

July 19, 1927.

1,636,062

A. MACLURE

SCALPEL

Filed Dec. 14, 1926

Fig. 1.

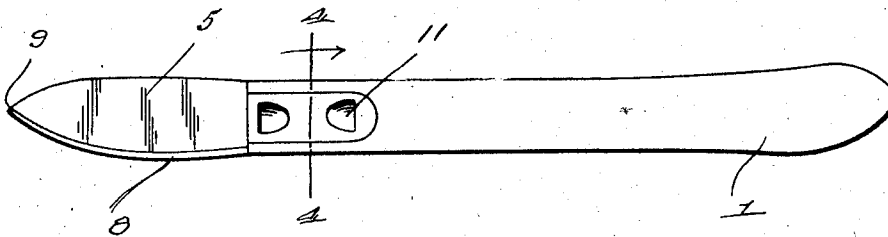


Fig. 2.

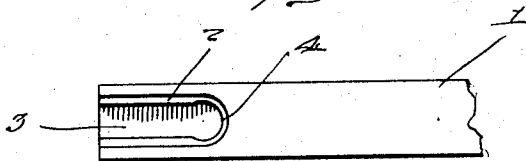


Fig. 3.

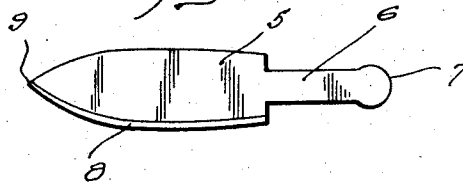
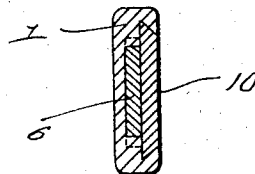


Fig. 4.



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UNITED STATES PATENT OFFICE.

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SCALPEL.

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This invention relates to an improved scalpel, that is a small pointed knife used in dissections and in surgery.

My principal aim is to generally improve upon knives of this class by providing one wherein the blade is detachable from the handle to permit ready replacement and removal.

It is the customary practice to have the blade permanently fastened to the handle, and after each operation to sterilize the instrument for sanitary reasons. It is my idea however, to have the blade removable so that it can be taken off and thrown away after the operation, somewhat as is the case with the ordinary safety razor. Naturally the blade becomes somewhat dull and when used on contagious anatomy becomes laden with germs such as might promote injurious results when used on another patient. My idea is to overcome this by employing a new blade for each operation.

In carrying out this end I construct the handle with a main groove, and a counter-groove, the shank of the blade being fitted into the latter and there being a slidable retaining plate fitted into the main groove for holding the blade in place.

In the drawing:—

Figure 1 represents a side elevation of a scalpel constructed in accordance with the invention.

Figure 2 represents a fragmentary end view with the blade removed.

Figure 3 is a side elevation of the blade itself.

Figure 4 is a cross section on the line 4—4 of Figure 1.

Referring to the drawing in detail it will be seen that the reference character 1 designates a handle which may be of any appropriate material and configuration to facilitate handling and efficient manipulation. As stated, this handle is formed at one end and on one side with a main groove 2 which opens through the end and a counter-groove 3 which also opens through the end. The counter-groove has an enlarged portion 4 at its inner end. The corresponding end of the

groove 2 is round. Also the longitudinal walls of the groove 2 are undercut as shown in Figure 4.

The blade is represented by the reference character 5 and it includes a relatively small shank 6 having a rounded head 7. As is customary, the blade is characterized by a sharp cutting edge 8 and a small point 9.

The retaining plate 10 is simply in the form of a slide having beveled edges fitting into the undercut portions of the grooves 2 and having a round end fitting into the correspondingly shaped end of this groove. In addition, this retaining plate is formed with depressions 11 forming recesses for reception of the tips of the fingers to facilitate insertion and removal.

With this arrangement it is obvious that the headed and reduced shank of the blade is fitted into the correspondingly shaped groove and then the slide and retaining plate 10 is placed in position so that the parts assume the relationship shown better in Figure 1 when the instrument is in use.

It will be apparent from the foregoing description and drawing that I have evolved an exceptionally simple and inexpensive scalpel which may be employed in an exceptionally efficient manner in dissecting human anatomy. Of course, the instrument is employed in the same manner as the ordinary scalpel for surgical operations, but the important advantage is in having the blade removable so that after each operation it may be disconnected from the handle and thrown away. My idea is to promote sanitation in surgical operations of this kind to minimize transfer of diseases from one person to another. No doubt by considering the description in connection with the drawings a clear understanding of the invention will be had. Therefore a more lengthy description is thought unnecessary.

While I have shown and described the preferred embodiment of the invention it is to be understood that minor changes in size, shape, and arrangement coming within the scope of the adjointed claim may be resorted to if desired.

Having thus described the invention, what I claim as new is:—

A scalpel for surgical use comprising a handle having a main groove and counter-groove formed at one end and in one side, a cutting blade having a cutting edge, a small point, a reduced centralized shank having a rounded head, said shank being fitted into said counter-groove and said counter-groove

being shaped to conform to said shank and head, the opposite longitudinal edges of said main groove being undercut, and a retaining plate fitted slidably into said main groove and having beveled edges cooperating with the undercut portions of the groove. 10 15

In testimony whereof I affix my signature.

ALBERT MACLURE.