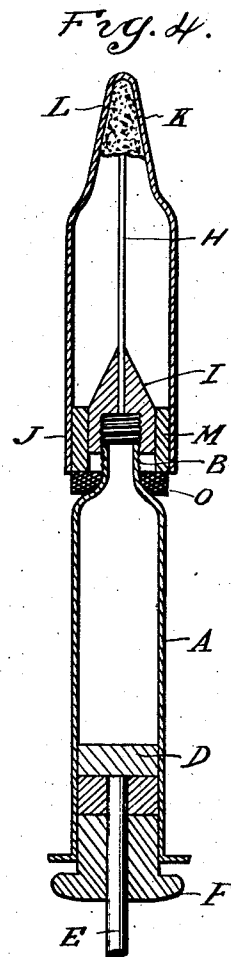
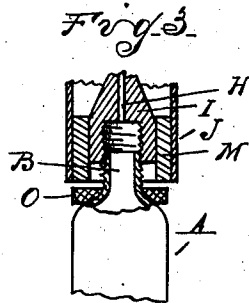
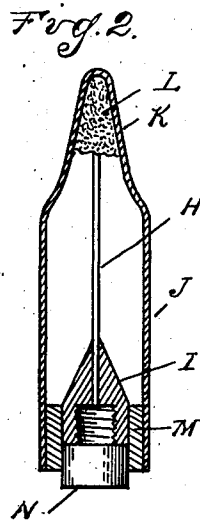
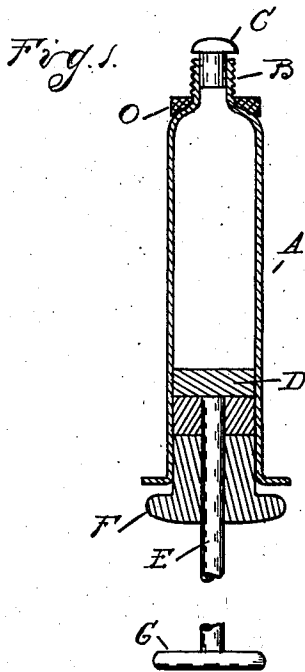


F. O. NORTHEY.
 SYRINGE.
 APPLICATION FILED SEPT. 18, 1911.

1,115,561.

Patented Nov. 3, 1914.



Witnesses
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UNITED STATES PATENT OFFICE.

FREDERICK O. NORTHEY, OF NEW ORLEANS, LOUISIANA, ASSIGNOR TO PARKE, DAVIS & COMPANY, OF DETROIT, MICHIGAN, A CORPORATION OF MICHIGAN.

SYRINGE.

1,115,561.

Specification of Letters Patent.

Patented Nov. 3, 1914.

Application filed September 18, 1911. Serial No. 649,830.

To all whom it may concern:

Be it known that I, FREDERICK O. NORTHEY, a citizen of the United States of America, residing at New Orleans, in the parish of Orleans and State of Louisiana, have invented certain new and useful Improvements in Syringes, of which the following is a specification, reference being had therein to the accompanying drawings.

The invention relates to syringes particularly designed for use in hypodermic injections or for the sub-cutaneous introduction of vaccines and serums.

It is the object of the invention to obtain a construction in which the needle as well as the vaccine is held in an antiseptic container.

It is a further object to adapt the device for successive operations without contamination of the needle in the operations or the waste of any of the fluid.

With these and other objects in view, the invention consists in the construction as hereinafter set forth.

In the drawings,—Figure 1 is a longitudinal section through the barrel or fluid container in condition for shipment; Fig. 2 is a similar view showing the needle and its container; Fig. 3 is a section showing the manner of engaging the needle with the barrel or fluid container; Fig. 4 is a longitudinal section through the parts in assembled position.

A is the fluid container preferably formed of a glass cylinder having at one end the contracted nipple B which is preferably exteriorly secured thereto.

C is a removable stopper for closing the aperture in the nipple B.

D is a plunger within the barrel or cylinder A and which has an operating stem or piston E passing out through a stopper F and provided at its outer end with a handle G.

H is the needle provided with a suitable head or cap portion I interiorly threaded to engage the threaded nipple B.

J is a container for the needle and its cap which is adapted to completely inclose the same and form an antiseptic package. This container J is preferably formed also of glass and has a contracted end K in which is placed a suitable porous substance L for holding an antiseptic oil. Any suitable material may be used for holding the antiseptic,

as for instance absorbent cotton, cork, etc. The needle when placed in the container will have its point embedded in the antiseptic holder L and by reason of the fact that the antiseptic material is an oil the needle will not rust. The opposite end of the container J is preferably provided with a bushing M of cork or other suitable material for supporting the head or cap I and the container is then closed by a suitable cork N.

With the construction as thus far described during the shipment, the containers A and J are separate and each forms a thoroughly antiseptic protection for its contents.

When the device is to be used the stoppers C and N are removable and the cap I while still within the container J is engaged with the threaded end of the nipple B screwed to its seat, preferably a gasket O on the container A. As soon as the needle is in position the container J may be drawn off the same and the device is then in condition for use without the necessity of the operator touching the needle with his hands or otherwise contaminating the same. After the injection the needle may be replaced in the container J and the point which has been contaminated by the operation is again sterilized by insertion in the material L with its antiseptic fluid. The fluid in the container A which has filled the cap I and the passage through the needle, is not in any way contaminated and is used in the subsequent operation without loss.

It will be understood that my improved construction has various advantages including first, the saving of the vaccine material which is usually lost when the needle is removed; second, it avoids the necessity of sterilizing the needle after each operation in any other way than by replacing of the cap or protecting container J thereof; third, it avoids any danger of contaminating the needle during the operation of engaging the same with the syringe barrel.

What I claim as my invention is:

1. In a syringe, the combination with a barrel or container for the fluid to be injected, of a needle attachable to said barrel, an antiseptic container for said needle, sterilizing means within the container in which the point of the needle is embedded when the latter is positioned within the container,

said container permitting of the engagement of the needle with the barrel before withdrawal of the needle point from the sterilizing means.

- 5 2. In a syringe, the combination with a barrel or container for the fluid to be injected, of a needle, a cap carrying said needle, cooperating, detachable, interengaging portions of the cap and barrel permitting
10 the needle to be attached to the barrel in operative relation thereto, and a protecting casing inclosing the needle having a bush-

ing of resilient material detachably engaging said cap, the latter serving to close the casing, said bushing being arranged to permit the cap to be secured to the barrel while, the needle is inclosed by the casing. 15

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

FREDERICK O. NORTHEY.

Witnesses:

JAMES P. BARRY,
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