

(No Model.)

H. P. YOUNG.
HORN.

No. 488,238.

Patented Dec. 20, 1892.

Fig. 2.

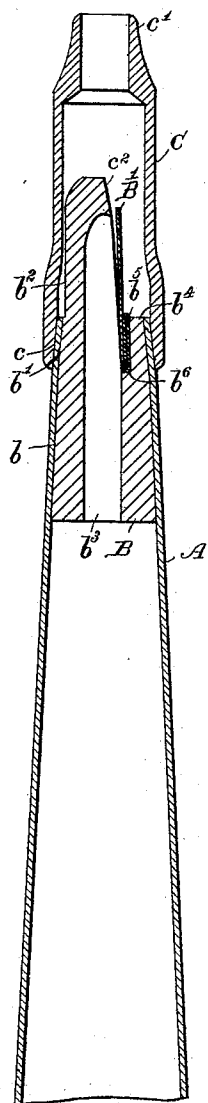


Fig. 1.

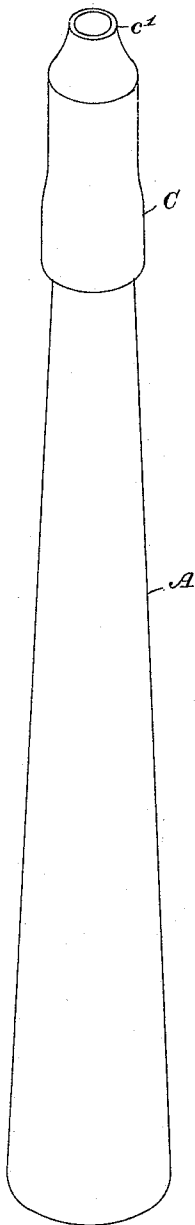


Fig. 3.

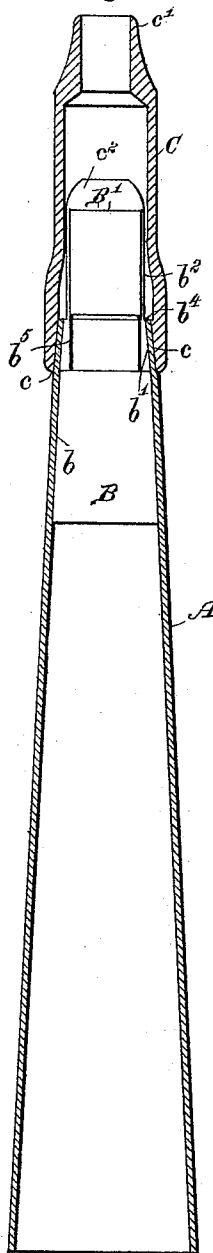
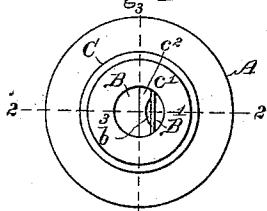


Fig. 4.



Witnesses—

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UNITED STATES PATENT OFFICE.

HARLAN P. YOUNG, OF LOWELL, MASSACHUSETTS.

HORN.

SPECIFICATION forming part of Letters Patent No. 488,238, dated December 20, 1892.

Application filed June 27, 1891. Serial No. 397,703. (No model.)

To all whom it may concern:

Be it known that I, HARLAN P. YOUNG, a citizen of the United States, residing at Lowell, in the county of Middlesex and Commonwealth of Massachusetts, have invented a certain new and useful Improvement in Horns and Trumpets, of which the following is a specification.

My invention relates to horns and trumpets and consists in the devices and combinations hereinafter described and claimed.

In the accompanying drawings, Figure 1, is an isometric view of a horn or trumpet, provided with my improvement; Fig. 2, a central longitudinal section of the same on the line 2 2 in Fig. 4, at right angles to the plane of the reed or vibrator, a part of the bell or cone near the end farthest from the mouthpiece being broken away; Fig. 3, a central longitudinal section on the line 3 3 in Fig. 4, at right angles to the plane in Fig. 2, showing the reed and reed-holder in front elevation; Fig. 4, a view of the horn or trumpet looking at the small end.

The bell or cone A is preferably made of paper rolled and pasted into the form of a frustum of a cone.

The reed-holder B, throughout the greater portion of its length is conical or tapering, as at b , and is represented as having a smaller taper, as at b' , above the taper b , the taper b being intended to fit the inside of the cone or bell A and the smaller taper b' being to enable the small end of said cone A to be compressed and retained more firmly on the reed-holder when the mouthpiece C is placed over said small end of said cone A, said mouthpiece having an internal taper, at c , of the same angle as the taper b' , the portion b^2 of the reed-holder B above the taper b' being preferably cylindrical and small enough to enter the mouthpiece C freely without being fitted thereto. The reed-holder B is drilled centrally nearly through, at b^3 , from the end farthest from the mouthpiece C, one side of said reed-holder from the taper b' to said last-named end being cut away, as shown in Fig. 2, leaving a shoulder b^4 at

the top of the cone A, at about right angles to the axis of said reed-holder, said cut c^2 extending inward and upward from the side of the central orifice b^3 partly across said orifice. A slit b^5 is cut in the shoulder b^4 , nearly parallel with the axis of the reed-holder, in which is inserted the reed B' at a slight angle with the central orifice b^3 and slightly cutting or falling within the adjacent side of said orifice. The reed B' is a strip of sheet-metal, as of tin-plate, doubled upon itself, at b^6 , one or more times, as shown in Fig. 2, the doubled portion of said reed being crowded into the slit b^5 and the doubling of said reed and the slight elasticity of the reed serving to hold the reed securely in said slit without other fastening. The mouthpiece C, at its lower end is provided, as already stated, with an internal taper c which receives the upper smaller end of the bell or cone A and compresses the same upon the taper b' of the reed-holder and holds said cone and reed-holder more securely to each other. The mouthpiece C is slightly reduced at its upper end, at c' to enter the lips of the person using the same. The mouthpiece C, cone A and reed-holder B are glued together. The cone A is preferably coated with lacquer or other water-proof material, both inside and out.

The horn or trumpet above described is very cheap of construction and very durable.

I claim as my invention:—

1. The combination of the bell or cone, having an internal taper, the mouthpiece, having an internal taper, the reed and the reed-holder, having an external taper to enter the tapering portions of said bell or cone and said mouthpiece and to compress said cone between said mouthpiece and said reed-holder, as and for the purpose specified.

2. The combination of the reed-holder, having a central orifice and a slit and a reed, arranged in said slit and lying partly within the circumference of said orifice and retained in place by friction on sides of the said slit, as and for the purpose specified.

3. The combination of the reed-holder,

having a central orifice and a slit, and a reed,
arranged in said slit and lying partly within
the circumference of said orifice and dou-
bled within said slit to increase the friction of
5 said reed on the sides of said slit to retain
said reed in said slit, as and for the purpose
specified.

In witness whereof I have signed this speci-
fication, in the presence of two attesting wit-
nesses, this 23rd day of June, A. D. 1891.
HARLAN P. YOUNG.

Witnesses:

ALBERT M. MOORE,
MYRTIE C. BEALS.