Oct. 12, 1954 G. J. HOOD 2,691,377

POWER-DRIVEN DERMATOME

Filed Sept. 22, 1952

2 Sheets-Sheet 1

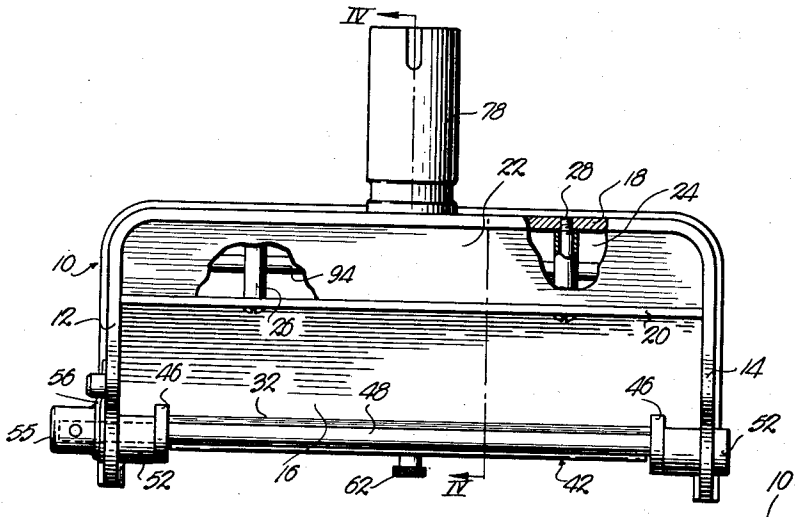


Fig. 1.

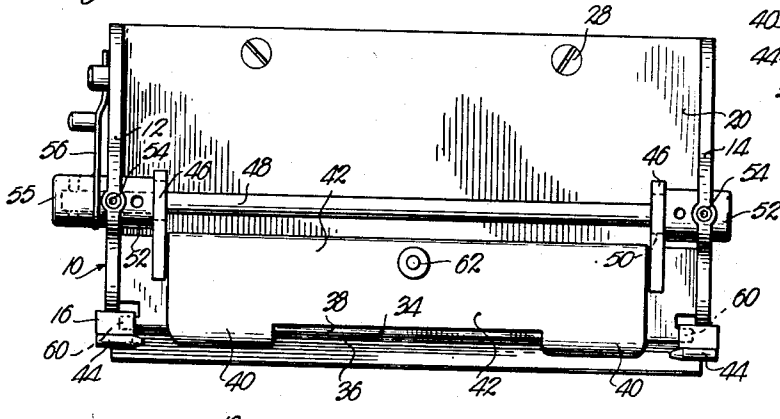


Fig. 2.

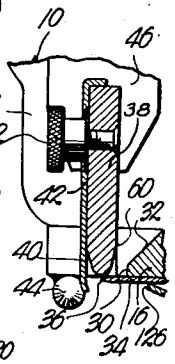


Fig. 10.

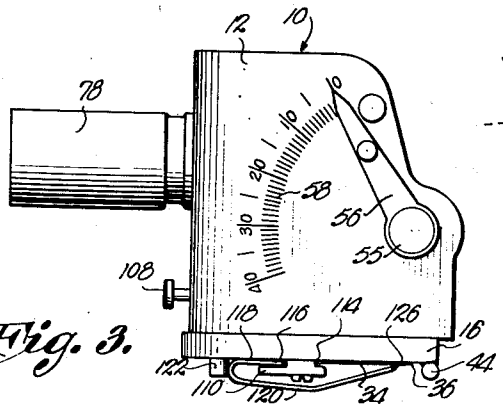


Fig. 3.

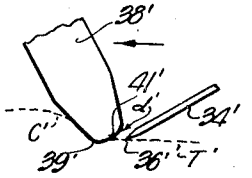


Fig. 8.

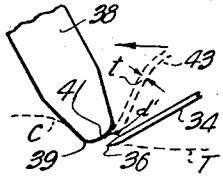


Fig. 9.

INVENTOR.
George J. Hood
BY
ATTORNEY.

Oct. 12, 1954

G. J. HOOD

2,691,377

POWER-DRIVEN DERMATOME

Filed Sept. 22, 1952

2 Sheets-Sheet 2

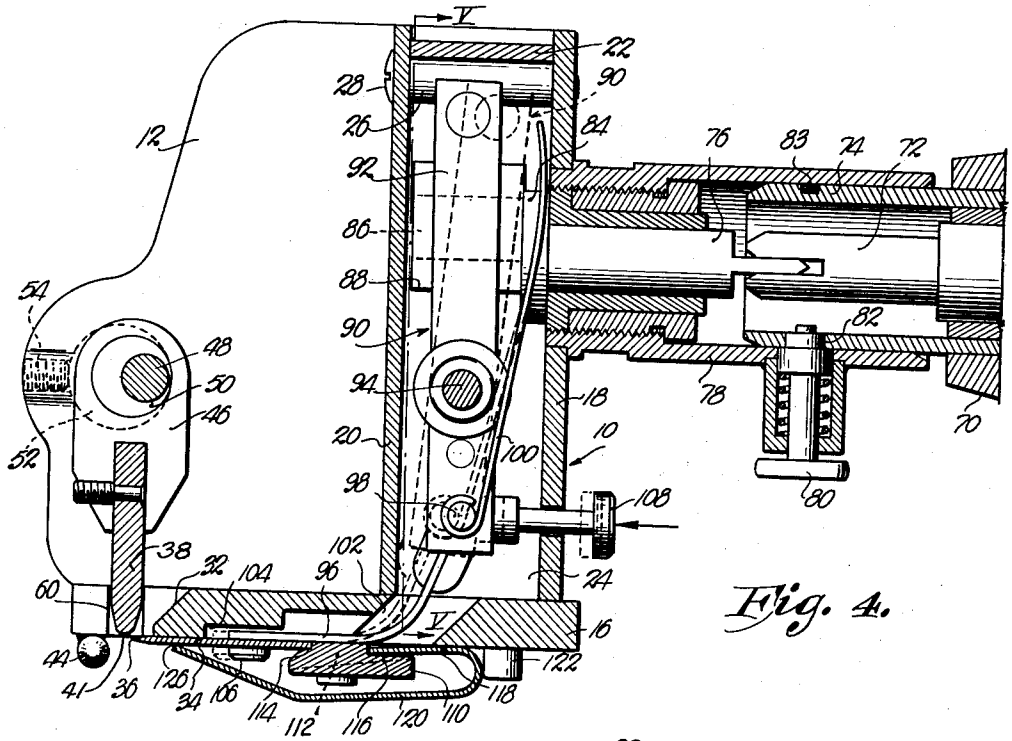


Fig. 4.

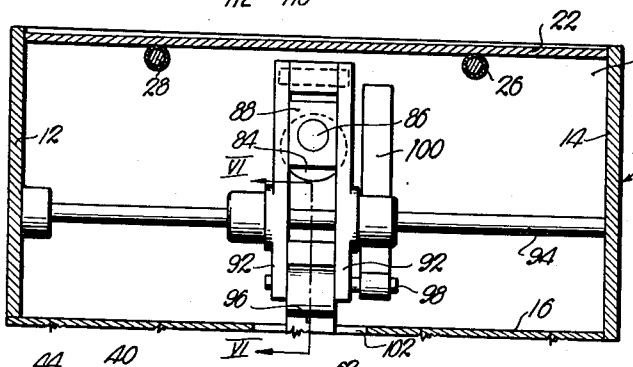


Fig. 5.

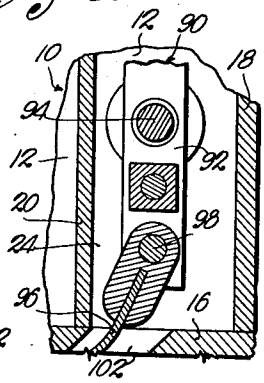


Fig. 6.

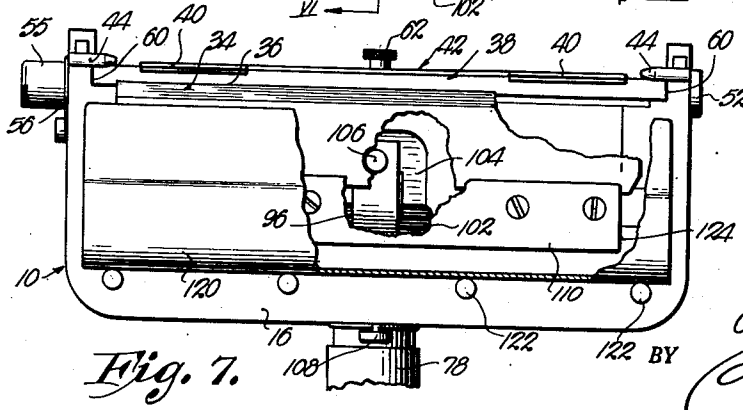


Fig. 7.

INVENTOR.
George J. Hood
BY
Joel Hoover
ATTORNEY.

Patented Oct. 12, 1954

2,691,377

UNITED STATES PATENT OFFICE

2,691,377

POWER-DRIVEN DERMATOME

George J. Hood, Lawrence, Kans.

Application September 22, 1952, Serial No. 310,796

12 Claims. (Cl. 128—305)

1

This invention relates to surgical instruments, and more articularly to a cutting device in the nature of a dermatome for removing skin from a patient's body to be used subsequently in grafting operations, an object being to provide a power operated instrument of the type having a reciprocable blade so arranged with other cooperating elements of the device to provide accuracy in the cutting operation and render the cutter easily operable by a single user without necessitating additional aid.

It is the primary object of this invention to provide a dermatome having the proper relationship between the leading edge of the gage bar and the cutting edge of the knife blade so that the graft cut will be of accurate thickness and the knife will cut at all times without gouging though the instrument is tilted relative to the skin.

It is the most important object of this invention to provide a dermatome that includes a reciprocable knife having an elongated cutting edge, disposed immediately below a gage bar that is adjustable toward and away from the cutting edge to determine the thickness of the cut, the gage bar being precisely disposed so as to permit accurate adjustments and at the same time not interfere with the cutting action.

Another very important object hereof is to provide in an instrument of the aforementioned class, a combination gage bar and knife blade assembly wherein the gage bar is so disposed as to assure accurate thicknesses in the cuts being made, notwithstanding variances in the angularity of the instrument to the body of the patient during use of the instrument to make the cut.

Another important object of this invention is to provide a dermatome adapted for cutting strips of indeterminate length and selected widths, as well as thicknesses precisely as desired by the user, there being means for providing simple adjustments without the necessity of using complicated tools or the skill of an engineer.

It is an aim of this invention to provide means for adjusting the aforesaid gage bar through novel application of dual eccentric elements, one of which is normally set at the factory by the manufacturer, and the other being employed by the user for making more precise adjustments immediately prior to placing the instrument in use.

A still further aim of this invention is to provide one or more removable plates adapted for support by the gage bar and having parts disposed directly in front of the cutting edge of the knife blade to determine the width of cut.

2

It is an additional aim hereof to include in an instrument of the type forming the subject matter of this invention, guard means adjacent each end respectively of the knife blade to obviate gouging into the patient during the cutting operations at the ends of the cutting edge.

Another object of this invention is to provide a dermatome having a quickly and easily removable knife blade that is held in place against the lowermost face of a knife bed through employment of a resilient clamp, the clamp being readily removable and there being provided a novel guide member having the function of releasably receiving the clamp, as well as the knife blade itself.

A further object of this invention is to provide novel driving mechanism for the reciprocable cutter blade that includes as a part thereof, a quickly releasable mounting assembly for the blade itself.

A still further object hereof is the provision of a reciprocable yoke adapted for operable connection with the rotatable drive shaft of an electric motor or other prime mover, the yoke itself being swingable on its reciprocable axis and having a trigger arm swingably mounted thereon for receiving the knife blade, whereby swinging action of the yoke and the trigger arm determines the manner of removal and replacement of the knife blade.

As will hereinafter appear, the present invention has a large number of additional, more minor objects, all of which will be made clear or become apparent as the following specification progresses.

In the drawings:

Figure 1 is a top plan view of a power driven dermatome made pursuant to my present invention.

Fig. 2 is a front elevational view thereof.

Fig. 3 is an end elevational view thereof.

Fig. 4 is an enlarged, transverse, cross-sectional view taken on irregular line IV—IV of Fig. 1 with the width plate removed.

Fig. 5 is a reduced, fragmentary, cross-sectional view taken on line V—V of Fig. 4, looking in the direction of the arrows.

Fig. 6 is an enlarged, fragmentary, detailed, cross-sectional view taken on line VI—VI of Fig. 5.

Fig. 7 is a reduced, fragmentary view of the lowermost face of the dermatome, parts being broken away to reveal details of construction.

Fig. 8 is a schematic, cross-sectional view illustrating a gage bar and an incorrectly positioned cutter blade, all of which becomes inop-

erable during tipping relative to the skin, so as to present a better understanding of the invention.

Fig. 9 is a view similar to Fig. 8 showing the operation of the present invention; and

Fig. 10 is a fragmentary, cross-sectional view similar to Fig. 4 showing the width plate in place.

Many types of dermatomes and other cutting instruments involving the use of an elongated, reciprocable knife blade have heretofore been developed, but so far as I am aware, none have satisfactorily eliminated all interference with the desired action of the blade in cutting relatively thin strips from an object such as the body of a patient that is extremely pliable and which tends to yield under the impact of cutting instruments of this type. Manifestly, it is essential that the instrument be provided with means for determining the thickness of cut and the means heretofore provided usually includes a gage bar or guard that is disposed forwardly and/or in front of the cutting edge of the blade itself, thereby interfering with its desired operations. These defects have been eliminated in the instrument about to be described through the provision of a novel gage bar and knife blade assembly.

The instrument includes a frame broadly designated by the numeral **10**. Frame **10** includes a pair of spaced, parallel side walls **12** and **14** that are interconnected adjacent the lowermost edges thereof by a knife bed **16**, by a rear wall **18**, and by a partition **20**, rear wall **18** and partition **20** being relatively parallel, perpendicular to the side walls **12** and **14** and also joined to the knife bed **16** on the uppermost face of the latter. A cover plate **22** between the side walls **12** and **14**, and between the rear wall **18** and partition **20**, closes a hollow compartment **24**. Cover plate **22** is removable and to this end, there is provided a number of tubes **26** rigid to the lowermost or innermost face of the plate **22** between the wall **18** and partition **20** for receiving bolts **28** that interconnect the partition **20** and the rear wall **18**.

The knife bed **16** is cut away to present an elongated, forwardmost, longitudinal edge **30**, provided with a rearwardly beveled portion **32**. An elongated, flat knife blade **34** is mounted on the lowermost face of the bed **16** for reciprocation on its longitudinal axis along a path of travel parallel with the forwardmost edge **30** of bed **16**. Blade **34** extends forwardly beyond the edge **30** and terminates in a cutting edge **36** that is spaced rearwardly from the forwardmost extremities of the frame **10**.

The depth of cut, by the edge **36** of blade **34**, is determined by an elongated or rectangular gage bar **38** that is disposed directly above the cutting edge **36** and between the walls **12** and **14** of frame **10**. It is highly important that the edge **36** of blade **34** be parallel with the lower edge **41** of gage bar **38** and in alignment with a central longitudinal plane through the gage bar, said plane being perpendicular to the upper face of blade **34**.

The precise disposition of the gage bar **38** becomes further apparent when it is noted that a pair of guards **44**, rigid to the knife bed **16**, are disposed directly in front of the cutting edge **36** at each of the two ends thereof. The guards **44** are effective in preventing gouging of the patient during the cutting operations by preventing the ends of the cutting edge **36** from reaching the patient's body during the cutting of skin therefrom.

The gage bar **38** is rigidly secured to a pair of spaced arms **46** that depend from a shaft **48** that interconnects the walls **12** and **14** of frame **10**. Shaft **48** is rigidly and eccentrically mounted in a pair of cams **50** and is also eccentrically mounted in bearing elements **52**. There is a bearing element **52** rotatably mounted in each wall **12** and **14**, the latter carrying setscrews **54** that bear against the rotatable elements **52** to hold the same against rotation. Thus, each element **52** constitutes a bearing for rotatably receiving shaft **48**.

Hub **55**, fixed to shaft **48** carries a resilient pointer **56** that bears against the outermost face of the wall **12** and indicates the depth of cut by virtue of calibrations **58** on said outermost face of wall **12**. It is seen that rotation of the bearing elements **52** within the walls **12** and **14**, raises and lowers the members **50**, shaft **48**, arms **46** and gage bar **38** toward and away from the uppermost face of blade **34** or the cutting edge **36** thereof. Adjustments of elements **52** are made at the factory and the setscrews **54** are brought to bear against the bearing elements **52** to normally hold the same against rotation. Thereupon the operator may make more precise adjustments with respect to the distance between the lowermost edge of the gage bar **38** and the cutting edge **36** by manipulation of the pointer **56**. Such action rotates the shaft **48** and accordingly, the members **50** that are rotatable within their arms **46** to raise and lower the gage bar **38**. Grooves **60** in the knife bed **16** receive the ends of the gage bar **38** and guide the same along its reciprocable path of travel toward and away from the knife blade **34**.

The lowermost longitudinal edge of the gage bar **38** is preferably formed as shown in Figs. 4, 9 and 10 of the drawings, and edge **36** should be disposed relatively close to legs **40** of a U-shaped plate **42** when the latter is mounted on the gage bar **38** (see particularly Fig. 10). It is noted that the legs **40** are disposed forwardly of and in overlapping relationship to portions of the cutting edge **36** as distinguished from the gage bar **38** that is entirely above the knife blade **34** where the same will not interfere in any way whatsoever with the cutting action of the instrument when the same is placed in use. The legs **40** of the plate **42**, when the latter is placed in use, being in front of the edge **36**, limit the extent of cutting action and therefore, determine the width of the strip to be cut.

The width determining plate **42** is used only when the strip to be cut is of less width than the distance between the proximal innermost ends of the guards **44**. It is contemplated that a plurality of plates **42** shall be provided for use with the instrument as desired, and since the same are identical except only for the differences in distances between the legs **40**, only one plate **42** has been illustrated in the drawings. Plate **42** which lies directly against the outermost face of the gage bar **38** is provided with releasable fastening means **62** to hold the same against displacement.

Any suitable prime mover may be utilized for driving the blade **34** and the same may either be removably attached directly to the dermatome or connected thereto through the medium of a flexible shaft. For purposes of illustration, there is shown fragmentarily in Fig. 4 of the drawings, a casing **70** of an electric motor hav-

ing a drive shaft 72 within a tubular housing 74. Shaft 72 is removably connected with a driven crank shaft 76 forming a part of the dermatome hereof and mounted within a tubular housing 78 that releasably receives the housing 74 of the motor.

One way of interconnecting the housings 74 and 78 is illustrated and includes a spring-loaded plunger 80 on the housing 78 that extends into a hole 82 within an annular groove 83 formed in the tube 74. The tubular housing 78 is carried by the rear wall 18 of frame 10 and communicates with the compartment 24. The crank shaft 76 is rotatably mounted in a bearing, bushing or the like, carried by the housing 78 as shown in Fig. 4, and has a disc 84 rigid to the innermost end thereof and disposed within the compartment 24. An inwardly extending pin 86 on the disc 84 is eccentric to the axis of rotation of shafts 72 and 76 and extends through a polygonal block 88 carried by a yoke-like drive member within the compartment 24 and broadly designated by the numeral 90.

Yoke 90 consists of a pair of spaced, elongated bars 92 (Fig. 5) which slidably receive the block 88 for reciprocation between the bars 92 toward and away from a shaft 94 that interconnects the walls 12 and 14 within compartment 24 below block 88 and above the bed 16. The bars 92 of yoke 90 are mounted on the shaft 94 intermediate the ends of the bars 92 for reciprocation of the yoke 90 along the shaft 94 and for swinging movement on shaft 94 in the manner illustrated by dotted lines in Fig. 4.

A substantially L-shaped trigger arm 96 is carried by the yoke 90 at the lowermost end thereof below the shaft 94 and between the bars 92. A pin 98 parallel with the shaft 94, pivotally mounts the trigger arm 96 and is carried by the bars 92. Pin 98 extends beyond one of the bars 92 as shown in Fig. 5, and has an elongated leaf spring 100 secured thereto. Spring 100 extends upwardly between the shaft 94 and the rear wall 18, and normally bears against the innermost face of the latter as is clear in Fig. 4.

The bed 16 has an opening 102 for clearing the trigger arm 96 that extends forwardly beneath the knife bed 16 into a cavity 104 formed in the lowermost face of the latter. Trigger arm 96 overlies the blade 34 and has a trigger pin 106 depending therefrom that extends into an opening provided therefor in the blade 34 midway between the intermediate ends thereof.

A manually operable push button 108 carried by the rear wall 18 below the housing 78, is aligned with the drive member or yoke 90 for imparting swinging movement thereto and to the trigger arm 96 when blade 34 is removed or replaced.

An elongated guide member 110 is mounted directly on the lowermost face of the bed 16 and is provided with a cavity 112 for clearing the trigger pin 106 when assembling the parts of the dermatome. A guide channel 114 along one longitudinal edge of the member 110, slidably receives the rearmost longitudinal edge of the blade 34 and a second channel 116 along the opposite longitudinal edge of the member 110, receives leg 118 of a resilient clamp 120. Leg 118 bears against the lowermost face of the bed 116 rearwardly of the guide member 110, and is held within the guide channel 116 by a plurality of studs 122 depending from the bed 16. A small dimple 124 on the leg 118 bears against the proximal end of the guide member 110 as shown in

Fig. 7 of the drawings, and a second dimple, not shown, at the opposite end of the guide member 110 releasably holds the clamp 120 against movement on its longitudinal axis.

The clamp member 120 is open at its ends, but otherwise encloses the guide member 110, underlies the projection 106 and a substantial portion of the blade 34. That longitudinal edge of the clamp 120 opposite to the loop thereof forming leg 118, is designated by the numeral 126, and is in line contact throughout is length with the blade 34. By virtue of the resilient nature of the clamp 120, the edge 126 is held biased against the blade 34, thereby cooperating with the guide 110 in holding the blade 34 against the lowermost face of bed 16.

While the operation of the dermatome hereof becomes apparent from the foregoing description, it is well to point out that reciprocable movement of the blade 34, through rotation of the shaft 72, takes place by virtue of the oscillation of the yoke 90 on the shaft 94. As disc 84 rotates, the block 88 reciprocates toward and away from the shaft 94 by virtue of the rotative mounting of block 88 on the eccentric pin 86. Accordingly, the blade 34 is reciprocated through the trigger arm 96 along a path of travel parallel with the shaft 94. During normal operation, the yoke 90 is disposed as illustrated by full lines in Fig. 4, and is held against swinging movement toward the partition 20 by spring 100. This spring 100 serves to hold the trigger arm 96 interlocked with the blade 34, keeping the latter within the guide channel 114.

When it is desired to remove the blade 34, the clamp 120 is shifted in either direction longitudinally thereof to remove the same entirely from the guide member 110. Thereupon, the operator pushes inwardly upon the button 108 against the action of spring 100, to cause relative swinging movement between the yoke 90 and the trigger arm 96. Such action shifts the blade 34 away from the bed 16 and blade 34 will thereupon readily drop from within the channel 114 and from the projection 106.

Replacement of the knife 34 is effected while the push button 108 is depressed. The functions of the clamp 120, the gage bar 38, the plate 42 and the guards 44, as well as the operation of gage bar 38, through manipulation of pointer 56 and/or the bearing elements 52 upon loosening of the setscrews 54, have all been made clear as the foregoing description progressed, and need not be repeated.

During use, the housing 78 or the prime mover 70 itself, is utilized as a handle and the instrument is moved across the patient's body along the area from which skin is to be removed and such strip of skin 43 moves between the lowermost face 41 of gage bar 38 and the cutting edge 36 of knife 34, upwardly along the inclined portion 32 of bed 16, and thence into the space provided between the gage bar 38 and the partition 20, as well as between the side walls 12 and 14. Skin 43 automatically folds upon itself upon the bed 16 in front of the partition 20 and therefore, a single operator may use the dermatome without need of assistance in handling the removed skin strips 43 during the cutting operations. The guards 44 and/or the inclined portion of clamp 120 immediately behind the edge 126 thereof, ride along the surface being cut, depending upon the angularity at which the instrument is held by the user. It is to be stressed however, that such angularity has no effect upon the cut-

ting action and particularly upon the thickness of the skin being cut because of the novel arrangement of the gage bar **38** with respect to the knife **34** immediately therebelow.

The gage bars **38'**—**38** and blades **34'**—**34** are shown in Figs. 8 and 9 as they will appear in relation to the surface of the body of the patient when the dermatome is tilted as it often will be when in use. When cutting a graft **43**, it often is difficult or impossible to keep the blade **34** approximately flat against the body of the patient.

In order to fully explain the interaction between the skin, the gage bar and the knife blade when the dermatome is tilted so that the blade face is lifted out of parallelism with the skin surface, Fig. 8 purposely shows the blade edge **36'** set too far back to cut a graft. When using the dermatome, the gage bar **38'** presses against the body of the patient and moves in the direction of the arrow which is parallel to the body of the patient. The skin, indicated by a broken line, flows along the forward face and around the leading rounded edge **39'** of the gage bar **38'** as the dermatome is pushed forward. The pressure of the gage bar **38'** against the body of the patient forces the flesh into compression in the general area C' ahead of the gage bar **38'**, while the skin surface behind the gage bar **38'** is pulled in tension along T'. This tension soon pulls the skin out of contact with the lower face **41'** of the gage bar **38'** along an edge located approximately at "*d'*." The knife edge **36'** is set too far back in Fig. 8 to cut the skin.

To cut a graft **43** when the dermatome is tilted, it thus is essential that the cutting edge **36** of the knife **34** must be forward of the edge "*d*" where the skin withdraws from its contact with the gage bar **38** (Fig. 9).

Also, it is necessary to maintain some pressure, and hence friction, between the skin and the gage bar **38** near the line where the graft **43** is cut so as to keep the skin from vibrating with the reciprocating blade **34**, since such vibration tends to make the blade **34** shred the cut graft **43**. As the flowing skin approaches the edge "*d*" in Fig. 9, the pressure decreases and the friction becomes zero.

In addition, the lower face of the knife blade **34** also tends to lift the skin away from its contact with the gage bar **38**. The three conditions just stated closely limit the location of the knife blade **34** in its relation to the gage bar **38** in order to meet the requirement that the dermatome is to cut a uniform graft **43** when the dermatome is applied at varying angles to the surface of the skin.

The related gage bar **38'** and knife blade **34'** as shown in Fig. 8, will cut a graft only if certain limited conditions are met: The blade **34'** must be held flat, or nearly flat, against the skin. Even then there will be a tendency to shred the graft, and a uniform graft cannot be assured unless additional means are provided to keep the skin from vibrating in the direction of the reciprocating knife edge **36'**. Also, to be sure of cutting a uniform graft, it usually is necessary to force the skin against and around the lower face **41'** of the gage bar **38'** by pulling on the edge of the cut graft. And, the graft will be severed from the patient should the dermatome be tilted forward through a rather small angle.

The area of contact between the skin and the lower edge of the gage bar can readily be demonstrated by coating the skin with some pigment such as printer's ink, and then pressing the gage bar against the skin and moving it across the coated part of the skin, while holding the gage bar tipped forward at a slight angle as indicated in Fig. 8. The markings left by the pigment on the lower edge of the gage bar will show that the skin follows the gage bar but a short distance around its lower edge, whether the edge of the gage bar is flat or rounded. And the imprint of the skin on the gage bar becomes fuzzy near the edge where the skin leaves the gage bar, thus indicating that the contact is not firm, and that conditions for cutting a graft are not stable.

Fig. 9 shows the correct location of the knife edge **36** to the gage bar **38** of the dermatome in order to satisfy the three above-explained requirements that must be met if the dermatome is to cut uniform grafts **43** when the dermatome is held at various angles in relation to the body of the patient so as to give the operating surgeon considerable freedom in holding the dermatome when cutting a graft **43**, to permit cutting a graft **43** from the less accessible areas of the body, and to avoid the need for having an assistant to stretch the graft **43** by pulling thereon while it is being cut. A dermatome designed to conform with Fig. 9 will cut uniform grafts **43** as it is tilted at increasing angles up to 45 degrees or more.

In Fig. 9, the dermatome is being moved parallel to the body of the patient in the general direction indicated by the arrow. The skin surface of the patient and the cut graft **43** are indicated by broken lines. The knife blade **34** is inclined at an angle with the surface of the skin, and the gage bar **38** is tilted forward at a corresponding angle. The distance of the knife edge **36** from the lower face **41** of the gage bar **38** is closely equal to the thickness "*t*" of the graft **43** that is being cut. The knife edge **36** is placed forward of the edge "*d*" where the skin begins to be pulled away from contact with the lower face **41** of the gage bar **38**. The knife edge **36** must also be rearward of the leading edge **39** of the gage bar **38** before the distance of the knife edge **36** from the lower face of the gage bar **38** is appreciably increased by the rounding of the leading edge **39** of the gage bar **38**. The edge **36** of the knife blade **34** must be precisely located in order to meet the three limiting conditions explained in previous paragraphs, even when the dermatome is tilted as much as 45 degrees, since the location of the edge "*d*" changes with the angle of tilt. In the dermatome, the knife edge **36** must be placed directly opposite a narrowly limited area of the lower edge **41** of the gage bar **38**. The width of this area is determined as described above. This width is estimated as being less than three times the thickness of the average graft **43** that is cut by the dermatome. If the knife edge **36** is placed in front of the leading edge **39** of the gage bar **38**, then the patient may be gouged, the thickness of the graft will vary with the pressure and the angle of tilting of the dermatome, and the graft **43** is likely to be shredded.

When the graft **43** is cut to the desired length, it is severed from the body of the patient by lifting the dermatome with the motor **70** running.

Since, as above indicated, it is primarily the aim hereof to improve upon the prior art with respect to gage bar-knife blade relationship, attention is called to Brown et al., No. 2,457,772, the references therein cited, and Eidam, No. 2,428,018.

All of the aforementioned features of the instrument hereof are highly important to efficient operation and each performs its part in present-

ing a delicate instrumentality requiring high precision in the particular use to which the same is to be placed.

Having thus described the invention what is claimed as new and desired to be secured by Letters Patent is:

1. In a dermatome, a frame having an elongated knife bed; an elongated, reciprocable knife blade on one face of the knife bed and having a longitudinal cutting edge extending forwardly beyond the normally forwardmost, longitudinal edge of the bed; and an elongated gage bar on the frame, said gage bar extending along said bed edge in overlapping relationship to the latter, said cutting edge being parallel with the bar in alignment with a central longitudinal plane passing through the gage bar and disposed perpendicularly to the upper face of the bed.

2. In a dermatome, a frame; an elongated knife blade mounted on the frame for reciprocation on its longitudinal axis and having a longitudinal cutting edge; an elongated gage bar carried by the frame, said gage bar having a longitudinal face spaced from said cutting edge of the blade; and a plate on the gage bar, said plate having a portion overlapping a portion of said cutting edge of the knife blade.

3. In a dermatome, a frame having an elongated knife bed; an elongated, reciprocable knife blade on one face of the knife bed and having a longitudinal cutting edge extending forwardly beyond the normally forwardmost, longitudinal edge of the bed; an elongated gage bar extending along said bed edge in overlapping relationship to the latter and overlying said cutting edge; and mounting means for securing the gage bar to the frame and normally holding the same against movement relative to the frame.

4. In a dermatome, a frame having an elongated knife bed; an elongated, reciprocable knife blade on one face of the knife bed and having a longitudinal cutting edge extending forwardly beyond the normally forwardmost, longitudinal edge of the bed; an elongated gage bar extending along said bed edge in overlapping relationship to the latter and overlying said cutting edge; and structure mounting the gage bar on the frame for movement toward and away from said knife blade and provided with means for holding the gage bar in predetermined positions relative to the frame.

5. In a dermatome as set forth in claim 4 wherein said structure includes a rotatable element having cam means operably coupled with the gage bar to move the latter upon rotation of said element.

6. In a dermatome as set forth in claim 5 wherein said structure is provided with bearing members for said element carried by the frame for movement relative thereto for shifting the latter and the gage bar toward and away from the knife blade.

7. In a dermatome, a frame having an elongated knife bed; an elongated, reciprocable knife blade slidable on one face of the knife bed and having a longitudinal cutting edge extending forwardly beyond the normally forwardmost, longitudinal edge of the bed; and a resilient clamp on said bed and bearing against the blade for holding the latter against said face of the bed.

8. In a dermatome, a frame having an elongated knife bed; an elongated, reciprocable knife blade slidable on one face of the knife bed and having a rearmost edge and a longitudinal cutting edge extending forwardly beyond the normally forwardmost, longitudinal edge of the bed; a guide on said face of the bed slidably receiving said rearmost edge of the blade; and a resilient clamp carried by the bed and the guide and bearing against the blade for holding the latter against said face of the bed.

9. In a dermatome as set forth in claim 8 wherein said guide consists of an elongated bar having opposed channels, one slidably receiving the blade, the other slidably receiving said clamp.

10. In a dermatome, a frame; an elongated knife blade mounted on the frame for reciprocation on its longitudinal axis and having a longitudinal cutting edge; an elongated shaft carried by the frame; a drive member mounted on the shaft for reciprocation therealong; and a trigger arm attached to the drive member and connected with said blade, said drive member and said trigger arm being swingable relatively in one direction to a position releasing the blade from the trigger arm.

11. In a dermatome, a frame; an elongated knife blade mounted on the frame for reciprocation on its longitudinal axis and having a longitudinal cutting edge; an elongated shaft carried by the frame; a drive member mounted on the shaft for reciprocation therealong; a trigger arm swingably mounted on the drive member and connected with said blade; and releasable means connected with said arm for yieldably holding the same biased against the blade, said drive member being swingable on the shaft in one direction to a position releasing the blade from the trigger arm.

12. In a dermatome as set forth in claim 11 wherein is provided a drive shaft, and a coupling member operably interconnecting the drive shaft and the drive member for reciprocating the latter, said drive member and said coupling member being relatively slidable.

References Cited in the file of this patent

UNITED STATES PATENTS

Number	Name	Date
1,594,613	Hagen	Aug. 3, 1926
2,288,709	Hood	July 7, 1942
2,579,029	Barker et al.	Dec. 18, 1951