

J. E. SPARKS.  
 ABDOMINAL RETRACTOR.  
 APPLICATION FILED JAN. 27, 1909.

955,006.

Patented Apr. 12, 1910.

Fig. 1

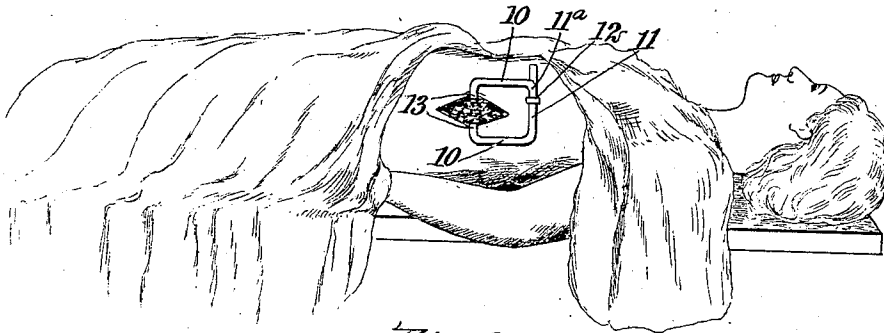


Fig. 2

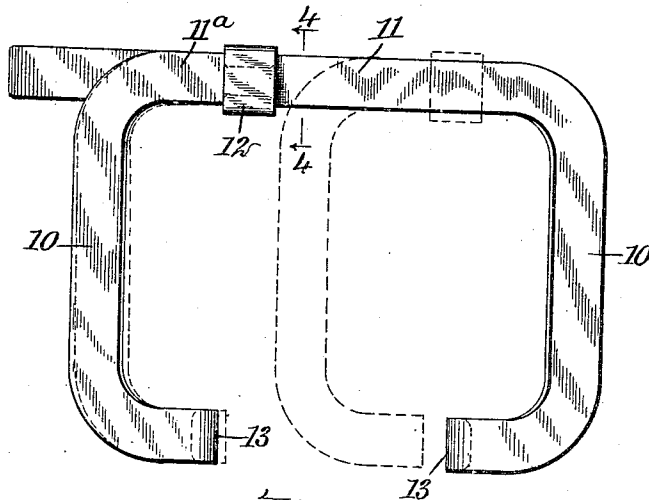


Fig. 3

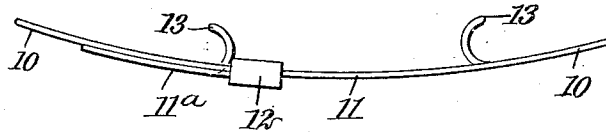


Fig. 4

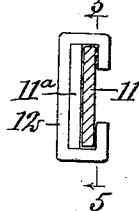
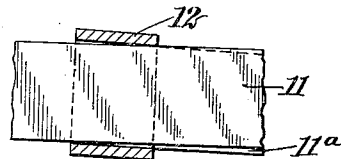


Fig. 5



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# UNITED STATES PATENT OFFICE.

JOSEPH EVERETT SPARKS, OF CROSSETT, ARKANSAS.

## ABDOMINAL RETRACTOR.

955,006.

Specification of Letters Patent.

Patented Apr. 12, 1910.

Application filed January 27, 1909. Serial No. 474,409.

*To all whom it may concern:*

Be it known that I, JOSEPH E. SPARKS, a citizen of the United States, and a resident of Crossett, in the county of Ashley and State of Arkansas, have invented a new and Improved Abdominal Retractor, of which the following is a full, clear, and exact description.

The invention relates more especially to improvements in abdominal retractors, although with suitable modifications the instrument may present a vaginal speculum, rectal speculum or mouth gag; in any case, the feature of adjustment and automatic locking of the spreading arms being substantially the same.

The invention may be defined as consisting of two U-shaped spreading arms arranged in opposed position and overlapping and slidably connected together at one side, and each arm having its extremity at the opposite side inwardly turned to form a hook, with the hooks facing outwardly.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a perspective view illustrating the application of my invention when in the nature of an abdominal retractor; Fig. 2 is a face view of the instrument, showing the relative position of the spreading arms in dotted outline and in full lines preparatory to spreading the lips of the incision and after the spreading has taken place; Fig. 3 is a top edge view of the instrument, showing the manner in which it is curved to conform to the body; Fig. 4 is a cross-section of the instrument on the line 4—4 of Fig. 2; and Fig. 5 is a longitudinal section through the keeper on the line 5—5 of Fig. 4.

In the construction of the instrument I employ two spreading arms 10, 10, one of the spreading arms having a relatively long offset shank 11 and the other arm having a corresponding shorter shank 11<sup>a</sup> provided at its end with a keeper 12 slidably embracing the shank 11. Both the shanks 11 and 11<sup>a</sup> are arranged at approximately right-angles

to the arms proper, and the shank 11 has a slight edgewise play in the keeper 12, as can be seen from Fig. 5, whereby when pressure is exerted on the free or outer end portions of the arms, the keeper frictionally binds on the shank 11 and automatically locks the arms in adjusted position. If the instrument is to serve as an abdominal retractor, the free ends of the arms are turned directly toward each other and provided with inwardly-turned hooks 13 to engage the lips of the incision, and the entire instrument is laterally curved to conform to the body, as shown in Fig. 3. The instrument is preferably constructed of sheet metal, which admits of its being relatively light while at the same time embodying requisite strength.

In applying the abdominal retractor to the patient, the arms are moved together and the hooks 13 engaged in the lips of the incision, after which the arms are spread apart to separate the walls as wide as is desired. On removing the hands from the spreading arms the tendency of the lips of the incision to close, cocks the movable arm to one side and automatically locks the keeper 12 to the shank 11, all parts of the instrument at this time being entirely out of the way of the operating surgeon. To remove the retractor, the arms are again grasped and the movable arms slightly sprung outwardly at the free or hooked end, when it may be readily shifted on the shank of the other arm.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:

In a surgical instrument, two U-shaped spreading arms arranged in opposed position and overlapping and slidably connected together at one side, and each arm having its extremity at the opposite side inwardly turned to form a hook, with the hooks facing outwardly.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOSEPH EVERETT SPARKS.

Witnesses:

LEONARD B. SIMS,  
A. T. SPARKS.