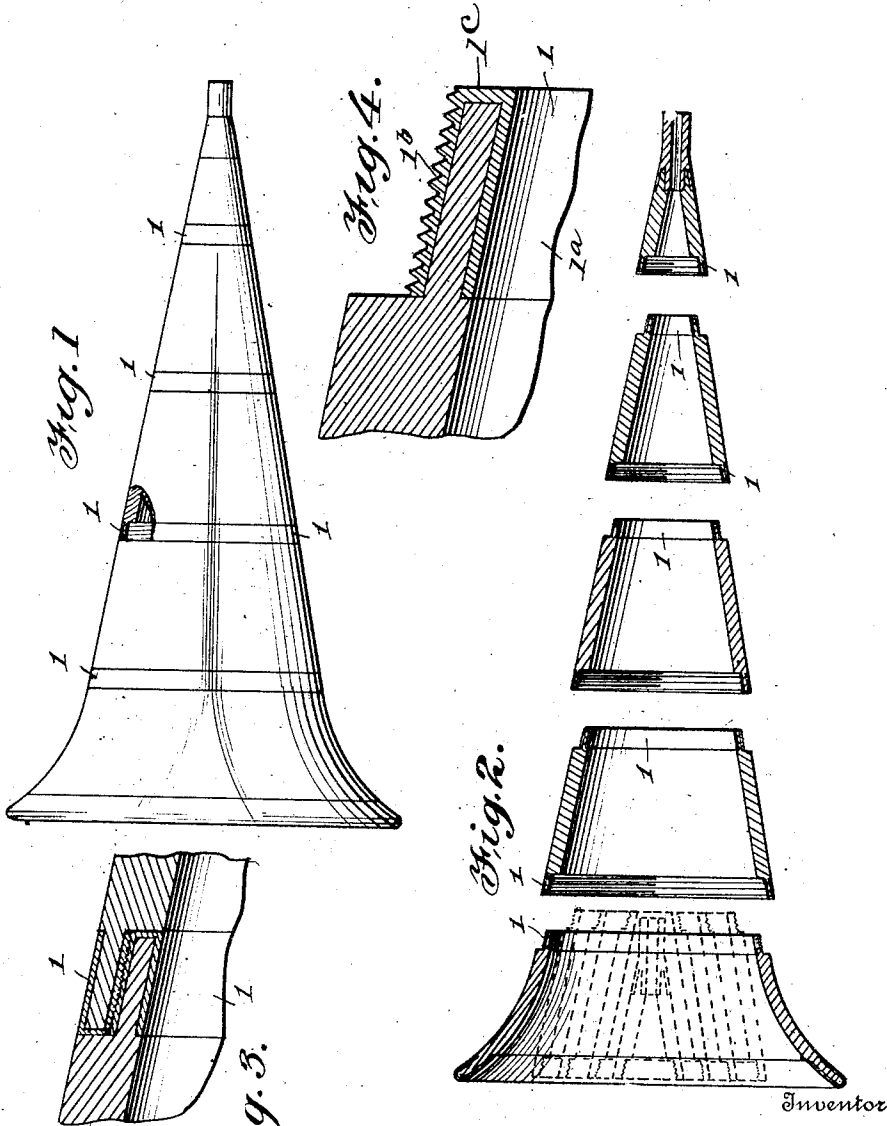


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 COLLAPSIBLE PHONOGRAPH HORN.
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1,049,166.

Patented Dec. 31, 1912.



Witnesses
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GILBERT STIFF, OF OVID, MICHIGAN.

COLLAPSIBLE PHONOGRAPH-HORN.

1,049,166.

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To all whom it may concern:

Be it known that I, GILBERT STIFF, a citizen of the United States, residing at Ovid, in the county of Clinton and State of Michigan, have invented new and useful Improvements in Collapsible Phonograph-Horns, of which the following is a specification.

The invention provides a horn designed most especially for sound reproducing machines of the phonograph type, the purpose being the provision of a horn which will admit of its length being readily reduced so that the horn may be stored in a comparatively small space either for convenience of carrying or to be laid aside when not required for immediate use so as not to be in the way, the invention relating most essentially to the joint formed between the horn sections whereby both the inner and the outer side of the horn are practically smooth and continuous.

The invention consists of the novel features, details of construction and combination of parts, which hereinafter will be more particularly set forth, illustrated in the accompanying drawing, and pointed out in the appended claim.

Referring to the drawing, forming a part of the specification, Figure 1 is a side view of a horn of the type described embodying the invention, a part being broken away. Fig. 2 is a sectional view, the parts or horn sections being separated and the dotted lines showing the position of the sections when nested. Fig. 3 is an enlarged section of the joint formed between adjacent sections. Fig. 4 is an enlarged view of a part of one of the horn sections.

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

The horn in its general appearance may be of any design such as commonly provided for sound reproducing machines and may be constructed of any material.

In order to admit of the length of the horn being reduced it is proposed to form the horn of longitudinal sections which are separable, each of the sections being approximately of frusto-conical form. The number of the horn sections and the length thereof will depend upon the size of the horn and the space into which the same is to be packed when the horn is reduced in length.

In accordance with the invention it is preferred to construct the horn of wood or like fibrous material. The edges or ends of the sections bordering upon or forming the joint are rabbeted or halved so that when the sections are placed together both the inner and the outer walls are smooth and practically continuous, while at the same time the parts of the horn sections forming the joints overlap. The horn sections are positively connected by providing the halved ends upon their longitudinal walls or faces with fine screw-threads which match and interlock when the sections are assembled, as indicated most clearly in Figs. 1 and 3. The end or edge portions of the horn sections are susceptible to contraction or expansion or to injury, which ordinarily would prevent assembling the sections. This difficulty is overcome by reinforcing the ends or edge portions of the horn sections, the reinforcement being in the nature of a metal binding 1, which embraces opposite sides of the section and extends over the end thereof. The reinforcement 1 consists of inner and outer tapered elements 1^a and 1^b and a connecting part 1^c joining the outer ends of the elements 1^a and 1^b. One of such elements is threaded to engage matching screwthreads on the mating element of the adjacent horn section. The smaller ends of the horn sections are rabbeted on the outer sides and the larger ends are rabbeted on the inner sides. The outer elements of the reinforcements fitted to the smaller ends of the horn sections are threaded, whereas the inner elements of the reinforcements at the larger ends of such horn sections are threaded. The reinforcement 1 besides protecting the end of the horn section also serves to give a finished appearance thereto and prevents injury to the end of the section.

When the sections comprising the horn are assembled, as indicated in Fig. 1, both the inner and the outer walls are practically smooth and continuous. When the sections are separated they may be nested, as indicated by the dotted lines in Fig. 2, to admit of their occupying a small space or being packed into a case for convenience of carrying.

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

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 embodiment thereof, I desire to have it understood that the device shown is merely illustrative, and that such changes may be made when desired as are within the scope of the claim appended hereto.

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

15 A collapsible horn for phonographs comprising a plurality of separable sections of similar formation, each of said sections being of tapering form and having its ends rabbeted, the smaller end having the rabbet

on the outside and the larger end having the rabbet on the inside, and a metal reinforcement fitted to each rabbeted end and consisting of inner and outer tapered elements, and a connecting part joining the outer ends of said elements, the joints between the sections being threaded and of such form as to present smooth inner and outer surfaces when the sections are assembled.

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

GILBERT STIFF.

Witnesses:

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