, and soldering the ground edges to form a small hollow ornament.
6. The method of forming a small hollow ornament, which consists in forming two cups, each substantially one half of the finished ornament, rolling the edges inwardly, grinding the rolled-in edges to present them in a single plane, and soldering the ground edges to form a small hollow ornament.
and with plated outer surfaces, thinning the edges of each cup, rolling the plated thinned edges inwardly, surfacing the rolled-in edges to present them in a single plane and soldering the surfaced edges to form a small hollow ornament.

7. The method of forming a small hollow ornament, which consists in forming two cups, each substantially one half of the finished ornament and with plated outer surfaces, rolling the plated edges inwardly, grinding the rolled-in edges to present them in a single plane, and soldering the ground edges to form a small hollow ornament.

8. The method of forming a hollow body, which consists in forming two cups, each substantially one half of the finished body, and with plated outer surfaces and projections from the edges of the halves, thinning the edges of each cup, rolling the thinned plated edges inwardly, surfacing the rolled-in edges to present them in a single plane, and soldering the surfaced edges to form a hollow body, and piercing the projections to provide ears for the suspension of the body.

9. The method of forming a hollow body, which consists in forming two cups, each substantially one half of the finished body and with plated outer surfaces and projections from the edges of the halves, thinning the edges of each cup, rolling the thinned plated edges inwardly, surfacing the rolled-in edges to present them in a single plane, soldering the surfaced edges to form a hollow body, and piercing the projections to provide ears for the suspension of the body.

10. The method of forming a small hollow ornament, which consists in forming two cups with plated outer surfaces, each substantially one half of the finished ornament, thinning the edges of each cup, rolling the thinned edges inwardly, surfacing the rolled-in edges to present them in a single plane, applying soldering flux to the surfaced edges only, placing solder inside the halves when brought together and heating whereby the solder will run only to the surfaced edges and stop short of the plated surface.

LEWIS S. CHILSON.