G. McC. STRATTON.

CONTAINER FOR LIGATURES, &c.

APPLICATION FILED MAY 5, 1909.

990,679. **Patented Apr. 25, 1911.**

Fig. 1.

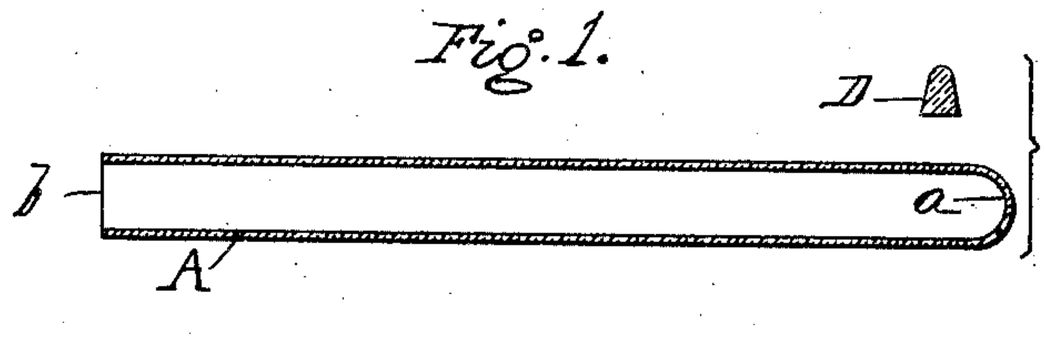


Fig. 2.

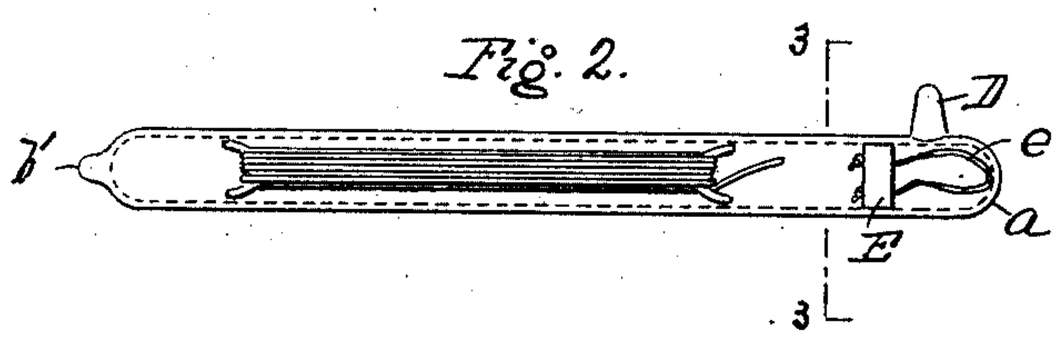


Fig. 3.

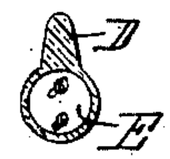


Fig. 4.

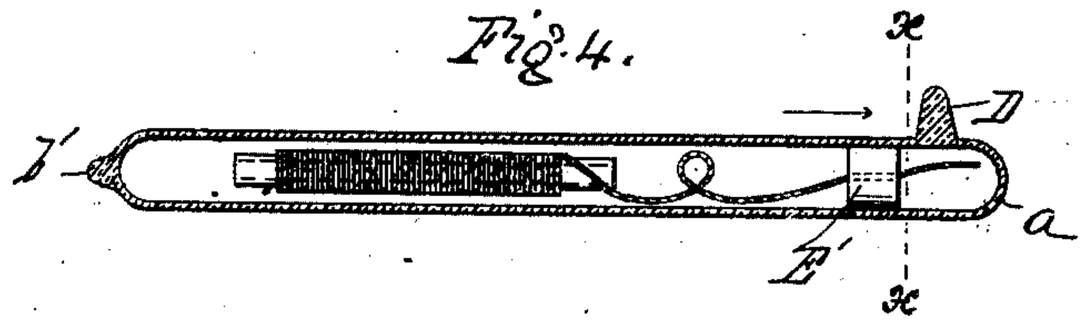


Fig. 5.

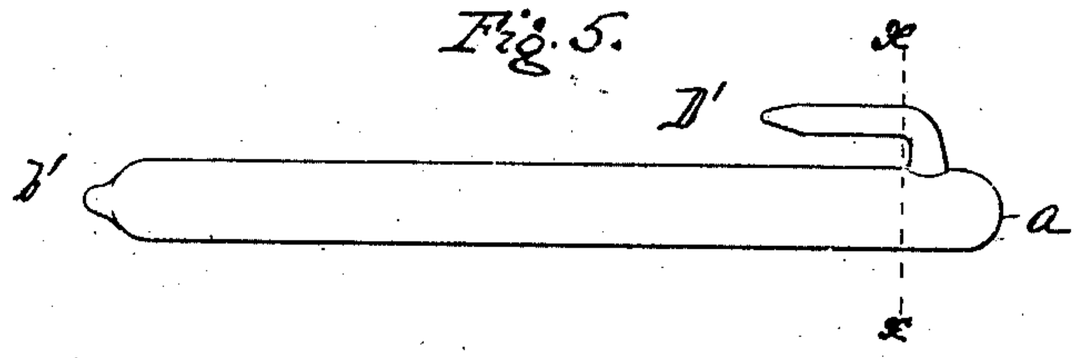
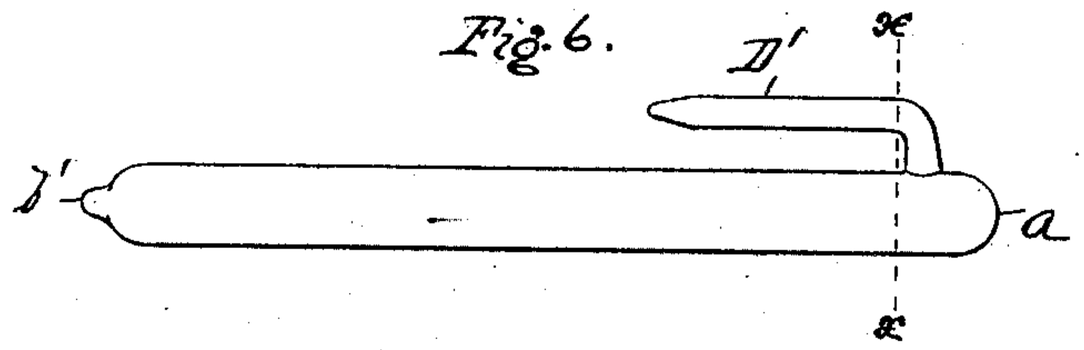


Fig. 6.



Witnesses:
L. H. Grote
Helen Abbe

Inventor
George McC. Stratton
By Howson and Howson
ATTORNEYS

UNITED STATES PATENT OFFICE.

GEORGE McCLELLAN STRATTON, OF CONSHOHOCKEN, PENNSYLVANIA, ASSIGNOR, BY MESNE ASSIGNMENTS, TO JOHNSON & JOHNSON, OF NEW BRUNSWICK, NEW JERSEY, A CORPORATION OF NEW JERSEY.

CONTAINER FOR LIGATURES, &c.

990,679. Specification of Letters Patent. **Patented Apr. 25, 1911.**

Application filed May 5, 1909. Serial No. 494,066.

To all whom it may concern:

Be it known that I, GEORGE MCCLELLAN STRATTON, a citizen of the United States of America, residing in Conshohocken, in the county of Montgomery and State of Pennsylvania, have invented certain new and useful Improvements in Containers for Ligatures, &c., of which the following is a specification.

My invention relates to breakable tubes for containing ligatures, serums, vaccination points and other articles which have to be hermetically sealed and sterilized and have to be kept in sterilized condition until they are used. A breakable tube of this character is illustrated in the Lee Patent No. 612,355, dated October 11th, 1908.

The main object of my invention is to so construct such a tube as to simplify its manufacture, to produce a tube which can be intentionally broken with a clean break and without danger of getting splinters into or onto the contents of the tube and yet give a tube which is no more liable to unintentional breakage than is an ordinary tube which is not prepared to be broken.

In the accompanying drawings, Figure 1 is a sectional view, illustrating a preliminary step in the manufacture; Fig. 2 is a side view of one form of tube made according to my invention; Fig. 3 is a cross section on the line 3—3, Fig. 2; Fig. 4 is a longitudinal section of another construction, according to my invention; Figs. 5 and 6 are side views of modifications.

In the first place the container may be made of the usual straight piece of tubing such as A, Fig. 1, to be closed at one end, as *a*, and left open at the other end *b* for the introduction of the ligature and liquid or other contents, after which the open end may be sealed up by fusing the glass in the well known manner, as shown at b^1, Fig. 2, for example. Before introducing the contents into the tube A, Fig. 1, I provide a teat or projection D (Fig. 1), which I weld to the side of the tube a short distance from the end *a*. In the finished container, this teat or lateral projection D, at a short distance from the end of the tube affords a safe and sure means whereby the end *a* of the tube may be completely broken off with a clean break and with comparatively few splinters. This break may be effected by striking the projection a blow or blows with a paper cutter or scissors or other convenient implement in the direction of the arrow, Fig. 4, with the result that the cap of the tube is thereby broken off completely about on the line *x*, *x*, and with a relatively clean break. If desired to provide for breaking off the cap without the use of any implement, the teat or projection welded to the side of the tube may be made long enough and bent parallel to the tube as shown at D^1 in Figs. 5 and 6, so as to afford a lever to be taken between the thumb and finger and by pulling on this lever away from the tube or sidewise, the tube cap *a* may be broken off, or an instrument may be inserted under this lever projection D^1 to pry it away from the tube and so break off the cap.

As a further improvement, to aid on the one hand in securing a clean break at the proper point and at the same time to prevent splinters from getting into the part of the tube containing the ligatures, etc., there may be provided a stopper or diaphragm of cork, rubber or other suitable material, as indicated at E, Fig. 2 just beyond the point where the break is wanted. This stopper may be provided with a loop cord *e*, which is fastened to the stopper to afford a convenient means for removing the latter, when the cap has been broken off and it is desired to take out the ligatures or other contents. Or if preferred, the cork may be left in the tube, as illustrated at E^1, Fig. 4, and the ligature end passed through the stopper to be drawn through as wanted. In either case, the stopper affords a suitable support to the tube to aid in securing a clean break and to prevent splinters from getting onto or into the contents of the tube.

I claim as my invention:

A sealed glass container tube for ligatures and other articles, and having welded to its side a short distance from one end a breaking projection and having within the tube adjacent to the projection a supporting stopper, as and for the purpose set forth.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses.

GEORGE McCLELLAN STRATTON.

Witnesses:

M. E. WRIGHT,

G. H. JONES.