WHAT IS CLAIMED IS:

1. An improved hand tool for rotationally inserting a screw within a bone, comprising:
a rotational driver having a handle supporting a shaft extending from a proximal end to a distal end;
a socket defined in said distal end of said shaft for receiving a head of the screw for rotationally inserting the screw within the bone; and
a first and a second slot is located in said socket defining a first and a second cutting edge for cutting the bone upon rotation of said rotational driver to simultaneously insert the screw and countersink the head of the screw within the bone.

2. An improved hand tool for rotationally inserting a screw within a bone as set forth in claim 1, including a suture retainer located on said handle for removeably retaining at least one suture.

3. An improved hand tool for rotationally inserting a screw within a bone as set forth in claim 1, including a suture retainer located on said handle for removeably retaining a suture; and
said first and a second slot cooperating with said suture retainer for enabling a suture to extend from suture retainer through said first and second slots and a transverse aperture in said screw.

5. An improved hand tool for rotationally inserting a screw within a bone as set forth in claim 1, wherein the screw head has a cross-section of a hexagon with a first and a second channel recessed in opposed sides of the screw head and communicating with a transverse aperture extending through the screw;
said first and second slots of said distal end of said shaft being aligned with the first and second channels of the screw head; and
said socket comprising a hexagon for engaging an outer periphery of the screw head enabling a suture to extend through the first and second channels between the screw head and said socket of said shaft and through the transverse aperture of the screw.

5. An improved hand tool for rotationally inserting a screw within a bone as set forth in claim

1, wherein the screw has a first and a second channel defined in a head of the screw communicating with a transverse aperture extending through the screw; and

said first and second slots of said distal end of said shaft being aligned with the first and second channels defined in the head of the screw for permitting a suture to extend through the first and second channels and the transverse aperture of the screw when said first and second cutting edges countersink the head of the screw within the bone.

6. An improved hand tool for rotationally inserting a screw within a bone as set forth in claim 1, including a capture magazine located on said handle for removeably retaining a capture.

7. An improved hand tool for rotationally inserting a screw within a bone as set forth in claim 1, including a capture magazine comprising a resilient wire loop for removeably retaining a capture; and

said resilient wire loop permitting a suture to be inserted into said resilient wire loop for threading into said capture.

8. An improved hand tool for rotationally inserting a screw within a bone as set forth in claim 1, including a capture magazine comprising a resilient wire loop extending from said handle;

said resilient wire loop extending through a capture aperture in said capture for removeably retaining said capture on the improved hand tool; and

said resilient wire loop permitting a suture to be inserted into said resilient wire loop for threading said suture into said capture aperture of said capture.

9. An improved hand tool for rotationally inserting a screw within a bone as set forth in claim 1, including a central orifice extending axially through said shaft and communicating with an outer surface of said shaft for positioning a suture centrally in said distal end of said shaft;

said suture extending through a central aperture of a capture; and

said distal end of said shaft configured for pushing said capture along said suture at said distal end of said shaft.

10. An improved hand tool for rotationally inserting a screw within a bone, the screw having a first and a second channel defined in a head of the screw communicating with a transverse aperture extending through the screw, comprising:

a rotational driver having a handle supporting a shaft extending from a proximal end to a distal end;

a socket defined in said distal end of said shaft for receiving a head of the screw for engaging with an outer periphery of said screw head for rotationally inserting the screw within the bone; and

a first and a second slot defined in said socket of said distal end of said shaft;

a first and a second cutting edge defined by an edge of said first and second slots for cutting the bone upon rotation of said rotational driver; and

said first and a second slot extending from said distal end of said shaft being aligned with the first and second channels defined in the head of the screw for permitting a suture to extend from said first and second slots through the first and second channels and the transverse aperture of said screw while said first and second cutting edges cut the bone to countersink the head of the screw within the bone.

11. An improved fastener for insertion into a living tissue by a rotational driver, comprising

a screw body extending between a screw tip and a screw head;

a helical screw thread extending from said screw tip toward said screw head;

said screw head defining a socket shape in an outer periphery of said screw head for enabling the rotational driver to rotationally insert said screw body into the living tissue;

a transverse aperture extending through said screw body below said screw head;

a first and a second channel defined in opposed sides of said screw head and communicating with said transverse aperture for enabling a suture to extend through said first and second channels and said transverse aperture while the screw body is inserted into the living tissue by said rotational driver; and

said first and second channels and said transverse aperture being dimensioned for enabling the suture to be moved through said first and second channels and said transverse aperture when said screw body is totally embedded into the living tissue.

12. An improved fastener for insertion into a living tissue as set forth in claim 1, wherein said

screw head has a cross-section of a polygon.

13. An improved fastener for insertion into a living tissue as set forth in claim 11, wherein said screw head has a cross-section of a regular polygon; and
said first and second channels being recessed into opposed sides of said regular polygon.

14. An improved fastener for insertion into a living tissue as set forth in claim 11, wherein said screw head has a cross-section of a regular hexagon; and
said first and second channels being recessed into opposed sides of said regular hexagon.

15. An improved fastener for insertion into a living tissue as set forth in claim 11, wherein said screw head has a cross-section of a regular hexagon;
said first and second channels being recessed into opposed sides of said regular hexagon; and
each of said first and second channels having a recess depth greater than one-third the distance between opposed sides of the regular hexagon.

16. An improved fastener for insertion into a living tissue as set forth in claim 11, wherein said screw head has a screw head has a cross-section of a regular hexagon;
said first and second channels being recessed into opposed sides of said regular hexagon;
each of said first and second channels having a recess depth greater than one-third the distance between opposed sides of the regular hexagon; and
each of said first and second channels having a length three times greater than said recess depth of each of said first and second channels.

17. An improved fastener for insertion into a living tissue as set forth in claim 11, wherein said screw head has a cross-section of a regular hexagon;
said first and second channels being recessed into opposed sides of said regular hexagon; and
each of said first and second channels having a recess depth greater than one-third the distance between opposed sides of the regular hexagon for enabling the suture to be threaded through said first and second channels and said transverse aperture when said screw body is totally embedded into the living tissue.

18. An improved fastener for insertion into a living tissue as set forth in claim 11, wherein the rotational driver comprises a hexagonal socket;

said screw head defining a hexagon outer periphery of said screw head for enabling the hexagonal socket of the rotational driver to rotationally insert said screw body into the living tissue; and

said first and second channels enabling a suture to pass through said first and second channels between said screw head and the hexagonal socket of the rotational driver.

19. An improved fastener for insertion into a living tissue by a rotational driver, comprising

a screw body extending between a screw tip and a screw head;

a helical screw thread extending from said screw tip toward said screw head;

said screw head having an outer periphery of said screw head defining a regular hexagon cross-section for enabling the hexagon rotational driver to rotationally insert said screw body into the living tissue;

a transverse aperture extending through said screw body below said screw head;

a first and a second channel being recessed into opposed sides of said regular hexagon screw head and communicating with said transverse aperture for enabling a suture to be threaded through said first and second channels and said transverse aperture by a flexible loop while the screw body is totally embedded into the living tissue by said rotational driver;

20. An improved fastener for insertion into a living tissue as set forth in claim 17, wherein each of said first and second channels having a recess depth greater than one-third the distance between opposed sides of the regular hexagon.

21. A method of securing a tissue to a bone with a suture, the suture having a series of protuberances spaced apart along a length thereof, comprising the steps of:

rotating a driver for driving a screw into the bone with the suture extending through the transverse aperture in the screw;

passing the first end of the suture through a central aperture in the driver;

threading the first end of the suture through a central aperture in a capture;

pushing the capture with the driver along the suture to lockingly engage the capture with one of the series of protuberances for securing the first end of the suture; and

securing a second end of said suture for securing the tissue to the bone.

22. A method of securing a tissue to a bone with a suture as set forth in claim 21, including the step of passing the suture through the tissue;

23. A method of securing a tissue to a bone with a suture as set forth in claim 21, wherein the step of rotating a driver for driving a screw into the bone includes cutting the bone with the driver to countersink the screw within the bone to completely embed the screw into the bone.

24. A method of securing a tissue to a bone with a suture as set forth in claim 21, wherein the step of securing the second end of said suture includes the step of :

rotating a driver for driving a second screw into the bone with the suture loop through the transverse aperture in the second screw;

threading the second end of the suture through suture loop;

pulling the suture loop for threading the second end of the suture through the transverse aperture in the second screw;

threading the second end of the suture through a central aperture in a second capture;

pushing the second capture with the driver along the suture to lockingly engage the second capture with one of the series of protuberances for securing the second end of the suture for securing the tissue to the bone.

25. A method for forming a protuberance on a suture, comprising the steps of;

placing a suture to extend through a mold cavity;

inserting an adhesive into the mold cavity at an ambient temperature;

permitting the adhesive to cure in the mold at an ambient temperature;

removing the suture with the adhered protuberance from the mold.

26. A method for forming a protuberance on a suture, as set forth in claim 25, wherein the step of placing a suture to extend through a mold cavity includes placing a braided suture to extend through a mold cavity.

27. A method for forming a protuberance on a suture, as set forth in claim 25, including the step of creating a loop in the suture; and

placing the suture to extend through a mold cavity with the loop located within the mold cavity.

28. A method for forming a protuberance on a suture, as set forth in claim 25, including the step of tying a knot in the suture; and

placing the suture to extend through a mold cavity with the knot located within the mold cavity.

29. A method for forming a protuberance on a suture for engaging with a capture having a capture aperture defining an entrance aperture contour and a reverse aperture contour, comprising the steps of;

providing a mold having a series of mold cavities with each of the mold cavities having:

a leading edge shape defined for cooperation with the entrance aperture contour of the capture; and

a trailing edge shape defined for cooperation with the reverse aperture contour of the capture;

placing a suture to extend through the series of mold cavities;

inserting an adhesive into the mold;

permitting the adhesive to cure in the mold cavities;

removing the suture with the adhered protuberance from the mold cavities

WHAT IS CLAIMED IS:

1. An improved hand tool for rotationally inserting a screw within a bone, comprising:

a rotational driver having a handle supporting a shaft extending from a proximal end to a distal end;

a socket defined in said distal end of said shaft for receiving a head of the screw for rotationally inserting the screw within the bone; and

a first and a second slot is located in said socket defining a first and a second cutting edge for cutting the bone upon rotation of said rotational driver to simultaneously insert the screw and countersink the head of the screw within the bone.

2. An improved hand tool for rotationally inserting a screw within a bone as set forth in claim 1, including a suture retainer located on said handle for removeably retaining at least one suture.

3. An improved hand tool for rotationally inserting a screw within a bone as set forth in claim 1, including a suture retainer located on said handle for removeably retaining a suture; and

said first and a second slot cooperating with said suture retainer for enabling a suture to extend from suture retainer through said first and second slots and a transverse aperture in said screw.

4. An improved hand tool for rotationally inserting a screw within a bone as set forth in claim 1, wherein the screw head has a cross-section of a hexagon with a first and a second channel recessed in opposed sides of the screw head and communicating with a transverse aperture extending through the screw;

said first and second slots of said distal end of said shaft being aligned with the first and second channels of the screw head; and

said socket comprising a hexagon for engaging an outer periphery of the screw head enabling a suture to extend through the first and second channels between

the screw head and said socket of said shaft and through the transverse aperture of the screw.

5. An improved hand tool for rotationally inserting a screw within a bone as set forth in claim 1, wherein the screw has a first and a second channel defined in a head of the screw communicating with a transverse aperture extending through the screw; and

said first and second slots of said distal end of said shaft being aligned with the first and second channels defined in the head of the screw for permitting a suture to extend through the first and second channels and the transverse aperture of the screw when said first and second cutting edges countersink the head of the screw within the bone.

6. An improved hand tool for rotationally inserting a screw within a bone as set forth in claim 1, including a capture magazine located on said handle for removeably retaining a capture.

7. An improved hand tool for rotationally inserting a screw within a bone as set forth in claim 1, including a capture magazine comprising a resilient wire loop for removeably retaining a capture; and

said resilient wire loop permitting a suture to be inserted into said resilient wire loop for threading into said capture.

8. An improved hand tool for rotationally inserting a screw within a bone as set forth in claim 1, including a capture magazine comprising a resilient wire loop extending from said handle;

said resilient wire loop extending through a capture aperture in said capture for removeably retaining said capture on the improved hand tool; and

said resilient wire loop permitting a suture to be inserted into said resilient wire loop for threading said suture into said capture aperture of said capture.

9. An improved hand tool for rotationally inserting a screw within a bone as set forth in claim 1, including a central orifice extending axially through said shaft and communicating with an outer surface of said shaft for positioning a suture centrally in said distal end of said shaft;

said suture extending through a central aperture of a capture; and

said distal end of said shaft configured for pushing said capture along said suture at said distal end of said shaft.

10. An improved hand tool for rotationally inserting a screw within a bone, the screw having a first and a second channel defined in a head of the screw communicating with a transverse aperture extending through the screw, comprising:

a rotational driver having a handle supporting a shaft extending from a proximal end to a distal end;

a socket defined in said distal end of said shaft for receiving a head of the screw for engaging with an outer periphery of said screw head for rotationally inserting the screw within the bone; and

a first and a second slot defined in said socket of said distal end of said shaft;

a first and a second cutting edge defined by an edge of said first and second slots for cutting the bone upon rotation of said rotational driver; and

said first and a second slot extending from said distal end of said shaft being aligned with the first and second channels defined in the head of the screw for permitting a suture to extend from said first and second slots through the first and second channels and the transverse aperture of said screw while said first and second cutting edges cut the bone to countersink the head of the screw within the bone.

11. An improved hand tool for rotationally inserting a screw within a bone as set forth in claim 1, wherein said screw comprises:

a screw body extending between a screw tip and a screw head;

a helical screw thread extending from said screw tip toward said screw head;

said screw head defining a socket shape in an outer periphery of said screw head for

enabling the rotational driver to rotationally insert said screw body into the living tissue;

a transverse aperture extending through said screw body below said screw head;

a first and a second channel defined in opposed sides of said screw head and communicating with said transverse aperture for enabling a suture to extend through said first and second channels and said transverse aperture while the screw body is inserted into the living tissue by said rotational driver; and

said first and second channels and said transverse aperture being dimensioned for enabling the suture to be moved through said first and second channels and said transverse aperture when said screw body is totally embedded into the living tissue.

12. An improved hand tool for rotationally inserting a screw within a bone as set forth in claim 11, wherein said screw head has a cross-section of a polygon.

13. An improved hand tool for rotationally inserting a screw within a bone as set forth in claim 11, wherein said screw head has a cross-section of a regular polygon; and

said first and second channels being recessed into opposed sides of said regular polygon.

14. An improved hand tool for rotationally inserting a screw within a bone as set forth in claim 11, wherein said screw head has a cross-section of a regular hexagon; and

said first and second channels being recessed into opposed sides of said regular hexagon.

15. An improved hand tool for rotationally inserting a screw within a bone as set forth in claim 11, wherein said screw head has a cross-section of a regular hexagon;

said first and second channels being recessed into opposed sides of said regular hexagon; and

each of said first and second channels having a recess depth greater than one-third the distance between opposed sides of the regular hexagon.

16. An improved hand tool for rotationally inserting a screw within a bone as set forth in claim 11, wherein said screw head has a screw head has a cross-section of a regular hexagon;

said first and second channels being recessed into opposed sides of said regular hexagon;

each of said first and second channels having a recess depth greater than one-third the distance between opposed sides of the regular hexagon; and

each of said first and second channels having a length three times greater than said recess depth of each of said first and second channels.

17. An improved hand tool for rotationally inserting a screw within a bone as set forth in claim 11,wherein said screw head has a cross-section of a regular hexagon;

said first and second channels being recessed into opposed sides of said regular hexagon; and

each of said first and second channels having a recess depth greater than one-third the distance between opposed sides of the regular hexagon for enabling the suture to be threaded through said first and second channels and said transverse aperture when said screw body is totally embedded into the living tissue.

18. An improved hand tool for rotationally inserting a screw within a bone as set forth in claim 11,wherein the rotational driver comprises a hexagonal socket;

said screw head defining a hexagon outer periphery of said screw head for enabling the hexagonal socket of the rotational driver to rotationally insert said screw body into the living tissue; and

said first and second channels enabling a suture to pass through said first and second channels between said screw head and the hexagonal socket of the rotational driver.

19. An improved hand tool for rotationally inserting a screw within a bone as set forth in claim 1, wherein said screw comprises:

a screw body extending between a screw tip and a screw head;

a helical screw thread extending from said screw tip toward said screw head;

said screw head having an outer periphery of said screw head defining a regular hexagon cross-section for enabling the hexagon rotational driver to rotationally insert said screw body into the living tissue;

a transverse aperture extending through said screw body below said screw head;

a first and a second channel being recessed into opposed sides of said regular hexagon screw head and communicating with said transverse aperture for enabling a suture to be threaded through said first and second channels and said transverse aperture by a flexible loop while the screw body is totally embedded into the living tissue by said rotational driver;

20. An improved hand tool for rotationally inserting a screw within a bone as set forth in claim 19, wherein each of said first and second channels having a recess depth greater than one-third the distance between opposed sides of the regular hexagon.

21. A method for forming a protuberance on a suture for engaging with a capture having a capture aperture defining an entrance aperture contour and a reverse aperture contour, comprising the steps of;

providing a mold having a series of mold cavities with each of the mold cavities having:

a leading edge shape defined for cooperation with the entrance aperture contour of the capture; and

a trailing edge shape defined for cooperation with the reverse aperture contour of the capture;

placing a suture to extend through the series of mold cavities;

inserting an adhesive into the mold;

permitting the adhesive to cure in the mold cavities;

removing the suture with the adhered protuberance from the mold cavities.

22. A method for forming a protuberance on a suture, as set forth in claim 21, wherein the step of placing a suture to extend through a mold cavity includes placing a braided suture to extend through a mold cavity.

23. A method for forming a protuberance on a suture, as set forth in claim 21, including the step of creating a loop in the suture; and

placing the suture to extend through a mold cavity with the loop located within the mold cavity.

24. A method for forming a protuberance on a suture, as set forth in claim 21, including the step of tying a knot in the suture; and

placing the suture to extend through a mold cavity with the knot located within the mold cavity.