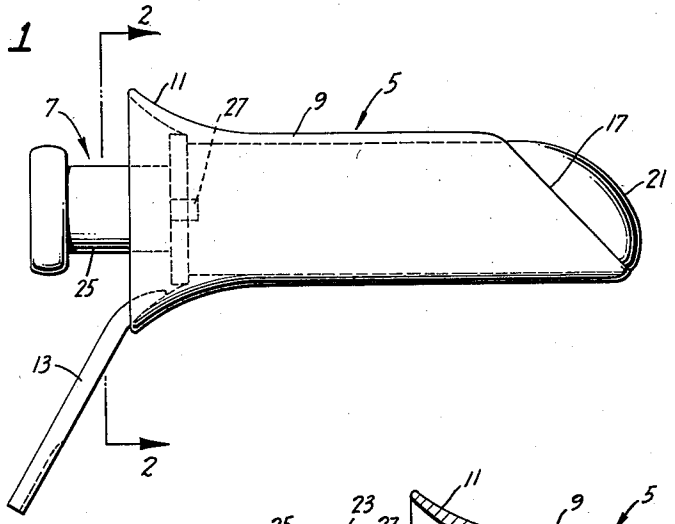
Jan. 26, 1960 G. J. CAMPAGNA 2,922,415

ANOSCOPE

Filed Sept. 5, 1957

FIG_1



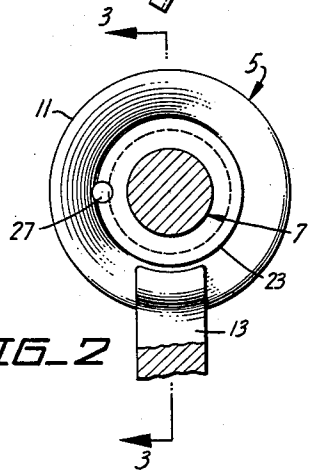


FIG_2

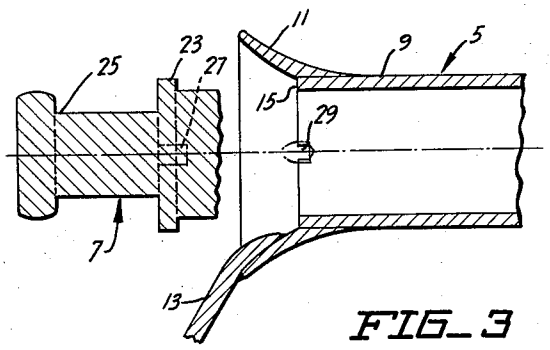


FIG_3

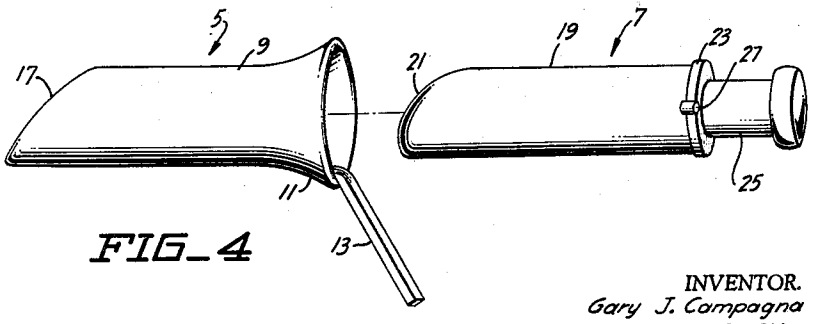


FIG_4

INVENTOR.
Gary J. Campagna
ECHOFF & SLICK
ATTORNEYS
BY: Robert R. Slick
A MEMBER OF THE FIRM

United States Patent Office

2,922,415

Patented Jan. 26, 1960

2,922,415

ANOSCOPE

Gary J. Campagna, Corte Madera, Calif.

Application September 5, 1957, Serial No. 682,113

1 Claim. (Cl. 128—4)

This invention relates to a transparent operating anoscope and similar instruments which are made of a clear transparent plastic.

Anoscopes and similar instruments have heretofore been made of metal, but such instruments offer a number of disadvantages. For one thing, electric cautery is frequently employed when using such instruments and if the anoscope is made of metal, there is always the danger of shock to the patient. Further, with a metal anoscope, it is impossible to examine the distended wall so that abnormal conditions along the wall itself may be overlooked. Such metal instruments are ordinarily provided with extremely small light bulbs at the far end and there is always the danger of having a bulb burn out during an operation, requiring replacement of the bulb. Additionally, anoscopes which have been used in the past have had an obturator of metal so that the physician inserting the instrument cannot see the placement of the instrument until the obturator is removed.

It is therefore an object of the present invention to provide an anoscope and obturator therefor made of a clear plastic, which plastic can be easily cleaned by cold sterilization methods.

It is another object of this invention to provide such an anoscope made of a clear plastic such as methyl methacrylate having a high index of refraction whereby light is conducted down the walls of the anoscope obviating the necessity of using a light source within the anoscope.

Still another object of this invention is to provide an anoscope having an obturator made of a clear transparent material so that the operator can see in advance as the instrument is inserted.

Another object of this invention is to provide an anoscope which is completely shockproof, reducing the hazards of electric cautery.

Still another object of this invention is to provide an anoscope having a simple locating pin for the obturator so that the obturator will not be turned relative to the instrument proper while it is being inserted in a body cavity.

In the drawings forming part of this application:

Figure 1 is a plan view of an anoscope made in accordance with the present invention.

Figure 2 is a view, partly in section, on the lines 2—2 of Figure 1.

Figure 3 is a sectional view, generally on the lines 3—3 of Figure 2 but with the obturator partially withdrawn from the anoscope.

Figure 4 is a perspective view of the anoscope of the present invention with the obturator withdrawn therefrom.

Referring now to the drawings by reference characters, the anoscope of the present invention has two principal parts, namely, the anoscope proper, generally designated as 5, and the obturator, generally designated as 7. The anoscope has a central portion in the form of a tube 9 to which is attached a flared end 11. To the flared end 11 is attached a handle 13. It will be noted that the

tube 9 terminates in a square shoulder 15, and this square shoulder serves to pick up light and convey it to the operation site. The opposite end of the anoscope has a tapered end 17 for easy insertion in a body cavity.

The obturator 7 is made of a clear transparent plastic also, and it consists of a central body portion 19 having a smoothly rounded end portion 21. At the opposite end of the obturator is a shoulder 23, and beyond the shoulder is a handle portion 25. It will be noted that the shoulder 23 normally fits against the shoulder 15 and that shoulder 23 further has a pin 27 extending therefrom which fits into a small slot 29 formed in the wall of the tubing 9. It will further be noted that when the pin 27 is in the slot 29, and when the shoulder 23 is in engagement with shoulder 15, the front end of the instrument formed by the anoscope proper and the obturator form a smoothly rounded curved surface which may be readily inserted in a body orifice. Further, the pin 27 and the slot 29 keep the obturator from turning as the device is inserted, preventing injury to the patient.

The obturator 7 as well as the anoscope proper are both made of a clear transparent plastic. The body portion 5 is made of a material having good light transmission qualities and a high index of refraction, such as methyl methacrylate (sold under the trade names of Plexiglas and Lucite) and such plastics have the property of conveying light down their walls and discharging it at the opposite end. Thus, light is conducted from over the operator's shoulder to the site of the operation, obviating the necessity of employing any illumination device within the anoscope itself. Further, since the obturator 7 is made of a clear transparent plastic, the operator can see what he is doing while he inserts the device. Since the walls 9 of the obturator are of clear plastic, the operator can also see the condition of the walls of the body cavity into which the device is inserted. Since such plastic does not conduct electricity, it is completely safe for use in electric cautery.

Although the device has been described as an anoscope, it is obvious that the principles here involved are of broad application and can be applied to similar instruments for surgical or exploratory procedures such as vaginoscopes or bronchoscopes.

I claim:

An anoscope and obturator combination made entirely of polymerized methylmethacrylate comprising a tube portion having proximal and distal ends, said proximal end terminating in a gentle flare and being provided with a handle and said distal end terminating in a taper, said obturator having a central body portion fitting within said tube and a handle terminating in a plane polished surface normal to the major axis of the obturator whereby an operator can look through said obturator as the anoscope is inserted in a body orifice. a shoulder on said obturator between said handle and said body portion to limit the forward movement of the obturator, a pin on said shoulder fitting into a recess in said tube whereby said obturator cannot turn with respect to said tube when fully inserted therein, said obturator having a bulbous end which fits with the tapered end of the anoscope to make a smoothly rounded member for insertion in a body orifice.

References Cited in the file of this patent

UNITED STATES PATENTS

1,880,551	Wappler	Oct. 4, 1932
2,583,937	Fossati	Jan. 29, 1952
2,759,478	Boltuch	Apr. 21, 1956
2,746,450	Lady et al.	May 22, 1956
2,769,441	Abramson	Nov. 6, 1956

FOREIGN PATENTS

551,146	Great Britain	Feb. 9, 1943