

(No Model.)

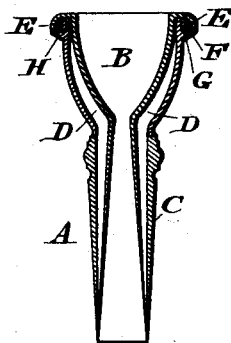
H. J. DISTIN.

MOUTH PIECE FOR WIND MUSICAL INSTRUMENTS.

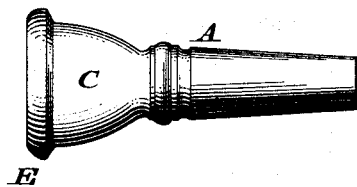
No. 419,424.

Patented Jan. 14, 1890.

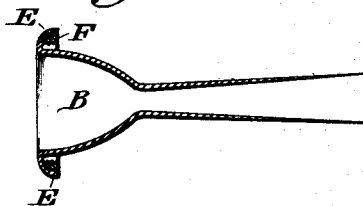
*Fig. 1.*



*Fig. 2.*



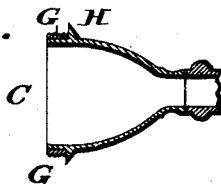
*Fig. 3.*



*Fig. 4.*



*Fig. 5.*



WITNESSES:

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# UNITED STATES PATENT OFFICE.

HENRY J. DISTIN, OF PHILADELPHIA, PENNSYLVANIA.

## MOUTH-PIECE FOR WIND MUSICAL INSTRUMENTS.

SPECIFICATION forming part of Letters Patent No. 419,424, dated January 14, 1890.

Application filed March 28, 1889. Serial No. 305,089. (No model.)

*To all whom it may concern:*

Be it known that I, HENRY J. DISTIN, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Mouth-Pieces of Wind Musical Instruments, which improvement is fully set forth in the following specification and accompanying drawings.

My invention relates to improvements in a mouth-piece of a musical instrument known as a "brass instrument," although made of different kinds of metal; and it consists in so constructing such mouth-piece that the same when in use is caused to vibrate to a greater extent than heretofore.

Figure 1 represents a longitudinal section of a mouth-piece embodying my invention. Fig. 2 represents a side elevation thereof. Fig. 3 represents a longitudinal section of the inner portion of the mouth-piece. Fig. 4 represents a perspective view of a portion detached from Fig. 3. Fig. 5 represents a longitudinal section of part of the outer portion of the mouth-piece.

Similar letters of reference indicate corresponding parts in the several figures.

Referring to the drawings, A designates a mouth-piece consisting of the inner and outer portions or shells, respectively, B C, each shell being substantially of the shape of a mouth-piece and of such diameter that a space or chamber D is left between the two shells for part of the length of the mouth-piece, or entirely so, if desired, or, in other words, the mouth-piece is made hollow. The inner shell is formed at its wide end with a flange E, which is turned backward or toward the narrow end, and has on its inner face a screw-thread which engages with a screw-thread on the outer face of the outer shell at the wide end of the latter, it being noticed that the wide end of the outer shell enters the flange of the inner shell, and by rotating each shell the two shells are screwed together and thus firmly connected. As the shells are made thin and preferably of sheet metal, the screw-thread of the inner shell is

formed on an annulus F, which is soldered, brazed, or otherwise secured to the flange E. The screw-thread of the outer shell is formed on an annulus G, which is soldered, brazed, or otherwise secured to said shell. By these means the shells are not weakened or cut by forming the screw-threads thereon. It will be seen that owing to the chamber D the mouth-piece is permitted to vibrate, the instrument being thereby beneficially affected in tone, volume, &c. On the outer shell C, back of the annulus G, is a shoulder H, which closes the joint between said shell and the edge of the flange E and conceals the two annuli.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A mouth-piece for a musical instrument, consisting of an inner and an outer shell with a chamber between the same, the inner shell having a flange at one end extending backward and over the end of the outer shell, and the outer shell having a shoulder bearing against said flange, said parts being combined substantially as described.

2. A mouth-piece for a musical instrument, consisting of an inner and an outer shell with chamber between the same, the inner shell having a flange at one end projecting over the end of the outer shell, the said ends of the shells having screw-threaded annuli connected therewith, said parts being combined substantially as described.

3. A mouth-piece for a musical instrument, consisting of an inner and an outer shell with chamber between the same, the inner shell having a flange at its widest end and the outer shell having a shoulder bearing against said flange, and each of said shells having a screw-threaded annulus secured thereto and covered by said flange and shoulder, said parts being combined substantially as described.

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Witnesses:

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