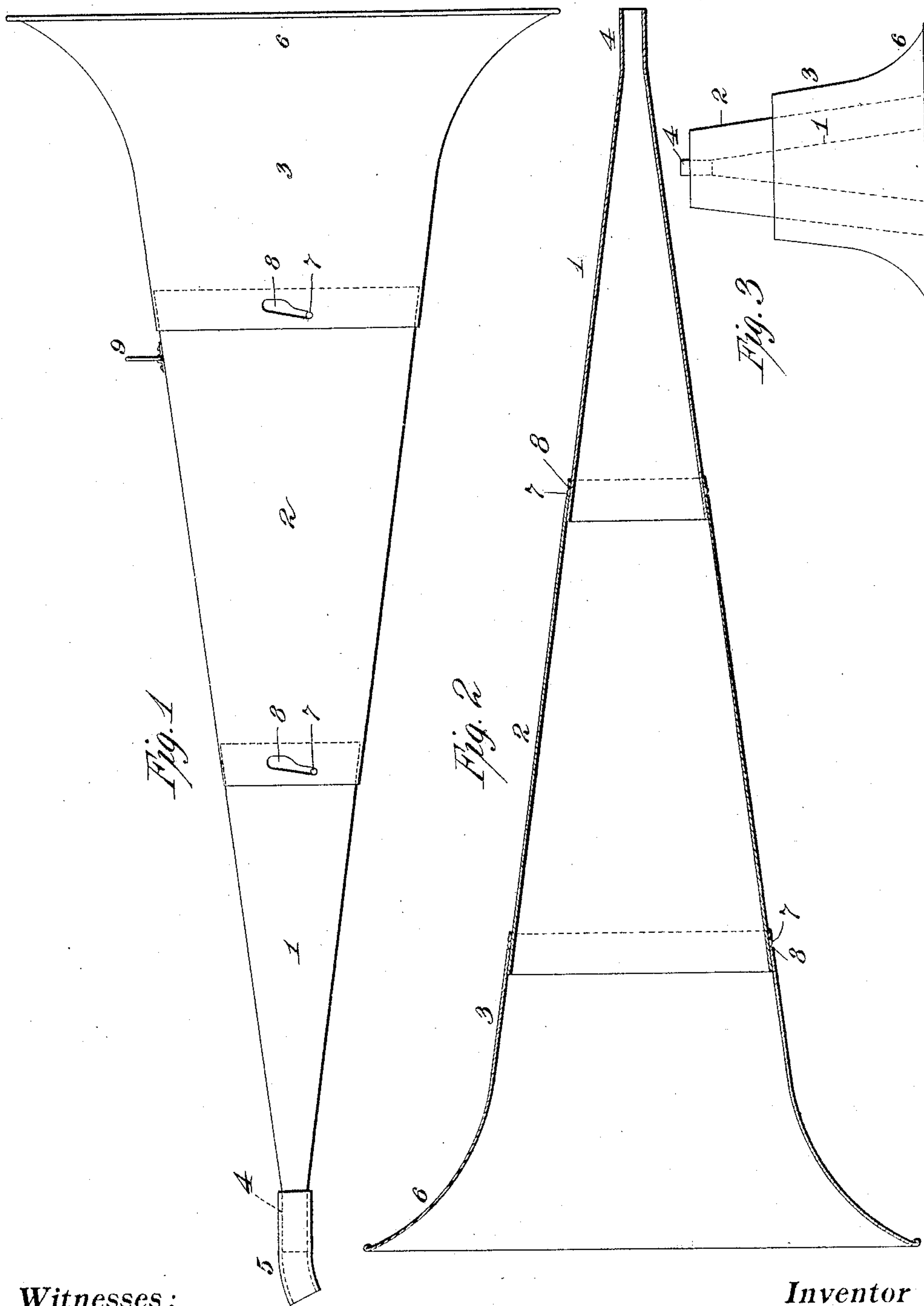


No. 878,029.

PATENTED FEB. 4, 1908.

P. WEBER.
PHONOGRAPH HORN.

APPLICATION FILED JUNE 29, 1904.



Witnesses:

Geo. F. Coleman
Arma P. Kehm

Inventor
Peter Weber

by *Frank L. Hyer*
Attorney

UNITED STATES PATENT OFFICE.

PETER WEBER, OF EAST ORANGE, NEW JERSEY, ASSIGNOR TO NEW JERSEY PATENT COMPANY, OF ORANGE, NEW JERSEY, A CORPORATION OF NEW JERSEY.

PHONOGRAPH-HORN.

No. 878,029.

Specification of Letters Patent.

Patented Feb. 4, 1908.

Application filed June 29, 1904. Serial No. 214,595.

To all whom it may concern:

Be it known that I, PETER WEBER, residing at 571 Park avenue, East Orange, in the county of Essex and State of New Jersey, have invented a certain new and useful Improvement in Phonograph-Horns, of which the following is a description.

In phonographic reproduction, superior results are secured with horns of considerable length and diameter, which at the present time, are about 30 inches long. These horns are made of sheet metal and great care has to be taken in transporting them, in order that they may not become dented or injured. Consequently, in the shipment of a phonograph outfit, a larger box is required for the horn than for the phonograph itself, and this is a serious practical objection. These horns are also bulky in the hands of the user, and objectionable for this reason.

The object of my invention is to provide a collapsible or sectional horn, having substantially as good acoustical properties as a continuous horn and which is as rigid as such a horn, but which, owing to its collapsible or sectional character, is very much less bulky than a continuous horn, whereby the objections indicated will be overcome.

In order that the invention may be better understood, attention is directed to the accompanying drawing, forming a part of this specification, in which

Figure 1 is a side elevation of one form of horn embodying my invention, showing the same made in three sections, Fig. 2 a longitudinal sectional view of the same, and Fig. 3 a side elevation, showing the parts collapsed or folded.

In these views, corresponding parts are represented by the same reference numerals.

Although I show a horn made of three sections, 1, 2, and 3, it will be obvious that it may be made of a greater or lesser number of sections. The section 1 is provided with a cylindrical neck 4 receiving the usual rubber tube 5, connecting with a nipple of the phonograph reproducer, and the section 3 is formed with the bell or flared portion 6, in the usual way. Otherwise, the sections are formed on substantially the same taper as shown, in order that they may be nested together. When extended, the sections are locked rigidly together by a joint somewhat similar to a bayonet joint, but differing from

the usual form in that one of the cooperating parts is inclined with respect to a plane perpendicular to the axis of the section as illustrated. In forming this joint, the sections 1 and 2 are provided with pins or projections 7 and the sections 2 and 3 are formed with slots 8, with which the pins engage, said slots being wider at their upper ends and curving downwardly, as shown. Ordinarily, three of these locks are formed between the adjacent sections, but obviously four or more may be used. By engaging the pins 7 with the enlarged portions of the slots 8, and by then turning the sections relatively to each other, each pin will be caused to ride down in the slots, thereby moving the sections longitudinally, and since the engaging surfaces of the sections are tapering, this longitudinal movement jams them tightly together. I find in practice, that the sections may, in fact, be thus locked together to form a structure which is longitudinally as stiff as a continuous horn, and diametrically stiffer than a continuous horn, since at certain portions of its length the metal is twice as thick as with a continuous horn. The sections may be unlocked by turning them in the opposite direction to that by which they are locked, and then disengaging the pins 7 from the slots 8. One of the sections, for instance, the section 2, may be provided with the usual ring 9, for supporting the horn from a suitable stand.

Having now described my invention, what I claim as new therein, and desire to secure by Letters Patent is as follows:

1. As a new article of manufacture, a horn comprising a plurality of tapered sections provided with cooperating projections and inclined slots having enlarged portions whereby the sections may be firmly engaged with each other, the taper of the sections and inclination of the locking shoulders being such as to produce such engagement by less than one complete rotation of one section with respect to the adjacent section, substantially as set forth.

2. In a device of the character described, a tapering section having an inclined locking shoulder and a second tapered section having a projection adapted to press against said inclined shoulder, the taper of the sections and inclination of the locking shoulder being such that the overlap of the two sections is re-

duced by the locking movement, substantially as set forth.

3. As a new article of manufacture, a phonograph horn, made of sections secured together by joints, consisting of projections en-
5 gaging inclined slots having enlarged portions, substantially as set forth.

This specification signed and witnessed
this 28th day of June 1904.

PETER WEBER.

Witnesses:

HARRY G. WALTERS,
MINA C. MACARTHUR.