

O. C. SCHULZ.
SURGICAL SWAB.
APPLICATION FILED APR. 24, 1916.

1,221,227.

Patented Apr. 3, 1917.

Fig. 1

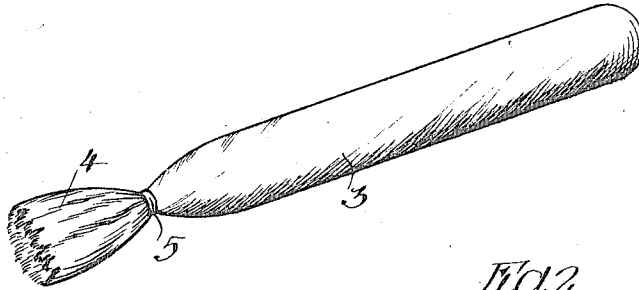


Fig. 2

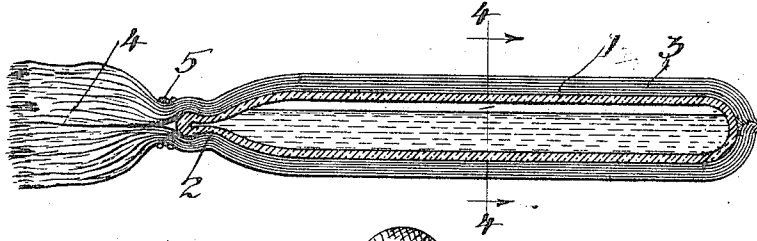


Fig. 3

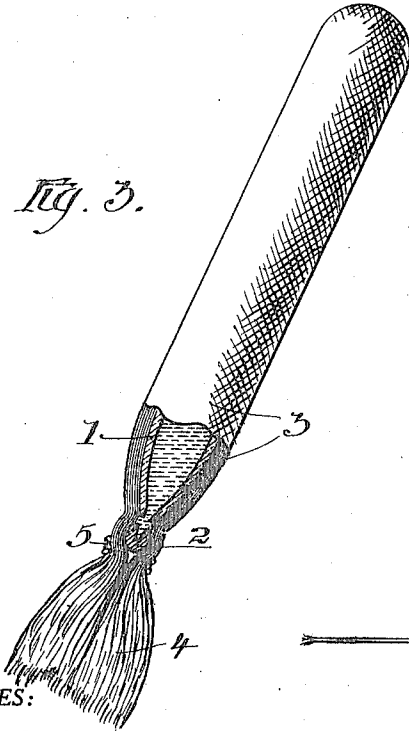


Fig. 4

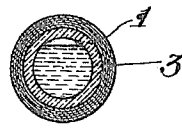
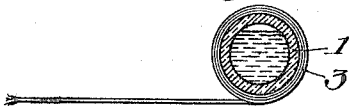


Fig. 5



WITNESSES:
W. Barrett
Ernest H. Marchant

INVENTOR.
Orto L. Schulz
BY *Wm. B. Bell*
ATTORNEY.

UNITED STATES PATENT OFFICE.

OTTO C. SCHULZ, OF CHICAGO, ILLINOIS, ASSIGNOR TO BAUER & BLACK, OF CHICAGO, ILLINOIS, A CORPORATION OF ILLINOIS.

SURGICAL SWAB.

1,221,227.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, OTTO C. SCHULZ, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Surgical Swabs, of which the following is a specification.

This invention relates to a surgical swab and has for its object the provision of a simple means for transporting small quantities of a cleansing, antiseptic or healing liquid in a manner best adapted to render it quickly available and readily applicable when needed.

Further objects and advantages of my invention will be apparent as it is better understood by reference to the following specification when read in connection with the accompanying drawing illustrating the preferred embodiment thereof.

Figure 1 is a view in perspective of a surgical swab according to my invention;

Fig. 2 is a longitudinal section through the swab;

Fig. 3 is an elevation partially in section illustrating the manner of breaking the container to release the liquid therefrom;

Fig. 4 is a section on the line 4—4 of Fig. 2, and

Fig. 5 is a transverse section illustrating the manner of wrapping the container.

Referring to the drawing, 1 indicates an elongated preferably tubular sealed container of glass or other readily friable material adapted to contain a small quantity of liquid. In sealing the container 1 I form a constricted neck 2 projecting from one end thereof, the purpose of which will hereafter more fully appear.

The container 1 is completely inclosed within a wrapper 3 comprising a plurality of turns of textile fabric, such as gauze bandage material, wound thereon as indicated in Fig. 5 and extending beyond the neck 2 to form a soft, pliable brush or applicator means 4 for applying the liquid. A fastening 5, preferably of cord, is disposed tightly about the wrapper 3 to retain the container 1 within the wrapper. The wrapper 3, except for the brush applying means 4, is impregnated with a liquid resistant material, preferably paraffin, and is then ready for use.

To utilize my invention it is necessary merely to break the neck 2 of the container

1, as indicated in Fig. 3, whereupon the liquid is allowed to flow to the brush applying means 4. The liquid is readily applied by grasping the impregnated wrapper 3 about the container 1, this portion of the wrapper being prevented by the impregnating material from absorbing any of the liquid. When the contents of the container has been utilized the swab is discarded. During the application of the liquid the broken end of the receptacle is retained within the wrapper by the fastening 5.

My invention is particularly desirable, in connection with first-aid packets, for applying iodine to wounds, since small but sufficient quantities of iodine may be readily carried by individuals in a form which makes it quickly available and readily applicable when needed. My invention, as will be apparent, is equally efficient as a means for transporting and applying liquids other than iodine and I do not desire to be limited to a means adapted only to contain iodine.

Furthermore, the shape of the swab enables it to be used surgically without the necessity of providing a handle of any kind. This is not only due to the elongated shape of the swab which enables it to be handled without the fingers coming in contact with the brush but also to the paraffined protective wrapping which confines the liquid and absolutely protects the fingers against stain. In the practical use of swabs it may often happen that the liquid will be permitted to flow back from the brush but with a swab made in accordance with my invention the liquid will not permeate the protector even if it does run back on the container from the broken end thereof. It will be apparent, therefore, that if the swab is held in the hand and used in the manner intended there will be no possibility of the liquid staining the fingers and also that the antiseptic property of the liquid will be preserved. When the end of the container is broken the liquid will flow lengthwise of the container directly to the soft pliable textile brush by which it may be applied to a wound without irritation. Practically all the liquid in the container may thus be used on a wound since very little is absorbed by the brush and none will be absorbed by the protector on the container.

It will be apparent that I have perfected a surgical swab which, because of its com-

pactness, simplicity of construction and the ease with which the contents may be released and applied, fills a long-felt need in the art.

It will be understood that various changes
5 may be made in the form, construction and arrangement of the parts without departing from the spirit and scope of the invention or sacrificing any of its material advantages, the form hereinbefore described being
10 merely a preferred embodiment thereof.

I claim:

1. A surgical swab comprising an elongated friable liquid container having a constricted end, a pliable brush made of fabric-
15 ricated textile material embracing and secured to said container at the constricted end thereof, and means beyond said end confining the textile material to retain the end when broken, the portion of the textile ma-
20 terial embracing said container being impregnated with a liquid resistant.

2. A surgical swab comprising an elongated liquid container, an impermeable wrapping inclosing the container, a pliable brush extending beyond one end of the con- 25 tainer, and means for preventing portions of the container when broken from escaping to the brush.

3. A surgical swab comprising an elongated friable liquid container, a wrapper 30 comprising a plurality of turns of textile fabric wound thereon, said wrapper being extended beyond one end of the container, and means for confining the wrapper adjacent said end of the container to form the 35 projecting free end of the wrapper into a soft pliable brush for applying the liquid in the container when the latter is broken.

OTTO C. SCHULZ.

Witnesses:

WM. O. BELT,
M. A. KIDDIE.