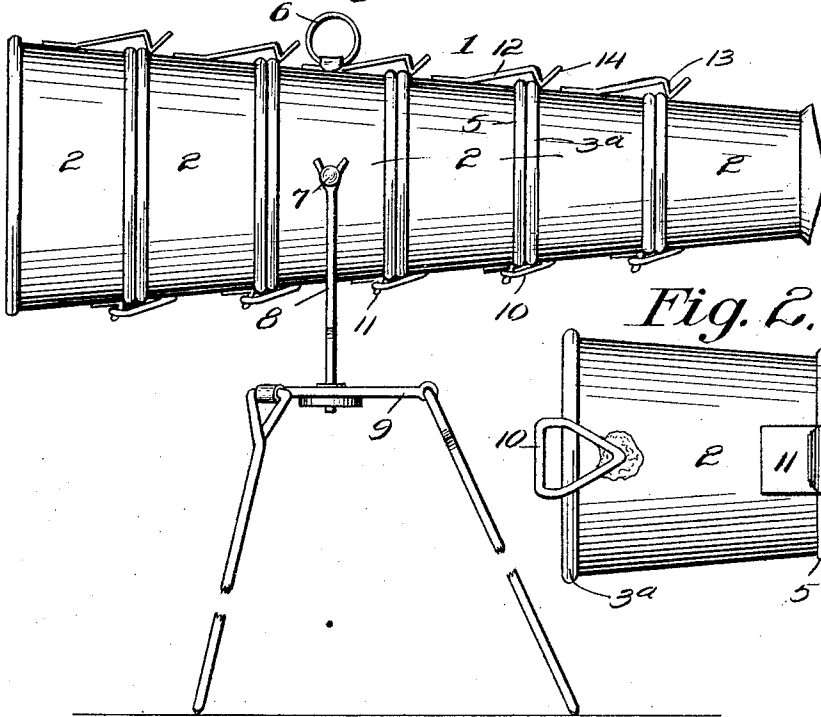


F. W. HOULSTON.  
 PHONOGRAPHIC HORN.  
 APPLICATION FILED APR. 2, 1913.

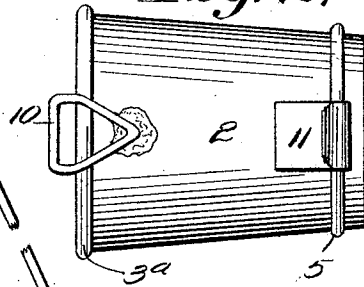
1,069,642.

Patented Aug. 5, 1913.

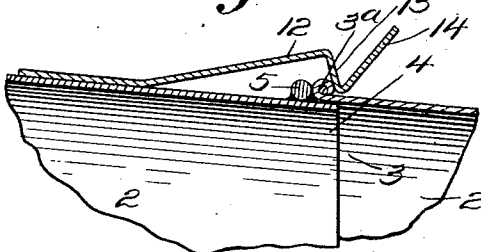
*Fig. 1.*



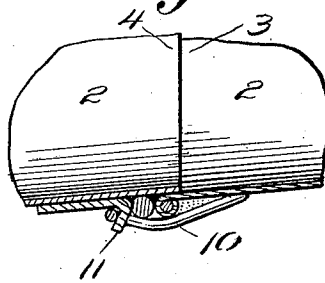
*Fig. 2.*



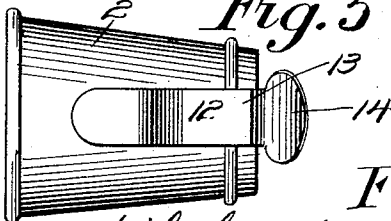
*Fig. 3.*



*Fig. 4.*



*Fig. 5.*



Witnesses

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# UNITED STATES PATENT OFFICE.

FREDERICK WILLIAM HOULSTON, OF TORONTO, ONTARIO, CANADA.

PHONOGRAPHIC HORN.

1,069,642.

Specification of Letters Patent.

Patented Aug. 5, 1913.

Application filed April 2, 1913. Serial No. 758,429.

*To all whom it may concern:*

Be it known that I, FREDERICK WILLIAM HOULSTON, a subject of the King of Great Britain, residing at Toronto, in the Province of Ontario and Dominion of Canada, have invented new and useful Improvements in Phonographic Horns, of which the following is a specification.

This invention relates to an improved phonographic horn or trumpet, its object being to provide a sectional horn which may be taken apart and its sections nested within one another for compact storage or shipment, and which is provided with simple means for fastening the sections, permitting of their ready connection and disconnection.

The invention consists of the features of construction, combination and arrangement of parts hereinafter fully described and claimed, reference being had to the accompanying drawing, in which:—

Figure 1 is a side elevation of the horn as set up and supported for use. Fig. 2 is a bottom plan view of one of the sections of the horn. Figs. 3 and 4 are longitudinal sections through the top and bottom portions of the meeting ends of horn sections, showing the connecting means. Fig. 5 is a top plan view of one of the horn sections.

Referring to the drawing, 1 designates a tapering horn composed of a number of sections 2. The enlarged forward end 3 of each section has an external annular bead 3<sup>a</sup> while the reduced end 4 thereof has an annular shoulder 5 set back from the edge thereof. The end 4 of each section is adapted to fit within the enlarged end of the next adjacent smaller section, so that the bead and shoulder thereon will abut and limit their telescopic connection. A handle 6 is provided on one of the sections for convenience in carrying the horn. Said section is also provided at opposite sides with trunnions 7 to engage the forked arms of a forked bracket 8 carried by a folding stand 9.

On the bottom of the enlarged end of each section is an outwardly extending spring keeper loop 10, which projects be-

yond the bead 3<sup>a</sup> to bear against the same and the shoulder 5 on the reduced end of the next section, and to be engaged beyond said shoulder by a retaining hook 11 on the reduced end of the latter named section. The top of each section carries a spring catch 12 having a hooked end 13 and a terminal finger piece 14, said hooked end being adapted to snap into engagement with the bead 3<sup>a</sup> on the next adjacent section to fasten the sections together.

In assembling the sections for use, the base of the reduced end of each section is inserted into the base of the enlarged end of another section, the hook 11 snapping into engagement with the loop 10, and then the sections are given a relative pivotal movement by which their ends are fully engaged and the catch 12 made to snap over the shoulder 3<sup>a</sup>. To disconnect the sections, the catch 12 on each section is retracted, whereupon said section may be freed from the other section by a downward pivotal movement, whereby the hook 11 will be disengaged from the loop 10. It will thus be seen that the sections of the horn may be readily connected and disconnected, so that the horn may be set up for use or taken apart and the sections packed closely within one another for storage or shipment. The advantages of the construction will accordingly be apparent.

I claim:—

A phonographic horn of tapered form and comprising a series of telescopic sections, each of said sections having at its wider end a terminal, annular external bead or enlargement, and each of said sections except the smallest also having adjacent to and spaced from its reduced end an external annular abutment shoulder, whereby the enlarged ends of the respective sections are adapted to receive and overlap the reduced ends of adjacent sections and the beads thereof to abut against the shoulders thereon, a retaining projection upon each section of larger diameter adjacent to the shoulder, a looped engaging member upon each section

of smaller diameter to pivotally interlock with the adjacent retaining member, and a spring metal fastening member on each section of larger diameter having a bent free  
5 end adapted to engage over the shoulder and bead of the coating sections and to interlock with said bead.

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

FREDERICK WILLIAM HOULSTON.

Witnesses:

SIDNEY FREDRICK HOULSTON,  
FLORENCE MAY TOPLEY.

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."

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