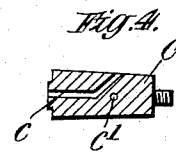
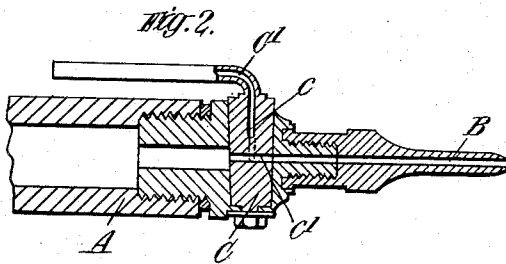
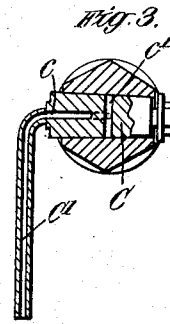
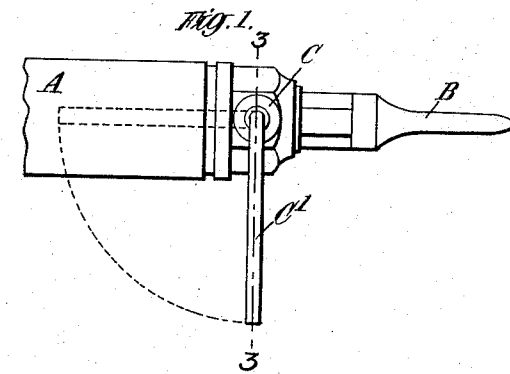


J. A. ROWSE.
HYPODERMIC AND SIMILAR SYRINGE.
APPLICATION FILED AUG. 10, 1911.

1,015,276.

Patented Jan. 16, 1912.



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UNITED STATES PATENT OFFICE.

JOHN AMBROSE ROWSE, OF NEWQUAY, ENGLAND, ASSIGNOR TO THE DENTAL MANUFACTURING COMPANY, LIMITED, OF LONDON, ENGLAND.

HYPODERMIC AND SIMILAR SYRINGE.

1,015,276.

Specification of Letters Patent:

Patented Jan. 16, 1912.

Application filed August 10, 1911. Serial No. 643,435.

To all whom it may concern:

Be it known that I, JOHN AMBROSE ROWSE, a subject of the King of Great Britain, residing at Lisbon House, Newquay, in the county of Cornwall, England, have invented certain new and useful Improvements in Hypodermic and Similar Syringes, of which the following is a specification.

This invention relates to syringes of the kind that are used for locally injecting an anesthetic or other liquid into a patient.

The invention is particularly applicable to the anesthetic syringes that are used by dentists, which as at present constructed comprise a barrel having at one end a needle-nozzle and containing a plunger the spindle of which projects through the opposite end of the barrel and terminates in an actuating handle. In charging the syringe with the anesthetic in the ordinary manner it is necessary for the needle-nozzle to be removed and when the syringe is in constant use the needle-nozzle may have to be removed many times during the day, and each time it is removed it is laid on the table, marble slab, glass stand or elsewhere while the refilling is being effected. The points of the needle and nozzle are thus rendered very liable to come into contact with substances which for septic reasons should be avoided.

According to this invention the syringe is provided with means whereby it can be recharged without the necessity of removing the needle-nozzle. For this purpose the said means may comprise a tube connected with a plug or valve that is interposed between the barrel of the syringe and the needle-nozzle for putting the barrel into or out of communication with the needle-nozzle or with the aforesaid tube which is adapted to be inserted into a vial or the like containing the anesthetic.

In order that the said invention may be clearly understood and readily carried into effect, I will describe the same more fully with reference to the accompanying drawings, in which:—

Figure 1 is a plan of part of a syringe constructed in accordance with this invention. Fig. 2 is a vertical section of Fig. 1. Fig. 3 is a transverse section taken on the line 3, 3, of Fig. 1, and Fig. 4 is a detached sectional view of the plug taken at right angles to that shown in Fig. 3.

A represents the barrel of the syringe, B the needle-nozzle, C the plug or valve and C' the tube that is connected therewith. In the example shown the tube C' constitutes the operating handle of the plug or valve C. The latter is detachable to permit of its removal for cleaning and sterilizing purposes and is formed with two passages *c c'* which open into the peripheral portion of the plug in a plane passing through the aperture of the needle-nozzle. The passages *c c'* are so arranged that when the tube C' occupies a transverse position in relation to the barrel as shown in Figs. 1 and 3, a free passage for the anesthetic is provided between the needle-nozzle aperture and the barrel for enabling the latter to be charged with the anesthetic. When the tube C' lies parallel to, or approximately parallel to the barrel (Fig. 2), a free passage from the barrel to the needle-nozzle exists for enabling the anesthetic to be forced from the barrel into the patient.

What I claim and desire to secure by Letters Patent of the United States is:—

In a hypodermic syringe, a barrel, a needle nozzle on the end of the said barrel, a valve plug between the nozzle and the barrel and a tubular operating handle for the said plug forming a continuation of a passage in the plug adapted to be placed into or out of communication with the barrel, whereby the barrel is charged with fluid through the said handle independently of the nozzle.

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

JOHN AMBROSE ROWSE.

Witnesses:

J. W. PATCHING,
T. SELBY WORDLE.