and I know further that it must stop, or a public awakening is imminent which will cause an unrest and distrust on the part of the public that it will take years to restore, if it is ever restored. And the signs are everywhere on the horizon that this public awakening is already in a smouldering state, waiting only for the torch that will light it into flame. The increasing readiness of the intelligent public not only to listen to but to adopt any new pathy or science, in which the element of drugs is omitted, spells not the ignorance or the gullibility of the public, as some physicians are ever ready and fond of designating any departure from the established school, but it spells in very plain letters, with the handwriting distinctly visible on the wall, a growing feeling of unrest and of distrust of the methods of the average physician, and a proclamation of individual enlightenment on this whole question.

The physician of to-day, by reason of his own acts, and chiefly by reason of his blind acceptance of commercial statements, rather than his reliance on his own personal knowledge of the drugs that he is prescribing, is rapidly losing his individuality. The time has come, yea, it is imminently at hand, for him to reconstruct his therapeutics, to lift it out of the commercial mire into which he has allowed it to sink. It is within his power, as yet, to do this by the adoption of the simple, honorable standard of prescribing only those drugs that he himself absolutely knows. This method of honorable dealing with it the public has believed he has been following all along. And when the public comes to a full realization that it has not received a square deal from the one profession of all professions from whom it has a right to expect fair treatment, it will be a time when the man who has not dealt squarely with it wants to get from under! And it is for every individual physician to determine whether or not he is that man!

Clinical Notes

THE APPENDIX FORMING A DUODENAL-CECAL CANAL.

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The following case is not deemed of sufficient clinical importance to merit a more detailed description, but it is of interest in that it shows the possibilities of the body to react to a variety of insults. The case was apparently one of downward displacement of the duodenum, the latter coming in contact with a retrocecal type of appendix. The chronic peritonitis seemingly tied the viscera firmly together and probably the independent contractions of the appendix irritated the duodenum, causing ulceration with perforation into the appendix. The fecal matter probably came from the cecum. The appendix was not thickened and the mucous lining of the canal was intact. Histologic examination was not carried out, owing to the character of tissue preservation.

Autopsy, subject No. 40, male, colored. Cause of death, pulmonary tuberculosis. Abdomen dissectors: Collins and Bennett.

The peritoneal cavity was almost entirely obliterated by a chronic peritonitis. Adhesions were dense and were separated with difficulty, particularly about the region of the gall bladder. There was slight enteroptosis; the cecum was placed a trifle higher than usual and was found attached to the transverse duodenum by a dense adhesion which was preserved as a possible appendix. The connection was found patent to the probe, and on opening it a canal was disclosed, about 4 cm. (1½ in.) long, and with a lumen throughout the entire length of about 2 mm. (1/12 in.). This canal opened into the cecum posterior to the ileocecal valve, while the distal extremity was adherent to the transverse duodenum on the dorso-inferior aspect. The canal was filled with fecal matter

and presented a slight intraluminal adhesion at either end, composed for the most part of mucous membrane. The proximal opening was free and direct, while the distal opening passed obliquely through the duodenal wall and was covered by a pocket of the duodenal mucous membrane.

THE OCULAR REACTION TO TUBERCULIN: A WARNING.

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The ocular reaction to tuberculin is the best example that we have of a local hypersusceptibility or anaphylaxis. Since attention was drawn to the practical diagnostic value of this phenomenon, its use has become widespread. The test is attended with certain inconveniences, and as we shall now point out, is liable to misinterpretation.

We show in the following experiments that the conjunctiva of man may be rendered sensitive by the application of tuberculin, so that it reacts specifically to a second instillation. In our experiments, fifty-one days elapsed between the first and the second applications.

No.	Name	First Instillation												Interval in days	2d Instillation Tuberculin used. No. 2, 1 per cent.												
		Tuberculin used	Result, hours after injection												Result, hours after injection												
			1	2	3	4	5	6	24	1	2	3	4		5	6	7	24									
1	JFA	No. 2, 1 per cent.....	..	..	..	..	..	..	..	51	s	m	M	M	M	M	M	M	M	M	M	M	M	M	M	M	
2	WWM	No. 1, 0.3 per cent....	..	..	..	..	..	..	..	"	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
3	RdMT	"	..	..	..	..	..	..	..	"	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
4	RH	"	..	..	..	..	..	..	..	"	..	..	..	..	..	..	..	..	s	m	..	..	..	..	..	..	
5	FJH	No. 2, 1 per cent.....	..	..	..	..	..	..	..	"	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
6	EE	"	..	..	..	..	..	..	..	"	..	..	..	..	..	..	..	..	s	m	m	..	..	..	..	..	
7	JG	"	..	..	..	..	..	..	..	"	..	..	..	..	..	..	..	..	s	m	m	M	M	M	M	M	
8	CGC	"	..	..	..	..	..	..	..	"	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
9	MJR	"	..	..	..	..	..	..	..	"	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
10	JHH	"	..	..	..	..	..	..	..	"	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
11	RCB	"	..	..	..	..	..	..	..	"	..	..	..	..	..	..	..	..	s	m	m	..	..	..	..	..	
12	FGW	"	..	..	..	..	..	..	..	"	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	

s = slight reaction; m = moderate; M = marked.

Twelve adult males in apparent good health, all members of the Hygienic Laboratory corps, were treated with tuberculin, by dropping it on the right conjunctiva. Not the slightest result apparently followed this first treatment. After an interval of fifty-one days, precisely the same amount of the same laboratory number and strength of tuberculin was again used in the same eye, except in Cases 2, 3 and 4, in which a weaker tuberculin was used at the first instillation. This time ten of the twelve persons gave a typical reaction, consisting of injection, mucopurulent discharge, etc. The symptoms came on very promptly in two of the cases; in one hour in Case 1, in two hours in Case 7, in three hours in Cases 6 and 11, in four hours in Case 4, in five hours in Case 8, in seven hours in Case 5; and the redness and injection of the other cases was apparent next morning. In four of the cases the reaction was violent enough to cause some concern. In one of these, the reaction was accompanied by subconjunctival hemorrhage.

How soon after the first application of tuberculin this sensitization comes on, and how long it lasts we do not know. We have also not yet determined whether the anaphylaxis is strictly local; that is, we can not answer the question whether the other eye is also in a condition of anaphylaxis. Nor do we know whether this sensitiza-

tion in the eye would be followed by general hypersusceptibility, manifested by a reaction to the subcutaneous injection of tuberculin.

Physicians must be cautious not to condemn the tuberculin of one manufacturer, if it gives a negative result, though a second application of tuberculin of another make proves positive when instilled into the same eye. In fact, we were partly led to make these experiments from the remark of a clinician who blamed the first tuberculin he used, while tuberculin of a different make used two weeks later gave a sharp reaction. Of course, the diagnostic value of the reaction in an eye that has had a prior treatment some days before is entirely negative.

The power of tuberculin to sensitize the conjunctiva is a beautiful example of the usefulness of the state of anaphylaxis. The conjunctiva or any other tissue in such a condition of hypersusceptibility is armored against bacterial invasion. Thus, if a tubercle bacillus lodges on a tissue having the power to react at once, that tubercle bacillus would immediately be surrounded with the protecting humors and cells of the body. In other words, the natural immunizing agencies of the body would at once be concentrated on the spot where they are most needed.

AN APPARATUS FOR THE INTERMITTENT POSTOPERATIVE DRAINAGE OF THE BLADDER.

APPLICATION OF THE PRINCIPLE TO THE DRAINAGE OF
EMPYEMATA, ETC.

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The satisfactory postoperative drainage of the bladder has always been a most perplexing problem. Satisfactory drainage after cystostomy, for instance, drainage that is effectual and allows the patient to be kept dry is manifestly a most important factor in the attainment of a speedy, comfortable convalescence. The trouble arising from plugged tubes and catheters, and the discomforts endured by a patient constantly soaked in urine are such that life becomes burdensome to the patient and bothersome to surgeons, house officers and attendants.

Intimate contact with a number of cases in which drainage was attempted with indifferent success led me to undertake experiments which finally resulted in devising the apparatus herein described. It has been used with satisfactory results in drainage of the bladder after both suprapubic and perineal cystostomy and in the postoperative drainage of empyemata. Through the courtesy of Drs. Munro and Bottomley the suitable material in the surgical wards of the Carney Hospital was placed at my disposal.

DESCRIPTION OF THE APPARATUS.

A glass reservoir (Res. I) with a capacity of about two gallons (i. e., a sufficient supply to last several hours) is placed on a horizontal shelf (S¹) supported by an adjustable standard (A) on a movable base (M). Projecting from the standard is a second shelf (S²) for the support of a second and smaller (capacity, one pint) reservoir (Res. II) into which the larger reservoir feeds at a rate which can be regulated by an adjustable cock (B). Through a perforated cork in an opening from 1½ to 2 inches from the top of Reservoir II passes a bent glass tube (C), one end of which should be close to the bottom of the reservoir, and which forms the short arm of a siphon, the long arm of which is the rubber tube (D) attached to the bent

glass tube at E; the lower end of the rubber tube (D) joins with a hydraulic pump (F) placed below the level of the cavity to be drained and connected with it by a rubber-glass connection (3, 4, 3). The pump empties into a receptacle (H) beneath the bed. The caliber of tube G should not be larger than that of tube D.

As a substitute for the hydraulic pump a glass Y-tube (L) may be used, but it does not work so satisfactorily.

THE WORKING OF THE APPARATUS.

Reservoir I is filled with water. The outflow into Reservoir II is regulated according to the quantity of discharge to be removed from the cavity which is to be drained. It is evident that the greater is the outflow from Reservoir I to Reservoir II, the sooner will the latter be filled to the level of the perforated cork which allows the water to run down the tube D into the hydraulic pump which is thus put in action and drains the cavity by virtue of a well-known principle of physics. In other words, the greater the outflow from Reservoir I to Reservoir II,

Res. I, glass reservoir with capacity of about 2 gallons; res. II, reservoir with capacity of about 1 pint; S¹, horizontal shelf; A, movable base; S², second shelf for support of reservoir II; B, adjustable stop-cock; C, bent glass tube; D, rubber tube forming long arm of siphon; E, junction of D, with bent glass tube; F, hydraulic pump; H, receptacle into which pump empties; L, glass Y-tube which may be used as a substitute for the hydraulic pump; G, connection of drainage tube to hydraulic pump.

the oftener will the latter be emptied by siphonage, the oftener will the pump work, and the oftener will the bladder or other cavity be drained. The frequency of the action of the pump is to be regulated according to the amount of urine or other secretion to be removed.

ADVANTAGES OF THE USE OF THE APPARATUS.

After either suprapubic or perineal prostatectomy the apparatus may be connected with the cavity either through the suprapubic or the perineal wound, as the case may be. A brief experience will soon teach one how