

F. STARKE.
MOUTHPIECE FOR CLARINETS.
APPLICATION FILED JAN. 18, 1905.

Fig. 1.

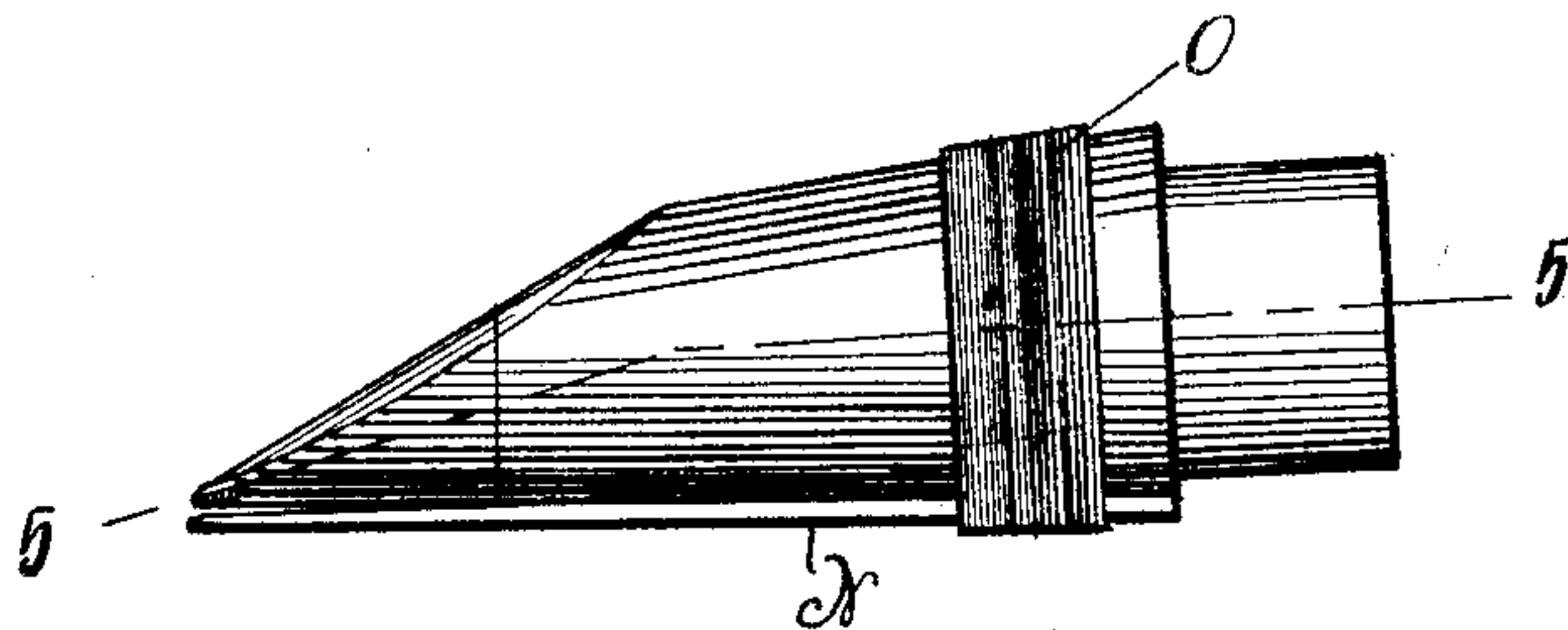


Fig. 2.

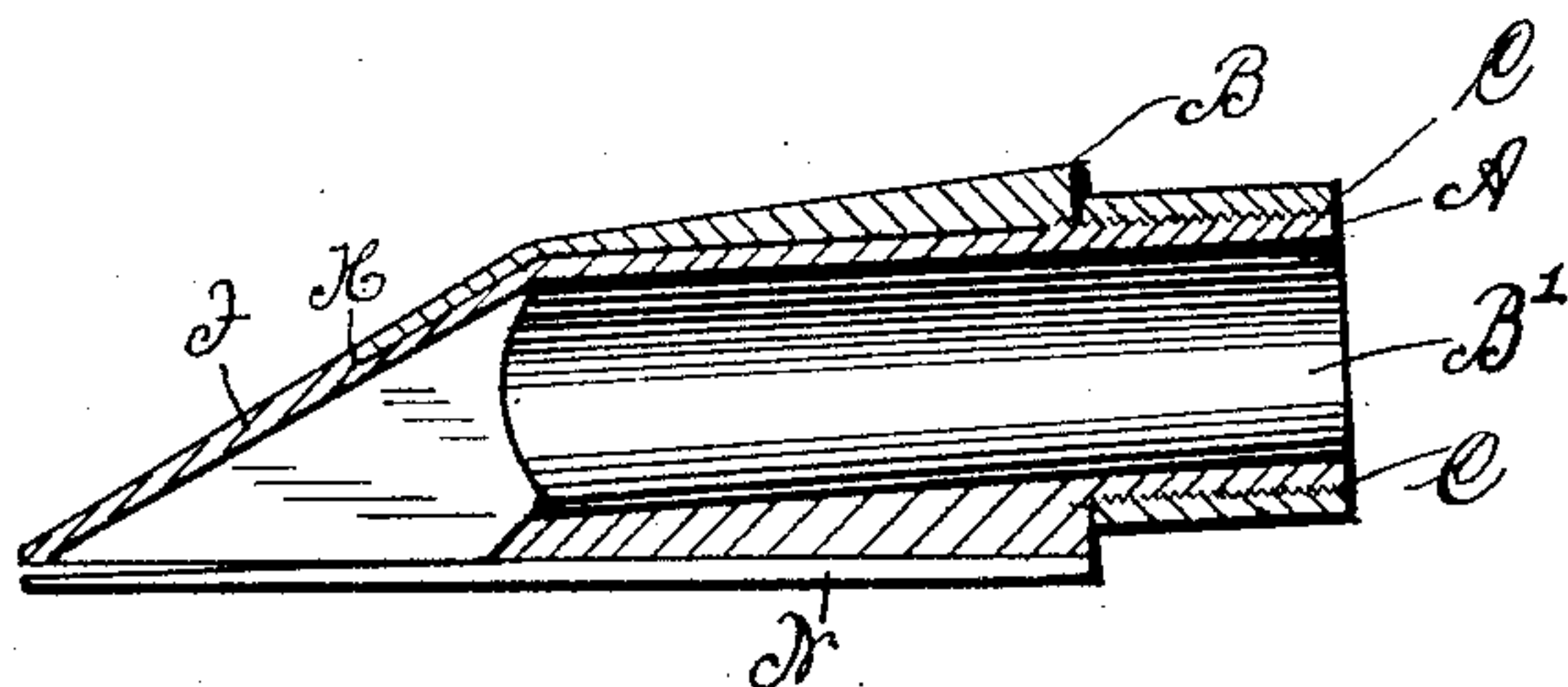


Fig. 3.

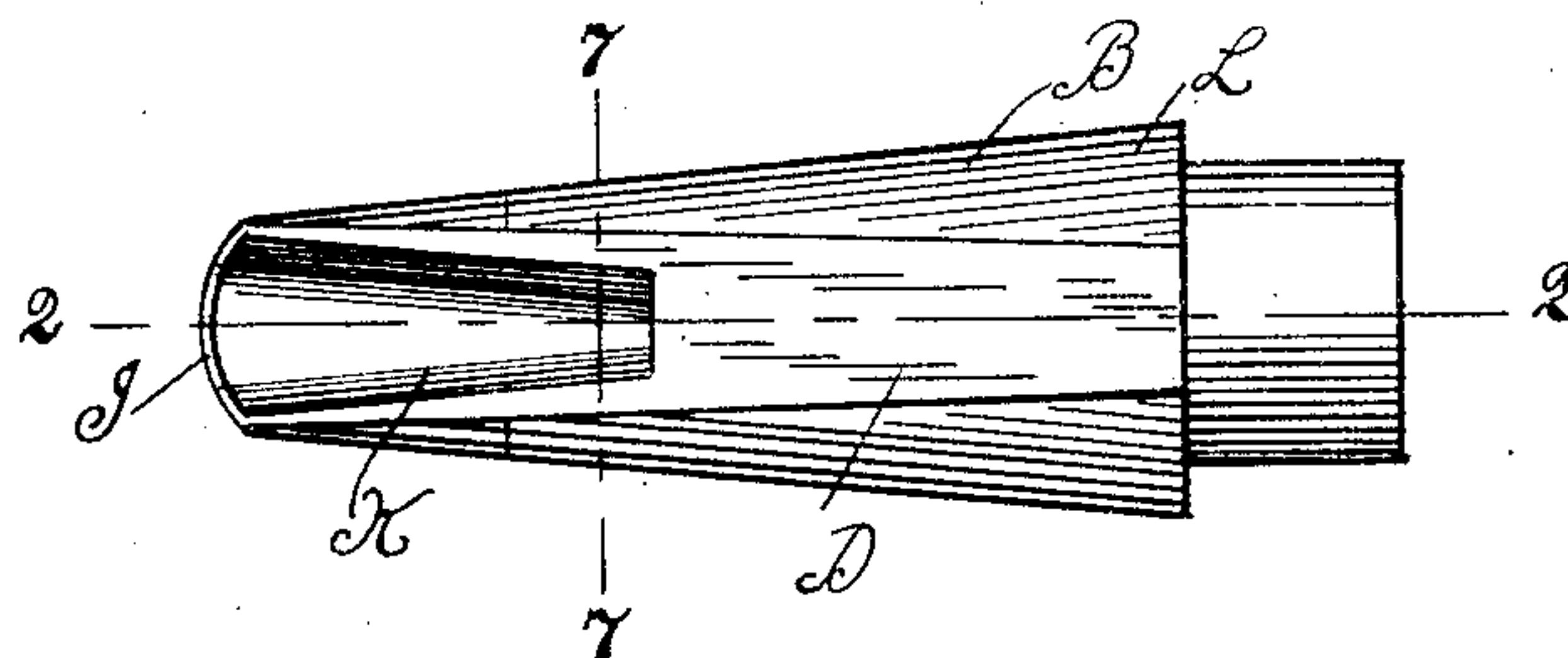


Fig. 4.



Fig. 5.

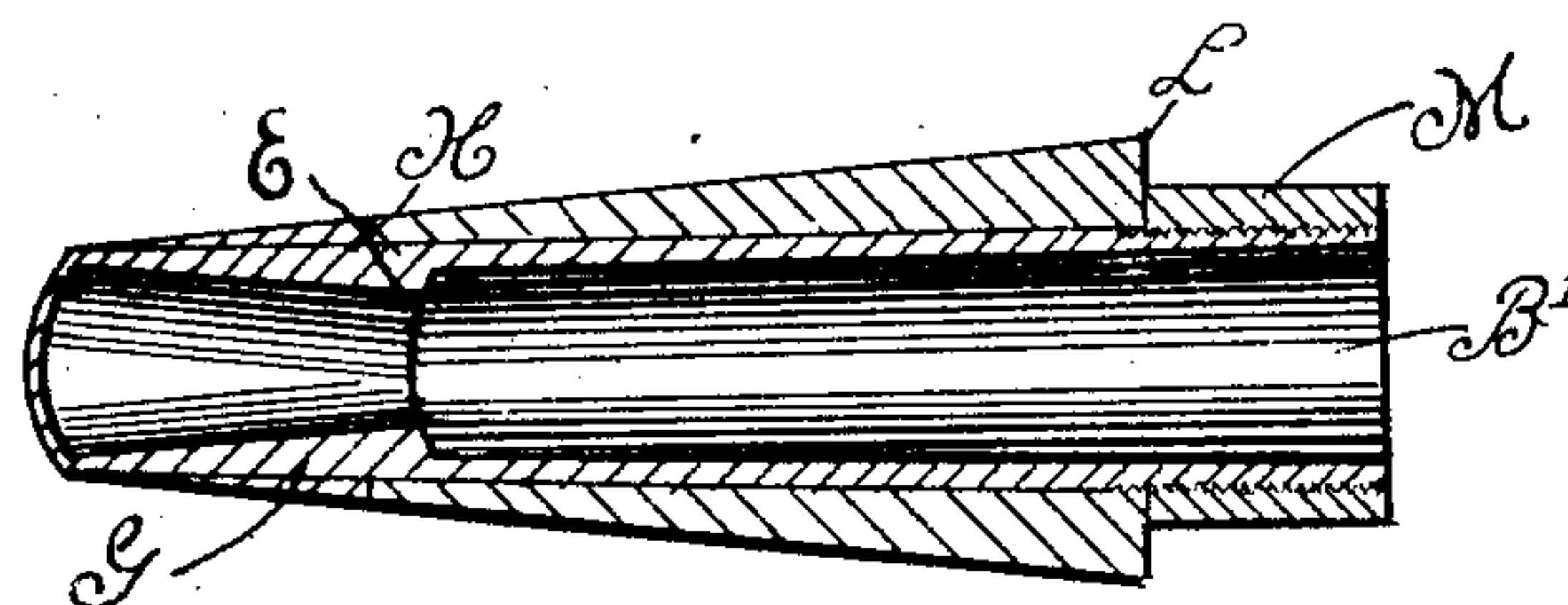


Fig. 6.

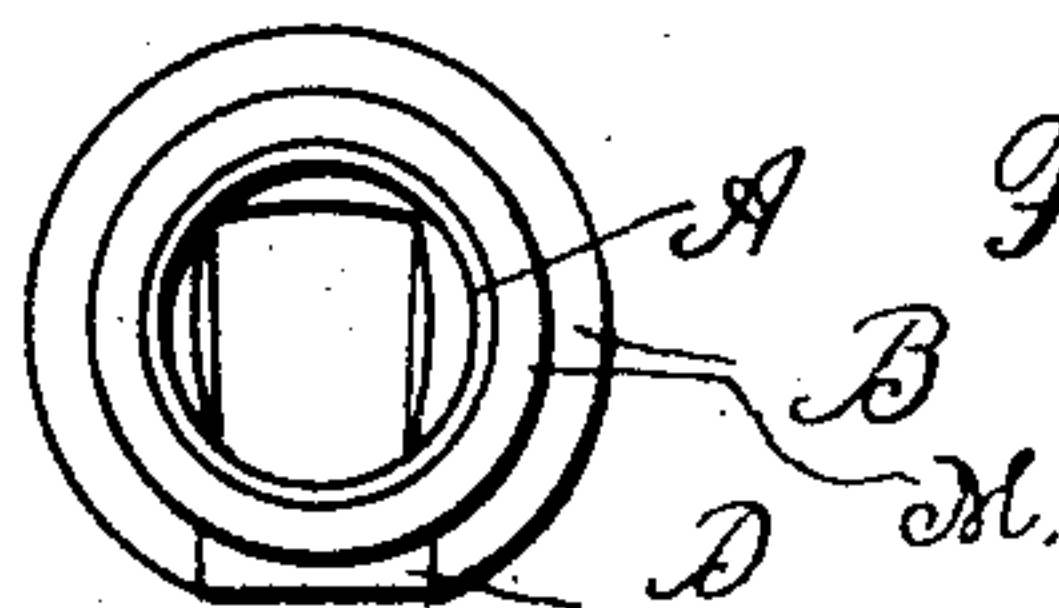
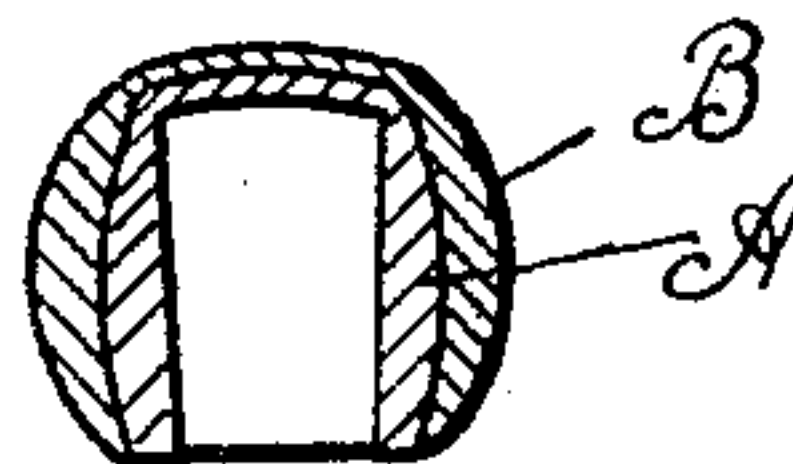


Fig. 7.



Witnesses
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UNITED STATES PATENT OFFICE.

FRIEDRICH STARKE, OF CHICAGO, ILLINOIS.

MOUTHPIECE FOR CLARINETS.

SPECIFICATION forming part of Letters Patent No. 787,127, dated April 11, 1905.

Application filed January 18, 1905. Serial No. 241,605.

To all whom it may concern:

Be it known that I, FRIEDRICH STARKE, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Mouthpieces for Clarinets; and I 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.

My invention relates to a novel construction in a mouthpiece for clarinets or similar musical instruments, the object being to provide a device of this character which is not affected by atmospheric conditions or variations in temperature to warp the same; and it consists in the features of construction and combinations of parts hereinafter fully described and claimed.

In the accompanying drawings, illustrating my invention, Figure 1 is a side elevation of a mouthpiece constructed in accordance with my invention. Fig. 2 is a central vertical longitudinal section thereof on the line 2 2 of Fig. 3. Fig. 3 is a top plan view of same. Fig. 4 is a plan view of the reed adapted to be secured over said mouthpiece. Fig. 5 is a plan section of same on the line 5 5 of Fig. 1. Fig. 6 is an end elevation of same. Fig. 7 is a transverse section of same on the line 7 7 of Fig. 3.

The mouthpieces for clarinets and similar musical instruments are made generally either of wood or hard rubber, more generally the latter. Such mouthpieces are very delicate and readily affected by atmospheric conditions, and particularly heat, which latter serves to slightly warp the same, and in so doing the opening between the reed and the opening in the mouthpiece is widened, thus seriously affecting the vibrations of the reed and sometimes entirely preventing the same, so that it is impossible for the musician to play thereon. This is particularly true in hot weather, and clarinet-players are frequently compelled to give up all attempts to play by reason of the warping of such mouthpieces.

The object of my present invention is to provide a mouthpiece which will not be affected by atmospheric conditions, but which at

the same time will not be disagreeable to the player; and to this end my device consists, primarily, of an inner metal portion A, which is partially embedded in or jacketed by hard-rubber jacket B, so as to expose as little as possible of the metal, which is generally very disagreeable to the taste. The said inner metal portion A comprises a tube B', which is externally threaded at its inner end, as at C, and is provided at its lower side with a longitudinally-disposed portion D, the latter being tapered and of less width at its rear end than at its forward end. At its other end said tube B' is laterally contracted, as at E, and adjacent said contracted portion the upper wall thereof is disposed at an angle and extends at a downward incline to meet the forward end of said portion D, as indicated at F, the lower portion of said wall F being thicker and the side walls thereof being likewise thickened, as at J, to form a substantially peripheral shoulder H, extending around said tube and flush with the lower face of said projection D. The extreme end of said tube is curved, as at J, and said curved portion forms one wall of the opening into which the blast passes into the instrument, said opening K being substantially wedge-shaped and the sides thereof extending at a slightly greater angle than the sides of said projection D, so that the outer walls of said opening K are thicker toward the rear end than at the forward end of said opening, the latter terminating substantially midway between the ends of said projection D. The said jacket B is preferably made of hard rubber and is provided with a recess conforming in shape with the tube B', said jacket being of a length equal to the distance between said shoulder H and the other end of said projection D. The slot in the upper wall of said jacket B conforms in shape and the walls thereof in thickness with the projection D, so that when said jacket B is sprung on said tube it will fit closely against the sides of said projection D and against said shoulder H. Said jacket is tapered and thicker at its rear than at its forward end, as indicated at L, and is held in place on said tube B' by means of a suitable cement and, further, by means of a

hard rubber sleeve M, which is internally threaded and mounted upon the threaded inner end of said tube B', the said sleeve M bearing at one end against said jacket B and forcing same at its forward end against said shoulder H. The reed N is secured in place on said mouthpiece by means of threads O in the usual manner, and my said mouthpiece is used in exactly the same manner as the old style, but is superior thereto by reason of its indifference to atmospheric conditions or other inconveniences which affect the old mouthpiece. The said tube B' is preferably made of solid silver, as this metal appears to produce better sound than any other; but any other suitable metal may obviously be substituted for said silver.

I claim as my invention—

1. A mouthpiece for clarinets or the like, comprising a metallic core member consisting of a tube deflected at one end and provided in its lower wall at said deflected end with an opening, a longitudinally-disposed projection on said lower wall of said tube through which said opening extends and which terminates

adjacent the other end of said tube, and a jacket of hard rubber or the like embracing said tube on each side of said projection.

2. A mouthpiece for clarinets and the like, comprising a tube externally threaded at one end, the other end thereof having its upper wall deflected downwardly at an incline, a longitudinally-disposed rib or projection on the lower wall of said tube extending from said deflected end to a point adjacent the other end thereof, there being an opening in said tube extending through said projection opposite the tapered upper wall of said tube, a jacket of hard rubber or the like embracing said tube and abutting against the sides of said projection, and a threaded sleeve of like material disposed on the threaded end of said tube and bearing against one end of said jacket to hold the latter in place.

In testimony whereof I have signed my name in presence of two subscribing witnesses.

FRIEDRICH STARKE.

Witnesses:

RUDOLPH WM. LOTZ,
F. SCHLOTFELD.