H. A. J. SEXTON.

AMPLIFYING DEVICE.

APPLICATION FILED JULY 3, 1915.

1,174,358. Patented Mar. 7, 1916.

Fig. 1

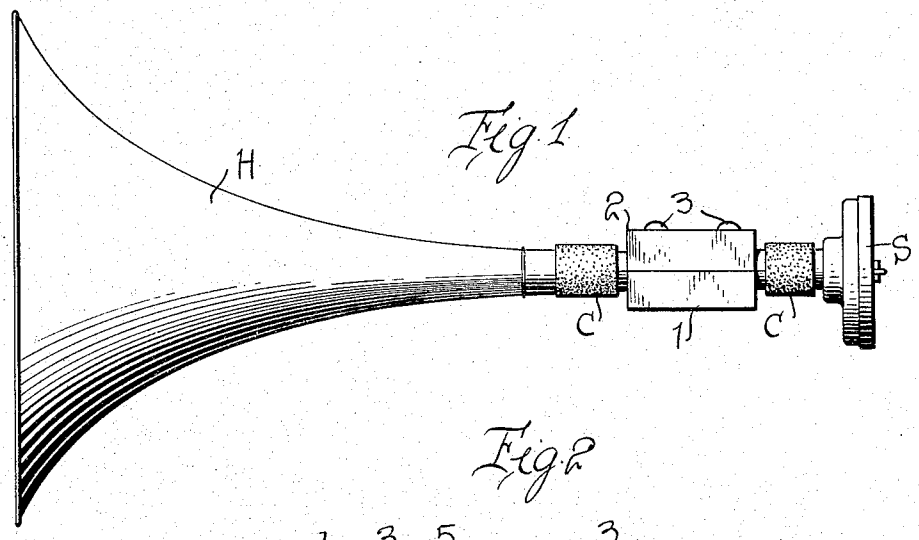


Fig. 2

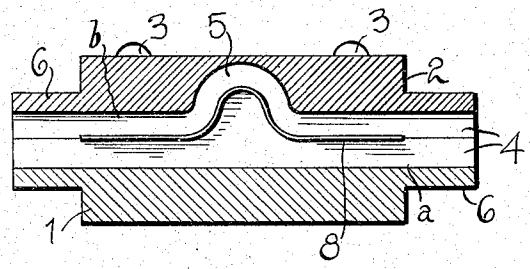


Fig. 3

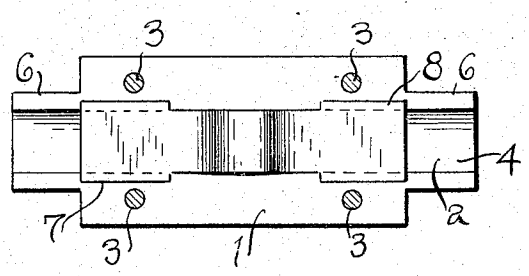
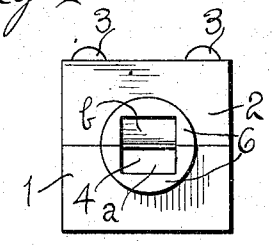


Fig. 4



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AMPLIFYING DEVICE.

1,174,358. Specification of Letters Patent. Patented Mar. 7, 1916.

Application filed July 3, 1915. Serial No. 37,901.

To all whom it may concern:

Be it known that I, HENRY A. J. SEXTON, a citizen of the United States, residing at St. Louis, in the State of Missouri, have invented certain new and useful Improvements in Amplifying Devices, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to certain improvements in amplifying devices; and it is an object of the invention to provide a device of this general character adapted to be interposed between the sound reproducing member and the sound chamber for increasing the volume of the sound and also enhancing the quality of the tones.

Furthermore, it is an object of the invention to provide a novel and improved device of this general character whereby the sound as emitted from the reproducing member is caused to travel in separated paths discharging at substantially a common point.

Furthermore, it is an object of the invention to provide a novel and improved device whereby obstruction is offered to the sound as it passes through the device.

The invention consists in the details of construction and in the combination and arrangement of the several parts of my improved amplifying device whereby certain important advantages are attained and the device is rendered simpler, less expensive and otherwise more convenient and advantageous for use, all as will be hereinafter more fully set forth.

The novel features of the invention will be carefully defined in the appended claims.

In order that my invention may be the better understood, I will now proceed to describe the same with reference to the accompanying drawings, wherein—

Figure 1 is a view in elevation of a somewhat diagrammatic character, illustrating an amplifier constructed in accordance with an embodiment of my invention in applied position; Fig. 2 is an enlarged longitudinal sectional view, detached, taken through my improved amplifier as herein embodied; Fig. 3 is a view in top plan of the lower section of my device as herein disclosed, with the connecting members in section and the interposed spring in plan; and Fig. 4 is an end elevational view of the amplifier as herein set forth.

As disclosed in the accompanying drawings, S denotes a sound box and H denotes a horn or other sound chamber in communication one with the other through the medium of the conduit C preferably of flexible tubing. Interposed in the conduit C is my improved amplifying device which comprises the superimposed sections 1 and 2 of suitable material and maintained in operative assemblage through the medium of the fastening devices 3, herein disclosed as threaded bolts.

The opposed faces of the sections 1 and 2 are grooved to afford the bore 4, the groove within the upper section 2 being depressed, as at 5, at a point substantially at the longitudinal center of the section. The sections when assembled are provided at their opposite ends with the flanges 6 affording nipples whereby the requisite connection may be had with the conduit C. The bore 4 is divided into two channels *a* and *b* through the medium of the interposed spring 8, the extremities of which are enlarged transversely, as at 7, to afford wings adapted to be interposed between the sections 1 and 2 whereby said spring may be maintained in applied position, the intermediate portion of the spring being curved to conform to the bottom wall of the groove of the upper section 2.

From the foregoing description, it is thought to be obvious that an amplifying device constructed in accordance with my invention is of an extremely simple and comparatively inexpensive nature and is particularly well adapted for use by reason of the convenience and facility with which it may be assembled, and it will also be obvious that my invention is susceptible of some change and modification without material departure from the scope of the appended claims and for this reason I do not wish to be understood as limiting myself to the precise arrangement and formation of the several parts herein shown in carrying out my invention in practice.

I claim:

1. A sound amplifier including a body provided with a bore therethrough, and means for dividing said bore into separate channels providing irregular paths, a wall of said bore being depressed at a point intermediate of its length.

2. A sound amplifier comprising two sections, means for maintaining said sections in superimposed relation, the opposed faces

of said sections being grooved to afford a bore, and means for dividing said bore into separate channels.

3. A sound amplifier comprising two sections, means for maintaining said sections in superimposed relation, the opposed faces of said sections being grooved to afford a bore, and means for dividing said bore into separate channels, an intermediate portion of one of the grooves being depressed.

4. A sound amplifier including a body provided with a bore, and a spring member dividing said bore into separate channels, the extremities of the spring being secured to the member.

5. A sound amplifier including a body provided with a bore, and a spring member dividing said bore into separate channels, the extremities of the spring being secured to the member, the wall of one of the channels being depressed, the spring having its intermediate portion disposed within said depression.

6. A sound amplifier comprising two sections, means for maintaining said sections in superposed relation, the opposed faces of said sections being grooved to afford a bore, and a spring member dividing said bore into separate channels, the extremities of the spring being provided with laterally disposed wings positioned between the sections whereby said spring is maintained in applied position.

7. A sound amplifier comprising two sections, means for maintaining said sections in superposed relation, the opposed faces of said sections being grooved to afford a bore, and means for dividing said bore into separate channels, the intermediate portion of one of said grooves being depressed, the second groove being straight and unobstructed throughout its length.

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

HENRY A. J. SEXTON.

Witnesses:

EMIL C. SECKEL,

HENRY W. L. SEXTON.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."