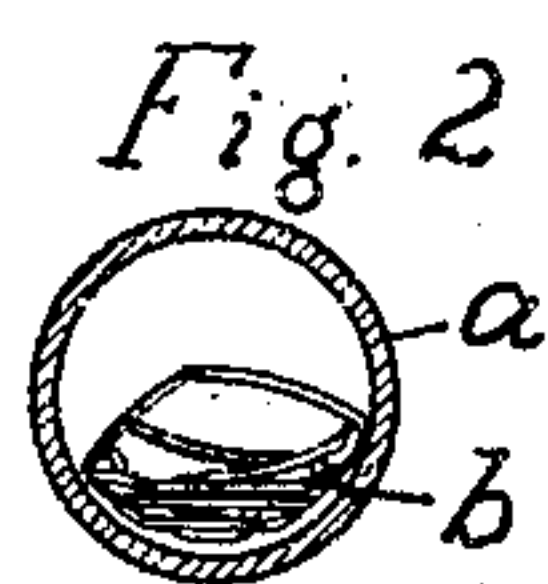
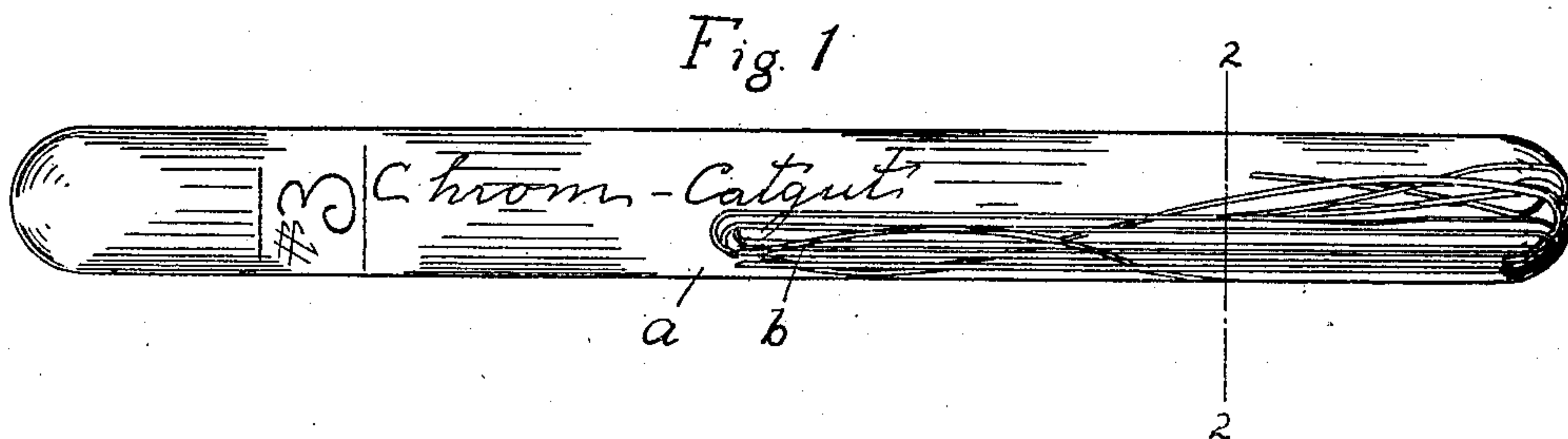


No. 889,361.

PATENTED JUNE 2, 1908.

H. A. FLANDERS.
SUTURE AND LIGATURE CONTAINER.
APPLICATION FILED JAN. 12, 1906.



WITNESSES:

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HOWARD A. FLANDERS, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO THE RANDALL-FAICHNEY COMPANY, OF BOSTON, MASSACHUSETTS, A CORPORATION OF MASSACHUSETTS.

SUTURE AND LIGATURE CONTAINER.

No. 889,361.

Specification of Letters Patent.

Patented June 2, 1908.

Application filed January 12, 1906. Serial No. 295,789.

To all whom it may concern:

Be it known that I, HOWARD A. FLANDERS, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Suture and Ligature Containers, of which the following is a specification.

This invention relates to transparent aseptic holders for surgical appliances, such as sutures, ligatures, needles, and similar instruments. It is the common practise to inclose these articles in hermetically sealed glass tubes or holders containing a body of alcohol or other aseptic fluid, in which the suture or ligature is immersed. As there are different sizes, kinds, and grades of these devices, and as it is important that the surgeon should be able to quickly select a holder containing the particular style of appliance that he wishes to use, it is important that means be provided for clearly marking each holder, to designate the quality or variety of its contents. Printed paper labels have heretofore been used, the label being inserted in the holder, so that it is in contact with the fluid and the appliance contained in the tube. The employment of such labels is open to certain objections, the principal one of which is that the label is liable to contaminate the contents of the holder unless absolutely sterilized, and even with the most careful sterilization, there is difficulty in securing absolute freedom from contamination. It is not practicable to secure a paper or erasable label to the exterior of the holder, because the holder has to be externally sterilized before it is opened to permit the removal of its contents; hence an externally attached label would be liable to be displaced by such sterilizing process.

My invention has for its object to provide a container of this character which is marked indelibly and irremovably, to indicate the contents in such manner that there is absolute freedom (a) from liability of contamination of the contents, and (b) from danger of removing the mark by the operation of sterilizing the external surface of the holder.

To this end, my invention consists in a suture, ligature, or surgical instrument container, comprising a transparent tube having on its external surface suitable descriptive characters indelibly applied, preferably by an etching process when the container is

made of glass, the etching chemical biting into the smooth surface of the glass, and leaving lines of a whitish color, like that of ground glass, which contrasts with the contents of the tube, and is entirely legible. Or the marking may comprise lines so deeply cut that they may be filled in, if desired, with some opaque pigment or compound. The tube thus marked can be externally sterilized without affecting the markings.

Of the accompanying drawings, forming a part of this specification,—Figure 1 represents a side view of a suture or ligature container marked in accordance with my invention. Fig. 2 represents a section on line 2—2 of Fig. 1.

The same letters of reference indicate the same parts in all the figures.

In the drawings,—*a* represents a container, here shown as a glass tube, which contains a surgical appliance, such as a suture or ligature *b*, this appliance being disposed in an elongated coil within the container. The appliance *b* and a quantity of absolute alcohol are placed in the tube while one end is open, the tube being then hermetically sealed by closing the other end.

In carrying out my invention, I indelibly mark the external surface of the container, to describe its contents. This marking is preferably effected by an etching process, a suitable acid being applied to glass in such manner as to form the desired characters, the acid eating into the surface of the glass sufficiently to render the lines indelible and cause them to contrast with the surrounding glass and with the contents of the container. In the embodiment of my invention here shown, the markings consist of the words chrom-catgut together with a numeral indicating the number or size of the appliance in the container.

It will be seen that the container above described contains no foreign matter liable to affect the contents, and is indelibly marked so that there can be no doubt as to the kind or quality of appliance within the container, the marking being of such nature that it is not affected by the process of externally sterilizing the container.

It is obvious that the described improvement may be used in connection with containers of various forms,—for instance, those that are employed to hold a suture or

ligature to which a curved needle is applied, the container being curved to conform to the curvature of the needle.

The term "appliance" as hereinbefore
5 used may be considered as referring either to the class of articles technically known as surgical appliances, said class including sutures and ligatures, or to the class of articles technically known as surgical instruments,
10 the latter class including needles.

I claim:

1. As an article of manufacture, a hermetically closed transparent package containing a surgical appliance in fluid and provided with external indelible characters de-

scriptive of the nature of the appliance and the size thereof.

2. As an article of manufacture, a transparent package having hermetically closed ends and containing a surgical appliance in fluid and having its exterior surface etched to provide indelible characters descriptive of the nature of the appliance and the size thereof.

In testimony whereof I have affixed my
signature, in presence of two witnesses.

HOWARD A. FLANDERS.

Witnesses:

C. F. BROWN,
E. BATCHELDER.