No. 889,662. PATENTED JUNE 2, 1908.

C. N. COULTER.

SURGICAL INSTRUMENT.

APPLICATION FILED APR. 26, 1907.

Fig. 1.

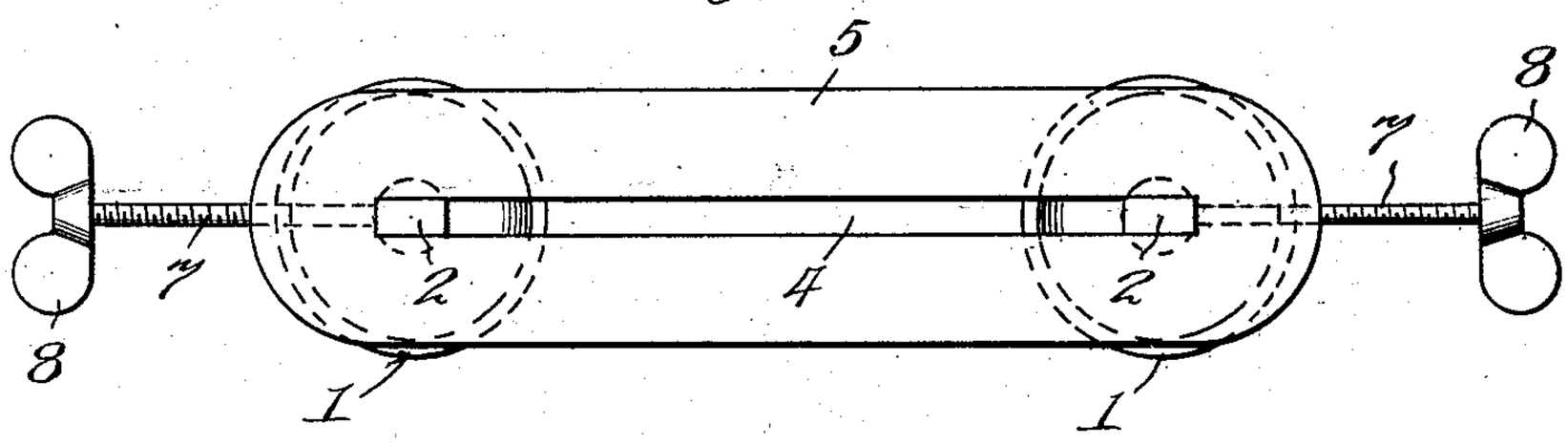


Fig. 2.

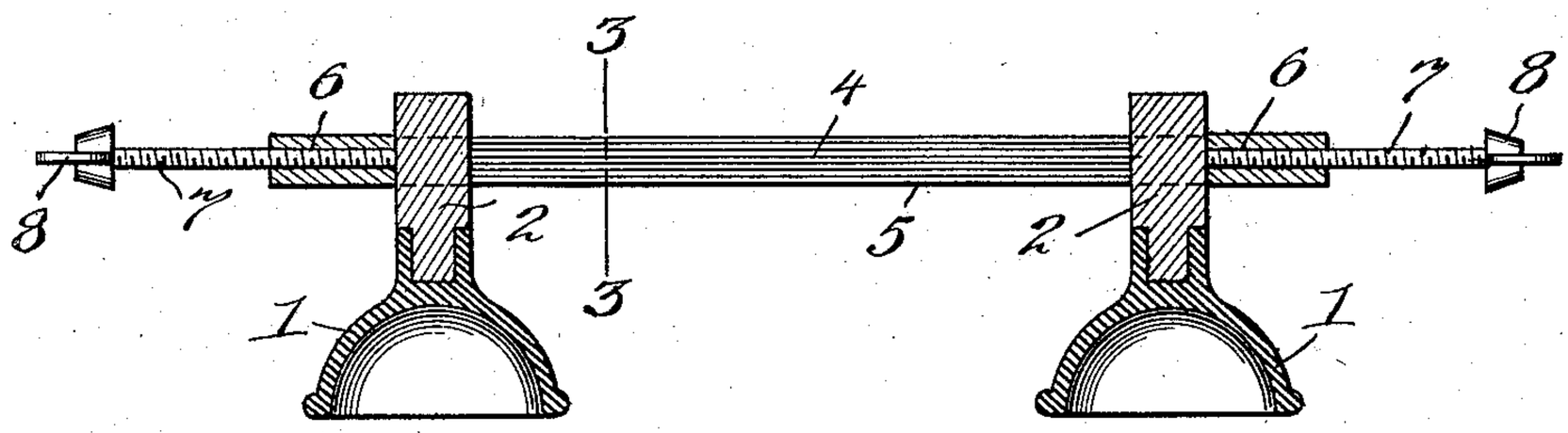
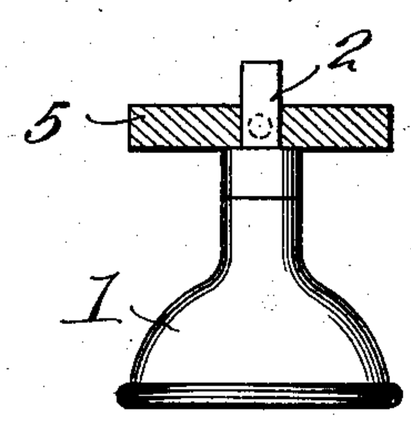


Fig. 3.



Witnesses

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UNITED STATES PATENT OFFICE.

CYRENIUS N. COULTER, OF TRAVERSE CITY, MICHIGAN.

SURGICAL INSTRUMENT.

No. 889,662. Specification of Letters Patent. Patented June 2, 1908.

Application filed April 26, 1907. Serial No. 370,472.

To all whom it may concern:

Be it known that I, CYRENIUS N. COULTER, a citizen of the United States, residing at Traverse City, in the county of Grand Traverse and State of Michigan, have invented new and useful Improvements in Surgical Instruments, of which the following is a specification.

This invention relates to a surgical device, primarily designed for use in closing cuts and other like wounds, the object of the invention being to provide a simple and effective device of this character by which a wound may be held closed in the course of treatment without the painful necessity of suturing or stitching the same, and by means of which the walls of the wound may be held as tightly closed as desired and opened at any stage during treatment for cleansing and the discharge of pus.

The preferred form of the invention is illustrated in the accompanying drawing, in which:—

Figure 1 is a top plan or outer side view of a surgical device embodying my invention. Fig. 2 is a longitudinal section of the same. Fig. 3 is a vertical cross section on line 3—3 of Fig. 2.

The device comprises in its organization a pair of spaced vacuum cups or applicators 1 designed to be arranged in practice on opposite sides of the wound, said cups being provided with upwardly extending guide bars or shanks 2 adapted to extend upwardly through and to move within a longitudinal guide slot 4 in a connecting plate, bar or member 5, forming a bridge to extend across the wound. The ends of the connecting member are provided with longitudinally extending threaded openings 6 arranged in alinement with the slot therein and in which work threaded stems or screw-adjusting devices 7 provided at their outer ends with suitable finger pieces 8. The threaded stems or adjusting devices may be swiveled or otherwise suitably mounted for revoluble movement in the shanks 2 of the vacuum cups, whereby the latter may be relatively adjusted along the guide slot 4.

In the use of the device, the cups 1 are brought into contact with the surface of the body on opposite sides of the wound, and the member 5 arranged to bridge over the wound, after which the adjusting devices are operated to force the cups inwardly to bring the walls of the wound as closely together as desired. One or more of such devices may be employed according to the length or size of the wound, and in such use a plurality are preferably arranged a distance apart corresponding to the normal distance between stitches when such are used. In this manner the walls of the wound may be held closed at all times, and the cups may be adjusted in and out by means of the adjusting devices to contract the wound or open the same to a greater or less extent for cleansing and the discharge of pus during the process of treatment. It will be understood that the connecting member will lie at sufficient distance away from the body to permit of the application and removal of the usual dressings or bandages, thus enabling the wound to be treated in the usual manner.

The construction and arrangement of parts herein shown provides an effective type of instrument for the stated purpose, but, of course, it will be understood that the construction may be modified within the purview of the claims.

Having thus described the invention, what is claimed as new, is:—

1. A surgical instrument comprising a pair of spaced vacuum cups, a bridge piece slidably engaged by said cups, and means for adjusting the cups relatively to each other.

2. A surgical instrument comprising a pair of spaced vacuum cups, a bridge-piece to which the cups are slidably connected for adjustment toward and from each other, and independent means for adjusting each cup and maintaining the same in adjusted position.

3. A surgical instrument comprising a bridge-piece, a pair of spaced vacuum cups slidably connected with the bridge-piece for adjustment toward and from each other, and an adjusting screw for independently adjusting each cup.

4. A surgical instrument comprising a pair of spaced vacuum cups provided with guide shanks, a bridge-piece having a guide slot receiving said shanks, whereby the cups are mounted for sliding adjustment toward and from each other, and means engaging said shanks for adjusting the cups.

5. A surgical instrument comprising an elongated bar or bridge-piece, a pair of spaced vacuum cups movable longitudi-

nally along said bridge-piece for adjustment toward and from each other, and adjusting and securing means for said cups.

6. A surgical device comprising a bridge-piece, a pair of vacuum cups carried thereby, and means slidably connecting the cups with the bridge-piece for adjustment in a straight line toward and from each other longitudinally along said bridge-piece.

7. A surgical device comprising a longitudinally slotted bridge piece, a pair of spaced vacuum cups having shanks adjustable in the slot of the bridge piece, and devices upon the bridge piece for adjusting said cups.

In testimony whereof, I affix my signature in presence of two witnesses.

CYRENIUS N. COULTER.

Witnesses:
C. A. HAMMOND,
E. L. EDWARDS.