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# CONTENTS OF VOLUME XXII.

	PAGE		PAGE
Anastomosis, Practical Considerations on	13	Diabetes, The Inter-Relations of, and Other	
Intestinal	49	Constitutional States	1
Anatomy, Text-Book of	108	Deaths, Reporting, in New Brunswick	54
Abdomen, Surgical Diseases of the, with	111	Diseases, Deductions from the Study of	
Special Reference to Diagnosis	148	Pelvic, in the Female Insane	71
Audience, How to Attract and Hold an	161	Diseases, Morrow on Social	104
Arsenical Preparations, A Modification of	162	Doctor, Does it Pay to be a	116
Two Classical	162	Diphtheria, The Early Antitoxin Treatment	
Asthma, Treatment of, in Children	164	of	105
Appendicitis, The Relation of Diseases of	174	Diabetes, The General Management of	240
the Tube and Ovary to	162	Diagnosis, Clinical	281
Alcohol in Patent Medicines	162	Eye, Lessons on the	40
Antitoxin	164	Embolism, Pulmonary	63
Association, A Physician's Business	174	Excitement and Insomnia, The Treatment	
Antitoxin Question, The	210	of	08
Adenoid Vegetations, Notes on the Treat-	221	Eye, Commoner Diseases of the: How to	
ment of	232	Detect and How to Treat Them	222
Anatomy Applied to Medicine and Surgery	233	Expert, The Medical	220
Articles, The Publication of Original	358	Epilepsy and its Treatment	281
Asylum Promotions	30	Eczema of the Palms of the Hands	357
Acetanilid, Notes on the Therapy of	30	Facial Deformities, The Treatment of, by	
Bronchial Catarrh, Acute	30	the Subcutaneous Injection of Paraffin	33
Bronchorrhea	101	Fractures, The Treatment of	107
Bruises	107	Fruits, Use of	150
Baby, The Practical Care of the	147	Flatulency, The Treatment of	270
Blister, The Fly, and How to Apply It	149	General Practitioner, Nose and Throat Work	
Bolls	155	for the	46
Blues, The	105	Glyco-Thymoline, Remarks on	61
Bread	234	Gynecology, Atlas and Epitome of Operative	225
Bacteriology of Every-Day Practice, The	300	Gastroptosis, Some Notes on, with Special	
Babies, How to Take Care of, During Hot	42	Reference to its Relation to Pregnancy	257
Weather	50	Hyperidrosis, Palmar and Plantar	41
Cosmetics to Improve the Complexion	53	Herpes Zoster	101
Cancer and Pre-Cancerous Changes	59	Headache Formulae, Some	102
Canadian Medical Protective Association,	68	Hay Fever, The Serum Treatment of	115
The	100	History, Who's Who in, and Who's Who in	
Correspondence—Professional Charges, A	100	Mythology	226
Method of Securing Greater Uniformity	113	Has Cancer Research Failed?	204
in	145	Impetigo Circinata	24
Contusions, Abdominal	150	Infant Feeding in its Relation to Health	
Chilblains, Applications for	150	and Disease	154
Colds, Remedy for	154	Intestines and Peritoneum, Diseases of the	281
Competition, Our Prize	173	Insects, For Bites and Stings of	356
Canadian Medical Protective Association—	211	Joints, Gonorrheal Inflammation of	214
Annual Statement	243	Kidney, The Nervous Phenomenon Associ-	
Cancer, Treatment of, by Caustic Pastes	261	ated with Movable	134
Chorea, Salicylates	276	Legal Medicine and Toxicology, A Text-	
Consumption, The Self-Cure of, Without	277	Book of	106
Medicine	280	Law, The Proposed New Assessment Law as	
Correspondence — Insurance Companies,	280	it Affects Physicians	114
Charity Work for Wealthy	283	Locomotor Ataxia	220
Cases, Report of	293	Lungs and Heart, Clinical Lectures on Dis-	
Catarrh, Chronic Nasal—A Simple and	293	eases of the	226
Effective Treatment	293	Lumbago	270
Calculus, Urinary	293	Lids, Edema of the	280
Cornea, A New Method for Treating Foreign	302	Liver, Diseases of the	281
Bodies in the, etc.	302	Legal Medicine, A Text-Book of	282
Children, Eneuresis in	361	Lea's Medical Epitome Series—Anatomy	284
Cornea, Ulcers of the, Following Purulent			
Conjunctivitis	280		
Conjunctivitis	280		
Canadian Medical Association	283		
Curse, The "Patent Medicine"	293		
Cases, Municipal Compensation in Quar-	293		
antinable	293		
Correspondence — Sanitarium, Municipal,	302		
Toronto Needs One	302		
Canadian Medical Protective Association	361		

## CONTENTS OF VOLUME XXII.

	PAGE		PAGE
Metabolism and Nutrition, Clinical Treatises on the Pathology and Therapy of Disorders of	48	Sciences, A Reference Handbook of the Medical	153
Medical Profession, Getting into the	51	Sciences, A Reference Handbook of the Medical, Vol. V.	157
Mothers, Plain Hints for Busy	109	Statistics, Vital	169
Medical Epitome Series, The Organic and Physiologic Chemistry	110	Saline Solution, Indications for the Use of Normal	220
Medley, A Medical	127	Surgical Hints	245
Migraine, Treatment of	151	Social Problem, The, in Toronto	231
Medical Annual, The International	221	Surgery, A Handbook of	252
Man Who Pleases and the Woman Who Charms, The	227	Surgery, A Text-Book of Operative	283
Medical Teaching, New Era in, University of Pennsylvania, etc.	263	Squint Occurring in Children	285
Mastitis, The Treatment of Puerperal	277	Serum, Maimorek's Anti-Tuberculous	291
Materia Medica, A Text-Book of	282	Side, When Your Case is Weak Abuse the Other	295
Mechano Therapy, A Text-Book of	282	Salicylic Acid, The Pharmacology and Therapeutics of, and Its Preparation	311
Materia Medica for Nurses	282	Smallpox	328
Methods and Tests, Medical Laboratory	283		
Materia Medica and Pharmacy, Manual of	283	Tumors, The Etiology, Pathology, Diagnosis and Treatment of	45
Mostly Educational Committee, Extracts from the	290	Throat, The Diagnosis and Treatment of Diseases of the, in Children	83
Menstruation, Irregular, and Treatment	366	Therapeutics, A System of Physiologic	103
		Tuberculosis, A Royal Commission on	159
Nausea, Ice for	100	Tuberculosis, The Literature of, at the Tuberculosis Exposition in Baltimore	206
Nurses, Obstetrics for	224	Typhoid Fever, Ergot in	276
Nephritis, Dietetic Treatment of Chronic Nursing, Obstetric and Gynecologic	268	Tuberculosis and Acute General Military Tuberculosis	281
News Items, 56, 57, 58; 121, 122, 123, 124; 171, 172, 173, 233, 234, 235, 236, 237, 238, 329; 296, 297, 298, 299, 300, 301; 363, 304	305	Typhoid Fever, The Treatment of, as Carried out in Johns Hopkins	354
		Tuberculosis, The Formalin Treatment of Laryngeal	357
Ontario Medical Association	38		
Obstetrics, A Text-Book of	47	Uterus, Ventrofixation of the, with Subsequent Normal Deliveries	126
Ontario Medical Association	145	Urine, Examination of the	282
Ontario Medical Association	274	University of Toronto Faculty of Medicine	294
Ophthalmia Neonatorum	280		
Ontario Medical Association, The	287	Vermiform Appendix, The, and its Diseases	281
		Vancouver	339
Prostatectomy and Galvano-Cautic Prostatectomy, Their Present Status in the Radical Treatment of Hypertrophied Prostate Gland	6	Victoria, B. C.—An Outpost of Empire	346
Progressive Medicine, Vol. IV., Dec., 1903	43	Vancouver and Victoria, To	360
Progressive Medicine, Vol. III., Sept., 1903	46		
Pregnancy, Extra Uterine	79	Woman's Life, The Four Epochs of	48
Prostatectomy, Perineal	70	Women, Brief Observations on Some Conditions in, that are of Much Concern to the Practitioner	240
Powder, Diuretic	100	Whooping Cough, The Treatment of	354
Progressive Medicine, Vol. I., 1904	104	Warner's Exhibit at St. Louis	303
Pertussis	149	Winner in Prize Competition	360
Parliamentary Usage, Howe's Handbook of	153		
Pain, Abdominal	188	Yeast Therapeutic Value of	120
Pneumonia, Notes on the Treatment of	218	Year-Book, The American, of Medicine and Surgery for 1904	156
Progressive Medicine, Vol. I., 1904	223		
Preventive Medicine, Two Prize Essays	225		
Pathology, A Text-Book of	281		
Pediatrics, Tuley's Epitome of	284		
Pruritus Ani	356		
Pneumonia, The Treatment of	356		
		OBITUARIES—	
Quiz Compend—Compend of Diseases of Ear, Nose and Throat	110	M. F. Haney	180
		David B. Bowley	180
Regeneration, Professor Halliburton's Lectures on Nerve	118	John Hubert Sangster	181
Rays, New Kind of, Emitted from the Brain and Nerve Centres	167	Duncan Fraser	183
Roentgen Rays, The Practical Application of the, in Therapeutics and Diagnosis	282	W. G. Christie	183
		Thomas Norton	184
Syphilis, Case Reports of, with Remarks	98	Fred. H. S. Ames	184
Surgery, Aids to	105	George Cooke	185
Surgery, Clinical	109	J. B. Murphy	185
Scald, Report of a Case of	133	Robert Lambert	186
		W. J. Anderson	186
		A. G. Belleau	246
		John Carroll	246
		William B. Burland	246
		Alexander Broadfoot	247

Desiring to make a practical, useful journal for the General Practitioner,  
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## Original Articles

### THE INTER-RELATIONS OF DIABETES AND OTHER CONSTITUTIONAL STATES.\*

BY GEO. F. BUTLER, M.D.,

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The great error dominating conceptions of disease in their clinical and therapeutic aspects is that which fixes upon one symptom as a test of disease rather than the symptom complex. Perhaps in no disorder is this better illustrated than in diabetes. The predominant symptom of diabetes is glycosuria. This condition may not only be an expression of many diseases, but may be at times merely the result of excess in carbo-hydrates. Glycosuria occurs in all the neuroses, not as a complication, but as an expression of metabolic instability, resultant on nerve disturbance. The vaso-motor nerves of the liver have their origin in the floor of the fourth ventricle, and pass through the cervical and upper dorsal regions of the spinal cord, the rami communicating opposite the fourth or fifth dorsal vertebræ to join the sympathetic and enter the liver as the hepatic plexus. Injury to the fibres at their origin in the fourth ventricle, in any part of the spinal cord, or of the sympathetic itself, is followed by glycosuria. Conditions such as express themselves in glycosuria and allied sub-oxidations readily occur in the neuroses. Hysteria may be

\* Read at Canadian Medical Association, London, Ont., August 26th, 1903.

complicated, for instance, with glycosuria of transitory or prolonged duration, which may eventuate in coma of an apparently diabetic type, but which disappears with the disappearance of the most marked hysteric symptoms. The great neuroses, parietic dementia, locomotor ataxia and epilepsy, occasionally display temporary glycosuria.

Delirium tremens and the confusional insanities may at times have a temporary glycosuria. Every one of the febrile conditions may be glycosuric. Conditions in which respiration is involved are often accompanied by glycosuria. Pregnancy being a condition in which there is over nutrition, faulty elimination and resultant imperfect oxidation is often attended by glycosuria. The patient may be glycosuric only during pregnancies. Glycosuria may come on during pregnancy, and be present during the period only, or it may occur immediately after pregnancy is terminated, and may recur sometime after, and may remain for a long time after pregnancy, and then suddenly disappear.

Gout and insanity of the auto-toxic types frequently alternate with glycosuria. During the mental disease, or during the gout glycosuria is absent, and its reappearance is an indication of recovery, while its disappearance is the precursor of an attack. What is true of glycosuria is likewise true of the states allied to it, acetonuria, etc. Every one of the acids from sugar metamorphoses may be formed in the urine of depressed mental states and after the apoplectiform and epileptiform attacks of parietic dementia, the crises of locomotor ataxia and the status epilepticus.

Independently of the symptom complex diabetes, there are states of which glycosuria is a symptom consequent on suboxidation, which they produce, that are temporary in character and have not the permanency characteristic of the disease diabetes. Many neuroses, however, are an expression of the suboxidation states constituting diabetes. In all of these glycosuria may disappear just previous to cerebral complications. The disappearance of glycosuria very often is an expression of imperfect elimination through renal insufficiency rather than a disappearance of sugar from the system. In a diabetic in a severe state of hyperglycemia sugar may be absent from the urine, yet the patient may pass into acidosis with resultant coma. Neurotic manifestations of diabetes comprise lesions of motility, of general and special sensibility of the intelligence and of trophic functions. Among the most marked motor manifestations are fatigue, lassitude, and deprivation of muscular energy which does not depend upon muscular weakness pure and simple, but may strongly sug-

gest a medulla affection. It is not always well marked. It may suddenly disappear to return as suddenly, and may first occur in consequence of a slight traumatism. Apoplexy with complete coma may occur, followed by hemiplegia, recovery from which may be rapid and complete.

Sometimes there is sudden loss of consciousness, which disappears so rapidly without resulting paralysis as to suggest epileptic states. Vertigo sometimes occurs alone, and sometimes precedes paralysis. Paralytic symptoms occur without loss of consciousness. Hemiplegia may be attended by very bizarre phenomena. In one case a left hemiplegia was accompanied by a monoplegia of the right eyelids. Monoplegias are very frequent in diabetes, and are apt to be extremely transitory. Paralysis of the right arm and face, ptosis, pupil dilatation, strabismus, and hesitancy in speech may follow glycosuria. While speech disorders are generally due to buccal dryness, yet true aphasia occurs, and aphonia from laryngeal paralysis is far from exceptional.

Imperfect muscular co-ordination in the dark attended by formication in the extremities may lead to a suspicion of locomotor ataxia. Cramps of the akinesia algera type frequently attack the lower extremities, especially at night and play an important part in the production of insomnia, being often the first indication of cerebral circulatory disturbance, and may be precursors of serious complications. Convulsions may be associated with coma, or may accompany paralytic phenomena. At times they present the monoplegic epileptic character and alternate with transitory paralysis of the same side.

Diabetic vertigo often assumes an epileptoid character. Asthma, exophthalmic goitre, and other respiratory neuroses are not infrequently temporary expressions of diabetes. Underneath them, and many diabetic neurotic states, lies the "air hunger" of the tissues, which is simply their expression of the need of oxygenation.

Diabetic absorption of oxygen as Voit, Peltenkoffer and others have shown, is much less than the normal, and decreases until toward the end of the disease, when it is hardly half the normal quantity. Carbon dioxide exhaled is proportionally reduced. This oxygen decrease Sajous ascribes, with much plausibility, to suprarenal disorder. Increased suprarenal activity, as Croftan has shown, can so augment the ferment producing power of the pancreas as to greatly increase sugar elimination through increase of the amylolytic ferment supplied by the pancreas which converts the liver glycogen into dextrose.

Herein lies the explanation of neuropathic glycosuria and of

diabetic neuropathics. In the first, the cause is primarily in the cerebro-spinal system. In the second the hepato-pancreatic-splenic and renal system is first affected, and the resulting toxic products, because of disordered oxidation, cause the nervous symptoms. The most furibund symptom of diabetes is coma. Under this title are included many conditions varying from mental depression, through apathy, to stuporous states with or without absorption in agonizing dreams or delusions. One of the most distressing conditions of partial stupor is that attended by psychic nausea where the nausea conception is intense but unattended by gastric disorder. Cases of this type often occur just after seeming coma, the patient refusing treatment because he believes his stomach is too squeamish to retain medicine. As the mental state is attended with loss of determining will power, like most depressional, stuporous or apathetic conditions, this psychic nausea and its effects are readily overcome by large doses of a saturated solution of sodium bicarbonate. Tablets should not be given, as they irritate the throat, thereby increasing the strength of the psychic nausea.

Nearly all the mental features of coma and its allies just mentioned, centre, like all depressional mental states attended by acidosis, around the medulla oblongata.

This is the origin of the cardiac, pulmonary and gastric instabilities which occasion such alarming features in the comatose and apathetic conditions of diabetes. The starting point of these disorders is central not local. The cerebral centres of the lungs, heart and stomach being disturbed, local excito-motor ganglia have undue play and become exhausted. Resultant local disorders underlie the diabetic endocarditis, diabetic myocarditis, diabetic phthisis, diabetic gastritis, etc. Diabetic skin, and diabetic tissues are, moreover, predisposed to microbic attack.

The etiologic moment of coma, comatose and stuporous states consists first of the condition of the patient at the time of the attack, and depends largely upon the condition of emunctories. The kidneys may be in good shape themselves, yet because the intestines are acting imperfectly with fecal resorption, the kidneys are overworked, which is shown by the presence of an excess of indican and urea in the urine. Secondary to this occurs renal insufficiency with resultant acidosis from retention of imperfectly oxidized sugar products.

Given the muscular changes which produce B—hydroxybutyric acid, acidosis production with decreased elimination is intensified. The skin in diabetics is very deficient in eliminative power which adds to the work of the kidneys. The lungs cannot

quite supply the oxygen ordinarily needed, not to speak of the increased amount required for diabetes, much less can they oxidize products unphysiologically eliminated through them. The lack of oxygen increases depression and apathy, which in turn decreases cardiac and lung energy. The liver has its nerve energy lessened, yet has increased poison destroying work thrown upon it. The diabetic, when elimination is lessened, is in a very serious and unstable condition, which the slightest shock will jar into coma, a comatose state, an epileptiform or apoplectiform convulsion. The premonition of these is generally given by lessening polyuria, suppression of urine, or by the finding first of cylindroid, then, hyaline or granular casts. Albuminuria *per se* often means merely the urethral or prostatic irritations of diabetes. These, as predisposing to microbic attack, are of serious augury, but not as to coma, etc. The sudden disappearance of sugar or sugar acids with increased casts is ominous of renal insufficiency and resultant toxemic cerebral states.

Another part of the etiologic moment is the condition of the arteries, whether due to diabetes, age, lues, rheumatism, gout, the exanthemata or mental or school overstrain.

Apoplectic extravasations during the coma, epileptiform, or apoplectiform states may here lead to permanent, mental or nervous disorders.

Hereditary defect may show itself in the etiologic moment peculiarly at the periods of stress: 2 to 6, 12 to 14, 14 to 25, 45 to 55, and from 60 on, when the system is undergoing evolution or involution.

There are many eye, ear, nose, throat, gums, skin, and genito-urinary phenomena found in diabetes which bear one of these relationships to the disease. They are an outcome of diabetes and are modified by it, or modify it, and finally they may be mere coincidences.

The common erroneous assumption that morbid states occurring during a diathetic state are due to it, is peculiarly accepted as to diabetes. While there is more truth than usual in the assumption as regards diabetes, still treatment of these local conditions will often do as much to relieve diabetes as treatment of diabetes does to relieve them.

The so-called "reflex" disorders exert their influence on the general constitution through continuous nerve irritation producing nerve waste and resultant autotoxemias, which, as has been shown, are a peculiarly dangerous addition to the general burden of the diabetic. Treatment of all these conditions is required not only from the local standpoint, but likewise from the constitu-



tional. This is especially true of the eye, ear, skin, gums, and genito-urinary system, whose disorders are certain to add to the atmosphere of worry, resultant nerve waste, and consequent toxic strain on the excretories into which the diabetic is plunged.

Clinical study demonstrates beyond doubt that most cases of diabetes are at first expressions of nutritional and assimilational instability. In consequence of the over-strain on the liver, adrenals, pancreas, spleen and kidneys, what were at first merely biochemic changes in these organs become permanent pathologic lesions, continuing constantly in excessive sugar manufacture without proper oxidation or elimination.

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### PROSTATECTOMY AND GALVANO-CAUSTIC PROSTATOTOMY (BOTTINI'S OPERATION); THEIR PRESENT STATUS IN THE RADICAL TREATMENT OF HYPERTROPHIED PROSTATE GLAND.\*

BY WILLY MLYER, M.D., NEW YORK.

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*Mr. President and Gentlemen,*—The question of the proper selection of operation for the relief of patients suffering from an enlarged prostate gland and its sequelæ has lost nothing of its importance and interest so far. Castration, including vasectomy, prostatectomy and galvano-caustic prostatotomy (Bottini's operation) are still in the field. The comparative value of these various procedures can be properly determined only by the final results, and that best by the results obtained by a single man in a fair series of cases. Hence, extensive personal experience, unbiased observation, and careful tracing of late results by objective examination, whenever possible, are the factors that will enable us to form a correct estimate as to the relative value of the operations in question.

Castration, although it has completely and permanently restored many a prostatic's urinary affection, will not be dis-

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\*Read before the Section on Genito-Urinary Surgery of the New York Academy of Medicine, May 21st, 1903.

cussed here. It still has staunch advocates among men whose views surely command respect. However, since we have two methods to help such patients by attacking the gland directly, indirect influencing should be relegated to the rear, or at least should be our very last resort, especially as it deprives the patient of his virile power. Personally, I believe that a direct attack should first be made in the case of every patient who asks for relief. Failing in this, an operation on the testicles or the vas deferens may then be resorted to. In accordance with this view of mine, I shall, therefore, here consider prostatectomy and galvano-caustic prostatotomy (Bottini's operation) alone.

That prostatectomy is the most radical, as well as the most surgical procedure from an operative point of view, goes without saying. The operation is typical. It aims to remove the hypertrophied tissue within the prostatic capsule. If this be accomplished, proper urinary drainage ought to become re-established. Recurrence of the former trouble would seem more than unlikely. Galvano-caustic prostatotomy (Bottini's operation), on the other hand, does not attack the bulk of the gland; it only cuts grooves through the mass, leaving the gland itself in place. However, it may be stated parenthetically, that it is not the bulk of the gland that is the disturbing factor in the trouble under consideration. Bottini's operation, in contra-distinction to prostatectomy, is by no means a typical operation. The number, length and direction of the cuts must differ with every case. Numerous other questions, too, as, for instance, Shall we hook and compress the prostate while ploughing through the same? Shall we repeat the incision, whole or in part, by going over the ground twice? Shall we use blades of various size and length? How had we best proceed in the presence of a median lobe? etc., are still mooted ones. To do Bottini's operation properly, as required in the individual case, is, therefore, often a very difficult task. To determine the various points at issue, it is necessary to make a careful examination of the patient with regard to size, configuration and consistency of the gland. For this a thorough cystoscopic examination is essential. Every single case has to be studied as to its requirements. If this be done, and if all the details of the operation be carried out properly, the result in trained hands is often surprisingly good.

In order to personally test the merits and demerits of gal-

vano-caustic prostatotomy, I made it a point for five years, from October, 1897, to October, 1902, to practise Bottini's operation to the exclusion of all other methods. No selection of cases was made. Regardless of statistics, the operation was done in every case of prostatic hypertrophy that came under my care.\* Age, debilitated condition, and complicating renal affection were not considered contra-indications. In not a single instance was the operation refused so long as the patient asked for it. In every one of the cases the after-treatment was carried out by myself personally; points of importance in the further history were carefully noted. It stands to reason that by thus making no discrimination whatever, Bottini's operation was, in some instances, performed upon patients, who, according to my present views, would have derived greater benefit from prostatectomy. The death-rate, too, was naturally swelled by my not refusing the operation to men whose far advanced bilateral, complicating renal affection should have deterred me to abstain from any attempt at still bringing relief.

Since October, 1902, I have individualized and done perineal prostatectomy in 6 and Bottini's operation in 4 patients.

I commenced this work a pioneer in the true sense of the word, having no other guide in the beginning than Bottini's original writings and Freudenberg's first brief, though excellent, article, published in the *Berl. Klin. Wochenschrift*, in April, 1897. The instrument and batteries used by me at that time, too, were inferior to those now employed. The decrease in the death-rate of the consecutive series (of 12 each) of my cases, nicely illustrates the gradual improvement in the necessary paraphernalia, as well as technique and personal dexterity.

Within the five years mentioned, 59 patients were operated upon by me with Bottini's operation, their age ranging from 47 to 80 years. In 48 of these the operation was done once, in 10 twice, and in one three times; 52 recovered and 7 died, death occurring as a direct consequence of operation in 3: (1) acute sepsis; (2) perforation of bladder by anterior cut, which has since been abandoned; (3) embolic (?) pneumonia. As an indirect result of operation in 2 cases: (1) Suprapubic cystotomy, eight days after the operation; (2) phlebitis of the left saphenous vein, eleven days after operation.

\*The only exception I made was in a man with a suppurating enlarged gland; here, extirpation, of course, by the perineal route was performed.

In order not to appear biased, I shall count the first of these two latter cases among the deaths directly due to the operation. The remaining two of the seven fatal cases died from the immediate effects of spinal anesthesia with the sterilized solution of tropacocaine.

Dividing my cases into series of twelve cases each, and comparing the death rates of the different series in an ascending scale, we have:

		Deaths directly due to operation.	Deaths indirectly due to operation.
In the first	12 .....	2	..
“ second	“ .....	1	1
“ third	“ .....	1	..
“ *fourth	“ .....	..	..
“ fifth (11 only so far)	.....	..	..

Of the 52 patients who recovered from the operation, 34 are alive to-day; 3 could not be traced; 3 died within six to ten weeks after operation of pyelonephritis that had existed long before operation, and 12 died from various causes, as apoplexy, cancer, general debility, nephritis, etc., from nine months to three years after operation.

Of these 52 cases 13 had complete retention, 33 had incomplete retention, and 6 had a persistent suprapubic fistula. Of the 33 patients with incomplete retention, 14 used the catheter from one to six times a day; 1 wore a urinal. Thus there were 27 patients who used the catheter, viz., 13 with complete and 14 with incomplete retention. Of these, 18 got rid of the catheter permanently; 2 used it, mostly for convenience sake, once at night; 3 were still obliged to use it; of 4 the later condition could not be ascertained.

Of the 6 patients with persistent suprapubic fistula, 2 have remained permanently cured, with the fistula closed to date: in 2 the fistula closed temporarily; 1 died ten weeks after operation with a contracting fistula; 1, in whom the suprapubic fistula had persisted for ten years, was so much improved by the operation that, a year later, he complained about his inability to introduce a No. 8 French silver catheter through the fistula for the sake of irrigation, as he had been in the habit of doing for so many years.

In 9 of the 52 cases with hypertrophy of the prostate, I found the trouble associated with stone (Annals of Surgery, July, 1902).

\*In the fourth 12 cases were two deaths due to spinal anesthesia.

In 5 of the 52 cases the membranous urethra was accidentally injured, causing perineal abscess in 4 cases, chronic inflammatory edema of scrotum and penis in 1. These patients in every single instance had a very soft gland, and the prostate had always been well hugged by the beak of the incisor, as originally advised by Freudenberg and described in my last article. Furthermore, I did not at that time use an incisor with centimetre division on the shank. This scale on the shank (recent proposition of Freudenberg) I consider a very important point indeed. I now no longer compress the gland and the accident here described has not occurred again, although I have done the operation twenty-six times since. I merely hug the gland, pull gently, without compressing it. I would mention, however, that all the cases in whom the accident happened recovered.

In one patient the rectum was injured and a recto-urethral fistula established. The accident happened in a much reduced man, 71 years old, who had a small, soft prostate and far advanced suppurating bilateral pyelonephritis. In his case (the only time in the 59 operations done) for special reasons, the street current, without amperemeter, was used.

Marked uni- or bilateral epididymitis, as a direct sequel to Bottini's operation, was seen in 6 patients; suppurating process of the testicle, necessitating incision, in 2; suppurating process of the testicles, necessitating castration in 1; a unilateral suppurating process of the vas deferens after vasectomy in 1.

In 20 of the 52 cases that recovered, the stream is noted as good at time of first examination; in 14 as fair; in 2 as weak; 32 had no pain in urinating; 5 some; 1 much. This became changed in a few instances at later examinations. As regards weight, this was noted in 38 of the surviving cases, and in every instance there was gain, sometimes considerable.

The results obtained in the first 24 cases operated upon by me were tabulated and reported at length in my last paper on Bottini's operation, published in the *Medical Record*, May 5th, 1900. It will be of interest to compare the results found at that time—two and one-half years after I first did Bottini's operation—with those noted in March-April, 1903, in the same series of cases.

Summarizing, we arrive at the following: Of 5 patients reported as cured in April, 1900, alive and heard from or re-examined in 1903, 3 have remained cured, 1 has to be classed as

much improved now, and 1 as not benefited. Of 3 patients reported as much improved in 1900, alive, etc., 1903, 1 remains much improved, 1 has to be classed as "improved" only, and 1 has recurrent residual urine. One patient reported as improved in 1900, on final examination in 1903, has to be classed as benefited to some extent only.

An analysis of the results of the 34 patients, who are alive to-day (including the 9 of the first 24 cases that were traced as still alive to date) either examined or heard from in March and April, 1903, shows the following: 10 are cured and 18 improved; in 1 the symptoms recurred to some extent, and 5 have to be classed as not improved. Of the 10 cases cured to-day, 3 had complete retention, 7 had incomplete retention, 3 of the latter using a catheter. Of the 18 improved, 6 had complete retention, 12 had incomplete retention, 3 using a catheter.

This gives 15 patients who had to catheterize themselves, Of these 10, that is, 66 per cent., laid the catheter permanently aside after Bottini's operation; 2 of the 5 could, if necessary, get along without its aid. They introduce it once or twice a day, in order to have a longer interval of comfort, particularly a better night's rest; 3 are still in need of it.

Little or no attention has so far been paid by authors to the question as to whether Bottini's operation or prostatectomy interfere with the power of intercourse. It is true this question is purely a social one, yet it may be of quite some importance if the patient has a wife living, and he be still below 60 to 65 years, sometimes even if he be older.

Inquiry of the 34 patients still living regarding this point brought out the following facts: The cases of 2 of my patients cannot be utilized in this connection, inasmuch as prostatectomy was performed by other surgeons sometime after Bottini's operation had been done by me; present condition with regard to this point not known in 3 cases. One patient, 73 years old, has no inclination for last 15 years; another, 80 years old, sick for years with paralysis agitans; a third patient, a diabetic, had absolute lack of erection for last nine years; 3 others, two 65 years and one 71 years of age, have been impotent for last three years or longer.

Deducting these 11 cases, we have 23 patients whose cases can be used with reference to the question at issue. Of these, power of intercourse was preserved in 20, viz., in 7 of the 11

cured cases; in 12 of the 18 improved cases; in 1 where the urinary trouble returned in part. However, in 1 (52 years) there is no orgasm; in 1 there is no seminal discharge in spite of orgasm; in 1 intercourse is not interfered with after Bottini's operation, though both vasa deferentia were dissected 5 years ago; of course, ejaculation is missing.

The power of intercourse was more or less interfered with in 3 patients, viz., a man, 49 years old, is impotent since operation; he has emissions, though erection is absent. Another, 62 years old, had weak erection before operation; is worse since operation. A third, 71 years old, claims to have lost power of intercourse since operation. Thus Bottini's operation has produced impotence in 2 out of 23 cases, and increased a weakness existing prior to operation in one. In two other patients irregularities in the normal seminal discharge have appeared.

This question as to the power of intercourse should also be carefully noted when tabulating the late results of prostatectomy, a point which, as stated before, has thus far received but little attention. Loss of sexual power has certainly quite frequently been met with after enucleation of the gland, as it has been carried out by most surgeons so far.

#### CONCLUSIONS.

1. The operations making a direct attack upon the enlarged prostate gland are preferable to those aiming to exert an indirect influence.

2. We have two useful operative procedures for the direct treatment of the enlarged prostate, *i.e.*, prostatectomy and galvano-caustic prostatotomy (Bottini's operation).

3. In selecting the method indicated in the given case we must individualize and be guided by anatomic, pathologic and social conditions.

4. Perineal prostatectomy offers advantages over the suprapubic method, since it enables the operator to do the operation under the direct guidance of his eyes.

5. Prostatectomy is, of course, the most radical and most surgical procedure; it should be the operation of choice whenever promising success.

6. Debilitated patients, who seem unfit subjects for the more radical operation, should not be relegated to catheter life, nor should prostatectomy be performed in order "to let them down easy"; they should be advised to have Bottini's operation done.

7. Surgeons should familiarize themselves with both methods in order to be in a position to do justice to their patients.

8. It is the duty of those refusing to do Bottini's operation under any circumstances, to nevertheless advise patients who ask for more radical relief to have Bottini's operation done, if the operation with the knife seems contra-indicated.

9. Further carefully compiled statistics as to the late results of both operative procedures—preferably in the hands of one man—are desirable in that they will increase our knowledge with reference to the selection of the proper method in the individual case.

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## PRACTICAL CONSIDERATIONS ON INTESTINAL ANASTOMOSIS.\*

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BY THEODORE A. MCGRAW, M.D., DETROIT, MICHIGAN.

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In the practice of surgery, the field of intestinal anastomosis is becoming daily enlarged, and the questions connected with it more and more important. These questions are necessarily viewed by the general practitioner and the surgeon from very different standpoints, and the physician whose ultra-conservatism is regarded by the operator with disfavor is inclined on his part to consider the surgeon too impatient and reckless. It is in such general assemblies as this that all such matters may be discussed with advantage, and we may all hope by a frank interchange of views to arrive at rational conclusions as regards practice.

In this paper I seek to give, as impartially as I may be able, the principles which should govern the surgeon in his work in this particular field. There are four classes of cases which may make intestinal anastomosis necessary. They are, 1st, the various kinds of intestinal obstruction; 2nd, inflammations and ulcerations in the alimentary tract; 3rd, displacements of the viscera, and 4th, intestinal fistulæ. The first class is by far the largest in numbers, and the most important.

We may divide the intestinal obstructions into those which

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are acute and those which are chronic. Of the acute obstructions I shall have little to say in this connection—the most of them, when operated on in an early stage, can be relieved by simpler operative methods. The intussusceptions may be drawn apart, the volvulus untwisted, the binding cord cut, and the hernias reduced.

The question of anastomosis comes in for consideration only when the gut has become gangrenous. In such cases the surgeon has a choice of a variety of procedures, none of which is very promising. He may immediately cut off the mortified coil and make either an end to end or lateral junction of the severed ends. This operation on the nearly moribund patient is only occasionally successful. It is difficult to determine the extent of bowel which must be sacrificed, and the surgeon is obliged either to excise a long piece of the gut or to operate on a tissue that is inflamed, soft and uncertain. Sutures are apt to cut through such tissues and permit an extravasation of feces. Many surgeons prefer to fasten the diseased coil in the abdominal wound and leave it to nature in hope that the patient may recover sufficiently to permit a secondary operation for the resulting false anus.

I venture to suggest a combination of these methods, which I have tried in one fatal case, and which seems to me to offer the best hope for the patient. In my procedure the surgeon draws the gangrenous coil out of the abdomen far enough to permit him to unite the two limbs of the bowel at a point where they seem healthy, by means of a rubber ligature. This requires very little time and causes no shock. All of that part which is liable to slough is then fastened outside of the abdomen, and the wound closed around it. The immediate result is a false anus through which the intestine may relieve itself of its contents, and when we consider the character of those contents we may hardly doubt that it is better that they should be discharged by the shortest and quickest route. At the end of two or three days a new channel has been cut by the rubber ligature and the false anus becomes unnecessary. It may then in time close spontaneously, or be closed by the simple operation of inverting and suturing the ends. In this way we may escape both the great danger of an immediate excision with an end to end anastomosis, and the severe secondary operation for the cure of an active false anus. The closure of the fistula when a free communication exists between the two segments of bowel above it would hardly require the opening of the abdominal cavity. Most physicians recognize the necessity of surgical procedures in cases of acute obstruction, although they are often too slow in arriving at a positive

diagnosis. This is, unfortunately, not the case with those chronic forms of obstruction which furnish the largest quota of cases which require the formation of intestinal anastomoses. I do not know why it is that the general practitioner evinces so much repugnance to operations on the very class of cases in which operations give the most brilliant results.

Cases of obstruction of a chronic nature differ from the acute obstructions, inasmuch as they are, during a comparatively long period, partial in character. Their symptoms develop gradually, and they give to the competent observer long notice of the coming closure. For this reason, the physician is enabled to study the conditions and to prepare, if he only will, for the coming disaster. To the surgeon, who is permitted to operate before the case has become desperate, a field is presented for operation which is free from inflammation, sepsis or gangrene. Stenoses of this character are most commonly caused by tumors or cicatricial contractions. The symptoms vary according to the seat of the obstruction and have to be studied, therefore, with especial relation to their location. When diagnosing any given case we have to note the intensity and character of the pain or distress produced by the disease, the changes which take place in the form, size and feel of the abdomen, the location of any abdominal swelling, the degree of tolerance with which contents are allowed to accumulate before serious symptoms supervene, and the character of the vomit when it occurs. The movements of the viscera, seen as they affect the abdominal wall, and the gurgle of the fluids as they pass the point of stenosis will also in some cases afford positive evidence as to the seat of the disorder.

We may become best acquainted with the import of symptoms if we study them in turn as they appear in the obstructions of the separate portions of the alimentary canal from the stomach down. A pyloric obstruction will often end in death before the channel is obliterated. It is not at all uncommon to find on post-mortem that death has taken place from a pyloric tumor, in which the pyloric orifice is still large enough to admit the finger, or even the thumb, the patient having died, nevertheless, from inanition, due to the inability of the viscus to force its contents into the duodenum. The explanation of this fact is simple. Under normal conditions, the chyme is forced out of the stomach by rhythmical contractions of its muscular fibres, associated and in unison with a relaxation of the circular fibres which close the pylorus.

It is, in fact, a very complicated process, involving many nerves and muscles, by which small portions of the digested food

are forced intermittently into the duodenum. When the duodenum is filled, the further evacuation of the stomach is inhibited. Now, any malady which interferes with this delicate mechanism may prevent the passage of chyme and cause vomiting. A pyloric tumor or cicatrix may do so by preventing the rhythmical expansion of the pyloric fibres, or by causing a change in the direction of the vermicular motion, or by thrusting a mechanical obstacle before the coming bolus, which will divert its course. So, too, the adhesions around such a diseased segment will prevent the free motion of the gut, or even cause a positive obstruction by producing a bend in the bowel.

Now, the first symptom produced by a beginning pyloric obstruction is one of irritation. The patient complains of indigestion, and has eructations of gas: these symptoms increase in intensity as the disease progresses, and sooner or later he begins to vomit. The stomach, unable to dispose of its contents, becomes distended and prolapsed. The pain becomes more intense, and the vomit, which has at first consisted only of ingesta mixed with the normal secretions, begins to contain mucus and blood, and the products of fermentative changes. It must be noted that bile is always absent from these ejecta. The distension of the stomach usually causes a swelling to the left of the median line, but occasionally the stomach will be so enlarged as to pass completely across the abdominal cavity. The position of the stomach will be influenced also by adhesions which it may form with the surrounding viscera. A tumor, if such exists, may or may not be felt by palpation. It may lie under the liver and be hidden by that organ or by very rigid and tense abdominal muscles.

I wish to insist upon the fact that there are very few diseases, other than obstruction of the pylorus or first part of the duodenum, which can cause just this sequence of symptoms. They might be simulated by the nausea of pregnancy, or by that of a purely nervous character, but rarely or never by chronic dyspepsia. Prolapsus of the stomach may, indeed, cause similar phenomena, but it does so by producing a kink of the duodenum, which itself causes an obstruction.

When, therefore, this train of symptoms occurs, the physician should not lose time by a vain indecision. If he can find no other cause for the trouble, and it persists in spite of all his remedies, it is his duty to call in the surgeon to give the relief which medicinal means cannot possibly supply. This is especially the case when the patient, previously healthy, is steadily losing weight and strength, though it must be remembered that both tumors and

strictures are apt to result from old ulcers and inflammations which have caused trouble during previous years.

If I have gone more into detail in the discussion of the diagnosis of pyloric stenosis than might seem necessary, it is because there is no class of cases which, in my judgment, demand so imperatively surgical aid, in which there is so much unjustifiable delay on the part of the general practitioner.

The profession seem to be hampered by old traditions, and unable to distinguish between other chronic digestive troubles and those due to obstruction. It would, perhaps, aid in stimulating to more decided measures if it were borne in mind that these other troubles may themselves be more amenable to surgical than to medical treatment, for many so-called dyspepsias are caused by inflammations of the gall-bladder or by gall-stones, and many ulcers of the stomach, which have resisted the efforts of the physician, have finally yielded to a gastro-enterostomy. Dr. Walker, of Detroit, has had much success of late in applying the same surgical remedy to indigestion caused by gastric ptosis. There may be some excuse for physicians who hesitate on account of a doubtful diagnosis, but there can, it seems to me, be only one opinion as to the duty of one who has diagnosed any given case as one of pyloric obstruction. In such cases there can be no relief except by the knife, and the failure to relieve means the sentence of death to the patient.

A large number of these cases are of benign stenoses in which a successful gastro-enterostomy means a permanent cure. Of the tumors of the pylorus, many are fibrous or adenomatous, and a tumor in that region should, therefore, never be assumed to be cancerous. I have just had occasion to correct a diagnosis upon a patient upon whom I operated nearly three years ago. His case was very instructive in many ways. He was a gentleman of 68 years when I first saw him, who was steadily failing in strength on account of a pyloric obstruction. There was a tumor to the right of the navel as large as a hen's egg. He could retain no food on his stomach for more than a few hours. The contents of the stomach, when tested, showed the absence of hydrochloric and the presence of lactic acid. On opening the abdomen an irregular tumor was found at the pylorus as large as a hen's egg, and enlarged lymphatics could be felt in the mesentery.

I made a gastro-enterostomy by the elastic ligature. He recovered completely and regained his strength to such a degree that he travelled all over the country attending to his large lumber and mining interests without any inconvenience whatever. His

first operation was done on September 15, 1900. He continued in good health until the middle of June, 1903, when attacks of colicky pain began, which were believed to be caused by the spread of the cancerous tumor to the neighboring viscera. These continued with occasional ameliorations until July 9th, 1903. He was then at Algonac at a summer hotel. There supervened then a sudden attack of obstruction of the bowels, with fecal vomiting. It was two days before I saw him, but as soon as he was brought to the hospital I operated on him. I found that the trouble was entirely independent of the original pyloric tumor. The obstruction was caused by a cancerous tumor of the transverse colon, which had completely occluded that organ. He died shortly after the operation, and I made a post-mortem. To my surprise I found that the original pyloric tumor, which I had believed to be cancerous, had nearly disappeared. The pylorus was thickened and contained some small tumors projecting from its mucous membrane. There were some calcified lymphatic glands in the mesentery. There were absolutely no adhesions anywhere. At the Detroit Clinical Laboratory, to which the specimens were sent for examination, the pyloric tumor was found to be an adenoma, and that of the colon a cancer. The orifice between the stomach and jejunum made by the elastic ligature was large and perfect. Now this illustrates the extreme difficulty of deciding upon the character of a pyloric tumor without a microscopical examination.

In this case we had every reason to believe that the hard pyloric mass and the swollen lymphatic glands were cancerous. There was a rapidly growing obstruction, and the test breakfast showed the entire absence of hydrochloric acid. The tumor, when exposed, felt like a cancer and looked like a cancer, and yet when the irritation produced by the obstruction was removed by a gastro-enterostomy, the tumor began to grow slowly smaller and was disappearing when a new tumor of different kind growing in the colon caused his death.

I have no doubt that the original trouble had been practically cured by my first operation. Now, if when he first began to suffer from that peculiar intermittent colicky pain which characterizes a beginning intestinal obstruction, I had promptly operated, I might by an excision of the cancerous mass in the colon or by an entero-enterostomy have still further prolonged his life. This was not done because I believed that the trouble was caused by the invasion of the surrounding intestines by the pyloric tumor—a condition which would have made an operation of no avail. It was one of those lessons which the practical surgeon every now

and then meets with, which tells him that no case should be despaired of until we have exhausted every possibility of cure.

When the pyloric tumor is cancerous, it does not forbid, but rather urgently indicates an operation. That which kills the patient is not the tumor but the obstruction. He actually starves to death. The cancer, if not eradicated, would sooner or later kill, but in the meantime, the patient relieved by a gastro-enterostomy, would have his life prolonged from one to five years. For these reasons, then, I urgently insist that we are not justified in withholding from patients a means of relief which, in many cases, would promise a permanent cure. If on entering the abdomen the surgeon finds that the case is not one of obstruction, he should examine the stomach to see whether a displacement causes a bend or if an ulcer has produced unusual symptoms. In either case, a gastro-enterostomy would give relief. In case there were gall-stones and evidences of inflammation around the gall-bladder, they could be operated on and the symptoms relieved, and thus in the rare cases in which the typical symptoms of pyloric obstruction were caused by other maladies, the operation would still be of service to the patient.

While the conditions which necessitate operations for the production of anastomosis in the small and large intestine are nearly the same as in pyloric stenosis, there are nevertheless peculiarities due to the position of the trouble which should be noticed. Stenosis of the duodenum between the orifice of the bile ducts and the stomach, presents about the same symptoms as pyloric obstruction. Beyond that point bile will always be present in the vomit if the bile ducts are open. A stenosis in the third part of the duodenum, or at the junction of the jejunum, will usually be marked by a great distension of gut to the right of the median line before vomiting begins. The vomiting may, indeed, be postponed until the patient is nearly moribund. This comes from the inhibiting action which is caused by a distension of that part of the duodenum on the motility of the stomach. I saw this manifested in my first case of vicious circle, in which the contents of the stomach instead of entering into the efferent limb of the jejunum passed into the duodenum. That viscus and the stomach both became enormously distended, but vomiting did not take place until the patient was moribund. This fact has a very important indication as regards surgical practice for the reason that gastro-jejunostomy would be of no avail in a stricture of the third part of the duodenum, for that bowel, becoming distended, would prevent the contractions of the stomach which are necessary to force the food through the artificial opening.

Stenoses of the jejunum, ileum, and sometimes colon, when incomplete, are manifested by the violent contractions, often visible through the abdominal walls, which the bowel is forced to make in order to empty itself through the narrow ring, by the extreme colicky pain caused thereby, and by the gurgle which announces the success of the movement and the consequent relief. I have met with this symptom only once in stricture of the large bowel, in the case, namely, of colonic cancer, which I have just reported. This patient manifested it so markedly that I was deceived in diagnosis, and thought that I had before me a stricture of the small intestine. Ordinarily a stricture of the colon causes a slowly growing distension with a general malaise and a toxemia resulting from fecal absorption. In many cases, however, the growing obstruction causes little inconvenience until, all at once, as the result of congestion or fecal accumulations behind the strictured point, the most violent symptoms arise of acute obstruction. The surgeon is then surprised to find the bowel so completely occluded as hardly to admit a lead pencil through the diseased part. The indications, then, for an intestinal anastomosis, are chronic or sub-acute and partial obstructions, displacements of the viscera which interfere seriously with their functions, and ulcers and inflammations otherwise incurable. In this last named case the relief is attained by making a new channel for the stomach contents, and thus relieving that viscus from the long retention of food and the friction which arises from its own churning action. They are indicated in acute obstructions only as a means of repair. They are contra-indicated when the stomach has lost its motor force, for in that case the chyle could not pass into the intestine even though there were a free and unobstructed opening; so, too, from conditions already stated, they could not avail in strictures of the third part of the duodenum or the beginning of the jejunum. In some cases, too, a total excision of the diseased area might offer a more permanent cure and be preferable.

It is a curious fact, which illustrates the caution with which statistics should be received without careful study, that gastro-enterostomy, an operation not in itself dangerous, has a mortality record nearly as great as that of pyloric excision. The reason of this is evident—it has been the operation of last resort in nearly moribund patients. Many surgeons make a practice of excising a pyloric tumor when the case is hopeful and making a gastro-enterostomy when it is desperate. That a man thus operated on, when his stomach has become highly inflamed, and when he himself is at the point of death from starvation, should die, indicates

not that the operation as such is dangerous, but that it has been too long postponed. It happens not infrequently that a surgeon begins an operation expecting to make a pylorotomy but, finding that procedure impracticable, makes a gastro-enterostomy in hope of giving a temporary relief.

As regards the mortality ratio, it varies widely in the practice of various surgeons. That it should depend, in a measure, upon the skill of the operator is self-evident, but there are other factors which influence the result in an even greater degree. Conservative surgeons who refuse to operate on patients who have passed the safety line will show exceedingly favorable statistics, for the majority of such will recover. He who operates, as I have done, in all stages of obstruction, cannot fail to lose many patients. It is a question whether it pays to operate on cases so desperate that only now and then one recovers.

Speaking generally, and with reference solely to pyloric obstructions, the operation will be usually successful so long as the ejecta consist solely of food and colorless mucus, and the cases become more and more hopeless as the vomit becomes green and finally black. The safety line may be measured in most cases by the color and character of the vomit. When it assumes a green hue we may know that the disorganization of the stomach has begun, and when black, that it is nearly completed.

I think it right to give the patient every reasonable chance, but I now refuse to operate when a black fluid oozing from the stomach indicates an early death. Statistics will become more favorable when the general practitioner arouses from his apathy and ventures to urge upon his patient an unwelcome operation. There are certain nationalities whose members will invariably resist all such attempts, but the duty of the physician is to give good advice, even though he cannot secure obedience.

The question of method is an all-important one to the surgeon who would make an intestinal anastomosis. Of the many procedures which have been introduced for this purpose, there are only three which can, at present, claim consideration, the use of the others having been abandoned or, at most, confined to single operators. These are, the suture, the Murphy button and the elastic ligature.

Of the suture and the Murphy button I shall have little to say, as they are too well known to all practical surgeons to require description. I shall, however, compare them with the method by elastic ligature, which has only recently succeeded in gaining favorable attention.

As early as 1891 I had operated for intestinal anastomosis by



the elastic ligature. The patient recovered from the operation and ceased to vomit, but died on the fifteenth day, of diarrhea and starvation. Adopting the plan recommended at that time by Lucke, I had united the stomach with the nearest presenting coil of small intestine. This error in technique caused the loss of the patient, as the post-mortem showed a magnificent anastomosis of the stomach with the ileum, at a point only 91 centimetres from the ileo-cecal valve. I published the case and described the method in a paper read before the American Medical Association and published in its journal of May 16th, 1891. The paper and the method fell dead and attracted no attention. I myself soon became enamored of the Murphy button, and used it in preference to my own procedure.

That which attracted me especially to Murphy's device was the possibility of administering food immediately after the operation, while the elastic ligature required an abstinence of three days while it cut its way through. It was not until further observation of ten years had taught me that it was not desirable that even the most fluid and blandest food should be thrust into an injured stomach directly after the operation, that I recurred to my own, as I now believe, superior method.

In most cases, the stomach refuses to contract during the first two or three days, and food or medicine put into it is liable to be retained there during that time. In the fall of 1900 I returned to my ligature operation with successful results, and am now in position to report many confirmations, on the part of distinguished American surgeons of its efficiency.

The application of the elastic ligature as a means of producing an intestinal anastomosis is very simple. The two viscera are brought together, and the surgeon connects them with a single line of Lembert sutures, a little longer than the desired opening. The rubber cord is then, by means of a large needle, passed through the walls of first one and then of the other bowel, and tied firmly in a single knot. Before tying it, however, a silk thread is laid under the knot, and, after the knot has been firmly tied with the rubber stretched to its utmost, the silk thread is made to fasten it in place. Both threads are then cut short and the Lembert suture is now completed so as to form a ring inclosing the rubber. In passing the rubber through the gut it should be put upon the stretch in order to lessen the size, and drawn slowly and carefully through in order not to tear the gut. It is not necessary to say that the rubber should be first-class, and fresh, for old rubber is apt to break.

The advantages of this procedure are: First, its simplicity and

quickness of application; second, its aseptic quality, for the rubber fills the openings through which it passes so completely that no extravasation is possible; third, the delay in opening the passage until the intestines have become well glued together, and, fourth, the ability to make with it a communication of any desired length. If we compare it with the incision and suture, it is more easy and quickly of performance, much more aseptic, and is accompanied with much less hemorrhage. If with the Murphy button, it is less liable to meet disaster from faulty technique, causes no loss of blood, is more aseptic, and it leaves no foreign body in the bowel.

The following history is interesting, as illustrative both of the dangers which may arise from the use of the Murphy button in the hands of a very competent surgeon, and of the condition of the gastro-intestinal anastomosis eight days after the application of the ligature. Dr. Max Ballin, surgeon to the Detroit Sanitarium, had two cases of gastro-enterostomy by the elastic ligature. One recovered without any complication whatever. In the other, fearing a vicious circle, he made a second anastomosis between the loops of the jejunum by the Murphy button. The history of the case, as reported by himself, is as follows:

Mrs. S. B.; 35 years old. Previous history: At 18 years, chlorosis and a severe hematemesis. Since then suffered frequently from vomiting, pain after meals, etc. In last three years vomited more frequently, and in large quantities, great loss in weight; lived mainly on liquid diet. Washing of stomach gave only temporary relief. Examination showed: Weight 98 pounds (at the age of 18 patient weighed 132 pounds). Stomach dilated below umbilicus. No palpable tumor. Operation on February 14, 1903. Abdominal section showed greatly dilated stomach, near the pylorus hard scar tissue. Fundus nearly 5 inches lower than pylorus. Anterior gastro-jejunosomy after McGraw. Entero-enterostomy of afferent and efferent loops of jejunum by Murphy button. For four days patient was in splendid condition. On February 19 sudden collapse and vomiting. Symptoms of peritonitis. Patient died on February 22. Autopsy showed: Perforative peritonitis. New communication between stomach and jejunum perfect; the rubber ligature had entirely cut through, the edges well united. On the place of anastomosis between the loops of the jejunum a perforation an inch large. The button not found on the place of the anastomosis.

Had there been no post-mortem examination the onus of causing death in this case might have been laid on the ligature-operation, as the less known and consequently less trusted pro-

cedure. The consideration which is, I find, the deterring factor in preventing the trial of this method by surgeons to whom it is a novelty, is the fact that the surgeon is not able to see the orifice produced by the ligature. He closes the abdomen on still intact intestines, and is obliged to put his trust in the slow, unseen action of a constantly contracting rubber cord. He desires the evidence of his senses, but is obliged to put faith in things unseen.

It is only after repeated trials of its efficiency that he learns to have confidence in a procedure which is certainly the simplest, and as I believe the least dangerous, of all methods for making an intestinal anastomosis.

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### IMPETIGO CIRCINATA.

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BY GRAHAM CHAMBERS, B.A., M.B., TORONTO.

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At the present day the term impetigo is applied to several eruptions of the skin caused by pyogenic bacteria. In some ways this classification is unsatisfactory, as two or three of the eruptions are distinct clinical conceptions. This is recognized by Unna, Sabourand, and other investigators, who have attempted to solve the question of the role of pus germs in diseases of the skin.

Unna believes that there are at least four distinct impetigos, namely, impetigo contagiosa of Tilbury Fox, impetigo staphylo-genes, or impetigo of Bockhart, impetigo circinata, and impetigo streptogenes.

Sabourand makes two divisions cover the whole field. He believes that the streptococcus causes impetigo contagiosa of Tilbury Fox, while the impetigo of Bockhart is always due to staphylococcus aureus or albus. Other physicians who have investigated the question, hold views not in accord with either of the above authorities. It is quite evident, therefore, that the question of impetigo is as yet in an unsettled condition. There are several reasons why this should be so, probably the principal being our somewhat limited knowledge of the nature and action of pus germs.

From a clinical standpoint it appears to me that there are at least three distinct skin diseases which are now classed with the

impetigos, namely, impetigo contagiosa of Tilbury Fox, impetigo of Bockhart, and impetigo circinata. In addition to these one meets with cases which, from the characters of the lesions, do not appear to belong to any of the above eruptions. These may represent other forms of impetigo, or be due to mixed infection.

Impetigo contagiosa is a very common disease, particularly



in children. It is characterized by the formation of vesico-papules, vesicles, or blebs, the contents of which tend to become sero-purulent or purulent. In two or three days, these lesions are replaced by yellowish-green or yellowish-brown crusts. The eruption extends by fresh inoculation. The lesions are superficially situated in the skin. The disease rarely, if ever, leads to

the formation of furuncles. This character suggests that impetigo contagiosa is not due to the infection of staphylococcus aureus or albus, which is the exclusive germ of boils. Impetigo of Bockhart is of extreme interest as it has the same etiology as coccogenic sycosis and furunculosis. The lesions are always pustules, and are always situated at hair follicles. The impetigo pustule is superficially situated, and soon dries up to a thin crust. However, in nearly every case of this type of impetigo, the staphylococcus invades more deeply into the follicle, producing folliculitis, furuncles, whitlows, etc. On the other hand, a boil may be the starting point of an eruption of impetiginous lesions. This is frequently observed in the skin in the vicinity of boils.

Impetigo circinata, the form to which I wish to draw special attention, is quite a different type of disease. In contrast to impetigo contagiosa, it is most frequently found in adults. The disease is usually contracted in barber shops, and is highly contagious. During the past five years it has been very prevalent in Toronto. Scarce a month passes without a number of cases, generally traceable to a common source, being brought to my notice. In each outbreak there has been from two to thirty cases. The barber shop is such a common source of infection that I usually designate the disease "Barber's impetigo."

The characters of the lesions are usually well defined. They are, as a rule, situated on the face, forehead, ears or neck. In a few cases I have observed small lesions on the wrists. The appearance of the eruption is frequently preceded for some hours by slight itching. The lesions are primarily small, vesicles about the size of the head of a pin. They are rarely observed, as they readily rupture, leaving a small exuding surface. This increases in size by centrifugal extension, forming lesions varying in size from a split pea to a quarter of a dollar. The surface of these lesions is either moist, exuding a clear serous discharge, or covered with crusts. The process of vesication may sometimes be observed in the periphery of the lesions in the form of a slightly-raised ring, hence the name impetigo circinata. Vesicles or pustules, except the minute vesicles which are sometimes observed in the early stage of a lesion, are never seen; nor does the infection ever extend deeply in the follicles. In fact, the superficial character of the eruption is one of the most marked symptoms of the disease.

The lesions as a rule are discrete. However, in a small proportion of the cases they coalesce, forming a patch covered with crusts and sero-purulent exudate. The eruption then resembles

very closely pustular eczema. According to my experience, this confluent type of impetigo circinata is found more frequently in children than in adults. In two cases in one family, which recently occurred in my practice, the father had the discrete, while a girl of three years of age had the confluent form of the disease.

With regard to the bacteriology of impetigo circinata nothing definite is known. It is believed to be due to a pus coccus; but the particular germ has not been isolated. During the last two years I have frequently grown cultures on agar from the exudate of the lesions. When the lesions were fresh then as a rule a pure culture of staphylococcus albus was obtained; but cultures made from older lesions usually had a yellow color, due to staphylococcus aureus. These results suggest that the disease is caused by staphylococcus albus.

The diagnosis of impetigo circinata presents few difficulties. It has to be differentiated from pustular eczema, and other forms of impetigo. When the lesions of impetigo coalesce, the resemblance to pustular eczema is very marked; but the history of the development of the eruption of impetigo from isolated foci, together with the presence of discrete lesions in the skin in the neighborhood of the large patches, will give the clue to the diagnosis. Moreover, in eczema there are other symptoms, such as intense itching, more or less infiltration of the skin, etc, etc.

Impetigo circinata differs from impetigo contagiosa by the absence of vesicles and pustules, except the tiny vesicles which may be occasionally seen at the commencement of a disease, and the slight vesication or pustulation at the periphery of a lesion, while it is increasing in size. On the other hand, in impetigo contagiosa vesicles, blebs, or pustules are usually present. Moreover, impetigo contagiosa is essentially a disease of childhood, whereas impetigo circinata usually occurs in adults.

The lesions of impetigo of Bockhart are, as a rule, quite different from those of the circinate form of the disease. In the former the staphylococcus invades the hair follicles, producing folliculitis and furuncles, which are never seen in uncomplicated cases of impetigo circinata.

The treatment of the circinate form of impetigo which has given me the best results, is quite different from that of the other forms of the disease. In impetigo contagiosa a mild antiseptic, such as diluted ammoniated mercury ointment, effects a cure in a few days.

In the impetigo of Bockhart the same treatment may be used; but where the staphylococcus has set up a folliculitis epila-

tion is usually required. In some of these cases lotions are more efficacious than ointments. Shaving of the diseased areas as a rule is useful. In impetigo circinata the medicinal agents should always be applied to the lesions in the form of lotions. They should be antiseptic, soothing and astringent. If the lesions are irritable and moist, I have found that ointments are useless. This I think is an important observation, as it is usually taught in textbooks on dermatology that application of antiseptic ointments is an efficient form of treatment in all the forms of impetigo. The lotions that I have found most useful are those containing sulphur, blackwash, zinc sulphate, lactate of lead, boric acid or acetate of aluminium. In many cases a lotion containing 2 drams of precipitated sulphur in 4 ounces of lime water makes an excellent application. When the lesions become confluent and the characters of the eruption approach in appearance those of pustular eczema, then I treat the case in a manner similar to that which I use for moist eczema. I remove the crust by a boracic acid poultice, and then apply a lotion containing 1 dram of liq. plumbi subacet. to 4 ounces of milk. A very good plan is to apply a boracic acid poultice during the night, and the lactate of lead lotion every hour during the day.

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## CASE REPORTS OF SYPHILIS, WITH REMARKS.\*

BY JAMES ROSS, M.D.,

Dermatologist to the Victoria General Hospital, Extra-Mural Lecturer on Skin and Genito-Urinary Diseases, Halifax Medical College.

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Case 1.—J. H. M., aged 47, a ship carpenter. When first seen, on October 24th, 1902, he complained of a "breaking-out" on the back part of the thigh, which had existed for three years. When examined, there was found to be a serpiginous eruption, with a well-defined margin and three or four small, punched-out ulcers, situated at intervals near the outer border of raised margin. The eruption was semi-circular in form, and was about six or seven inches in length. This condition had been diagnosed as "King's Evil"—so the patient said—by his former medical

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\*Read before meeting of Maritime Medical Association, St. John, July 23rd, 1903.

attendant. At all events, he had received no internal treatment for the disease, which gave the picture of a deep serpiginous or ulcerating syphilide. On increasing doses of iodide of potassium, with local antiseptic treatment, the eruption disappeared and the ulcers filled up nicely. The initial lesion had been acquired ten years previously, which was followed by secondary symptoms, but treatment had not been persevered with.

Case 2.—A. J. M., aged 49, a farmer. First seen on February 9th, 1903, complaining of sores on the back. Two and a half years before the sores first appeared, gradually spreading till a large area was covered. When I first saw him there was a widespread margin, and scattered here and there were ulcers of different sizes. The skin over which this spreading eruption had travelled was thin, white and parchment-like, due to the scarring produced by the serpiginous ulceration.

The patient said eruptions began a few days after an accident, when his left forearm and thigh had been fractured by being thrown from a team.

There was a history of a chancre twenty years ago, but he did not remember having a rash or other symptoms of syphilis. After prescribing iodide he rapidly improved; in six weeks no sign of eruption, and ulcers had completely filled up.

Case 3.—A young lady, aged 26. First seen on May 13th of 1903, complaining of a rash on arms, legs and body. The history, as given by the patient, was that about the 1st of March last a fine rash of a pinkish color appeared, affecting most of the body, which was accompanied by much itching and burning. The spots gradually got larger and brighter, and the itching became more intense. The rash, when I first saw it, was very extensive, covering the arms thickly as a large papular rash, varying from a pea to a five-cent piece, and covered by grayish scales. Some on the back, which was also extensively covered, were even larger, but showing the same characteristics. The color was the well-known raw-ham shade. The palms of the hands also showed several discrete lesions having a punched-out appearance, but superficial, which is most characteristic of syphilis. There was likewise marked glandular enlargement present.

The appearance of the eruption on the body might easily have been mistaken for psoriasis; but on careful examination I found that the condition present was a papulo-squamous syphilide, which, in some of the older books was termed "syphilitic psoriasis."

This patient gave no history to throw further light on the subject. She evidently had some idea as to the nature of the



trouble, but resented any suggestion as to the most probable way in which it was contracted. It had been diagnosed as eczema and also psoriasis, no suspicion of the real trouble ever entering the minds of the other two doctors who had previously examined her. And no wonder; here was a case much resembling psoriasis guttata, with a history of intense itching, but nothing further to clear up the mists of doubt. The complaint of itching I did not place much reliance on, and thought it evidently a blind to throw unsuspecting diagnosticians off their guard. However, I ordered an antipruritic lotion, which she said gave her much relief. Mixed treatment was also prescribed, and soon rapid improvement followed. When last seen, five weeks after starting treatment, the rash had disappeared, leaving nothing but slight pigmentation.

Regarding Case 2.—Whether the accident to this patient had any connection with the eruption which followed, it is difficult to decide, though it is known that an accident to a syphilitic person is sometimes followed by some manifestation of the disease at the site of injury. The patient referred to believed he fell on his back, but the fractures received were naturally of more moment. At all events the eruption started about a week after the accident, while lying on his back, so that possibly the continuous pressure over the same situation may likewise have had some influence as an exciting cause.

I remember a very interesting case which was under the care of Dr. Chisholm at the Victoria General Hospital some years ago. A young man, about 18 years of age, was kicked on the knee by a horse one year previously; breaking down of the tissues and deep ulceration followed. He had been treated faithfully with tonics, and different antiseptics used locally, but to no avail. When he arrived at the hospital, the ulcer was about six inches in diameter, and considerably deep at the centre of the floor. A consultation was held to consider the advisability of amputation. Noting the punched-out appearance and other typical manifestations present, I suggested iodide of potassium, which was soon followed by improvement and cure. There was no history to be obtained, but the picture was there nevertheless. It is probable some inherited taint was present in this case.

Two years ago a woman consulted me about a rash on her arm, which, on examination, proved to be a superficial serpiginous syphilide, that on appropriate treatment disappeared. Some six months afterwards her husband consulted me about a sore finger. Six weeks before I saw him, he and another fellow on board a steamer had an altercation in which his opponent bit his

forefinger. It swelled up and considerable thickening developed around the site of injury. Antiseptic and other treatment had been carried out by another doctor, but still the wound did not heal nor the induration disappear. Remembering the case of his wife, I administered iodide of potassium, and it was remarkable how soon recovery ensued.

There is no doubt that considerable carelessness is manifested at times in the diagnosis of syphilitic cases. Why should we not put every doubtful case on antisyphilitic treatment? History does not always help us, as evidenced by Case 3, and others to which I have alluded. Never mind who the patient is or from what particular "good" family has he come. There may be a syphilitic taint somewhere, either inherited or acquired.

Then there is the other extreme. There are practitioners to be found in this enlightened century who have only to see or even hear of some kind of sore on the penis to jump at the conclusion that it is the initial lesion of syphilis. There are others, again, who are consulted by a patient with some kind of a profuse rash over the body and at once conclude it is of syphilitic origin, particularly if the patient has been known as "one of the boys."

A patient came to me some years ago with a well-marked rash of seborrheic eczema on the front and back of chest. There was not much trouble in the diagnosis, but he then told me that three other medical men had called it a syphilitic rash, for which he had been swallowing mercury pills for many months. The rash at times slightly improved, but nevertheless persisted under the treatment mentioned. The patient was very anxious to tell all, but was positive that he never had any other venereal trouble but gonorrhoea. However, the knowledge of contact with women of all kinds and the presence of a rash was enough evidence for some medical men he had consulted.

Another patient consulted me some years ago suffering from angio-neurotic edema, which involved the tongue and different parts of the face. Many years previously he had contracted some sores on the penis, which his medical adviser diagnosed as of syphilitic origin, and without delay prescribed mercury, which patient had faithfully kept up for a long period. Sometime after he got married, and raised a family of as healthy-looking children as can be seen anywhere. One morning, finding half of his tongue swollen and also part of his face, he hastened to his medical attendant of many years before, who told him this was a manifestation of the old disease, so mercury and iodides were once more called into action. However, the swelling would

come and go, no improvement taking place from the remedies mentioned. He then consulted me, and I came to the conclusion that the trouble from which he was then afflicted was of a different nature, and, after thorough questioning, likewise concluded the patient never had syphilis. He was an intelligent man, gladly answering questions and sure of the conditions which had years ago existed. There had been several sores present, which, with a clear history of a short incubation stage, pointed to chancroids.

Again, there are patients who have had syphilis and who manifest some other skin affection which is at once diagnosed by the medical attendant as of syphilitic origin. Why should not such a patient be affected with a skin disease entirely remote from syphilis?

Not long since a case in this city suffered from a very severe skin affection, which resulted in death. There was a suspicion of a syphilitic history, yet mercury and iodides did no good. When the death certificate was written, the disease was stated as — — following syphilis. The contents of that document became widespread, and possibly may have proved a valuable object-lesson. It is probable, however, that the disease which proved fatal had no connection with syphilis, unless, of course, the tissues, modified by syphilis, rendered him more susceptible to the encroachment of some other serious malady. At all events, the authorized treatment was of no avail. Examples of lowered vitality predisposing to other diseases are a common experience in the daily routine of most practitioners.

To recapitulate: it would be advisable to give all doubtful cases antisyphilitic treatment, but always insist on watching the further progress of the case.

On the other hand, do not rush to prescribe mercury when viewing an initial lesion of the genitals, but rather "make haste slowly" until sure of your diagnosis.

THE TREATMENT OF FACIAL DEFORMITIES BY THE  
SUBCUTANEOUS INJECTION OF PARAFFIN.

BY GEORGE K. GRIMMER, B.A., M.D. (EDIN.)

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Montreal General Hospital.

It is now three years since Gersuny, of Vienna, published a description of his *subcutaneous prosthesis* by the injection of melted paraffin; thus introducing a method of removing certain deformities which surgery had not previously been able to cope with successfully.

Some years before Gersuny recommended the injection of paraffin, Corning, of New York, had made experiments, in which he had injected solidifying oils, and had established the important fact *that such substances can be injected without producing any serious inflammatory reaction*; but the idea of utilizing paraffin for the effacement of physical imperfections was conceived by Gersuny, who first injected it into the scrotal sac of one of his patients to produce an artificial testicle. The possibility of building up flattened noses soon suggested itself to him, and was speedily put into practice. Since then surgeons in many parts of Europe and America have taken up his method, and with few exceptions, have met with highly gratifying results. I believe the first case of the kind reported in the United States was by A. C. Heath, of Chicago, in December, 1901, and, in Canada, two by the writer in September, 1902.

Among the numerous defects that have been successfully treated by the injection of paraffin, may be mentioned: Incontinence of urine; prolapse of the uterus; prolapse of the rectum; and cleft palate. It has, also, been used with success to build up sockets for artificial eyes. But it is in the field of cosmetic surgery that it has found its greatest utility, and it is for such ailments as the following that I would specially press its claims, namely:

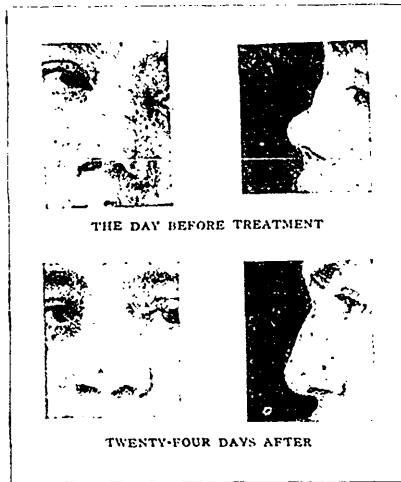
To build out depressed or flattened (saddle-back) noses and receding chins, to fill up the depressions frequently left by frontal sinus and mastoid operations, and by excision of the upper or lower jaw, and other such defects as destroy not only the symmetry and presentability of the face, but also not infrequently the happiness of the unfortunate sufferer.

*The Kind of Paraffin Required.*—Much diversity of opinion

has been expressed by various authorities regarding the most satisfactory paraffin for this operation, that is to say, paraffin of what melting point gives the best results? In Gersuny's early cases he used paraffin melting at 104 F., and in recent writings he still recommends the softer variety.

Eckstein made a series of experiments on animals with paraffin melting at various points, and has declared a preference for those melting between 132 and 140 F.

In July, 1902, I injected 10 cc. of paraffin, melting at 102 degrees, beneath the skin of a rabbit's nose, and an equal quantity at 107 degrees and 112 degrees in the same situation in two others. I also injected a few drops into the anterior chamber of

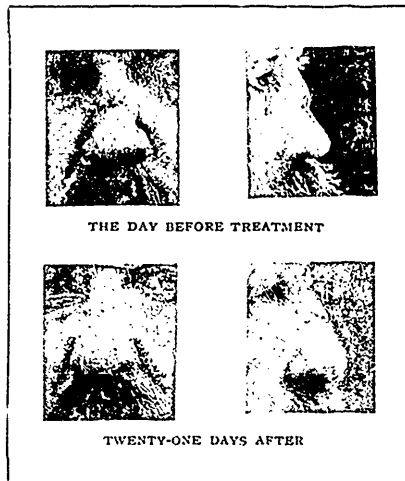


one eye, and 10 cc. into the abdominal cavity of each rabbit, always using in the same rabbit paraffin of a uniform melting point. These animals are still living and healthy. There was some reaction in each of the eyes into which the paraffin was injected, but it passed off after some weeks. Of the three before mentioned experiments, the nose built up with paraffin at 112 has given the best result, having maintained its shape unchanged to the present time, while the paraffin at 102 F. after a few weeks ran to one side of the nose, causing it to be unsymmetrical.

In August this year I made a further injection with paraffin melting at 115, 120 and 130 F., under the skin of the neck just behind the ears of the same rabbits; no noticeable reaction re-

sulted in any. Phannensteil and Paget are in favor of paraffin melting at 115 degrees. My own view is that paraffins from 112 to 120 degrees are best; the choice between the softer and the harder being determined by the requirements of the case, that is, according as we desire a more or less firm support for the up-lifted tissues.

*The Syringe.*—The points that constitute a good paraffin syringe are the following: That it be made of solid metal, with a solid metal platen, have a capacity of about two teaspoonfuls, and have both a piston and screw action. The needle should be about the size of an ordinary antitoxine needle, but shorter, and may be curved or straight. I have found Eckstein's method of



covering the syringe with rubber tubing a most satisfactory one for the retaining the heat of the paraffin.

*Preparation of the Paraffine, Syringe and Needle.*—These must be sterilized and placed in sterile lotion at 120 F., until required.

*The Operation.*—The site of operation having been rendered surgically clean, the operation may be performed under local or general anesthesia, the former being sufficient in many cases, When local anesthesia is used, care must be taken not to inject more than a few drops of the anesthetic, as a larger quantity would, in some measure, mislead as to the amount (of paraffin) required. Immediately before injecting the paraffin, the syringe

is filled and tried, and special attention given to the junction between the needle and syringe to see that it is perfectly tight. The point of the needle is then placed in boiling water for a few seconds, and inserted at once into the tissues, before the paraffin has time to harden in the needle. The needle puncture should be made 1-2 inch or more from the depression, and carried a little beyond the point of greatest deficiency, making sure that the tissues around the defect to be filled up, are firmly compressed by an assistant, to prevent the escape of the paraffin into an undesirable position. The piston is then slowly and continuously screwed in until sufficient has been injected; meanwhile, the point of the needle can be moved about as desired. After a few seconds, the needle is withdrawn. The operator should continue moulding the paraffin for fifteen or twenty minutes, until it has become thoroughly set. Should the needle clog, so that a moderate amount of pressure will not remove the obstruction, it should be withdrawn and reheated, since cases have been reported in which the needle has burst when an attempt has been made to force out the hardened wax by great pressure on the piston. In operations upon the nose, I have found the manipulations easier when the needle was inserted from near its point. The paraffin is best injected in a semi-solid condition, too little, rather than too much, being used; since a second injection can always make good any deficiencies caused by too small a primary one, while the removal of a surplus is more difficult, and there is much greater danger of hyperemia, and even sloughing, when high tension in the tissues has been caused by an over-injection. The quantity of paraffin required varies with each case from a few drops to many centimetres.

*The After-Treatment.*—Flexile collodion should be painted on the needle punctures and cold astringent compresses applied for some hours. Any swelling that has occurred in my cases had disappeared in three or four days under this treatment. Some caution is necessary in the use of cold astringent compresses, as too vigorous an application of them might cause necrosis of the overlying skin.

*The Dangers of Paraffin Treatment.*—Accidents and unfavorable results following the injection of paraffin have been few, and have resulted chiefly from embolism or over-injection; but since it has become the custom to inject paraffin in a semi-solid condition, I have not seen any case of embolism reported, and with care in entering the needle, it should not occur. Meyer has claimed that paraffin when injected is toxic; this is now an exploded theory, at any rate for paraffins melting above 110 F.

Suppuration may follow if the operation has not been performed aseptically, but I have only seen an account of one case in which it has occurred. Necrosis of the overlying skin may result when too large a quantity has been injected, or when the paraffin has been injected into the skin and not beneath it, and is caused by the extreme tension cutting off the blood supply. Hyperemia of the skin over the injected area has occurred in a number of cases, and is also the result of tension. It may be unavoidable, but as it has disappeared in a large majority of reported cases in from one to two months it is not a serious complication. Connel has reported a case, however, in which it lasted over a year, but was easily hidden by a small amount of face powder.

*What becomes of the Paraffin after Injection.*—Gersuny has claimed that it becomes encapsuled. Meyer thinks it is slowly absorbed, while Stein claims it is replaced by connective tissue. I am convinced, from my own experience, that some absorption takes place in paraffins of melting points between 102 degrees and 112 degrees, when injected into the anterior chamber of rabbits, this I have been able to observe, and the softer the paraffin, the greater absorption, since the paraffin at 102 degrees, which I have injected into that situation in a rabbit, has disappeared to a much greater extent than those of a higher melting point, similarly inserted, and I believe I have also observed that the paraffin was first infiltrated with young tissue elements. However, in the cases in which paraffin has been injected for cosmetic results, little, if any, shrinkage has been observed in the uplifted tissue after a period of two or three years. My own experience of this method has been limited to nine cases, eight of which are still under observation. In all, the results have been good. In my first two cases, I used paraffin melting at 104 degrees, one of these was lost sight of after the fourth month; in the other, now after eighteen months, the nose feels soft, but the improved shape has been retained unimpaired, and the skin over the paraffin looks perfectly normal. In three others I used paraffin melting at 112 degrees. In two of these there was some hyperemia of the superimposed skin, which has now almost disappeared after two or three months respectively; in the remainder I used paraffin at 115 degrees, which was injected semi-solid, and which on the whole has given me the best results. In none was there any severe inflammatory reaction, and all swelling had disappeared in from two or three days.

*Points that Recommend the Use of Gersuny's Method.*—(1) It proves successful in removing many facial deformities that have not been treated successfully by any other means. (2) The



results are uniformly good, and the risks few. (3) After the technic of the operation has been mastered, it is easily and quickly performed, and is almost free from pain, even when no anesthetic is used.

In conclusion, I would claim that the subcutaneous injection of paraffin has now passed from the experimental stage to that of a sound therapeutic measure, and has been an incalculable blessing to a large number of sorely-afflicted persons, who have sought in vain, from other sources, relief from some unsightly defect of person.

### Reports of Societies

#### ONTARIO MEDICAL ASSOCIATION, TORONTO, JUNE 14, 15, AND 16, 1904.

*Committee on Papers and Business.*—Drs. A. A. Macdonald, N. A. Powell, G. A. Bingham, J. T. Fotheringham, W. J. Wilson, T. F. McMahon, G. Chambers, R. D. Rudolf, J. Caven, H. Parsons.

*Corresponding Members of Committee on Papers and Business.*—Peterboro, Dr. McNulty, St. Catharines, Dr. John Sheahan; Windsor, Dr. Jas. A. Ashbough; Woodstock, Dr. W. T. Parke; Kingston, Drs. Jas. Third, R. W. Garrett; Hamilton, D. H. S. Griffin; London, Dr. H. A. McCallum; Ottawa, Dr. J. D. Courtenay; Belleville, Dr. Perry Goldsmith; Guelph, Dr. Angus McKinnon; Chatham, Dr. J. L. Bray; Owen Sound, Dr. T. H. Middlebro; Collingwood, Dr. Arthur; Barrie, Dr. J. C. Smith; Orillia, Dr. W. C. Gilchrist; St. Thomas, Dr. Frank Lawrence; Brantford, Dr. L. Ashton; Stratford, Dr. D. B. Frazer; Brockville, Dr. R. A. Bowie.

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*Hospital Abuse.*—Drs. W. J. Wilson, R. A. Reeve, C. J. Hastings, E. J. Barrick, A. A. Macdonald, C. Sheard, G. A. Bingham.

*Necrology.*—Drs. A. Primrose, J. McCullough, H. Howitt.

*Audit.*—Drs. D. J. G. Wishart, C. H. Carveth, G. Elliott.

## Therapeutics.

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OUR readers are invited to send favorite prescriptions or outlines of treatment, such as have been tried and found useful, for publication in these columns. The writer's name must be attached, but it will be published or omitted as he may prefer. It is the aim of this department to aid the general practitioner by giving practical prescriptions and, in brief, methods of treatment for the diseases seen especially in every-day practice. Proper inquiries concerning general formulæ and outlines of treatment are answered in these columns without allusion to inquirer.

### Bronchorrhea

In bronchorrhea the following combinations are recommended by Danforth in *Amer. Text-Book of Applied Ther.*:

- |    |                     |                                   |
|----|---------------------|-----------------------------------|
| ℞. | Copaibæ .....       | gtt. xx.                          |
|    | Pulv. opii .....    | gr. ii.                           |
|    | Pulv. acaciæ q.s.   |                                   |
| M. | Ft. capsulæ No. x.  | Sig.: One every three hours ; or, |
| ℞. | Copaibæ .....       | gr. xx.                           |
|    | Acidi gallici ..... | gr. xxx.                          |
|    | Pulv. acaciæ q.s.   |                                   |
| M. | Ft. cap. No. x.     | Sig.: One every three hours.      |

### Acute Bronchial Catarrh.

There is no remedy, according to Yeo, in his *Clin. Ther.*, which so readily relieves the distressing dryness of the mucous membrane in the early stages of acute bronchitis as does tartarized antimony. He recommends it combined with small doses of morphin, codein or opium as follows:

- |    |                                |  |
|----|--------------------------------|--|
| ℞. | Vini antimonalis .....         | ʒiiss.   |
|    | Liquoris morph. acetatis ..... | ʒss.   |
|    | Liq. ammonii acetatis .....    | ʒiiss.   |
|    | Aq. laurocerosi .....          | ʒii.   |
|    | Syrupi simp. ....              | ʒiii.  |
|    | Aquæ q.s. ad .....             | ʒvi.   |
| M. | Ft. mistura.                   | Sig.: Two tablespoonfuls every three or four hours |

The following combination is sometimes used by the author as a substitute for the foregoing prescription:

- |    |   |           |
|----|---|-----------|
| ℞  | Pulv. opii et ipecacuanhæ .....   | gr. v.-x. |
|    | Spts. etheris nitrosi .....   | ʒi.       |
|    | Liq. ammon. acetatis .....  | ʒiii.     |
|    | Aq. camphoræ .....  | ʒiiss.    |
| M. | Sig.: At one dose, to be taken at bedtime, followed the next morning by a saline purgative. |           |

When fever is present the following is of great value:

- R. Tinct. aconiti ..... ℥xxiv.  
 Vini antimonialis..... ℥ii.  
 Liq. morph. acetatis ..... ℥xl.  
 Liq. ammon. acetatis..... ℥iiss.  
 Aq. camphoræ q.s. ad ..... ℥viii.  
 M. Ft. mistura. Sig.: Two tablespoonfuls every two or three hours.

It should be kept in mind, however, when opium, antimony and acnite, or similar preparations are given, that they should be discontinued when the definite symptoms for which they are given have disappeared.

As a stimulating expectorant the following combination is recommended:

- R. Infusi senegæ ..... ℥iii.  
 Sodii bicarb..... ℥i.  
 Sodii chloridi  
 Ammon. carb., āā ..... gr. xxiv.  
 Syr. tolutani ..... ℥iii.  
 Aquæ q.s. ad ..... ℥vi.  
 M. Ft. mistura. Sig.: Two tablespoonfuls every six hours.

Dr. N. S. Davis recommends the following mixture in acute bronchitis:

- R. Tinct. veratri viridis ..... ℥iiss.  
 Vini antimonii..... ℥iv.  
 Tinct. opii camph. . . . . ℥iiss.  
 Liq. ammon. acetatis ..... ℥ii.  
 M. Ft. mistura. Sig.: One teaspoonful in a tablespoonful of water every two, three or four hours.  
 R. Ammon. carb..... gr. xxx.  
 Tinct. hyoscyami . . . . . ℥iv.  
 Codeinæ . . . . . gr. ii.  
 Syr. pruni virg ..... ℥iv.  
 Aquæ camphoræ q.s. ad ..... ℥ii.  
 M. Sig.: One teaspoonful every three hours.

E. Fletcher Ingals recommends the following combination to relieve the cough:

- R. Ext. cannabis indicæ..... gr. ½  
 Ext. hyoscyami ..... gr. ss-i.  
 Ext. nucis vom ..... gr. ¼-ss.  
 Quininæ hydrobrom. .... gr. i-ii.  
 Camphoræ monobrom ..... gr. ii-iii.  
 M. Ft. capsulæ No. i. Sig.: One such capsule every four to six hours; or:  
 R. Morphinæ sulph..... gr. i.  
 Ammon. carb..... gr. xxx-℥i.  
 Syr. pruni virg.  
 Mist. glycyrrhizæ co., āā ..... ℥iv.  
 M. Sig. One teaspoonful in water and repeat as necessary.

He condemns the use of morphin in the capillary form of bronchitis except in very small doses. Ammonium chlorid or

ammonium carbonate are useful preparations in this form of bronchitis; or a combination of the carbonate and iodid is of value:

- R. Ammon. carb. .... ℥ii.  
 Ammon. iodid. .... ℥iii.  
 Syr. glycyrrhizæ.  
 Syr. tolutani, āā ..... ℥ii.  
 M. Ft. mistura. Sig.: One teaspoonful every two or three hours in water.

Stevens, in *Med. Rev. of Reviews*, recommends the following treatment of acute bronchitis:

- R. Terebini  
 Ol. eucalypti, āā ..... ℥ss.  
 Strych. sulph. .... gr. 1/3.  
 Codeinæ sulph. .... gr. iii.  
 M. Ft. capsulæ No. xii. Sig.: One capsule every four hours.

The following is recommended by De Brun in the treatment of chronic bronchitis:

- R. Ichthyol ..... gr. xxx.  
 Glycerini  
 Syr. aurantii, āā ..... ℥iv.  
 Aquæ ..... ℥iii.  
 M. Sig.: One-half to one teaspoonful several times daily.

—*Jour. A. M. A.*

#### Palmar and Plantar Hyperidrosis.

M. G. Lyon (*Revue de Therapeutique Medico-Chirurgicale*, quoted by *Nord Medical* for November 1st, 1903), recommends the following:

- (a) R. Decoction of walnut leaves. .... 1,000 grammes (33½ ounces).  
 Alum or borax ..... 10 grammes (¼ ounce).  
 (b) R. Potassium permanganate. .... .25 centigrammes (3¾ grains).  
 Water ..... 1,000 grammes (33½ ounces).  
 (c) R. Tincture of Benzoin ..... 10 grammes (150 minims).  
 Formaldehyde ..... 15 grammes (225 minims).  
 Water ..... 1,000 grammes (33½ ounces).

The feet or hands should be bathed in any of the foregoing. If, instead of being cold and cyanotic, the members are warm, cold water should be used and the following applications used subsequently:

- (a) R. Ichthyol } of each. .... 25 grammes (6¼ drachms).  
 Lanolin }  
 Water ..... 15 grammes (3¾ drachms).  
 (b) R. Naphthol ..... 5 grammes (75 grains).  
 Glycerin ..... 10 grammes (150 minims).  
 Alcohol ..... 100 grammes (3½ ounces).  
 M. Use as a lotion twice daily.

Good results are obtained, too, from:

- ℞ Quinine sulphate ..... 5 grammes (75 grains).  
 Alcohol, 60 per cent ..... 100 grammes (3½ ounces).  
 Or:  
 R. Essence of bergamot..... 20 drops.  
 Iron perchloride..... 30 grammes (1 ounce).  
 Glycerin ..... 10 grammes (2½ drachms).  
 M. Lotion.

Besides baths and lotions, powders may be used, the following being a good example:

- R. Potassium permanganate..... 2 grammes (30 grains).  
 Salicylic acid ..... 5 grammes (75 grains).  
 Bismuth subnitrate..... 30 grammes (1 ounce).  
 Talc..... 60 grammes (2 ounces).  
 M. Dusting powder.

Inside the shoes may be placed filter paper baked in the following:

- ℞. Thymol ..... 30 centigrammes (4½ grains).  
 Potassium permanganate ..... 1 gramme (15 grains).  
 Distilled water ..... 100 (3½ ounces).  
 M. Foot application.

—N. Y. M. J. & P. M. J.

#### Cosmetics to Improve the Complexion.

*Nord Medical*, for November 1st, 1903, gives several formulæ said to be valuable in improving the complexion, which may prove useful to practitioners in districts remote from "beauty parlors."

- R. Liquefied oil of cacao ..... .5 parts.  
 Castor oil ..... 30 parts.  
 Oil of bergamot ..... 1 part.  
 Eau de cologne ..... 20 parts.  
 M. Cosmetic.  
 R. Spermaceti ..... 45 centigrammes (6¾ grains).  
 Paraffin ..... 35 centigrammes (5¼ grains).  
 Oil of almonds..... 75 centigrammes (11¼ grains).  
 Rose water } of each ..... 70 centigrammes (10½ grains).  
 Glycerin }  
 Oil of roses ..... 1 centigramme (⅓₀ grain).  
 M. Apply nightly.  
 R. Oil of roses ..... 20 drops.  
 Lanolin ..... 85 parts.  
 Cacao butter ..... 25 parts.  
 M. Use nightly.  
 R. Sweet almonds ..... 100 parts.  
 Bitter almonds ..... 20 parts.  
 Rice powder ..... 120 parts.  
 Borax } of each ..... 5 parts.  
 Powdered iris }  
 Oil of bergamot ..... 1 drop.  
 Oil of lemon..... 3 drops.  
 M. For use at night.

—N. Y. M. J. & P. M. J.

## The Physician's Library

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*Progressive Medicine*. Vol. IV., December, 1903. A Quarterly Digest of Advances, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by HOBART AMORY HARE, M.D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia. Octavo, handsomely bound in cloth, 434 pages, 46 illustrations. Philadelphia and New York: Lea Brothers & Co., Publishers.

The completing volume of "Progressive Medicine" for the year 1903 contains some of the most important contributions of the series. Dr. J. C. Hemmeter's article on "Diseases of the Digestive Tract" is really a monograph, embodying the new physiology of digestion as it has been established by the discoveries made by Pawlow, Futterer and others, whose investigations have so completely revolutionized our knowledge of the digestive function. The bacteriology of dysentery and the diarrheas of infants; the subject of intestinal parasites and the recent advances in the diagnosis and treatment of diseases of the liver and gall-bladder are fully considered. Diseases of the pancreas have of late been exciting much attention, and Dr. Hemmeter has devoted considerable space to their discussion.

In the article on "Surgery," by Dr. J. C. Bloodgood, of Johns Hopkins, there will be found a particularly interesting discussion of the entire field of anesthesia, both local and general, considered not only from the standpoint of the surgeon-specialist, but also from that of the general practitioner. Dr. Bloodgood's chapter includes, in addition to the subjects above referred to, an exhaustive review of all advances in the treatment of fractures and dislocations, amputations and orthopedics. It is illustrated by a splendid series of engravings in the text, and by six full-page plates in black and colors. The subject of the surgical infections in their various aspects is thoroughly canvassed. A very valuable part of Dr. Bloodgood's contribution is that devoted to tumors, benign and malignant; all the recent advances in their surgical treatment being presented, and the X-ray therapy of tumors is discussed at length.

Dr. Bellfield's contribution on "Genito-Urinary Diseases" covers the entire field in a most practical manner. Of special interest to the general practitioner will be found that part which deals with tuberculosis and other infections of the genito-urinary

tract. The article on the "Prostate," especially on the treatment of hypertrophy of that organ, is of the highest interest.

In dealing with "Diseases of the Kidneys," Dr. John Rose Bradford, of University College, London, presents an interesting discussion of the blood changes in chronic renal disease, and particular attention may be called to his able consideration of the surgical treatment of chronic Bright's disease. An excellent *re-sume* of the advances in our knowledge of albuminuria and indicanuria is included in the article.

Since the startling announcement made by Koch in regard to the difference between human and bovine tuberculosis, scientists the world over have been engaged in an earnest endeavor to ascertain the actual facts. This subject constitutes one of the most interesting of the topics discussed by Dr. Harrington, of Harvard, in the section on "Hygiene." The conveyance of typhoid and other infectious diseases is another topic upon which Dr. Harrington presents the most recent views.

The concluding section of the issue is taken up with the "Practical Therapeutic Referendum," by Dr. Landis. It is a thorough, up-to-date index of the progress in therapeutics, treating not only of the drugs recently introduced to the profession but also dealing fully with the physiological action and clinical uses of older remedies. Thus the continued use of acetone in enteric is noted; the various antitoxins receive due attention; the coal-tar products are referred to; vioform, the new neutral powder, and isarol, the new substitute for ichthyol, are described, and on the other hand it takes two pages to describe the newer preparations of as old a stand-by as quinine. Dr. Landis greatly increases the practical value of this excellent chapter by introducing a number of prescriptions, showing the best vehicles for the administration of the less known drugs.

In dealing with the contents of "Progressive Medicine," it is impossible to mention more than a few of the subjects of special interest; each contributor, however, will be found to cover most thoroughly the entire field which is assigned to him. The different sections are not mere compilations, but are complete discussions of the various topics under consideration. Because of their standing as consultants and teachers, the contributors to "Progressive Medicine" are peculiarly cognizant of the points possessing interest for the medical profession. It is this knowledge and its practical application which has resulted in the wonderful success of the work.

The publishers announce that, with the new year, the annual subscription price of "Progressive Medicine" will be reduced

from \$10 to \$6, and that for convenience in carriage, it will divest itself of the heavy cloth binding. The volumes will each contain 300 pages, abundantly illustrated, and the work will continue to be issued under the same editorial management and with the same brilliant corps of contributors which have made it the indispensable assistant to the active, busy practitioner. The series of these volumes forms annually a practical treatise covering the entire domain of medicine and surgery.

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*The Etiology, Pathology, Diagnosis and Treatment of Tumors.*

By A. HAMILTON LEVINGS, M.D., Professor of the Principles and Practice of Surgery and Clinical Surgery in the Wisconsin College of Physicians and Surgeons, Surgeon to St. Joseph's, Milwaukee County and Mount Sinai Hospitals, Consulting Surgeon to Johnson's Emergency Hospital and to the Milwaukee County Hospitals for Acute and Chronic Insane. Profusely illustrated. Chicago: Cleveland Press. Canadian Agents: Chandler and Massey Company, Limited, Yonge Street, Toronto.

We fully believe that the author of this most excellent work on tumors has given the profession of medicine a work of clear conception as regards the causation, origin, structure, diagnosis and treatment of tumors. That the subject is an important one, all will agree; a subject which cannot possibly be overestimated. They have been classified according to their histological structure, and in the preparation of the work it will be found that the author has contributed greatly to this subject of medicine by the many beautiful and original illustrations, which may be put down as constituting a marked and distinguishing feature. These illustrations number 259, and must be seen to be appreciated. We believe that the medical faculty will give Dr. Levings' work a warm welcome. The publishers, The Cleveland Press, are to be congratulated in presenting this work to the medical profession. As regards the mechanical side of the book, they have done their part exceedingly well. The heavy cow-hide binding makes a splendid binding, calculated to preserve the volume. We understand it is the intention of the Cleveland Press to get out a fine class of books. If this is a sample, we look forward to seeing good things in the future. The members of the Canadian profession may secure a copy of this work through Mr. A. P. Watts, of the Chandler and Massey Company, Limited, Yonge Street, Toronto.



*Nose and Throat Work for the General Practitioner.* By GEORGE L. RICHARDS, M.D., Fellow American Laryngological, Rhinological and Otological Society; Fellow American Otological Society; Associate Editor "Annals of Otology, Laryngology and Rhinology"; Otologist and Laryngologist, Fall River Union Hospital, Fall River, Mass. Price, \$2. New York: The International Journal of Surgery Co. Canadian Agents: Chandler & Massey Company, Limited, Yonge Street Toronto.

This book derives especial importance from the fact that the diseases described therein constitute so large a share of the physician's daily routine of practice. It has been the author's aim to teach the practitioner how to diagnose these cases and how to treat them successfully and according to modern methods. With this object in view every effort has been made to describe the treatment in such detail as to leave no point obscure, and to simplify the technics as much as possible so as to avoid the necessity of an elaborate and expensive armamentarium. No space is occupied with theory, and the information given is based for the most part upon the author's own extensive clinical experience in diseases of the nose and throat. For the sake of completeness a number of conditions are discussed which properly belong to the specialist, but with these few exceptions the diseases described are such as can be treated by the general practitioner. A noteworthy feature of this work is the large number and excellence of the illustrations.

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*Progressive Medicine.* Vol. III. September, 1903. A Quarterly Digest of Advances, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by HOBART AMORY HARE, M.D., assisted by H. R. M. Landis, M.D. Diseases of the Thorax and its Viscera, including the Heart, Lungs and Blood-vessels, Dermatology and Syphilis, Diseases of the Nervous System, Obstetrics. Philadelphia and New York: Lea Brothers and Company.

The foregoing denotes what is comprehended in the present volume. The work is invaluable to the progressive physician who wishes to keep himself well to the front in modern medicine and its advances. There are four contributors to this volume: William Ewart, M.D., F.R.C.P., William S. Gotthed, M.D., William G. Spiller, M.D., and Richard C. Norris. Each handles

his part in a meritorious manner, and all the literature on the different subjects has been apparently examined in order that everything new and important may be properly set forth. We have commended this work so frequently to our readers, that any further encomiums might be considered superfluous. We know of no better work to keep one thoroughly posted upon current medical literature.

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*A Text-Book of Obstetrics.* Fourth Edition. By BARTON COOKE HIRST, M.D., Professor of Obstetrics in University of Pennsylvania. Handsome octavo, 900 pages, with 746 illustrations, 39 of them in colors. Philadelphia, New York, London: W. B. Saunders & Co., 1903. Cloth, \$5.00 net.; Sheep or Half-Morocco, \$6.00 net. Toronto: J. A. Carveth & Co.

In revising his work for this the fourth edition, the author has spared no pains to make the book reflect the latest knowledge on the subject. He has even described and illustrated the method of using the "Neumann-Ehrenfest Kliseometer." His perfect familiarity and extensive experience with diseases of women is shown in the careful and minute manner in which he describes the various methods of treatment. As most all the diseases of women are the consequence of complications of childbirth, their preventive treatment at least is in the hands of the obstetrician, and the physician in general practice must be equally well informed in both branches of gynecology. The specialist in obstetrics must be an expert in the surgical treatment of all diseases of women. Even the specialist who confines his work entirely to this treatment, must at least have served a long apprenticeship in practical obstetrics, and have mastered its science to be adequately prepared for his work. From the glimpse we have obtained of Dr. Hirst's knowledge of diseases of women, we wait anxiously for his new work on that subject. In this present work every page has been altered and bettered in some way. More attention has been given than in the previous editions to the diseases of the genital organs associated with or following childbirth, and this, we think, is an excellent improvement. Many of the old illustrations have been replaced by better ones, and there have been added besides a number entirely new. The work treats the subject from a clinical standpoint, the author ever keeping in mind that the aim of all medical literature is to cure.

*Clinical Treatises on the Pathology and Therapy of Disorders of Metabolism and Nutrition.* By PROF. DR. CARL VON NOORDEN, Physician-in-Chief to the City Hospital, Frankfurt. Authorized American edition. Translated under the direction of Broadman Reed, M.D., Professor of Diseases of the Gastro-Intestinal Tract, Hygiene and Climatology, Department of Medicine, Temple College; Physician to the Samaritan Hospital, Philadelphia, etc. Part IV. The Acid Auto-intoxications, by Prof. Dr. Carl Von Noorden and Dr. Mohr. New York: E. B. Treat & Company.

The chronicle of the researches of Professor Noorden into the derangements of metabolism which result in an over-production of acid, will be found to concern the clinician as well as the subjects dealt with in the three previous volumes of this very interesting series, published concurrently in Berlin and New York. That there are numerous forms of self-poisoning is now admitted, and herein will be found an able exposition of that gravest of all forms, acid production. The publishers are to be congratulated on the American production of these monographs.

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*The Four Epochs of Woman's Life.* Maidenhood, Marriage, Maternity, Menopause. By ANNA M. GALBRAITH, M.D., Author of "Hygiene and Physical Culture for Women"; Fellow of the New York Academy of Medicine, etc. With an Introductory Note by JOHN H. MUSSER, M.D., Professor of Clinical Medicine, University of Pennsylvania. 12mo volume of 247 pages. Cloth, \$1.50 net. Philadelphia, New York, London: W. B. Saunders & Company. 1903. Canadian Agents: J. A. Carveth & Co, Limited, 413 Parliament Street, Toronto.

This work, written for the instruction of the laity on subjects of which every woman should have a thorough knowledge, is indeed a timely and excellent one. The fact that a second edition has been demanded in such a short time is sufficient proof that women have at last awakened to a sense of the penalties they have paid for their ignorance of those laws of nature which govern the epochs of their lives. The language used is clear and comprehensive, yet, withal, modest, and the meaning easily grasped even by those unfamiliar with medical subjects. As a further aid a comprehensive glossary of medical terms has been appended.

In this new edition the author has made some excellent ad-

ditions, viz.: A section on "The Hygiene of Puberty"; one on "Hemorrhage at the Menopause a Significant Symptom of Cancer"; and one on "The Hygiene of the Menopause." These sections make the work the very best on the subject we have seen, and physicians will be doing a real service by recommending it to their patients.

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*Lessons on the Eye.* For the Use of Undergraduate Students. By FRANK L. HENDERSON, M.D., Ophthalmic Surgeon to St. Mary's Infirmary, and the Christian Orphans' Home; Consulting Oculist to the St. Louis City Hospital, to the Wabash Railway and the Terminal Railway Association, etc., etc. Third edition. Philadelphia: P. Blakiston's Son & Company.

This is a first-class students' manual on diseases of the eye, and will be found of no little value to those in the practice of general medicine. The work is entirely practical, lays no claim to the comprehension of the entire science of ophthalmology, and is designed to impart and convey only useful knowledge. This it does well. The spelling of some of the words are according to the rules of the American Association for the Advancement of Science, as oxid, sulfate, quinin, etc.

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*Text-Book of Anatomy.* Edited by D. J. CUNNINGHAM, F.R.S., M.D. (Edin. et Dublin), D.Sc., LL.D. (Glasg. et St. And.), D.C.L. (Oxon.), Professor of Anatomy and Chirurgery, Trinity College, Dublin. Illustrated with 824 wood engravings from original drawings, many printed in colors. New York: William Wood & Company. Canadian Agents: Chandler & Massey Limited, Toronto.

Anatomy is a subject in medical literature fortunate in that there are many high-class books relating thereto. The present work under review, in its very first edition, takes at once a prominent stand in the front rank. Cunningham has been well known on this side of the Atlantic for many years. His dissector has stood well the test of time; and in most dissecting rooms it is the sole companion of the man with the scalpel. The production of a general work by the same author was, therefore, looked forward to with keen interest, and it is quite safe to say

that no one has been disappointed. The book has many new and unique features, not to say many illustrations, some old, many new. These latter are of the very highest order of excellence, and enhance very much the value of the work. We are rather taken with the manner in which the action of muscles is tabulated. This new feature will, no doubt, be very acceptable to students, who are all too prone to neglect the study of the function of muscles.

There is also a well-arranged and well-written section on surface and surgical anatomy. We would have liked to have seen Cunningham fall into line in the description of the shaft of the fibula, as others have done recently, so that there might be uniformity in description. The shaft is generally four-sided, and so can be readier described and remembered by students. The practising physician needs a review of his anatomy from time to time, and there should be more of it. While the student will find it a most valuable companion to his dissector, the physician in practice will find it fresh, up-to-date, and just as near perfection as any anatomy published. It has been a pleasure to us to examine its pages. A like pleasure is awaiting any one who applies to Mr. A. P. Watts, of Chandler & Masscy Company, Limited, Toronto, for a copy. We endorse and recommend it most favorably.

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*Cancer and Pre-Cancerous Changes: Their Origin and Treatment.* By G. H. FINK, M.R.C.S., L.S.A. (Lond.), Major Indian Medical Service (retired). London: H. K. Lewis, 136 Gower Street, W.C.

This brochure opens with a general survey of cancer, which is probably the most formidable disease at the present day, and then proceeds to discuss at extended length the various theories of cancer. There are twenty-six chapters in the book, the entire number being well written and full of valuable information on the subject.

Desiring to make a practical, useful journal for the General Practitioner,  
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# Dominion Medical Monthly

And Ontario Medical Journal

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## GETTING INTO THE MEDICAL PROFESSION.

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There are in Canada to-day something like 2,000 medical students eager and anxious to get into the medical profession. They are devoting hours, months, and years of study qualifying for admission. Thousands of dollars are being spent by each, which if spent or invested in some good business would reap for them far more of a monetary consideration. This takes into account no value of the time required to fit them for medical practice. If the amounts spent for books, board, fees, etc., were added to the value of a young man's working capability at twenty-one years of age, the total would approximate \$5,000, which would be a very fair item with which to embark upon a business career. And yet, after this outlay, the number who actually get into the profession of medicine heart and soul, are in great

minority. This has particular reference to the hundreds, not to say thousands, if we brought into the scope of the reference the United States, who are not even members of a medical organization or society of any description, be it of county, city, provincial, or national standing. They are "apparently in," but in reality "out." How is this? Wherein lies the reason for this unfortunate condition which prevails to such a wide extent? And yet there are not lacking signs that the profession is awakening in this respect, as evidenced in the steady growth at the annual meetings of the larger associations. According to the investigations of the Secretary of the American Medical Association, there are about 25,000 of the profession of the United States, which sums up to about 150,000, who participate in medical society work, who are actual members of these societies. Here, in Canada, the largest body of medical men that can be got together, does not commence to equal the medical population of either of the two largest cities, Montreal and Toronto, a number for all Canada which, in many instances, does not equal the attendance at State societies. Does the reason or the cause of this lack of spirit and interest in the advancement of the medical profession as a body lie at the fountain head, or is it due to too many seeking to attain to the ranks of medicine as a means of enjoying an easy life, or earning a very good livelihood? The total lack of teaching medical ethics and business methods at our medical colleges no doubt has a good deal to do with the prevailing attitude of many who are "not in" the profession, as they should be in it, and who are from five to ten years in practice before they make up their minds to become a member of either a provincial or of our national medical association. It is generally found that those engaged in medical college work are active members of all the leading medical societies, and, being such, are in a strong position to educate those under their charge to the advantages both to themselves individually and to the profession as a whole, of their becoming, as soon as they have been graduated, active participants in medical society work. Professors, lecturers, and clinicians should, therefore, lose no opportunity in promoting industriously the idea amongst medical students that when they once get into the medical profession, they stay in and do not immediately drop out of sight, of sound, and of hearing.

## THE CANADIAN MEDICAL PROTECTIVE ASSOCIATION.

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Founded and endorsed by the Canadian Medical Association, patronized by many of the leading practitioners of Canada, and upheld and sanctioned by the medical press of the country, the Canadian Medical Protective Association ought to be a successful and thriving institution. Officered by men who are keenly alive to its worth to the medical faculty, who are industriously seeking to bring home to the minds of the medical men of Canada the need of just such an organization to bind our profession together in standing off malicious attacks upon the integrity of our characters and professional attainments, and in many instances the welfare and happiness of our households, it is, indeed, a great surprise to know that those of us who are already thus bonded together, can scarcely attain to a membership of three hundred. Already this Association, since its organization in 1901, has done a great amount of good in successfully protecting and defending several of its members in suits for alleged malpractice. It has paid out in defending these suits something like \$1,026 since its inception, defraying the legal costs to defendants; and it must be very gratifying to the officers that, "in every instance that we have undertaken to defend one of our members, we have succeeded." Surely an organization which is admittedly doing such good work—and most everyone in conversation will admit that he should be a member—ought to demand at the hands of the medical profession of Canada something more than a fractional support of our faculty. These are the things that are of the most vital importance to us as a professional body, the object of sharks and the prey of unmitigated scoundrels. Their discussion in gatherings of the medical fraternity are mostly hurried over, in the precipitate desire many have, who believe that the stereotyped programme of papers is all and everything of the good that can come out of us as a body. A whole half day would not be too much to allot at the annual meetings of the parent medical organization of Canada for listening to the annual report of this meritorious association, for its discussion, and for the recording of suggestions looking towards its perfection. The day is coming when medical gatherings will partake more of matters of this character, and that day should not be very far deferred. Now is the time; delay is dangerous.



## REPORTING DEATHS IN NEW BRUNSWICK.

The following clipping from the *St. John Telegraph*, Wednesday, Jan. 6th, 1904, is worthy of record:

*To the Editor of The Telegraph:*

SIR,—Some few weeks ago a number of physicians were summoned before the police magistrate for not reporting births that had occurred in their practice. Believing the Act under which it was attempted to prosecute them to be unjust and an unwarrantable interference with their liberty, and especially with the confidential relationship which they hold with their patients, they determined to oppose the prosecutions and fight the matter through. The following letter from Dr. L. A. Currey, who was retained as their counsel, gives the result of the action taken:

“In the Police Court of the City of St. John.

“The King, on the information of John B. Jones, *v.* Murray MacLaren and certain other medical practitioners in the city of St. John.

“DEAR SIR,—I hereby beg to notify you that the information in the above matter, and all other informations against medical practitioners in the City of St. John, laid under and by virtue of the Vital Statistics Act of the Legislature of the Province of New Brunswick have been withdrawn by the prosecutor and are at an end, and that it is not necessary for you to further attend the hearing of the above or any of the other informations either personally or by counsel.

“The action of the prosecution in the withdrawal of said information was not brought about by any request or otherwise on the part of your counsel, but was the voluntary act of the prosecutor, and for reasons best known to himself or those who represent him.

“I attended at the return of the information, and at all the subsequent adjournments, either personally or by my partner, and was on each and every occasion of said adjournment ready to proceed with the defence on the grounds outlined by me to your society at the meeting held some weeks ago in your rooms.

“Should future action be taken at any time against your honorable body, I consider the same grounds of objection would be equally as available and tenable as in the present case, had they proceeded to full hearing and disposal thereof.

“I may add that the further I have carried my legal investi-

gation and research into the validity of said Acts, the more I am convinced of their unconstitutionality, and that the sole and exclusive right to legislate with reference to vital and all other statistical matter belongs not to the local legislature, but to the Parliament of Canada.

“ L. A. CURREY,

“ *Counsel for Medical Practitioners.*

“ December 16th, 1903.

“ To J. W. DANIEL, M.D., *Chairman.*”

From this it appears that Dr. Currey believes the whole Act to be *ultra vires* the Provincial Legislature, and, as the law officers of the Government have withdrawn the prosecution, it would appear that they must agree with that opinion.

As the physicians have been criticized in some quarters for their refusal to carry out this Act, the undersigned were appointed as a committee to give to the press some of their reasons for doing so, in order that the public may have a clearer idea of the matter than they have at present.

When this Act was first passed it did not compel physicians to report, although they were mentioned, and it was unnecessary for us to take action. Last winter, however, Mr. John B. Jones obtained an amendment compelling physicians to report to him with a number of details, within five days of its occurrence, every birth attended by them, and under a penalty not exceeding \$20 or imprisonment in the county jail.

Some physicians did make returns and had to undergo the humiliation of finding a number of their patients in the police court to answer a charge of neglecting to register births, and the charge was to be proved on the evidence of the physician!

In other words, the physician was made a spy and informer on his patients, and that under a heavy penalty. From the physicians' standpoint such an Act is most abhorrent, destroying at once the confidential relationship existing between physicians and patient, and making them (the physicians) unwilling perjurers in breaking the oath they took on graduation to preserve inviolate all information coming to them through the necessary confidences of their patients. This is our great objection. We also object to being made statistical officers without our knowledge or consent and without remuneration.

That Mr. John B. Jones should be able to get an Act passed by the Legislature exploiting the gratuitous services of the whole

medical profession of the county to collect statistics and, incidentally, to assist him materially in making a living, without others being consulted in any way, is a circumstance that requires a fuller explanation than has yet been given.

We believe that no class of citizens in the community is more law-abiding and more honorable in its dealings than the physicians; no other class of persons has ever been compelled to do professional work for the public for nothing, and penalized for neglect; we are tired of legislation of this kind and think it is time it was stopped.

The objections taken to the Act by our counsel, Dr. L. A. Currey, may be summarized as follows:

1. The Act under which these prosecutions were brought are *ultra vires* to provincial legislatures.

2. The gratuitous duty imposed on medical practitioners by said Act is repugnant to natural justice, and is not of such a public nature as authorizes the legislature to impose the same.

3. The above Act requires (a) medical practitioners to become informants on their patients, and renders the latter liable to a penalty; (b) to violate their professional oaths in making a public record of facts which are often of a delicate and confidential character; (c) to perform gratuitous services for which another receives remuneration.

Yours truly,

THOMAS WALKER, M.D.  
J. W. DANIEL, M.D.

St. John, N.B., January 2nd, 1904.

## News Items

DR. C. M. LANG has been appointed associate coroner in and for the County of Grey.

DR. J. MARTY, of New Hamburg, has been appointed coroner for the County of Waterloo.

DR. A. F. REYNAR of Palgrave, has been appointed associate coroner for the County of Peel.

DR. A. BROWN, of Motherwell, Ont., has gone to Markdale where he has purchased a practice.

THE Canadian Medical Protective Association should have every physician in Canada on its roll of membership.

MUCH smallpox prevails in Cape Breton, and fears are entertained that it may invade Sydney.

DR. LEFEVRE, Vancouver, B.C., has arrived home after a two months' trip to the Old Country.

PATRONIZE those commercial houses who patronize the medical journals. Their standing is thus unquestioned.

DR. S. H. WESTMAN, of the Anatomy Department of Toronto University, has gone to England for a year's study.

DR. A. C. HUNTER, of Goderich, has been appointed Surgeon Captain in connection with the 33rd Huron regiment.

TYPHOID fever is epidemic in the suburbs of Montreal. To date, 10th of January, upwards of six hundred cases have occurred.

THE advertisements in this issue should be read carefully. We are satisfied that our subscribers will be able to find many things of value.

DR. CARLOS MACDONALD, New York, has been in British Columbia giving expert evidence in the now famous Hopper *v.* Dunsmuir will case.

THE Ontario Medical Association will meet this year in Toronto under the presidency of Dr. J. F. W. Ross, on the 14th, 15th, and 16th of June.

THE deaths in Montreal during 1903 numbered 6,941 as against 6,275 for the previous year. This gives a rate of 24.22 per 1,000 of the population.

A DENTAL course will be established at McGill University, under the supervision of the Medical Faculty. It will extend over four years and nine months.

DR. L. J. LEMIEUX, Montreal, has recently returned from Paris, and will make experiments in the Notre Dame Hospital, Montreal, with Marmoreck's serum for tuberculosis.

MR. H. L. PEILER, Managing Director of the Lacto-Globulin Company, Limited, Montreal, was in Toronto on business in connection with his firm during the week ending January 10th.

THE Sanitarium By-law in Toronto was carried on election day by a vote standing as follows: For, 4,071; against, 3,882. It will provide for raising \$50,000 for the purpose of a municipal sanitarium for consumptives.

DR. T. BEDFORD RICHARDSON, Toronto, has removed from 10 Carlton Street to 128 Bloor Street West, having recently completed the purchase of that property, which he has had fitted up in modern and handsome style.

CANADIAN MEDICAL PROTECTIVE ASSOCIATION.—It costs only \$2.50 per annum to be a member of this most worthy organization and be protected for a year in case of actions for alleged malpractice. Why should you not be a member?

MR. L. G. SWIFT, for many years manager of the Walkerville laboratories of Parke, Davis & Co., has been appointed General Manager of that firm at Detroit, succeeding the late Mr. W. M. Warren, and being succeeded by Mr. R. H. Revell.

THE Civic Treasury Board of St. John, N.B., has made a grant of \$1,000 to the local branch of the Victorian Order of Nurses. There have been two nurses on their staff during the past year, and these made a total of 3,000 visits. Another nurse will be added to the staff.

CANADIAN MEDICAL PROTECTIVE ASSOCIATION.—The Toronto Clinical Society, on motion of Dr. George A. Peters, seconded by Dr. D. Campbell Meyers, at its last regular meeting, endorsed the Canadian Medical Protective Association, and urged all its fellows, as well as practitioners ail over Canada, to immediately become members of this most important organization.

THE Montreal League for the Prevention of Tuberculosis is issuing an appeal for funds to enable it to carry on the war against tuberculosis in that city. The Government of the Province of Quebec has granted the League a tract of land on Trembling Mountain, where they will erect a sanitarium; and it is their intention also to establish free consulting rooms in the city.

DR. W. F. LANGRILL, Hamilton, Ont., who for several years has been Medical Health Officer of that city, was recently appointed Medical Superintendent of the Hamilton General Hospital, in succession to Dr. McLaren, but declined. The Governors of the Hamilton Hospital will co-operate with the Toronto General Hospital in securing a larger grant for the hospitals of Ontario from the local government.

## Correspondence

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### A METHOD OF SECURING GREATER UNIFORMITY IN PROFESSIONAL CHARGES.

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*To the Editor of DOMINION MEDICAL MONTHLY :*

We all recognize the lack of uniformity in our system of professional charges, and no doubt would welcome with appreciation a system that would facilitate the adjustment of the amount of remuneration in each particular service rendered, providing it fulfilled the two cardinal conditions which underlie our financial dealings, viz., adequate remuneration for services rendered, and a just consideration of the financial condition of the patient.

I have endeavored to give a solution of this problem in terms of the table herewith presented, and in this connection I suggest that the remuneration for professional services be stated in definite amounts, and not in the sliding scale that we now use, and that the amount charged be estimated upon the basis that a single man without any one dependent upon his income, and with an income of one hundred dollars per month can reasonably be expected to pay full amount or 100 per cent. That for each additional individual dependent upon the monthly income, a 10 per cent. reduction be made, and for each ten dollars decrease in the monthly income 10 per cent. be made, and also for each ten dollars per month that the income rises above one hundred dollars per month an additional member of the family is included in the full rate.

This schedule is intended to apply only to those in moderate circumstances. When the income reaches two hundred a month, the matter of remuneration is better left wholly to the discretion of the physician, but the table can be extended to cover all incomes. The principles embodied in this system we have all recognized, and have adopted more or less in our daily practice, regulating our charges according therewith; but with such a system as I have outlined we could secure a greater degree of uniformity than with our present method.

The question of the monthly income, in many cases, would present a difficulty, only an approximation would be possible. Then there is the ever-varying personal factor to consider, a matter that cannot be calculated in terms of tables or mathematics.

Notice that this table is ruled both vertically and horizontally. In the vertical column to the left is the amounts of monthly incomes, and in each column to the right is the percentage of

Monthly Income.	Number Dependent upon Income.								
	1	2	3	4	5	6	7	8	9
150	100	100	100	100	100	100	90	80	70
140	100	100	100	100	100	90	80	70	60
130	100	100	100	100	90	80	70	60	50
120	100	100	100	90	80	70	60	50	40
110	100	100	90	80	70	60	50	40	30
100	100	90	80	70	60	50	40	30	20
90	90	80	70	60	50	40	30	20	10
80	80	70	60	50	40	30	20	10	
70	70	60	50	40	30	20	10		
60	60	50	40	30	20	10			
50	50	40	30	20	10				
40	40	30	20	10					
30	30	20	10						
20	20	10							
10	10								

reduction of income, according to the number dependent upon the income.

For example, a man consults us requiring appendectomy, the

schedule rate being say \$250.00, he has an income of \$90.00 per month, and dependent upon him are his wife, three children, and an aged mother, that is, six in all. He then, by reference to the table, is taxed 40 per cent of the schedule rate, or \$100.00.

Such a table of reference would tend to impress the patient that we consider both his responsibilities, as well as his finances, and would at times be of great assistance to us in stating to the patient the cost of services, a full understanding of which is so essential to the proper relation of patient and physician.

ERNEST A. HALL.

Vancouver, B.C.

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## Special Selection

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### REMARKS ON GLYCO-THYMOLINE.

BY W. R. D. BLACKWOOD, M.D., PHILA., PA.

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For many years this preparation has been one of my main-stays in diseases of the mucous membranes, and it has held its place despite the trials of many other agents warranted to supplant it by the advocates who decried Glyco-Thymoline when I spoke of its virtues. Space is now getting too valuable to waste with long detailed descriptions of separate cases, and, anyhow, I never did write in that manner—I think general remarks about agents is the better way, and we need this more than stories of symptoms and temperatures, with daily alterations. No class of maladies is more troublesome than disorders of the mucous membranes, and none more difficult to eradicate thoroughly, and we have been put to our wit's end many times for remedial agents in such cases. The local treatment of catarrhs is frequently disappointing, and none more so than that prevalent one—post-nasal catarrh. Unless we can get an alterative condition established little good is done, and nothing has been of greater service to me than Glyco-Thymoline, locally and internally, in several hundreds of long-standing and severe cases of this intractable and common affliction. I have come to regard this preparation as a standard and almost routine remedy. I seldom care for a post-nasal trouble without prescribing it at



the onset, and if I don't it is not long before it comes into use. It is just alkaline enough; just so as to the dialysis—the action locally with exactly the right amount of fluid excretion through the diseased membrane—just enough astringent without drying the parts; and just the right thing in the direct line of reparative work; it sets up tissue building soon after the membrane gets somewhere near its right shape. Many things are employed in catarrh, but I firmly believe that if I was confined to one agent only, that would be Glyco-Thymoline. For years I used the so-called antiseptic tablets of boric acid, salt, glycerine, etc., and with good results, but for a long time past this is thrown aside and the Glyco-Thymoline takes its place. I use it in about half-strength with a "Birmingham" douche, and from twice to four times daily. With this, in bad cases, I give it internally, adding to it, or giving separately, mercuric bichloride, and if done separately the menstruum is compound syrup of stillingia. In presumed syphilitic persons I always do this.

In gastritis, chronic enteritis, vaginitis, gonorrhoea, and in recurring attacks of what too many physicians deem appendicitis, I use this agent freely, and always with good results. As a local application to foul ulcers, and especially to hemorrhoids, I think this preparation is very good. In the nasty leg ulcers which now and then defy all remedies, Glyco-Thymoline does wonders—it can't do harm any time, and I am almost persuaded to give it in all instances. In bronchitis and asthma it is fine; in spasmodic croup it fills the bill nicely; it does well in venereal disorders locally, and in balanitis it stops the trouble at once.