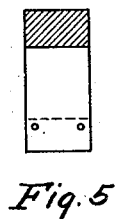
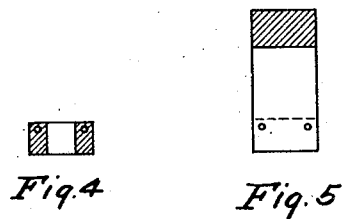
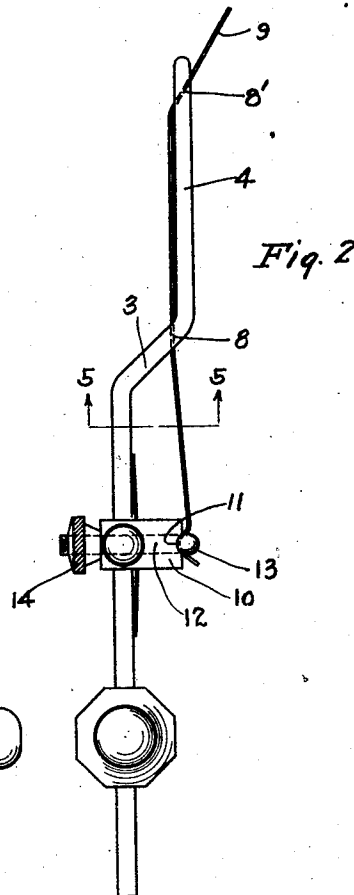
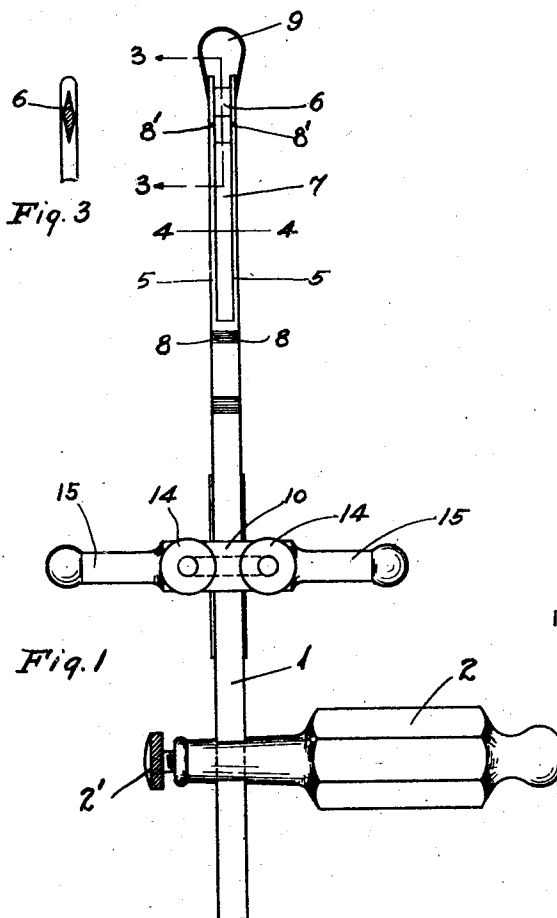


Sept. 21, 1926.

1,600,381

G. M. WRIGHT
SURGICAL INSTRUMENT
Filed Sept. 9, 1921



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SURGICAL INSTRUMENT.

Application filed September 9, 1921. Serial No. 499,378.

This invention relates to surgical instruments and more particularly to instruments in which two separate cutting instruments are combined for making their respective cuts or incisions in immediate succession without removal of the instrument from operative position.

This invention was made primarily to facilitate the removal of the anterior portion of the inferior or middle turbinal. This operation requires a cut or incision on a substantially horizontal line and a cut or incision in a substantially vertical line, the two cuts or incisions meeting at an approximate right angle.

The object of this invention is the provision of a single instrument in which there are combined two cutting members so arranged as to accomplish two such cuts or incisions as are required in the operation above mentioned and similar operations.

A further object of the invention is the provision of a surgical instrument in which there are combined a member with a rigid cutting edge and a wire loop or snare for cutting.

A further object of the invention is the provision of a surgical instrument in which there are combined two cutting members adapted to make two separate cuts or incisions at an angle with each other.

With the above and other objects in view the invention consists in the novel features of construction, combination and arrangement of parts hereinafter more fully set forth, pointed out in the claim and shown in the accompanying drawings in which:

Figure 1 is a plan of an instrument constructed in accordance with my invention;

Figure 2 is a side elevation;

Figure 3 is a section taken on the line 3—3 of Figure 1;

Figure 4 is a transverse section taken on the line 4—4 of Figure 1 as same appears if holes 8 be run through arms 5, and

Figure 5 is a transverse section taken on the line 5—5 of Figure 2 as same appears if holes 8 be run through arms 5.

In the construction of my improved instrument, I provide a shank member 1 which may be formed of any suitable kind of metal and adjustably mounted upon the shank is a handle 2. The shank is provided with an offset portion 3 whereby the operating end

of the shank, which is generally indicated by the numeral 4, is arranged in a plane parallel with the main body of the shank 1.

The operating end 4 of the shank is preferably cut away along the central portion leaving two side arms 5 with a cutting blade 6 between the same near the forward ends thereof and an open space 7 between the arms in the rear of the blade.

The offset 3 and the arms 5 are provided with holes 8 and 8' respectively for the wire, a part of which forms loop or snare 9. The holes 8 are preferably parallel with portion 4 of the shank but the holes 8' are at an angle thereto so as to position the loop or snare 9 at an angle to longitudinal axis of the cutting blade 6 as clearly shown at Figure 2. The ends of the wire forming snare 9 pass through holes 8' and 8, a smooth sliding fit being preferable, and thence through a suitable clamp on member 10 which is slidably mounted on shank 1, the clamp being preferably formed by providing in member 10 a groove 11 and holes 12 for the accommodation of an approximately U shaped member 13, the base portion of which fits snugly into groove 11 and the arms of which project through holes 12, the upper ends of the arms being threaded for accommodation of nuts 14. The ends of the wire pass across the groove 11 under member 13 and are clamped therein by screwing down the nuts 14, all as clearly shown at Figure 2.

It will be evident that as member 10 is slid along shank 1 loop 9 will extend and enlarge or contract and recede with the advancing or drawing back of member 10.

Handle 2 is adjustably mounted on shank 1 by means of set screw 2' whereby the handle may be clamped to shank 1 at any desired point along the shank. Handle 2 may be placed upon the shank 1 extending to left thereof if desired for a left-handed operator, instead of to the right as shown in the drawings, sliding the handle from the shank, reversing its position and sliding it on again, being all that is necessary to accomplish this end.

The operation will be described as performed in the removal of the anterior portion of the inferior or middle turbinal for which the instrument is primarily intended it being understood that while details may be varied the principle of the operation will

remain the same if performed on other portions of the anatomy or other substances.

In operation the handle 2 is gripped in the hand, two fingers being extended to grasp the arms 15 of member 10, for operating that member. Blade 6 is placed against the edge of the turbinal where it is desired to start the horizontal cut, the forward ends of arms 5 forming guides along the sides of the turbinal. The loop or snare 9 is so adjusted, by sliding member 10, that the outer end of the snare will be below the lower edge of the turbinal. By forward pressure on handle 2 or by hammer blows on the outer end of shank 1 as desired, the blade 6 is then forced forward the desired distance making the horizontal cut or incision. When this is completed member 10 is drawn back toward handle 2 thus drawing in or contracting snare 9 and causing it to draw or cut up through the turbinal from its lower edge to the farther end of the horizontal cut as already made. The two cuts of the operation are thus completed in im-

mediate succession without removal of the instrument from operative position.

It will be understood that the outer openings of holes 8' are adjacent the edge of blade 6 so that the cut of the snare 9 will approximately meet the end of the cut made by blade 6.

It will also be understood that, if desired, the holes 8 may be formed at a lower point in offset 3 and continued longitudinally through arms 5 as shown at Figures 4 and 5 so that the wire will be concealed and protected within arms 5 throughout the length of the arms.

I claim:

In a surgical instrument, a shank, a blade positioned adjacent one end of the shank having a cutting edge extending transversely of the shank, a snare, the shank having guiding orifices disposed back of the cutting edge of the blade and at an angle to the plane of the blade to guide the snare.

In testimony whereof I affix my signature.

GEORGE M. WRIGHT.