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WHIRLING TOY

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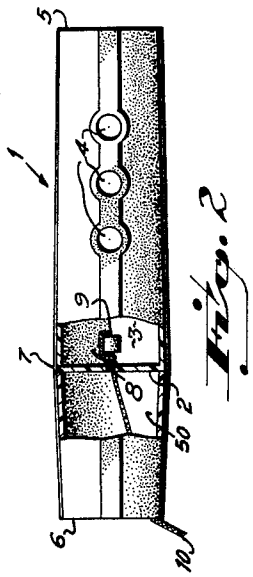


Fig. 2

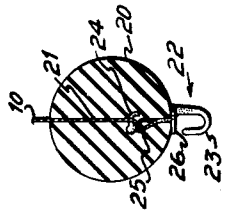


Fig. 3

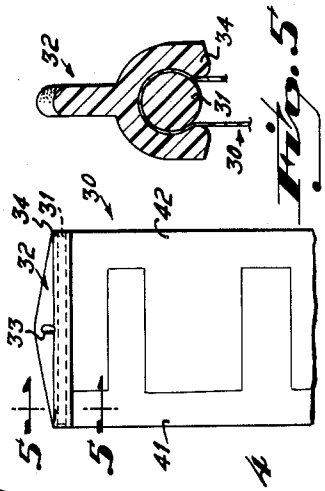


Fig. 4

Fig. 5

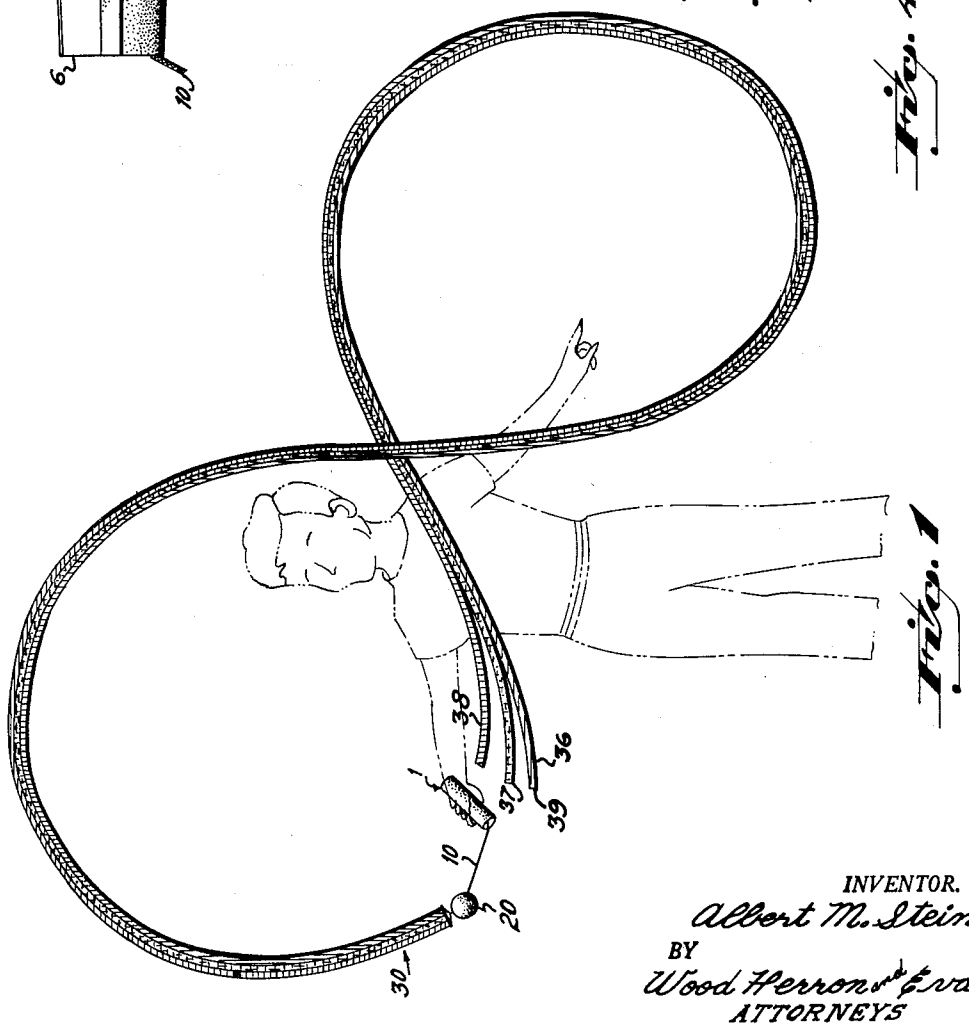


Fig. 1

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WHIRLING TOY

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This invention relates to a whirling toy having both visual and variable sound effects.

An object of this invention is to provide a toy which will be a source of amusement to children. A visual effect is provided by the selective attachment of elongated, light-weight streamers to a weighted cord which is whirled about in desired patterns by means of a baton, so as to cause the attached streamer to follow a path described by the end of the weighted cord.

Sound is produced by means of attaching the cord to the wall of a hollow, tubular baton so that during use of the toy, the cord will be chafed against an edge of the baton so as to produce a vibratory sound in the baton. The pitch of the sound may be varied by manipulation of the fingers to selectively open and close apertures provided in the wall of the sounding portion of the baton.

It is a further object of this invention to provide an action toy which is completely safe for children's use and which combines a means of developing certain simple feats of co-ordination skills so as to provide amusement for children.

To the foregoing objects, and others, which hereinafter more fully appear, the invention consists of the novel construction, combination and arrangement of parts, as will be more specifically referred to and illustrated in the accompanying drawing.

FIGURE 1 is a perspective view of the toy in use.

FIGURE 2 is an enlarged top plan, partially broken away view of the baton member of the toy.

FIGURE 3 is an enlarged cross-sectional view showing the attachment of the weight member to the cord.

FIGURE 4 is an enlarged plan view of an alternate form of streamer for use with the toy.

FIGURE 5 is an enlarged cross-sectional view taken along lines 5—5 of FIGURE 4 showing the tow clamp attached to the front portion of the streamer.

As can be seen in FIGURE 1, the device comprises a baton member **1**, a cord or tension member **10**, a weight member **20** and an elongated flexible streamer **30**. The toy is operated by grasping the baton in the hand and by swinging the baton in a desired pattern, such as the figure 8 illustrated in FIGURE 1, so that the weight member **20** will pursue the same general pattern and cause the light-weight, flexible streamer **30** to follow, in much the same path.

With reference to FIGURE 2, it may be seen that while the hollow baton member **1** is of substantially cylindrical or tubular configuration, the tube is tapered inwardly at its opposite open ends **5** and **6**. These tapers provide an enlarged waist portion **7** intermediate the ends of the tube in which is mounted a membrane **2**. The membrane **2** is positioned in a plane coincident with an interior diameter of the baton to divide the baton into a sounding chamber **3** and a chafing chamber **50**. Sounding chamber **3** is provided with a plurality of openings **4** which can be opened and closed by the fingers while the device is in use so as to vary the pitch of the sound emanating from the open end **5** of sound chamber **3**.

With regard to the broken away portion of FIGURE 2, it will be noted that the tension or cord member **10** is secured to the central portion of membrane **2** by passing the end of the cord **10** through a small aperture **8** in the membrane **2** by such means as a knot and plug arrangement such as is shown at **9**.

As shown particularly in FIGURE 3, the extended end of cord member **10** is received in a bore **21** in weight member **20** and made fast to a double ended hook **22** as shown at knot **25**. The double ended hook **22** terminates in a large streamer hook **23** at one end and a smaller cord engaging hook **24** at the other. The double ended hook is provided with a centrally located, axially disposed shield member **26** which snugly engages the outer circumference of weight member **20** in an area immediately adjacent the bore **21** when the small cord hook **24** is sunk into weight member **20**, to keep hook **23** from engaging the surface of weight **20**.

With reference to FIGURE 5, it may be seen that the streamer used with the device, while extremely light in weight and flexible, is provided with a stiffening tow rod **31** around which the end of the streamer **30** is looped and which is then press-fit into longitudinal tow yoke **34** in towing clamp **32**. As shown in FIGURE 4, the lead portion of the tow clamp **32** is provided with an aperture **33** which can be engaged upon streamer hook **23** to removably attach the streamer to the toy.

When the device is whirled as is shown in FIGURE 1, the cord member **10** is chafed against the periphery of the open end **6** of the baton **1** to produce a vibration which, in turn, creates a sound in the sounding chamber **3**. The faster the weight is whirled, the louder the sound. At the same time, the weight is being whirled, the child operating the baton can manipulate his fingers to open and close the apertures **4** so as to vary the pitch of the sound and add interest to the use of the toy.

The device lends itself to the use of different types and colors of streamers which can be made to produce novel visual results in conjunction with the sound means previously described. The streamers should be of sufficient length so that it is possible for a child to create large patterns in which the weight member **20** of the device almost catches the tail **39** of the streamer so as to give the illusion of a complete pattern or design. While the use of polyethylene sheeting is preferred in the construction of the streamers, it is, of course, possible to use any material which is extremely light in weight and extremely flexible so that it will "follow" the path of the weight member **20** and create a design described by the weight member **20** as the weight is whirled by the baton **1**.

In the preferred embodiment as disclosed in FIGURE 1, it can be seen that the streamer **30** is composed of three separate streamers **36**, **37**, and **38** which are colored blue, yellow and red respectively. When the weight member **20** is whirled, the three separate streamers follow closely behind and create a "rainbow" illusion as the colors blend together when the streamers entwine.

FIGURE 4 discloses an alternate streamer for use with the toy in which the streamer **30** is composed of a solid sheet of light weight, flexible, filmy material which is imprinted with a design having two basic colors as indicated at **41** and **42**. When this streamer is whirled, an illusion is produced in which the two colors **41** and **42** appear to be "blended" into an intermediate color.

In the preferred embodiment, the weight member **20** is composed of a rubber ball which has enough weight to operate the device successfully and is soft enough not to damage any article into which it might be hurled. The baton member **1** is preferably composed of a non-breakable plastic which is light in weight and easy to manipulate.

If preferred, the streamers may be made of sufficiently heavy material so as not to require the use of weight **20**.

Although the invention has been described in its preferred form, with a certain degree of particularity, it is understood that the present disclosure of the preferred

form has been made only by way of example and that numerous changes in the details of construction and the combination and arrangements of parts may be resorted to without departing from the spirit and the scope of the invention as hereinafter claimed.

I claim:

1. A toy for producing visual and sound effects comprising a hollow, tubular baton member, a diaphragm mounted in said baton member interiorly thereof, a cord secured to the diaphragm and extending outwardly therefrom and streamers secured to the extended end of the cord whereby swinging of the baton extends the streamers and the simultaneous chafing of the cord against the baton edge produces a sound effect.

2. In a whirling toy for producing visual and sound effects comprising an extended cord length having streamers secured to an end thereof; the improvement comprising a tubular baton member for swinging said cord length, said baton member comprising a hollow tube and a diaphragm mounted in said tube intermediate the ends thereof, and having the cord length secured thereto, whereby swinging of the baton causes the cord to chafe against the baton edge to produce a sound effect and means on the baton to vary the pitch of the sound.

3. A whirling toy comprising an elongated streamer, a cord member, means weighting said cord adjacent one end thereof, means removably attaching said streamer adjacent the weighted end of the cord, a tubular baton to whirl said cord, means dividing said baton into a sound chamber and a cord chafing chamber, the unweighted end of said cord being fastened at a point within said chafing chamber, said cord extending through said chafing chamber to chafe against the rim of the open end of said chamber to produce a sound in said sound chamber upon the manipulation of said baton to whirl said streamer rapidly about.

4. A whirling toy comprising a cord length having a streamer removably attached adjacent one end thereof, a tubular baton to whirl said cord, means dividing said baton into a sound chamber and a cord chafing chamber, the other end of said cord being fastened at a point within said chafing chamber, said cord extending through said chafing chamber to chafe against the rim of the open end of said chamber to produce a sound in said sound chamber upon the manipulation of said baton to whirl the streamer rapidly about, the walls of said sound chamber having a plurality of apertures defined therein to vary the pitch of said sound upon the selective opening and closing of said apertures.

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