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(54) **BLUNT DISSECTION AND TISSUE ELEVATION INSTRUMENT**

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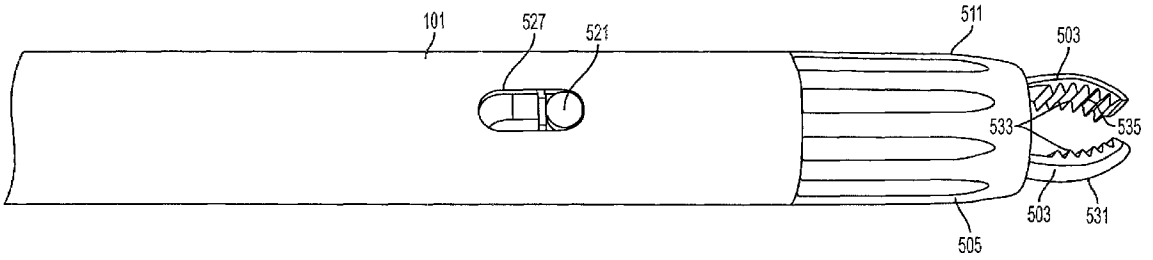
(57) **ABSTRACT**

A handheld medical instrument designed for efficient, atraumatic blunt tissue dissection and/or elevation during surgery. The instrument generally comprises an elongated rigid shaft having a grasping construct at one or both ends. Each of the grasping constructs being sized and shaped to hold a cottonoid or similar disposable dissection device.



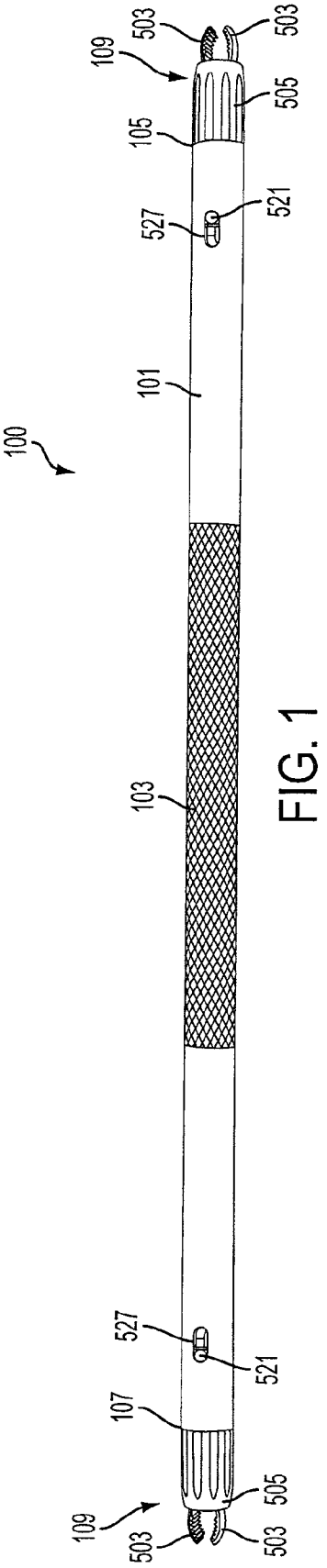

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FIG. 1

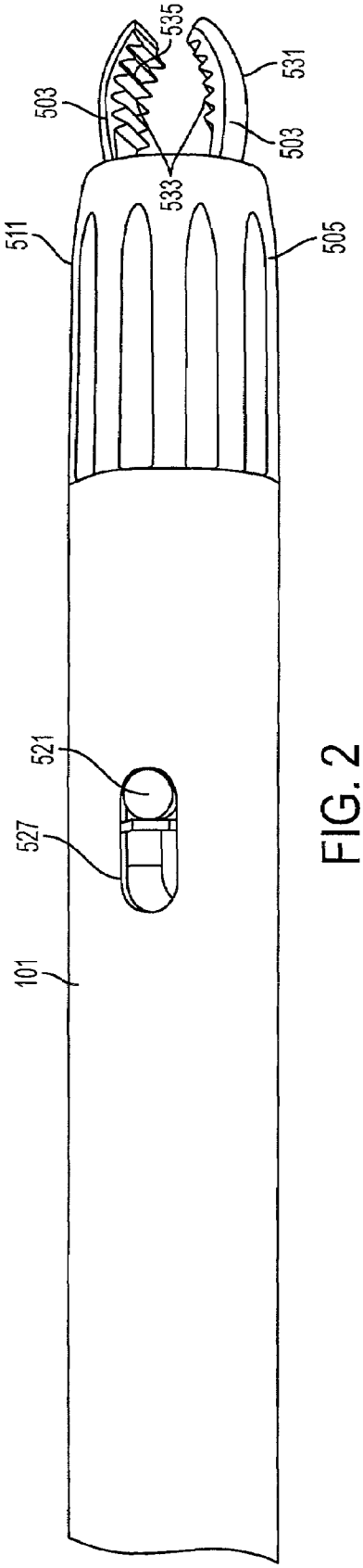

FIG. 2

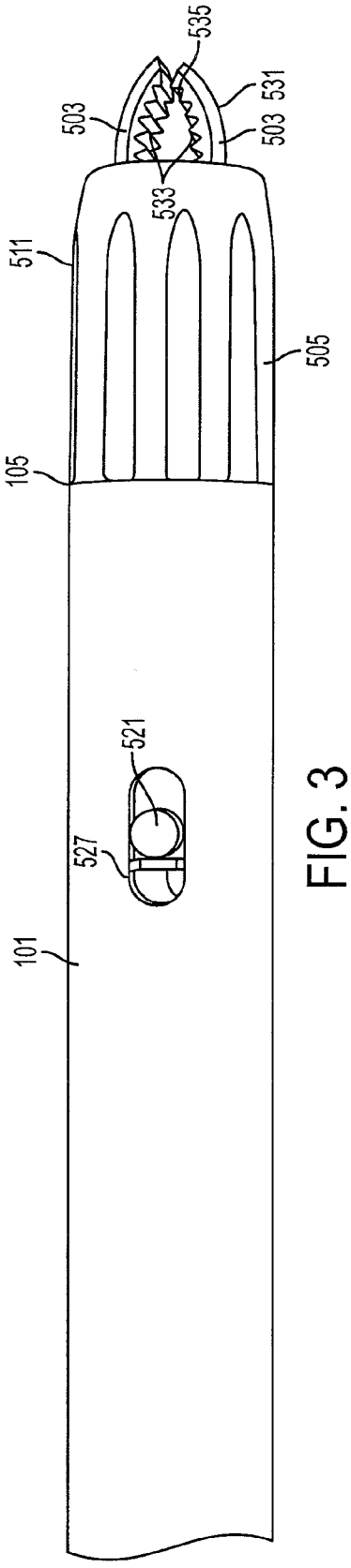

FIG. 3

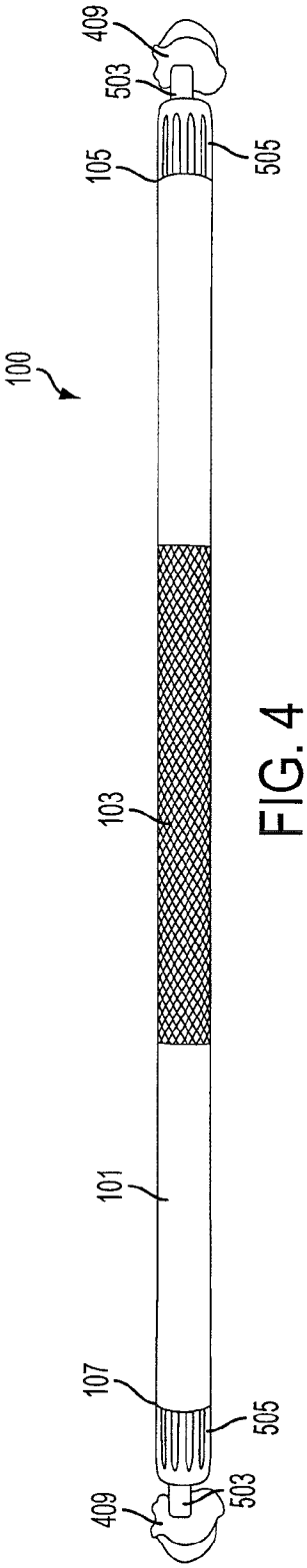

FIG. 4

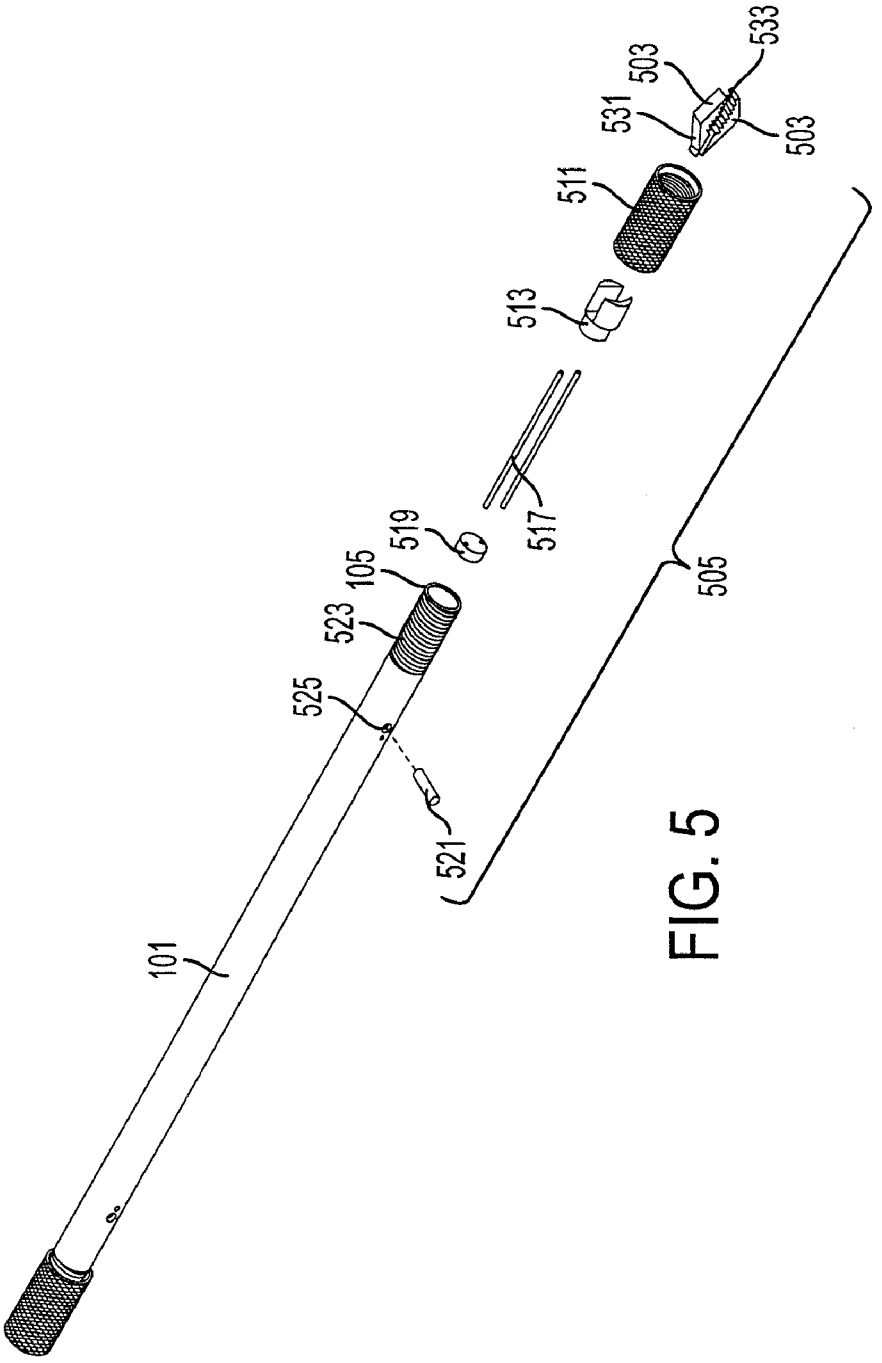

FIG. 5

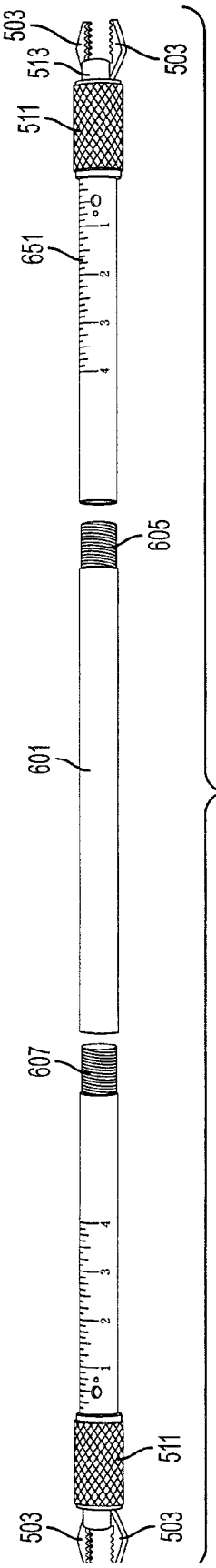

FIG. 6

BLUNT DISSECTION AND TISSUE ELEVATION INSTRUMENT

CROSS REFERENCE TO RELATED APPLICATION(S)

[0001] This application claims benefit of U.S. Provisional Patent Application Ser. No. 60/821,327 filed Aug. 3, 2006, the entire disclosure of which is herein incorporated by reference.

BACKGROUND

[0002] 1. Field of the Invention

[0003] The present invention relates to a surgical device for use in blunt tissue elevation and/or dissection such as in cranial, spine, cervical, abdominal, thoracic, lumbar, endoscopic, laparoscopic, and other types of surgery.

[0004] 2. Description of the Related Art

[0005] In many types of surgery it is necessary to remove or displace tissue in order to perform a procedure. Often, this is to improve a surgeon's vision in an area of interest where more delicate operations need to be performed, or may be to remove tissue which is in the way for a procedure as it either prevents the surgeon from accessing the area of interest with the tools they need to operate on it, or inhibits the application of a prosthetic or other surgical device. One of the more common types of surgery where removal of tissue is necessary is in implantation where it is often necessary to remove tissue from a bone so an artificial device, such as a support plate, can be attached. Removing the tissue provides for a stronger safer attachment and generally can result in an improved surgical outcome.

[0006] Depending on the nature of the tissue to be removed and its location, various different types of tools are desirable. The most common type of surgical removal tool is undoubtedly a sharp device such as a scalpel, blade, saw or drill. These types of devices are necessary for virtually any type of surgery to be performed as they allow the surgeon to cut through what would otherwise be a seamless body structure. In many situations, however, they are preferably not used as should the cutting instrument slip slightly, a very dangerous situation could occur. When a surgeon is working near essential blood vessels, organs, or other sensitive structures, the slightest misplacement or deviation of a sharp device can result in potentially traumatic injury or death.

[0007] The situation can be particularly dangerous if the surgeon is working on the spine or other central nervous system component. While an inadvertent cut to a blood vessel could create a potentially dangerous situation, blood vessels can often be repaired without lasting injury. A severed spinal cord, however, often cannot be repaired even with the most advanced procedures currently known. Because of these and other issues, it is therefore desirable that a surgeon use an instrument when working near the spinal cord or similar sensitive structures which, if it were to inadvertently contact nearby tissue, would have a decreased possibility of causing injury.

[0008] One such way to avoid this type of injury is to utilize a tool which is suitable for separating two types of matter along an existing seam or connection, but is generally unsuitable for "cutting" into seamless matter. This is often referred to as a blunt dissection instrument. Blunt dissection generally allows for tissues to be dissected atraumatically by simply separating the tissue along existing seams or natural planes. That is, the tool separates along natural separations, conjunctions, or faults, without the tool being able to create a new seam on its on. This type of instrument facilitates in surgical exposure and tissue retraction both because of reducing danger to neighboring tissue, and reducing trauma from manmade separation.

[0009] While blunt dissection is a useful medical practice, the tools for blunt dissection are generally ad-hoc and often ill-suited for the task. Current practice in blunt dissection generally involves using a makeshift device which is assembled in the operating room and provides the surgeon with a temporary support for holding a small blunt dissection pad having a relatively rough surface. Generally, this makeshift device consists of a traditional Kelly clamp (locking clamp) clamping a small blunt dissection pad commonly called a cottonoid, between its jaws. A "cottonoid" is a small, rolled piece of gauze commonly used in surgical procedures for a variety of activities. The cottonoid has a relatively rough surface which is capable of grasping tissue and supporting it to separate the tissue from adjoining tissue. This structure is generally unable to damage an intact organ, blood vessel, or similar structure as the cottonoid simply cannot grip tissue with sufficient force to separate structures without an existing seam, and is generally incapable of generating a new seam or separation on its own.

[0010] This makeshift device is unsuitable for the desired task of blunt dissection in many cases and can present dangers when used for such. In the first instance, the length of the Kelly clamp arm and handle necessarily limit the device to procedures relatively close to the location of the surgeon's hands. The structure of a clamp widens quite quickly to enable the clamp to be used for its principle purpose of clamping. The use of the device as a holder, therefore, is often relatively difficult and creates a less than ideal design. Further, sufficient depth of tissue dissection is often not possible with such a device and adequate exposure and visibility is therefore often difficult, if not impossible, because the device is held by the palm of the hand and lacks appropriate length and shape to perform the procedure.

[0011] Furthermore, a Kelly clamp is liable to become unlocked during a dissection and release the cottonoid into the patient, where it would need to be retrieved from a potentially sensitive area as Kelly clamps are generally designed for relatively simple release. Finally, the Kelly clamp device is individually created by a surgical assistant and if the Kelly clamp is not loaded correctly with the cottonoid, or even if it is loaded differently than a surgeon was expecting, the metal tips of the Kelly clamp can come into unintentional contact with the surgical area. This contact can be adverse as the metal tips can act as a sharp dissection instrument when blunt dissection was intended, thus leading to unanticipated tissue injury and poor wound healing. This contact can also occur when the surgeon is least expecting it which can lead to an increased likelihood of injury.

[0012] To try and deal with some of the problems of a makeshift tool created from a Kelly clamp, disposable cottonoid devices designed principally for homeostasis are also sometimes used as endoscopic and laparoscopic dissectors. While they can resolve some of the concerns from the Kelly clamp device, these devices still have many of the same problems of the Kelly clamp improvised device such as a lack of sufficient length and a design intended for a

different purpose. Further, disposable cottonoid devices are often weak and can break or bend preventing them from being particularly useful in dissection as they are unable to provide sufficient separation force.

SUMMARY

[0013] The following is a summary of the invention in order to provide a basic understanding of some aspects of the invention. This summary is not intended to identify key or critical elements of the invention or to delineate the scope of the invention. The sole purpose of this section is to present some concepts of the invention in a simplified form as a prelude to the more detailed description that is presented later.

[0014] Because of these and other reasons known to those of ordinary skill in the art, disclosed herein, among other things, is a handheld medical instrument designed for efficient, atraumatic blunt tissue dissection and/or elevation during surgery. This device generally provides for improved functionality and visibility over makeshift devices previously used for this task.

[0015] There is described herein, among other things, a surgical instrument, the instrument comprising: a shaft, having two ends and a length therebetween, a grasping construct, positioned at the first of the two ends, the grasping construct including: at least two jaws; and a finger tightening mechanism capable of opening and closing the jaws through rotation of the finger tightening mechanism; and a blunt dissection pad, grasped between the jaws; wherein the finger tightening mechanism can be rotated a first direction to open the jaws, when open the blunt dissection pad can be removed and replaced with another blunt dissection pad, and the jaws can be closed by rotation of the finger tightening mechanism in a second direction.

[0016] There is also described, an embodiment of the instrument further comprising: a second grasping construct, positioned at the second of the two ends, the second grasping construct including: a second group of at least two jaws; and a second finger tightening mechanism capable of opening and closing the second group of jaws through rotation of the finger tightening mechanism; and a second blunt dissection pad, grasped between the second group of jaws; wherein the second finger tightening mechanism can be rotated in a first direction to open the second group of jaws, when open the blunt dissection pad can be removed and replaced with another blunt dissection pad, and the second group of jaws can be closed by rotation of the second finger tightening mechanism in a second direction.

[0017] In an embodiment of the instrument, the finger tightening mechanism comprises a cuff which is screwably attached to the shaft, which cuff can be screwed so as to extend from or retract back toward the shaft. The jaws may be biased into an open position and the cuff, when extending from the shaft, compresses the jaws together.

[0018] In another embodiment of the instrument, the finger tightening mechanism comprises a cuff which is rotationally attached to the shaft, wherein rotation of the cuff causes the jaws to extend from or retract toward the shaft. The jaws may be biased into an open position and the jaws are compressed together when the jaws retract toward the shaft.

[0019] In other embodiments of the instrument, the shaft includes a textured portion along the length, the blunt dissection pad comprises a cottonoid, the instrument is made of metal, or the shaft is separable into two portions at a point between the two ends and an extension shaft may be placed between the two portions to form a longer device.

[0020] There is also described herein, a kit of instruments for blunt dissection, the kit comprising: at least two tissue dissectors, each of the dissectors including: a shaft, having two ends and a length therebetween, a grasping construct, positioned at a first of the two ends, the grasping construct including: at least two jaws; and a tightening mechanism capable of opening and closing the jaws; a blunt dissection pad, grasped between the jaws; wherein the tightening mechanism can be manipulated to open the jaws, when open the blunt dissection pad can be removed and replaced with another blunt dissection pad, and the jaws can be closed by additional manipulation of the tightening mechanism; and wherein at least two of the at least two blunt dissectors have different lengths.

[0021] In an embodiment of the kit, the kit comprises at least three dissectors wherein a first dissector has a first length and a first diameter; a second dissector has the first length and a second diameter, greater than the first diameter; and a third dissector has the first diameter and a second length greater than the first length.

BRIEF DESCRIPTION OF THE DRAWINGS

[0022] FIG. **1** is a side view of an embodiment of a blunt dissection instrument.

[0023] FIG. **2** is a side view of the embodiment of FIG. **1** showing detail of the jaws on one end of the instrument in the open position.

[0024] FIG. **3** is the side view of FIG. **2** showing the jaws in the closed position.

[0025] FIG. **4** is a top view of the embodiment of FIG. **1** showing the device grasping a cottonoid at each end.

[0026] FIG. **5** is an exploded perspective view of another embodiment of a blunt dissection instrument.

[0027] FIG. **6** is a side view of another embodiment of a blunt dissection instrument.

DESCRIPTION OF THE PREFERRED EMBODIMENT(S)

[0028] The following detailed description illustrates by way of example and not by way of limitation. Described herein, among other things, are embodiments of medical devices for use in blunt elevation and/or dissection of tissue. The devices are particularly of use in cranial or spinal surgery but the type of surgery for which it is used is in no way limited to such surgeries. The device will generally be referred to herein as a "blunt dissection instrument" or simply a "blunt dissector" or "dissector" for ease of discussion. This terminology is not intended to limit its use solely to dissection as the device may be used for a number of activities including, but not limited to, tissue elevation and blunt dissection.

[0029] FIGS. **1-4** provide for drawings of a first embodiment of a blunt dissection instrument (**100**). FIGS. **5** and **6** provide for two additional embodiments. The embodiments will generally be discussed simultaneously and interchangeably as many of their functional structures are similar and operate in a similar fashion. The blunt dissector (**100**) generally comprises an elongated shaft (**101**) with two ends (**105**) and (**107**). In the first depicted embodiment, the shaft (**101**) includes a grip section (**103**) which is knurled or

otherwise textured and is located between the two ends (**105**) and (**107**) to provide for a comfortable surface for grasping by a human hand and an increase in friction between the blunt dissector (**100**) and the hand to improve manipulability and grip.

[0030] The blunt dissector (**100**), when used by a surgeon, is preferably held in the same general fashion as an individual holds a pencil. That is, the dissector (**100**) will generally be held between the thumb and opposing fingers at a point located on the grip section (**103**). This is as opposed to being held with the palm of the hand as the makeshift Kelly clamp device is generally held. This makes the blunt dissector (**100**) generally more convenient and comfortable for a surgeon to hold, provides for improved manipulability, and generally affords increased target tissue visibility and depth of tissue dissection. Further, the dissector (**100**) is generally more maneuverable as the fingers can manipulate it without need of additional support from the hand.

[0031] In the depicted embodiments, the blunt dissector (**100**) is constructed of metal, plastic, or other rigid and sturdy materials and is intended to be reusable. In an alternative embodiment, the blunt dissector (**100**) may be designed to be single use and disposable. The reusable embodiment will generally be sterilized in any manner known to those of ordinary skill in the art between patients and, consequently, will generally be more economical over time than disposable devices. Constructing the shaft (**101**) out of a rigid, reusable material such as metal also provides for increased strength to the blunt dissector (**100**) which will generally make the blunt dissector (**100**) more resistant to bending or breaking in the event the surgeon needs to apply pressure to the blunt dissector (**100**) in order to perform the desired procedure.

[0032] In the depicted embodiments, at each of the two ends (**105**) and (**107**) there is provided a grasping construct (**109**). The grasping construct (**109**) serves to securely hold a blunt dissection pad (**409**) at each end of the shaft (**101**). The grasping construct (**109**) is generally sized and shaped to hold the blunt dissection pad (**409**) securely, while at the same time allowing the blunt dissection pad (**409**) to extend beyond the grasping construct (**109**) along the line of the shaft (**101**) in such manner that the structure of the grasping construct (**109**) is generally prevented from coming into contact with the tissue being dissected by the blunt dissection pad (**409**). Such a connection is shown in FIG. **4**.

[0033] In the depicted embodiments, each of the grasping constructs (**109**) comprises a pair of expandable jaws (**503**) which are capable of securely grasping blunt dissection pads (**409**) of varying sizes and types. The use of two jaws (**503**) is generally preferred, but by no means required, and in alternative embodiments, each grasping construct (**109**) will comprise three or more jaws (**503**). Further, one of ordinary skill in the art would recognize that the two jaws (**503**) need not necessarily be separate pieces, but may be attached together as shown in FIG. **5** while still functioning as separate jaws.

[0034] Generally, the blunt dissection pad (**409**) will comprise a cottonoid or similar small gauze or other textile structure having a relatively textured surface capable of being used to grasp tissue through friction. It is not necessary that the cottonoid be constructed of cotton or even textiles and devices constructed of substances such as, but not limited to, sponge, foam, or similar materials may be referred to as being cottonoids. The jaws (**503**) will generally be designed to support one or more of the standard cottonoid sizes including, but not limited to, rosebuds, kittners, and sponges.

[0035] In alternative embodiments, the blunt dissection pad (**409**) may comprise alternative structures to cottonoids such as, but not limited to, fibrous balls, wood pulp products, soft plastic products, or combinations of structures. In most embodiments, the blunt dissection pad (**409**) is only limited in that its structure is generally incapable of creating a seam in an otherwise intact structure in the human body. That is, it is not a knife, saw, or similar object designed to cut. Instead, the blunt dissection pad provides a frictional surface capable of contacting tissue and separating it from adjacent tissue along an already existing (natural planes?) transition line. Regardless of the construction or materials, the term "cottonoid" as used herein may be used to refer to the blunt dissection pad (**409**).

[0036] In the depicted embodiments, the blunt dissector's (**100**) two sets of jaws (**503**) which are located on opposing ends of the blunt dissector (**100**) are preferably designed to operate independently of each other. That is, the jaws (**503**) at one end (**105**) of the shaft (**101**) maybe opened or closed independently of the jaws (**503**) at the other end (**107**) of the shaft (**101**). Generally, the opening and closing of the jaws (**503**) will be accomplished by rotation of a finger tightening mechanism (**505**) which serves to open or close the jaws (**503**) depending on the direction of rotation. In the depicted embodiment, the opening or closing of the jaws (**503**) occurs as the jaws interact with the finger tightening mechanism (**505**) and/or the shaft (**101**) during the rotation. As should be apparent, the finger tightening mechanism is generally designed for manipulation by the fingers of a user.

[0037] The interaction is best explained by reference to FIG. **5**. In the embodiment of FIG. **5**, the finger tightening mechanism (**505**) from one end of the device is shown in exploded view. The finger tightening mechanism (**505**) includes a cuff (**511**) which is rotationally connected to the shaft (**101**), in this case, via series of interacting screw threads (**523**). The jaws (**503**) are provided in a fashion that they are biased toward an open position. The jaws (**503**) (which in this depiction is a single construct) are fitted to a mount (**513**) which serves to hold the jaws (**503**) to the shaft (**101**). The mount is then connected by two rods (**517**) to a limiting plate (**519**). The limiting plate (**519**) is generally located within the shaft (**101**) and is connected to the shaft (**101**) via a pin (**521**) which extends through the shaft (**101**) via holes (**525**) in such manner as to prevent the limiting plate (**519**), and thus the jaws (**503**), from rotating.

[0038] In the finger tightening mechanism (**505**) shown in FIG. **5**, the closing of the jaws (**503**) occurs because the cuff (**511**) can be extended from the end of the shaft (**101**) by being rotated about the screw threads, the rotation either moving the cuff toward or away from the shaft depending on the direction of rotation. As the cuff (**511**) extends from the end (**105**) of the shaft (**101**), the cuff (**511**) contacts the exterior surface (**531**) of the jaws (**503**). The exterior surfaces are angled in a manner such that contact from the cuff (**511**) serves to force the jaws (**503**) together as the cuff (**511**) extends from the shaft and over the jaws. The opposite movement of the cuff (**511**) allows the jaws (**503**) to open due to the biasing and effectively removal of the cuff's (**511**) blocking of the jaws' (**503**) opening. Generally, the jaws (**503**) will be shaped and sized so that at least a portion of the internal surfaces (**533**) of the jaws (**503**) are against each

other or separated with very little space between them at a point along the allowed motion of the cuff (**511**). In this way, the jaws (**503**) can be closed on anything placed between them, regardless of its size.

[0039] In the embodiments of FIGS. **5** and **6**, the jaws (**503**) include a linearly angled exterior surface (**531**) and a generally linear interior surface (**533**). This can provide for an opening that is generally rectangular when the jaws (**503**) are open and is compressed into a generally "V" shape with the tip of the "V" being at the end of the jaws (**503**) when they are closed. This design is generally preferred as it provides for easier cottonoid insertion and improved grip strength, but is by no means required. In the embodiment of FIGS. **1-4**, the jaws (**503**) are generally smoothly curving in both the exterior (**531**) and interior (**533**) surfaces which provides for a slightly different shape of closed jaws (**503**) as seen in FIG. **3**. These jaw (**503**) shapes are simply two of many which may be used depending on construction methodology and desired grip style of the jaws (**503**).

[0040] While the embodiments of FIGS. **5** and **6** contemplate that the cuff (**511**) moves relative to the shaft (**101**) when the finger tightening (**505**) is activated, the embodiment of FIGS. **1-4** provides for an alternative methodology. In this embodiment, the cuff (**511**) is allowed to freely rotate about the end (**105**) of the shaft (**101**), instead of extending or retracting on threads. In this embodiment, the mount (**513**), or similar structure, is deigned to move on threads or similar structures moving the jaws (**503**) interior to the cuff (**511**) toward and away from the end (**105**) or (**107**) of the shaft (**101**). In this case, the pin (**521**) will generally be placed into an elliptical runway hole (**527**) (as best shown in FIGS. **2** and **3**) and will be able to move along a portion of the length of the shaft (**101**). In this situation, the closing of the jaws (**503**) may serve to limit the extent of retraction of the jaws (**503**), or the pin's (**521**) freedom of movement may prevent the jaws (**503**) from opening or closing more than is desired. The movement of the pin (**521**) is shown between FIGS. **2** and **3** which show the jaws (**503**) in open and closed positions respectively.

[0041] The opening and closing of the jaws (**503**) need not be performed through such a screwable rotation as described in the above embodiments. However, it is preferred that the opening and closing of the jaws (**503**) be performed through a process which requires relatively significant movement of the operator so that the jaws (**503**) are not inadvertently released or connected. A more motion intensive mechanism requiring increased movement to release is preferred as it provides for generally more secure grasping of the cottonoid (**409**) and reduces the risk that the jaws (**503**) could separate or unlock inadvertently during use of the blunt dissector (**100**). This helps to inhibit the possibility of the cottonoid (**409**) separating from the blunt dissector (**100**) in use and then having to be retrieved from the patient.

[0042] Due to the size and positioning of the jaws (**503**), the jaws (**503**) are either forced together or allowed to spread apart depending on the direction the finger tightening mechanism (**505**) is rotated. This variable size opening of jaws (**503**) allows the jaws (**503**) to accommodate a variety of different sized cottonoids (**409**) and allows each to be securely clamped to the blunt dissector (**100**).

[0043] The jaws (**503**) preferably include a plurality of internal teeth (**535**) or a similar high friction surface which can be used to securely grasp a blunt dissection pad (**409**) which is placed between the jaws (**503**) and inhibit the blunt dissection pad (**409**) from being pulled from within the closed jaws (**503**) during the procedure. It is preferred that a significant force be required to pull the blunt dissection pad (**409**) from within the jaws (**503**) and that, in an embodiment, the force required to remove the blunt dissection pad (**409**) from the jaws (**503**) is greater than the force to disassociate parts of the blunt dissection pad (**409**) from each other.

[0044] In the depicted embodiments, there is a grasping construct (**503**) and associated finger tightening mechanism (**505**) at each end of the shaft (**101**). This structure is generally preferred but is not required and in alternative embodiments a grasping construct is only placed on a single end. The two-ended structure allows for a cottonoid (**409**) to be placed on each end of the blunt dissector (**100**) simultaneously. By having a grasping construct (**109**) on both ends of the blunt dissector (**100**), two different sizes, textures, or other propertied blunt dissection pads (**409**) can be used interchangeably without need to switch tools. This gives the surgeon a more versatile tool that is both bi-directional and potentially bi-functional. It also generally eliminates the need to switch between instruments when the surgeon needs a larger or smaller dissection pad (**409**). Still further, even if two different sizes of dissection pads (**409**) are unnecessary, it gives the surgeon two readily available blunt dissection pads (**409**) allowing a switch if one was to become full of tissue, damaged, or for some other reason was unsuitable.

[0045] To meet the specific needs of different types of procedures (cranial, thoracic, abdominal, etc.), the shaft (**101**) may be designed in various diameters and lengths. In one embodiment, the depicted blunt dissector (**100**) would be provided as one of a series of blunt dissectors (**100**) provided as a set. Such a set may include a number of different blunt dissectors (**100**) having different lengths and/or diameters. A larger diameter dissector (**100**) may be needed on a procedure where greater force is required for the dissection, when a larger dissection pad (**409**) is desired, or there is greater access to the area of interest. Conversely, a smaller diameter blunt dissector (**100**) might be necessary to afford access to a smaller location or to provide a wider field of view around the blunt dissector (**100**). A smaller diameter blunt dissector (**100**) may also be necessary in situations where smaller incisions are preferred or when working on more delicate areas where neighboring structures can be more readily injured. Likewise to the diameter, the shaft (**101**) may be designed to different lengths. A longer length shaft (**101**) would generally be more desirable when accessing deeper areas, while a shorter shaft (**101**) will generally be more convenient and provide for greater control if the depth of the procedure is less.

[0046] In an embodiment of such a kit of dissectors, the kit would be provided including a number of different blunt dissectors (**100**). Depending on the type of surgical operation the kit is designed for, the blunt dissectors (**100**) may specifically be chosen and provided based on increased need in these types of procedures. The kit may also include repeated sizes if the procedure may require significant dissection quickly to allow for the surgeon to be using one tool while an assistant is swapping out or loading a new dissection pad (**409**) on another.

[0047] In a still further embodiment, the shaft (**101**) may be modified to be two or more separable pieces such as is shown in FIG. **6**. In particular, at a point between the two ends (**105**) and (**107**) the shaft (**101**) may be separable into

two pieces, such as, for instance, by unscrewing them. In this embodiment, variable lengths of shafts (**101**) could be obtained for the blunt dissector (**100**) by providing screw-in extension shafts (**601**) which interact with screw threads (**605**) and (**607**) on each end and are designed to be screwed between the two end pieces of shaft (**101**). A variety of such shaft extensions (**601**) could be provided with each blunt dissector (**100**). If a shorter blunt dissector (**100**) was desired, the user could use a short extension or simply screw the two end pieces together. If an even shorter device was required, one end could be used alone. To provide a longer device, a longer extension (**601**) could be used.

[0048] As also shown in FIG. **6**, a ruler (**651**) or other measurement marking may be placed on the shaft (**101**) so that tissue depth can be measured from each end. This can enable the surgeon to quickly and efficiently determine the size of retractor blades or other devices needed in subsequent steps of the surgery and to determine the depth at which the device is being used if vision is uncertain.

[0049] While the invention has been disclosed in connection with certain preferred embodiments, this should not be taken as a limitation to all of the provided details. Modifications and variations of the described embodiments may be made without departing from the spirit and scope of the invention, and other embodiments should be understood to be encompassed in the present disclosure as would be understood by those of ordinary skill in the art.

1. A surgical instrument, the instrument comprising:
a shaft, having two ends and a length therebetween,
a grasping construct, positioned at the first of said two ends, said grasping construct including:
at least two jaws; and
a finger tightening mechanism capable of opening and closing said jaws through rotation of said finger tightening mechanism; and
a blunt dissection pad, grasped between said jaws;
wherein said finger tightening mechanism can be rotated a first direction to open said jaws, when open said blunt dissection pad can be removed and replaced with another blunt dissection pad, and said jaws can be closed by rotation of said finger tightening mechanism in a second direction.

2. The instrument of claim **1** further comprising:
a second grasping construct, positioned at the second of said two ends, said second grasping construct including:
a second group of at least two jaws; and
a second finger tightening mechanism capable of opening and closing said second group of jaws through rotation of said finger tightening mechanism; and
a second blunt dissection pad, grasped between said second group of jaws;
wherein said second finger tightening mechanism can be rotated in a first direction to open said second group of jaws, when open said blunt dissection pad can be removed and replaced with another blunt dissection pad, and said second group of jaws can be closed by rotation of said second finger tightening mechanism in a second direction.

3. The instrument of claim **1** wherein said finger tightening mechanism comprises a cuff which is screwably attached to said shaft, which cuff can be screwed so as to extend from or retract back toward said shaft.

4. The instrument of claim **3** wherein said jaws are biased into an open position and said cuff, when extending from said shaft, compresses said jaws together.

5. The instrument of claim **1** wherein said finger tightening mechanism comprises a cuff which is rotationally attached to said shaft, wherein rotation of said cuff causes said jaws to extend from or retract toward said shaft.

6. The instrument of claim **5** wherein said jaws are biased into an open position and said jaws are compressed together when said jaws retract toward said shaft.

7. The instrument of claim **1** wherein said shaft includes a textured portion along said length.

8. The instrument of claim **1** wherein said blunt dissection pad comprises a cottonoid.

9. The instrument of claim **1** wherein said instrument is made of metal

10. The instrument of claim **1** wherein said shaft is separable into two portions at a point between said two ends and an extension shaft may be placed between said two portions to form a longer device.

11. A kit of instruments for blunt dissection, the kit comprising.
at least two tissue dissectors, each of the dissectors including:
a shaft, having two ends and a length therebetween,
a grasping construct, positioned at a first of said two ends, said grasping construct including:
at least two jaws; and
a tightening mechanism capable of opening and closing said jaws;
a blunt dissection pad, grasped between said jaws;
wherein said tightening mechanism can be manipulated to open said jaws, when open said blunt dissection pad can be removed and replaced with another blunt dissection pad, and said jaws can be closed by additional manipulation of said tightening mechanism; and
wherein at least two of said at least two blunt dissectors have different lengths.

12. The kit of claim **11** wherein said kit comprises at least three dissectors wherein
a first dissector has a first length and a first diameter;
a second dissector has said first length and a second diameter, greater than said first diameter; and
a third dissector has said first diameter and a second length greater than said first length.

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