

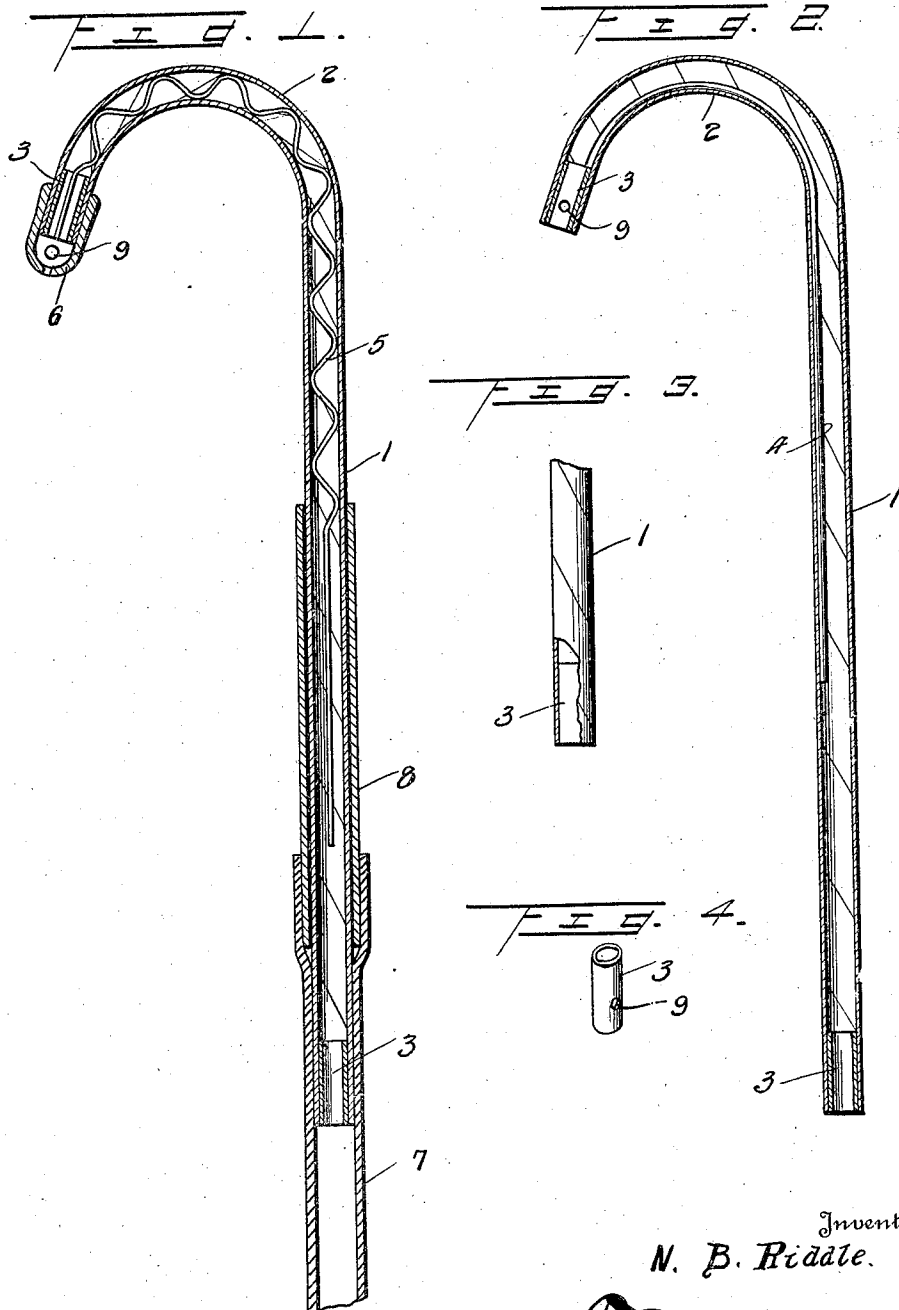
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N. B. RIDDLE

SANITARY INDIVIDUAL SALIVA EJECTOR

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UNITED STATES PATENT OFFICE.

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SANITARY INDIVIDUAL SALIVA EJECTOR.

Application filed May 8, 1922. Serial No. 559,405.

To all whom it may concern:

Be it known that I, NAPOLEON B. RIDDLE, a citizen of the United States, residing at St. Francisville, in the parish of West Feliciana and State of Louisiana, have invented certain new and useful Improvements in Sanitary Individual Saliva Ejectors; 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.

This invention has relation to means for ejecting saliva from the mouth of a patient when undergoing dental operations which make it practically impossible or undesirable to swallow the saliva. The usual saliva ejector forming part of a dental equipment is unsanitary and liable to spread disease unless thoroughly sterilized, and it frequently happens that such sterilization is not thorough and as a result the patient suffers.

The present invention provides a mouth-piece which is sanitary and intended for individual use only and which after being used may be discarded because of the small cost incident thereto, said mouth piece being constructed of paper or like cheap material and reinforced so as to maintain the predetermined shape.

Other objects and advantages will be apparent and suggest themselves as the nature of the invention is understood.

While the drawings illustrate an embodiment of the invention it is to be understood that in adapting the same to meet different conditions and requirements, various changes in the form, proportion and minor details of construction may be resorted to without departing from the nature of the invention.

Referring to the accompanying drawings forming a part of the application,

Figure 1 is a sectional detail of a saliva ejector embodying the invention, showing a portion of the suction tube attached thereto.

Figure 2 is a sectional view of a modification, the reinforcement consisting of a straight wire.

Figure 3 is a side view of the article having a portion of the lower end broken away to disclose the reinforcing band or nipple, and

Figure 4 is a detail perspective view of a reinforcing nipple or band.

Corresponding and like parts are referred to in the following description and designated in the several views of the drawings by like reference characters.

The device comprises a tube 1 preferably of paper or other sheet material such as employed in the manufacture of drinking straws used at soda fountains. The tube 1 may be formed in any manner or may consist of a drinking straw having an end portion bent into the form of a hook as indicated at 2. The tube 1 is reinforced at both ends by means of an inserted band or nipple 3 which may be of metal or other material capable of resisting pressure and moisture. The reinforcing bands or nipples 3 may be secured in the end portions of the tube by friction or in any preferred way. The tube is reinforced in its length either by means of a straight wire 4 or a crimped or waved wire 5, the latter being preferred as it prevents collapsing of the tube under pressure. The wire reinforcement being bendable preserves the hooked form 2 into which an end portion of the tube 1 is bent and which is adapted to engage over the lip or ridge of the patient and retain the device in position when adjusted for service to prevent saliva accumulating in the mouth during the performance of a dental operation. A metal tip 6 may be fitted to the hooked end of the tube and provides a finish and prevents annoying contact of the tube with the mouth. While it is preferred to make the tip 6 of metal, it may consist of any material and may be secured to the tube in any way. The outer end of the tip 6 is of rounded form so as to cause a minimum amount of inconvenience to the patient.

The numeral 7 designates the usual suction tube preferably of rubber. A holder 8 is fitted to the end of the tube 7 and in practice is adapted to receive the attaching end of the tube 1, the latter passing through the holder 8 and entering the tube 7 for a short distance as indicated most clearly in Figure 1. The device is intended for individual use and after being used is thrown away, thereby overcoming the objectionable features of the ordinary saliva ejector forming a part of the equipment of a dental outfit. The receiving end of the tube 1 has lateral openings 9 which prevent the tissue from pulling when the device is in active operation.

What is claimed is:

1. A saliva ejector consisting of a fragile suction tube for application to the mouth, a reinforcing element in said tube, and said reinforcing element being crimped to prevent collapse of the tube by suction therethrough.

2. A saliva ejector consisting of a suction tube, a reinforcing nipple insertible snugly into an end thereof, a reinforcing tip applicable to the exterior wall of said

end, whereby said end will be disposed intermediate the ferrule and tip and the latter frictionally held in place, and a crimped reinforcing element in said tube to prevent collapse of the tube by suction therethrough
In testimony whereof I affix my signature in presence of two witnesses.

NAPOLEON B. RIDDLE, D. D. S.

Witnesses:

W. D. FOLKES,

S. M. WILLIAMS.