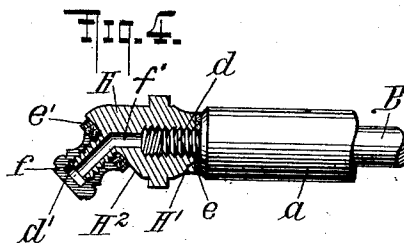
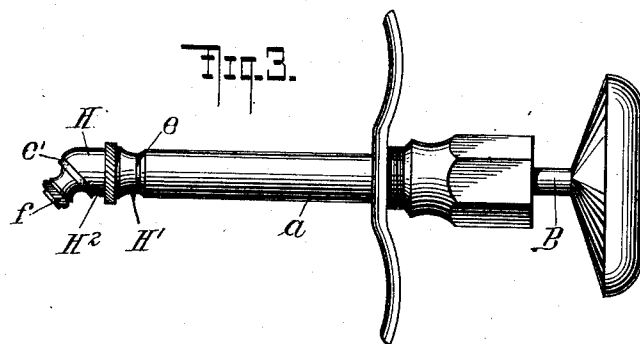
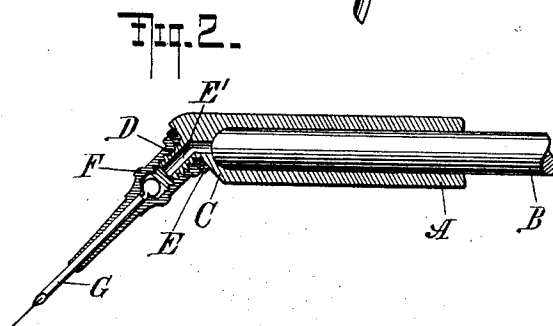
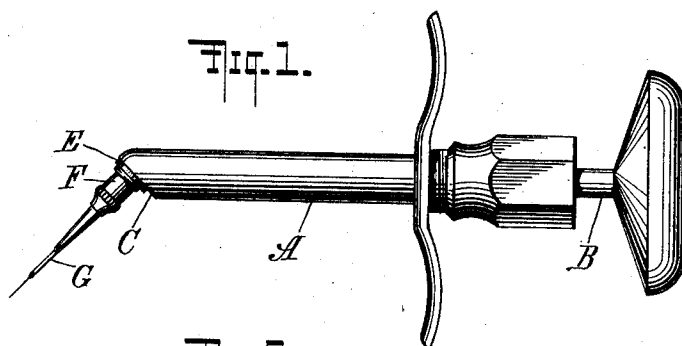


A. A. ALLINGER.
HYPODERMIC SYRINGE.
APPLICATION FILED MAR. 16, 1908.

964,950.

Patented July 19, 1910.



WITNESSES
G. V. Rasmussen
John A. Kellenbeck

INVENTOR
ALBERT A. ALLINGER
BY *Briesen & Huauth*
ATTORNEYS

UNITED STATES PATENT OFFICE.

ALBERT A. ALLINGER, OF NEW YORK, N. Y., ASSIGNOR TO CHARLES J. TAGLIABUE,
OF BROOKLYN, NEW YORK.

HYPODERMIC SYRINGE.

964,950.

Specification of Letters Patent. Patented July 19, 1910.

Application filed March 16, 1908. Serial No. 421,552.

To all whom it may concern:

Be it known that I, ALBERT A. ALLINGER, a citizen of the United States, and resident of Richmond Hill, borough and county of Queens, city and State of New York, have invented certain new and useful Improvements in Hypodermic Syringes, of which the following is a specification.

My invention relates to hypodermic syringes and has for its object to improve and simplify the construction of syringes of this kind in which the needle extends at an angle to the axis of the barrel. Heretofore in such syringes the needle has been bent to secure this result, which created difficulties in manufacture and made the needles expensive. My improvement which is intended to overcome these objections will be fully described hereinafter and the features of novelty will be pointed out in the appended claim.

In the accompanying drawing in which I have illustrated two forms of my invention, Figure 1 is a side elevation of my improved syringe; Fig. 2 is a detail sectional view thereof. Fig. 3 is an elevation of a second form of my device and Fig. 4 is an enlarged detail sectional view thereof.

Referring more particularly to Figs. 1 and 2, A is the customary barrel of the syringe in which the fluid is contained and B is the plunger which works therein. The end of the barrel to which the needle is attached instead of being at right angles to the axis of the barrel is disposed obliquely forming an inclined face C. D is a screw threaded stem the axis of which is perpendicular to the said inclined face C. E is a washer of suitable material and E' is a passage for conveying the fluid to the needle from the barrel. The straight needle which may be of any suitable construction comprises a screw threaded member F arranged to be screwed on the stem D against the washer E and to carry the needle G proper in the usual manner. It will be seen that with the barrel of the syringe made with an oblique end face C this face forms a solid bearing for the end of the needle carrying member F which screws on the stem D and is held in an inclined position. The necessity for bending the needle itself or the needle carrying member is thus done away

with and an ordinary straight needle may be used with my syringe.

In Figs. 3 and 4 I have shown a device for use in connection with the ordinary syringe having a straight end face to obtain the above results. In this form the screw threaded nipple or barrel section H having a straight face H' and an inclined face H² is screwed upon the tubular stem d, with the straight face H' in engagement with the straight end face of the barrel a or with a washer e adjacent thereto. The stem d' having its axis perpendicular to the inclined face H² is arranged to receive the needle carrying member in the same manner as described in regard to the form shown in Figs. 1 and 2. A washer e' may be located on the stem d' to insure a tight joint. f, is a cap which is used to close the passage f', of the nipple or barrel section H when the syringe is not in use. With this latter device an ordinary syringe with a straight end face may be easily and quickly converted into a syringe with an inclined end face, in which the needle is held at an angle to the axis of the syringe barrel. Barrel sections of different sizes and with differently inclined faces may be used to accommodate needles of various sizes at different angles.

In both forms of my invention, should the needle-carrying member F become loose, due for instance to the wearing out of its screw threads, or the threads on the stem D or d', the inclined faces C or H² will serve as a solid stationary bearing for said member F and will maintain it against wobbling.

I claim—

In a hypodermic syringe, a barrel provided with an inclined end face, a stem projecting outwardly from said end face and perpendicular thereto and a needle carrying member arranged to be carried by said stem in axial alinement therewith and with its end face abutting against said inclined end face of the barrel.

In testimony whereof, I have hereunto signed my name in the presence of two subscribing witnesses this 29th day of February, 1908.

ALBERT A. ALLINGER.

Witnesses:

JOHN A. KEHLENBECK,
JOHN LOTKA.