

B. T. TRUEBLOOD.  
HYPODERMIC SYRINGE.  
APPLICATION FILED DEC. 14, 1916.

1,234,582.

Patented July 24, 1917.

Fig-1-

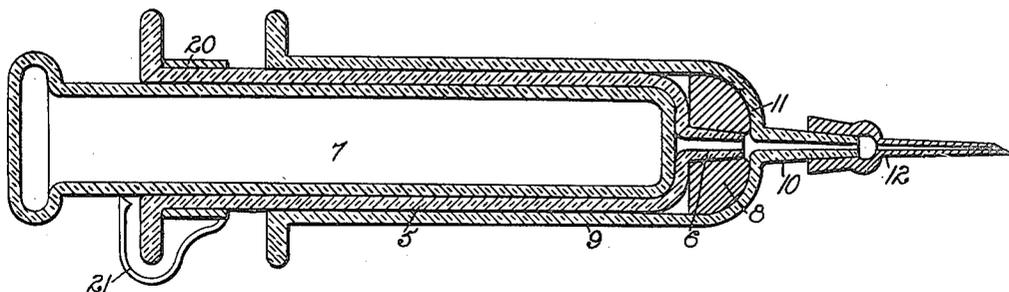


Fig-2-

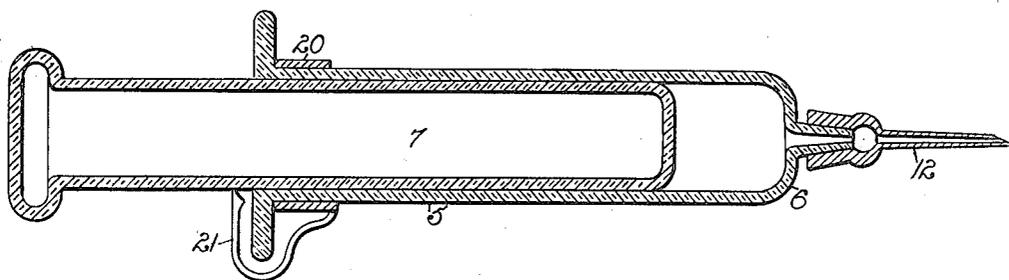


Fig-3-

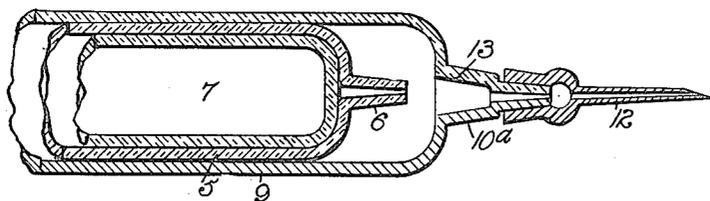
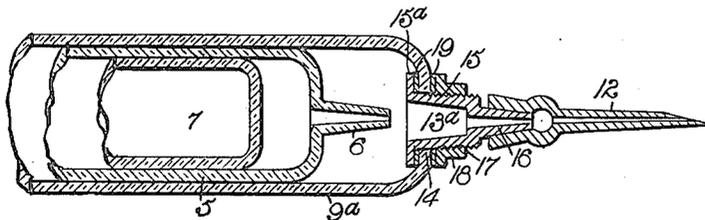


Fig-4-



WITNESSES

Frank C. Palmer  
E. B. Marshall

INVENTOR  
B. T. Trueblood  
BY *Mundee*  
ATTORNEYS

# UNITED STATES PATENT OFFICE.

BARCLAY T. TRUEBLOOD, OF SEATTLE, WASHINGTON.

## HYPODERMIC SYRINGE.

1,234,582.

Specification of Letters Patent.

Patented July 24, 1917.

Application filed December 14, 1916. Serial No. 136,909.

*To all whom it may concern:*

Be it known that I, BARCLAY T. TRUEBLOOD, a citizen of the United States, and a resident of Seattle, in the county of King and State of Washington, have invented a new and Improved Hypodermic Syringe, of which the following is a full, clear, and exact description.

My invention has for its object to provide an invention of the class described having a tube constructed with a socket to receive a nipple on a syringe removably disposed in the tube so that a local anesthetic may be disposed in the tube which will pass through a nipple on the tube corresponding to the nipple on the syringe, and to a needle mounted on the tube nipple, when the syringe is given an inward movement relatively to the tube. The syringe nipple fits in the tube socket to permit of a subsequent injection of a medicament by the use of the syringe while there is an air tight connection between the tube nipple and the syringe nipple.

Another object of the invention is to provide a brake for the syringe.

Additional objects of the invention will appear in the following specification, in which the preferred form of the invention is disclosed.

In the drawings, similar reference characters denote similar parts in all the views, in which—

Figure 1 is a sectional view illustrating my invention;

Fig. 2 is a sectional view illustrating the syringe after it has been removed from the tube; and

Figs. 3 and 4 are fragmentary sectional views illustrating modified forms in the invention.

By referring to the drawings it will be seen that the syringe 5 may be of the ordinary construction, with the usual nipple 6 and the usual piston 7. A disk 8 is disposed in a tube 9 adjacent a nipple 10 on the tube, this disk 8 being constructed with an opening 11 leading to the nipple 10, and in which the syringe nipple 6 fits. The syringe nipple 6 and the tube nipple 10 are of substantially the same size, so that a needle 12 may be removed from the tube nipple 10 and mounted on the syringe nipple 6 after the syringe has been withdrawn from the tube 9.

With this construction, an anesthetic may be disposed in the tube 9 and a medicament

may be disposed in the syringe 5, so that the local anesthetic may be first injected into the patient, and when the syringe nipple 6 snugly fits the disk 8, the medicament in the syringe may be injected with a certainty that all the medicament will pass out of the syringe and into the tube nipple 10 because of the fact that the syringe nipple 6 closely fits the disk 8 at its opening 11.

Fig. 3 illustrates another form of the invention in which the disk 8 is dispensed with, and the inner portion of the tube nipple 10<sup>a</sup> is constructed with a seat 13 for receiving the syringe nipple 6, a tight fit between the syringe nipple 6 and the tube 9 at its nipple 10<sup>a</sup> being obtained thereby.

In the construction illustrated in Fig. 4 of the drawings, the tube 9<sup>a</sup> is constructed with an opening 14 in which a thimble 15 is disposed, this thimble 15 having a nipple 16 and being provided with a seat 13<sup>a</sup> for receiving the nipple 6, and thereby obtaining a tight joint between the syringe nipple 6 and the thimble 15 at its seat 13<sup>a</sup>. The thimble 15 has an outer thread 17 with which meshes a nut 18, so that washers 19 may be disposed at the opening 14 in the tube 9<sup>a</sup>, one at the outer side and the other at the inner side of the opening, the inner washer 19 being engaged by an outer flange 15<sup>a</sup> on the thimble, and the outer washer 19 being engaged by the nut 18. By this means, a cheap construction may be obtained which will accomplish the desired result, which is to obtain a tight fit between the syringe nipple 6 and the tube at its nipple when the syringe nipple is seated at the tube nipple.

A collar 20 is disposed around the syringe, and from this collar extends a resilient arm 21 engaging the piston, to act as a brake.

Having thus described my invention, I claim as new, and desire to secure by Letters Patent:

1. A syringe having a nipple and a piston, a tube in which the syringe is disposed and having a nipple corresponding with the syringe nipple, the inner surface of the tube at its nipple corresponding with the outer surface of the syringe nipple to obtain a tight joint between the syringe nipple and the tube nipple.

2. A syringe having a nipple and a piston, a tube in which the syringe is disposed and provided with a nipple, the inner surface of the tube at its nipple corresponding with the syringe nipple to obtain a tight joint be-

tween the syringe nipple and the tube nipple.

3. A syringe having a nipple and a piston, a tube in which the syringe is disposed and provided with a nipple with a seat for receiving the syringe nipple to obtain a tight joint between the syringe nipple and the tube nipple.

4. A syringe having a nipple, a tube in which the syringe is disposed and provided with an opening, a thimble secured in the opening and having a nipple at its outer end and with a seat at its inner end for receiving the syringe nipple to obtain a tight joint between the syringe nipple and the thimble nipple.

5. A syringe having a nipple and means

to eject a medicament disposed in the syringe through the nipple, and a tube in which the syringe is disposed and having a nipple corresponding with the syringe nipple, the inner surface of the tube at its nipple corresponding with the outer surface of the syringe to obtain a tight joint between the syringe nipple and the tube nipple.

6. A syringe having a nipple and means to eject a medicament disposed in the syringe through the nipple, and a tube in which the syringe is disposed and having at one end a nipple extending beyond the tube and a seat within the tube, the syringe nipple being normally seated at the seat for the purpose set forth.

BARCLAY T. TRUEBLOOD.