G. O. KNAPP.

REED HOLDER.

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1,229,757. Patented June 12, 1917.

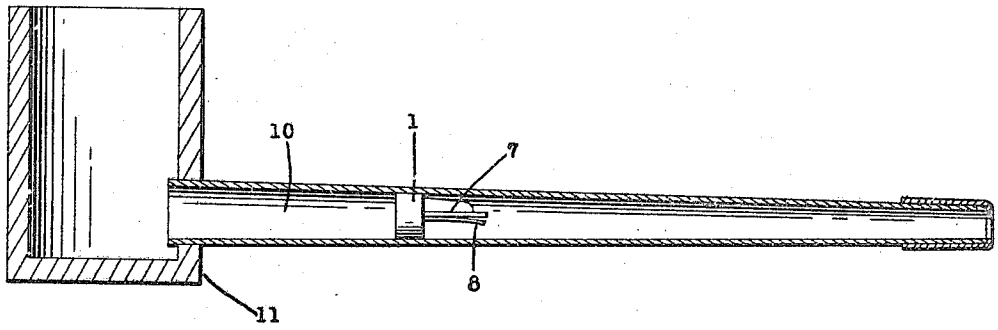


Fig. 1.

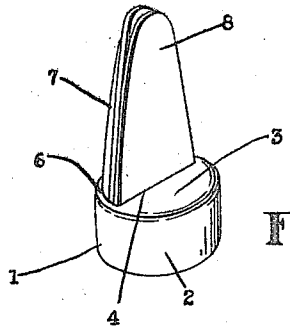
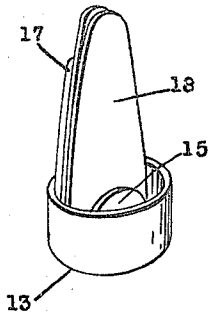


Fig. 2.

Fig. 4.



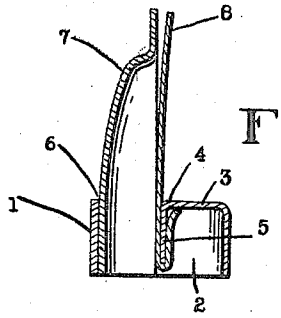


Fig. 3.

Fig. 5.

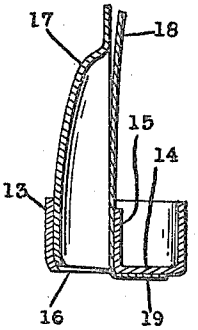
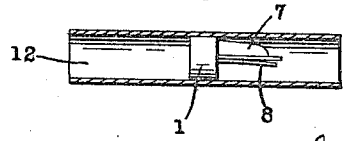


Fig. 6.



WITNESS

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REED-HOLDER.

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To all whom it may concern:

Be it known that I, GEORGE O. KNAPP, a citizen of the United States, and a resident of Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Reed-Holders, of which the following is a specification.

This invention relates to holders for reeds such as are used in toy horns and the like, and the objects of the invention are to provide a reed holder which will permanently retain alinement of itself and the reed longitudinally of an inclosing tube or the like, and thus hold the reed out of engagement with the wall of said inclosing tube or other member and so it will not be liable to tilt; to this end to provide an extended bearing surface at the exterior of the holder, considerably longer than the thickness of metal forming the holder; to provide simple and improved means for fixing the reed in the holder; to secure simplicity of construction and operation, and to obtain other advantages and results as may be brought out in the following description.

Referring to the accompanying drawings, in which like numerals of reference indicate the same parts throughout the several views,

Figure 1 is a longitudinal section through a toy smoking pipe showing my improved reed holder in the stem thereof;

Fig. 2 is a perspective view of the preferred form of reed holder;

Fig. 3 is a longitudinal section of the same taken on a plane through the reed and its tongue;

Figs. 4 and 5 are views corresponding to Figs. 2 and 3 respectively, showing a modified construction of reed holder, and

Fig. 6 is a longitudinal section of a tube in which a reed holder of my invention is shown mounted so that the whole can be applied as desired.

In the specific embodiment of the invention illustrated in Figs. 1, 2, 3 and 6 of said drawings, the reference numeral 1 indicates a reed holder of my new construction in its preferred form. This reed holder is cup-like and stamped out of sheet metal, with a substantially cylindrical side wall 2 and a bottom closure or end wall 3. A portion of said bottom closure 3, and preferably a semi-circular portion at one side of a chord or a diameter, as shown, is bent at said chord or diameter inwardly of the cup, as at 4, forming a partition 5 in the cup-like chamber of the holder extending in the same direction and to about the same distance as the side wall 2 and thus being substantially perpendicular to the end wall 3. Obviously in bending in the partition 5, the same leaves a correspondingly shaped opening 6 in the bottom 3, and with the partition in its preferred form as stated, said opening has a straight edge adjacent the partition and a semi-circular edge at the edge of the cup, preferably coinciding with the inner surface of the side wall 2, but obviously the partition and opening could be otherwise shaped or placed if found more desirable.

Into this opening is forced the reed, the body 7 of said reed being of the usual hollowed construction semi-circular in cross-section and the tongue 8 fitting flatwise against its side edges. It will be understood that at the larger end of the reed, it and the tongue wedge tightly in the opening 6, the rounded exterior of the reed body lying against the wall 2 of the holder and the tongue lying flatwise against the partition 5. The holder is made in such proportion that when the reed body and tongue are forced into its opening 6 until the end of the reed body is flush with the open end of the holder, the reed body and tongue project a suitable distance from the other or closed end of the holder. Preferably the tongue 8 is longer than the reed body, so that it projects beyond the partition 5 and its end 9 can be doubled or bent back into the holder against the opposite side of said partition, as clearly shown in Fig. 3.

It will be noted that in my improved construction of reed holder, the parts may all be made of thin sheet metal, which can be procured at small cost, and are all readily stamped out by appropriate dies with great facility and easily assembled without any rivets or soldering or expensive and tedious operations. At the same time, a reed holder is provided in which the long outer bearing surface formed by its cylindrical side wall 2 will engage within a tube or tubular member and hold the reed in longitudinal position in said tube and member so that it cannot engage the inner walls of the tube or member and its operation be interfered with. For purposes of illustration, the reed holder is shown mounted, in Fig. 1, within the tubular member or stem 10 of a toy smoking pipe 11, but obviously it is not intended to restrict the use of the reed holder to any article, but

to use it in as many different places as possible. For some uses, the reed holder is pushed tight into a short piece of tube 12, as in Fig. 6, which tube can afterward be inserted wherever desired, and it will be readily appreciated that many other conditions exist where my improved reed holder can be used, without specifically enumerating or illustrating them.

Furthermore, it is deemed within the scope of the invention to insert the reed body and vibrating tongue from either end of the holder, and although as shown in the preferred construction the reed body and tongue project from the closed end of the holder, they might project from the open end if desired. As illustrating such an arrangement, Figs. 4 and 5 show a reed holder 13 with a closed end 14 from which is bent inward a partition 15 leaving a substantially semicircular opening 16 in the said end 14, just as has been described. A reed body 17 and tongue 18 are then inserted so as to project from the open end of the holder, the rounded side of the reed body lying against the inner wall of the holder and the tongue between its lateral edges and the partition 15 as in the preferred construction. The end 19 of the tongue projects from the closed end of the holder, however, in this construction, and is bent over flat upon the portion of said end 14 which has not been bent in to form the partition 15.

Obviously other detail modifications and changes may be made in manufacturing my improved reed holder without departing from the spirit and scope of the invention, and I do not wish to be understood as limiting myself except as required by the following claims when construed in the light of the prior art.

Having thus described the invention, what I claim is:

1. A reed holder comprising a cup-shaped portion with a partition bent inwardly from its closed end and forming an opening which extends from a chordal line to the side wall.

2. A reed holder comprising a cylindrical portion having one end closed and the other open and having a partition bent inwardly from its closed end and forming an opening bounded by said partition and the side wall of the cylindrical portion.

3. A reed holder comprising a cup-shaped portion with a partition bent inwardly from its closed end to lie longitudinally of the holder and forming an opening which extends from a chordal line to the side wall.

4. The combination with a reed holder comprising a cup-like portion having a partition bent inwardly from its closed end and forming an opening bounded by said partition and the side wall, of a reed having a trough-like body and flat tongue fitted in said opening between said partition and wall of the holder.

5. The combination with a reed holder comprising a cup-like portion having a partition bent inwardly from its closed end and forming an opening bounded by said partition and the side wall, of a reed having a trough-like body and flat tongue fitted in said opening between said partition and wall of the holder with the rounded side of the body against the side wall of the holder and the tongue against said partition.

6. The combination with a reed holder comprising a cup-like portion having a partition bent inwardly from its closed end and forming an opening bounded by said partition and the side wall, of a reed having a trough-like body and flat tongue fitted in said opening between said partition and wall of the holder with the rounded side of the body against the side wall of the holder and the tongue against said partition, said tongue projecting beyond the body and holder and being bent over against the holder.

7. The combination with a reed holder comprising a cup-like portion having a partition bent inwardly from its closed end and forming an opening bounded by said partition and the side wall, of a reed having a trough-like body and flat tongue fitted in said opening between said partition and wall of the holder with the rounded side of the body against the side wall of the holder and the tongue against said partition, the reed projecting from the closed end of the holder and the tongue extending in the opposite direction beyond the said partition and bent over the end of it against its opposite side.

8. The combination with a tube, of a reed holder inside said tube comprising a cup-like portion having a partition bent inwardly from its closed end and forming an opening bounded by said partition and the side wall, and a reed having a body and tongue fitted in said opening between said partition and wall of the holder.

9. The combination with a tube, of a reed holder frictionally positioned in said tube and comprising a cylindrical portion with one end closed and the other open and having a partition bent inwardly from its closed end and forming an opening bounded by said partition and the side wall of the cylindrical portion, and a reed having a trough-like body and flat tongue fitted in said opening between said partition and wall of the holder.

GEORGE O. KNAPP.

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