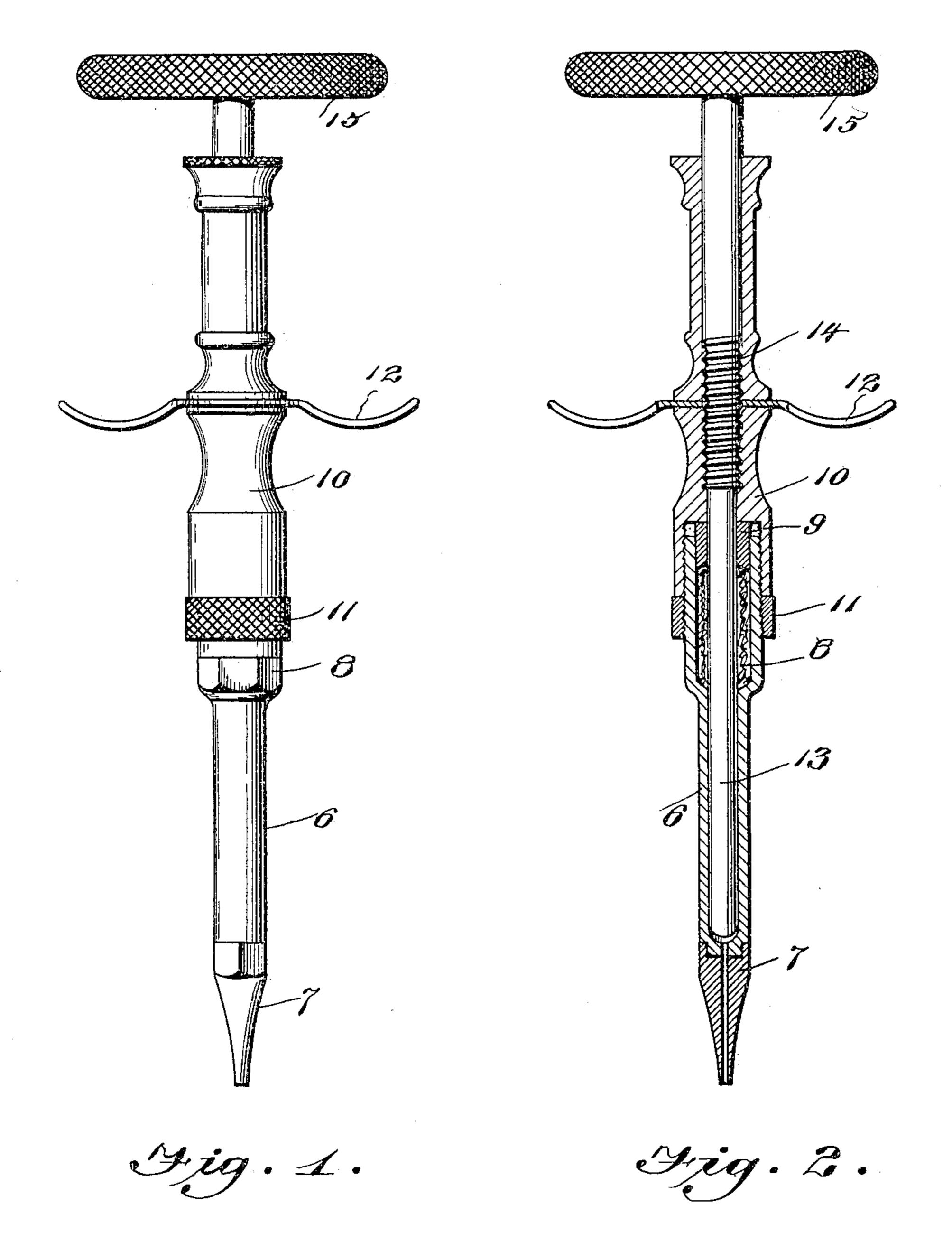
J. B. SAPP.

SYRINGE.

APPLICATION FILED OCT. 19, 1904.



Witnesses Maschmidt Good Tew. Inventor Inline B. Dapp by Milo B. Stevensolo Attorneys

## UNITED STATES PATENT OFFICE.

JULIUS B. SAPP, OF CLEVELAND, OHIO.

## SYRINGE.

SPECIFICATION forming part of Letters Patent No. 793,099, dated June 27, 1905.

Application filed October 19, 1904. Serial No. 229,127.

To all whom it may concern:

Be it known that I, Julius B. Sapp, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, 5 have invented new and useful Improvements in Syringes, of which the following is a specification.

This invention is an obtunding-syringe par-

ticularly suitable for dental work.

The object of the invention is to produce a device characterized by improved construction and operation, as will more fully appear from the following description and the accompanying drawings. The principal character-5 istic is the use of a screw-plunger instead of the usual reciprocating piston.

In the drawings, Figure 1 is a side elevation of the instrument. Fig. 2 is a central longi-

tudinal section thereof.

Referring specifically to the drawings, 6 indicates the barrel of the instrument, into which the liquid is drawn and from which it is ejected.

7 is a removable point screwed onto the front

end of the barrel.

The barrel is enlarged at its rear end to form a stuffing-box, as at 8, the material therein being confined by a stuffing-ring 9, which is slidable within the rear end of the barrel.

10 indicates a hollow handle or shank which is screwed onto the rear end of the barrel and bears against the stuffing-ring 9 to tighten the

packing.

A lock-nut 11 prevents accidental unscrew-

ing of the parts.

The handle has finger-pieces 12 to assist the

grip.

The plunger is indicated at 13. This works in the barrel and through the handle, having screw-threaded engagement in the bore of the

latter, as at 14. At the rear end the plunger 40 has a knurled wheel 15, whereby it may be

readily turned.

In use the point is immersed in the liquid and the plunger is unscrewed a sufficient distance to draw into the barrel the amount of 45 liquid desired. The point is then inserted into the tooth in the usual manner, and by screwing the plunger forwardly the liquid is discharged in an obvious manner. The packing at 8 can be made as tight as desired by 50 screwing the barrel into the handle. The screw operation of the plunger allows the instrument to be held securely and steadily in one hand while the other turns the screw without the use of the force necessary to push in 55 the piston of an ordinary syringe, which latter is frequently painful and apt to cause unsteadiness or displacement of the point.

What I claim as new, and desire to secure

by Letters Patent, is—

In a syringe, in combination, a barrel enlarged at its rear end to form a stuffing-box, a point screwed onto the front end of the barrel, a handle screwed onto the rear end thereof and constructed to close the rear end of the 65 stuffing-box and compress the packing therein, and a screw-plunger which extends through the handle and is threaded therein and has a plain portion extending through the stuffingbox and into the barrel.

In testimony whereof I have signed my name to this specification in the presence of two sub-

scribing witnesses.

JULIUS B. SAPP.

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Witnesses:

JOHN A. BOMMHARDT, LOTTIE NEWBURN.