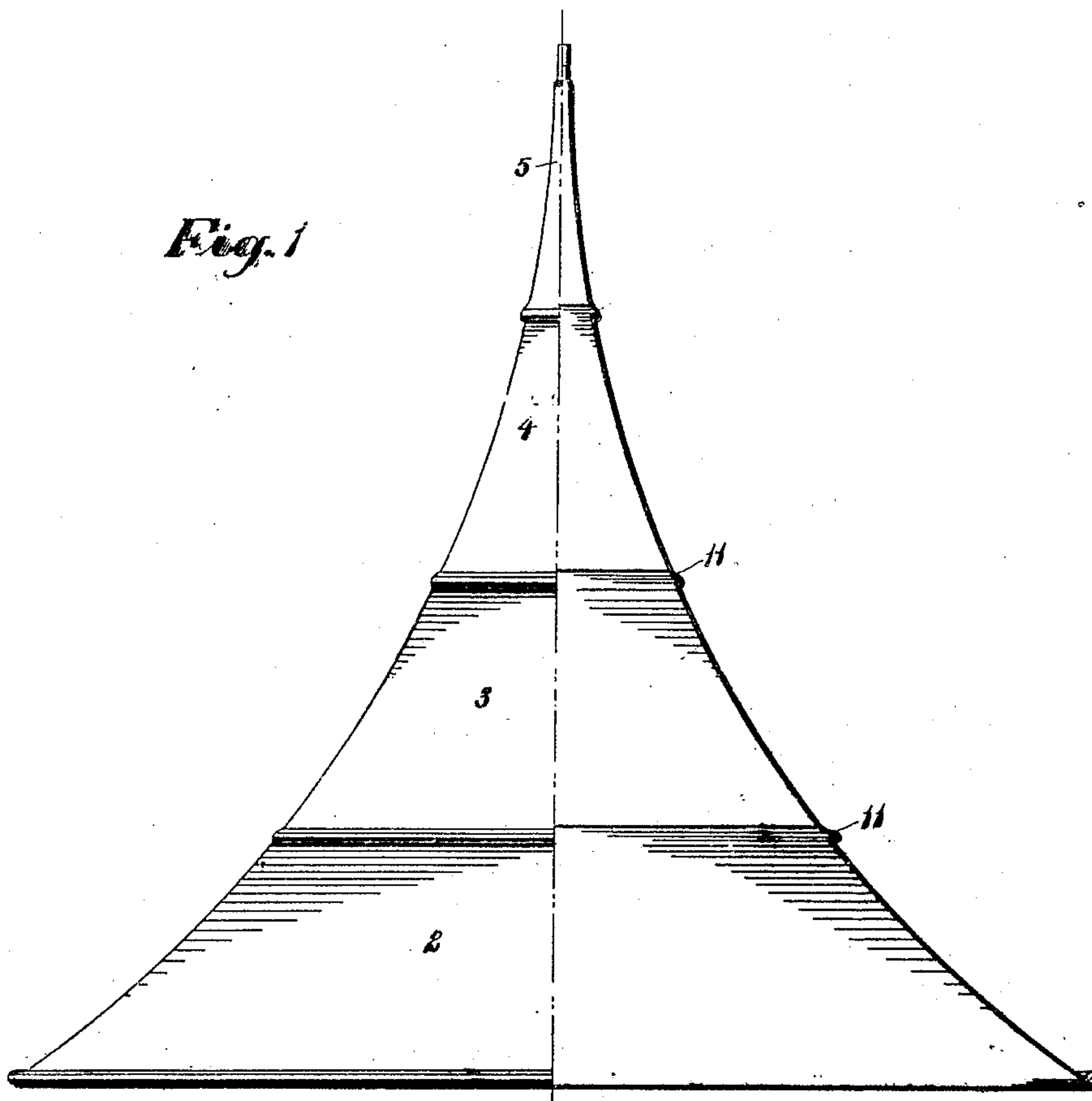


917,252.

Patented Apr. 6, 1909.
3 SHEETS—SHEET 1.

Fig. 1



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3 SHEETS—SHEET 2.

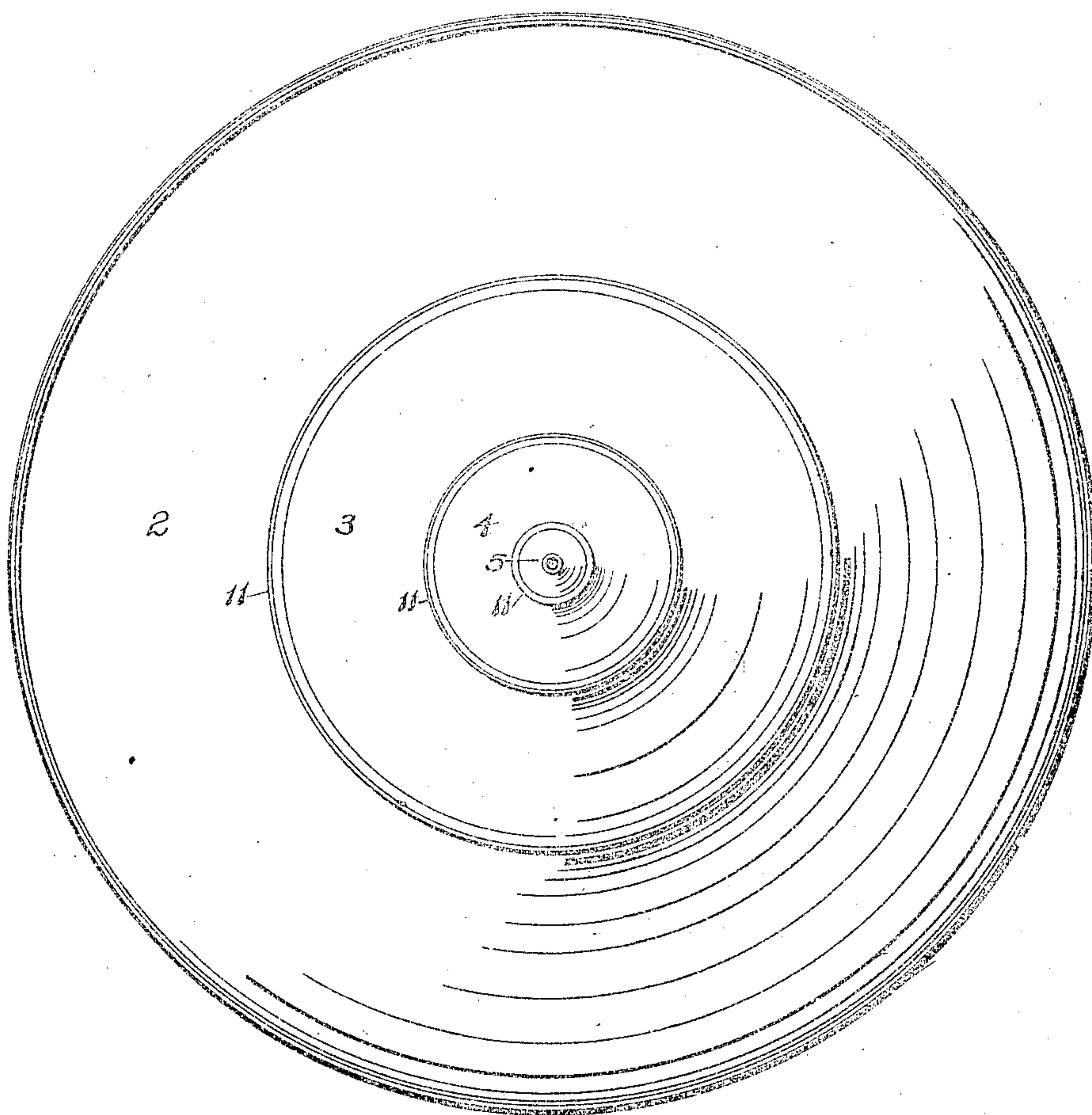


Fig. 2

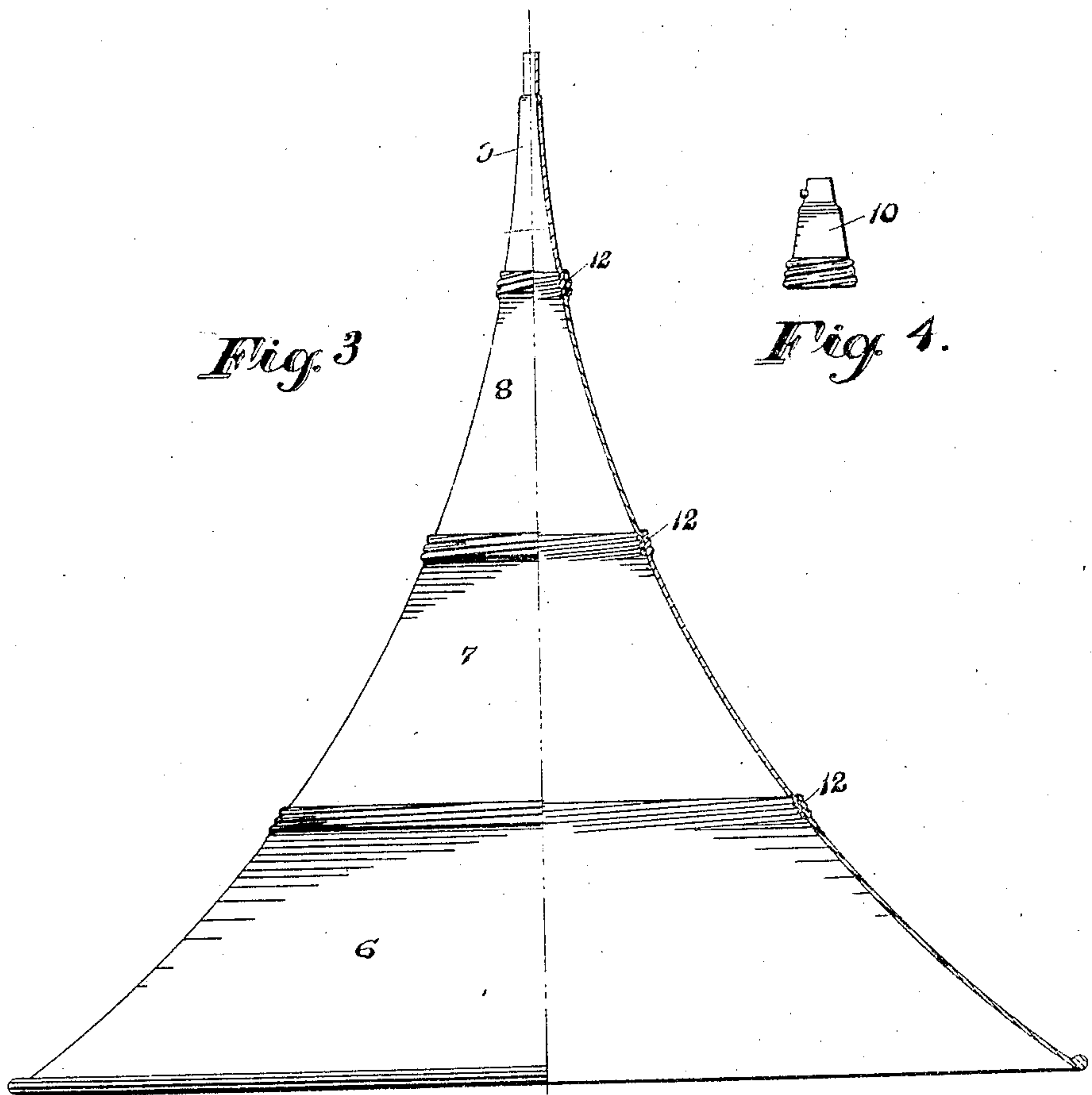
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AMPLIFYING-HORN.

No. 917,252.

Specification of Letters Patent.

Patented April 6, 1909.

Application filed May 4, 1906. Serial No. 315,227.

To all whom it may concern:

Be it known that I, JOHN H. B. CONGER, a citizen of the United States, residing at Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Amplifying-Horns, of which the following is a specification.

The objects of this invention are to provide an amplifying horn flaring upon curved lines which shall be composed of transverse sections, each comprising a seamless or circumferentially integral band; to thus reduce the number of parts or pieces in such a horn and secure fewer seams; to enable a horn flaring on curved lines to be made collapsible; to provide interchangeable sections for the small end of the horn so that the main body of the horn can be used for different talking machines, and to secure other advantages and results as may be brought out in the following description.

Referring to the accompanying drawings, in which like numerals of reference indicate corresponding parts in each of the several figures, Figure 1 is a side elevation, partly in central vertical section, of a horn of my improved construction; Fig. 2 is a plan of the same; Fig. 3 is a view similar to Fig. 1 except that the horn sections are shown detachably united, and Fig. 4 shows a small end section adapted to replace the one shown in Fig. 3 for certain kinds of talking machines.

It will be understood that horns of the type to which my present invention relates, that is, horns which flare upon curved lines,—morning-glory or flower horns as they are commonly called,—have heretofore been made of a large number of longitudinal sections or strips, since it obviously was impossible to form of one or two pieces a horn or horn section which flared upon other than straight lines. The result of this construction has been a multiplicity of seams or joints in the horn, which not only marred its appearance but also interfered with its acoustic properties.

My purpose is to do away with all these objectionable features and provide a horn flaring upon curved lines which shall have a minimum number of joints or seams. To this end the horn is constructed of a longitudinal series of transverse sections each of which is composed of a seamless integral band which has been pressed, stamped or

spin into its proper form, to wit, a flaring shape in which the lateral lines are curved. In Figs. 1 and 2 of the drawings I have shown such sections 2, 3, 4, etc., which are connected at their adjacent edges, as at 11, by reaming or any other means known to the art to afford a permanent connection. A horn is thus provided which flares continuously on curved lines and yet is composed of a small number of pieces and has a still less number of seams.

Obviously, the degree of curvature of the sides of the horn may be varied, and the length of the sections changed at will, without departing from the spirit and scope of the invention.

In Fig. 4 of the drawings I have shown sections 6, 7, 8, etc., of the horn detachably connected, as by screwing together at their adjacent ends, as at 12, although any other appropriate means of coupling together could be employed if desired. Furthermore, the larger end of each section screws inside of the smaller end of the next adjacent section, as shown in the drawings, so that when the sections are screwed apart the horn will collapse and nest its sections one within another.

One advantage of the construction shown in Fig. 3, is that in manufacturing, different small-end sections may be employed with the rest of the horn to accommodate it to different conditions, makes of machines, and so forth. For instance, the end section 9 shown in Fig. 3 is adapted to the use of the horn upon phonographs, while in Fig. 4 I have shown another end section 10 which is adapted to replace the end section 9 and enable the horn to be applied to gramophones. It will thus be understood that by having a judicious assortment of small-end sections, the number of horn bodies carried in stock could be greatly reduced, since they would be available for different purposes.

Having thus described the invention what I claim as new is:

The hereindescribed horn, composed of a plurality of transverse sections adapted to be connected end to end, each section comprising a seamless band and having its walls flaring on curved lines.

JOHN H. B. CONGER.

Witnesses:

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ETHEL B. REED.