

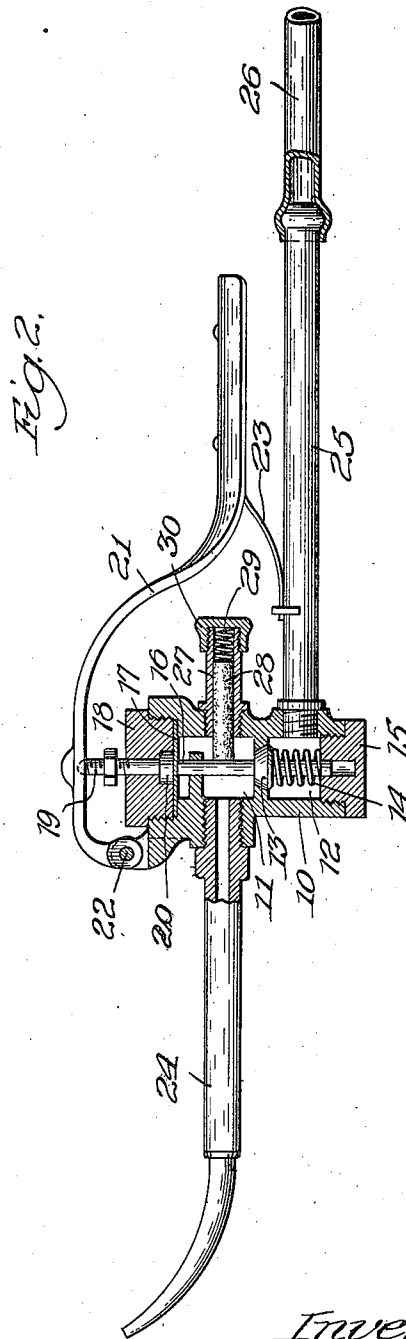
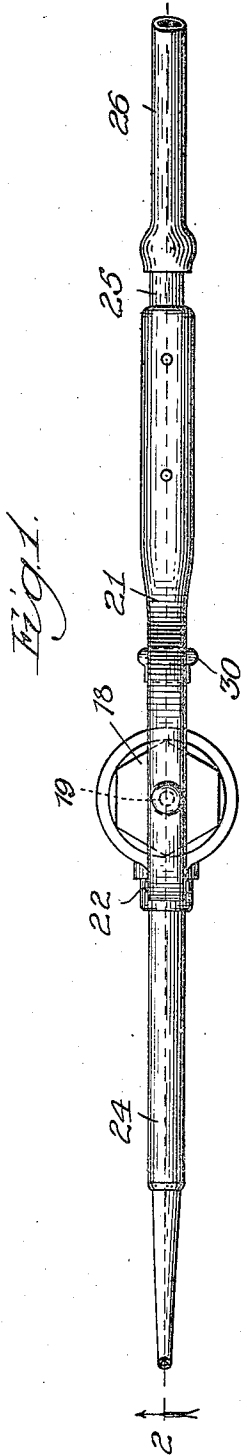
Sept. 9, 1924.

1,508,070

J. G. ROSEN

DENTAL SYRINGE

Filed Oct. 19, 1923



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UNITED STATES PATENT OFFICE.

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DENTAL SYRINGE.

Application filed October 19, 1923. Serial No. 669,489.

To all whom it may concern:

Be it known that I, JOSEPH G. ROSEN, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Dental Syringes, of which the following is a specification.

This invention relates to dental syringes and the like.

The primary object of the invention is to provide a neat compact dental syringe which has a means for readily adding an antiseptic salt, disinfectant or the like to water passing through the syringe.

Another object is to provide a valve for said syringe with a neat and simple means for operating the same which is not likely to get out of order. These and other objects are accomplished by my device which is fully described in the following specification and shown in the accompanying drawing in which:

Figure 1 is a top plan view of a syringe embodying my invention; and

Fig. 2 is a partial longitudinal section of the same.

The syringe as illustrated comprises a body 10 having inner and outer chambers 11 and 12 separated by means of a valve 13 which is normally held upon its seat by means of a spring 14, the outer end of the valve stem being slidably mounted in the cap 15.

The inner end of the valve stem 16 terminates adjacent a flexible diaphragm 17 which may be made of any suitable material as rubber and is held about its periphery by means of its cap 18. A plunger 19 has a head 20 extending through the cap, said head lying immediately over the end of the valve stem 16 so that pressure exerted upon the plunger 19, as by means of the lever 21 which is hingedly mounted at 22, is transmitted through the flexible diaphragm 17, thereby lifting the valve 13 off its seat. A spring 23 is preferably inserted beneath the lever 21 to hold the lever in place when not being depressed. A nozzle 24 communicates with the inner chamber 11 while a pipe 25 connects the outer chamber 12 with a suitable source of water pressure (not shown) by means of rubber tubing 26.

A tube 27 communicates with the inner

chamber 11 and is adapted to hold a stick or pencil of antiseptic salts or other disinfecting material and to hold the same in said inner chamber so that water passing through the same will slowly dissolve this antiseptic material and will carry it out through the nozzle 24 so that a dentist using the same may force this solution in a fine stream around the root of a tooth which it is desired to treat. The stick 28 is inserted through the end of the tube 27, a spring 29 is then inserted behind it so as to normally hold the forward end of the stick in the inner chamber 11 while a cap 30 retains the spring in the tube.

While I have shown and described certain embodiments of my invention, it is to be understood that it is capable of many modifications. Changes, therefore, in the construction and arrangement may be made without departing from the spirit and scope of the invention as disclosed in the appended claims, in which it is my intention to claim all novelty inherent in my invention as broadly as possible in view of the prior art.

I claim:

1. A syringe comprising a body having inner and outer chambers, a valve between said chambers, a spring normally holding said valve on its seat, a lever for lifting said valve, a pipe leading from one of said chambers and adapted to be connected to a source of water supply, a nozzle communicating with the other chamber, a tube communicating with said other chamber adapted to hold a pencil of antiseptic salts, and a spring for pressing said pencil into said chamber.

2. A syringe comprising a body having inner and outer chambers, a valve between said chambers, a spring normally holding said valve on its seat, a lever for lifting said valve, a pipe leading from one of said chambers and adapted to be connected to a source of water supply, a nozzle communicating with the other chamber, means for gradually feeding a solid chemical to said other chamber, a flexible diaphragm adjacent the end of said valve, and a plunger on the opposite side of said diaphragm for operating said valve.

JOSEPH G. ROSEN.