

Nov. 12, 1957

H. R. TAYLOR
ABDOMINAL RETRACTOR

2,812,759

Filed June 21, 1956

2 Sheets-Sheet 1

Fig. 1.

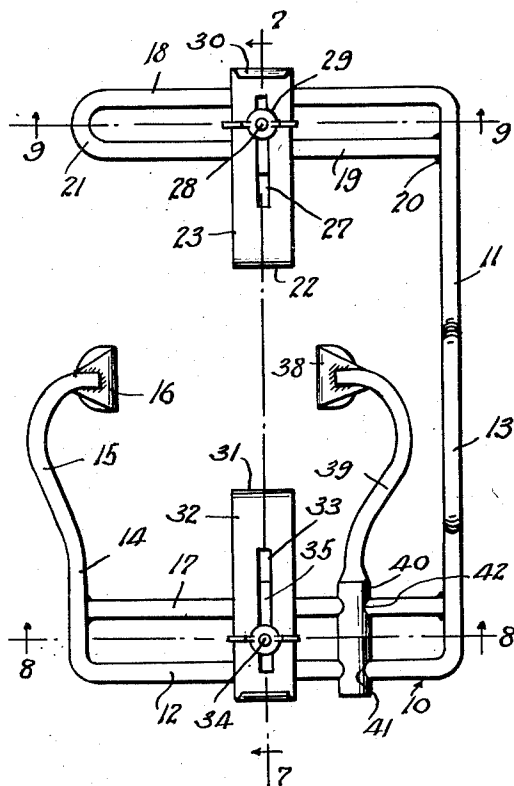


Fig. 2.

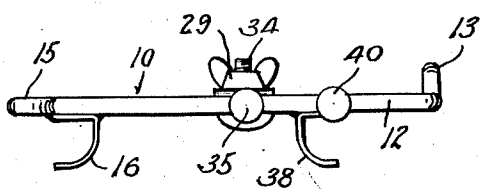
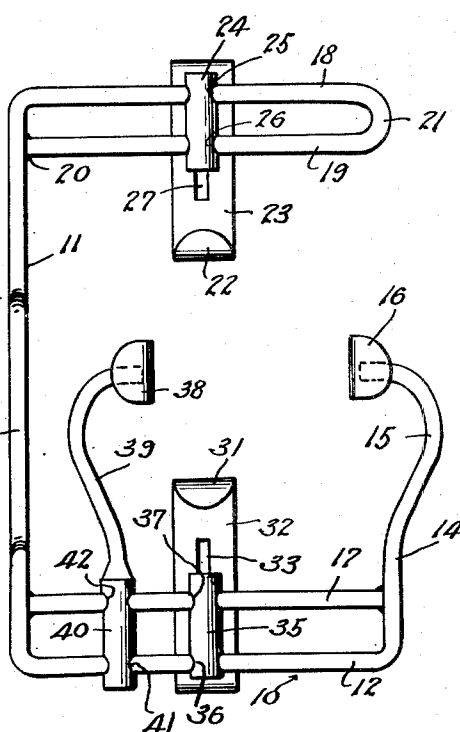


Fig. 3.

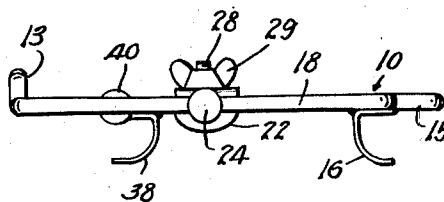


Fig. 4.

Harry R. Taylor
INVENTOR

BY *Chenoweth*
ATTORNEYS.

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Fig. 5.

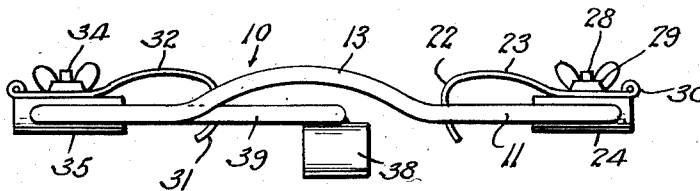


Fig. 6.

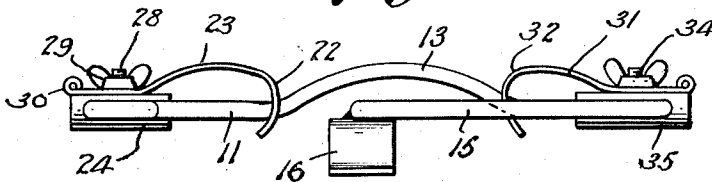


Fig. 7.

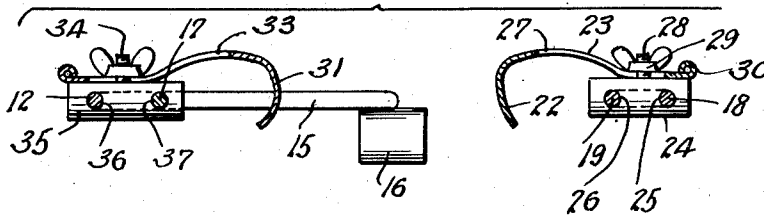


Fig. 8.

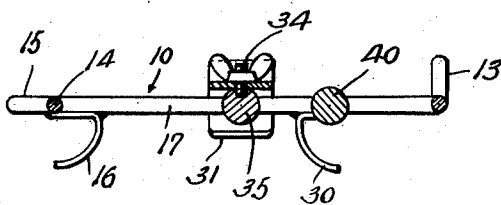
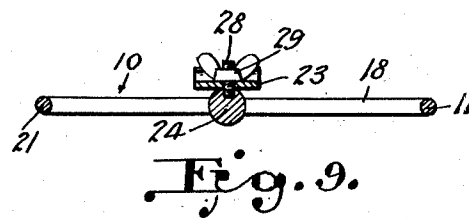


Fig. 9.



Harry R. Taylor

INVENTOR

BY *Chenoweth*
ATTORNEYS.

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2,812,759

ABDOMINAL RETRACTOR

Harry R. Taylor, Lewisville, Tex.

Application June 21, 1956, Serial No. 592,927

2 Claims. (Cl. 128—20)

This invention relates to a surgical instrument, and more particularly to an instrument known as a retractor.

In the performing of an operation on the abdomen where the incision is quite large, in order to provide for ready access to the interior it is necessary that means be provided which will engage the walls of the incision and pull the walls back. It is, therefore, an object of this invention to provide a retractor which can be easily and quickly applied and adjusted.

Another object of this invention is to provide a retractor having opposed pair of hooks with at least one hook of each pair adjustable in two directions, so that the retractor may be properly centered with respect to the incision.

A further object of this invention is to provide a retractor which is relatively light in weight and which when in set position will firmly hold the incision open.

With the foregoing and other objects in view which will appear as the description proceeds, the invention consists of certain novel details of construction and combinations of parts, hereinafter more fully described and pointed out in the claims, it being understood that changes may be made in the construction and arrangement of parts without departing from the spirit of the invention as claimed.

Referring to the drawings:

Figure 1 is an outer side elevation of a retractor constructed according to an embodiment of this invention.

Fig. 2 is an inner side elevation of the device.

Fig. 3 is an end elevation of the device.

Fig. 4 is an end elevation showing the end opposite from that shown in Fig. 3.

Fig. 5 is a side elevation of the device.

Fig. 6 is another side elevation showing the side opposite from that shown in Fig. 5.

Fig. 7 is a sectional view taken on line 7—7 of Fig. 1.

Fig. 8 is a sectional view taken on line 8—8 of Fig. 1.

Fig. 9 is a sectional view taken on line 9—9 of Fig. 1.

Referring to the drawings, the numeral 10 designates generally a frame structure embodying a longitudinal bar 11 having a bowed portion 13. The bowed portion 13 projects outwardly as will be hereinafter described. The frame 10 also includes a right-angularly disposed lower end bar 12 with a right-angularly disposed arm 14 having a bowed portion 15. The arm 15 has the concave portion thereof innermost and an outwardly directed hook 16 is carried by the terminal or upper end of the arm 14. The arm 14 is braced relative to the bar 11 by means of a brace bar 17 which is disposed parallel with the bar 12 and the two bars 12 and 17 form a guide as will be hereinafter described.

The opposite or upper end of the frame 10 includes a right angle bar 18 parallel with the bars 12 and 17 and the bar 18 has disposed in parallel relation thereto a second bar 19 which is welded as at 20 to the bar 11. The bar 19 is integral with the bar 18 and is connected therewith by means of a curved connecting member 21.

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The two bars 18 and 19 form a right half of hook 22 having a shank 23 extending outwardly therefrom. The hook 22 with the shank 23 is adjustably secured lengthwise to the shank 23 to a tubular slide member 24 having openings 25 and 26 through which the bars 18 and 19 slidably engage. The shank 23 is formed with an elongated slot 27 through which a bolt 28 engages and a nut 29 is threaded on the bolt 28 so as to secure the shank 22 and hook 23 in adjusted position. The outer end of the shank 23 is provided with a rolled portion 30 so that the hook 22 can be readily adjusted in the event any moisture or the like engages the hook and shank 22 and 23, respectively.

A diametrically opposite hook 31 having a shank 32 is adjustably carried by the bars 12 and 17. The shank 32 is provided with an elongated opening 33, where a bolt 34 engages and the bolt 34 is carried by a tubular slide member 35 having openings 36 and 37 through which the bars 12 and 17, respectively, slidably engage. A second hook which is complementary to hook 16 and outwardly directed, is indicated at 38. The hook 38 is carried by a longitudinally bent arm 39 which is fixed to a slide member 40 having openings 41 and 42 through which the bars 12 and 17 respectively, loosely engage. When the hook 38 is engaged with an edge of the incision the pressure at the upper end of the arm 39 is such as to effect a locking of the slide member 40 with respect to the bars 12 and 17.

In the use and operation of this device, the hooks 16 and 38 are engaged with opposite walls of the incision and these walls are then moved outwardly by movement of hook 38 with slide member 40. The incision is further expanded by engagement of the hooks 22 and 31 with the walls of the incision at right angles to the walls engaged by the hooks 16 and 38. These hooks 22 and 31 are adjusted outwardly or inwardly to provide for further holding of the incision so that when the incision is held by the oppositely disposed pairs of hooks the opening formed by the incision will be available for whatever treatment may be desired. It will be understood that in certain instances selected ones of the hooks may be engaged with adjacent entrails which may be in the way and which it may be desired to hold in expanded position.

The adjustable hooks or blades 22, 31 and 38 may be adjusted in the stationary frame relative to each other and to the stationary hook or blade 16, and the adjustable hooks or blades will remain in their adjusted positions for holding the incision open in two or more directions.

What is claimed is:

1. A retractor comprising a frame formed of an elongated bar, right angularly disposed pairs of guide bars at each end of said elongated bar, a longitudinally bent arm extending right angularly from one pair of bars in the direction of the other pair of bars, an outwardly directed hook on the free end of said arm, a second longitudinally bent arm, an outwardly directed hook on the free end of said second arm, a slide member fixed relative to said second arm and loosely engaging said one pair of bars, said hooks being disposed in confronting position, a second pair of confronting hooks disposed at right angles with respect to said first named hooks, and means slidably mounting said second pair of hooks one each on each pair of guide bars.

2. A retractor comprising a frame formed of an elongated bar, right angularly disposed pairs of guide bars at each end of said elongated bar, a longitudinally bent arm extending right angularly from one pair of bars in the direction of the other pair of bars, an outwardly directed hook on the free end of said arm, a second longitudinally bent arm, an outwardly directed hook on the free end of said second arm, a slide member fixed rela-

tive to said second arm and loosely engaging said one pair of bars, said hooks being disposed in confronting position, a second pair of confronting hooks disposed at right angles with respect to said first named hooks, means slidably mounting said second pair of hooks one each on each pair of guide bars, and means adjusting said second pair of hooks relative to each other.

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