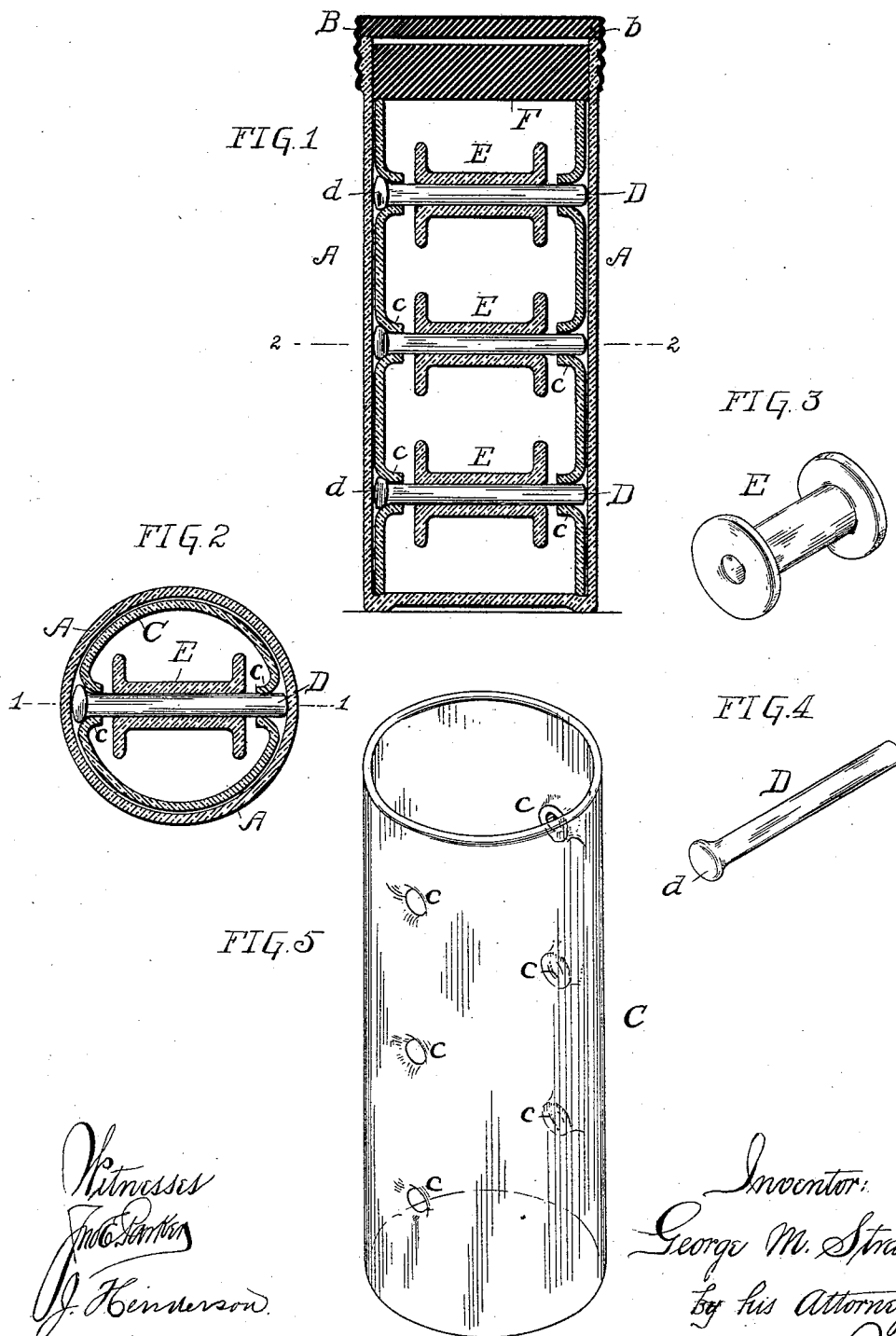


(No Model.)

G. M. STRATTON.
LIGATURE RECEPTACLE.

No. 529,844.

Patented Nov. 27, 1894.



Witnesses
J. C. Stratton
J. Henderson.

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UNITED STATES PATENT OFFICE.

GEORGE M. STRATTON, OF CONSHOHOCKEN, PENNSYLVANIA.

LIGATURE-RECEPTACLE.

SPECIFICATION forming part of Letters Patent No. 529,844, dated November 27, 1894.

Application filed July 26, 1894. Serial No. 518,639. (No model.)

To all whom it may concern:

Be it known that I, GEORGE M. STRATTON, of Conshohocken, county of Montgomery, State of Pennsylvania, have invented a certain new and useful Improvement in Ligature-Receptacles, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

The object of my invention is to improve, simplify and cheapen the construction of receptacles for surgical ligatures of silk or catgut, such as are ordinarily preserved in an antiseptic fluid, in an air tight receptacle, as more fully set forth hereinafter.

In the accompanying drawings:—Figure 1 is a sectional elevation on the line 1—1 Fig. 2, of a ligature receptacle embodying my invention. Fig. 2 is a sectional plan view of the same on the line 2—2, Fig. 1. Fig. 3 is a perspective view of one of the spools upon which the silk or catgut may be wound. Fig. 4 is a perspective view of the axis of such spool, and Fig. 5 is a similar view of the spool supporting cylinder.

Referring to the drawings A represents a glass bottle provided at its open end or mouth with a metallic top, B, having a disk, b, of rubber, or similar material which when the cap is screwed into position will tightly bind upon the edge of the mouth and make the bottle air tight. The bottle is in the form of a cylinder and of practically the same diameter throughout its length so that there may be placed within it an open-ended cylinder, C, also formed of glass and fitting comparatively loosely within the bottle so that it may be readily inserted and when occasion requires it may readily be removed. At diametrically opposite points on the cylinder, C, I form openings by means of a suitable tool which presses the glass inwardly in such manner as to form inwardly projecting annular flanges, c, which form bearings for the axes, D, of the various spools, E. The axes, D, are formed of rods of glass preferably having one end upset to form a head, d, for greater convenience in holding the rod in position when placed in the cylinder and the spools, E, also formed of glass, are placed within the cylinder, C, and the various axes then passed through the openings in the cylinder and the central open-

ings of the spool so as to hold the latter in position.

At the mouth of the bottle is a disk of soft rubber, F, in which are formed a number of openings through which the various ligatures wound upon the spools, E, are threaded so that the surgeon may draw from the spool a section of the required length without opening the bottle, the rubber acting to keep the bottle air tight and at the same time removing all surplus moisture from the ligature as it is drawn from the bottle. It is desirable that the spool or spools shall have a slight travel or be free to move to some little extent longitudinally on their axes so that the ligatures may be drawn up with greater freedom, but in order to prevent the end flanges of the spool from coming into contact with the inner wall of the cylinder and binding when the ligature is being unwound the flanges, c, which form the bearings for the axes are projected inwardly to such a distance that any excessive movement of the spool will bring its end into contact with one of the flanges, c, and thus prevent the end disk of the spool from contact with the inner wall of the cylinder.

In assembling the parts, the wound spools are simply held within the cylinder with their central openings in line with the flanges, c, and the various axes, D, are passed through both the openings in the cylinder and the openings in the spools and the cylinder is then placed within the bottle. It will be observed that the length of the axes, D, is nearly equal to the inner diameter of the bottle or receptacle, A, so that little or no endwise movement of the axes is possible and there is no danger of the axes moving from their sockets or bearings and consequent falling of the spools.

With a receptacle of glass spools, axes for the spools and the support for the axes also of glass there can be no danger of chemical action by the antiseptic fluid employed and the ligatures will remain for an unlimited length of time in a perfect condition and the antiseptic fluid will never be tinged or colored by any chemical action of the fluid.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. The combination in a ligature holder of
a cylindrical glass vessel, an inner removable
cylindrical tube having an exterior diameter
slightly less than the interior diameter of the
5 said cylindrical vessel and adapted to fit
snugly within the exterior vessel of a length
approximately equal to the length of the cy-
lindrical vessel, inwardly projecting flanges
provided diametrically opposite each other in
10 said removable casing in a longitudinal se-
ries, removable headed glass axes provided
in said flanges, a glass ligature holding spool
mounted upon each axis, said flanges having
sufficient inward projection to prevent con-
15 tact between the end disks of the spools and
the inner wall of the cylinder, and tightly fit-
ting cover provided in the upper portion of
the glass vessel having small orifices for the
passage of the ligature, substantially as de-
20 scribed.

2. In a ligature holder the combination of
the cylindrical glass vessel, A, inner remov-
able glass cylinder, C, of a diameter approxi-
mately equal to the inner diameter of the ves-

sel A, and of a length slightly less than the 25
length of said vessel, inwardly projecting cir-
cular flanges, c, provided in said casing oppo-
site each other and in longitudinal series, ori-
fices provided through said casing within said
flanges, removable axes, D, provided in said 30
orifices, heads, d, provided on said axes, and
depressions provided in said casing at the
mouth of the orifices for the reception of said
heads, d, when the axes are in position, glass
spools, E, mounted upon each axis in a lon- 35
gitudinal series, soft rubber disk, F, provided
in the upper portion of the vessel having
small orifices vertically disposed through the
same for the passage of the various ligatures,
and metallic cap, B, having center rubber 40
disk, b, mounted upon said vessel, substan-
tially as described.

In witness whereof I have hereunto set my
hand this 13th day of July, A. D. 1894.

GEORGE M. STRATTON.

Witnesses:

JNO. E. PARKER,

JNO. A. MCCARTHY.