G. M. McMANN.

DENTAL SYRINGE.

APPLICATION FILED APR. 13, 1912.

1,033,819.

Patented July 30, 1912.

FIG. 1

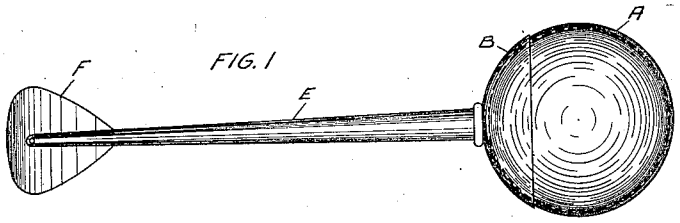


FIG. 3

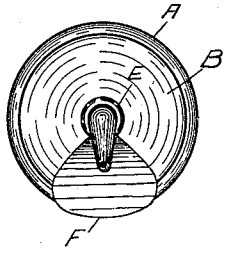
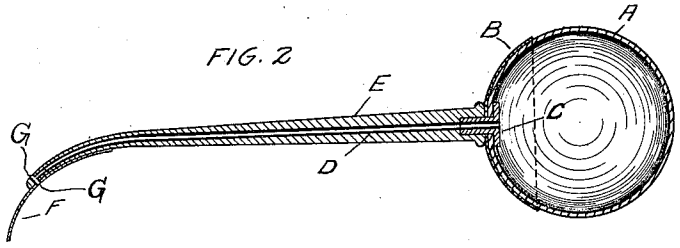


FIG. 2



WITNESSES:

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GEORGE M. McMANN, OF DETROIT, MICHIGAN.

DENTAL SYRINGE.

1,033,819. Specification of Letters Patent. Patented July 30, 1912.

Application filed April 13, 1912. Serial No. 690,526.

To all whom it may concern:

Be it known that I, GEORGE M. McMANN, a citizen of the United States of America, residing at Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Dental Syringes, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to improvements in syringes for dental purposes and its object is to provide such a device with means whereby the cheek or tongue of the patient may be held by the syringe away from the tooth which is being operated upon and at the same time water or other fluid may be ejected against the tooth and the grinding tool which is being used on the tooth.

To this end the invention consists in the matters hereinafter set forth and more particularly pointed out in the claims, reference being had to the accompanying drawing in which,

Figure 1 is a plan view of a device embodying the invention; Fig. 2 is a longitudinal section through the same; and Fig. 3 an end elevation of Fig. 2.

As shown in the drawing a rubber bulb A is provided at one side with a metal shield B forming a seat for the bulb and also forming means which may be grasped by the operator to assist in holding and manipulating the syringe. A long stem or nipple E is formed with a longitudinal duct or passage D and this stem is secured to the bulb and shield B by means of a tubular member C having a head engaging the inner side of the bulb and screwthreaded into the end of the stem E. The member C forms a clamping member to firmly hold the bulb seated within the shield B and make a water tight joint.

The free end of the stem E is curved laterally and at its extreme end is provided with a cross passage G into which the end of the passage D opens. Soldered or otherwise secured to one side of the curved end of the stem is a curved plate or shield F which is formed wide at its outer end beyond the end of the stem and narrow toward its inner end which is secured to the curved side of the stem. This plate is preferably curved in a manner corresponding to the curve of the end of the stem and thus has a concavo-convex form. The transverse opening G opens through the plate F at one end and through the opposite side of the stem at its opposite end.

This syringe is especially adapted for use by a dentist when he is grinding a tooth for a patient, the stem with the curved plate upon its outer end being used to press and hold the patient's cheek away from the tooth when the outer side of the tooth is being ground, the convex side of the plate being pressed against the cheek, and when the dentist is grinding the inner side of the tooth the stem is held with the concave side of the plate against the patient's tongue to hold it away from the inner side of the tooth. In order to cool the tooth while being ground and also moisten the grinding tool so that it will operate properly, the dentist may supply a spray of water or other fluid by pressing upon the bulb A which is previously filled with water and this will force a spray through the transverse opening G which will direct it against the tooth or tool. When the stem is held against the cheek of the patient one end of the transverse passage G is closed by the cheek and the water will be sprayed through the opposite open end of the passage, and when the plate is held against the patient's tongue the end of the transverse passage which opens through the plate is then closed and the opposite end left open to direct a spray against the inner side of the tooth.

Obviously changes in the construction and arrangement of parts may be made without departing from the spirit of my invention and I do not wish to limit myself to the particular form or arrangement shown.

Having thus fully described my invention what I claim is:—

1. In a device of the character described, the combination with a stem having a passage therethrough and means for supplying fluid to said passage, of a member carried by the end of the stem and adapted to be pressed against the parts of the mouth of a person to hold the same away from his teeth, said stem being formed with a passage at its end opposite said member to direct the fluid laterally from said end.

2. In a device of the character described, the combination with a stem having a passage therethrough, and means for supplying fluid to said passage, of a plate secured to the end of said stem, said stem being pro-

vided with a transverse passage at its end communicating with the supply passage extending therethrough to direct fluid laterally from the end of the stem.

3. In a device of the character described, the combination of a stem having a laterally curved end and formed with a longitudinal passage, means for supplying fluid to said passage, and a curved plate secured to the curved end of the stem.

In testimony whereof I affix my signature in presence of two witnesses.

GEORGE M. McMANN.

Witnesses:

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LEWIS E. FLANDERS.