

(No Model.)

G. B. ROSS.  
HYPODERMIC SYRINGE.

No. 422,450.

Patented Mar. 4, 1890.

Fig.1.

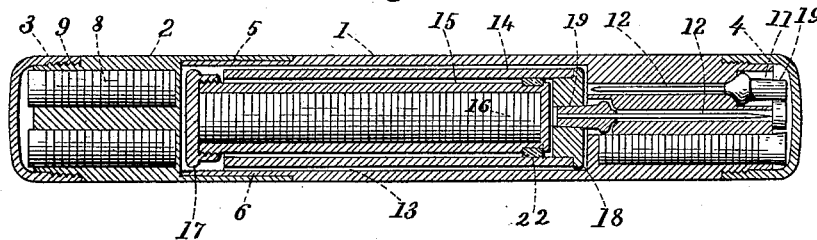


Fig.2.

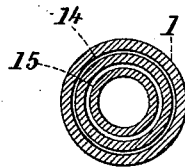


Fig.3.

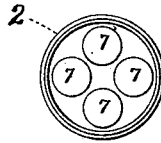


Fig.4.

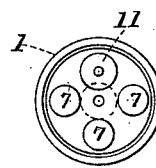


Fig.5.

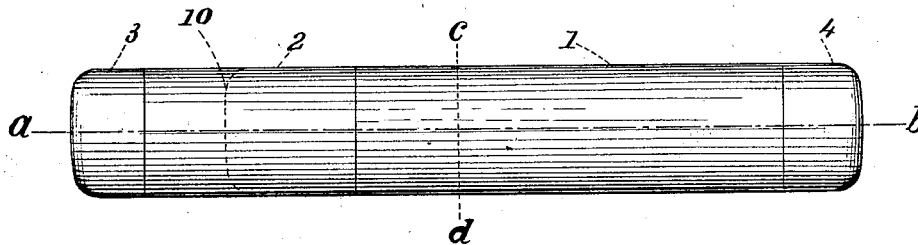
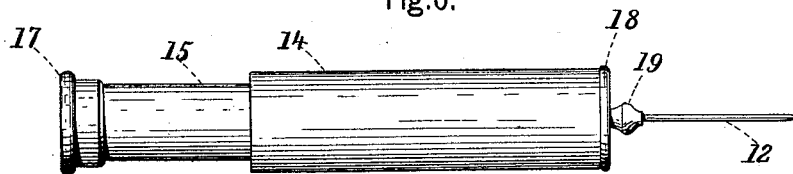


Fig.6.



Witnesses.

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# UNITED STATES PATENT OFFICE.

GEORGE B. ROSS, OF BUFFALO, NEW YORK.

## HYPODERMIC SYRINGE.

SPECIFICATION forming part of Letters Patent No. 422,450, dated March 4, 1890.

Application filed May 1, 1889. Serial No. 309,153. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE B. ROSS, a citizen of the United States, residing in Buffalo, in the county of Erie and State of New York; have invented certain new and useful Improvements in Hypodermic Syringes, of which the following is a specification.

This invention consists in certain improvements whereby room is provided in a comparatively small compass for several different kinds of medicine, either in the form of tablets or small pills, and one or more removable needle-point syringe-nozzles, all of which will be fully and clearly hereinafter described and claimed, reference being had to the accompanying drawings, in which—

Figure 1 is a longitudinal central section in or about line *a b*, Fig. 5, cutting through the outer case and syringe. Fig. 2 is a transverse section in or about line *c d*, Fig. 5. Fig. 3 is a top view of the end portion 2, its cap being removed. Fig. 4 is a top view of the opposite end of the case, the cap being omitted. Fig. 5 is a side elevation. Fig. 6 is a detached side elevation of the syringe complete, showing the plunger partly withdrawn.

The outer case is composed, preferably, of the body 1, the end portion 2, and the caps 3 and 4. The end cap portion 2 is provided with an enlarged inside portion 5, adapted to slip snugly over the reduced portion 6 of the body 1, (see Fig. 1,) and within it are four cylindrical chambers 7, adapted to receive medicine in the form of pellets or tablets 8 or liquid. I have shown four of the chambers 7; but more or less may be used. This portion 2 forms one end of the outer case when connected with it, and is provided with the screw-cap 3. In some cases this portion 2 may be dispensed with and the cap or cover adapted to fit the case either by means of a screw portion 9 or made to slip over the reduced body portion 6. This construction would shorten the device, substantially as shown by the dotted lines 10 in Fig. 5. The end portion of the body 1 is also provided with apartments or chambers 7 to receive medicine or for other purposes. It is also provided with a chamber 11 to receive an extra

syringe needle-point nozzle 12. (See Fig. 1.) This outer case and its several parts are preferably made of hard rubber; but any other suitable material may be used. The portion 2 acts as a cover for covering the syringe-chamber 13.

The syringe 14, which is preferably made of glass, so as to be transparent, is provided with a hollow medicine-plunger 15, adapted to receive the tablets of medicine 16, and is provided with a screw cap or cover 17. At the opposite end of the syringe is a removable plug 18, having a tapering hole through it adapted to receive the tapering removable shank 19 of the hypodermic needle-point 12.

The syringe-body 14 is usually made of glass, as before mentioned. The plug 18 is preferably made of hard rubber; but any suitable material may be used. The shank 19 is also made of hard rubber in the usual way, and the hypodermic needle-point is made of steel in the well-known way for the purpose designed, and a further description here is not required. The apartments for medicine in the outer case are provided with suitable corks or stoppers *e*. (See Fig. 1.) The syringe-plunger 15 is preferably made of hard rubber as the most suitable material.

22 in Fig. 1 represents the ordinary packing for the syringe-plunger.

In operating with this device the cover 2 is removed and the syringe taken out. The plunger is now withdrawn, and a tablet of suitable medicine is taken and put into the syringe. The plunger is now put back and the syringe filled with water or other suitable liquid and the medicine dissolved, after which it may be administered in the well-known way.

I claim as my invention—

In a hypodermic syringe, the combination of a syringe and an inclosing-case 1, having a syringe-chamber, a series of medicine-chambers 7, a cover 4, and a portion 2, provided with a series of medicine-cases 7, and a cover 3, substantially as described.

GEORGE B. ROSS.

Witnesses:

JAMES SANGSTER,  
ROBERT A. GEARY.