ABSTRACT: A plastic bobbin holder of resilient material transversely channeled and laterally slotted to snap upon and fit over one of the arms of a needle suturing forceps to provide a continuous supply of suture material.
BOBBIN HOLDER FOR SUTURING DEVICE

BACKGROUND OF THE INVENTION

Heretofore, in suturing operations, the suture material properly threaded through the needle must be severed and tied after each insertion for a knotting and tying operation after which the needle is rethreaded with the suture material.

The present invention has for its primary object the use with a conventional-type suture needle gripping forceps of a snap-on bobbin holder mountable upon the forceps to provide a continuous uninterrupted supply of suture material.

This and other objects will be seen from the following specification and claims in conjunction with the appended drawing in which:

FIG. 1 is a plan view of the present suturing device;
FIG. 2 is a front side elevational view thereof; and,
FIG. 3 is a right side elevational view of the bobbin holder shown in FIG. 2.

Referring to the drawing, the present suturing device includes a forceps or needle holder 10 having a pair of opposed laterally overlapped arms 12 and 14 terminating at their one ends in the opposed grippers 16 with internal serrations 18.

Said serrations are adapted to supportably receive and grip therebetween the transversely extending conventional suture needle N provided with eye 20 adapted to receive the suture material 22 for the suture or stitching operation. The suture material 22 is wound upon the bobbin or spool 24 which is snapped over and journaled upon shaft 26 of the bobbin holder 28.

The bobbin holder body or base 30 as well as the axially projecting shaft 26 are constructed of a plastic material; as for example, Teflon, which material has an inherent resiliency. The outer end of the shaft 26 has an enlarged head 32 of such diameter as will permit snapping thereover of the bobbin 24 after which the said head functions to retain the bobbin against accidental removal from shaft 26.

The body 30 has transversely extending therethrough the elongated channel 38, preferably of a cross-sectional shape corresponding to the cross section of one of the arms 12 or 14. The said channel along its length terminates in the outwardly diverging laterally extending entrant slot 34 with intermediate slotted portions 36, FIG. 3.

The channel 38 upon its opposite side has an additional slotted portion 40 opposing the slotted portion 36 to thereby provide a flexible grip 42.

By this constructions and employing the entrance slot 34 and the cooperating additional slots 36 and 40, the bobbin holder is conveniently and easily snapped over arm 14 for example of said forceps and frictionally mounts thereon in the position shown.

The suture material normally stored upon bobbin 24 is extended longitudinally forward and threads through the eye 20 of the needle N and is then ready for stitching or suturing operation.

The one primary advantage of the present invention is that a very simplified snap-on bobbin holder is provided to thus adapt the needle holder or forceps for a continuous suturing operation and providing a continuous supply of suture material to facilitate stitching of tissue, human or animal.

The plastic body 28 is preferably constructed of Urethane.

Having described my invention, reference should now be had to the following claims.

I claim:

1. For use with a forceps having a pair of surgical steel crossed arms terminating at their one end in opposed grippers adapted to secure a suture needle and at the other end in finger grips; and having a pivot at their crossing points;

a plastic bobbin holder adapted to be snapped onto one of said arms between the grip and the pivot;

said bobbin holder comprising a monolithic cylindrical block of plastic material and having a reduced diameter shaft projecting axially from an upper transverse surface of said body for journaling a bobbin supported on such transverse surface of said block;

said block also having, below said shaft, a transverse channel therethrough of the cross-sectional shape to receive said arm cooperatively and frictionally;

said channel extending completely through the block in one direction and transverse of the block axis and also extending about two-thirds of the way deep into and across the block in a direction coplanar with but transverse of the first named direction;

said channel having its open edge laterally and outwardly divergent;

said block at said channel having sufficient resiliency and flexibility to grip said arm when the block is applied to it.
UNITED STATES PATENT OFFICE
CERTIFICATE OF CORRECTION


Inventor(s) Henry Raskin

It is certified that error appears in the above-identified patent and that said Letters Patent are hereby corrected as shown below:

On the cover sheet [72]
"410 N. Woodward," should read -- 9935 Oakhurst Rd. --.

Signed and sealed this 11th day of April 1972.

(SEAL)
Attest:

EDWARD M. FLETCHER, JR. ROBERT GOTTSCHALK
Attesting Officer Commissioner of Patents