

(No Model.)

J. E. LEE.

SURGEON'S LIGATURE RECEPTACLE.

No. 490,207.

Patented Jan. 17, 1893.

FIG.1.

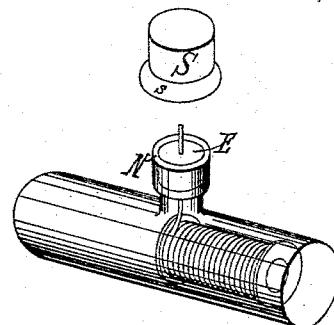


FIG. 5.

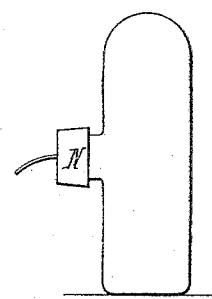
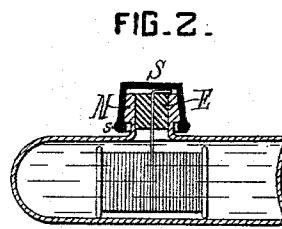


FIG. 3.

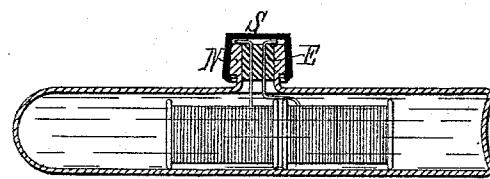
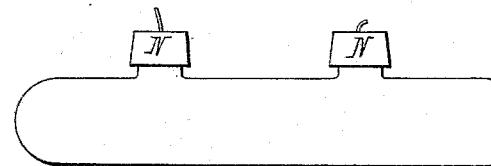


FIG. 4.



WITNESSES:

George Bannam  
James Gracie

INVENTOR  
John Ellwood Lee  
BY  
Howson and Howson  
his ATTORNEYS

# UNITED STATES PATENT OFFICE.

JOHN ELLWOOD LEE, OF CONSHOHOCKEN, PENNSYLVANIA.

## SURGEON'S LIGATURE-RECEPTACLE.

SPECIFICATION forming part of Letters Patent No. 490,207, dated January 17, 1893.

Application filed September 28, 1892. Serial No. 447,159. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN ELLWOOD LEE, a citizen of the United States, and a resident of Conshohocken, Montgomery county, Pennsylvania, have invented an Improved Package 5 of Surgeon's Silk or Catgut, of which the following is a specification.

My invention is mainly designed as an improvement upon that class of packages of 10 surgeon's silk or catgut which forms the subject of the Letters Patent granted to me July 10, 1888, No. 385,937, and the main object of my present invention is to produce such a package of convenient size, more particularly 15 where but one spool or two may be needed.

In the accompanying drawings, Figure 1 is a perspective view of a ligature package constructed in accordance with my invention, the inclosing cap for the bottle neck being 20 shown detached.—Fig. 2 is a longitudinal section of the same.—Fig. 3 is a longitudinal section of a modification: Fig. 4 is an outside view of another modification; and Fig. 5 is a view of the package shown in Fig. 1 to 25 better illustrate how it may be stood on end.

In this construction of ligature package the silk, catgut or other thread is to be wound as usual upon a spool or spools, preferably of glass. The spools are so constructed 30 that their end flanges will fit, but with considerable freedom of movement, the interiors of the tubular bottles, as shown in Fig. 2 for instance, the spools lying lengthwise in the bottles. The mouth of each bottle is to be 35 closed by a stopper E of rubber or other suitable material, through which the thread is passed with a close fit, as described in my above mentioned patent, but instead of arranging this mouth at the end of the bottle 40 I arrange it, as shown in the drawings, at the side of the bottle, and the latter is closed at its opposite ends. The neck N of the mouth of the bottle is made of sufficient length to hold a stopper of a size to make the mouth of 45 the bottle fluid-tight, for these bottles are intended to contain antiseptic solutions. For the neck of the bottle I provide a cap S of elastic material, such as rubber, the neck being preferably formed with a shoulder s, with 50 which engages the rim of the elastic cap the better to retain the cap in place. For this latter purpose the cap may have the ribbed

rim shown in Figs. 1 and 2. The bottle is made about twice the length of the spool, which latter is free to move endwise in the 55 bottle, so that the part of the spool from which the thread is being unwound at any time can always come opposite the outlet. In Fig. 1 for instance I have shown the spool in the position it would occupy when the 60 thread is being drawn off the end of the spool, while in Fig. 2 the spool is shown as in the position when the thread is being drawn off about the middle of the spool. I prefer to make one end of this bottle flat, so that it may 65 be stood up as shown in Fig. 5, but the other end may be conveniently rounded, as shown in the drawings. It is preferred to make these bottles, and also the spools, of glass, but they may be made of other material such as 70 rubber or metal.

When a package of two spools is to be used it may be made with one mouth, as illustrated in Fig. 3, or with two mouths, one for each spool as illustrated in Fig. 4.

I claim as my invention:

1. A package of surgeon's silk or catgut consisting of a bottle containing one or more spools of the thread adapted to about fit the interior of the bottle, the latter being about 80 double the length of the spool or spools and having an outlet at the side closed by a fluid-tight stopper, through which the thread is to be passed with a close fit.

2. A package of surgeon's silk or catgut 85 consisting of a bottle containing a spool or spools, the bottle being flattened at one end and rounded at the other and having the bottle neck at the side closed by a fluid-tight stopper, through which the thread is to be 90 passed with a close fit, substantially as described.

3. A package of surgeon's silk or catgut, consisting of a bottle containing a spool or spools and having a neck closed by a stopper 95 and provided with a cap of elastic material fitting the said neck, substantially as set forth.

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

J. ELLWOOD LEE.

Witnesses:

CONRAD B. LEE,  
A. J. PENNINGTON.