

May 22, 1923.

1,456,116

A. N. BESSESEN, SR

SURGICAL RETRACTOR

Filed Aug. 8, 1921

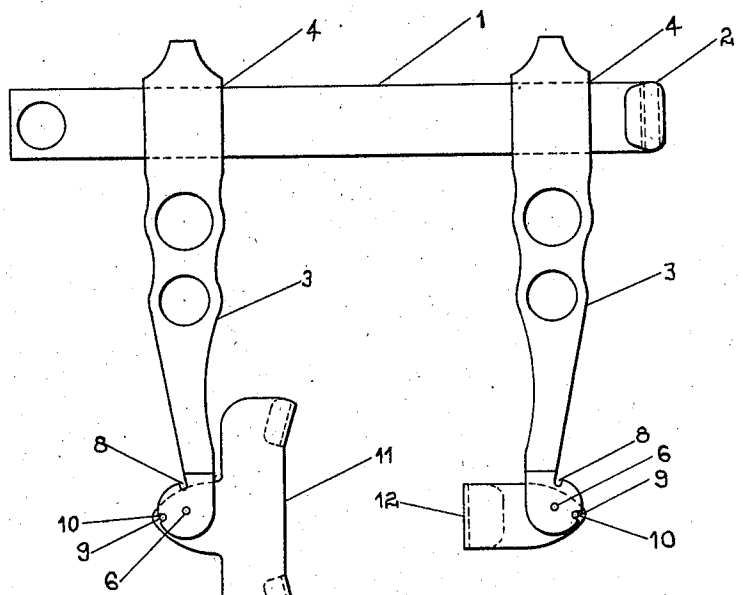


Fig. 1.

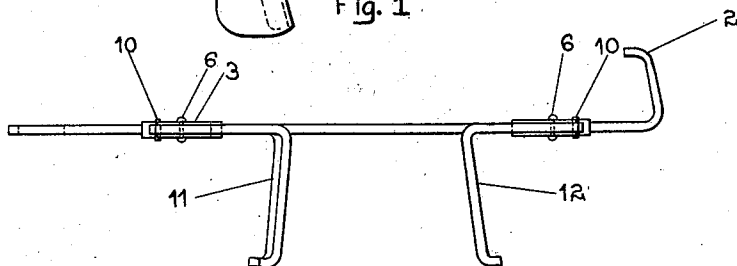


Fig. 2.

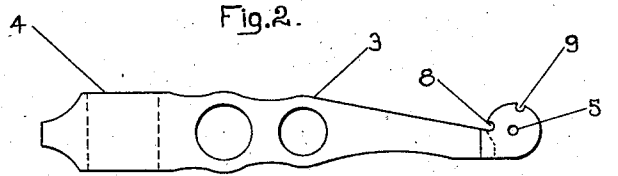


Fig. 3.

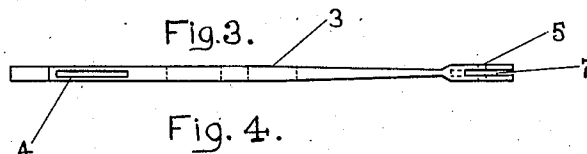


Fig. 4.

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SURGICAL RETRACTOR.

Application filed August 8, 1921. Serial No. 490,666.

To all whom it may concern:

Be it known that I, ALFRED N. BESSESEN, Sr., a citizen of the United States, residing at Minneapolis, in the county of Hennepin and State of Minnesota, have invented certain new and useful Improvements in Surgical Retractors; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to certain new and useful improvements in retractors, designed more particularly for use by the surgeon in performing abdominal operations on the human, or for such other purpose as may be required in operative work when one or more retractors may need to be used individually but if desired these individual retractors can be interlocked and combined into a self-retaining retractor for special retraction.

One object of the invention is to provide the surgeon with a set of applicators of but little weight and few parts, and of a new design to give better satisfaction for the purpose intended.

Another object of the invention is to provide a special self-retaining retractor through the interlocking of three or more individual retractors so as to form a single complex instrument of firm construction that can be used to hold the operative wound edges apart to any required degree, so constructed that it can be quickly applied and easily released and still perfectly self-retaining when in use.

A further object of the invention is to generally improve upon devices of this character by the provision of a simple and comparatively strong, durable and inexpensive construction, which will be efficient and reliable in operation and well adapted to the purpose for which it is designed.

With these and other objects in view, the invention consists of certain details of construction, and the combination and arrangement of parts as will be hereinafter fully described and claimed.

In the accompanying drawings, in which like parts are designated by similar reference characters throughout the various views:

Figure 1 represents in general the plan of the instrument, constructed in accordance with this invention, assembled for use

as a self-retaining retractor. It shows the manner of hinging the blades to the handles, and permitting a lateral side to end movement; and indicates the method of mounting the handles on a long straight retractor placed transversely to the handles.

Figure 2 represents an elevation of the instrument, and shows the blades of the three retractors, and the manner of hinging to the handles.

Figures 3 and 4, represent a detached retractor handle in plan and elevation, and shows the dove-tailed groove at its tip, and the rectangular slot through the butt end of the handle, for the reception of the long, straight retractor handle, when the instrument is assembled.

Referring more particularly to the drawings, the reference numeral, Fig. 1, represents the assembled instrument as formed by sliding the long, straight handle of retractor, 1, through the rectangular slot, 4, in the handles of the retractors, 3 and 3. It may be constructed of any suitable material, but preferably of metal. Number 2 refers to the blade of the long, straight retractor 1. Round holes are bored through the handles of the retractors to reduce weight and to serve as finger holes when used as individual retractors. Number 6 represents the rivet in the hinge joint at the end of the handle of each retractor 3 and 3. It completes the joint and permits the blades 11 or 12 to swing in a lateral direction from a right angle with the handle to a perpendicular with the handle; in which position it is held firmly by peg 10 catching into notches 8 or 9. Number 12 represents a narrow blade and number 11 a blade of extra width.

Figure 2, represents the same instrument as Figure 1; but in elevation. It brings out more clearly the blades 2, 11 and 12 of the individual retractors and shows in detail the construction of the hinge joint in the retractors 3 and 3. It shows the rivets 6 and 6 and the pegs 10 and 10.

Figure 3, represents a plan view of the retractor handle 3. It shows the position of the rectangular slot 4, and also the enlarged tip of the handle that enters into the formation of the hinge joint, showing the central hole 5 for the rivet and the notches 8 and 9 for the peg above described.

Figure 4, represents the same handle in elevation. It shows the rectangular slot

4 and the dove-tailed groove 7 in the tip of the handle 3, and the rivet hole 5.

From the foregoing description it may be seen that the object of the invention has been effectively carried out. The instrument can be quickly assembled when required for use as a self retaining retractor, and can easily be taken apart when needed for use as individual retractors. It is of simple construction and of sufficient strength for the purpose intended.

As various changes in form, proportion and minor details of construction may be resorted to without departing from the spirit of this invention I do not wish to be limited to the construction herein shown and described other than that set forth in the appended claims.

I claim:

- 20 1. A device of the character described, comprising a longitudinal handle member, a pair of depending arms removably posi-

tioned upon said handle, a pivotally mounted hook upon the lower end of each depending arm, and an integral hook upon one end of the handle member. 25

2. A device of the character described, comprising a longitudinal handle member, a pair of depending arms removably positioned upon said handle, a pivotally mounted hook upon the lower end of each depending arm, and an integral hook upon one end of the handle member, the hooks upon the depending arms being swung inwardly so as to provide a self retaining retractor when the several elements are assembled. 30 35

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

ALFRED N. BESSESEN, Sr.

Witnesses:

JOSEPH WM. DOMAK,
CHRISTINE J. BILLE.