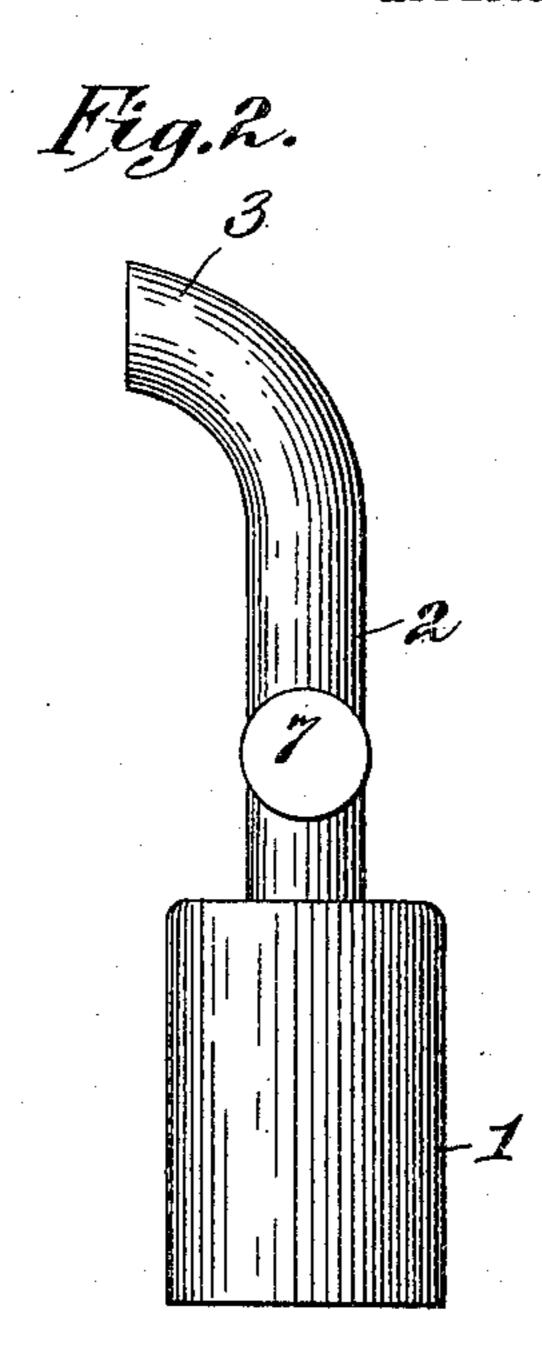
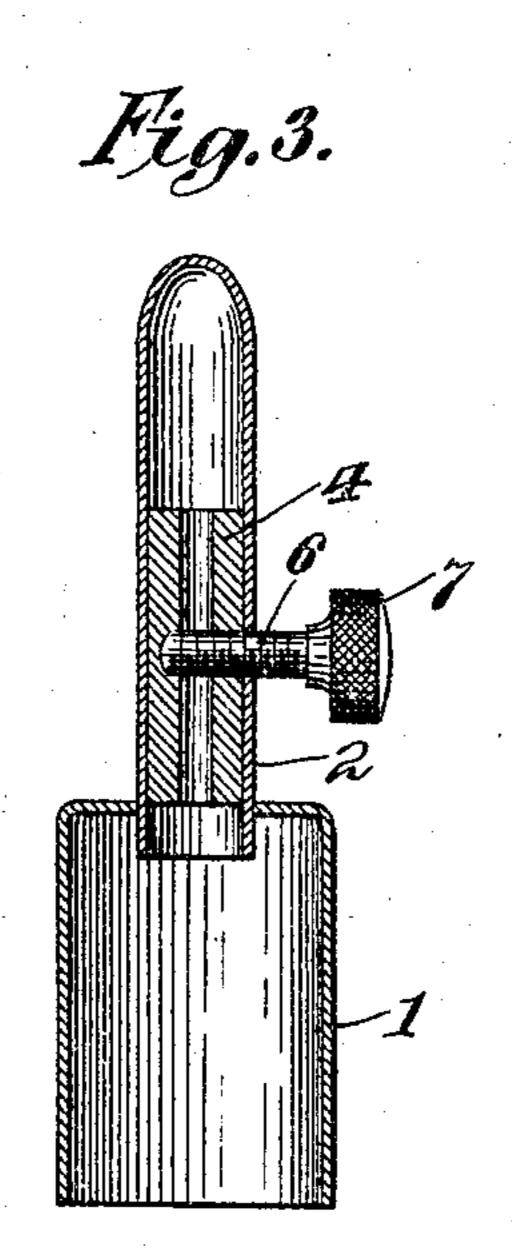
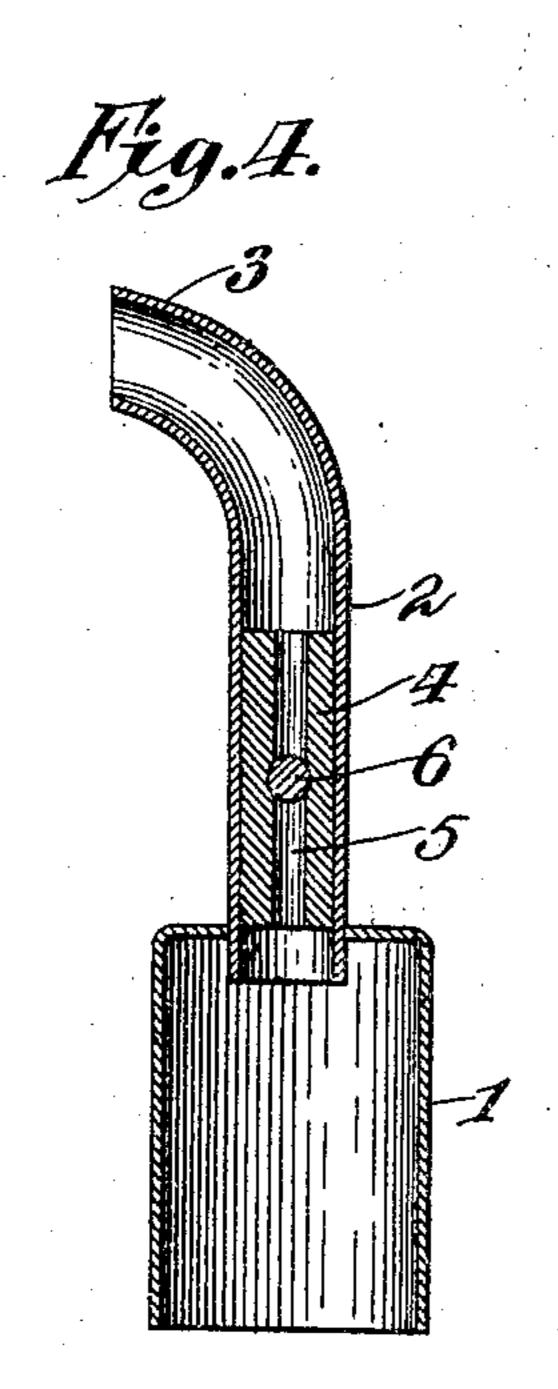
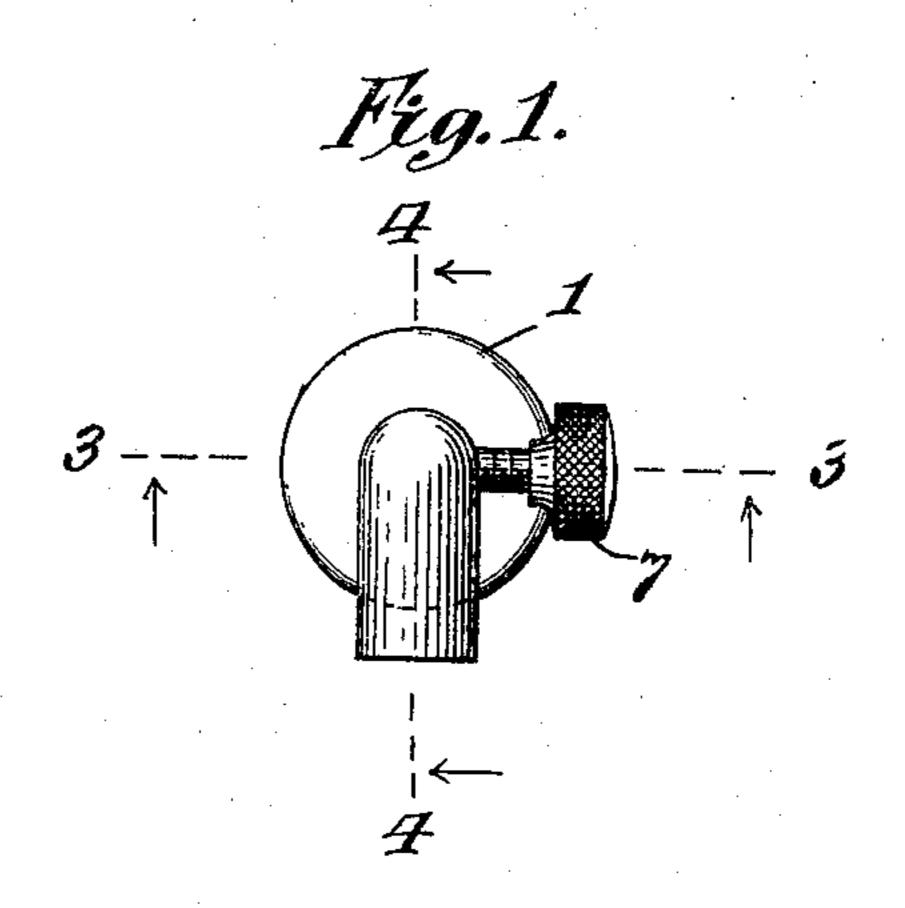
## C. L. HIBBARD. SOUND MODIFIER. APPLICATION FILED MAR. 20, 1905.









Witnesses Edgurorthesum Delos Holden

Charles L. Hobbara By his Attorney Trank L. Bree

## United States Patent Office.

CHARLES L. HIBBARD, OF ORANGE, NEW JERSEY, ASSIGNOR TO NEW JERSEY PATENT COMPANY, OF WEST ORANGE, NEW JERSEY, A CORPORATION OF NEW JERSEY.

## SOUND-MODIFIER.

SPECIFICATION forming part of Letters Patent No. 793,442, dated June 27, 1905.

Application filed March 20, 1905. Serial No. 251,026.

To all whom it may concern:

Be it known that I, Charles L. Hibbard, a citizen of the United States, residing at Orange, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Sound - Modifiers, of which the following is a specification.

In using phonographs and similar talkingmachines for commercial purposes, such as 10 the dictation of letters and other documents and also in using such machines for the study of a language, it is customary for the person listening to the phonographic reproduction of the sound-records of the said letters or lessons 15 to use ear-tubes leading from the reproducer of the instrument. It is found, however, that frequently the sounds given out by the reproducer are so powerful as to produce an unpleasant effect upon the listener, especially 20 one whose sense of hearing is very acute. It is for this reason desirable that means be provided whereby the sounds thus given out by the reproducer mechanism may be modified or reduced in intensity or volume. It is also 25 desirable that such means shall be so constructed as to be capable of being readily attached to or detached from a talking-machine and preferably that it shall be capable of being readily connected with or disconnected 30 from the ear-tubes which are in common use; also, that it shall be so designed as to be capable of ready and delicate adjustment, whereby the volume of sound may be adapted to

My invention has for its object the provision of a device having the characteristics above set forth.

any particular ear.

Reference is hereby made to the accompanying drawings, illustrating one form of device in which my invention may be embodied, in which—

Figure 1 is a plan; Fig. 2, a side elevation; Fig. 3, a section on the line 3 3 of Fig. 1, and Fig. 4 a section on the line 4 4 of Fig. 1.

The same numerals of reference are used to indicate corresponding parts in the several views.

The device as preferably constructed consists of a tubular structure comprising a hollow base 1, cylindrical in form and of such internal diameter as to snugly fit upon the upwardly - projecting neck of reproducers in common use in talking-machines. In the upper portion of the hollow base is fixed a tube 2, leading upwardly therefrom and whose upper end 3 is curved forward, as shown, so that the sound-waves will be directed forward. It is also obvious that a flexible connection can be fitted thereon and lead upward to the ears without danger of stopping or constricting 60 the passage for the sound-waves.

Within the tube 2 is fitted a plug 4, provided with an air-passage 5, preferably of small diameter. Transversely of the passage 5 is located a screw 6, threaded in the block 65 4 and having a milled head 7 for convenience in turning. This screw extends entirely across the passage 5 when in its extreme inner position, thus entirely closing the said passage and cutting off the sound-waves com- 70 pletely. By turning the screw so as to move the same outward the passage 5 is opened to any desired extent, whereby the volume of sound which reaches the ears of the listener may be correspondingly modified or regulated 75 from nothing to the full volume of sound given out by the reproducer.

Various modifications in the proportions and arrangement of parts will be apparent to those skilled in the art.

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

1. As a new article of manufacture, a sound-modifier comprising a hollow base adapted to be fitted upon the neck of a talking-machine 85 reproducer, a reduced tubular portion in communication with said hollow base, and a regulating-valve, substantially as set forth.

2. As a new article of manufacture, a sound-modifier comprising a hollow base adapted to 90 be fitted upon the neck of a talking-machine reproducer, a reduced tubular portion having its upper end curved forwardly and its lower end in communication with said hollow base,

and a regulating-valve, substantially as set forth.

3. As a new article of manufacture, a sound-modifier comprising a hollow base adapted to be fitted upon the neck of a talking-machine reproducer, a reduced tubular portion in communication with said hollow base, a plug having an air-passage therethrough and a screw

threaded into said plug across said air-passage, substantially as set forth.

This specification signed and witnessed this 18th day of March, 1905.

CHARLES L. HIBBARD.

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Witnesses:

Delos Holden, Frank L. Dyer.