ing, it matters not whether he lies on his back, his side or his face, or whether he sits or stands; if urine is voided it will be collected and retained. When the diaper is loosened the urinal remains right side up.

While it was not originally intended to obtain twenty-four-hour specimens, by occasionally emptying the flask, quantitative amounts have been secured. The principal need in infants is a means of procuring a specimen of sufficient quantity for chemical and microscopic examination, free from contamination and without discomfort to the patient or trouble to the nurse. This simple device meets these requirements. It has been in use in the Children's Memorial Hospital for several months.

Children's Memorial Hospital.

SHIELD FOR PROSTATIC EXAMINATIONS

WILLIAM S. EHRLICH, M.D., EVANSVILLE, IND.

The following is a description of a very simple but exceedingly useful little device to protect the hand in the none too pleasant examination and massage of the prostate gland.

Shield for prostatic examinations.

A piece of ordinary dentist's rubber dam is cut in a circle which will have a diameter of 5 inches. Through the center of this, a hole three-eighths inch in diameter is made.

After an ordinary finger cot is slipped on, the finger is pushed through the center hole, which, of course, fits snugly, leaving a margin of at least three-sixteenths inch overhang. This makes a joint which is waterproof, holds the cot firmly, preventing

wrinkles, and absolutely protects the knuckles from any dirt on the external parts.

The shield is easily and quickly made, easily cleaned, and costs practically nothing.

A RELIABLE METHOD FOR TABLE MICROSCOPIC DIAGNOSIS

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Pathologist, State Institute for the Study of Malignant Disease

From the fact that many men who have visited our institute knew nothing of this method, and that "table diagnosis" is in disrepute by many surgeons, it seemed worth while to publish this technic, which I have been using for the past three years. I was led to adopt it by finding that by the usual method of freezing the unfixed tissue, and staining by polychrome methylene blue, sections were sometimes unsatisfactory, and that a diagnosis given in one case was found to be incorrect when further sections were made on fixed tissues.

It seems to me that a great fallacy in making diagnoses at the table is the necessity of returning the report within three minutes. The surgeon expects to take his time with his operative procedure, while he expects the pathologist to be limited to a minimum time, and also to take the responsibility of the extent of the operation and the chances of the future of the patient. After my first mistake I refused to use the three-minute method, and frankly told the surgeons that I did not believe I could make a reliable diagnosis under eight minutes. I am happy to be able to say that, in the three years' experience with the following method, the table diagnoses have been confirmed in every case by further examination by the usual laboratory methods.

The method is as follows: Just before the surgeon is about to remove the tissue, a large test tube, about 2.5 cm. in diameter, containing about 40 c.c. of liquor formaldehydi, is brought to the boiling point and set aside. The removed tissue is laid on a dissecting board and cut with a sharp knife into sections about 5 mm. thick; these are carefully examined for suspicious areas, the selected piece is cut in a square 1.5 cm., put in the liquor formaldehydi, which is heated and allowed to boil for about thirty seconds, the tissue is now put in cold water for a few seconds, and then sectioned on the freezing microtome in the usual way. The sections are stained for half a minute in Harris acid hematoxylin and transferred in a weak solution of ammonia to bring back the blue color, then are run up through 50, 85 and 95 per cent. alcohols, then into 100 per cent. alcohol saturated with alcoholic eosin, then into carboxylol, put on the slide, blotted with filter paper and mounted in balsam. The section obtained by this method is usually as good as any frozen section obtained by the usual laboratory method.

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SOME NEW INSTRUMENTS TO SIMPLIFY THE MODERN TONSILLECTOMY OPERATION*

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With the multiplicity of instruments already devised for the enucleation of tonsils, one must indeed have a good deal of assurance to bring out something new along these lines. I have felt, however, that the instruments which I am presenting possess sufficient merit to warrant bringing them to the notice of the profession. The combination of instruments which I am presenting has been in use for the past two years, long enough to obtain data as to their practicability and reliability.

The three instruments and devices which I have used for over two years in tonsillectomy are a mouth gag, with a

Fig. 1.—Mouth gag with lip retractor.

successful lip retractor; a tonsil-seizing forceps combined with a tongue depressor; and a suction apparatus, with a cut-off.

Figure 1 illustrates the mouth gag, which is a Whitehead gag, with the additional lip retractor. I have had as much trouble with the patient's lips getting pinched prior to the use of this instrument, as the average throat operator.

Figure 3 illustrates the combined tonsil-seizing forceps and tongue depressor, and it has the advantage that it eliminates the assistant whose duty it has been to hold the tongue depressor in position. This combined instrument has the decided advantage of depressing the tongue in the corner of the mouth just where the tongue needs to be depressed.

As will be seen, the lower finger loop of this instrument is open. It has been made this way in order that the snare

*Owing to lack of space, several illustrations are omitted from THE JOURNAL. They are included in the author's reprints.

wire can readily be slipped through this opening and over the upper finger loop.

Figure 5 illustrates the suction apparatus. This is an instrument which certainly has a decided field in the modern operation of tonsillectomy. The instrument can be fitted to an ordinary water faucet, and a gage attached to the jar registers the vacuum pressure in the demijohn.

The main advantage of this device is in the manner of working of the suction portion. This part acts as a suction

Fig. 3.—Combined tonsil-seizing forceps and tongue depressor.

when the small piston at the end is pressed with the thumb, and shuts off the suction when the thumb pressure is released.

In the use of this instrument it makes a true bloodless operation. There is no sponging in the throat and consequently less postoperative edema and soreness. It is an excellent device for drawing the uvula well out of the field of the snare wire.

It has the decided advantage that it can be placed in the field of operation, and in spite of oozing, the work can proceed without interference or interruption. It also has the

Fig. 5.—Suction apparatus complete, showing the method of holding the cut-off.

additional advantage of making an even anesthetic and hence less danger of shock and anesthetic calamity through reflex stimulation of the vagus.

314 Colton Building.

Special Article

PRACTICAL PHARMACOLOGY *

(Continued from page 1849)

XXII

EVACUANTS—(Continued)

Evacuants may be classified conveniently for study as follows: (1) those acting mainly on the small intestine; (2) those acting mainly on the colon; (3) those acting on the small and large intestines including alkaloidal evacuants; (4) those acting on the rectum; (5) miscellaneous measures for inducing purgation.

1. EVACUANTS ACTING MAINLY ON THE SMALL INTESTINE

OILS

Neutral fats and saponifiable oils like butter and olive oil pass practically unchanged through the stomach, but are saponified more or less completely in the small intestine, and the resulting soaps may be sufficiently irritating to the intestinal mucous membrane to cause increased peristalsis and with an excess of the fat or oil act as a mild laxative.

Castor oil, which consists largely of ricinolein, yields a soap that is much more irritating and prompt in its action. The direct influence of the irritation is usually limited wholly or mainly to the small intestine, because these soaps are absorbed into the circulation without reaching the colon. The increased peristalsis in the small intestine rapidly drives a large amount of fluid into the colon, distending it and causing an evacuation before the stools become fully formed, or at least while they are still soft, because a sufficient interval of time is not afforded for as much fluid to be absorbed as usual.

Castor oil acts mildly even in fairly large doses, because the ricinoleic acid is liberated slowly, and the more active the peristalsis the less is the time allowed for the further liberation of the acid, hence, to a certain extent, its action is self-limiting.

THERAPEUTIC USES

Castor oil is used frequently for children, being a dependable laxative or purgative which may be administered without fear of causing intestinal inflammation or disturbing the stomach seriously, but it is not suited for continued use in chronic constipation because of its gradually lessening effect. It is also applied to the skin and to the eye as a demulcent.

The dosage is 15 c.c. (4 fluidrams). The taste is disagreeable, and children manifest an especial repugnance for it, so that it is best administered in such a way that the taste is masked.

Because of its disagreeable taste castor oil is given preferably with pungent, freely frothing beverages, or enclosed in soft gelatin capsules holding about 1 teaspoonful. It may also be administered in the form of a mixture or emulsion and this latter type of administration is becoming popular. The following may be used as a type formula:

	gm. or c.c.	
Benzosulphinid (saccharin).....	0.05	1 grain
Oil of Cloves.....	0.2	3 drops
Oil of Cinnamon.....	0.3	5 drops
Alcohol	4.0	1 fl. dram
Castor oil.....	q. s. ad 100	3 fl. ounces

* This is the twenty-second of a series of articles on useful drugs—on practical pharmacology for the general practitioner. As soon as completed, these articles, elaborated by additional subjects, will be published in book form.