Sigmoidoscopy : a new instrument / by Anthony Bassler.

5.

Reprinted from the New York Medical Journal for November 18, 1911.

SIGMOIDOSCOPY;

A New Instrument.

By Anthony Bassler, M. D.,
New York.
Visiting Gastroenterologist to the People's Hospital, Chief Gastroenterologist to the German Poliklinik.

The examination of the rectum to its dome by an endoscopic instrument is possible in all individuals in whom the rectum is patent, and that of the sigmoid in about one fourth of all. Among the three fourths of the persons in whom the sigmoid cannot be examined, are those in whom the lower sigmoid passes to the right toward the cæcum; those in whom it swings horizontally forward in a looped course from right to left, and those in whom its position directly beyond is nearer to the anus than the dome of the rectum, even when in the knee chest position. In most instances in which the sigmoid cannot be examined completely, it is due to a vertical looping of the sigmoid, more or less extent of angulation, or because, on inflation, when the end of the instrument is at the upper part of the rectum, the air rushes into the lower sigmoid, causing this to approximate itself to the rectum nearer to the anus than the position of the tip of the instrument.

For the examinations, a sigmoidoscope answers as a proctoscope, a proctosigmoidoscope, and for deep observations also—therefore, one instrument answers for all purposes. Its passing is simple to perform, and almost painless, and its diagnostic advantages warrant its more general use. Diagnoses of the following conditions are all easily made with it: Internal hæmorrhoids, hypertrophy of the Houston valves, simple catarrhal, hypertrophic, and atrophic proctitis; ulceration, stricture, and carcinoma of the rectum; pressures upon the lumen of

the rectum due to enlarged prostate; displaced uteri, and circumrectal adhesions and growths, acute, chronic, catarrhal, hypertrophic, and atrophic sigmoiditis; ulceration and carcinoma of the sigmoid. The position and course of the sigmoid, in many instances, can be made out by its use.

For these examinations the lower bowel should be cleared of fæces by giving rhubarb or other

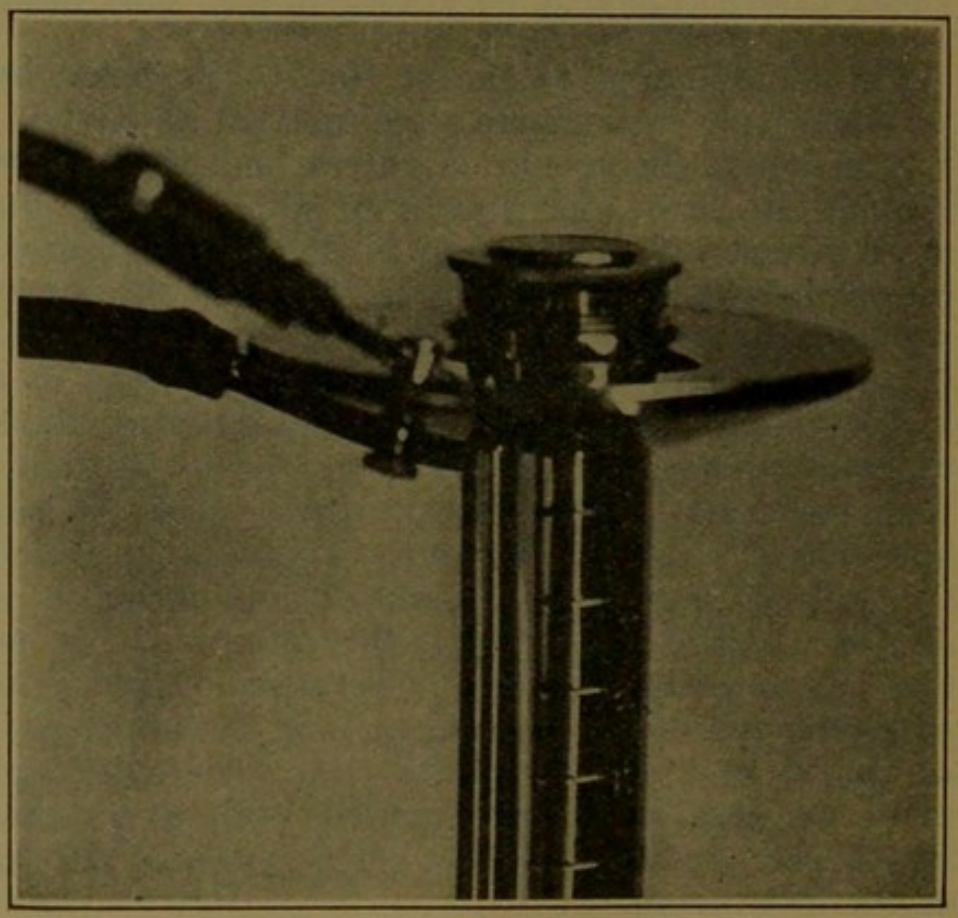

FIG. 1.—Showing the construction of the head end of the instrument, with the obturator withdrawn, the window in place, and the current connection for illuminating the lamp and the tube from the inflating bulb attached.

aperient about twenty-four hours, and an enema of plain, warm water, about three hours, before the examination, or perhaps only a brisk saline purge, three hours before, would answer. The patient should be placed in the knee chest position, since others are not so satisfactory. The instrument and anus should be lubricated preferably with petroleum

jelly, since oils are too thin and run off, and glycerin does not permit the tube to slip in and out easily enough to obviate jumping and undue pressures. After the tip has entered the rectum, the obturator should be withdrawn, the window put in place, the incandescent bulb lit, and the instrument passed upward under sight and inflation, and absolutely without force. The inclination of the tip should first be up and backward to the depth of the excavation of the sacrum, then straight upward, then upward and slightly forward as the dome of the rectum is reached, and then gradually to the left into the sigmoid. The inflation should be performed by small puffs, as the mucous membrane infolds into the lumen of the tube, and not by a steady stream of air as the twin bulbs give, as the latter causes an unnecessary amount of air to be delivered into the bowel and added distress during the examination and afterward.

Although there are many different forms of endoscopic instruments for the purpose of these observations, the one most generally used is that of Tuttle. Not wishing to criticise this best of all instruments for practical work in any way, several years of its employment, as well as that of others, had suggested to me a new instrument, which, in my experience, is superior to any yet constructed. Its features are: It is easier to introduce; the tube is marked so that the distance up from the rectum, when lesions are met with, can be quickly estimated; its advancing rim is protected from injuring the mucous membrane; the window can be quickly put on and taken off without requiring any in or out force to be exerted; it is of large size and the tube is tightly closed when the window is on, so that air from the bowel cannot come back into the operator's face. The basin shaped, proximal end permits of turning the instrument without the necessity of a handle, which is a nuisance, and protects the operator's face better than the small hilted instruments do. The light carrier is held in place by a screw attachment,

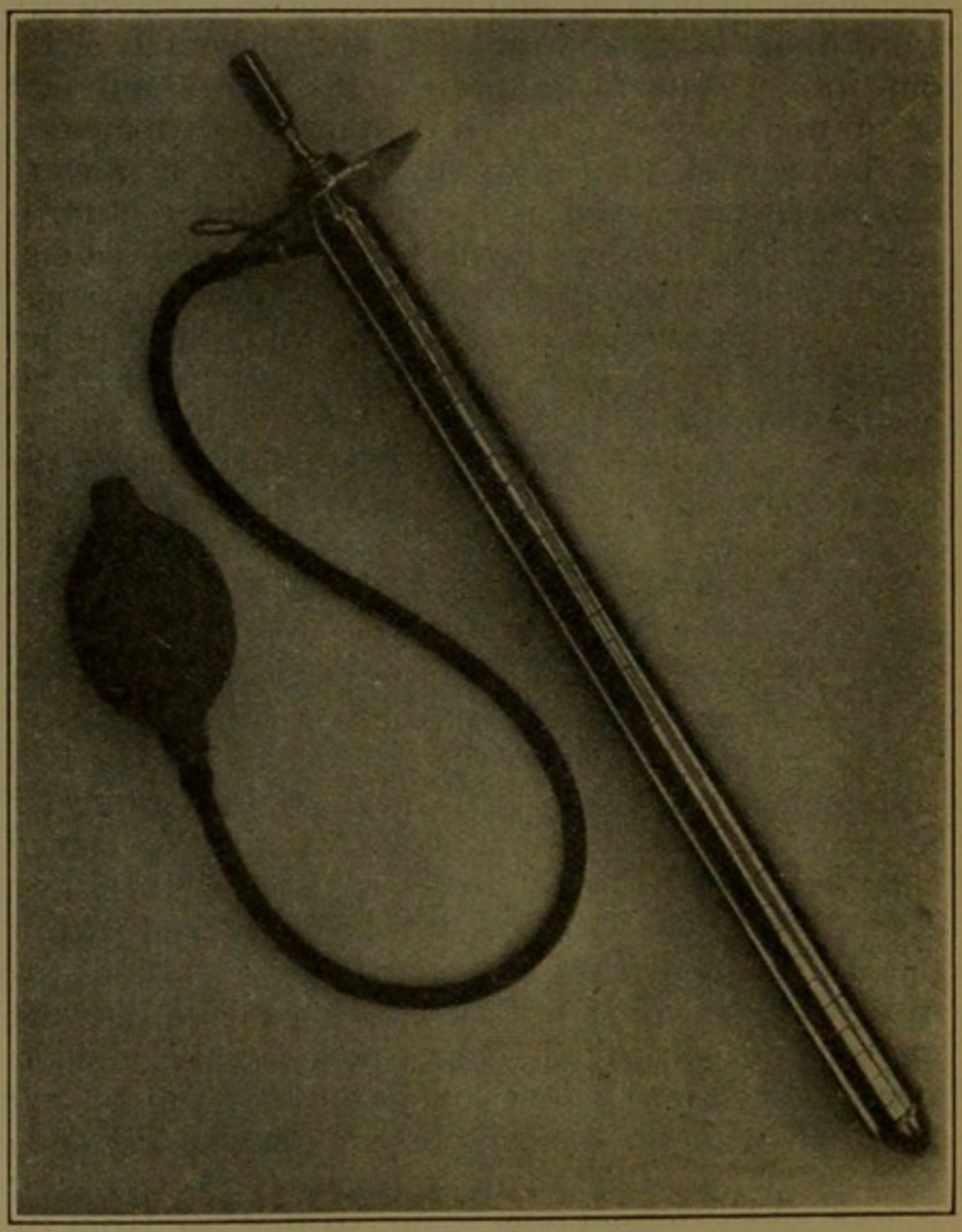

FIG. 2.—The sigmoidoscope, with the obturator in place and the inflating bulb attached.

so that the bulb cannot slip back into the tunnel and cause the darkening of the further end. The air tunnel leading into the lumen is part of the solid instrument and not of the detachable window, and it is away from the face. A single ball can be used for the inflation without a special connection therefor, and the window is most easily cleaned on both sides.

The outside of a tube, three centimetres in calibre, is marked in centimetres up to 35. Its distal end is oblique and thickened by a rounded edge. The lamp tunnel is below, terminating in a glass bulb, which protects the incandescent lamp and can easily be taken out and cleaned. The proximal end of the lamp carrier is screwed in place, so that it cannot slip out. The inflation is made directly into the lumen of the tube by a permanently fixed tube, upon the end of which ordinary rubber tubing can be slipped. The head consists of a large shallow basin, through which the tube projects, and upon which the window can be screwed with one and a half turn on the thread. The inflating bulb is of the ordinary kind, purchasable anywhere, of a strong make. The end of the obturator is conical, so that introduction through the anus is easy and less painful.

126 East Sixtieth Street.