

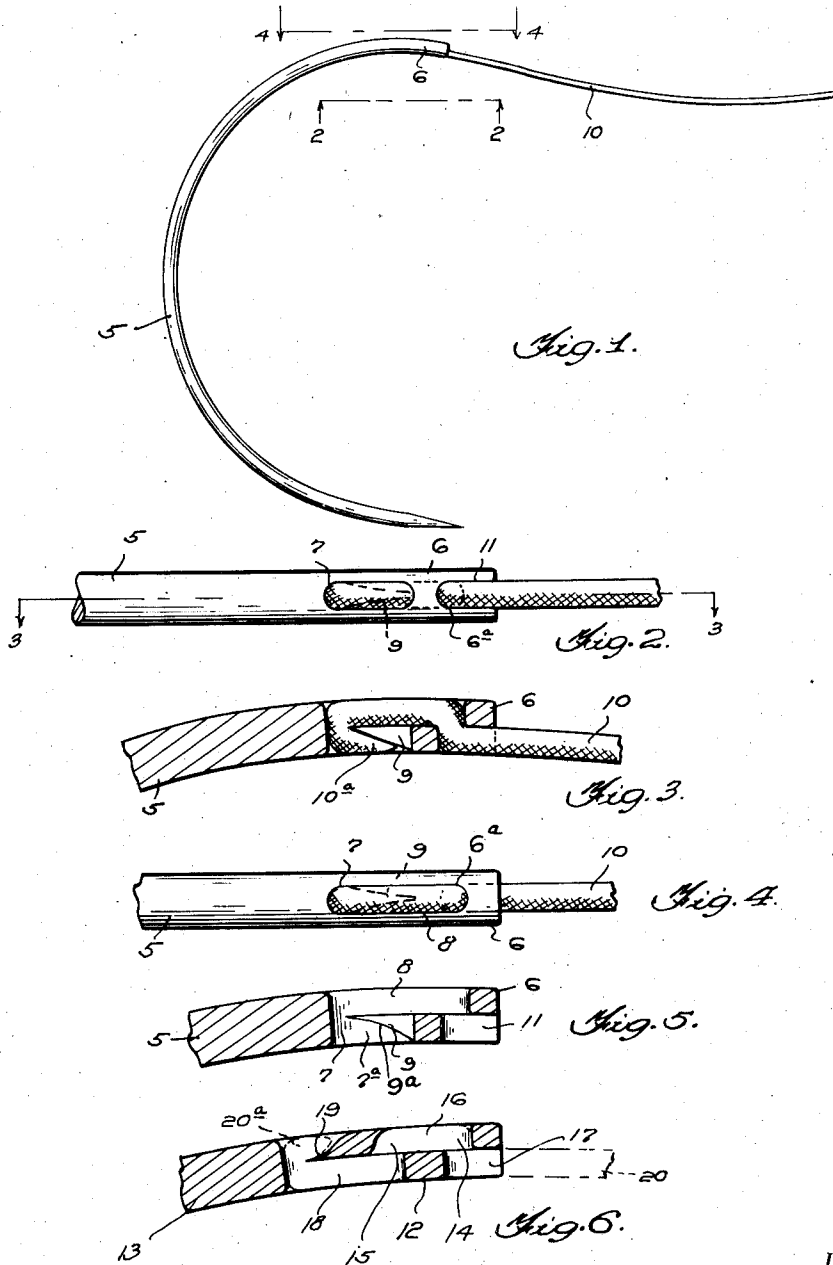
Aug. 16, 1949.

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2,479,464

SURGICAL NEEDLE

Filed Nov. 4, 1946



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UNITED STATES PATENT OFFICE

2,479,464

SURGICAL NEEDLE

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Application November 4, 1946, Serial No. 707,428

2 Claims. (Cl. 128—339)

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This invention relates to new and useful improvements in needles and more particularly to a needle for surgical use.

The primary feature of this invention is to provide a needle of the class referred to having an improved eye adapted to securely hold one end of a gut or thread in such a manner that said thread will not produce a hole larger than the body of the needle.

Another important feature of this invention is to provide a needle of this character having a point end and an eye end and adapted to hold a single gut or thread in its eye end, said thread being readily secured to the eye end and detached therefrom.

A further feature of this invention is to provide a needle for surgical use that is efficient and reliable in operation, relatively inexpensive to manufacture, and otherwise well adapted for the purposes for which the same is intended.

Other objects and advantages reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawings forming part hereof, wherein like numerals refer to like parts throughout, and in which:

Figure 1 is a side elevational view of the invention with a thread attached to the eye end thereof.

Figure 2 is an enlarged sectional view taken on line 2—2 of Figure 1.

Figure 3 is a sectional view taken on line 3—3 of Figure 2.

Figure 4 is an enlarged sectional view taken on line 4—4 of Figure 1.

Figure 5 is a view similar to Figure 3 with the gut or thread removed therefrom, and

Figure 6 is a sectional elevational view of the eye end of the needle in slightly modified construction.

Referring now to the drawings in detail, wherein, for the purpose of illustration, I have disclosed a preferred embodiment of the invention, the numeral 5 represents the usual tapered and pointed body which may be either curved or straight, and which is provided with a rear end 6.

Near the rear end 6 of the body 5, a rear eye 6a and a front eye 7 are formed in said body, and a longitudinal groove 8 in one side of said body 5 connecting said eyes 6a, 7 on one side of the longitudinal axis of said body 5. Forwardly of the rear eye 6a, the body 5 is formed, on the other side of said longitudinal axis with a rearwardly tapering slot, or notch, portion 9 therein extending along the groove 8 and having an outer

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side edge 9a inclining rearwardly and outwardly of said body 5 to form in the side of said body 5 opposite that, in which the groove 8 extends, a groove 7a extending rearwardly from the front eye 7. The rear eye 6a opens into a groove 11 extending rearwardly therefrom in the side of the body 5 opposite that in which the groove 8 extends, said groove 11 opening onto the rear end 6 of the body 5.

In threading the needle, the thread 10 is passed through the rear eye 6a from the side of the body 5 having the groove 11 therein so that the thread when pulled will lie in the groove 11. The threaded end 10a of the thread 10 is then passed from the opposite side of the body 5 through the front eye 7, then pulled to cause the thread to enter the groove 8 and be wedged in the slot, or notch, portion 9, and then pressed into the groove 7a.

Figure 6 illustrates a modified construction in which the rear end 12 of the body 13 of the needle is formed with a rear eye 14 and a front eye 15 connected on one side of said body by a groove 16 corresponding to the groove 8 of the preferred embodiment, the rear eye 14 opening into a groove 17 in the other side of said body 13 corresponding to the groove 11 of the preferred embodiment. The front eye 15 opens into a longitudinal groove in the side of the body 13 opposite the side in which the groove 16 is formed, said groove 18 extending forwardly of said eye 15 and opening at its front end into a tapered crotch portion 19 in the same side of the body 13 as said groove 16, said crotch portion 19 being inclined inwardly of said body 13 and forwardly of said body.

In threading the needle of modified construction, the thread 20 shown in broken lines, is passed through the groove 17 and then through the rear eye 14. The thread 20 is then passed, in a reverse direction, through the front eye 15 after which the threaded end 20a is wedged into the crotch portion 19 with the thread lying in the groove 18.

The thread lying in groove 16 and tapered crotch 19 in grooves 17 and 18 is of smaller circumference than the circumference of the needle.

In view of the foregoing description taken in conjunction with the accompanying drawings it is believed that a clear understanding of the construction, operation and advantages of the device will be quite apparent to those skilled in this art. A more detailed description is accordingly deemed unnecessary.

It is to be understood, however, that even though there is herein shown and described a preferred embodiment of the invention the same is susceptible to certain changes fully comprehended by the spirit of the invention as herein described and the scope of the appended claims.

What I claim:

1. A surgical needle comprising a body provided in the rear end portion thereof with a pair of front and rear threading eyes and a groove in one side of the body connecting said eyes, said body having a rearwardly tapering crotch portion therein forwardly of the rear eye, extending along said groove and rearwardly from the front eye in the side of the body opposite the groove, and said body further having, in the side thereof opposite the groove, a second groove extending from the rear eye to the rear end of the body, whereby a thread may be extended oppositely through said eyes to lie in said grooves with a terminal end wedged in said crotch portion and thereby be securely fastened to the body within the confines thereof.

2. A surgical needle comprising a body provided in the rear end portion thereof with a pair of front and rear threading eyes and a groove in one side of the body connecting said eyes, said body having a rearwardly tapering crotch portion

therein forwardly of the rear eye, extending along said groove and rearwardly from the front eye, and said body further having, in the side thereof opposite the groove, a second groove extending from the rear eye to the rear end of the body, whereby a thread may be extended oppositely through said eyes to lie in said grooves with a terminal end wedged in said crotch portion and thereby be securely fastened to the body within the confines thereof, said crotch portion having an inclined edge on the side of the body opposite the first-named groove to provide a third groove in said body extending rearwardly from the front eye on the side of the body opposite the first-named groove for receiving the end of the thread therein.

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