Aug. 13, 1935. S. CAPEZIO 2,011,435

TAP SOLE

Filed March 19, 1934

Fig. 1.

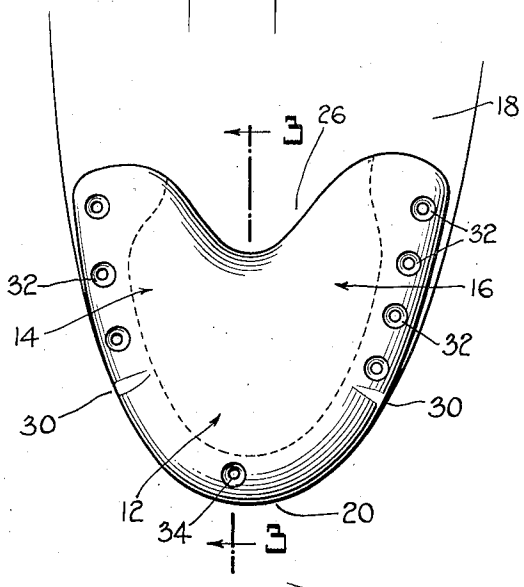



Fig. 2.

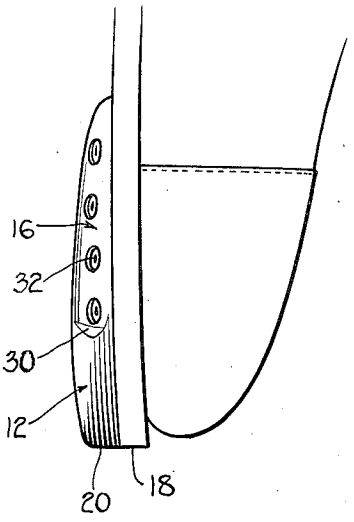



Fig. 3.

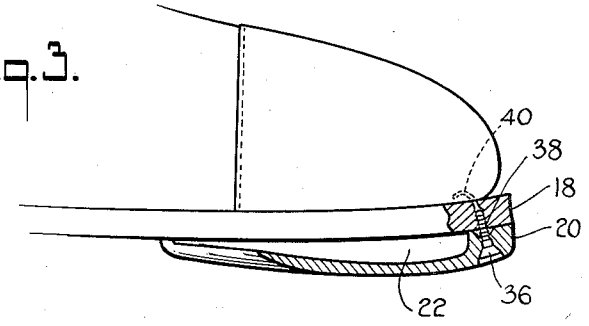
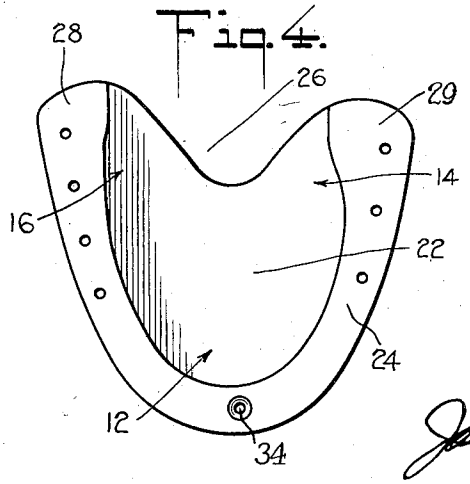



Fig. 4.




INVENTOR
Salvatore Capezio
BY
James & Franklin
ATTORNEYS

Patented Aug. 13, 1935 2,011,435

# UNITED STATES PATENT OFFICE

2,011,435

## TAP SOLE

Salvatore Capezio, New York, N. Y.

Application March 19, 1934, Serial No. 716,262

9 Claims. (Cl. 36—8.3)

This invention relates to tap soles for dancers, more commonly called taps, and to a dancing shoe provided with the same.

Tap dancing has become highly specialized, and for successful appearances, it is necessary for the dancer to produce taps which are loud and distinct and to further include in the routine, acrobatic or eccentric steps, including toe stands.

One of the primary objects of the present invention resides in the provision of a tap which will facilitate toe stands of long duration. Another important object of my invention is to provide the tap with a sound box or sound chamber adapted to augment the sound produced by the tap.

To the accomplishment of the foregoing and a number of other objects which will hereinafter appear, my invention consists in the tap sole and in the dancing shoe provided with a tap sole in the manner hereinafter more particularly described in the specification and sought to be defined in the claims. The specification is accompanied by a drawing, in which

Fig. 1 shows the sole of a shoe provided with my improved tap;

Fig. 2 is a side elevation of the same;

Fig. 3 is a partially sectioned side elevation of the same taken in the plane of the line 3—3 of Fig. 1; and

Fig. 4 is a plan view showing the inside or top of the tap.

The tap is preferably made of metal and may be cast in a single piece from a preferably light metal such as aluminum or one of its alloys. Referring to the drawing, the tap comprises a toe portion 12 and diverging wing portions 14 and 16 forming a continuation of toe portion 12. The contour of the tap preferably follows the contour of the sole 18 of the shoe very closely, especially at the toe portion 12.

The toe portion 12 is relatively thick and provided with a broad front edge 20, presenting a surface approximately equal to the thickness of the sole 18. Referring to Figs. 2 and 3, it will be seen that the front edge 20 of the tap is arranged flush with the front edge of sole 18 so that the two together present an exceedingly broad surface which greatly facilitates toe stands. Furthermore, the edge of the leather sole bears against the floor at the same time as the metal tap and helps prevent slipping. For this reason, it is extremely important that the front edges of the tap and the leather sole be made flush and continuous, and in some cases, the precaution is taken of grinding the front edge after the tap has been mounted in place in order to give the tap and the leather sole the same contour and to provide, in effect, a single relatively broad front surface.

The top of the tap is hollowed out to form a sound chamber or sound box, clearly shown at 22 in Figs. 3 and 4. The hollow may be made quite deep because of the unusually great thickness of the tap. It is bordered at the sides and front by a marginal flange 24 and this flange has a broad top surface sufficient to provide adequate support for the sole 18 of the shoe. The chamber 22 is left open at the rear edge 26 and this I find is extremely important if the full benefit of the sound box is to be obtained. The marginal flange 24 terminates at 28 and 29 and these terminals are preferably widened inwardly as shown in Fig. 4, in order to increase the support for the sole 18 of the shoe and to thereby at least partially compensate for the absence of direct support between the rear edge 26 of the tap and the shoe sole.

The great thickness of the toe portion 12 of the tap is not maintained throughout the tap and the wings 14 and 16 are thinned down toward the rear of the tap as will be evident from an inspection of Figs. 2 and 3. Furthermore, the extreme edge of the tap which is maintained at a substantially uniform thickness around the toe portion 12 is beveled or thinned at the side edges of the tap, there being a transition at the points 30. (Figs. 1 and 2).

The thinning of the tap from the front toward the rear, together with the thinning of the edges of the wing portions, thus giving the wings a convex surface, increases the projection of the toe portion of the tap from the shoe and makes the same better available for taps produced at the toe.

The tap is secured to the shoe by appropriate nails or screws which pass through mounting holes 32. These holes are preferably countersunk to receive the nail heads, and in the case of the hole 34 at the tip of the tap, the hole may be counter-sunk from both sides in order not to obstruct the nail despite the extra thickness of metal at that point. It will be evident from the drawing that the attachment is through the flange 24 which is of ample breadth for the purpose.

The nails 36 may be of any desired type but I find it preferable to use a nail having locking rings 38 around the body and a thinned portion 40 at the end which is bent over within the shoe insole when attaching the tap. Except for the

hole 34, the nail holes are located on the thinned edges of wings 14 and 16 and it will be noted that the wing 16 is provided with four nail holes, while the wing 14 has only three, this being due to the fact that wing 16 is longer than wing 14.

It is believed that the mode of constructing and attaching my improved tap, as well as the many advantages thereof will be apparent from the foregoing detailed description.

The combination of shoe and tap facilitates toe stands because of the broad toe surface, and prevents the troublesome slippage of an all metal toe edge because of the contact of the leather sole with the floor. The relatively thick projecting toe portion facilitates tapping with the toe, while the weight of the tap is reduced behind the toe. A loud clear sound is produced by reason of the sound box construction. Adequate area is provided for comfortable support of the sole.

It will be apparent that while I have shown and described the tap in preferred form, changes and modifications may be made in the structure disclosed without departing from the spirit of the invention as defined in the following claims.

I claim:

1. A metallic tap comprising a single body of metal having a thick front edge and diverging sides tapering in thickness from the front edge, said tap being hollowed at its upper surface to form a sound box bordered by a marginal flange, said flange being broad on its upper surface to provide adequate support for the sole of the shoe to which it is attached and terminating at the rear side edges of the tap, whereby said sound box is open at the rear of the tap, said flange having a plurality of nail holes passing therethrough.

2. A metallic tap comprising a single body of metal having a toe portion and rearwardly extending divergent wing portions, the toe portion of said tap having a thick arcuate edge which is substantially perpendicular to the upper face of the tap but the wing portions of said tap being tapered or thinned down when viewed in elevation, whereby the toe portion projects downwardly relative to the wing portions and is thereby made better available for toe taps, the top of said tap being hollowed out and bordered by a flange of substantial breadth to adequately support the sole of the shoe, and said flange having a plurality of nail holes passing therethrough.

3. The combination with a tap comprising a body of metal having a thick front edge and divergent sides tapering in thickness from the front edge, said tap being hollowed at its upper surface and bordered by a broad marginal flange, of a shoe having a sole of substantial thickness at the toe portion thereof, and means securing the tap to the sole of the shoe with the thick front edge of the tap positioned flush with the front edge of the sole.

4. The combination with a metallic tap comprising a single body of metal having a thick front edge and divergent sides tapering in thickness from the front edge, of a shoe having a leather sole of substantial thickness at the toe portion thereof, said tap being hollowed at its upper surface to form a sound box bordered by a marginal flange, said flange being broad on its upper surface to provide adequate support for the sole of the shoe to which it is attached and terminating at the rear side edges of the tap, whereby said sound box is open at the rear of the tap, said flange having a plurality of nail holes passing therethrough, and means passing through the nail holes securing the tap to the sole of the shoe with the thick front edge of the tap positioned flush with the front edge of the sole.

5. The combination with a metallic tap comprising a toe portion and rearwardly extending divergent wing portions, of a shoe having a sole of substantial thickness at the toe portion thereof, the toe portion of said tap having a thick edge but the wing portions of said tap having edges which are thinned down, the top of said tap being hollowed out and bordered by a flange of substantial breadth to adequately support the sole of the shoe, and means securing the tap to the sole with the thick front edge of the tap positioned flush with the front edge of the sole.

6. The combination with a metallic tap comprising a toe portion and rearwardly extending divergent wing portions, of a shoe having a leather sole of substantial thickness at the toe portion thereof, the toe portion of said tap having a thick edge but the wing portions of said tap having edges which are thinned down, the top center portion of said tap being hollowed out to form a sound box which is open at the rear but which is bordered at the sides and front by a flange of substantial breadth to adequately support the sole of the shoe, and means securing the tap to the sole of the shoe with the thick front edge of the tap positioned flush with the front edge of the sole.

7. In combination, a shoe having a sole of substantial thickness at the toe, a tap of substantial thickness at the toe, and means securing said tap to the sole with its front edge flush with the front edge of the sole, in order to form a single front edge of abnormal thickness to facilitate toe stands.

8. The combination with a metallic tap comprising a toe portion and rearwardly extending divergent wing portions, of a shoe having a sole of substantial thickness at the toe portion thereof, the toe portion of said tap having a thick arcuate edge which is substantially perpendicular to the sole of the shoe but the wing portions of said tap being tapered or thinned down when viewed in elevation, whereby the toe portion projects downwardly from the shoe relative to the wing portions and is thereby made better available for toe taps, the top of said tap being hollowed out and bordered by a flange of substantial breadth to adequately support the sole of the shoe, and means securing the tap to the sole of the shoe with the thick front edge of the tap positioned flush with the front edge of the sole.

9. A metallic tap comprising a single body of metal having a thick front edge which is substantially perpendicular to the upper face of the tap and having diverging sides tapering in thickness from the front edge, said tap being hollowed at its upper surface to form a sound box bordered by a marginal flange, said flange being broad on its upper surface to provide adequate support for the sole of the shoe to which it is attached, and said flange having a plurality of nail holes passing therethrough.

SALVATORE CAPEZIO.