

No. 673,396.

Patented May 7, 1901.

G. L. HOGAN.

HORN OR TRUMPET FOR PHONOGRAPHS.

(Application filed May 28, 1900.)

(No Model.)

2 Sheets—Sheet 1.

Fig. 1.

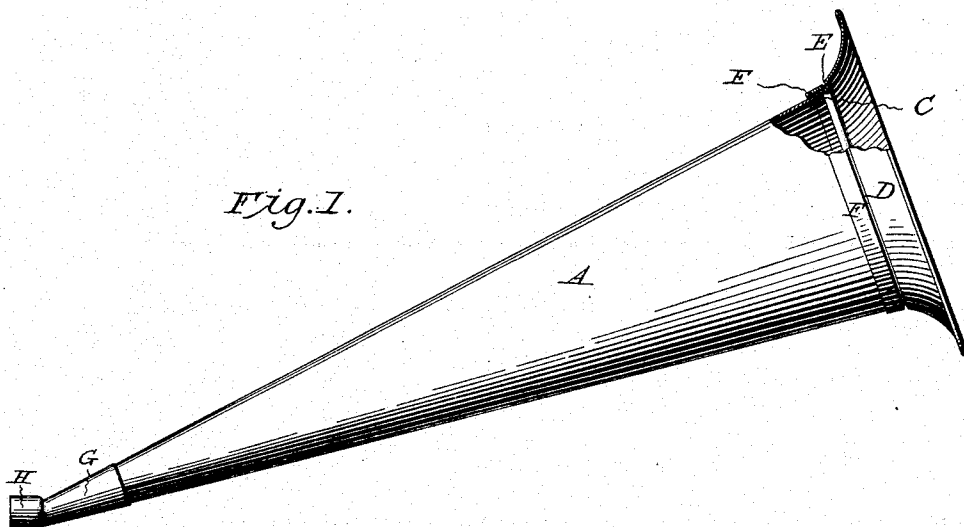
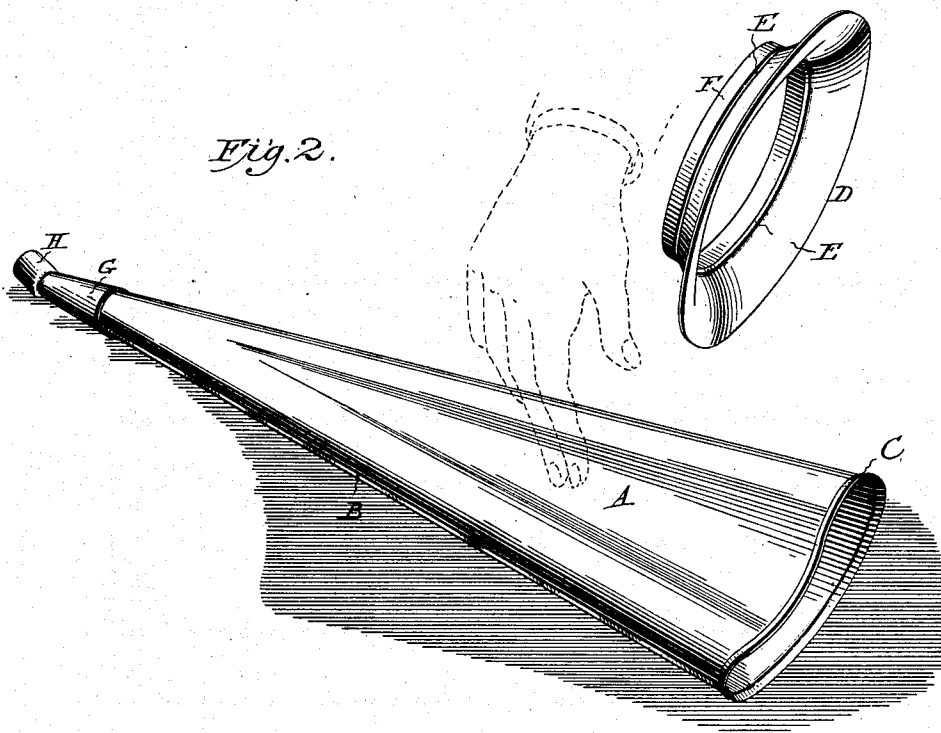


Fig. 2.



WITNESSES

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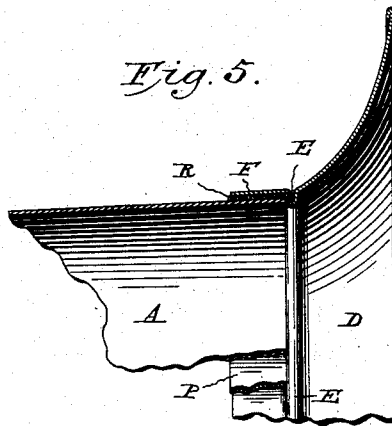
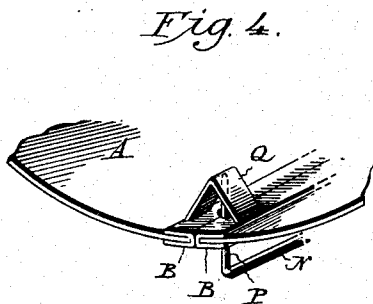
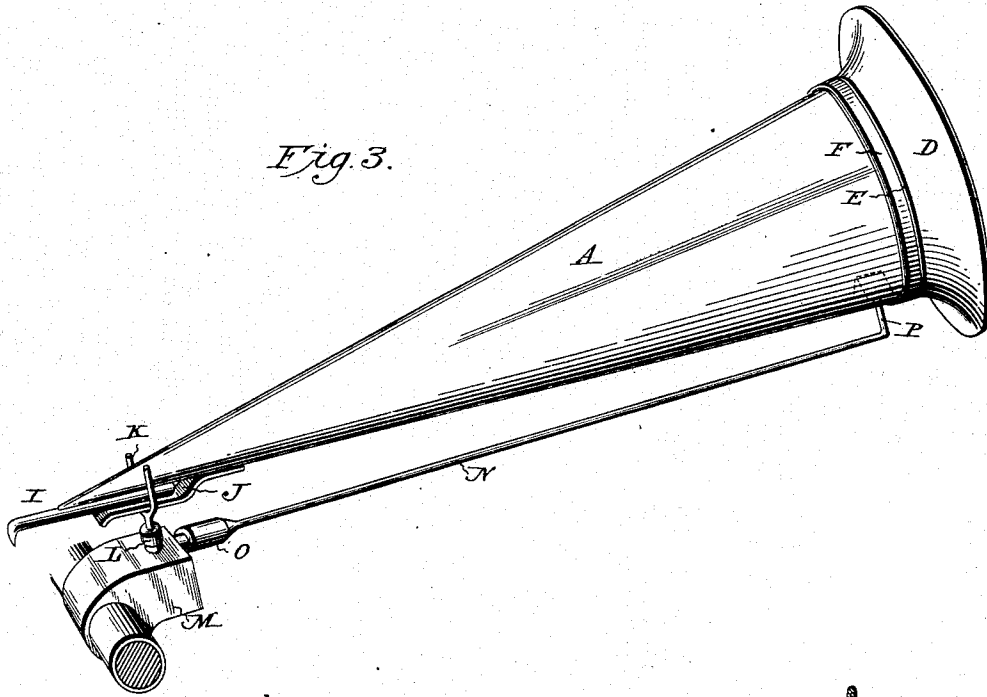
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UNITED STATES PATENT OFFICE.

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HORN OR TRUMPET FOR PHONOGRAPHS.

SPECIFICATION forming part of Letters Patent No. 673,396, dated May 7, 1901.

Application filed May 28, 1900. Serial No. 18,282. (No model.)

To all whom it may concern:

Be it known that I, GEORGE L. HOGAN, a citizen of the United States, residing at New York city, in the county of New York and State of New York, have invented certain new and useful Improvements in Horns or Trumpets for Phonographs, of which the following is a specification.

My present invention pertains to phonographs, and more particularly to the trumpet used in connection therewith, as will be best understood upon reference to the accompanying drawings, wherein—

Figure 1 is a perspective view of the trumpet partly broken away; Fig. 2, a similar view showing the bell or collar removed and the body of the trumpet in a flattened or collapsed condition; Fig. 3, a perspective view of the trumpet, illustrating a method of supporting the same in connection with a phonograph, a stylus or reproducing-point being also shown; Fig. 4, a detail perspective view, and Fig. 5 a sectional view illustrative of a modified form of construction.

The main object of my invention is to produce a highly superior trumpet for use in conjunction with phonographs and the like, one which is highly resonant, light, clean, resilient, and collapsible, so that it may be packed away in a small space, and which also possesses other properties and qualities herein-after set forth.

A further object of my invention is to provide the horn so formed with means for bringing it into operative connection with a record.

The body or main portion of the trumpet is composed of a sheet of celluloid, isinglass, gelatin, or the like—in practice celluloid having been the substance employed—the sheet being so cut that when its edges are brought together it takes the desired shape. To secure the edges together, each edge is provided with a binding-strip B, preferably of sheet metal, and the two metal strips soldered together. The outer or larger end of the trumpet thus made is slightly flared, as indicated at C, Figs. 1 and 2. A collar or bell D, of sheet metal, is employed to form the finish or outer end of the trumpet, and said bell is provided with an inwardly-projecting ridge or rib E, intermediate the curved or flaring portion of the bell, and a rearwardly-extending sleeve F. In

practice the bell or collar is formed of a single piece of thin sheet metal, and when it is desired to place the same in position all that it is necessary to do is to pass the smaller end of the trumpet back through the opening in the bell or collar and draw the trumpet until the flared edge C bears upon the inner face of the collar F in rear of the rib E. The parts are so proportioned that the collar F and the flared edge C of the trumpet will make a tight fit one with the other. Owing to the fact that the collar F is also slightly smaller at its rear end or edge than near the bead or rib E, the celluloid makes a tight fit therewith, and the bell will not under ordinary usage become displaced. When, however, it is desired to withdraw the bell, it is only necessary to give it a quick forward pull.

The rear end of the trumpet in the forms shown in Figs. 1 and 2 is not closed—that is to say, the sheet is so shaped that when the edges are brought together an opening will be left at the smaller end. Over this smaller end is passed a hollow metal sleeve G, having secured thereto or formed integral therewith a collar H, which is adapted to be secured to the reproducer of any phonograph or similar machine. To maintain the sleeve G in its position upon the trumpet-body, it is preferably soldered to the binding-strips B. The trumpet thus formed may when the bell D is removed be collapsed or folded up, as indicated in Fig. 2, and packed in a flat box or similar receptacle, occupying but little space. As above pointed out, the construction is advantageous in that the trumpet is light and needs no support when directly connected to the reproducer.

It is found in practice that the sound given off by a trumpet constructed as herein set forth is devoid of that well-known metallic ring or harshness common in other trumpets. Where the trumpet is used both for making the record and for giving it out, the effect is still more noticeable. It is to be observed that the body of the trumpet will not dent, is smooth, and consequently gives off a better tone than other trumpets which while apparently having a smooth surface of necessity have more or less imperfections. The trumpet can be folded or collapsed, is light, and no support is necessary therefor. It is

easy to keep clean and may be made highly ornamental by reason of variation in color and design. It is further to be noted that a trumpet made of this material may be manufactured at much less cost than can a trumpet made of metal.

In Fig. 3 a trumpet having its body portion made up in the manner above set forth is shown, except that instead of placing a sleeve or collar upon the rear end thereof to form connection with the ordinary reproducer there is illustrated a reproducing-stylus I, held in position upon the trumpet by being placed intermediate the binding-strips B, and a spring-arm J, soldered or otherwise secured to said binding-strips. The stylus is adapted to work in conjunction with the sound-record without the intervention or use of a reproducer, as is well understood. To maintain the trumpet and stylus in proper relation to the record, a forked member K is employed, said member having secured to its lower end a ferrule L, which passes over a stud extending up from the traveling block M, as is usual in the ordinary phonograph. Said stud usually holds in place the reproducer now commonly used. To maintain the outer end of the trumpet in its elevated position, a supporting-rod N, having attached to its rear end a ferrule O, is employed. The ferrule fits over a stud extending outwardly from the block M, as is usual. The outer end of the rod N is bent upwardly, forming a point P, which extends through an opening formed in the binding-strips B and bears against a U-shaped metal plate Q, secured inside of the trumpet to the binding-strips B. The opening through which the arm or upward extension P passes is made sufficiently large so that the arm will not come in contact with the walls thereof—this for the reason that it is desirable that the trumpet should have a perfectly free movement, so that the stylus may adapt itself to the variation in the record-surface.

It is manifest that a trumpet built up in the manner herein set forth may be employed in connection with any form of stylus or reproducing device, and I do not therefore desire to limit myself to any particular form.

In Fig. 5 there is illustrated a bell or flare having its rearwardly-extending sleeve F provided with a lining R, of rubber, against which the celluloid forming the body of the trumpet may bear. This construction may be employed instead of flaring the outer end of the celluloid body and is designed to form a close union between the parts. In practice, however, it has been found that neither the flare nor the rubber packing is essential to a proper joining of the parts, as the celluloid may be made perfectly straight, as indicated in Fig. 5, and bear directly against the collar F, the edge coming in rear of the rib or bead.

While I have described the trumpet as made up of a sheet of celluloid or similar material having its edges bound or secured to-

gether, I desire to be understood as claiming, broadly, a trumpet composed of the material herein set forth, whether said trumpet be made of a single sheet having its edges joined together or molded, so that there are no joints in it whatsoever.

Although it is desirable to use the flare or member D, it is not absolutely essential so to do, inasmuch as when the trumpet-body is formed either by bringing its edges together or by molding it will maintain its shape to a greater or less degree. Of course when the bell is passed over the trumpet-body and brought to position on the end the trumpet assumes a more perfect shape and the forward edge is also protected.

Having thus described my invention, what I claim is—

1. A trumpet for phonographs and the like formed of a sheet of resilient celluloid having its edges brought together and permanently secured, and means for maintaining the outer end of the trumpet in shape.
2. A trumpet for phonographs or the like formed of a sheet of resilient material, and a collar removably mounted upon the outer or larger end of the trumpet.
3. A trumpet for phonographs or the like formed of resilient material, and a collar removably mounted upon the outer end of the trumpet, said collar having an inwardly-extending bead.
4. A trumpet for phonographs and the like, comprising a body portion formed of resilient material; a flare or collar having an inwardly-extending bead, mounted upon the large end of the trumpet; and means carried by the other end of the trumpet adapted to bring the trumpet into operative relation with the sound-record of a phonograph.
5. A trumpet for phonographs and the like, comprising a body portion formed of resilient material; a removable flare mounted upon the outer end of the trumpet; and means carried at the opposite end of the trumpet adapted to bring the trumpet into operative relation with the sound-record of a phonograph.
6. A trumpet for phonographs formed of a sheet of resilient material having its edges permanently connected, whereby the trumpet may be folded or collapsed and when relieved from pressure or restraint will assume its normal shape.
7. A trumpet for phonographs or the like formed of a single piece of flexible resilient material capable of being folded or collapsed upon itself while still retaining its integrity of structure whereby the trumpet may be folded upon itself when desired, and will resume its normal position and form when released from confinement.
8. A trumpet for phonographs or the like formed of a flexible resilient material, and provided with a removable means for maintaining it in shape when in use.
9. A trumpet for phonographs or the like formed of a flexible springy material, and

provided with removable means for maintaining its outer end in shape when in use.

10. A trumpet for phonographs or the like formed of a flexible springy material; means
5 secured to the smaller end thereof adapted to bring it into operative relation with a sound-record; and a removable flare or collar mounted upon the outer end of the trumpet.

11. A trumpet for phonographs or the like
10 having its body portion formed of resilient material, the outer or larger end being flared outwardly; and a removable flare or collar mounted upon said flared end.

12. A trumpet for phonographs or the like having its body formed of a sheet of resilient
15 celluloid; a metallic binding for the proximate edges thereof; a ferrule secured to the smaller end of the trumpet; and a removable flare mounted upon the opposite end.

In testimony whereof I have signed my
20 name to this specification in the presence of two subscribing witnesses.

GEORGE L. HOGAN.

Witnesses:

JAS. W. WALKER, Jr.,

MILLARD F. KUH.