United States Patent [19]

Vennola

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[54] **MUSICAL AMUSEMENT DEVICE**

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[73] Assignee: **Columbia Broadcasting System, Inc.,** New York, N.Y.

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[52] **U.S. Cl.** **46/17,** 46/191, 84/404

[51] **Int. Cl.** **A63h 33/06,** A63h 5/00

[58] **Field of Search** 46/17, 191; 84/404

[56] **References Cited**

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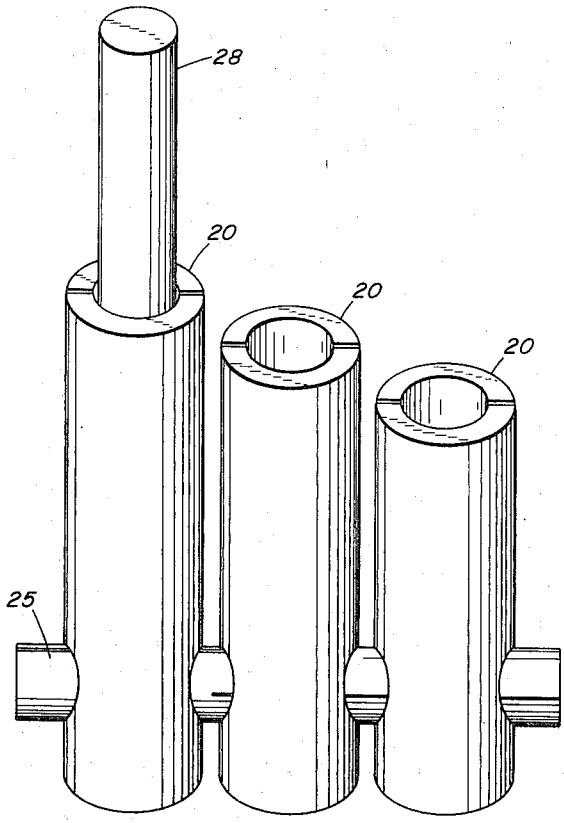
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[57] **ABSTRACT**

A musical toy or amusement device that includes an elongated wooden dowel adapted to be compressed circumferentially. A plurality of cylindrical wooden members are provided, each of the members having a first borehole near one of its ends. The first borehole is oriented radially in each member and is proportioned to receive and compress the dowel. Each member also has a second axial borehole in its other end forming a cavity of different size in each member. In a preferred embodiment of the invention, the cylindrical members are of different lengths, the gradation of lengths corresponding to the gradation of cavity sizes of the members.

15 Claims, 4 Drawing Figures



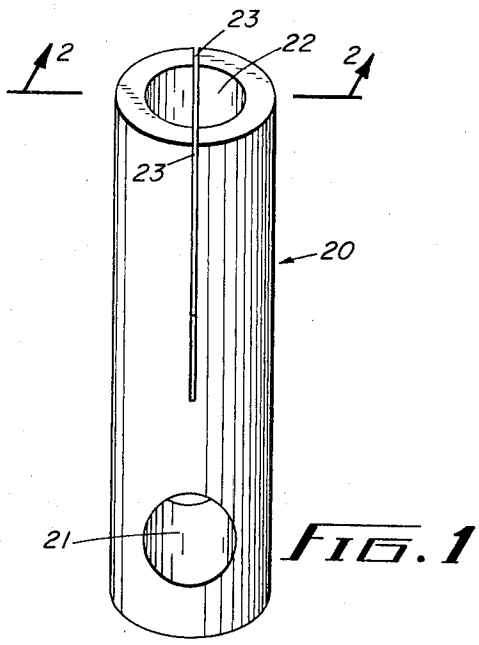


FIG. 1

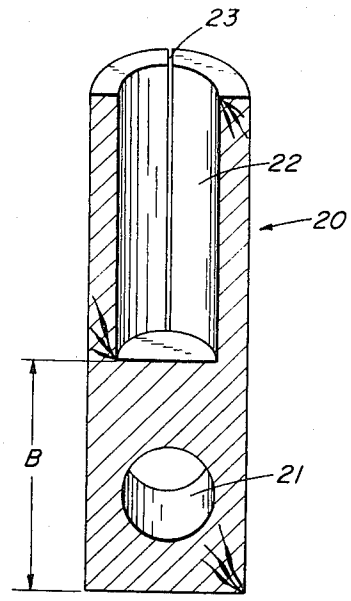


FIG. 2

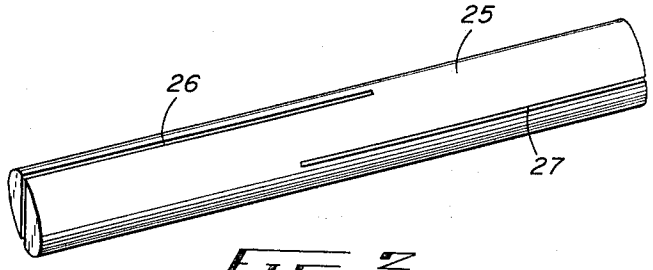


FIG. 3

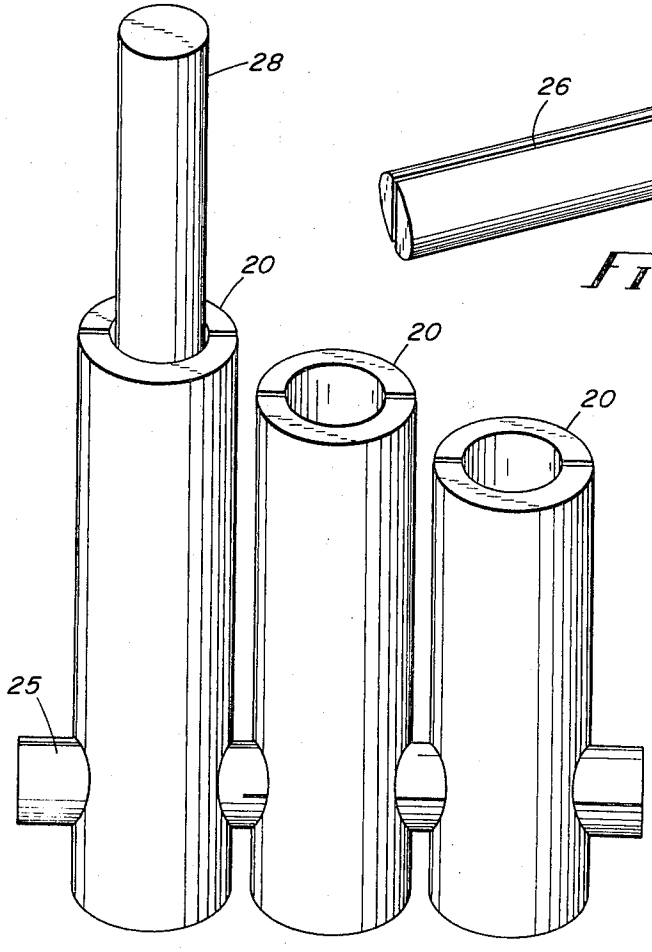


FIG. 4

MUSICAL AMUSEMENT DEVICE

BACKGROUND OF THE INVENTION

This invention relates to amusement devices and, more particularly, to an amusement device of a musical nature that is especially suitable for use by a young child.

The primary object of the present invention is to provide an amusement device for a young child that has a musical appeal, can be easily assembled and disassembled so that the child can construct his own "instrument," and is of a sturdy and non-breakable construction.

SUMMARY OF THE INVENTION

The present invention is directed to a musical toy or amusement device that includes an elongated dowel adapted to be compressed circumferentially. A plurality of cylindrical members are provided, each of the members having a first borehole near one of its ends. The first borehole in each member is oriented substantially radially in the member and proportioned to receive and compress the dowel. Each of the members has a second axial borehole in its other end forming a cavity of different size in each member. In a preferred embodiment of the invention the cylindrical members are of different lengths, the gradation of lengths corresponding to the gradation of cavity sizes of the members.

Further features and advantages of the invention will become more readily apparent from the following detailed description when taken in conjunction with the accompanying drawing.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is an elevational perspective view of a member which comprises part of the present invention;

FIG. 2 is a perspective cross-sectional view of the member of FIG. 1 as taken through the arrows designated 2—2;

FIG. 3 is an elevational perspective view of another part of the invention; and

FIG. 4 is an elevational perspective view of an embodiment of the present invention when assembled in a preferred form.

DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring to FIGS. 1 and 2, there is illustrated a cylindrical member 20 that is preferably constructed of wood. The member 20 has a substantially radial borehole 21 near one of its ends, referred to as its lower end. In the upper end of the member 20 an axial borehole 22 forms a cylindrical cavity. Communicating with the borehole 22 are a pair of longitudinal slots 23 that effectively divide the cavity into separate halves.

Referring to FIG. 3, there is shown an elongated cylindrical dowel 25 that is also preferably formed of wood. The dowel 25 has a first longitudinal slot 26 that extends from one end of the dowel to about two-thirds of the way to the other end of the dowel. Another longitudinal slot 27 starts at the other end of the dowel and extends about two-thirds of the way towards the first mentioned end of the dowel. The slots 26 and 27 effectively render the dowel 25 circumferentially compressible over its length. The dowel 25 has a normal uncompressed circumference that is minutely larger than the

circumference of the radial borehole 21 of member 20 (FIG. 1). Accordingly, when the dowel 25 slidingly engages the borehole 21, a slight circumferential compression results in a frictional fit between these parts.

Referring to FIG. 4 there is shown a perspective view of an embodiment of the present invention when assembled in a preferred form. Three cylindrical members 20, of varying length, are adjacently positioned on the dowel 25. Typically, a toy "set" in accordance with the invention is packaged with the dowel 25 and the three members in unassembled form. A "striking" member 28, shown resting in the cavity of the longest member 20, is the fifth piece of the preferred "set." A young child presented with the toy musical instrument in unassembled form has the challenging enjoyment of constructing his own simple instrument by sliding the members 20 over the dowel 25 in any desired order. The sizes of the cavities associated with the three members 20 of FIG. 4 are graded in accordance with the lengths of the members. Thus, for example, in FIG. 2, the length of the base portion of each member, designated "B," is the same so that the cavity gradations are proportional to the gradation in length of the members 20.

When the toy instrument has been assembled as in FIG. 4, there are various ways in which it can be "played." For example, the base portions of the members 23 along with dowel 25 can be gripped in one hand while the striker 26 is held in the other hand and used for tapping the individual members 20. Alternatively, the toy can rest in an upright position as shown in FIG.4 with an effective base being formed by the flat bottoms of the three members 20.

In this position, the striker 26 is preferably used to tap the tops of the different members 20 to produce clicking tones of different pitch. The slots 23 enhance the sound available from each member 20 by allowing independent vibrations of the opposite sides of each cavity 22. This concept is also disclosed in my copending U.S. Pat. application Ser. No. 227,803 entitled "Noisemaking Amusement Device," filed of even date herewith and assigned to the same assignee as the present application. An experimenting child soon finds that the longer members with larger cavities produce higher pitched tones when tapped with a firm object.

I claim:

1. A sounding amusement device comprising:
   - an elongated dowel adapted to be compressed circumferentially;
   - a plurality of resonating cylindrical members mounted on said dowel and axially orthogonal thereto, each of said members having a first borehole near one of its ends, said first borehole being oriented substantially radially in said member and proportioned to receive and compress said dowel;
   - each of said members having a second axial borehole in its other end forming a cavity of different size in each member.

2. An amusement device as defined by claim 1 wherein said dowel and said resonating cylindrical members are constructed of wood.

3. An amusement device as defined by claim 2 wherein said dowel and said first boreholes are cylindrical in shape.

4. An amusement device as defined by claim 3 wherein said resonating cylindrical members are of dif-

ferent lengths, the gradation of lengths corresponding to the gradation of cavity sizes of said members.

5. An amusement device as defined by claim **4** wherein said plurality of members equals three members.

6. An amusement device as defined by claim **5** further comprising wooden striking means proportioned to fit within one of said cavities.

7. An amusement device as defined by claim **3** wherein each of said members has a pair of longitudinal slots communicating with said borehole.

8. An amusement device as defined by claim **7** wherein said slots effectively divide each of said cavities into two equal halves.

9. An amusement device as defined by claim **3** wherein said dowel contains two longitudinal slots which run perpendicularly from opposite ends of said dowel.

10. A sounding amusement device comprising:

an elongated wooden cylindrical dowel adapted to be compressed circumferentially;

a plurality of resonating cylindrical members of varying lengths mounted on said dowel and axially orthogonal thereto, each of said members having a first radial borehole near one of its ends which receives and compresses said dowel;

each of said members having a second axial borehole in its other end forming a cavity of different size in each member.

11. An amusement device as defined by claim **10** wherein said resonating cylindrical members are of different lengths, the gradation of lengths corresponding to the gradation of cavity sizes of said members.

12. An amusement device as defined by claim **11** wherein said plurality of members equals three members.

13. An amusement device as defined by claim **12** further comprising wooden striking means proportioned to fit within one of said cavities.

14. An amusement device as defined by claim **10** wherein each of said members has a pair of longitudinal slots communicating with said borehole.

15. An amusement device as defined by claim **14** wherein said slots effectively divide each of said cavities into two equal halves.

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