

No. 880,388.

PATENTED FEB. 25, 1908.

F. M. MURPHY.  
PHONOGRAPH HORN.  
APPLICATION FILED MAR. 11, 1907.

FIG. 1.

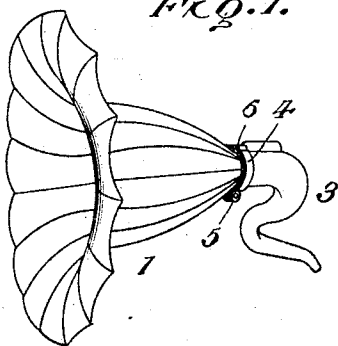


FIG. 2.

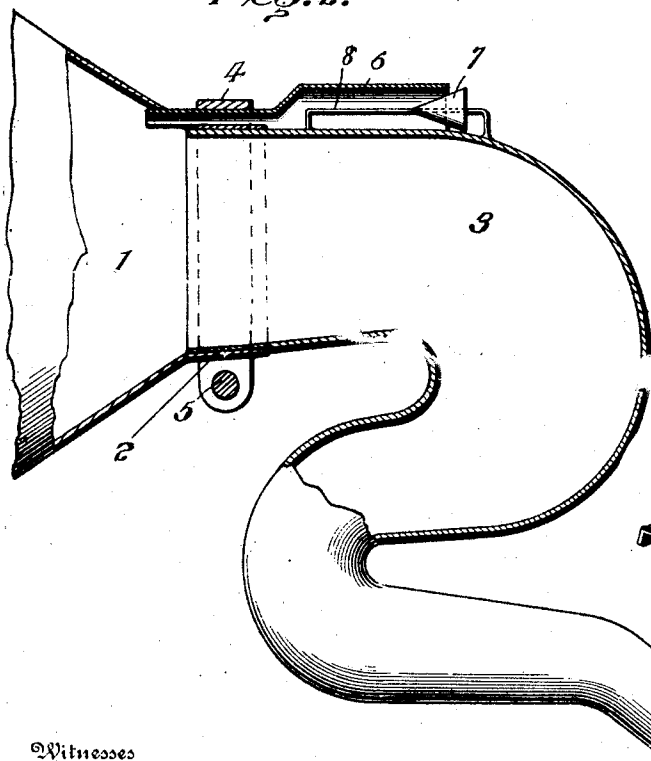


FIG. 4.

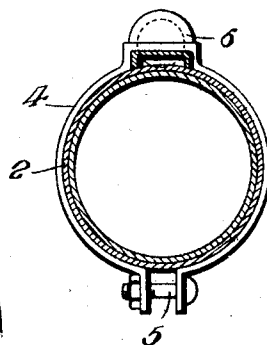
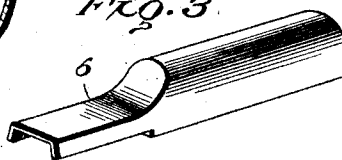


FIG. 3.



Witnesses

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# UNITED STATES PATENT OFFICE.

FRANCIS M. MURPHY, OF JERSEY CITY, NEW JERSEY, ASSIGNOR OF ONE-HALF TO THOMAS FLANAGAN, OF JERSEY CITY, NEW JERSEY.

## PHONOGRAPH-HORN.

No. 880,388.

Specification of Letters Patent.

Patented Feb. 25, 1908.

Application filed March 11, 1907. Serial No. 361,855.

*To all whom it may concern:*

Be it known that I, FRANCIS M. MURPHY, citizen of the United States, residing at Jersey City, in the county of Hudson and State of New Jersey, have invented certain new and useful Improvements in Phonograph-Horns, of which the following is a specification.

This invention relates to horns for talking machines generally, the purpose being to modify the sound by the application of a valve controlled air inlet located in the length of the horn and preferably about at the juncture of the base or stem with the body of said horn.

In the specific application of the invention, the horn comprises a body or bell portion and a stem or base, the parts being separable and the base or stem being tapered and reversely curved in its length, said base or stem having securing means for positive attachment thereto of the bell or body portion of the horn and provided with the valve controlled air inlet at or near its larger or coupling end.

For a full description of the invention and the merits thereof and also to acquire a knowledge of the details of construction and the means for effecting the result, reference is to be had to the following description and accompanying drawings.

While the invention may be adapted to different forms and conditions by changes in the structure and minor details without departing from the spirit or essential features thereof, still the preferred embodiment is shown in the accompanying drawings, in which:

Figure 1 is a perspective view of a phonograph horn embodying the invention. Fig. 2 is a longitudinal section of a portion of the stem or base and the contracted end of the horn body or bell. Fig. 3 is a detail view of the coupling end of the stem or base showing more clearly the clamp means for securing the horn thereto. Fig. 4 is a transverse sectional view taken at the junction of the horn and stem.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

The numeral 1 indicates the horn proper which is of bell or flared form, its contracted end terminating in a collar 2. The

base or stem 3 is tapered throughout its length and may be of any material and for compactness of arrangement is reversely curved, its smaller end being designed for attachment to the reproducer of any style of talking or sound reproducing machine. To insure formation of a tight joint between the body of the horn and the stem, the latter is provided with a clamp 4 consisting of a slit portion of said stem or base and having the portions bordering upon the slit bent to form ears and adapted to be connected by means of a set screw 5. An air chamber 6 is located at one side of the stem or base at or near its coupling end and communicates with the interior thereof and opens at its rear end exterior to the stem or base to admit air into the horn. A valve 7 of conical construction is adapted to close the exterior opening of the air chamber and is slidably mounted upon a rod 8 arranged within the chamber and may be moved so as to uncover the same more or less as may be required to effect the desired result.

The base or stem practically increases the length of the horn and throws the same at a greater distance from the reproducer, thereby obviating the rattle common to sound reproducing machines. The same results may be obtained by a straight stem or base but in order to reduce the length and economize space the base or stem is reversely curved. As a result of the stem or base, the tone quality of the horn and the volume thereof is increased. The provision of the air inlet enables the sound to be moderated or increased and by adjustment of the valve, the sound may be regulated to meet certain requirements. By having the stem or base detachably connected with the horn, the parts may be separated so as to be more readily handled and conveniently stored.

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

1. A horn for sound reproducing machines having an air chamber arranged upon one side thereof, one side of the said chamber communicating with the interior of the horn while the opposite side opens exteriorly, and a valve controlling the exterior opening of the chamber.

2. A horn for sound reproducing machines having an air chamber arranged upon one side thereof, one end of the chamber communicating with the interior of the horn

while the opposite end opens exteriorly thereof, and a slidably mounted valve for controlling the effective size of the exterior opening of the chamber.

- 5 3. A horn for sound reproducing machines having an air chamber in communication therewith, a guide rod arranged within the chamber, and a conical valve slidably mounted upon the guide rod and operating to control the effective size of the mouth of the air chamber.

10 4. In a device of the character described,

the combination of a tubular base, a horn detachably connected to the base, the said base carrying an air chamber communicating with the interior of the horn, and a valve controlling the effective size of the mouth of the air chamber. 15

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

FRANCIS M. MURPHY. [L. S.]

Witnesses:

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