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1,490,914

S. J. G. CORNELL

SOUNDING TOY

Filed Sept. 1, 1922

Fig. 1

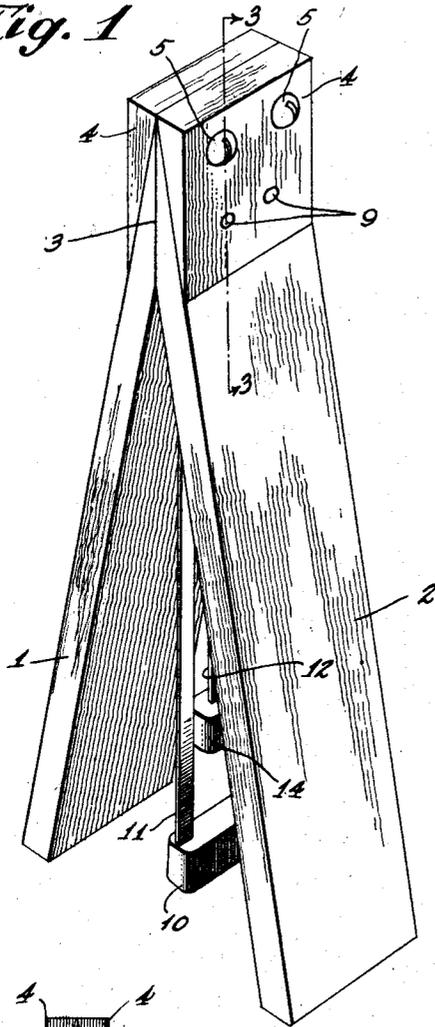


Fig. 2

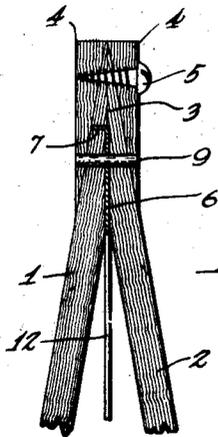
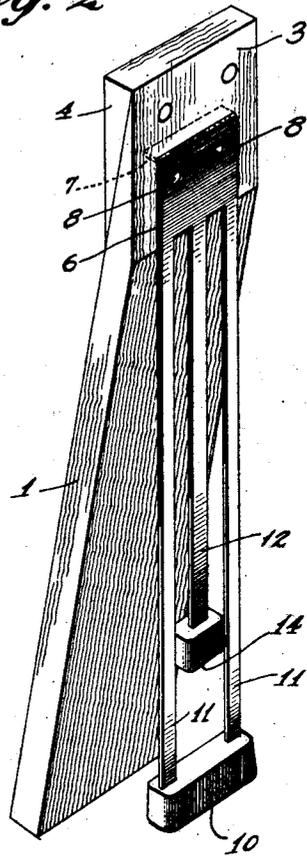


Fig. 3

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SAMUEL J. G. CORNELL, OF NEW YORK, N. Y.

SOUNDING TOY.

Application filed September 1, 1922. Serial No. 585,611.

To all whom it may concern:

Be it known that I, SAMUEL J. G. CORNELL, a citizen of the United States, residing at New York city, in the county of New York and State of New York, have invented a certain new and useful Sounding Toy, of which the following is a specification.

This invention is a toy and, more particularly, an improvement on the well known castanet.

In one well known modified form of castanet, two leaf springs are mounted on opposite sides of a strip of wood and each leaf spring carries a clapper or weighted striker at its free end, which clappers are adapted to strike against the strip of wood when said strip is rapidly vibrated.

The present invention, in contradistinction, comprises two strips of wood or other suitable material, secured together in the form of a V-shaped body and clamped between these strips is one end of a leaf spring which is slotted or cut out so to provide two or more tongues. In the preferred form of the invention, the leaf spring is provided with three tongues, the center one of which is shorter than the two marginal tongues. The center tongue carries a weight or clapper at its end while an additional weight or clapper is mounted on the other two tongues and is supported by said tongues collectively. In this manner two clappers are resiliently maintained in neutral position intermediate the arms of the V-shaped member but said V-shaped member may be vibrated for the purpose of causing the clappers to engage therewith and produce the noise desired. By skillfully manipulating the device the toy may be used for beating time either in solo or in accompaniment to musical instruments, preferably string instruments.

One of the novel features of the construction, from an acoustical standpoint, resides in the fact that since the tongues of the leaf spring which carry the clappers are of different lengths they strike the arms of the V-shaped body at different points and, consequently, produce different notes which, when heard collectively, result in a very pleasing and novel effect.

Another feature of the invention consists in the manner of making and assembling the parts in a simple and economical manner.

Features of the invention other than those

adverted to, will be apparent from the hereinafter detailed description of the invention, when read in conjunction with the accompanying drawings.

The accompanying drawings illustrate one practical embodiment of the invention but the construction therein shown is to be understood as illustrative, only, and not as describing the limits of the invention.

Figure 1 is a perspective view of the toy of the present invention shown completely assembled.

Figure 2 is also a perspective view but showing one of the arms of the V-shaped body removed; and

Figure 3 is a section on the line 3—3 of Figure 1.

In constructing the toy of this invention, I preferably take a strip of wood substantially equal to the aggregate length of the two arms of the body and after cutting the strip into two equal lengths I miter the two strips 1 and 2, thus produced, together as shown at 3. When cutting the miters, small blocks of triangular cross-section are cut away and these blocks 4 are preferably reversed and positioned exteriorly of the V-shaped body as clearly shown so as to form a handle whereby the device may be readily gripped and held in the hand. The arms 1 and 2, as well as the blocks 4 are maintained in assembled relation by means of screws 5, which screws may, if desired, be augmented by glue. In practice, I find it convenient to glue the blocks 4 to the strips 1 and 2 and secure the two strips together at the miter by screws 5. This facilitates assembling and produces a strong, durable construction.

Housed within the miter joint is one end of a leaf spring 6, the extreme end of which is preferably upset or bent over to form a flange 7 adapted to be received within a slot of corresponding size in the mitered face of one of the strips 1 or 2. The advantage of this construction is that the leaf spring 6 is precluded from lateral shifting or pivotal movement between the arms of the V-shaped body. It is thoroughly practical in assembling the parts to force the flange 7 into the slot in one of the arms and thereafter bring the other arm into juxtaposition and insert the screws 5 to bind the parts firmly together. However, if desired, the leaf spring may be further secured against

lateral shifting or pivotal movement by perforating the leaf spring as shown at 8 in Figure 2 and passing through these perforations pins 9 as shown best in Figures 1 and 2. It is feasible, moreover, to employ the pins 9 to the exclusion of the flange 7.

The leaf spring is positioned so as to normally bisect the angle between the arms 1 and 2, reaches substantially to the free ends of said arms and carries at its free end a weighted body or clapper 10. Intermediate its ends it is cut away so as to form, in effect, three tongues 11—11 and 12. The two tongues 11 are of the same length and carry the clapper 10, while the intermediate tongue 12 is of lesser length and carries a weighted member or clapper 14.

The tongues 11 and 12, being formed from a leaf spring are naturally resilient and, in their normal positions, support the clappers 10 and 14 midway between the arms 1 and 2. However, if the V-shaped body is grasped in the hand and snapped or vibrated rapidly, the clappers will be caused to strike the arms and result in the production of sounds. As the tongues 11 are longer than the tongue 12 the clapper 10 will strike the arms nearer the free ends thereof than will the clapper 14 and, consequently, the sounds produced by the clapper 10 will be of different sound or note than those produced by the clapper 14. Moreover, if the leaf spring is made relatively light the rapid vibration thereof will also produce sound of which the tone of the tongues 11 will be of a lower pitch than the tone produced by the tongue 12. By this arrangement very pleasing sound effects may be produced and, with relatively little practice, considerable skill can be acquired so that the operator will have perfect control of the clappers.

In practice, the arms of the V-shaped body are made of wood, preferably one of the hard woods, though bone, ivory or other materials may be employed if desired.

The foregoing detailed description sets forth the invention in its preferred form but the construction may be modified in details, as by the substitution of equivalents, without departing from the spirit of this invention, which is to be understood as broadly novel as is commensurate with the appended claims.

Having thus fully described the invention,

what I claim as new and desire to secure by Letters Patent, is:

1. A toy comprising a V-shaped body, a leaf spring secured at one end to the body and normally extending in a direction to substantially bisect the angle formed between the arms of the body, said leaf spring being cut away to provide three tongues, the outside tongues being longer than the center tongue, a clapper supported on the two outside tongues collectively, and another clapper supported on the center tongue, whereby the body may be vibrated to cause the clappers to flex the tongues and strike the arms for the purpose of producing sounds.

2. A toy comprising two strips of material, one end of each of which is mitered, means for securing the mitered ends of both strips together to form a substantially V-shaped body, a leaf spring, one end of which is clamped in the mitered joint, said end being provided with a flange projecting into a pocket in one of the mitered faces, and the other end of the leaf spring being formed with a plurality of tongues, the free ends of which have clappers associated therewith.

3. A toy comprising two strips of material, one end of each of which strips is mitered, means for securing the mitered ends together to form a V-shaped body, a leaf spring, one end of which is clamped in the mitered joint, and the other end of which is formed into a plurality of tongues having clappers mounted thereon, those portions of the strips which were cut away to form the miters being secured on the exterior faces of said strips adjacent the miter joint to afford a more convenient grip for the operator's hand.

4. A toy comprising a pair of sounding boards having a space between them, a leaf spring extending into said space and cut away to form three tongues, the outside tongues being longer than the center tongue, a clapper supported on the two outside tongues collectively and another clapper supported on the center tongue only, whereby, when the toy is vibrated the clappers are adapted to strike against the sounding boards to produce sounds.

In testimony whereof I have signed the foregoing specification.

SAMUEL J. G. CORNELL.