United States Patent [19]

Kirk

[11] **3,909,977**

[45] **Oct. 7, 1975**

[54] **NOISE-MAKING CLAPPER**

[76] Inventor: **Norbert A. Kirk,** 43 E. Ohio St., Chicago, Ill. 60611

[22] Filed: **Nov. 12, 1973**

[21] Appl. No.: **414,941**

[52] **U.S. Cl.** ..... **46/191;** 231/2 R

[51] **Int. Cl.²** **A63H 5/06;** B68B 11/00

[58] **Field of Search** ..... 46/191, 177; 84/402; 119/29; 273/67 R; 231/2 R

[56] **References Cited**

UNITED STATES PATENTS

2,386,561	10/1945	Magnuson	46/191
2,678,158	5/1954	Arant	46/191
3,059,375	10/1962	Tischer	46/191

FOREIGN PATENTS OR APPLICATIONS

3,801	10/1901	Austria	46/191

Primary Examiner—Louis G. Mancene
Assistant Examiner—J. Q. Lever
Attorney, Agent, or Firm—Larson, Taylor & Hinds

[57] **ABSTRACT**

A noise-making clapper comprises a stack of a plurality of at least three elongated, flexible blades which are rigidly secured together at a first end. In one embodiment of the invention, each blade has a length different from the other blades and the blades are arranged in the stack in order of their successively increasing overall lengths and such that corresponding first ends of the blades are coterminous. In another embodiment of the invention, all the blades have the same length, but the blades are successively located in the stack such that at each end, the blades have a longitudinally overlapping arrangement. Hence, in both embodiments of the invention, the corresponding other ends of the blades have a successively increasing stepped relationship.

10 Claims, 5 Drawing Figures

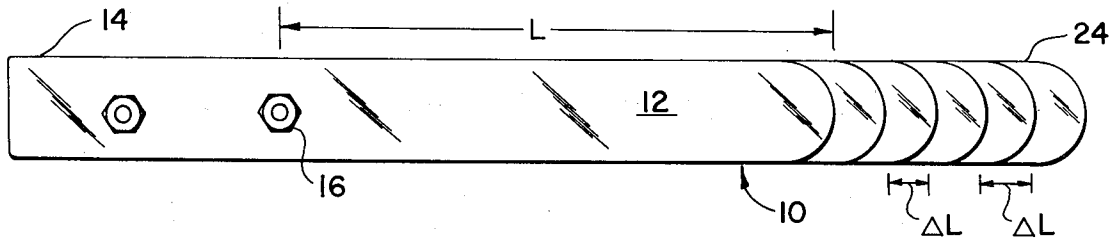


FIG. 1

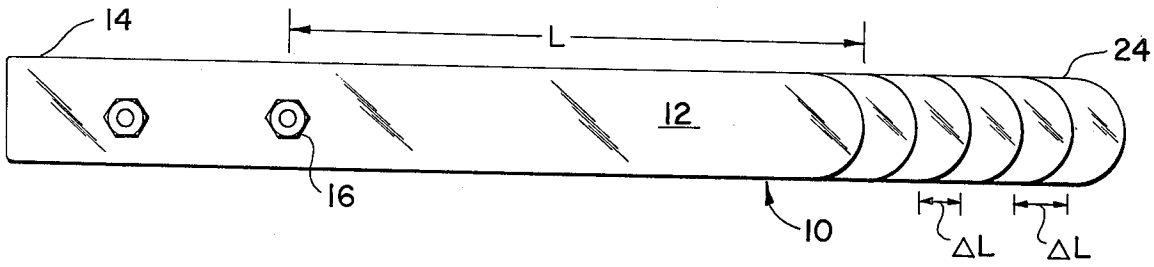


FIG. 2

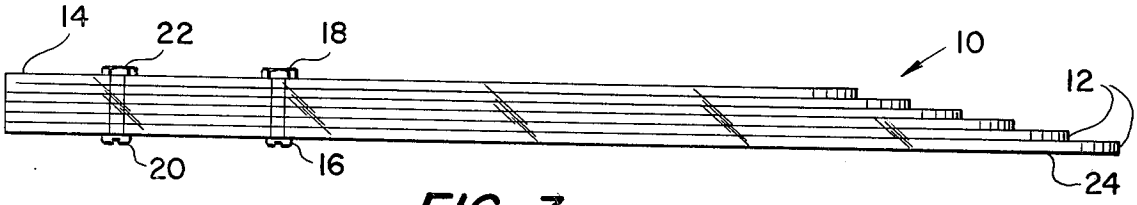


FIG. 3

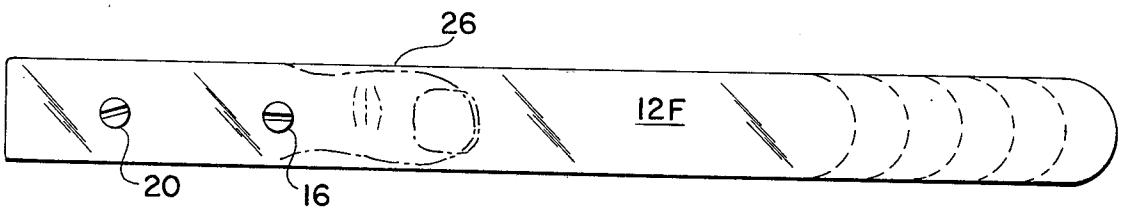


FIG. 4

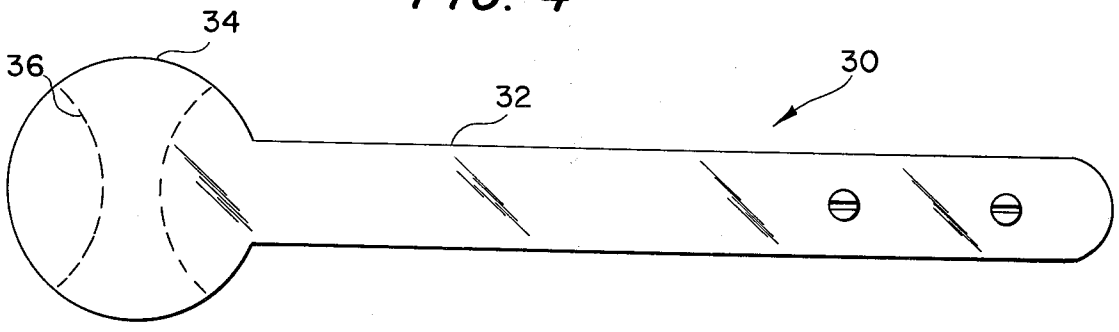
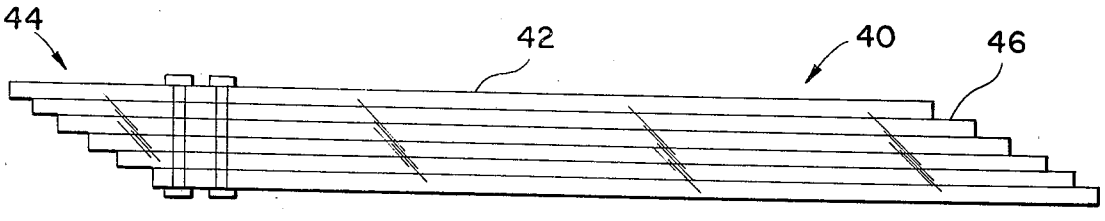


FIG. 5



NOISE-MAKING CLAPPER

FIELD OF THE INVENTION

This invention relates to a noise-making device or clapper.

DESCRIPTION OF THE PRIOR ART

There are many noise-making devices known in the prior art in which the device consists of a plurality of juxtaposed paddles whereby the noise is produced by one paddle striking an adjacent paddle. These devices, however, usually produce noise when the tip of one paddle strikes the other paddle as the device is briskly reciprocated by the hands of the user. Consequently, the amplitude of the noise produced by the device is very difficult to control and the user rapidly becomes tired as he violently flicks his wrist back and forth to increase the intensity of the noise produced by the device. One such device as described above is disclosed in a Patent to Stavig, No. 3,157,000.

SUMMARY OF THE INVENTION

The present invention provides a hand-carried and actuated device for creating a variable volume of noise. A device in accordance with the invention can be made economically, in a size which can be conveniently transported in, for example, pockets in clothing, and which is lightweight. In use, the device can be operated without striking, and hence possibly injuring, the hand of the user or without the necessity for rapidly shaking the device.

Accordingly, a device in accordance with the present invention comprises a clapper for making noise which includes a stack of elongated, flexible, juxtaposed blades and means located only at a first end of the stack for securing the blades at corresponding first ends in the stack. The blades in the stacks have successively increasing lengths from the securing means such that the stack has at the other end a successively increasing step relationship among the blades.

Other features and advantages of the present invention will be discussed in or are apparent from the description of the preferred embodiments of the invention found hereinbelow.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. **1** is a bottom plan view of one embodiment of the noise-making clapper;

FIG. **2** is a side elevation of the noise-making clapper shown in FIG. **1**;

FIG. **3** is a top plan view of the noise-making clapper shown in FIG. **1**;

FIG. **4** is a top plan view of another embodiment of a noise-making clapper in accordance with the invention; and

FIG. **5** is still another embodiment of a noise-making clapper in accordance with the invention.

DESCRIPTION OF THE PREFERRED EMBODIMENT

With reference to FIGS. **1** and **2**, there is shown a noise-making clapper in accordance with the invention. The clapper is comprised of a stack **10** of a plurality of elongated, flexible, juxtaposed blades **12** which are fixedly fastened together at a first end **14** by fastening means such as bolt **16** and nut **18** and bolt **20** and nut **22**. Blades **12** are coterminous at first end **14** and each blade is substantially rectangular with a planar top and bottom. Blades **12** can be made from any flexible, rigid material such as, for example, solid synthetic polymeric plastics, wood, and metals, including aluminum. The blade can be colored, transparent or translucent.

The length of blades **12** is such that at the other end **24** of stack **10** there is a successively increasing stepped relationship among blades **10.** The operative length of each blade **12,** the blades being denoted **12***a*, 12*b*, 12*c*, 12*d*, 12*e*, and **12***f*, is defined as the length from bolt **16** to the respective other ends **24** of the individual blades. For example, the operative length of blade **12***a* is denoted "L" in FIG. **1.** Furthermore, in the presently preferred embodiment shown in FIG. **1,** a difference in the operative lengths between any set of two juxtaposed blades in stack **10** is substantially equal to the difference in the operative lengths between any other set of two juxtaposed blades. Thus, for example, the difference in the operative lengths of blades **12***a* and **12***b*, denoted ΔL, is substantially equal to a difference in the operative lengths of blades **12***c* and **12***d*, which is denoted $\Delta L'$. In an exemplary embodiment, ΔL and $\Delta L'$ can be one eighth inch in length.

The noise-making clapper is relatively easy to operate so as to permit both a controlled loudness of the noise and a controlled pattern in the noise. With reference to FIG. **3,** there is shown a clapper in accordance with the invention in which an indicia **26** of a thumb is affixed to the top side of blade **12**f. In use, the user holds the clapper in one of his hands and places his thumb over indicia **26.** The user then bends the plurality of blades **12** arcuately backward using his thumb as a fulcrum. The noise is produced by controllably releasing succeeding ones of blades **12.** The noise is produced as adjacent blades return to their planar position and strike the previously released adjacent blade. The further back blades **12** are arcuately bent, the greater is the noise produced thereby.

With reference to FIG. **4,** a second embodiment of the invention is shown. A clapper **30** is comprised of an elongated, substantially rectangular blade section having a planar top and bottom, and a circular section **34** which is integral and coplanar with blade section **32.** Arcuate line indicia **36** is imprinted on circular section **34** to give the appearance thereto of a baseball. Clapper **30** can be used during baseball games for registering a noisy approval or disapproval by the operation thereof. In addition, clapper **30** can be further imprinted with appropriate indicia to indicate the name of the team for whom the user is rooting. Other impurities on clapper **30** can include the names of cities or towns or of a tourist attraction.

Although clapper **30** is depicted with fastening means located at blade section **32,** it would be obvious to one skilled in the art to locate the fastening means on circular section **34** near the other end thereof.

Furthermore, there are an unlimited number of shapes in which a clapper in accordance with the invention can be made and the shapes depicted in FIGS. **1** and **4** are merely exemplary. For example, other shapes could include that of a baseball bat, hockey stick, and tennis racket or the clapper could incorporate the shape of a football or tennis ball at one end in a manner similar to the clapper shown in FIG. **4.** In addition, the fastening means can be located in the middle of stack

10 and both end 14 and end 24 of stack 10 can have a successively increasing stepped relationship.

A further embodiment of the invention is depicted in FIG. 5. A clapper 40 includes a plurality of blade sections 42 located on top of each other so as to form a stack. However, unlike the clapper depicted in FIG. 1, blade sections 42 all have the same length. Blade sections 42 are successively located in the stack such that at a first end 44 and at the other end 46 of the stack, the blades have a longitudinally overlapping or stepped arrangement. A fastening means 48, comprising, for example, plastic rivets the ends of which are hot stamped into abutting relationship with the corresponding top and bottom blade sections 42, fixedly fastens blade sections 42 together in the stack. This embodiment of the invention is operated in the same manner as the embodiment in FIG. 1.

Although the invention has been discussed in detail with respect to exemplary embodiments thereof, it will be understood by those of ordinary skill in the art that variations and modifications may be effected within the scope and spirit of the invention.

What is claimed is:

1. A clapper for making noise comprising a stack of at least three elongated, flexible, juxtaposed rigid blades; and means located a longitudinal distance from a first end of said stack for securing said blades in said stack, said blades having successively increasing operative lengths from said securing means such that said stack has at the first end a successively increasing stepped relationship among said blades and each of said blades having a rigidity so as to enable each of said blades when arcuately bent to return to a straightened position upon the release of the bent blade thereby producing a noise by the returning blade striking a previously returned blade.

2. A clapper as claimed in claim 1 wherein each blade in said stack has an overall length different from the other said blades, and the difference in the operative lengths between any set of two juxtaposed blades in said stack is substantially equal to the operative lengths between any other set of two juxtaposed blades.

3. A clapper as claimed in claim 2 wherein the other ends of said blades are coterminous and said securing means are located only at the other end of said stack, said stack consisting of blades having successively increasing overall lengths.

4. A clapper as claimed in claim 3 wherein each blade has planar top and bottom surfaces; and wherein said securing means fixedly secures said first ends of said blades in said stack.

5. A clapper as claimed in claim 1 wherein said securing means fixedly secures said blades in said stack.

6. A clapper as claimed in claim 1 wherein each said blade has planar top and bottom surfaces.

7. A clapper as claimed in claim 5 wherein each said blades are substantially rectangular in shape.

8. A clapper as claimed in claim 5 wherein each said blade comprises a substantially rectangular portion and an integral circular portion, said securing means being located only at said circular portion.

9. A clapper as claimed in claim 1 wherein each blade in said stack has substantially the same length and wherein said blades are successively located in the stack such that at each end the blades have a stepped relationship.

10. A clapper as claimed in claim 1 wherein each blade is comprised of a solid, synthetic, polymeric plastic material.

* * * * *