

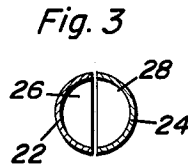
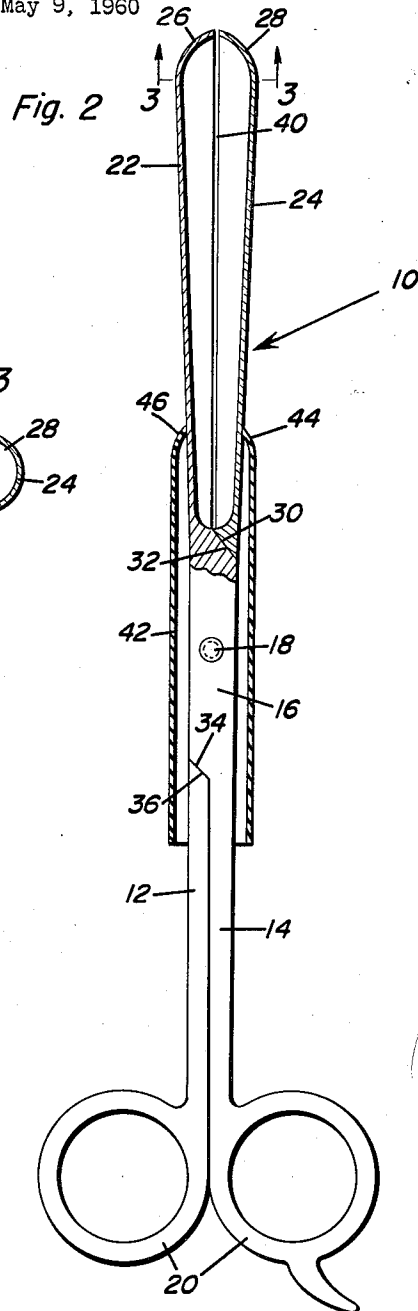
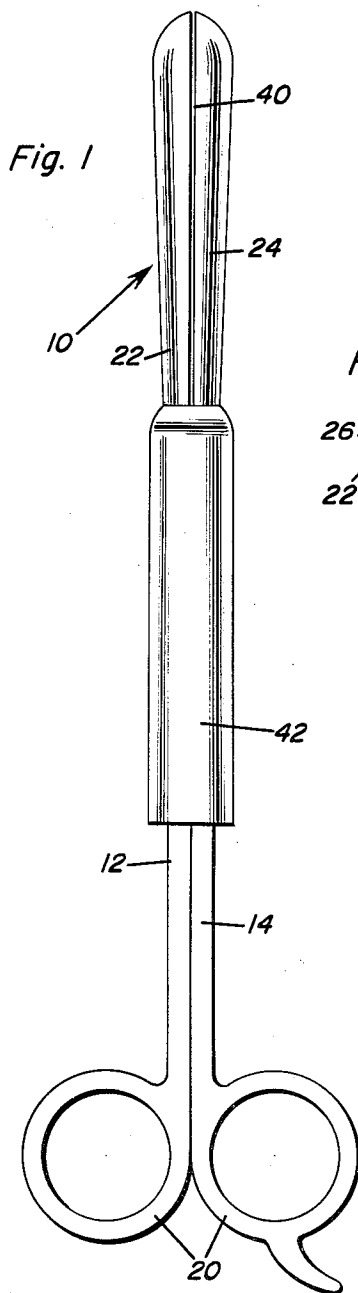
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TOOL FOR RECTAL TREATMENT

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TOOL FOR RECTAL TREATMENT

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9 Claims. (Cl. 128—321)

This invention comprises a novel and useful tool for rectal treatment and more particularly relates to a surgical instrument for removing fecal impactions from the rectum of a patient.

The principal object of this invention is to provide a surgical instrument especially adapted for the purpose of removing in as effective and painless manner as possible fecal impactions obstructing the rectum.

A further object of the invention is to provide a surgical instrument in accordance with the foregoing objects which shall be of such a construction that it may be safely used by persons having only a limited anatomical knowledge as well as by doctors or nurses.

A further object of the invention is to provide a scissors-like instrument especially adapted for insertion into the rectum for removing fecal impactions therefrom and which shall be so constructed that the blades of the instrument do not completely close thereby eliminating the danger of the jaws of the implement from pinching or injuring the lining of the rectum.

Yet another object of the invention is to provide a scissors-like surgical implement in accordance with the preceding objects wherein the blades thereof are spoon shaped so as to facilitate enclosing the matter to be removed by the implement and wherein there is provided a soft rubber shield or sleeve covering and enclosing the pivotal connection of the two jaws of the implement and facilitating passage of the implement into and out of the rectum.

These together with other objects and advantages which will become subsequently apparent reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawings forming a part hereof, wherein like numerals refer to like parts throughout, and in which:

FIGURE 1 is a side elevational view of the surgical implement in accordance with this invention, the same being shown with its jaws in the closed position in readiness for insertion into or removal of the same from a rectum;

FIGURE 2 is a view in vertical central section through a portion of the instrument of FIGURE 1; and

FIGURE 3 is a horizontal transverse sectional view taken substantially upon the plane indicated by the section line 3—3 of FIGURE 2 and showing the configuration of the ends of the jaws of the implement.

It frequently happens that obstructions of the rectum arising from fecal impaction therein is experienced in a patient. The removal of the same is often a difficult problem and is usually quite painful to the patient. It is frequently desired to effect the removal of fecal matter from the rectum in such a manner as to avoid irritation of the delicate tissues lining the rectum, especially in the case of patients who have undergone surgery or otherwise are in a weakened condition.

The surgical implement in accordance with this invention to overcome these disadvantages and effect the desired result is illustrated in the accompanying drawings. The instrument in its entirety is indicated by the numeral 10 and consists of a pair of relatively slim elongated arms or levers 12 and 14 having overlapping plate-like midportions 16 which are pivoted to each other as by a suitable pivotal connection at 18. At one end these members are provided with scissors-type finger grips or han-

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dles 20, while elongated jaws as at 22 and 24 project from the other ends thereof. As shown in FIGURE 3, the jaws are preferably semi-circular or cup shaped in cross section so that the same have the edges of their side walls disposed in close relation to each other to thereby confine a substantially circular chamber, in cross section, therebetween. At their ends, these jaws likewise have curving end walls as at 26 and 28 so as to complete the enclosure of the space between the jaws.

An important feature of this invention resides in the construction of the midportions 16 of the members 12 and 14 and their jaws 22 and 24 such that shouldered surfaces 30 and 32 disposed in complementary fashion upon the two midportions 16 and further complementary surfaces 34 and 36 disposed at the other ends of these midportions are adapted to engage each other and thus limit closing movement of the jaws to prevent contact of the adjacent edges thereof. There is thus defined a slight clearance between the jaws as indicated by the numeral 40 in each of FIGURES 1 and 2. The purpose of this construction is to prevent a complete closure of the jaws which might thus squeeze, and painfully or injuriously grip the delicate tissues which line the rectum during the operation of the implement.

There is also provided a tubular guard or sleeve as at 42 which may conveniently be of rubber or other soft and resilient material, and which at its inward extremity is provided with a ball shaped turned flange or lip 44 having an aperture 46 therethrough to receive the jaws 22 and 24 as shown clearly in FIGURE 2. The open end of the guard or shield extends considerably beyond the pivot 18, the midportions 16 of the members 12 and 14 to thus completely enclose those portions of the device, thereby preventing any possibility of contact of the pivotal connection and of the stop surfaces or shoulders 30, 32, 34 and 36 with the tissues of the rectal passage, and also to maintain this portion of the instrument in a clean condition.

By virtue of its resilient construction, the sleeve 42 may be easily inserted with the instrument into a rectal cavity and readily removed therefrom and by its smooth yielding surface will protect the rectal cavity from painful contact with or damage by the metallic portions of the instrument from the point of contact of the nose portion 44 of the tubular shield to the handle portions of the instrument.

It should be observed that the instrument has been illustrated as having the handles and jaw portions disposed in a substantially straight line. Obviously, if desired, appropriate contours could be given to these parts to adapt them for some specific situation in which they are to be employed.

Although the jaws 22 and 24 have been shown as semi-circular in cross section it will be appreciated that some other configuration could be provided if desired. It is merely essential that the jaws shall in their closed position be of a relatively small diameter to facilitate the ease of insertion of the instrument into and its removal from the rectum of a patient.

In operation, the instrument in the closed position of FIGURE 1 is inserted into the rectum, the handles 20 then manipulated to cause the jaws to open slightly, whereupon the jaws can be manipulated to cause the fecal obstruction to be disposed within the cup-shaped jaws and securely retained therein when the jaws are closed. Thereupon the instrument can be withdrawn and this operation repeated as often as necessary.

The foregoing is considered as illustrative only of the principles of the invention. Further, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation shown and de-

scribed, and accordingly all suitable modifications and equivalents may be resorted to, falling within the scope of the invention as claimed.

What is claimed as new is as follows:

1. A surgical instrument for removing rectal impactions, comprising a pair of elongated members having handles at one end and elongated jaws at the other, pivot means connecting intermediate portions of said members together whereby said jaws may be moved toward and away from each other between closed and open positions of the instrument by actuation of said handles, said jaws being of a concave cross-section and coacting to define therebetween a substantially cylindrical chamber in the closed position of the instrument, each jaw having a pair of elongated side edges parallel to but spaced from the corresponding edges of the other jaw when the instrument is fully closed but divergent from said corresponding edges when the instrument is open, and stop means for limiting movement of said members about said pivot means whereby said jaws are prevented from moving toward each other beyond a position wherein their longitudinal side edges are spaced and parallel when the instrument is closed.

2. The combination of claim 1, wherein the outer ends of said jaws remote from said pivot are curved towards each other whereby to substantially close the end of the chamber defined between said jaws.

3. The combination of claim 1, wherein said stop

means are disposed on said intermediate portions of said members.

4. The combination of claim 1, wherein said stop means comprise complementary engaging surfaces on said pair of members disposed to limit movement of said jaws towards each other.

5. The combination of claim 4, wherein said stop means are provided on the intermediate portions of said members.

6. The combination of claim 5, wherein said stop means are disposed on one end of each of said intermediate portions.

7. The combination of claim 1, together with a tubular shield of yieldable material embracing the intermediate portions of said elongated members.

8. The combination of claim 7, wherein said shield has a closed end resiliently embracing said jaws.

9. The combination of claim 8, wherein said shield is open at its other end and surrounds a portion of said members between said pivot means and said handles.

References Cited in the file of this patent

UNITED STATES PATENTS

2,489,842	Wochner	Nov. 29, 1949
2,644,455	Benoit	July 7, 1953
2,723,666	Greenberg	Nov. 15, 1955