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TWIRLING BATON

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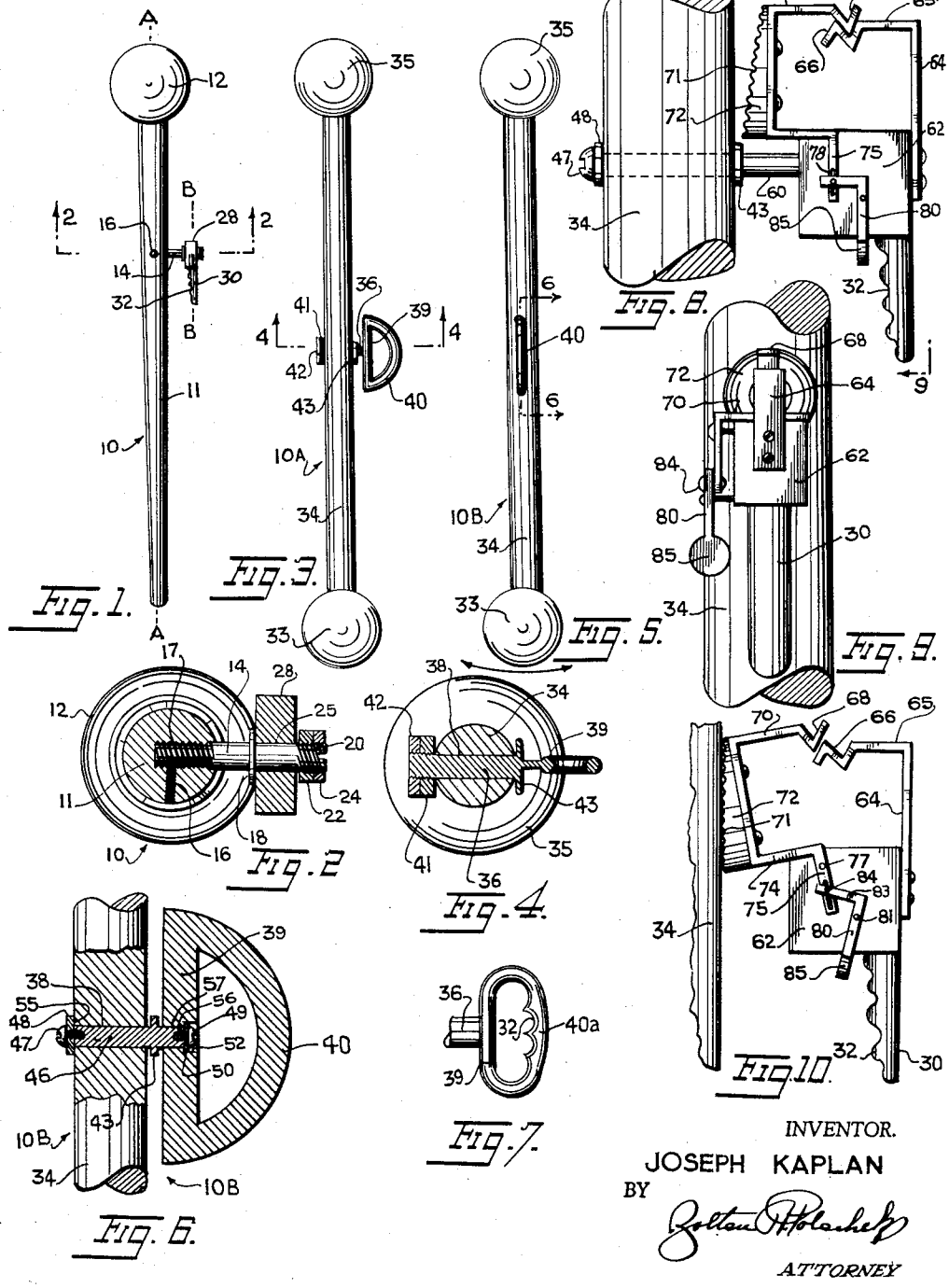


Fig. 1.

Fig. 3.

Fig. 8.

Fig. 5.

Fig. 9.

Fig. 2

Fig. 4.

Fig. 6.

Fig. 7.

Fig. 10.

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TWIRLING BATON

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4 Claims. (Cl. 84—477)

This invention relates to the art of twirling batons and particularly concerns an improvement in the twirling means therefor.

The invention is directed at a baton which can be handled by a child, who can twirl the baton without requiring any of the particular skills of manual dexterity and coordination of movements required for the adult types of batons used by drum majors and majorettes with marching bands.

A handle is provided which can be grasped securely without slipping from the child's hand during twirling of the baton. The baton may be flipped with a finger or thumb to set it whirling. A friction means is provided whereby the rotation of the baton can be slowed to stop its motion at will.

It is, therefore, a main object of the invention to provide a baton provided with a handle pivotally joined thereto.

It is a further object to provide a baton with a handle having a contoured finger grip to insure a firm grasp thereof by the user.

It is a further object to provide a baton which is freely whirlable with respect to a handle and which is provided with manually operable friction means for controlling the speed of motion of the baton.

For further comprehension of the invention, and of the objects and advantages thereof, reference will be had to the following description and accompanying drawings, and to the appended claims in which the various novel features of the invention are more particularly set forth.

In the accompanying drawings forming a material part of this disclosure:

Fig. 1 is an elevational view of one form of baton embodying the invention.

Fig. 2 is a sectional view on an enlarged scale taken on lines 2—2 of Fig. 1.

Figs. 3 and 5 are elevational views of other forms of batons according to the invention.

Figs. 4 and 6 are sectional views taken on an enlarged scale on lines 4—4 and 6—6 of Figs. 3 and 5, respectively.

Fig. 7 is an elevational view of a handle according to the invention.

Figs. 8 and 9 are side and front views respectively of a portion of another baton embodying the invention.

Fig. 10 is a side view on an enlarged scale of portions of the baton shown in Fig. 8 showing the friction pad in its operative position and the pin omitted.

In Figs. 1 and 2, there is shown a baton **10** having a tapered body or shaft **11** and terminated at its wider end by a ball **12**. The shaft and ball are preferably made of a relatively light, rigid material such as aluminum, wood, synthetic plastic, etc. Perpendicularly disposed with respect to the axis A—A of the shaft is a cylindrical pin **14** having one end **17** threaded in the body of the shaft and secured against rotation therein by a setscrew **16**. An annular flange **18** is integrally formed with the pin. The other end **20** of the pin is threaded to receive the lock nuts **22** and **24** thereon. Between the

flange and lock nuts, the pin has a smooth portion which extends through a bore **25** in the head portion of a handle **28**. The pin thus is rotatable in the handle and the shaft is rigidly fixed with respect to the pin which serves as an axle for rotation of the baton.

The handle has a depending handle bar portion **30** formed with finger grip corrugations **32**. The axis B—B of the depending portion **30** extends parallel to the axis A—A of the shaft. By this arrangement, a child can hold the handle securely in one hand and flip the shaft with his thumb so that the shaft rotates on pin **14** as an axis in a plane parallel to the axis B—B of the handle. The axis of the pin should preferably pass through the center of gravity of the baton diametrally to insure free rotation of the shaft for a maximum period of time.

In Figs. 3 and 4 the shaft **34** of baton **10A** is cylindrical and terminates in balls **33** and **35** at its opposite ends. Pin **36** extends diametrally through a bore **38** in the center of the shaft. The pin **36** is integrally formed with the handle bar **39**. A curved hand grip portion **40** extends from the handle bar. The axis of bar **39** is disposed parallel to the plane of rotation of the longitudinal axis of the shaft. Nuts **41** and **42** prevent the shaft from coming off of the pin **36**. Flange **43** is formed on pin **36** between the threaded end **44** thereof and the handle bar **39**. This arrangement of the baton permits the shaft to rotate on pin **36** which remains fixed as an axis of rotation for the shaft.

In Figs. 5 and 6 the baton **10B** is arranged so that both the handle and shaft are each journaled on the pin **46**. A screw **47** and washer **48** are mounted at one end **55** of the pin and another screw **49** and washer **50** are mounted at the other end **56** of the pin. The pin **46** is disposed in bore **38** so that the shaft is rotatable with respect to the pin. The pin end **56** extends through bore **57** in handle bar **39**. Bore **57** has an enlargement **52** in which the washer **50** and screw **49** are disposed. The pin **46** is rotatable with respect to the handle with flange **43** on the pin keeping the handle bar and shaft separated.

In Fig. 7, is shown another form of handle, with handle bar **39** secured to shaft **36** as in Figs. 3 and 4. The hand grip portion **40A** is formed with corrugations **32** to insure a more secure hold on the handle during rotation of the shaft of the baton.

In Fig. 8 the pin **60** is shown extending through shaft **34** so that the shaft is rotatable thereon. The pin terminates in a screw **47** and washer **48** which hold the shaft on the pin. The pin is rigidly formed with the body **62** of the handle which has a depending handle bar **30** provided with finger gripping corrugations **32**. Mounted on the body **62** is a leaf spring **64** provided with an inwardly extending end **65** and having a bent catch portion **66** at its free end, as clearly shown in Figs. 8 and 10. This catch portion is disposed to engage a hooked catch portion **68** located at the end of a rigid bracket **70**. The bracket supports a rubber friction pad **72** made of rubber or leather. The pad may have a ribbed or roughened surface **71** to increase its frictional effect when pressed against the side of shaft **34** as shown in Fig. 10.

Bracket **70** has a lower arm **74** terminating in a depending link **75**. The link is pivotally attached to body **62** by a pintle **77**. The link is slotted at **78**. A lever **80** is pivoted on body **62** by another pintle **81**. The lever **80** has a forwardly extending arm portion **83** carrying a pin **84** which is slidably engaged in the slot **78**. A laterally extending finger piece **85** is formed on the free end of lever **80** as clearly shown in Fig. 9.

In operation of the control mechanism shown in Figs. 8–10, the child holding the handle portion **30** can pivot the lever **80** by pressing the finger piece **85** with his thumb. This will cause the bracket **70** to tilt forwardly disengaging catch elements **66** and **68**, so that pad **72**

can be pressed against shaft **34**. If the shaft is rotating on pin **60**, this pressure will cause the rotating shaft to stop. By moving the finger rearwardly, the pad **72** will be retracted and catch elements **66**, **68** will become engaged so that the user can freely rotate the shaft. In Fig. 8 the pad **72** is shown in a retracted position and in Fig. 10 the pad is shown pressing against the shaft **34**. When the pad is retracted, the child can flip the shaft with his thumb to cause it to rotate freely.

While I have illustrated and described the preferred embodiments of my invention, it is to be understood that I do not limit myself to the precise constructions herein disclosed and that various changes and modifications may be made within the scope of the invention as defined in the appended claims.

Having thus described my invention, what I claim as new, and desire to secure by United States Letters Patent is:

1. A twirling baton, comprising a handle having an elongated handle bar, said bar having an integrally formed finger grip portion, a shaft rotatably secured to the handle bar and rotatable in a plane parallel to the axis of said handle bar, and manually actuatable friction means carried by said handle for controlling rotation of said shaft.

2. A twirling baton, comprising a handle having a body with a depending elongated handle bar, said bar having an integrally formed finger grip portion, a shaft rotatably secured to the handle bar and rotatable in a plane parallel to the axis of the handle bar, and manually actuatable friction means carried by said handle for controlling rotation of said shaft, said means including a member carrying a friction pad, said member being pivotable on said body, said member terminating in a catch member, and a catch means carried by said body and engageable with said catch member to hold the pad in a retracted position with respect to the shaft.

3. A twirling baton, comprising a handle having an elongated handle bar, said bar having an integrally formed finger grip portion, a shaft terminating at one end in a ball, a pin extending diametrally with respect to the shaft, with the axis of the pin perpendicular to the axis of the shaft and passing through the center of gravity of

the shaft, said pin extending perpendicular to the axis of the handle bar, said shaft being rotatably secured to the handle bar, said handle having a body, said bar depending from the body, a bracket member pivotally carried by the body, a friction pad mounted on the bracket to contact the shaft and slow rotation thereof upon pivoting of the bracket toward the shaft, a first catch element terminating said member, another catch element carried by the body and disposed to engage said first catch element when said member is pivoted away from the shaft, and a lever pivoted on said body and pivotally linked to said member, said lever terminating in a finger piece operable to tilt the pad against the shaft and to retract the pad so that said catch elements become engaged.

4. A twirling baton, comprising a handle having an elongated handle bar, said bar having an integrally formed finger grip portion, a shaft terminating at one end in a ball, a pin extending diametrally with respect to the shaft, with the axis of the pin perpendicular to the axis of the shaft and passing through the center of gravity of the shaft, said pin extending perpendicular to the axis of the handle bar, said shaft being rotatably secured to the handle bar, said handle having a body, said bar depending from the body, a bracket member pivotally carried by the body, a friction pad mounted on the bracket to contact the shaft and slow rotation thereof upon pivoting of the bracket toward the shaft, a catch element carried by said member, a leaf spring carried by said body and having a catch portion disposed to engage said catch element when said member is pivoted away from the shaft, and a lever pivoted on said body and pivotally linked to said member, said lever terminating in a finger piece operable to tilt the pad against the shaft and to retract the pad so that said catch element and said catch portion become engaged.

References Cited in the file of this patent

UNITED STATES PATENTS

2,450,545	Foster	Oct. 5, 1948
2,812,683	Harrold et al.	Nov. 12, 1957

FOREIGN PATENTS

1,004,121	France	Nov. 21, 1951