

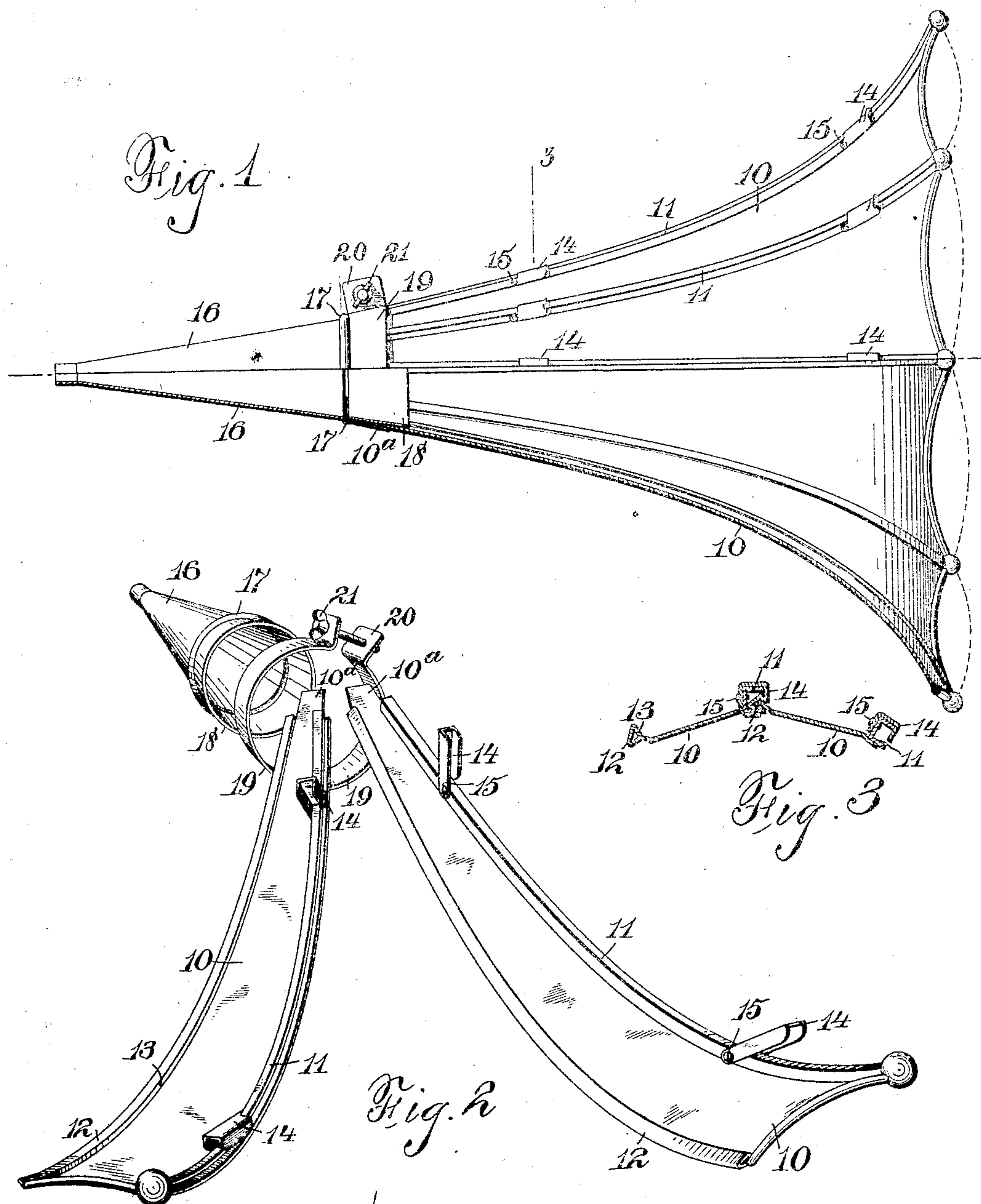
No. 840,967.

PATENTED JAN. 8, 1907.

M. STEINER & M. BRENNER.

AMPLIFYING HORN.

APPLICATION FILED MAY 25, 1906.



WITNESSES:

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MAX STEINER AND MICK BRENNER, OF NEWARK, NEW JERSEY.

AMPLIFYING-HORN.

No. 840,967.

Specification of Letters Patent.

Patented Jan. 8, 1907.

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To all whom it may concern:

Be it known that we, MAX STEINER and MICK BRENNER, citizens 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; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to numerals of reference marked thereon, which form a part of this specification.

This invention relates to a horn, and more particularly to that class of horns that are known as "amplifying-horns," these being mainly used on talking-machines and as megaphones.

The invention is designed to provide a horn of this class that can be taken apart, the larger end of the horn and the major portion of its length being made of separable sections that will fit one on the other, so as to make a compact package for transportation or storage.

The invention is further designed to provide means for holding these separable sections when they are assembled to form the horn; and a still further object is to provide a means on the smaller end of the horn for holding all parts together, so that the small and large ends are rigidly and securely connected.

Our invention is illustrated in the accompanying drawings, in which—

Figure 1 is a half-elevation and half-section of the horn assembled. Fig. 2 is a perspective view of the elements making up the small ends of the horn and two of the separable sections that constitute the large or the flaring end. Fig. 3 is a section of two of the sections of the horn, this view being taken on line 3 in Fig. 1.

As illustrated, our horn is made up, on the larger end, of the sections 10 that are of a configuration that permits of a series of these sections to be put together to make a horn of the desired shape. Each of these sections on one edge has a channel-shaped rib 11 and on the other edge a turned-over portion 12. The rib 11 is soldered to one edge of a section 10; but it may be otherwise secured, or it might be bent up from the same piece. The rib 12 may be made of any suitable shape, so

long as it will fit into the rib 10, and has the straight rear piece 13, that permits of its being locked in the channel 11 by one edge of the U-shaped clasp 14, these clasps being disposed at suitable intervals on the ribs 10 and pivoted by a suitable pin or rivet 15. This holding means, however, might be changed, as long as the structure was devised to hold the ribs on the adjacent edges of the sections 10 together. These sections when thus assembled are prevented from collapsing or from being separated, and in the small end of these joined sections is forced a conical sleeve 16, that has a peripheral rib 17, and the larger flaring end 18 of which fits up tight inside the flat inner edges or tongues 10^a of the sections 10. Around this joint and having one edge in engagement with the rib 17 and the other edge in contact with the inner ends of the ribs 11 and 12 is the band 19, that is slipped around the horn, and the ends 20 are drawn together by a set-screw or similar regulating device 21.

It will be seen from this description that the small end of the horn is easily packed away—that is, the elements 16 and 19—and the larger part of the horn is made up of separable sections 10 that are duplicates of one another, and these sections can be folded or laid in a pile, and they take up very little room.

The particular kinds of fastening means for the ribs and also for the band 19 can have alternative constructions to perform their functions.

Having thus described our invention, what we claim is—

1. A horn comprising a tapered sleeve at its small end, its large end made up of assembled sections detachably secured together, each section having a flat tongue on its inner end, and a detachable band for covering the tongues and clamping them around and against the tapered sleeve.

2. A horn comprising a tapered sleeve, at its small end, a large end made up of detachable sections, each section having one edge provided with clamps secured thereto and its opposed edge adapted to be clamped, whereby the adjacent sections are secured together; and means for clamping the assembled sections on the tapered sleeve.

3. A horn comprising a tapered sleeve at its inner end, a large end composed of separable sections, each section having a hollow rib on one edge, and a rib on its other edge to

enter the hollow rib on the adjacent section, means on the ribs for fastening the sections together, and means for securing the assembled sections on the large end of the tapered sleeve.

4. In a horn comprising a tapered sleeve at its smaller end, the larger end of the horn being made up of separable sections, each section having a hollow rib on one edge, and having on its other edge a rib to enter the hollow rib on the adjacent section, clips to go over the ribs to fasten them together, the inner ends of the assembled sections fitting on the large end of the tapered sleeve, and means encircling the ends of the sections to fasten the parts together.

5. A horn comprising a series of separable sections, means for detachably securing the sections together, a tapered sleeve on the small end of the horn arranged to be embraced by the inner ends of the assembled

sections, a peripheral rib on the tapered sleeve, ribs on the adjacent edges of the assembled sections, a peripheral band between the rib of the sleeve and the ends of the ribs on the sections, and means for drawing the ends of the bands together.

6. In a horn made up of detachable sections, each section comprising a body portion, a hollow rib on one edge, a rib on the opposed edge of the section to fit the first-mentioned rib, and pivoted clips on the hollow ribs and arranged, when in place, to cover the open side of the hollow rib.

In testimony that we claim the foregoing we have hereunto set our hands this 23d day of May, 1906.

MAX STEINER.
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Witnesses:

E. A. PELL,
WM. H. CAMFIELD.