Dec. 24, 1935. N. SIMON 2,025,181

SOUND PRODUCING DEVICE

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Fig. 1.

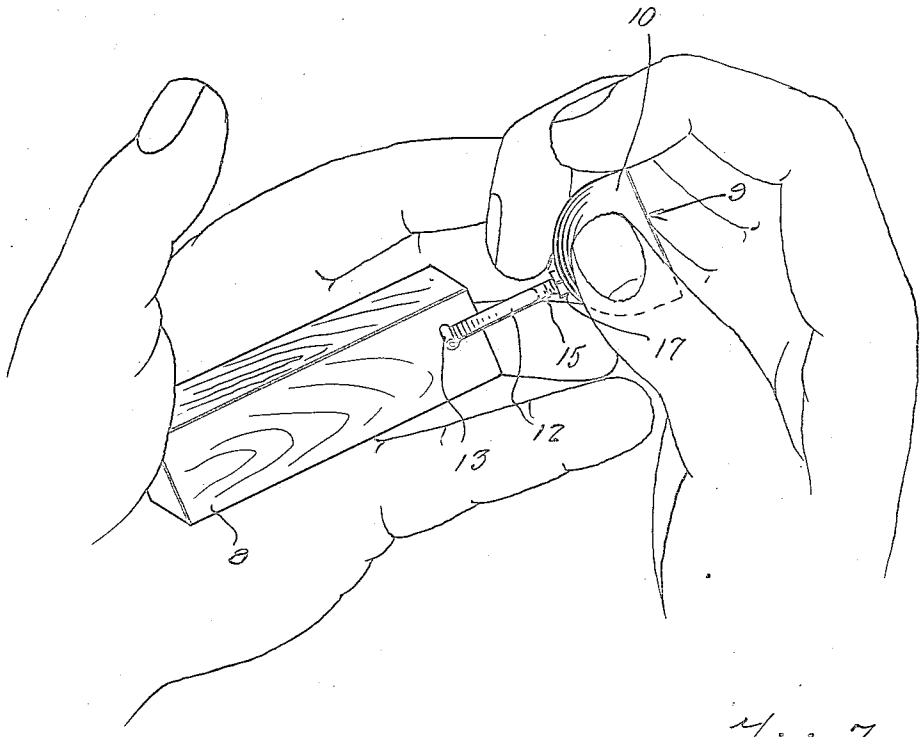


Fig. 7.

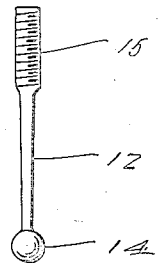
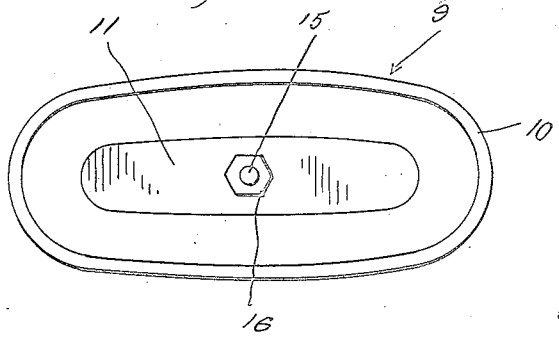


Fig. 3.



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Fig. 2.

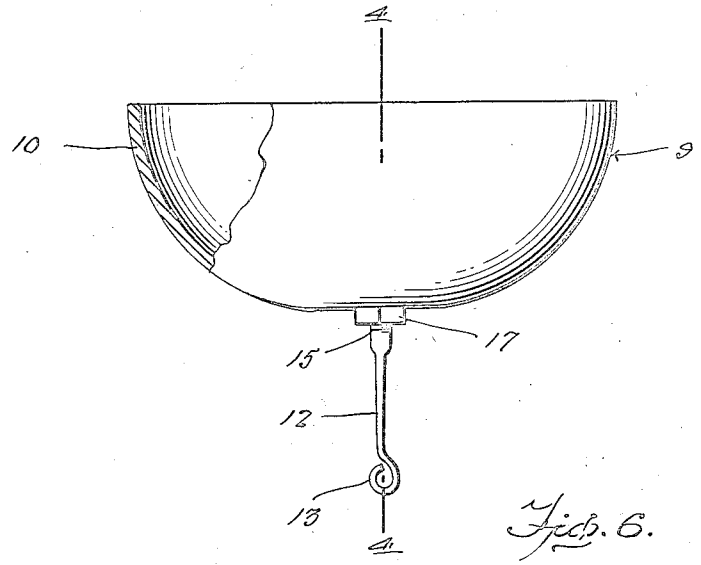


Fig. 4.

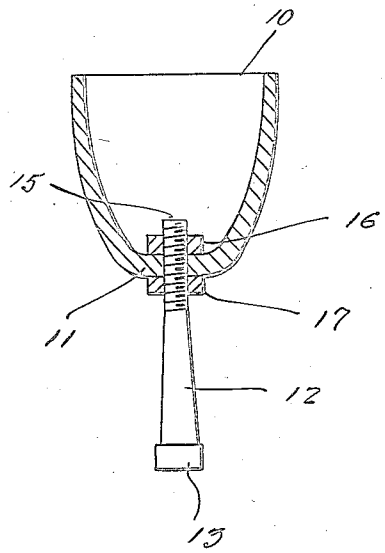


Fig. 6.

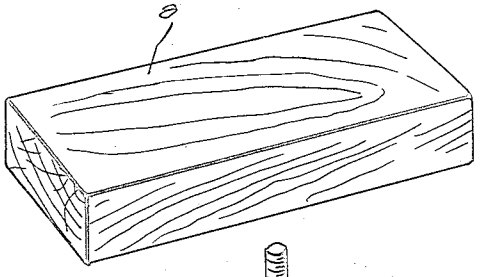
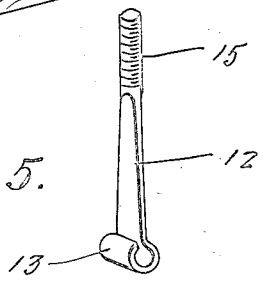


Fig. 5.



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UNITED STATES PATENT OFFICE

2,025,181

SOUND PRODUCING DEVICE

Nicholas Simon, St. Louis, Mo.

Application June 15, 1935, Serial No. 26,362

3 Claims. (Cl. 46—189)

This invention relates to a unique manually manipulated hand controlled accessory expressly constructed for producing sounds or noises of a predetermined character resembling the yelping of a turkey in such a manner as to permit it to be satisfactorily utilized as a so-called turkey caller.

Needless to say, I am conversant with many different kinds and types of sound and noise-making appliances used for stage-work, amusement purposes and drummer's traps but have found none in which the quality of the tone or sound produced renders it successfully usable in imitating the call of a turkey. Since there is constant need for a practical and simple device for accomplishing this desirable result, I have discovered, after much experimentation and by trial and error a feasible device for the purpose.

I have found, for example, that by adopting and using a relatively small wooden block and holding it in the palm of one hand, and employing an easily controllable sound-wave amplifying shell and holding it in the other hand, and by attaching to the shell a metal vibrator it is possible to stroke the free end of the vibrator across the frictional surface of the block in such a manner as to develop and perfect tones virtually the same as those utilized by a turkey for call purposes.

In reducing the invention to practice, I have perfected a novel structural ensemble, which collectively visualized forms an ingenious device believed to be not only feasible and practicable for the purposes intended, but somewhat of an innovation in this line of endeavor.

Other features and advantages will become more readily apparent from the following description and drawings.

In the drawings:

Figure 1 is a perspective illustration of the invention showing the approximate manner in which it is held and utilized.

Figure 2 is a view of the hollow substantially semi-elliptical shell which functions as a resonating sound or tone wave amplifier.

Figure 3 is a top plan view of the amplifier unit shown in Figure 2.

Figure 4 is a section on the line 4—4 of Figure 2.

Figure 5 is a perspective view of the metallic flexible vibrating element.

Figure 6 is a perspective of the wooden sound block.

Figure 7 is a view of a modified form of the vibrator.

In carrying the invention into practice, I have found it expedient and practicable to utilize a simple rectangular block of wood 8 as the friction producing unit. This may be some three and one-half inches long and of suitable width so that it may be conveniently lodged and held in the palm of the hand somewhat in the manner shown in Figure 1. As a general proposition it is held in the left hand. Cooperable with this is the vibrator equipped sound amplifying and controlling unit 9. One part of this comprises the open top semi-elliptical shell 10. This shell is sometimes referred to as the sound wave trapping resonating and amplifying cup. It may be of wood or other suitable material. As a general proposition it is made to include a flat attaching bottom 11 and adjustably and detachably connected with this bottom is the vibrator element. This comprises a tapered flexible metal spring or leaf of appropriate tensile strength denoted at 12 and this terminates at its free end in a head. In Figures 1 to 5 the head is in the nature of a split or open curl 13 whereas in Figure 7 it is in the form of a spherical ball 14. In either instance the action is more or less the same. The shank portion 15 is screw-threaded and extends through an aperture in the flattened bottom 11 being secured thereto by inner and outer clamping nuts 16 and 17 respectively.

In practice, the sounding or frictional block 8 is held in the palm of the left hand and the resonating shell 10 is held in the right hand somewhat as shown in Figure 1 and the major portion of the open side thereof is covered with the fingers but the index finger is raised. In fact, the index finger is used somewhat in the nature of a valve to more or less control the discharge of the sound waves trapped in the chamber defined by said shell. I shall not attempt to describe the nature of the call produced since this will depend largely on the skill of the user. Or stated otherwise, this is one of those inventions which must first be demonstrated by one who knows how to use it in order to enable others to obtain the best and most efficient results from its use. Moreover, in order to imitate the natural turkey call one must be familiar with the call to begin with. However, it is obvious that by stroking the head 13 or 14, as the case may be, across the flat surface of the block, holding the vibrator more or less at right angles thereto, the friction thus produced vibrates the metal and the metal in turn develops sound waves trapped in the cup 10 and controlled by the action of the fingers.

It is necessary to keep the stroking or friction

producing surface of the block 8 more or less clean and smooth. This is one of the reasons for using a block of wood since by the employment of a piece of fine sand paper the surface can be roughened just sufficiently to develop the drag necessary to vibrate the metallic element 12. The head on this element serves as a drag shoe and prevents ruination of the drag surface of the wooden block. By having a detachable and adjustable connection between the device 12 and the cup 10 it is obvious that the vibratory stroke or freedom of action of the spring 12 can be regulated more or less to make it intent or more sombre as the case may be.

It is thought that persons skilled in the art to which the invention relates will be able to obtain a clear understanding of the invention after considering the description in connection with the drawings. Therefore, a more lengthy description is regarded as unnecessary.

Minor changes in shape, size and rearrangement of details coming within the field of invention claimed may be resorted to in actual practice, if desired.

Having thus described the invention, what is claimed as new is:

1. In a structure of the class described, a substantially semi-spherical metallic open top shell having a flat bottom formed with an aperture, a metal vibrating element terminating at its free end in an open curled head, having its opposite end formed into a screw-threaded shank, said shank extending through the aperture, and inner and outer clamping nuts for securing the shank to the flat portion of the shell.

2. As a new article of manufacture and a component part of a turkey call imitator of the class described, a metallic flexible and vibratory block stroking tang formed at its working end with a split curled head and provided at its opposite end with a screw threaded attaching shank, a companion open top substantially gourd-shaped wooden shell constituting a sound wave trapping and amplifying cup, said shell being proportioned to be held in the fingers of the user's hand in such a way as to allow said fingers to substantially cover and properly valve the open top and being formed at the center of its bottom with an aperture, said screw threaded shank extending through said aperture, an adjusting and retaining nut carried by the shank and cooperable with the shell to maintain the parts properly assembled.

3. In a structural assemblage of the class described designed to serve as a turkep caller, in combination, a substantially rectangular cedar wood block proportioned to be held in one hand of the user, and a complemental sound producing unit adapted to be held in the other hand of the user, said unit comprising an open top substantially semi-elliptical hollow cup, said cup being of wood, and a vibratory flexible metal tang adjustably and detachably connected to said cup and centrally arranged in relation to the bottom portion thereof, said tang terminating at its free end in a block contacting head, whereby to utilize the block as frictional rubbering surface, the tang as a vibratory sound wave production element, and the cup as an amplifier for the sound waves in the manner and for the purposes described.

NICHOLAS SIMON.