#### E. P. SHEPARD.

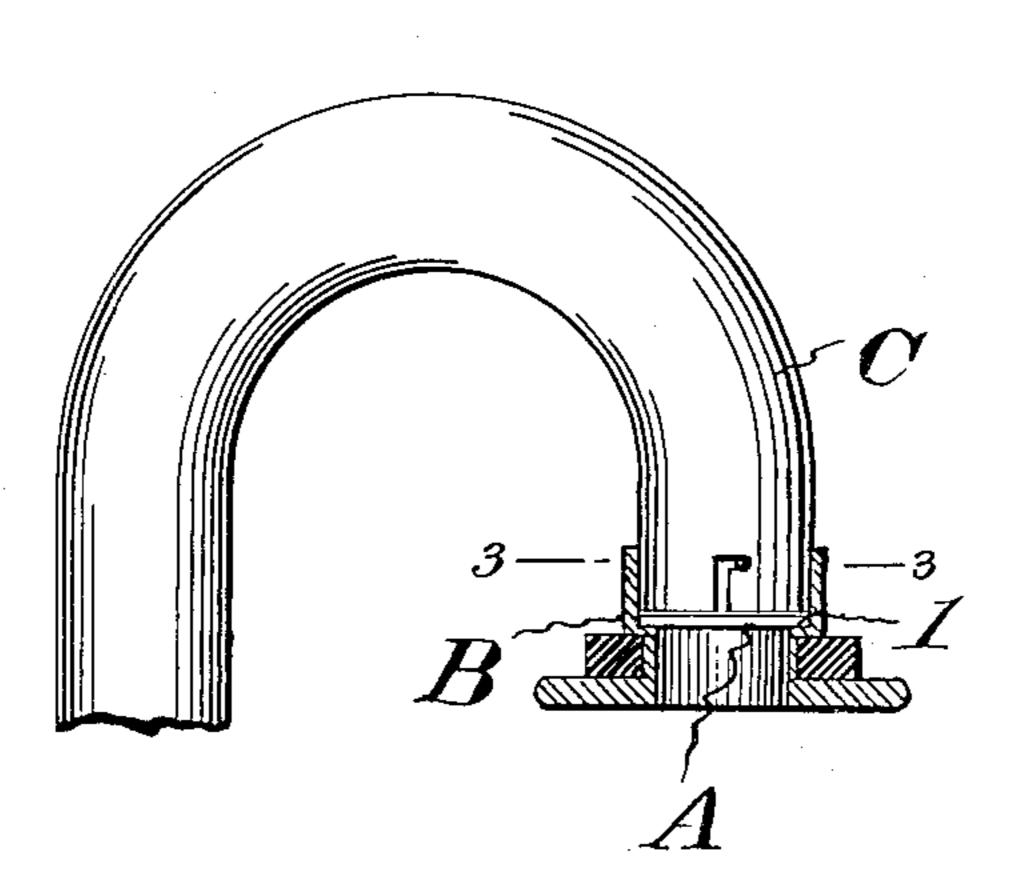
## SOUND MODIFIER FOR TALKING MACHINES. APPLICATION FILED DEC. 30, 1908.

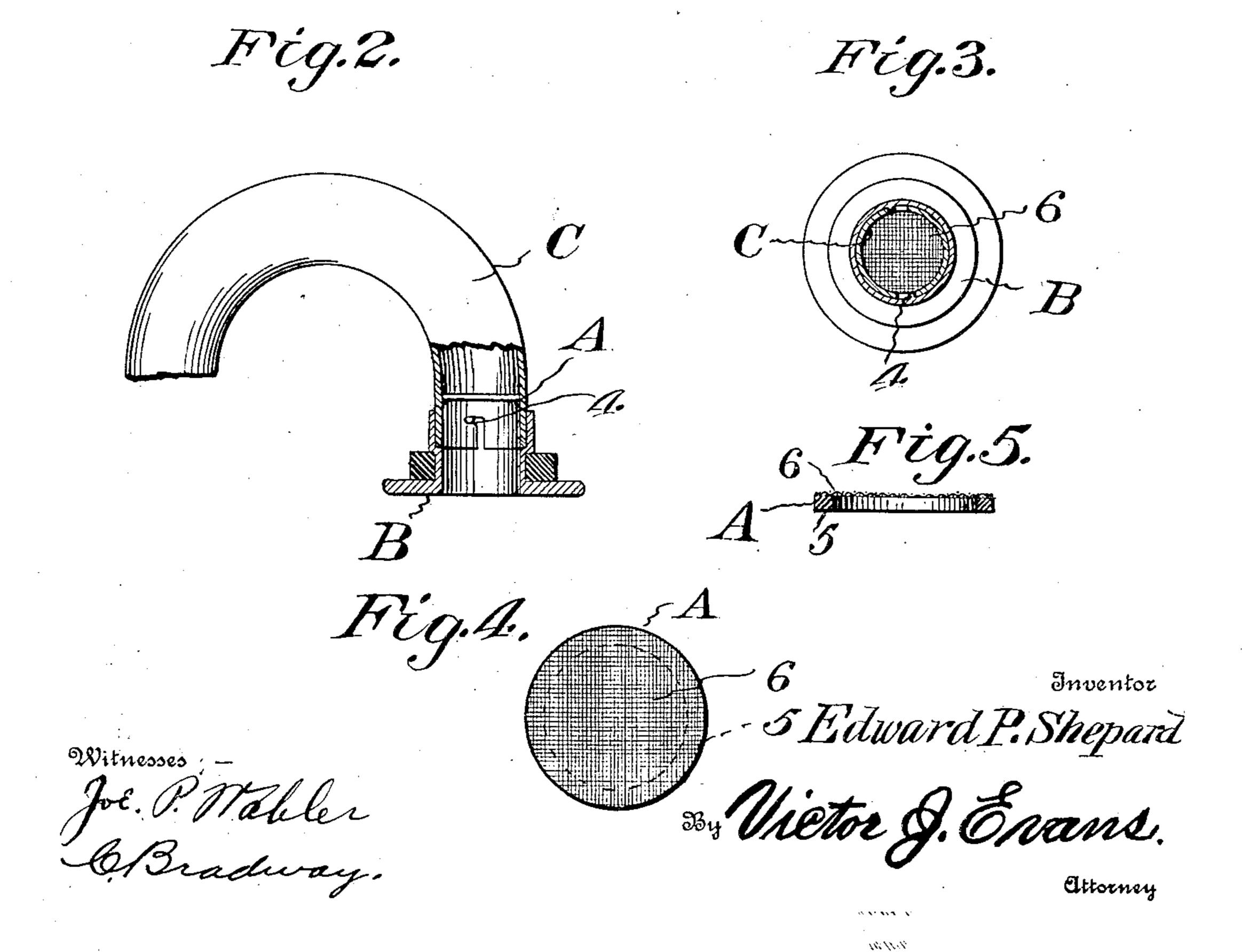
JOE OEO

925,958.

Patented June 22, 1909.

# Fig.Z.





### UNITED STATES PATENT OFFICE.

EDWARD P. SHEPARD, OF SAN DIEGO, CALIFORNIA.

### SOUND-MODIFIER FOR TALKING-MACHINES.

No. 925,958.

Specification of Letters Patent. Patented June 22, 1909.

Application filed December 30, 1908. Serial No. 470,021.

To all whom it may concern:

Be it known that I, Edward P. Shepard, a citizen of the United States, residing at San Diego, in the county of San Diego and 5 State of California, have invented new and useful Improvements in Sound-Modifiers for Talking-Machines, of which the following is a specification.

This invention relates to a device designed 10 for use in connection with gramophones and other talking machines whereby the sound can be effectively modified or reduced without, however, producing any detrimental

muffling effect.

15 The invention has for one of its objects to improve and simplify the construction of devices of this character so as to be comparatively simple and inexpensive to manufacture, reliable and efficient in use, and so 20 designed as to be in the nature of an attachment which can be readily applied to machines in common use.

Another object of the invention is the provision of a sound-modifying device con-25 sisting of a resilient or elastic ring adapted to fit within the gooseneck of the machine or in the sleeve connecting the sounding box with the gooseneck, and secured to this ring and stretched across the same is a diaphragm 30 of suitable material or fabric such as silk which allows the sound waves to readily pass with the effect that the sound will be reduced in an effective manner.

With these objects in view and others, as 35 will appear as the description proceeds, the invention comprises the various novel features of construction and arrangement of parts which will be more fully described hereinafter and set forth with particularity

40 in the claims appended hereto.

In the accompanying drawing, which illustrates one embodiment of the invention, Figure 1, is a fragmentary view of the goose-neck of a talking machine showing 45 the attachment arranged in the sounding box of the goose-neck, said sound box being shown in section. Fig. 2 is a detail sectional view showing the attachment located within the goose-neck at a point inwardly from the 50 box. Fig. 3 is a transverse section on line

3-3, Fig. 1. Fig. 4 is a plan view of the attachment. Fig. 5 is a diametrical sectional view thereof.

Similar reference characters are employed to designate corresponding parts throughout 55 the views.

Referring to the drawing, A designates the sound-modifying attachment which may be located within the part or sleeve B by which the sounding box is attached to the 60 goose-neck C or within an equivalent part of the talking machine, the attachment being positioned between the annular shoulder 1 of the said part B and the extremity of the goose-neck. If desired, however, the 65 sound-modifying attachment can be located within the goose-neck C as shown in Fig. 2, at a point above the bayonet joint 4 that detachably connects the said part B with the goose-neck.

The sound-modifying attachment preferably consists of a ring 5 of rubber or other suitable elastic material and of such diameter as to snugly fit in the goose-neck or part B. This ring constitutes a support or a body 75 for a diaphragm 6 of any suitable fabric such, for instance, as silk which serves to reduce or modify the sound. This diaphragm of silk is glued, cemented or otherwise suitably secured to the supporting ring.

From the foregoing description, taken in connection with the accompanying drawing, the advantages of the construction and of the method of operation will be readily apparent to those skilled in the art to which 85 the invention appertains, and while I have described the principle of operation of the invention, together with the device which I now consider to be the best embodiment thereof, I desire to have it understood that 90 the device shown is merely illustrative, and that such changes may be made when desired as are within the scope of the claims appended hereto.

Having thus described the invention, what 95 I claim is:—

1. A sound-modifying attachment for talking machines consisting of an annular elastic body adapted to be frictionally held in place in the machine by its own resiliency, 100 and a diaphragm of fabric stretched across the opening of the body and secured fixedly to the latter.

2. A sound-modifying attachment for talking machines comprising a rubber ring, and a diaphragm of silk stretched across the ring and secured to the said ring.

In testimony whereof I affix my signature in presence of two witnesses.

EDWARD P. SHEPARD.

Witnesses:

JOHN N. NEWKIRK, A. T. MACFARLAND.