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Hale et al.

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[54] TWIRLING BATON WITH SPOTTING MEANS

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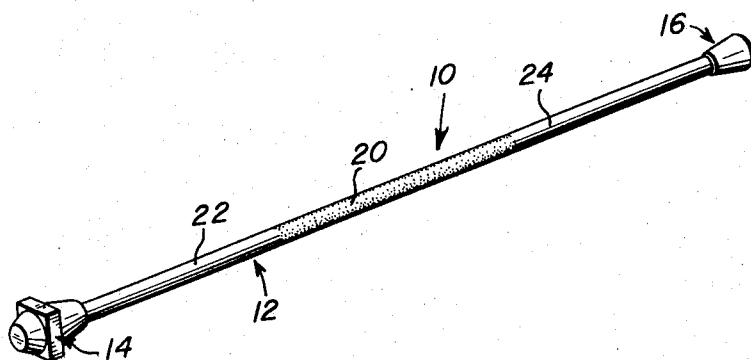
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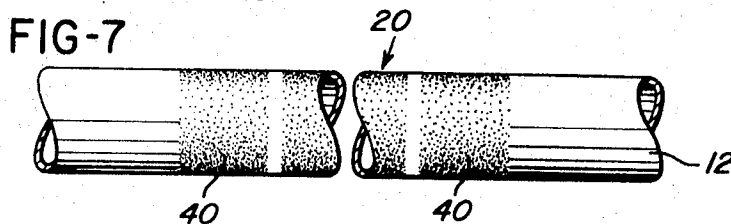
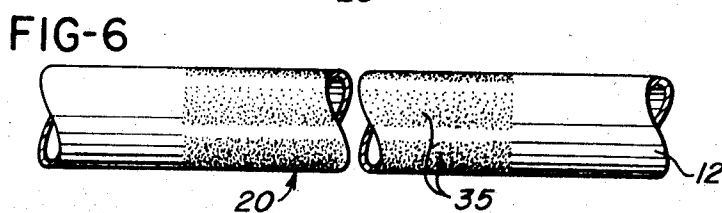
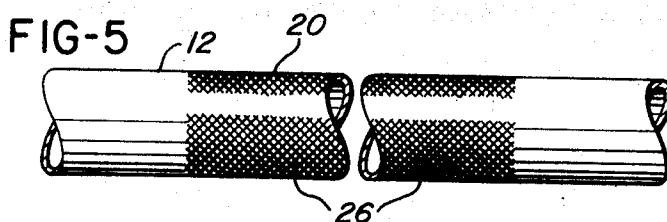
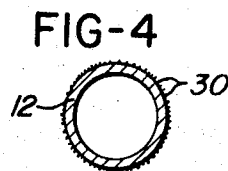
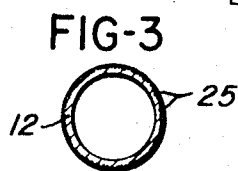
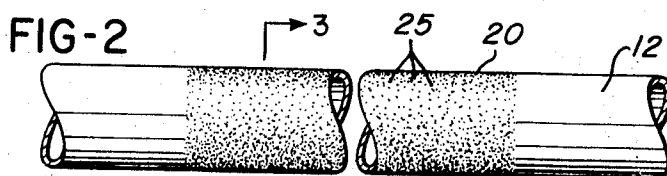
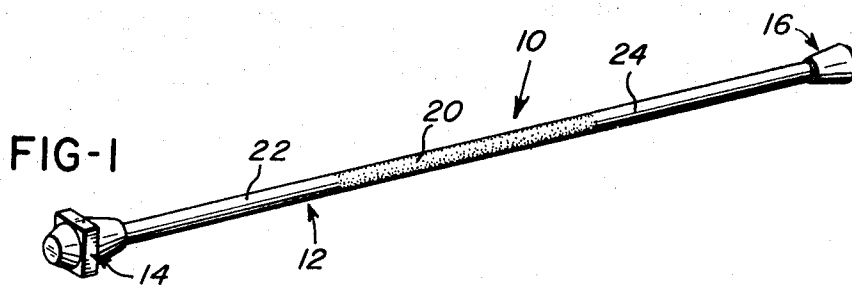
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ABSTRACT

A twirling baton includes a shaft having means defining a textured area preferably on a central portion thereof for aiding the twirler to spot and follow a spinning baton against a bright background and for providing a surface for improved baton manipulation and control. In the preferred embodiment, the shaft is chrome-coated tubular stainless steel and the textured area is a sandblasted surface.

1 Claim, 7 Drawing Figures





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TWIRLING BATON WITH SPOTTING MEANS

BACKGROUND OF THE INVENTION

A baton twirling performance is essentially a test of dexterity and grace. A typical performance includes the manipulation of a twirling baton while carrying out a dance routine in response to music. The music may be supplied by a band, such as at parades and football games, or artificially from recordings as is usually the case in competitive twirling. In each of these twirling environments, the twirler maintains the baton in a continuously spinning state and performs various tricks with the baton.

The shafts of twirling batons are polished to a high luster so that they produce a brilliant spinning appearance when twirled. Such shafts are conventionally constructed of chrome-coated metal for the purpose of producing a polished appearance, and most developments in twirling batons have been directed to providing shafts which achieve an even more dazzling appearance than polished metal. For example, a polished plastic shaft has been developed which includes a layer of glittery decorative material sandwiched between a fiberglass core and a semi-rigid plastic casing, U.S. Pat. No. 3,113,482.

While polished metal and plastic shafts provide a glittering complement to the twirler's performance, they also have drawbacks which detract from it. A serious drawback is evidenced primarily during one of the tricks most often performed by twirlers. In the trick, the twirler tosses the whirling baton high into the air and catches it upon its return. By following the rotational node of the baton and timing the spin, the twirler is able through practice to complete the trick by grasping the baton before it hits the ground.

When polished batons are tossed high into the air against a background of brilliant sunlight or indoor lights, their shiny surfaces are apt to blend in with the light and be lost by the twirler. It is particularly difficult to spot and follow the baton in sunlight because the sun's rays reflect off the baton and produce a bright flaring effect. In such situations, the twirler has only a few seconds to complete the stunt after sighting the baton as it falls toward the ground out of the bright glare of the sun, and is usually successful only by awkwardly grasping the baton at the last moment. Often the twirler is either out of position or never spots the baton, and consequently fails to execute the trick altogether.

Another serious drawback to polished metal surfaces is that they are difficult to grasp and control when the twirler is nervous or perspiring. Such shafts are quite slipper, and many twirlers carry towels or frequently wipe their hands on their costumes in the hope of avoiding dropping the baton. A dropped baton significantly mars the twirler's performance because the baton bounces and rolls away from the twirler, who is then forced to chase it, often causing a disruption of other performers nearby.

In competitive twirling, twirlers are generally constrained within a fixed area and are scored according to their proficiency with the baton and the gracefulness of their routine. Spotting and control are accordingly of vital importance to the competitive twirler, because they lose points if they drop the baton or fail to execute a trick properly. Moreover, they lose additional points if the baton rolls outside the fixed area.

SUMMARY OF THE INVENTION

The present invention is directed to twirling batons and is particularly directed to an improved shaft which increases the ability of the twirler to control the baton and execute ordinary tricks and routines. The improved shaft provides a dull rotational node against a background of bright light and facilitates spotting of the baton as it is rotating in the air. It also provides a non-slippery surface for improved control and manipulation of the baton.

In general, the invention provides a shaft with a textured surface thereon for producing the dull rotational node that is easily spotted against a background of bright reflective light.

The textured surface preferably covers the central portion of the shaft where the twirler handles the baton to provide a surface which is substantially less slippery than a polished shaft.

In preferred practice, the shaft is polished metal, and the textured surface comprises a multiplicity of indentations in the central portion of the shaft which dull the shiny appearance thereof to a substantial degree. The textured surface is preferably a roughened surface which may be a sandblasted, etched or knurled surface, or simply a surface roughened with a metal brush or the like. Alternatively, the roughened surface may comprise a multiplicity of small particles applied by adhesive or the like to the central portion of the shaft. Each of these textured surfaces produces the dulling effect necessary for locating the shaft in the air, and also provides a roughened area for improved control of the baton.

In the preferred embodiment, the elongated shaft is a rigid, chrome-coated tubular stainless steel having an outside diameter of about three-eighths inch and a length of approximately 16 to 30 inches. A sandblasted area 7-10 inches in length is located centrally between the ends of the shaft. This shaft improves the quality of the twirler's performance considerably, much in the same way that an improved baseball glove improves a player's fielding, and enables twirlers to concentrate on the graceful execution of their routines with a minimum of concern with the slipperiness of the baton and the spotting of the baton in the air. As such, the baton of the present invention, as a practical instrument, enables new and improved results to be achieved with the baton and is accordingly a significant advance in the art.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a perspective view of a twirling baton showing the improved shaft of the present invention;

FIG. 2 is an enlarged broken-away view of the shaft of FIG. 1;

FIG. 3 is a cross-sectional view taken along line 3-3 of FIG. 2;

FIG. 4 is a cross-sectional view of a second embodiment of the present invention;

FIG. 5 is an enlarged broken-away view of an alternate embodiment of the present invention;

FIG. 6 is an enlarged broken-away view of another embodiment of the present invention; and

FIG. 7 is an enlarged broken-away view of yet another embodiment of the present invention.

DESCRIPTION OF THE PREFERRED EMBODIMENTS

The twirling baton 10 shown in FIG. 1 includes a shaft 12 with a rubbery ball 14 attached to one end and a somewhat smaller rubbery tip 16 attached to the other end. Generally the ball and tip, or only the tip, have weights in them for providing a balanced baton. The shaft 12 is preferably formed of polished tubular metal, such as chrome-plated stainless steel, although it could as well be formed of solid metal or plastic, or of tubular plastic.

In accordance with the invention, the shaft 12 is provided with a roughened textured surface 20 which preferably covers at least the central portion of the shaft, but in the broad concept of the invention, the surface 20 could comprise the entire shaft as well. The length of the shaft 12 in the typical twirling baton ranges from about 16 to about 30 inches in length, and the textured surface is accordingly preferably from about 7 to about 10 inches in length.

The textured surface 20 in the central portion of the shaft visually offsets the adjacent shiny or polished portions 22 and 24 and serves several purposes. It improves visibility or spotting of the baton when it is thrown into the air and particularly when it is tossed into the air against a background of bright light. The textured surface 20 produces a dull rotational node the outline of which is more easily spotted by the twirler than a totally polished surface. A baton with this type of shaft essentially locates itself in the sky so that, in aerial tricks, it is

easier to time the spin of the center shaft and to grasp the baton without error before it hits the ground.

The textured surface 20 is, by its nature, rougher than the smooth shiny surface of the portions 22 and 24. This surface 20 is also considerably rougher than other materials such as polished plastic, which may be less slippery than polished metal, and it accordingly serves the additional function of improving the twirler's control of the baton.

In the preferred embodiment, the textured surface 20 is formed by a multiplicity of indentations 25 which substantially dull the shiny appearance and interrupt the smooth contour of the central portion of the shaft. This is preferably accomplished by roughening the surface 20, and the representation in FIGS. 1-3 is intended to indicate a sandblasted or etched surface. A surface roughened with a metal brush or the like would have essentially the same properties, and the textured surface 20 may also be a knurled surface, as represented in FIG. 5, in which a plurality of aligned penetrations 26 are milled into the surface of the shaft.

Another embodiment, which is represented in FIG. 4, comprises a multiplicity of small particles 30 applied by adhesive or the like to the central portion of the shaft. The particles 30 produce essentially the same roughened effect as the indentations 25, and present the same appearance as FIGS. 1-2, but have the disadvantage of being dislodged in use.

In other embodiments, the indentations or adhering particles are formed in longitudinal strips 35 (FIG. 6) or in radial bands 40 (FIG. 7) which cover at least a substantial portion of central area 20. Other design variations are also available within the basic concept of the present invention, if a somewhat different twirling appearance is desired.

In one example of the invention, the shaft 12 is chrome-coated tubular stainless steel and has an outside diameter of about three-eighths inch and a length of approximately 16-30 inches. The textured surface 20 defines a center segment on the shaft between the ball 14 and the tip 16 having a length from about 6 to 10 inches roughened to a substantial degree and preferably entirely, to contrast visually the shiny end portions 22 and 24. The textured surface 20 is preferably a sandblasted surface.

From the foregoing description and accompanying drawing,

it is apparent that certain desirable features and advantages and provided by the present invention. The textured area in the center of the shaft can be easily seen revolving in the sky, particularly against a background of bright sunlight. Instead of producing a continuous flare of reflected light which is apt to be lost by the twirler in the sun, the textured surface defines a dull rotational node which enables the twirler to spot and follow the baton and to time the spin of the shaft.

Moreover, the roughened segmental surface also provides a frictional surface facilitating gripping of the baton in tricks and increasing the ability of the twirler to manipulate the baton during regular twirling exercises. It therefore relieves twirlers from the unsightly activities of carrying a towel or wiping their hands on their costumes, and, when combined with the improved spotting feature, enables twirlers to concentrate on the graceful execution of their routines with a minimum of concern with dropping the baton.

While the articles herein described constitute preferred embodiments of the invention, it is to be understood that the invention is not limited to these precise forms of articles, and that changes may be made therein without departing from the scope of the invention which is defined in the appended claims.

What is claimed is:

1. In a baton specifically adapted to be tossed high in the air while spinning and having improved light reflective characteristics to facilitate visual spotting while in flight including an elongated generally cylindrical shaft having a body mounted on each end of the shaft, the improvement in which said shaft is one-piece metal having an outer surface formed into three visually distinctive longitudinal sections, each of said sections being approximately the same length and consisting of two outer sections and a center section, the outer sections being highly polished and reflective, and the center section consisting of a roughened texture including a dispersed multitude of surface irregularities thereby imparting to said center section a low degree of reflectance as compared to said outer sections so that when the shaft is in rotational flight, said center section provides a relatively dull rotational node to facilitate spotting, visual following and grasping of the twirling baton.

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