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2,685,289

SURGICAL APPARATUS FOR INTESTINAL INTUBATION

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Fig. 1.

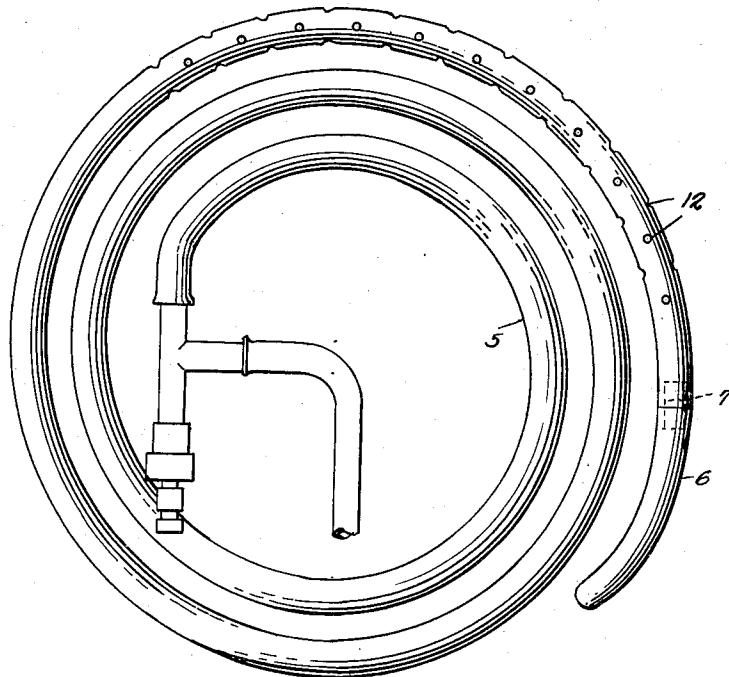


Fig. 2.

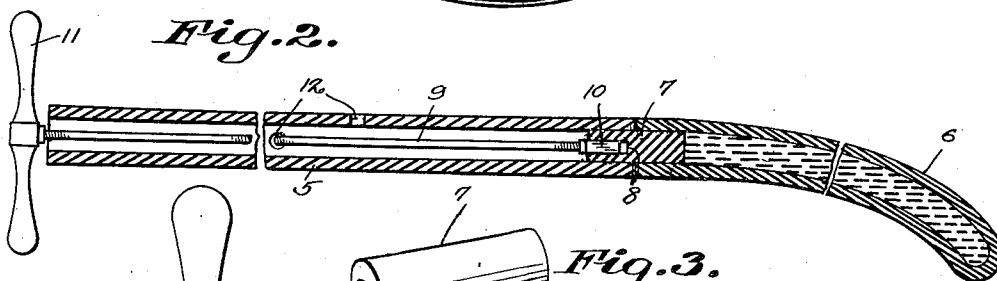


Fig. 3.

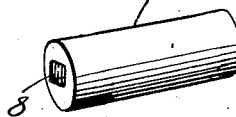


Fig. 4.

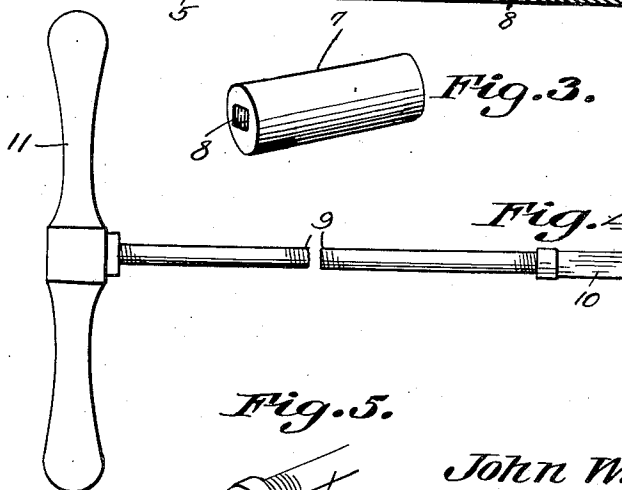
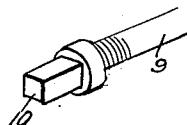


Fig. 5.



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UNITED STATES PATENT OFFICE

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SURGICAL APPARATUS FOR INTESTINAL INTUBATION

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4 Claims. (Cl. 128—276)

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This invention relates to a surgical apparatus, and more specifically to an apparatus designed for use in intestinal intubation.

By way of explanation, it might be stated that in the application of the air vent tube commonly used in intestinal intubation, the flexible tip forming a part of the usual plastic tube, frequently takes a position within the stomach, wherein it is extremely difficult with known methods, to properly direct the flexible tip into the duodenum.

It is therefore the primary object of the invention to provide an apparatus of this character wherein the movements of the flexible tip of the apparatus may be controlled by the person inserting the tube, to the end that the tip may be readily and accurately rotated to direct the tip and tube through the pylorus, into the duodenum, thereby reducing the time required to prepare the patient for surgery, to the minimum.

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 drawing,

Figure 1 is a view illustrating a surgical apparatus, constructed in accordance with the invention, as rolled into a coil.

Fig. 2 is a longitudinal sectional view through the flexible tip of the apparatus and a section of the tube to which the tip is secured, the plug forming the essence of the invention being also illustrated.

Fig. 3 is an elevational view of the plug showing the wrench socket.

Fig. 4 is an elevational view of the wrench and flexible shaft to which the wrench is secured.

Fig. 5 is an end elevational view of the wrench.

Referring to the drawing in detail, the surgical apparatus constituting the subject matter of the present invention, comprises the tube 5 which is formed with the flexible tip 6 which is curved as clearly shown by the drawing, to facilitate the positioning of the tip when extending the tip and tube through the pylorus, into the duodenum.

Positioned within the inner end of the flexible tip 6 which is filled with mercury to lend weight thereto, is the plug 7 which is provided with the socket 8 extending inwardly from one end thereof, the walls of the socket being rectangular providing a wrench socket.

The reference character 9 indicates a flexible

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shaft which is of a length to extend throughout the length of the tube 5, there being provided the wrench 10 on one end of the shaft 9, which wrench is of a size to closely fit within the socket 8 connecting the wrench and plug.

On one end of the flexible shaft 9 is the finger piece 11 by means of which rotation of the flexible shaft and wrench is effected.

The tube 5 is of the usual construction and is formed with a plurality of small openings 12 for intestinal intubation.

From the foregoing it will be seen that due to the construction of the apparatus forming the subject matter of the present invention, the flexible shaft 9 may be inserted in the tube 5, so that the wrench 10 on the inner end of the flexible shaft will seat within the socket 8. By turning the flexible shaft 9 within the tube, it is obvious that the curved tip may be moved or rotated to direct the tip through the pylorus, into the duodenum quickly, and with little effort on the part of the operator, thereby reducing the time required in preparing the patient for surgery, to the minimum.

It is obvious that when the tip 6 has been properly positioned, the flexible shaft and its wrench may be withdrawn and the intestinal intubation treatment carried out.

Having thus described the invention, what is claimed is:

1. An intestinal intubation apparatus, comprising a tube having openings through the wall thereof, a curved tip disposed on the end of said tube, a plug disposed within the tube adjacent to the tip, a wrench embodying a flexible shaft fitted in the tube, a wrench on one end of the flexible shaft connected with said plug, said wrench effecting rotation of said tip, directing said tube in its passage through the intestines.

2. An intestinal intubation apparatus, comprising a tube having openings through the wall thereof, a curved tip disposed on one end of said tube, a plug disposed within the tube adjacent to the tip, said plug having a wrench socket formed therein, a flexible shaft disposed in said tube, a wrench on one end of the shaft seated in said wrench socket connecting the wrench and plug, and a knob on one end of the flexible shaft for effecting rotation of the shaft and tip directing said tube and its tip through the intestines.

3. An intestinal intubation apparatus comprising a flexible tube, a curved tip secured on one end of the flexible tube, a wrench embodying a flexible shaft, disposed in said tube, a wrench on one end of said flexible shaft, a socket member disposed within the curved tip to which said

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wrench is connected, a finger piece on one end of the flexible shaft for effecting rotation of said shaft and wrench, turning said curved tip guiding said tip in its passage through the intestines.

4. An intestinal intubation apparatus, comprising a flexible tube, a curved weighted tip secured on one end of the tube, a plug disposed within the tip spaced a substantial distance from the outer end of the tip, a wrench embodying a flexible shaft removably held within the tube engageable with said plug effecting rotation of the

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plug and tip in guiding the tip and tube to a predetermined position within the intestines.

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