July 26, 1938. S. CAPEZIO 2,124,908

SIDE TAP AND TAP ASSEMBLY FOR DANCERS

Filed Jan. 19, 1938

Fig. 1

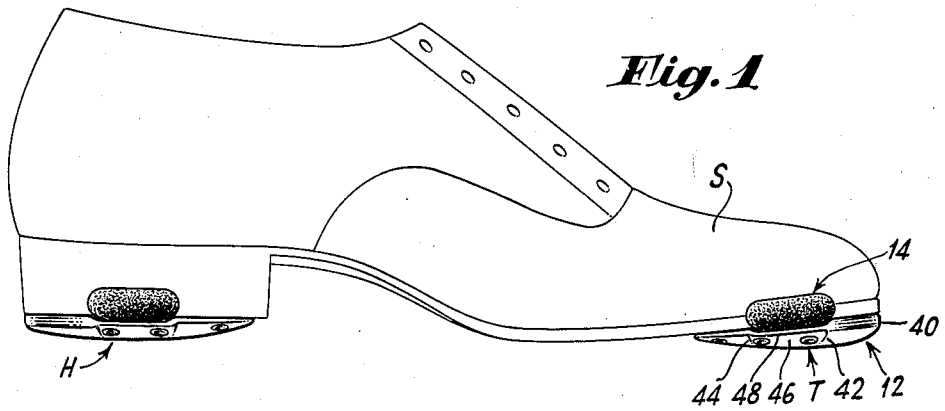


Fig. 2

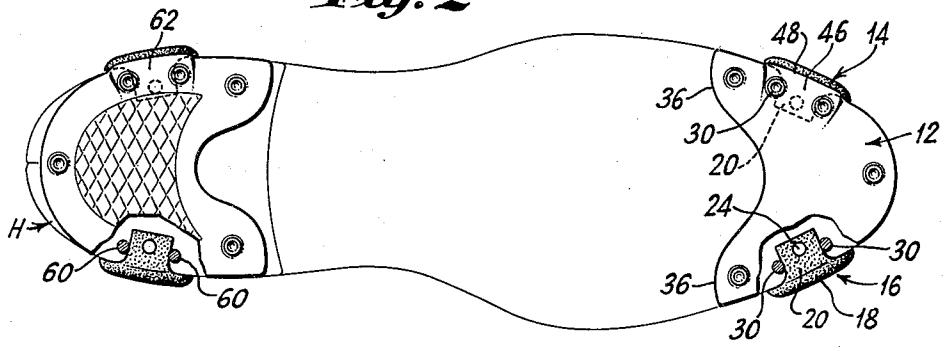


Fig. 3

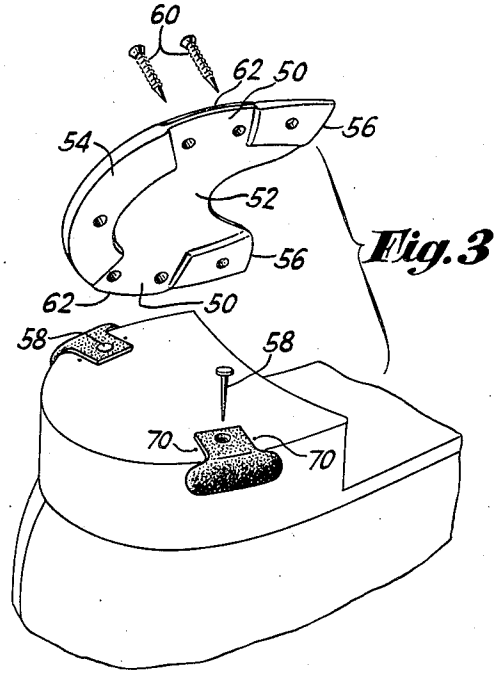
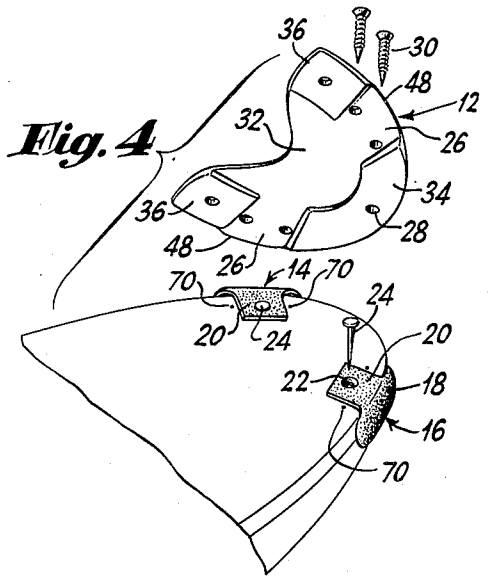


Fig. 4



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SIDE TAP AND TAP ASSEMBLY FOR DANCERS

Salvatore Capezio, East Paterson, N. J.

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10 Claims. (Cl. 36—8.3)

This invention relates to dancers' taps, and more particularly side taps, and especially an assembly of bottom and relatively adjustable side taps.

The common type of dancer's tap has the advantage of being light in weight and of not detracting excessively from the flexibility of the shoe on which it is mounted. However, it does not permit the production of extra tap sounds with the side of the toe or heel. In fact, the edge of the tap is usually within the edge of the shoe because it is not possible to make the vast number of different sizes and shapes of tap that would be needed to fit various soles and heels. Moreover, even if an accurate fit is obtained, the edge of the tap does not present sufficient surface for the intended purpose.

The primary object of the present invention resides in the provision of side taps which will facilitate the production of extra taps or clicks with the side of the toe or heel, all without reducing the flexibility, light-weight, and fast action of the shoe. A more particularized object is to make the tap assembly of multiple parts, the side taps preferably being separate members which are relatively adjustable so that they may be moved snugly against the side of the shoe, while using only a reasonable number of sizes for the bottom tap. Further objects of the invention are to make the side taps inexpensive and light in weight, and with this object in view, I prefer to stamp the same out of sheet metal. The tap surface is convex to give the same the desired thickness and rigidity and to permit a snug fit against the side of the shoe. The side tap is preferably secured in place by means of an attaching flange extending sidewardly therefrom beneath the shoe, and an additional advantage of the sheet metal construction is that the flange is thin and is thereby adapted to be received between the bottom tap and the shoe.

Such a side tap may be used with a variety of bottom taps, but I prefer to combine the side tap with a special bottom tap, this bottom tap being recessed on its top surface at the sides to receive the attaching flanges of the side taps. The bottom tap is preferably provided with a marginal flange which rests against the bottom of the shoe and which surrounds a hollow compartment or sound chamber. This peripheral flange preferably terminates at the inner end of the tap to form a sound-discharge passage. The desired space for receiving the side tap flange may be provided by interrupting the peripheral flange of the bottom tap. The side taps are preferably secured by independent attaching means, and the nail holes through the bottom tap are so spaced at the side taps that the nails straddle the flange of the side tap.

In accordance with further features and objects of my invention, the foregoing improvements are applied to a toe tap and also to a heel tap. The bottom tap is preferably enlarged at the side taps to form protective surfaces underlying the side tap. The side tap may be treated to give the same a permanent black color when it is desired to render the same inconspicuous on black shoes.

To the accomplishment of the foregoing, and such other objects as will hereinafter appear, my invention consists in the side and bottom tap elements and their relation one to the other, as hereinafter are 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 is a side elevation of a shoe provided with bottom and side taps at both the toe and heel;

Fig. 2 is a bottom view thereof;

Fig. 3 is explanatory of the internal construction and mode of assembly of the heel tap; and

Fig. 4 is explanatory of the internal construction and mode of assembly of the toe tap.

Referring to the drawing, the shoe S has secured thereto a tap assembly T at the toe and another tap assembly H at the heel. It will be understood that, if desired, either tap assembly may be used alone.

The toe tap assembly comprises a bottom tap **12** and side taps **14** and **16**. The side taps comprise a side wall **18** formed integrally with a bottom flange or attaching flange **20**. This is perforated at **22** to receive a nail **24** for securing the side tap in place. With this construction, the exposed tap wall **18** may be imperforate and is devoid of nails or screws. This is desirable first, for improved appearance; second, to avoid the possibility of catching or scratching by the heads of the nails or screws; and third, because in the case of the toe tap, it is difficult and impractical to drive nails or screws through the side edge of the sole, the latter ordinarily being quite thin. With the present construction, the side wall **18** may be pushed snugly against the side edge of the sole, whereupon the nail **24** is driven home to secure the side tap in place.

The side tap is preferably made of heavy gauge sheet metal. This makes it strong, cheap, and light in weight. The side wall **18** is preferably convex, thus giving the same substantial thick-

ness to facilitate production of the "taps", and, at the same time, insuring a neat, snug fit between the wall 18 and the side of the shoe.

The bottom tap 12 is preferably made in the conventional manner, by die casting aluminum or other suitable light-weight alloy. It is preferably cut away at 26 to receive the attaching flanges 20 of the side taps. In this way, the top of the tap may be fitted snugly against the bottom of the shoe. The bottom tap is provided with a series of nail holes 28 dimensioned to receive special ridged nails 30 for mounting the tap on the bottom of the shoe. At the sides of the tap, the nail holes are so spaced that the nails 30 clear the bottom flange 20 of the side taps. They preferably straddle flange 20 rather closely, as is clearly shown in Fig. 2, thus helping fix the location of the side tap.

The bottom tap 12 is preferably provided with a hollow sound chamber 32. From a different viewpoint, the tap is provided with a broad peripheral flange 34 which rests against the bottom of the shoe and within which the sound chamber 32 is formed. The flange 34 preferably terminates at the inner end of the tap, as is indicated at 36, thus forming a sound-discharge passage between the ends 36. This passage is located between the bottom of the shoe and the top of the tap at the inner end of the tap. When using a flange 34, as here specified, the recesses 26 for the side taps may be considered to be interruptions in the continuity of flange 34.

The bottom tap is preferably provided with a high front edge 40 to facilitate tapping with the tip of the toe. The tap tapers to a comparatively thin edge at its rear end, and may be stepped slightly, as is indicated at 42 and 44, to form a portion 46 of substantially uniform thickness at the side tap. The tap is preferably enlarged at this portion so as to form a protective edge 48 which projects out sidewardly from the tap and underlies the bottom edge of the side tap. This protective part of the bottom tap thus forms a smooth continuation of the side tap.

The heel tap assembly H is generally similar to the toe tap assembly already described, and probably requires no detailed description other than to say that the bottom tap at the heel is shaped in dimension to conform to the heel. A suitable number of sizes of heel tap is provided, but here again, it would be impossible to accurately fit every variety of heel, and the adjustability of the side taps relative to the bottom tap makes for a complete tap assembly which snugly fits the heel both at the sides and the bottom. The heel tap is recessed at 50 to receive the attaching flanges of the side taps. The heel tap is preferably hollowed at 52 to form a sound-amplifying chamber, this chamber being surrounded by flange 54 which is interrupted to form the recesses 50 and which is terminated at 56 to form a sound-discharge passage therebetween. The side taps are preliminarily secured by nails 58, and the bottom tap is thereafter attached by nails 60, two of which straddle the flange of the side tap, as is best shown in Fig. 2. The heel tap, like the toe tap, is preferably enlarged at 62, to form protective surfaces underlying the side taps and forming a smooth continuation thereof.

The side taps may be left with a natural metal color which is inconspicuous on white shoes and silver shoes. This color may also be used on black shoes, but if the dancer prefers to conceal the same, the side taps are preferably given a black finish. This finish must be a permanent one which will not wear or chip as the taps are repeatedly struck against one another. I have found that the Parkerizing process developed by the Parker Rustproof Company is satisfactory for this purpose. The taps are made gray rather than black by the Parkerizing process, but are then oiled and baked, whereupon they acquire a black finish which is exceedingly durable and satisfactory for the present purpose.

To attach the tap assembly with the parts in proper registration, I recommend the following procedure. The bottom tap is first properly positioned on the bottom of the shoe, whereupon the position of the side nail-holes is marked on the bottom of the shoe. These marks will be seen at 70 in Figs. 3 and 4. The bottom tap is then removed and the side taps are nailed in position with the attaching flange exactly centered between the marks 70. The bottom tap is then replaced and nailed in position.

It is believed that the construction and method of assembly and use, as well as the many advantages of my improved side tap and complete tap assembly will be apparent from the foregoing detailed description thereof. The side taps may be used with a conventional bottom tap, this being so because of the comparatively thin nature of the attaching flange of the side taps. However, the fit obtained is not as neat and as good as that obtained when using the complete tap assembly, that is, when combining with the side taps the special bottom tap intended to be used therewith. The dancer is greatly aided by the addition of the side taps, for toe and heel clicks can be made by hitting one toe or heel against the other, and in "crossovers", by striking the heel of one foot against the toe of the other, and vice versa. The side taps are also good for "riff tapping", and, in general, give added brilliance to tap dance routines. The complete tap assembly is light in weight, inexpensive to manufacture, and in no way interferes with the flexibility of the shoe and the speed of the dance. A snug, accurate fit is obtained on all shoes while using only a reasonably limited number of sizes for the bottom tap. The side taps are alike for all sizes, and are adjustable relative to one another and to the bottom tap in order to obtain the desired snug fit.

It will be understood that, while the side taps have been shown at the sides of the toe and heel, it is also possible to use the side tap at the tip of the toe or at the rear end of the heel. The flange around the bottom tap may be interrupted at the forward end of the toe tap or rear end of the heel tap to form an additional recess receiving one of the side taps. Considered in this aspect, the word "side" refers to the vertical or side wall of the shoe extending entirely around the periphery of the shoe.

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

I claim:

1. A dancer's shoe having attached thereto a bottom tap and two side taps, each side tap comprising an elongated side wall and a bottom flange formed integrally therewith, said bottom flange being perforated, means passing through the perforation for anchoring the same on the bottom of the shoe, said bottom tap being a cast

metal body having a peripheral flange adapted to rest on the bottom of the shoe and to form a hollow sound chamber in the tap, said flange terminating at the inner end of the tap to leave a sound discharge space therebetween, said flange also being interrupted at the sides of the tap to receive the bottom flanges of the side taps.

2. A dancer's shoe having attached thereto a bottom tap and two side taps, each side tap comprising an elongated side wall and a bottom flange formed integrally therewith, said bottom flange being perforated, means passing through the perforation for anchoring the same on the bottom of the shoe, the bottom tap being provided with a series of holes and having nails for fastening the tap to the bottom of the shoe, two of said holes at each side of the tap being so spaced that the nails driven therethrough straddle the flange of the side tap at that side of the shoe.

3. A dancer's shoe having attached thereto a bottom tap and two side taps, each side tap comprising an elongated side wall and a bottom flange formed integrally therewith, said bottom flange being perforated, means passing through the perforation for anchoring the same on the bottom of a shoe, said bottom tap being a cast metal body having a peripheral flange adapted to rest on the bottom of the shoe and to form a hollow sound chamber in the tap, said flange being interrupted at the sides of the tap to form recesses to receive the bottom flanges of the side taps, the bottom tap being provided with a series of holes and having nails for fastening the tap to the bottom of the shoe, two of said holes at each side of the tap being so spaced that the nails driven therethrough straddle the flange of the side tap at that side of the shoe.

4. A dancer's shoe having attached thereto a bottom tap and side taps, said side taps including a vertical tapping surface and a horizontal mounting flange extending inwardly therefrom above the bottom tap and disposed between the bottom tap and the bottom of the shoe, said bottom tap being enlarged at the side taps to provide a bottom tap surface underlying the side tap, and to provide an edge which forms in effect a continuation of the side tap.

5. A dancer's bottom tap comprising a metal plate member having a top portion adapted to be secured directly against the bottom of the sole of a shoe, said top portion being downwardly recessed to receive a side tap member having a portion extending into the recessed portion and another portion extending up along the edge of the sole to which the tap is to be attached.

6. A dancer's bottom tap comprising a metal plate having a peripheral flange adapted to rest on the bottom of a shoe, said flange having recesses formed therein adapted to receive side tap members having portions extending into said recesses and other portions extending up along the edge of the sole to which the tap is to be attached.

7. In combination, a shoe having a multiple tap assembly attached thereto, said assembly comprising a side tap having an upright tap wall and a sidewardly extending attaching flange, said flange underlying the bottom of the shoe and fastened thereto, and a bottom tap secured to the bottom of the shoe and being cut away to receive the aforesaid attaching flange.

8. A dancer's side tap for a dancing shoe, said tap comprising heavy gauge sheet metal bent to form a horizontally elongated convex surface of substantial area acting as an upright tap wall, said convex wall defining a hollow space on the inner side thereof, the ends of said wall being rounded inwardly for a close fit against the side of the shoe, and a thin flat mounting flange bent approximately at right angles to the tap wall, said mounting flange extending sidewardly from the bottom of the upright wall and terminating at a distance substantially less than the width of ordinary shoes, said flange being adapted to receive means for securing the same to the bottom of a shoe.

9. A dancer's side tap for a dancing shoe, comprising an upright wall of substantial thickness so as to project beyond the edge of the shoe to which it is to be attached, said wall being of substantial height so as to extend a considerable distance above the upper edge of the sole if the tap is attached to a sole, the front and rear ends of said wall being rounded inwardly, the inner surface of said wall being hollowed so that the ends fit tightly and snugly against the side of the shoe, and a thin flat mounting flange projecting sidewardly from the tap wall for a distance substantially less than the width of ordinary shoes.

10. In combination, a shoe and a multiple dancer's tap assembly attached thereto, said assembly comprising a side tap and a bottom tap, said side tap having an upright wall and a sidewardly extending attaching flange, said upright wall extending an appreciable amount above the upper edge of the shoe sole and being hollowed on the inside so that the ends fit tightly against the side of the shoe, said bottom tap being secured to the bottom of the shoe, and said attaching flange comprising a relatively thin flat wall disposed between the shoe sole and the bottom tap, and extending sidewardly for a distance substantially less than the width of ordinary shoes.

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