E. P. MERTES.

CORNET OR TRUMPET MOUTHPIECE.

APPLICATION FILED JULY 5, 1917.

1,264,673.

Patented Apr. 30, 1918.

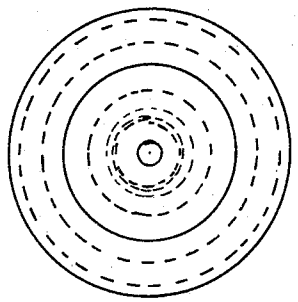


Fig 2.

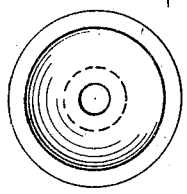


Fig 4.

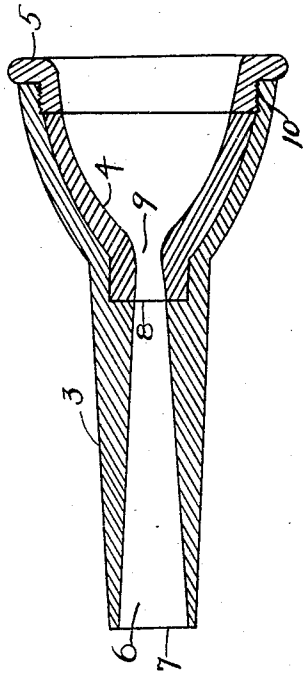


Fig 1

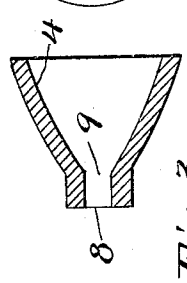


Fig 3.

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UNITED STATES PATENT OFFICE.

EDWIN PHILLIP MERTES, OF ST. LOUIS, MISSOURI.

CORNET OR TRUMPET MOUTHPIECE.

1,264,673. Specification of Letters Patent. **Patented Apr. 30, 1918.**

Application filed July 5, 1917. Serial No. 178,764.

To all whom it may concern:

Be it known that I, EDWIN PHILLIP MERTES, a citizen of the United States, and resident of St. Louis, Missouri, have invented certain new and useful Improvements in Cornet or Trumpet Mouthpieces, of which the following is a specification containing a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

The objects of my invention are to construct a simple mouthpiece that may be used with either a cornet or trumpet, and one in which the change can be quickly and effectively made by an interchange of cups.

In the usual mouthpiece structure, the parts are usually made integral or of parts which are not interchangeable, necessitating an entirely new mouthpiece for each different instrument. The rim of the mouthpiece must be delicately ground in order to properly conform to the conformation of the musician's lips; this grinding must be done to meet each individual requirement. Some cornet players search for years before securing the correct rim, while others never obtain one that is entirely satisfactory. When the correct one is obtained, it is of great value to the individual owner and one which he desires to use both on a trumpet and a cornet; furthermore, he desires to protect it as much as possible when not in use. For these reasons I have made the rim removable.

The qualities of tone that can be produced in a cornet or trumpet are materially affected by the conformation of the cup of the mouthpiece. The surfaces with which the air comes in contact must be smooth and possess certain curvatures to produce different sounds. For this reason the cup of a trumpet must be differently shaped than the cup of a cornet. In the ordinary practice a different mouthpiece must be used for each instrument since the cup is made integral with the remainder of the mouthpiece. But with my structure, one mouthpiece suffices if different cups are provided.

In my structure the rim provides means for holding the cup in position in the mouthpiece body structure.

With the above and other objects in view, my invention has relation to certain novel features of construction and operation, examples of which are shown in the accompanying drawings in which,

Figure 1 is a longitudinal sectional elevation of my device and

Fig. 2 is an end elevation of Fig. 1.

Fig. 3 is a longitudinal sectional elevation of a modified form of cup which can be interchangeably used with any mouthpiece.

Fig. 4 is an end elevation of Fig. 1.

Referring to these figures numeral 3 designates the body, 4 the cup and 5, the rim. The body has formed in its interior a cylindrical opening 6 which is concentric with the exterior of the body and which tapers regularly from one end to the other as indicated at ends 7 and 8. The cup 4 fits snugly in the body 3 as shown in Fig. 1 so that the throat 9 of cup 4 forms a continuous surface with the extremity 8 of the opening 6. The cup may be lifted out of the body without resistance before the rim is in position. The rim 5 is secured to the body 3 by the threads 10, the inner edge of the rim coming in contact with the outer surface of the cup 4, thereby holding it in position, and forming a continuous exterior wind bearing surface between the cup and rim.

What I claim and mean to secure by Letters Patent is—

In a device of the character described, in combination with a body, a cup and a rim detachably connected together, and one or more additional cups of different shapes fitted detachably to the body and rim and interchangeable with the first cup, said cup secured in position by said rim and said body, so that said cup becomes removable and detachable, only when the rim is detached from said shank.

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

EDWIN PHILLIP MERTES.

Witnesses:
LEONA PRICE,
WILLIAM WIKERBONNER.

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