Technical and Bibliographic Notes / Notes techniques et bibliographiques

Canadiana.org has attempted to obtain the best copy available for scanning. Features of this copy which may be bibliographically unique, which may alter any of the images in the reproduction, or which may significantly change the usual method of scanning are checked below.

Canadiana.org a numérisé le meilleur exemplaire qu'il lui a été possible de se procurer. Les détails de cet exemplaire qui sont peut-être uniques du point de vue bibliographique, qui peuvent modifier une image reproduite, ou qui peuvent exiger une modification dans la méthode normale de numérisation sont indiqués ci-dessous.

- ☐ Coloured covers / Couverture de couleur
- ☐ Covers damaged / Couverture endommagée
- ☐ Covers restored and/or laminated / Couverture restaurée et/ou pelliculée
- ☐ Cover title missing / Le titre de couverture manque
- ☐ Coloured maps / Cartes géographiques en couleur
- ☐ Coloured ink (i.e. other than blue or black) / Encre de couleur (i.e. autre que bleue ou noire)
- ☐ Coloured plates and/or illustrations / Planches et/ou illustrations en couleur
- ☐ Bound with other material / Relié avec d'autres documents
- ☐ Only edition available / Seule édition disponible
- ☐ Tight binding may cause shadows or distortion along interior margin / La reliure serrée peut causer de l'ombre ou de la distorsion le long de la marge intérieure.

- ☐ Coloured pages / Pages de couleur
- ☐ Pages damaged / Pages endommagées
- ☐ Pages restored and/or laminated / Pages restaurées et/ou pelliculées
- ☑ Pages discoloured, stained or foxed/ Pages décolorées, tachetées ou piquées
- ☐ Pages detached / Pages détachées
- ☑ Showthrough / Transparence
- ☑ Quality of print varies / Qualité inégale de l'impression
- ☐ Includes supplementary materials / Comprend du matériel supplémentaire
- ☐ Blank leaves added during restorations may appear within the text. Whenever possible, these have been omitted from scanning / Il se peut que certaines pages blanches ajoutées lors d'une restauration apparaissent dans le texte, mais, lorsque cela était possible, ces pages n'ont pas été numérisées.

☑ Additional comments / Commentaires supplémentaires: Continuous pagination.

THE

CANADA LANCET

A Monthly Journal of Medical and Surgical Science, Criticism and News.

THE OLDEST MEDICAL JOURNAL IN THE DOMINION.

Vol. XXIX. No. 3. } TORONTO, NOVEMBER, 1896. { Price, 30 Cents. $3 per Annum.

THE HUNTER, ROSE CO., LTD., PRINTERS, TORONTO.

INDEX TO CONTENTS.

WM. R. WARNER & CO'S.

Soluble Sugar and Gelatin-Coated Pills.

NOTED FOR ACCURACY, PURITY, AND BEAUTY OF FINISH.

WARNER & CO'S.

Pil. Cascara Cathartic.

(DR. HINKLE.)

EACH CONTAINING

Cascarin		Ex. Belladon	⅛ gr.
Aloin	aa ¼ gr.	Strychnine	1-60 gr.
Podophyllin	⅛ gr.	Gingerine	⅛ gr.

Dose, 1 to 2 Pills.

This pill affords a brisk and easy cathartic, efficient in action and usually not attended with unpleasant pains in the bowels.

It acts mildly upon the liver (Podophyllin), increases Peristalsis (Belladonna), while the carminative effect of the Gingerine aids in producing the desired result, thus securing the most efficient and pleasant cathartic in use.

Pil. Cascara Alterative.

Warner & Co.

(DR. LEUTAUD.)

℞—Cascarin	¼ gr.	Stillingia	¼ gr.
Euonymin	⅛ gr.	Piperine	1-100 gr.

Dose, 1 pill night and morning. Per 100, 60c.

The alternative action of this pill is very effective. It affords a gentle aperient, which is very essential. The quality of the ingredients used leads to the happy results anticipated.

Mineral drugs not necessarily a part of the human economy are omitted. The action of the pill is mild and gentle, and also has tonic properties. The usual dose as an aperient and alterative is one pill night and morning, perhaps commencing with two for a dose.

Pil. Arthrosia

Wm. R. Warner & Co.

For cure of Rheumatism and Rheumatic Gout.

FORMULA.—Acidum, Salicylicum; Resina Podophyllum; Quinia; Ext. Colchicum; Ext. Phytolacca; Capsicum.

Almost a specific in Rheumatic and Gouty affections. Price, 60 cents per 100.

Pil. Sumbul Comp.

Wm. R. Warner & Co.

(DR. GOODELL.)

℞—Ext. Sumbul	1 gr.	Ferri Sulph Exs.	1 gr.
Asafœtida	2 grs.	Ac. Arsenious	1-40 gr.

"I use this pill for nervous and hysterical women who need building up." This pill is used with advantage in neurasthenic conditions in conjunction with Warner & Co's. Bromo Soda, one or two pills taken three times a day.

Price, $1.00 per 100.

Pil. Peristaltic

(*Trade Mark*).

EACH CONTAINING

Aloin	¼ gr.	Ext. Bellad	⅛ gr.
Strychnine	1-60 gr.	Ipecac	1-16 gr.

Price, 40 cents per 100. Dose, 1 to 2 pills.

"PIL. PERISTALTIC."

This new pill, lately added to the list of Wm. R. Warner & Co., is small, gelatine-coated, easy to take, perfectly soluble and absolutely reliable in its action. The utmost care is exercised in examining each of the ingredients before making the mass, thus when the physician prescribes Pil. Peristaltic he may rely on it to give the desired result. It is invaluable in habitual constipation, biliary and gastric troubles, administered in doses of one to two pills at bedtime.

Pil. Chalybeate

Wm. R. Warner & Co.

Proto Carb. of Iron, 3 grs. Dose, 1 to 3 pills.

(Wm. R. Warner & Co's. Ferruginous Pills.)

Ferri Sulph. Fe SO4	)	Ferri Carb. Fe CO3	
Potass Carb. K2 CO3	)	Potass. Sulph. K2 SO4	

Price, 40 cents per 100.

Pil. Chalybeate Comp.

Wm. R. Warner & Co.

Same as Pil. Chalybeate, with ⅛ gr. Ext. Nux Vomica added to each pill to increase the tonic effect.

Dose, 1 to 3 pills. Price, 55 cents per 100.

Pil. Antiseptic Comp.

Wm. R. Warner & Co.

EACH PILL CONTAINS

Sulphite Soda	1 gr.	Powd. Capsicum	1-10 gr
Salicylic Acid	1 gr.	Concentr'd Pepsin	1 gr.
Ext. Nux Vom	⅛ gr.		

Pil. Antiseptic Comp. is prescribed with great advantage in cases of Dyspepsia, Indigestion and Malassimilation of food

Dose, 1 to 3 pills. Price, 55 cents per 100.

Pil. Aloin, Belladonna and Strychnine.

Wm. R. Warner & Co.

℞—Aloin	1-5 gr.	Ext. Belladonna	⅛ gr.
Strychnine	1-60 gr.		

Medical Properties—Tonic Laxative.
Try this pill in Habitual Constipation.

Dose, 1 to 2 Pills. Price 35 cents per 100.

PREPARATIONS SUPPLIED BY ALL LEADING DRUGGISTS.

The following well-known houses in the Dominion will supply Warner & Co's. Standard Preparations:—

Kerry, Watson & Co., Lyman, Sons & Co., Evans, Mason & Co, Kenneth Campbell & Co., R. J. Devins, Montreal; J. Winer & Co., Hamilton; Lyman Bros. & Co., Elliot & Co., Toronto; London Drug Company, London; R. W. McCarthy, St. John; Brown & Webb, Halifax.

LITHIA TABLETS [WARNER & CO.]

FOR THE ACCURATE ADMINISTRATION OF LITHIA.

EFFICACIOUS. ACCURATE. INEXPENSIVE. CONVENIENT.

Dose—One or two tablets in glass of water after effervescing.

PARVULES

25 Cents per Bottle of 100 Parvules.

PARVULES (WARNER & CO.) LAXATIVE PURGATIVE

ALOIN, 1-10 Gr.

The most useful application of this Parvule is in periodic irregularities—Dysmenorrhœa and Amenorrhœa. They should be given in doses of one or two every evening, and at about the expected time.

DOSE.—4 to 6 at once. This number of Parvules, taken at any time, will be bound to exert an easy, prompt and ample cathartic effect, unattended with nausea, and, in all respects furnishing the most satisfactory aperient and cathartic preparation in use. For habitual constipation they replace, when taken in single Parvules, the various medicated waters, avoiding the quantity required by the latter as a dose, which fills the stomach and deranges the digestive organs.

PARVULES (WARNER & CO.) ALTERATIVE PURGATIVE

CALONEL, 1-20 Gr.

DOSE—1 to 2 every hour. Two Parvules of Calomel taken every hour until five or six doses are administered (which will comprise but half a grain), produce an activity of the liver, which will be followed by billious dejections and beneficial effects that twenty grains of Blue Mass or ten grains or Calomel rarely cause; and sickness of the stomach does not usually follow.

PARVULES (WARNER & CO.) CATHARTIC CHOLAGOGUE

PODOPHYLLIN, 1-40 gr.

Two Parvules of Podophyllin, administered three times a day, will re-establish and regulate the peristaltic action and relieve habitual constipation, add tone to the liver, and invigorate the digestive functions. Supplied by all druggists, or sent by mail on receipt of price.

FREE TO OUR DOCTOR FRIENDS: VISITING RECORDS, PRESCRIPTION BLANKS.

SUPERIOR TO PEPSIN OF THE HOG

INGLUVIN

(FROM THE VENTRICULUS CALLOSUS GALLINACEUS.)

FOR PHYSICIANS PRESCRIBING.

A Powder:—Prescribed in the same manner, doses and combinations as Pepsin.

A most potent and reliable remedy for the cure of

Marasmus, Cholera Infantum, Indigestion, Dyspepsia and Sick Stomach.

It is superior to the Pepsin preparations, since it acts with more certainty, and effects cures where they fail.

A SPECIFIC FOR VOMITING IN PREGNANCY

In doses of 10 to 20 grains.

PRESCRIBED BY THE MOST EMINENT PHYSICIANS IN EUROPE AND AMERICA.

INGLUVIN

For Physicians' Prescription Only

The classical and well tried Specific for Vomiting in Pregnancy. Superior to Pepsin—given in the same manner and combinations as Pepsin Dose, 10 to 20 grains.

FROM THE VENTRICULUS CALLOSUS GALLINACEUS.

IN NERVOUS EXHAUSTION FEED THE NERVOUS SYSTEM

WM. R. WARNER & Co.,

SOLUBLE, SUGAR-COATED PHOSPHORUS PILLS.

PHOSPHORUS—"It exists mainly in the nervous centres in the form of a peculiar compound with fatty matter which has been named 'protagon' just as iron is united with hæmatin in the blood. It actually forms more than one per cent. of the human brain."

Phosphorus is stimulating nerve tonic, and in suitable cases a true tissue food in every issue of the word.

Specify WARNER & CO'S. for full therapeutic effect.

Pil: Phospho i, 1-100 gr., 1-50 or., 1-25 gr. (Wm. R. Warner & Co.)

DOSE.—One pill, two or three times a day, at meals.

THERAPEUTICS—When deemed expedient to prescribe phosphorus alone, these pills will constitute a convenient and safe method of administering it.

Pil: Phosphori Co. (Wm. R. Warner & Co.)

℞ Phosphori, 1-100 gr.; Ext. Nucis Vomicæ, ¼ gr.

DOSE.—One or two pills, to be taken three times a day, after meals.

THERAPEUTICS.—As a nerve tonic and stimulant this form of pill is well adapted for such nervous disorders as are associated with impaired nutrition and spinal debility, increasing the appetite and stimulating the digestion.

Pil: Phosphori cum Nuc. Vom. (Wm. R. Warner & Co.)

℞ Phosphori, 1-50 gr.; Ext. Nucis Vomicæ, ¼ gr.

DOSE.—One or two pills, three times a day, at meals.

THERAPEUTICS.—This pill is specially applicable in **Atonic Dyspepsia**, depression, and in exhaustion from overwork, or fatigue of the mind. **Phosphorus** and **Nux Vomica** are **Sexual Stimulants**, but their use requires circumspection as to the dose which should be given. As a general rule they should not be continued for more than two or three weeks at a time, one or two pills being taken three times a day.

Pil: Phosphori cum Ferri et Nuc. Vom. (Wm. R. Warner & Co.)

℞ Phosphori, 1-100 gr.; Ferri Carb. 1 gr.; Ext. Nucis Vomicæ, ¼ gr.

DOSE.—One or two pills may be taken two or three times a day, at meals.

THERAPEUTICS.—This pill is applicable to conditions referred to in the previous paragraphs, as well as to anæmic conditions generally, to sexual weakness, neuralgia in dissipated patients, etc.

Pil: Phosphori cum Ferra et Quinia. (Wm. R. Warner & Co.)

℞ Phosphori, 1-100 gr.; Ferri Carb. 1 gr.; Quiniæ Sulph, 1 gr.

DOSE.—One pill, to be taken three times a day, at meals.

THERAPEUTICS.—Phosphorus increases the tonic action of the iron and quinine, in addition to its specific action on the nervous system. In general debility, cerebral anæmia, and spinal irritation, this combination is especially indicated.

Pil: Phosphori cum Ferro et Quinia et Nuc. Vom. (Wm. R. Warner & Co.)

℞ Phosphori, 1-100 gr.; Ferri Carb., 1 gr.; Ext. Nuc. Vom., ¼ gr.; Quin. Sulph., 1 gr.

DOSE.—One pill, to be taken three times a day, at meals.

THERAPEUTICS.—The therapeutic action of this combination of tonics, augmented by the specific effect of phosphorus on the nervous system, may readily be appreciated.

Pil: Phosphori cum Quinia et Digital. Co. (Wm. R. Warner & Co.)

℞ Phosph., 1-50 gr.; Quin. Sulph., ½ gr.; Pulv. Digitalis, ½ gr.; Pulv. Opii, ¼ gr.; Pulv. Ipecac, ¼ gr.

DOSE.—One or two pills may be taken three or four times daily, at meals.

THERAPEUTICS.—This combination may be prescribad in cases of consumption, accompanied daily with periodical febrile symptoms, quinine and digitalis exerting a specific action in reducing animal heat. Patients should, however, be cautioned as to the use of digitalis, except under the advice of a physician.

Pil: Phosphori cum Digital. Co. (Wm. R. Warner & Co.)

℞ Phosphori, 1-50 gr.; Pulv. Digitalis, 1 gr; Ext. Hyoscyami, 1 gr.

DOSE.—One pill may be taken three or four times in twenty-four hours.

THERAPEUTICS.—The effect of digitalis as a cardiac tonic renders it particularly applicable, in combination with phosphorus, in cases of overwork attended with derangement of the heart's action. In excessive irritability of the nervous system, in palpitation of the heart, valvular disease, aneurism, etc., it may be employed beneficially, while the duretic action of digitalis renders it applicable to various forms of dropsy. The same caution in regard to the use of digitalis may be repeated here.

PREPARED BY

WM. R. WARNER & CO

PHILADELPHIA, **NEW YORK,** **LONDON, ENG.**

Accurate Administration of Lithia

To make Fresh Sparkling Lithia Water of Definite Strength Dissolve one of

WM. R. WARNER & COMPANY'S

ORIGINAL EFFERVESCENT

LITHIA WATER TABLETS

IN A GLASS OF WATER

EFFICACIOUS, CONVENIENT AND INEXPENSIVE

AN EFFECTUAL REMEDY IN

Rheumatism, Lithemia, Gravel, Bright's Disease, Gout, etc.

IT IS DIURETIC AND ANTACID

Each tablet contains three grains (made also five grains) Citrate of Lithia, so that a definite quantity of soluble Lithia is administered in a pleasant form, besides the advantage of havin fresh water with each dose, presenting a therapeutic value of higher standard than the various Lithia spring waters. This is a scientific preparation of the highest standard.

Supplied by all Druggists, or by Mail. Take no Substitutes.

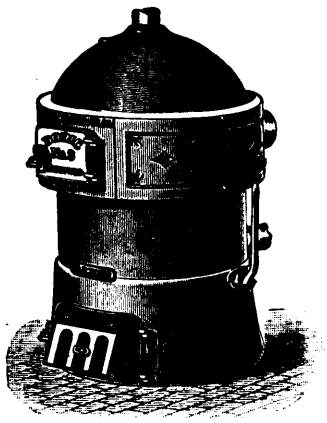
RAPID SOLUBILITY IS THE DESIRABILITY

WILLIAM R. WARNER & CO'S HYPODERMIC TABLETS.

We claim (and a candid comparison will convince any one) for our soluble tablets, the following points of superiority, viz. : *First*,—They are quickly and entirely soluble. *Second*,—They are permanent in form and accurate in dose. *Third*,—They are safe, and rapid in action.

Soluble Hypodermic Tablets	Bottle 100 Tab.	Tube 20 Tab.
ACONTINE, Pure Cryst., 1-120 gr.	$0.70	18
APOMORPHINE MURIATE, 1-20 gr.	60	16
APOMORPHINE MURIATE, 1-8 gr.	1.10	26
APOMORPHINE MURIATE, 1-12 gr	85	19
ATROPHINE SULPH. 1-150 and 1-200 gr.	30	10
ATROPHINE SULPH., 1-120 gr.	35	11
COCAINE HYDROCHLOR., 1-8 gr.	50	14
CODEINE SULPHATE, 1-8 gr.	70	18
CONIINE HYDROBROMATE, 1-100 gr.	30	10
DIGITALINE, Pure, 1-100 gr.	30	10
DUBOISINE SULPHATE, 1-100 gr.	50	14
ERGOTIN, 1-6 gr.	60	18
ESERINE SULPHATE, 1-60 gr.	80	20
ESERINE SULPHATE, 1-100 gr.	45	13
HYOSCINE HYDR. BROM., 1-100 gr.	75	19
HYOSCYAMINE SULPH., 1-100 gr.	40	12
MERCURY CORROSIVE CHLORODIN, 1-60, 1-150, 1-240 gr.	30	10
MORPHINE MURIATE, 1-8 gr.	35	11
MORPHINE MURIATE, 1-6 gr.	45	13
MORPHINE NITRATE, 1-6 gr.	70	18
MORPHINE NITRATE, 1-8 gr.	55	15
MORPHINE NITRATE 1-12 gr.	50	14
MORPHINE SULPHATE, 1-8 gr.	80	10
MORPHINE SULPHATE, 1-6 gr.	35	11
MORPHINE SULPHATE, 1-3 gr.	50	14

Soluble Hypodermic Tablets	Bottle 100 Tab.	Tube 20 Tab.
MORPH. 1-8 & ATROP., 1-200 gr., No. 1,	$0.45	13
" 1-6 " 1-180 gr., No. 2,	45	13
" 1-4 " 1-150 gr., No. 3,	50	14
" 1-4 " 1-100 gr., No. 4,	60	16
" 1-8 " 1-150 gr., No. 5,	45	13
" 1-8 " 1-100 gr., No. 6,	50	14
" 1-6 " 1-150 gr., No 7,	50	14
" 1-6 " 1-120 gr., No. 8,	55	15
" 1-4 " 1-200 gr., No. 9,	50	14
" 1-4 " 1-120 gr., No. 10,	55	15
" 1-4 " 1-60 gr., No. 11,	60	16
" 1-3 " 1-120 gr., No. 12,	75	19
" 1-2 " 1-150 gr., No. 13,	75	19
" 1-2 " 1-120 gr., No. 14,	75	19
" 1-2 " 1-100 gr., No. 15,	75	19
" 1-2 " 1-240 gr., No. 16,	75	19
NITROGLY. 1-50, 1-100, 1-150, 1-200 gr.	40	12
SODIUM ARSENIATE, 1-30 gr.	30	10
STRYCHNINE NITRATE, 1-150 gr.	50	14
STRYCHNINE NITRATE 1-60 gr.	40	12
STRYCH SUL., 1-120, 1-100, 1-60, 1-150 gr.	30	10
STRYCH. SUL., 1-30, 1-30 gr.	30	10
STRYCH. & ATROP., No. 1, 1-50, 1-150 gr.	50	14
STRYCH. & ATROP., No. 2, 1-30, 1-120 gr.	50	14
STRYCH. & ATROP., No. 3, 1-60, 1-150 gr.	50	14



'Complete Boiler.)

Your Winter Comfort

Is a certainty, if you use the

SEAMLESS **DORIC**

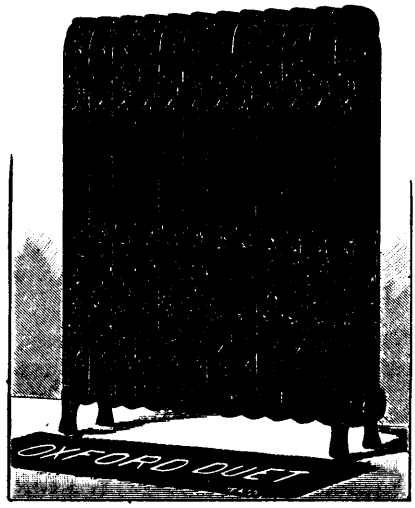
HOT WATER BOILER

- AND -

OXFORD RADIATORS.

The BOILERS are low in price, economical in the use of fuel, and will burn longer without attention than any other heater.

The RADIATORS are mechanically correct and artistic in design, with the only perfect joints—iron to iron, no gaskets used. Endorsed by the leading engineers and made in sizes to suit any room of any building. See our Catalogue for full details.



The Gurney Foundry Co., Ltd., Toronto.

The Canada Lancet.

VOL. XXIX.] TORONTO, NOVEMBER, 1896. [No. 3.

A CASE OF SEPTICÆMIA WITH ENDOCARDITIS COMPLICATING GONORRHŒA; RECOVERY.*

BY H. B. ANDERSON, M.D., TORONTO.

Professor of Pathology, Trinity Medical College; Pathologist to the Toronto General Hospital.

The present case presents no points of special interest, unless considered from an ætiological point of view, illustrating, as it does, one of the less frequently described complications of gonorrhœa.

R. W——, æt. 23. Patient was a strong, robust young man. Had always been healthy. His father had suffered from heart trouble.

Patient contracted gonorrhœa Jan. 10th, 1896. The disease ran an ordinary course until February 2nd, when a mild attack of epididymitis and orchitis developed. This was accompanied by chills, frontal headache, general pains throughout the body and limbs, furred tongue, etc.

These symptoms, except the chills, continued, and on February 4th he had severe vomiting, being unable to retain anything on the stomach. He was first seen by the writer on February 5th. His temperature was then 102⅕, pulse 86. He had headache, and general pains, furred tongue, and was very nervous and restless. The general disturbance was quite out of proportion to the local condition in the testicle. Suspecting some other trouble, a thorough examination of the patient was made.

The heart and lungs were normal. The spleen was not appreciably enlarged. There was no localized pain or tenderness in the abdomen or elsewhere, except in the testicle. No eruption was present on any part of the body. The joints were unaffected. No diarrhœa or tympanites was present.

The urine was examined with negative results, except for the presence of pus, and a small trace of albumen from the urethral discharge.

The patient's condition remained much the same for the next three days, temperature reaching about 101⅖ in the evening, with morning remissions, but no additional local trouble manifested itself.

On Sunday night, Feb. 9th, the temperature rose to 103, and on Monday night to 104⅘; pulse, 108; respiration, 36.

The tongue was still slightly furred and reddish, with a tendency to dryness.

* Read before the "Toronto Clinical Society."

Physical examination now revealed a distinct systolic murmur at the apex of the heart, and another systolic murmur at the base, traceable into the neck. The lungs and other organs gave no physical evidence of disease. The evening temperature remained in the neighborhood of $104\frac{1}{5}$ for three days, when it fell to normal, rising to $101\frac{2}{5}$ in the evening, for the next five days, when it finally dropped to, and remained, normal. Co-incident with the falling of the temperature, the other symptoms improved, and he was discharged from the hospital, February 23rd, 21 days after the development of the orchitis. When last examined, in April, the testicle was somewhat hard and swollen and the heart murmurs still remained.

Pathologically considered, there is reason for believing that the course of the disease was as follows:—The gonococci, being first implanted in the urethra, produced an ordinary purulent urethritis, the condition being a purely local one. Later, the organisms, gaining entrance to the blood stream, were carried by the circulation throughout the body, producing a mild form of septicæmia, as was evidenced by the chills, rise of temperature, general pains, headache, vomiting, etc., with no local condition sufficient to explain them. Some of the organisms were deposited in the testicle—a part peculiarly susceptible to their action—and an epididymitis and orchitis were produced. Still remaining in the circulating blood, the same infective agent set up the endocarditis, and the development of this complication was accompanied by an aggravation of all the symptoms as described. As the system finally succeeded in ridding itself of the invaders, the symptoms improved and the patient recovered.

It may be objected that this statement of the case is purely hypothetical, as the actual presence of the gonococci in the blood stream was not demonstrated.

The symptoms, moreover, might have been produced by streptococci or staphylococci, as it is well known that a mixed infection frequently occurs in gonorrhœa.

The report of any case where recovery takes place, must, of necessity, lack in the detail and accuracy of demonstration that is possible in cases that come to necropsy, and we are often forced to fall back on clinical evidence for our proof, which is, unfortunately, not absolute.

Admitting the force of the objections, the case, nevertheless, exemplifies the fact that gonorrhœa, far from being—as the laity usually regard it—a comparatively unimportant local inflammation, is an infective disease, not infrequently accompanied by the most serious constitutional symptoms.

There is now abundant, indisputable evidence that, under favorable conditions not yet understood, general infections of the system by the gonococcus do occur. The organism has repeatedly been found alone in the exudation into the joints in gonorrhœal rheumatism, and the only means of reaching there from the urethra, is through the blood stream.

Steinon has reported a case of gonorrhœal cerebro-spinal meningitis in a young man.

In the *American Journal of Medical Science*, Sept. 1893, Councilman relates a case of acute myocarditis with hæmorrhage into the pericardium,

secondary to gonorrhœa. There was also a purulent exudation into the knee joints, and associated with all these lesions he found organisms which he considered were gonococci.

Leyden has reported a case of chronic gonorrhœa with arthritis, which terminated by the development of an ulcerative endocarditis. In the exudation on the cardiac valves, organisms corresponding to gonococci were found. In a review of the literature of the subject up to date, he says that some of these cases run a chronic course and are partially cured, while others end fatally.—(*Deutsche Medicinische Wochenschrift*, Sept. 21st, 1893.)

A case has been reported by Bordone-Affreduzzi, where a young girl was assaulted by an individual with gonorrhœa. Some days after, she developed a polyarthritis, and later a double pleurisy, with symptoms of endo and pericarditis. Cover slips from the pleural exudate showed organisms not to be distinguished from gonococci, which conclusion was afterwards confirmed by cultures.—(*Gazette Medicale de Paris*, Oct. 5th, 1895.)

Thayer and Blumer (*Archives de Médicine Experimentale*, Nov. 1895) publish the report of a case of gonorrhœal septicæmia with ulcerative endocarditis, in which gonococci were isolated from the blood stream during life, and were found in, and cultivated from, the vegetations in the cardiac valves post mortem.

The literature of the subject contains many other cases; so it may now be taken as an established fact that general infection of the system, causing grave lesions in distant parts of the body, may supervene during the course of an attack of gonorrhœa, producing the most serious symptoms, or even fatal results.

AN APPENDIX ABSCESS PERFORATING THE DIAPHRAGM, AND DISCHARGING THROUGH A BRONCHUS, ALSO PERFORATING AN INTERCOSTAL SPACE.

BY ALEXANDER M'PHEDRAN, M.B.

Associate-Professor of Medicine and Clinical Medicine, University of Toronto, etc.

Adam G., aged 40. An agent. Of good personal and family history. On January 1st, 1895, he had an attack of colic, the pain being in the right inguinal region, extending towards the umbilicus, and lasting about one day. In two or three days he felt as well as usual, and remained so until February, when he had a second and more severe attack, from which he did not fully recover. He was conscious of discomfort in the inguinal region; there was a tendency to stoop towards the right side, and jarring was unpleasant, if not painful. He is not certain as to the existence of swelling or induration at this time, but in March, he says, a well-defined tumor had formed.

In April he had a third attack of colic, more severe than the previous ones, and with this there was a local swelling and considerable general tympanites. He improved gradually, and the tumor grew smaller. In

May he was able to be out a little, but was weak and had lost considerable flesh. About the middle of May, the swelling in the right inguinal region began to increase again. There was a feeling of dragging in the right side, and he walked so as to save his side from strain and jarring.

On June 10th he coughed excessively all night, and spat up a profuse quantity of most offensive dark, and rather thin, pus. Since then, on lying down, the cough has been severe and the expectoration free. When in the erect position, hacking cough is troublesome, but the sputum is comparatively scanty.

Since the cough began, a circumscribed tender area, about two inches in diameter, appeared below the angle of the scapula on the right side. For some weeks there has been some pain in this region, beginning gradually, but never severe. He noticed that this swelling became fuller on lying down. There was no shortness of breath. His appetite had been fairly good; bowels regular.

On June 29th, 1895, when he first consulted me, his condition was one of extreme emaciation and great weakness. The breathing was quiet; there was frequent short, hacking cough, with offensive sputum, consisting of pus mixed with glairy mucus.

Below the angle of the right scapula was the swelling already referred to—it was tender and fluctuating. The examination of the chest, apart from the immediate neighborhood of this swelling, was negative, except for the presence of an occasional mucus rale on both sides. Around the swelling the percussion note was flat, and the breath sounds were faint.

The abdomen was flat, a little fuller on the right side, where a tumor-like mass could be felt, extending from the level of the ant. sup. spine of the ilium up nearly to the costal margin and from the umbilicus, outwards to one inch outside of the mammary line. Over this mass it was dull on light percussion; deep percussion gave slight tympany. The lumbar region was normal.

Urine normal.

Pulse, 110; T. 98°; R. 22.

The case was evidently one of abscess in abdomen, almost certainly resulting from appendicitis. The pus had made its way over the liver, through the diaphragm, and thus found vent by way of the bronchial tract. Secondarily, it had penetrated the eighth intercostal space forming a subcutaneous abscess. To give exit to this pus, and with the hope of giving a shorter way of escape to all the pus, and thus relieve the bronchi of the irritation, and the patient of the necessity of coughing up such horrible material, a free incision was at once made into the abscess. Two ounces of stinking pus, of the same character as that being coughed up, was discharged.

The effect of this incision was all that could be hoped for. There was a free discharge of pus that night; he slept well and had no cough. An operation on the abdominal abscess was advised, and he entered the Toronto General Hospital next day, June 30th, 1895, for the purpose of having that done. During the next few days he improved so well, that operative interference was delayed, in order that he might gain some strength to enable him to stand the operation better. On July 3rd his

temperature rose to 101½° and his improvement not continuing satisfactorily, further delay was deemed inadvisable.

For the remainder of the history I am indebted to Dr. Lambert, of the House Staff.

July 6th, Dr. I. H. Cameron, assisted by Dr. A. Primrose, opened the abdomen outside of the right rectus muscle. The opening entered the abscess cavity, which was irregular, and extended upwards over the surface of the liver, a probe passing up to the opening in the chest wall at the eighth intercostal space, although it could not be felt at this point, but water passed out at the chest opening on irrigating the abscess cavity. He recovered fairly well from the effect of the operation, and progressed favorably for a week. The discharge was abundant at first, but grew less in quantity, and the odor less offensive. At the end of a week he was seized with sudden pain and became collapsed, the abdomen became tympanitic. Death occurred on the 15th of July. There was no autopsy. There is little doubt, however, that the abscess opened somewhere into the general peritoneal cavity.

THE PATHOLOGY OF ITCHING AND ITS TREATMENT BY LARGE DOSES OF CALCIUM CHLORIDE, WITH ILLUSTRATIVE CASES.—After presenting very fully the symptoms and characteristic phenomena of pruritus, the author enlarges upon the success he has attained in the use of calcium chloride in the treatment of this most troublesome affection. It has been shown that this drug has a very marked effect on the blood, —namely, increasing its coagulability. The distinct success the author has met with in thus relieving primary pruritus confirms the idea that the irritated state of the nerve-endings and fibrils which exists in this complaint, manifested by itching and tingling, is due to some change in the quality and composition of the blood. The paper is accompanied by a very elaborate table of cases thus successfully treated, with the remedies previously used without effect. In each case either a cure was made or great benefit obtained. The doses must be considerable—not less than twenty grains three times a day—and should be gradually increased; thirty or even forty grains have often succeeded where less have failed. As thirst frequently follows the administration of the drug, it is best to cover the salt taste with a drachm of tincture of orange-peel and one ounce of chloroform-water, in which form it is really an agreeable medicine, and would be well borne by children. The diet during its use should be restricted, no beer, sugar or sweets being allowed, and meat only in moderate quantity. The recovery in some cases was retarded by neglecting this. The bowels should also be kept freely active. Although improvement is generally noted after the first dose, recovery sometimes does not take place until the blood has become saturated, the dosage being increased until this is accomplished. Upon recovery the dose should be gradually, not suddenly, reduced; in fact, the treatment should be continued for from one to three weeks after all symptoms have disappeared. In a few cases of long duration relief was obtained only during continuation of the drug; but a cure is more than probable, with persistence, even in these.—*International Medical Magazine.*

SURGERY.

IN CHARGE OF

GEO. A. BINGHAM, M.B.,

Surgeon Out-door Department Toronto General Hospital; Surgeon to the Hospital for Sick Children. 68 Isabella Street.

INJURIES OF BONES INTO JOINT CAVITIES.

BY STEWART L. M'CURDY, A.M., M.D., PITTSBURG, PA.

Compound fractures of bone into joint cavities or compound dislocations, if given thorough treatment at the time of the accident, are almost as promising as simple fractures into joints.

In some cases, indeed, it is an advantage to have the joint open, so that the serum in abnormal quantities, blood clots, fragments of bone, injured cartilages, as in the knee, may be removed.

In the treatment of fractured patella, it is now the practice to remove the synovia between the fragments by aspiration or to make an opening below the patella to allow the fluid to escape.

Compound dislocations and compound fractures into joints, if they are treated without suppuration, generally recover with functionally useful joints. Suppuration following such injuries, on the other hand, destroys the synovial membrane and limitation of motion must be expected. Some cases recover with true ankylosis or bony union, and others recover with firm fibrinous or false ankylosis. The latter class of cases can generally be improved by passive motion.

Passive motion should not be instituted until all inflammatory symptoms have subsided and sufficient time has elapsed to insure firm bony union. In other words, passive motion should be discarded and *brisement force* should be adopted. It is criminal meddlesomeness to practice passive motion as we are told to do in the majority of text-books.

This has been my practice for years.

At the last meeting of the American Orthopedic Association, Dr. Ansel G. Cook, of Hartford, Conn., discusses this subject at length, and summarises by saying:

1. That bony or serious fibrous ankylosis is the result of injury and subsequent inflammation and not of immobilization,

2. That early passive motion only disarranges the fragments of bone, thereby increasing the production of callus; that it irritates the injured ligaments, and by increasing the inflammation, tends to produce the ankylosis it is thought to prevent.

3. Immobilization is useful only when active inflammation is present, or until the ruptured ligaments or broken bones have thoroughly united.

4. The logical treatment of a fracture into a joint, therefore, should be est and local applications to reduce inflammation; reduction of the frac-

ture as early as possible, then immobilization until the bones and ligaments are united (from three to eight weeks or more, according to circumstances).

5. Passive motion, massage, and use until the tissues become normal, or if massage fails, complete rupture of all adhesions under an anæsthetic. The factors which will ultimately determine ankylosis, are the nature of the original injury, the character and duration of the subsequent inflammation, the destruction of bone and cartilage, cicatricial contractions of the soft tissues around the joint, and the age and condition of the patient.

Case 1. C. W. Fracture of olecranon, sent to me two days after the injury, by a surgeon, with arm dressed at right angle. It was at once dressed in complete extension, and kept there for seven weeks, when the splint was removed, and in another month the arm was perfect. Patient returned to his former occupation as locomotive engineer.

Case 2. J. H. P. Fell from a moving train and received fracture of olecranon, quite similar to the preceding case. The physician who gave temporary relief, had the arm dressed at right angle. I dressed it in complete extension and kept it there for six weeks, when the dressings were removed, and in ten weeks the patient returned to his former occupation as railway conductor, with a perfect arm.

The common practice of the average practitioner of applying dressings in fractures into the elbow joint, with the arm in a position of flexion, is a great mistake.

Allis made a masterly advance when he advocated complete extension for the treatment of all cases of fracture into the elbow joint.

Extensive injuries into joints may recover with fair usefulness.

Case 3. J. W. Besides receiving two scalp wounds seven or eight inches long, sustained a fracture of the left humerus at two points and a compound fracture of the head of the radius, with about half of the articular surface of the bone detached. He also had a fracture of the ulna of the same arm, and a fracture of the right fibula. An occasional dressing was made of the various wounds. The arm was dressed in extension and was kept in that position for about six weeks. Union of all these numerous fractures was prompt, and the patient returned to the coal mine in six months as a full hand.

Case 4. G. L. G. Had his right foot caught under a large stone as it was being lowered by a derrick. The great weight was received on the outside of the foot gradually, and another stone nearby held the leg almost perpendicular. When the member was examined, a complete compound dislocation between the astragalus and os calcis was found. The foot was turned out at right angle with the leg, the astragalus protruding completely through the wound.

Amputation is advised in such cases, and if the preceding case had been taken into account, would have been demanded. It was thought best to make an effort at reduction, and if it was then found that the blood supply was not entirely destroyed, an effort would be made to save the foot. After washing sand, etc., from the astragalus, and as near as possible securing antisepsis, reduction of the dislocation was accomplished.

It was quite a task to make reduction, and it was only accomplished by using a very heavy bone elevator as a sort of pinch bar, over the astragalus and under the os calcis, thus throwing the margins of these bones free. After a long siege the wound was entirely healed. The ankle was ankylosed, but otherwise the foot is quite useful.

I might remark at this time that the ankle motion is not necessary to graceful locomotion.

Case 5. J. L., aged 24, a brakeman, suffered a compound dislocation of the second joint of the left middle finger, the joint surface being plainly visible. This wound was closed under antiseptic precautions and healed promptly without infection. In two months motion was perfect.

Case 6. M. B., aged 50, was walking along the railroad, and a train backed up and knocked him down between the rails, the entire train passing over him. The arm being flexed, the elbow was caught under a wheel and the entire joint crushed, except the head of the radius. I saw the case in a few hours in consultation with Dr. Grove. As the circulation appeared good, I decided to remove the detached pieces of bone and trim up the lower end of the humerus and upper end of the ulna, drain and close the wound. The injury occurred on Monday, and on Friday the drainage tube was removed, and on Saturday, the eighth day, the next dressing was made, and this was renewed once per week. The skin that was destroyed by the wheel, came off as a dry slough. The wound healed promptly without subsequent complication. One year after the accident, the arm is almost as useful as before the bones were removed. With the arm hanging down, the forearm can be fixed to a right angle. He is now working at his former occupation as a trackman, and suffers little inconvenience. The exact drawings of the bones removed are shown in Figs. 1 and 2.—*Int. Jour. of Surgery.*

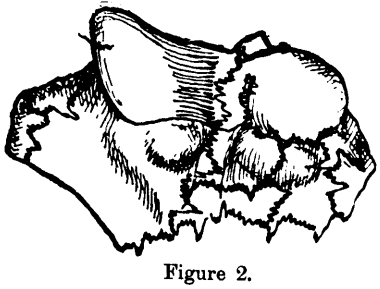


Figure 2.

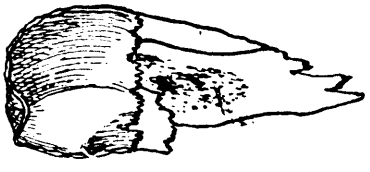


Figure 1.

A heaping tablespoonful of washing soda to a quart of water, is the proper proportion for the solution in which instruments should be boiled for sterilization. *Do not* boil non-metallic sutures in this liquid, for it will very greatly weaken them. *Do not* boil an aluminum instrument in this liquid, for it will be corroded and completely ruined. Silk sutures and aluminum instruments may be sterilized by boiling in five per cent. carbolic.

STRICTURE OF THE RECTUM.

BY R. W. STEWART, M.D., PITTSBURGH, P.A.

The following case presents some unusual difficulties in treatment, the method of overcoming which may prove instructive.

Mrs. E. S. was referred to me for treatment by Dr. Mercur. She gave a history of having suffered for six or seven years from constipation. She had previously suffered from ulceration of the rectum, which was probably of syphilitic origin, although no history of syphilis could be obtained. About a year and a-half ago, her uterus, tubes, and ovaries were removed *per vaginum*, partly under the supposition that the constipation she was suffering from was due to the pressure against the rectum of a retroflexed uterus. Her general health improved after the operation and she gained in weight; but the constipation remained unrelieved; in fact, steadily increased so that an evacuation of the bowels was an operation that required all the tact of the patient, and all the resources of the materia medica.

An examination showed a stricture, caused by a cicatricial deposit on the right anterior portion of the bowel. The stricture was situated about four inches from the anus, too high for the finger to be inserted into it, although by bi-manual examination an ill-defined mass could be touched with the tip of the finger. This mass was composed partly of the cicatricial tissue referred to, and partly of a fecal accumulation that was lodged above the stricture.

By no manner of means could a bougie, either rectal or urethral, be insinuated through the stricture. An attempt was made, with the aid of a Kelly speculum and headlight illumination, to pass a bougie, but this attempt, like its predecessors, failed.

After all hopes of penetrating the stricture by this means had been abandoned, the only alternative that presented itself was by operative interference, to which the patient readily assented.

In considering the operative procedure to be adopted, there seemed but two courses to pursue: first, to attack the stricture directly by a Kraske's operation, or some modification of it; but as this would probably be followed by a fistulous tract, and the subsequent treatment in maintaining the patency of the bowel would be tedious, I decided on the second method, namely, to bring down the sigmoid flexure and form an anastomosis between it and the rectum at a point below the site of the stricture thus eliminating the diseased portion of the bowel from functionating, by diverting the feces from their natural channel. I fully realized that the necessary manipulations would have to be carried on in the deeper portion of the pelvis, but by using the Murphy button the difficulty did not seem to be great.

Accordingly, on April 16th, the patient being in the Trendelenberg position, I opened the abdominal cavity by a median incision and drew the sigmoid flexure out of the wound. A point was then selected where this portion of the bowel could be approximated to the rectum, and was opened sufficiently to admit one-half of the Murphy button.

An assistant then passed into the rectum the other half of the button, so held by a long pair of forceps that it was adjusted in proper position to the anterior portion of the rectum immediately below the stricture. This part of the button being felt within the pelvis, an attempt was made to incise the rectum immediately over it in order to complete the anastomosis. Before making this incision it was observed, as should have been anticipated, that the cul-de-sac of Douglas had been obliterated, by the previous removal of the uterus and that the bladder lay in intimate apposition with the anterior wall of the rectum; in fact was so adherent that the separation of the two was impossible. For this reason it was feared that the incision of the rectum might transfix the overlying and adherent bladder, and this is just what happened; the incision over the projecting button permitted the escape of about half an ounce of urine into the pelvic cavity. The bladder wound was immediately sutured, and, as the location of the stricture did not permit of the higher apposition of the button within the rectum, the futility of attempting to complete the anastomosis was apparent.

I was now forced to consider the formation of an artificial anus, but as the patient's consent to this disagreeable operation, with its disgusting discomforts, had not been obtained, I temporized by closing the opening I had made for the Murphy button in the sigmoid flexure, and then fastening that portion of the bowel to the incised parietal peritoneum in such a manner that it lay immediately beneath the centre of the abdominal wound, the latter in turn being closed, with the exception of its central portion, which was plugged with iodoform gauze down to the sutured portion of the underlying sigmoid flexure.

On the following day, the situation having been fairly laid before the patient, and her consent to the formation of an artificial anus having been obtained, the iodoform plug was removed, the surface of the exposed bowel was painted with cocaine and opened by removing the sutures of the day before. Through this wound the contents of the bowels found an avenue of escape, and the patient was immediately relieved of a distressing flatus.

On the following day an attempt was made to pass bougies through the stricture by passing them into the bowel at the abdominal opening, and then downward into the rectum; this attempt, however, failed. A stout silk thread was then passed into the bowel, one end, however, being fastened by adhesive strips to the skin of the abdomen, and a cathartic administered, in the hope that the string would be carried through the stricture; this also failed; then a string, weighted with a small revolver bullet whittled to the diameter of a slate pencil, was tried; a cathartic was again administered and we were rewarded by finding, on the following day, the bullet with the attached string, lying immediately above the internal sphincter.

The two ends of the string, one of which projected from the abdominal opening and the other from the anus, were tied together to prevent the escape of the string from the bowel.

It was now a comparatively easy matter to tie urethral bougies, beginning with the small sizes, to the silken circuit that had been established, and draw them up by way of the rectum through the stricture and

out of the abdominal opening. By this means, in the course of about ten days, the stricture was gradually dilated so that the largest bougie would readily pass, when rectal bougies were passed in a similar manner. The dilatation of the stricture was materially assisted by the friction and constant opposition of the string against the stricture over which it passed, on account of the flexion of the bowel at an angle, so that the string practically sawed through the stricture.

When the stricture had been dilated so that a bougie about forty mm. in circumference could be passed, it was found that bougies could be passed *per rectum*, without the aid of the string. The latter was then removed, and the abdominal wound permitted to close. In the meantime, formed movements began to pass *per rectum*, and but little escaped from the artificial opening.

On May 22nd, six weeks after her admission to the hospital, the patient was discharged, with the instruction to continue the use of the large sized rectal bougie which she was then using. At this time she had regained her health, the abdominal opening was but a mere sinus, and her bowels were moved with but little difficulty.

Seven months later (November 16th) she reported at the office. At this time she said she was enjoying better health than for many years before; the abdominal sinus had closed soon after leaving the hospital; a large rectal bougie passed with the greatest facility; she rarely required a cathartic to move her bowels; and altogether she was well-pleased with her condition.—*Med. and Surg. Reporter.*

SURGICAL HINTS.

Surgical operations put off until too late are of very frequent occurrence. Operations performed *too early* are so rare that one never hears of them. The lesson is a very plain one, operate in time if you wish to do all in your power to save your patient.

In peritonsillar abscess an aspirating syringe with a long needle will usually find the pus with very little pain, and will often prevent the repeated blind stabbing so annoying to the surgeon and so demoralizing to the patient

Never perform an operation without examining the urine for sugar, no matter what its specific gravity may be. If glycosuria exists antiseptic precautions should be redoubled, but the condition does not contra-indicate necessary surgical interference.

Never examine for crepitus in supposed fracture of the skull. Depression or other unevenness of surface, together with symptoms referable to cerebral injury, will enable one usually to make a diagnosis and will not jeopardize the life of the patient.

When fecal vomiting is one of the indications for surgical measures, a washing out of the stomach should precede the operation. The danger of aspiration of filthy vomited material during or after the anæthesia is most grave. This accident has cost many a man his life.

DR. EDWARD BORCK'S

SLEEVE BANDAGE FOR FRACTURE OF THE CLAVICLE.

Out of the two hundred and ninety-five cases of fractures and dislocations treated by me at my late private surgical home, from April 1, 1885, to June 1, 1893 (see report in *Medical Mirror*, October number, 1894), thirty-three cases were fractures of the clavicle; nine of these cases were adult males, of which eight were on the right side, and one upon the left side, twenty-four were children, of whom fifteen were boys, right side eleven, left side four; nine were girls, right side seven, left side two.

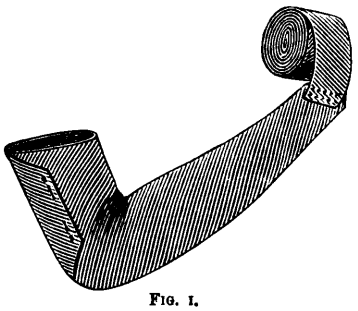


Fig. I.

The diagnosis presents no difficulty if one is acquainted with the structure and development of that bone, and has accurately in mind the articulation and the action of the attached muscles.

I first adjust the fractured pieces in position by manipulation. (For instance the right arm.) I then lay the forearm of the injured side in the sleeve, then bring the hand towards the sound left shoulder as far up as required to keep the fragments in place, then I fasten the sleeve around the upper arm with pins; now the bandage is brought over the sound left shoulder, obliquely down the back toward the right elbow, then under the elbow, and up in front of the right arm over the fractured right clavicle and right shoulder, obliquely down the back to the left and around the chest again towards the right elbow and fastened in place. From here the bandage goes completely around the body, and pinned in front of the right arm near the elbow. Now you can see if your fracture is in correct apposition. You can pull the arm up or let it down, bring the arm to or from the body, push it forward or backward just as required. You may need a pad over the fracture or in the axilla, or you may not, as the case may be, and as your judgment dictates. With a little patience you will succeed. After everything

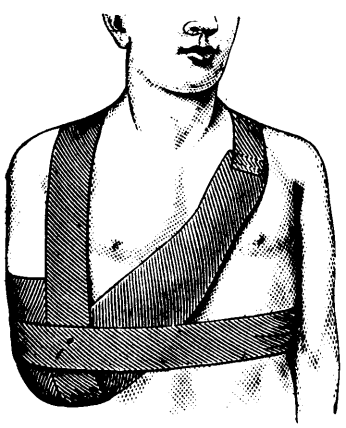


Fig. II Front.

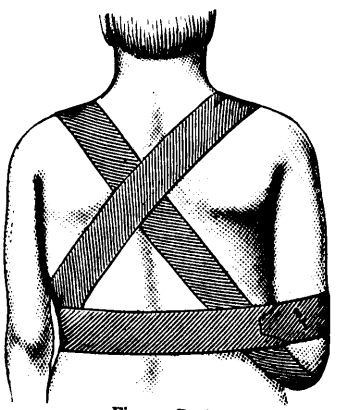


Fig. III Back

is in good order, fasten the bandage with safety pins wherever they cross. (See figures II. and III.) This bandage is well adapted where the fracture extends from the sternal to the acromial extremity.

When the fracture is the reverse I apply my bandage thus: proceed as before, the hand resting upon chest, the tips of the fingers toward the sound left shoulder, the bandage goes around the neck over the right shoulder, across the right fractured clavicle, down anteriorily upon the right arm and under the elbow, up on the posterior side of the right arm, again over the right shoulder and fractured clavicle, then obliquely over the right forearm, towards and around the left side of the chest, and straight over the back toward the right elbow, and here fastened. It takes about three yards of bandage one and one-half to two inches wide; if longer, it may be rolled out as in the preceding manner. (See figures IV. and V.)

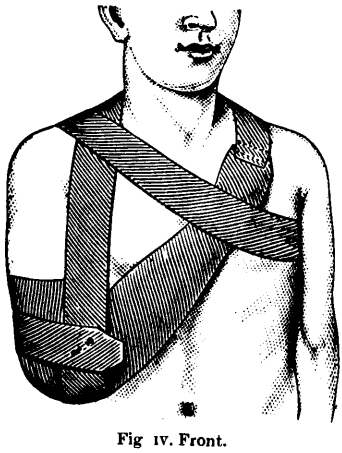


Fig IV. Front.

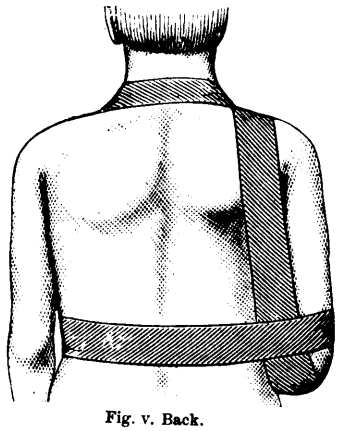


Fig. V. Back.

The sleeve and bandage must be made of previously washed, strong and stout muslin. I always keep a dozen on hand for immediate use. This is light, comfortable and easy to manage, can be readjusted without removing the apparatus and without disturbing the fracture, the hand cannot slip, but still has motion, and the arm can occasionally be relieved of an uncomfortable position, etc., etc. It has many advantages over other appliances and has served me well.

Where the displacement is great, a splint can be be applied direct to the fractured clavicle, in persons that are lean and the bone very prominent as follows:—Take a piece of Hood & Reynolds' dental modelling composition, soften in hot water, flatten it out to a proper thickness, and cut into a strip the length and breadth required, soften again in hot water and dry with a towel, then press or mould it firmly over the clavicle while holding the parts in apposition, exhausting all the air, it acts like a cupping glass, it will stay and not irritate the skin. Apply the sleeve bandage. In children there will be complete union in twelve to eighteen days, in adults from thirty to forty.

BRONCHITIS OF THE AGED.—*Le Prog. Méd.*—

℞ Benzoic acid, 4½ grains.
Tannic acid, 2¼ grains.

M. For one powder. Take four or five such daily.

MEDICINE.

IN CHARGE OF

N. A. POWELL, M.D.,

Professor of Medical Jurisprudence, Trinity Medical College; Surgeon Out-door Department Toronto General Hospital; Professor of Principles and Practice of Surgery, Ontario Medical College for Women. 167 College St.

AUTO-INFECTION FROM THE INTESTINAL CANAL

BY S. G. GANT, M.D.

As I understand it, auto-infection from the intestinal canal means that pathological condition resulting from the absorption of poisons generated within it. It matters not whether they are the result of chemical, putrefactive or fermentative changes, or bacterial action.

That the organism might be poisoned by the products generated within it was until quite recently looked upon with skepticism. To-day we are forced to admit that such a thing is of common occurrence. Recent investigators have given abundance of proof of poisons generated within the colon, and further that the various organs of the body—the brain the liver, the lungs, the kidney, etc.—are frequently invaded by the bacillus coli communis and other micro-organisms and some pathological condition induced as a result thereof. They have gone a step further than this and demonstrated the fact that toxic substances that are disease-producing independent of bacterial action, are being constantly formed within us in health.

As regards auto-infection from the intestinal canal, we have as yet very little proof of the absorption of poisons from this source, or as to the manner in which it occurs. Many of our best clinicians express themselves as believing that the cause of many diseases, the pathology being obscure at present, will be explained when we become more familiar with the part played by the contents of the human sewer.

Bouchard well says, "The organism in its normal, as in its pathological state, is a receptacle and laboratory of poisons. Some of these are formed by the organism itself, others by microbes, which either are the guests, the normal inhabitants of the canal, or are parasites at second hand, and disease-producing."

Because of this fact we may become intoxicated on one hand from the alkaloidal poisons formed during digestion, and, on the other, as a result of unusual activity of the bacteria—the normal inhabitants of the intestinal canal—and their ptomaines. As we become more familiar with the almost innumerable poisons within us, and their effects when injected into the lower animals, we are forced to admit that we are constantly tottering on the brink of self-destruction, and that we only need to dis-

obey some of nature's laws to upset the equilibrium and to fall a prey to some one of these poisons. Our Creator, however, foresaw all dangers and provided us abundantly with safeguards with which we can destroy or neutralize the poisons, on the one hand, or throw them off, on the other, as soon as they are formed.

It becomes apparent, then, that for auto-infection to take place, two things are essential:

1. There must be an impairment of physiological action somewhere.
2. That poisons are being constantly formed in us in health.

In the physical system every cell has a duty to perform, and the same can be said of those aggregations of cells which we call organs. Impair or destroy a single one and the economy suffers, and the effect is in proportion to the importance of the work normally alloted to it. Now, if from any cause the liver, the lungs, the skin, the kidneys or the blood should get out of order and fail to perform its function, what is the result? Poisons that are being constantly secreted are not being rendered harmless, on the one hand, or are not being thrown off on the other, but are allowed to accumulate and enter the circulation (possibly lymphatics), and are distributed throughout the body, causing local or systemic infection, as the case may be.

It is at times very difficult to determine, in cases of auto-infection, where health leaves off and disease begins; this is because of the fact that, on the one hand these poisons are physiological factors, and, on the other, as soon as the system becomes susceptible, they become active pathological factors.

Perhaps the most frequent and immediate cause of auto-infection is "constipation," and more especially when complicated with fecal impaction. In the latter case we have the retention of the feces for a variable length of time; as a natural sequence effete matters accumulate in the bowel and by remaining, undergo chemical changes, and poisons of the ptomaine and leucomaine classes are formed, which are as active as any poisons that could be introduced from without, as, for example, typhoid fever and cholera, wherein the bacillus runs its entire course in the intestines. This condition also favors the rapid growth of septic micro-organisms within the intestinal canal.

Next to constipation as a cause comes diarrhœa, for liquid stools render soluble and distribute the poisonous elements contained therein to any exposed points of the mucosa, thus insuring their entrance into the circulation.

As a result of the accumulation of poisons, we have systemic infection induced; it may or may not run a chronic course, depending on the removal of the offending mass. If nothing is done to prevent the formation of poisonous products, they soon manifest themselves in the clinical pictures with which we are all more or less familiar—chlorosis and anemia.

For the sake of illustration let us study the phenomena in a case of extreme intoxication from the intestinal canal to ascertain its effect upon the various systems and skin.

The Circulatory System.—As a result of auto-infection we have a disturbance in the circulation; the cutaneous vessels become contracted, thus

throwing an increased amount of blood into the central organs, and the body's equilibrium is interfered with. The pulse may be slow and full, on the one hand, or rapid and feeble, on the other, depending on the extent of the intoxication and its influence upon the muscular fibres of the heart and upon the nervous system. Frequently the heart is very excitable and patients have fainting spells. Sometimes, instead of the blood being retained in the central organs, it seems to remain in the extremities and causes a dilatation of the veins. Hemorhoids are almost invariably present in those who suffer from auto-intoxication for a considerable time.

The Respiratory System.—The effects of auto-infection on the respiratory system are not so numerous as they are on the circulatory or nervous systems. Their effects are shown more quickly and in a more aggravated form when the intoxication is complicated with some lung trouble; and *vice versa*, all lung diseases become markedly worse when there is systematic intoxication, for there is deficient oxygenation of the blood. It would appear, from recent investigations, that the colon bacillus plays an active part in the causation of some forms of pneumonia and empyema. but more frequently when there is a lesion of the intestinal mucosa.

The Skin.—The skin shows the effect of the intoxication in its pale, muddy, unhealthy color, foul-smelling secretions, and in any one of the many skin diseases.

The Nervous System.—When there is auto-infection to any great degree it manifests itself in some of the many nervous phenomena that we see so frequently in our every-day practice. One of the most frequent manifestations is a feeling of drowsiness, due to the effects of the absorption of one of the intestinal gases, likely that of sulphuretted hydrogen, which is known to have a soporific effect. Though the patients feel drowsy, they are poor sleepers; they roll and toss about the bed; they are frequently awakened by horrible dreams, or find themselves wandering about their rooms. In the morning when they arise, they do not feel refreshed; but, on the contrary, they feel weak, nervous, exhausted, and find their clothing moist by a clammy, unhealthy perspiration.

I believe that a very large percentage of all headaches and neuralgias are due to auto-infection, it matters not where the pain is located. For I have many times witnessed the disappearance of the headache after the bowels have been completely emptied, without the assistance of a single dose of medicine.

As for the single germ of intestinal origin, the most frequent disturber in the neighboring and distant parts, the colon bacillus communis leads them all. This germ seems to be the king of disturbers and has been found in nearly all the organs of the body, and under circumstances that have led investigators to believe that it unquestionably has pyogenic properties. Many other germs, with known pathogenic properties, have been proven to be identical with this bacillus.

I shall not attempt to more than mention a few of the diseases in which the colon bacillus appears to be the most active agent. It has been known to manifest its presence in the following conditions:

1. Infectious diarrhœa.

2. Empyema (following enteritis).
3. Broncho-pneumonia.
4. Endocarditis.
5. Cystitis.
6. Nephritis and pyelonephritis (surgical kidney).
7. Disorders of the liver (icterus).
8. Appendicitis.
9. Peri-appendiceal abscess.
10. Perforative peritonitis (also in cases of lesions of the intestine without perforation).
11. Laparotomy wounds.
12. Strangulated hernia (in fluid of).
13. Peri-rectal abscess, etc., etc.

A casual glance at the above diseases in which this germ if known to be an etiological factor is sufficent proof of its having pathogenic and pyogenic properties. Until quite recently it was supposed that this germ did not enter the circulation and produce disease in distant parts unless there was a lesion of the intestinal mucosa. We are to-day taught by such authorities as Welch, Park, Councilman and others that the bacillus coli communis is capable of entering the circulation, whence it is carried, and does produce disturbance independent of any intestinal lesion. It is quite easy to understand the way in which it reaches and affects the genito-urinary tract and the liver.

As to reaching the liver, this normal inhabitant of the intestinal canal has but to walk leisurely, as it were, up the intestine and through the door of the common bile-duct to gain access to her "Majesty's innermost chamber," causing an infection therein. It is remarkable that we do not see bilary infection more frequently than we do.

This paper has already reached a length far beyond my expectations. For this reason I will at once hasten on to the more important part of this subject—that of treatment.

TREATMENT.—I will not attempt a detailed discussion of the many remedies that have been suggested for the prevention and relief of auto-infection of intestinal origin, but will mention only the salient features.

The treatment in a large measure should be prophylactic, and every effort should be put forward to keep the system in perfect order and the equilibrium maintained; so long as this is accomplished nature is capable of defending herself against any and all toxic substances generated from the body. Any disease or symptom of disease that would predispose a patient to auto-intoxication from poisons normally generated within the body must be eradicated at once.

There are three essential features that must be constantly borne in mind in the treatment of auto-infection:

1. We must remedy any condition which predisposes the patient to self-infection,

2. We must use every possible means to prevent abnormal production and absorption of poisons within the intestinal canal.

3. We must do all we can to assist nature to neutralize and eliminate poisons already absorbed.

To accomplish the first we must correct any condition that will cause an erosion or that weakens the mucous membrane in any way, because it prepares the way for the entrance into the circulation of toxic substances within the intestine. Hence we must correct irritative discharges of all kinds; we must heal ulcers and fissures; we must remove hemorrhoids, polypi and other growths. In fact we must first get rid of any local disease of the rectum and colon present, or all our efforts directed towards the prevention and relief of auto-infection will be useless.

There are some cases in which we find no local cause; then we must look elsewhere and in all probability the exciting cause of the infection will be found to be either diarrhœa or constipation and fecal impaction—conditions that must be remedied at once. Whenever there is an irritant within the intestinal canal that promotes auto-infection, the safest plan is to give a vigorous cathartic, one of the mercurial if you choose, which will cause it to be expelled. Then we must institute a laxative tonic treatment, to be continued for a long or a short period, dependent upon the extent and continuation of the infection. Very often poisonous substances can be eliminated from the system by the constant and abundant use of reputable mineral waters known to have a cathartic action. Sometimes it will be necessary, in addition, to administer a pill composed of aloin, strychnine and belladonna, which has stood the test of time, or one composed of the lactate of iron, extract of nux vomica, and purified aloes, given three times a day. In the treatment of auto-infection it is necessary to correct errors in diet, prohibit the use of alcoholic stimulants, and have our patients take only such foods as they can digest easily. If we were going to recommend any special diet we should select milk, for experience has proven that it is opposed to all sources of intoxication and puts a check upon auto-infection due to intestinal putrefaction.

We now turn our attention to the second feature in the treatment, and endeavor to prevent the abnormal production and absorption of poisons. To accomplish this we must resort to the intestinal antiseptics, both local and systemic. Perhaps the best general antiseptics, either alone or in combination, are the iodides of potash and sodium. We have many times witnessed beneficial results from the continued use of these drugs in cases where the system was saturated with poisons. There are many medicines that are highly commended as intestinal antiseptics, such as iodine, creosote, benzoic acid, boric acid, salol, resorcin, turpentine, the mercurials, etc. Many of the above-named antiseptics undergo changes in their course through the alimentary canal, ere they reach the colon, which diminishes their activity. The best results are usually obtained through those insoluble drugs which remain unchanged throughout their course, such as salicylate of bismuth, salol, iodoform and naphthalin. When the salicylic acid accumulates in the blood and threatens complications, the subnitrate of bismuth may be substituted for the salicylate. In giving these intestinal antiseptics it is not necessary that the dose should be sufficiently large to kill the bacteria but large enough to render them dormant, as it were, thereby preventing their multiplication. We know of nothing better than the subnitrate of bismuth in combination with charcoal to neutralize poisons already formed and to prevent fermentation and putrefaction.

We make up a powder containing ten grains each, to be repeated at short intervals until there is evidence of relief, such as a diminution of tenderness over the abdomen and tympanites. The bismuth seems to prevent the putrefactive fermentation, while the charcoal diminishes the toxins. Iodoform may be combined with charcoal or with naphthalin to accomplish the same purpose. To diminish the fecal odor as well as the toxicity, Bouchard combines seventy-five grains of naphthalin with an equal amount of sugar made aromatic with one or two drops of bergamot. This mixture he divides into twenty powders and gives one every hour. In this way he claims putrefaction in the intestinal tube may be completely suppressed.

The last feature in the treatment consists in assisting nature to neutralize and eliminate poisons which have already entered the circulation. To accomplish this we must see that the eliminatory apparatus is in perfect order, for when any one of the emunctories gets out of order, poisons immediately accumulate in such quantities that nature can neither neutralize nor eliminate them. The blood must be toned up by tonics, if necessary, the liver and kidneys by medicines that will stimulate them to renewed activity, and the skin must be kept in order by frequent cold baths, followed by a brisk toweling and massage. In addition to remedies directed for the perfection of the emunctories, we must see that patients suffering from auto-infection lead a simple, regular, active, occupied life, and do not mope about and brood over their afflictions.—*Langsdale's Lancet.*

THE NARROWING FIELD OF THE GENERAL PRACTITIONER.—The following is a portion of an essay by Dr. Onslow Gordon, of Brooklyn, in *Weir's Index*, inculcating a higher self-confidence and a less constant reliance upon specialists. He holds that specialism is overdone to an extent injurious to general medicine, and a concert of action is needed. He further says:

"Within comparatively few years the field of the general practitioner has been very much narrowed, and present indications point to still greater inroads upon his field of usefulness. Should he be crowded into such narrow quarters that he will be unable to exist, the fault will be largely his own. It requires but a moment's reflection to convince one that the number of good all-round physicians is rapidly growing smaller and that the tendency is toward specialism. While I have nothing to say against specialism in medicine, and would not wish to go back to the time when there were no specialists, as we owe very much to them, and there are certain lines along which they can do better work than the man who tries to cover the whole field of medicine and surgery, I think that the general practitioner is too dependent upon them at the present time. A very large number of physicians (especially the younger members of the profession) are doing a larger business as distributors of cases than as practitioners of medicine; 'they shake the bush and the specialist gathers the fruit.' There is not a member of this Association that has not repeatedly seen the specialist called upon to open a simple abscess,

remove wens, dilate for anal fissure, remove tonsils, ingrowing toe-nail, perform circumcision and do an innumerable number of operations that the family physician should blush to decline. All surgical cases are sent to the surgeon, gynecologic cases to the gynecologist, throat and nose work to the laryngologist, heart and lung affections to the chest specialist, nervous diseases to the neurologist, diseases of the rectum to the rectal specialist, genito-urinary ailments to the genito-urinary surgeon, joint and bone diseases to the orthopedic department, eye and ear troubles (however slight) to the ophthalmologist, and skin diseases to the dermatologist; we can also find specialists who will call us good fellows if we will turn over our stomach, kidney and hernia cases; yet there are very few specialists who will decline to treat a patient, no matter what his ailment may be, if the *money* is in sight. While the people of moderate means still tolerate the family physician as an obstetrician, the more favored in worldly goods are looking for a specialist when an accoucheur is desired. If matters continue on these lines, the specialist, or more properly speaking, the general practitioner, will leave for himself possibly acute coryza and constipation. The tendency to rely on the specialist has grown to such an extent that there are many physicians who will not remove a retained placenta, suture a recently lacerated perineum, however simple, open an abscess or venture a diagnosis in any obscure case. It is the custom of the times that makes them hesitate to rely more on their own judgment and call into action the ability their patients have a right to expect them to have. It has been well said, 'The wise and brave conquer difficulties by daring to attempt them.' Perhaps the time will come when the general practitioner will be consulted only as to the advisability of calling a specialist and whom to call. All this can but tend to belittle the family physician in the eyes of his patients, limit his ability and impair his usefulness, to say nothing of his loss from a financial standpoint. The physician who has no confidence in himself cannot expect others to trust him with their lives. I believe there will always be room for the well-equipped general practitioner, unless he persists in turning away all of his most interesting cases. By so doing he will help educate the rising generation to believe that they are to depend on the family physician to treat slight ailments only.—*Journal Am. Med. Assoc.*

Modern Treatment of Progressive Polyarthritis Deformans.—Physicians are too much inclined to consider this disease incurable. Its pathogenesis is still obscure, but it is probably due to some infection which rapidly localizes itself in the nervous system. It attacks both adults and young people, starting with one or two acute seizures, develops from below upward, attacking symmetrically the articulations of the members and then of the trunk, but scarcely ever causes visceral lesions. The usual internal remedies for rheumatic or gouty tendency, salicylate of soda, preparations of colchicum and alkalies in large doses, usually fail to produce any effect in this disease. The only internal medicines which prove effectual are iodine and the iodides combined with preparations of arsenic. It can be commenced with small doses of iodide or tinc-

ture of iodine, taken in the middle of the two principal meals, 4 to 5 and even 10 drops of tincture of iodine in a glass of wine or of *eau sucrée* or syrup of bitter orange peel in water. Or else a teaspoonful of the following: Two grams each of potassium iodide and sodium iodide in 120 grams of dist. water. After fifteen days of this treatment it is to be suspended and a teaspoonful of the following taken in the same way with the meals in a tablespoonful of iodotannic syrup: Sodium arseniate 0.05 gram in 120 grams of dist. water. The sodium arseniate can be replaced by Fowler's solution taken in progressive doses, increasing from 3 drops at each meal to 6 drops, and then decreasing a drop a day until the original dose is reached. This treatment is to be continued several months, alternating the arsenical medication with the iodides. If, as sometimes happens, the iodide is not borne well, the tolerance can be increased by associating with it belladonna and arsenic in the following proportions: Potassium iodide, 4 grams; sodium arseniate, 0.02 gram; neutral sulphate of atropin, 0.001 gram, and 120 grams of dist. water. Take one teaspoonful in the middle of each of the two principal meals, in half a glass of Vichy water (Hauterive). In combination with this internal medication there should be external treatment to ward off the threatening anchylosis in the joints. They must be frictioned with a stimulating liniment, and as the frictions are to be made daily, irritation of the skin should be carefully avoided. The following is a good liniment for this purpose: Liquid ammonia, 50 grams, with 100 grams each of balsam of Fioravanti and spirit of lavender. The frictions may be followed by slight massage, but it is best not to massage the articulations and avoid imparting too active movements to the diseased joints. The different methods of electrization have all proved impotent, even long-continued currents applied to the atrophied muscles consecutive to arthritis of this kind. Alkaline and saline baths, very hot and prolonged, sometimes produce good results, as also hydromineral treatment at Aix-la-Chapelle, Dax, Saint-Armand, Ragatz, Bourbonne-les-Bains, Bourbon-l'Archambault, etc. But in the torpid periods of the disease, to combat the articular deformities and restore mobility to the anchylosed members, mud and sand baths are excellent. These have been recommended for many years, but it is only comparatively recently that the establishments at Dresden (Dr. Fleming), Kostritz, near Leipsic (Dr. Sturm), at Berlin (Dr. Grawitz), and especially at Lavey, in Switzerland (Dr. Suchard), have really rendered these baths practicable. The Grawitz method enables baths to be taken at home in an ordinary bath tub at 122 degrees, but the best results are obtained at Lavey, where the establishment is fitted up with appliances for whole or partial baths of sand, evenly heated to 122 and 140 degrees, absolutely free from gravel, clay, calcareous or organic matters. The partial baths are considered best, as they do not debilitate. The baths produce an excessive cutaneous secretion, which has been found to benefit to a surprising degree sciatic and chronic rheumatism and gout. They also modify very favorably cases of arthritis deformans. The Lavey water is also beneficial in rheumatic disorders.—*Rev. Int. d. M. et d. Ch.*

OBSTETRICS AND GYNAECOLOGY.

IN CHARGE OF

J. ALGERNON TEMPLE, M.D., C.M., M.R.C.S., ENG.,

Professor of Obstetrics and Gynæcology, Trinity Medical College; Gynæcologist Toronto General Hospital; Physician to the Burnside Lying-in Hospital. 205 Simcoe Street.

HOW CAN SUPPURATION BE BEST PREVENTED IN ACUTE PELVIC INFLAMMATIONS?

BY WM. R. PRYOR, M.D.

I shall not treat of those forms of pelvic inflammation which arise from disease of the pelvic bones, from bowel disease, or from other causes which are operative in men as well as women; but shall confine myself strictly to those inflammatory conditions which arise from causes extending through the uterus.

In the earlier application of laparotomy to the treatment of inflammatory diseases of the uterine adnexa, conditions were met with which could only be treated by removal of the affected parts. The subjective symptoms were of the most distressing nature, and examination demonstrated an extensive involvement of the pelvic peritoneum, together with ovarian and Fallopian disease. Having obtained marked success in removing the grosser evidences of chronic pelvic inflammation, as pyosalpinx, hydrosalpinx, etc., we began to apply the radical operation of laparotomy to the treatment of the more acute forms of tubo-ovarian disease. Just here we made a mistake.

I had met with a number of cases of gonorrhœal infection of the uterus and tubes in which nature apparently effected a cure; certainly, disagreeable symptoms disappeared, and examination showed no marked pelvic lesions. Applying to a consideration of these inflammations observation made in the study of the extension of infection in other parts of the body, I began to seek for some means to assist in the cure of these cases. The idea struck me that I might here apply the surgical rule that stopping the supply of infectious material conduces to a cure of its complication and prevention of extension; and in 1891 I began to curette the uterus for acute salpingitis and peritonitis. The results obtained were startling. A riper experience and more careful observation of my cases have led me to expect a cure (or rather, to retain the idea of my paper, to prevent suppuration) from currettage, irrigation, and the use of antiseptic dressings in one class of cases only, namely, those cases of first infection when seen within a week after extension of the infection outside the uterus. This operation, the advocacy of which brought so much unpleasant criticism upon me, is now the accepted routine procedure in most of our general hospitals.

I have applied it in nearly a hundred cases of acute first attacks and have never seen failure result from it when early applied. If we secure good results from this treatment, where an infection has already extended to the tubes and pelvic peritoneum, it may be presumed that the curettage is indicated whenever the endometrium is infected. My experience has taught me that such is the case. The causes of failure in the hands of others I have traced to the use of strong antiseptics within the uterine cavity, partial removal of *débris*, and incomplete packing of the uterus.

The observation and experience of six years with conservative curettage have taught me to surely expect a complete recovery in cases of acute endometritis with salpingitis and peritonitis when seen early in first attacks.

I do not divide the cases according to the infection, whether septic or specific, but treat all pyogenic infections alike. But there are many cases which are seen late; there are other cases which present an acute process implanted upon a chronic, cases of chronic relapsing salpingitis; and still other cases which have been cured entirely, so far as we can see, by operation years befere, but have become reinfected. Although these cases are certainly most acute, it must not be forgotten that previous attacks of tubal and peritonitic inflammation have markedly changed the nutrition of the affected organs.

Suppuration *may* not ensue, but it is likely to. Curettage helps all these cases somewhat, but so many failures to afford entire relief result where curettage alone is employed that more must be done. Henrotin, Chicago, has written very ably upon this subject, and credit for the idea is due him. For two years, in all such cases, I have operated as follows: The uterus is thoroughly curetted and irrigated. All instruments being changed, in a few minutes, the cul-de-sac is opened and a wide blunt dissection made in the vagina and cul-de-sac by separating two fingers. The fimbriated ends of the tubes are opened if found closed. All serous-fluid accumulations are evacuated, and the pelvis wiped dry. No irrigation is here used. I then pack from three to five yards of iodoform gauze into the pelvis, each strip being about three inches wide. The uterus is next tightly packed as is also the vagina. A self-retaining catheter is introduced. On the third day the vaginal gauze is removed, together with that in the uterus. The vaginal gauze is renewed but the uterine packing is not, unless the uterus be large. The gauze in the pelvis comes out in a week or ten days under chloroform and another large pelvic packing is made.

The results of this operation are most gratifying. The lymph which is thrown about the antiseptic dressing disappears in a few months and the uterus becomes perfectly movable. Accidents have never happened to me and I have so far been uniformly successful in preventing suppuration. In several of these cases of relapsing salpingitis I have met with large hydrosalpinx and broad ligament cysts. These were merely incised and evacuated.

So much has of late years been written upon hysterectomy in inflammatory cases that the profession at large has come to believe pretty generally that we gynecologists have nothing else to offer a woman who has pelvic

peritonitis other than some mutilating operation. These two operations, one matured, the other new but sufficiently tried, will very effectually prevent suppuration in the pelvis when properly applied. All the criticism which has been put upon the operation of hysterectomy is not merited, but most of it is. He who first sees these cases of pelvic inflammation, folds his hands, orders opium and poultices, and lets the infection run riot in the woman's pelvis, is the man to blame. I consider it an imperative duty to treat pyogenic infection here by surgical means only. Laparotomy is no longer warranted, unless there be pus present, for peritonitis of a distinctly pelvic character. We have in these two operations the means to prevent the wholesale mutilations which we see advertised on every college and hospital bulletin board. But we must get our cases early. The responsibility resting upon the family physician is great. I state it as mildly as I can when I say that the greatest nonsense ever receiving the support of intelligent men was Alonzo Clark's treatment of peritonitis by opium. Pelvic inflammation is due to an invasion from without One very common result of such infection is production of pus. Nowhere else in the body will the surgeon adopt the stasis plan of treatment of an infection. Incision into the cul-de-sac immediately relieves these women of pain. Very often within twelve hours the bed is soaked with serum, so great is the drainage. The breaking up of adherent lymph-plates opens the mouths of the infection-laden lymph-streams and they pour all their contents into the gauze. These operations take the place of opium and poultices; they do not, by locking up the emunctories, foster infection, but stop it short. I feel that I have something between the poultice or ice-bag and the horrible hysterectomy. I believe I can nearly always prevent suppuration.

I cannot too strongly urge you to apply to the acutely inflamed pelvis of a woman those general surgical principles which are embodied in the two procedures of (*a*) cutting off the primary source of an infection, and (*b*) draining away its results. This is the truest conservatism, for it seeks the conservation of tissue diseased and, at the same time, protects the general economy against the results of diseased processes. Above all, it leaves the woman her menstrual function. These women are symptomatically and physiologically cured, for they bear babies afterward.

In reviewing my experience of the last sixteen years, I believe I can at last see my way to prevent the formation of pus where the tubes and peritoneum are involved; and I feel much gratified upon being able to present these operations to you. For many months, week after week, I have shown these operations to the practitioners who honour me with their presence at my lectures. I have hammered at them with the irresistible arguments, demonstration and result. From among the seven or eight hundred who have gone out, some have tried the cul-de-sac opening where before they used opium. Their letters are indorsement enough. I shall be more than repaid if I can make among you a few converts.

A NEW METHOD OF ENTERO-ANASTOMOSIS.—Souligoux (*Gazette heb. de Méd. et Chir.*, July 23, 1896) has devised a new method of intestinal anastomosis, which consists in suturing two loops of gut without opening

them. With a strong clamp, he pinches, in a longitudinal direction, the free border of the two intestinal loops, and then stitches them together along one margin of the compressed areas. These areas are then touched with caustic potash, and the suture completed around them. The cauterized portions of the gut necrose, and fall into the lumen of the intestine, and communication is established. In animals, this takes about forty-eight hours. The operation has been performed upon man several times with success.

Chaput has performed a similar operation, using a Paquelin cautery in place of caustic potash. If the stomach enters into the anastomosis, he first removes the muscular coat of the portion involved. Retention of feces is a contra-indication. The chief advantage of the operation is the rapidity with which it may be performed.

CHOLECYSTO-GASTROSTOMY.—Terrier (*Gazette Hebdom. de Méd. et de Chir.*, July 16, 1896) reports a case in which, upon opening the abdomen for obstruction in the gall-duct, due to cancer of the pancreas, he performed the unusual operation of forming an anastomosis between the gall-bladder and the stomach, which was more readily accessible than the intestine. Recovery followed the operation, and there was no disturbance due to the outpouring of bile in the stomach. The patient died some months later of disseminated carcinoma, and, upon autopsy, the anastomotic opening was found to be ample. Only two other cholecystogastrostomies have been performed.

RESULTS OF FIVE HUNDRED VAGINAL HYSTERECTOMIES.—Jacobs (*Centralbl. f. Gynäkol.*, No. 29, 1896) finds that the mortality of five hundred hysterectomies for various causes is only 3.4 per cent. Among the cases are forty-nine of carcinoma uteri without a single death. Two of the deaths were from intestinal obstruction, brought about by adhesions of the intestine so low down in the vaginal region that the author thinks they might have been avoided by vaginal tamponade. Practical directions for the operation are given: Short clamps hold better than long ones. For the first part, a thermocautery is preferable to the knife as saving time and blood.

When the extirpation is complete, Jacobs ties off the clamps on the broad ligament, stitches the peritoneum together, and thereby renders the patient more comfortable, and avoids danger of intestinal adhesions and herniæ in the vagina. In inflammatory cases, drainage of the peritoneal cavity is necessary, gauze being employed.

REMOVAL OF ONE-HALF OF THE KIDNEY FOR TUBERCULOSIS; FAVOURABLE PROGNOSIS IN RENAL MALIGNANT DISEASE.—How important has become the application of surgery to the kidney is shown by the fact that a single operator, J. Israel of Berlin, is able to report (*Deut. med. Woch.*, May 28, 1896) 126 cases so treated by himself. Eleven times the kidney was extirpated on account of tubercular disease. In a twelfth case the lesions were situated so evidently in one end of the organ that Israel decided to remove only the upper half of it. Hemorrhage was

avoided by digital compression of the renal artery during the cutting away of the diseased portion. Then a compress was held against the cut surface for some minutes; upon its removal there was no bleeding, but for safety a piece of gauze was stitched by catgut against the cut surface. Recovery was prompt and complete, and the patient has remained in good health for over a year.

This operation is recommended only in exceptional cases, as tubercles too small to be observed at the operation usually extend beyond the area of the gross lesion.

Another encouraging feature of this report is the chapter on malignant tumours of the kidney. There were seventeen such cases—six carcinomata, ten sarcomata, and one so-called struma renalis. Complete nephrectomy was performed in each case. Two patients died from operation; one a year later, of acute peritonitis, without recurrence of the cancer, and six were well at the time of report, no recurrence having manifested itself in periods ranging from fifteen months to nine years.

TUMOUR OF MESENTERY; TUBERCULAR.—In the *Deut. med. Woch.*, June 11, 1896, Gruneberg mentions a rare case of tuberculosis isolated in the mesenteric glands, and resulting in an abscess holding about two pints, which formed a freely movable tumour in the right side of the abdomen, the site of which was correctly diagnosed, but whose nature was not suspected until it was ruptured in the attempt to shell it out of the mesentery. The patient was an eight-year-old girl, with no previous illness except a diarrhœa of short duration three months previous to the appearance of the tumours. At the autopsy, three days after operation, other mesenteric glands were found tubercular, but there were no other traces of tubercle organ.

SUCCESSFUL LAPAROTOMY FOR RUPTURED UTERUS.—Three hours after labour began in a twenty-one-year-old III-para, the membranes ruptured and a hand came down. Two hours later a midwife made desperate attempts to extract the child by this arm. There was a sudden pain and collapse, with pulse at 128. About two hours later the abdomen was opened and the child and placenta found in the peritoneal cavity, the rupture being on the anterior wall of uterus and vagina, and extending into the left broad ligament. The uterus was removed and its stump treated extraperitoneally.

According to Rein (*Wratsch*, 1896, No. 6), whose case this is, laparotomy has been performed in rupture of the uterus twenty-five times, fifteen times successfully.

POST-PARTUM HÆMORRHAGE.—Turpentine is a prompt and efficient remedy. *Lancet-Clinic.* A piece of lint saturated therewith should be carried directly into the uterus so as to bring it into contact with the inner surface. In cases where the patient was almost pulseless it seemed to act as a stimulant, but on no occasion did it fail to instantly check the hæmorrhage and produce contraction.

NERVOUS DISEASES AND ELECTRO-THERAPEUTICS.

IN CHARGE OF
CAMPBELL MEYERS, M.D., C.M., M.R.C.S., Eng., L.R.C.P., Lond.,
Neurologist to St. Michael's Hospital. 192 Simcoe Street.

SCRIVENER'S PALSY NOT SOLELY PEN FATIGUE.

BY C. H. HUGHES, M.D.

Honorary Fellow of the Chicago Academy of Medicine, and of the British Medico-Psychological Society, etc., etc., etc., and Dean of the Faculty and Professor of Neurology, etc , of Barnes Medical College, St. Louis.

From an intimate familiarity with a large number of cases of writer's cramp or, better, writer's palsy, and other forms of the so-called occupation neuroses, I have long been of the opinion that the occupation is not the sole cause, but simply the determining, and to a limited extent only the predisposing, cause of the special expression of those neuroses which we call by the several names of Scrivener's palsy, musician's paralysis, chorister's cramp, engraver's palsy, etc., etc., etc.

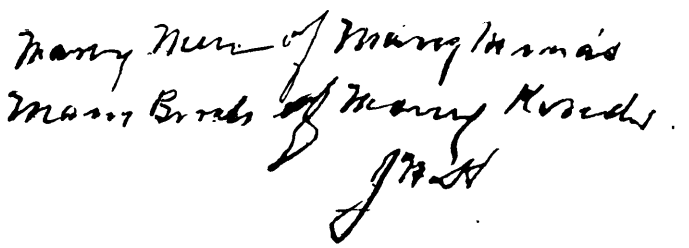
The usual sedentary, excitable, irregular and excessive nerve-strain life of the individual, blended often with associated brain and nerve exhausting dissipations, together with inherent neuropathic predisposition being the essential conditions of the development of the neural instability and exhaustion neuratrophia, through which it is possible to have an occupation neurosis by excessive or even moderate use of a special group of muscles in the represented daily routine of a certain vocation.

The proof that local over strain is not the sole factor is found in the fact that many cases of occupation neuroses are not the result of excessive over-work ; unless we use the term as applied to the particular individual as excessive, which may be, and often is,exceedingly light at the time of the break-down, such as would show unfavourable on the average worker in the same field, and sometimes the local palsy appears after the individual, from general debility, has quit work for a time and again resumed his occupation for awhile only to discover his inability to use with former dexterity the instrument of his occupation.

The following record is a case somewhat in point:

The gentleman did not know he had this affliction to such an extent till making the effort illustrated below in my office. He is not and has never been a professional book-keeper or accountant. His vocation has been to sell goods in an exclusively cash store in a small interior city. He has been all his life at this occupation. He is married, is temperate and moderately regular in his habits. His tendon reflexes and physical

functions generally are quite normal, except that he has nervous dyspepsia and does not sleep as much as he ought. He has no intention tremor or no involuntary tremor of any kind. No eye defects; no lightning pains; no pupillary derangement; nothing suggestive of either posterior spinal or *en plaque* sclerosis. When he writes he supports his wrist and makes one letter at a time. He is naturally somewhat ambidextrous, though preferring his right hand, and both hands give the same expression to his hand writing. This is how he writes:



This gentleman has some sources of private worry; has been anxious to make more money than he has acquired; has kept steadily to an indoor occupation and become so neurasthenic that the muscles in writing do not respond well even to a moderate demand, but display those irregular explosions of nerve force at the regular behest of the will which we are accustomed to speak of, when so displayed through the fingers used in writing, as Scrivener's palsy or writer's cramp.

In a large neurological experience I have encountered so many such cases where the local strain was not commensurate with the palsy, especially among choristers and pianists, and these facts, I think, justify th s record.

The above is this patient's best writing.

THE EFFECTS OF ELECTRICAL EXCITATION IN THE CEREBRAL CIRCULATION IN MAN.—V. Capriata, *Annali de Nevrologia* XIII, iii-vi, publishes the results of an experimental study of the effects of electricity on the circulation of the human brain. He used in these experiments two patients who have been trephined, and who, therefore, could serve for the direct application of the recording apparatus to the cranial contents. The conclusions reached indicate the range of the experimentation, and are given as follows:

The results obtained from this long series of observations demonstrate clearly not only that electricity, both galvanic and faradic, applied in man according to different methods, can act in the circulation of the brain, producing profound and lasting variations, but offer besides the opportunity for better establishing certain data of electra-physiology not as yet well ascertained.

We can first of all make sure that in the application of the galvanic current, whether directly or indirectly, to the head, the modifications of

the cerebral circulation primarily and chiefly reflect the state of the vascular walls; and secondarily, as the result of the above change of vascular tones, they alter the fulness of the pulse, and *vice versa* with the application of the faradic current the pulse is first affected.

As regards galvanization of the head, the results experimentally obtained in rabbits by Lowenfeld are not applicable to the human species.

The changes, in fact, that were obtained in the human cerebral circulation with longitudinal currents did not vary with the position of the poles, but were always the same—vascular spasm with consequent smaller pulse. Likewise there was no difference between the pulse action of transverse currents. However arranged, there was only one result—angioparesis with increased fulness of the pulse, equally extended over the whole brain.

On the other hand I do not hesitate to admit with Lowenfeld that the change of vascular tonus obtained from longitudinal galvanization ought to be referred to a direct influence of the electricity on the vaso-motor centres in the medulla. This seems to me the more probable since my observations indicate that similar vascular effects follow galvanization of the sympathetic in the neck whenever an electrode is placed at the nucha. There is no difference of action of the two poles; the result is always the same—vascular spasm.

In galvanization of the sympathetic in the neck, besides the modifications of the vessels, we may have notable changes in the volume of the brain. While the vascular changes, however, are generally and equally diffused, those of the cerebral volume, on the other hand, are limited to, or at least most pronounced in the hemisphere corresponding to the sympathetic irritated. These changes of the cerebral volume being seen only after galvanization of the sympathetic in the neck and never after any other applications I made, I feel authorized to refer them to a special action of the galvanic current on that region where this application is commonly practiced.

Changes of the volume of the brain from galvanization of the smypathetic were also noted by Sgobbo; but while in my observations they appeared irregularly during and after the application of the electricity, in his, on the contrary, they were seen only during the passage of the current, and especially at the closing of the circuit. In my own observations I have often noticed at the opening and closing of the current a varying degree of vertigo in the subject, but no disturbance of the cerebral pulse. A glance at the tracings will suffice to demonstrate this clearly. This fact is not without importance, since it excludes the hypothesis of some authors, and which Sgobbo has credited, that the subjective symptoms (vertigo, nausea, sense of weakness, threatened syncope, etc.,) seen in individuals on galvanization of the head are in more or less direct relation with changes in the cerebral circulation. To me, on the contrary, the alteration of the pulse to which Sgobbo ascribes so much importance is nothing but the effect of the rapid changes of the respiratory rhythm or of sudden movements of the head, since in the the subject vertigo is often associated with a general shake. Indeed by such shaking some of my tracings have the pulse exhibiting the same changes altogether independent of any of the above cited disturbances.

With the application of the faradic current, less in that made longitudinally, in which the cerebral circulation may present variable modifications, in all the others (transverse faradization, faradization of the sympathetic in the neck, cutaneous faradization of the trunk and limbs), aside from slight differences, the last effect obtained is always an increase of the flow of blood in the head.

My results from cutaneous faradization of the trunk and limbs agree almost perfectly with what had been previously established by Rumpf. It is not improbable that the same circulatory changes are produced in the brain by general faradization, and perhaps this is one of the principal reasons why it is so useful in many cases of cerebral neurasthenia and in those specially kept up by more or less profound disturbances of the general nutrition.—*Am. Jour. of Insan.*

BROMIC INTOXICATION.—At the meeting of the Association of American Physicians in Washington, May 1st, Dr. Weir Mitchell read a paper on "Some Unusual Forms of Bromic Intoxication," of which the following is the abstract given in the *Medical News*, May 23rd: It has long been recognized that the bromides may increase the unpleasant after-effects of epileptic attacks, especially the irritability of temper. This will, in some cases, be accompanied by ptosis and feebleness of the limbs, not rarely more marked upon one side than upon the other, just like some drunkards who can recognize that they are distinctly "drunker in one leg than in the other." Feebleness and dullness so marked at times as to amount to partial imbecility. This was the case of a girl of seventeen, whose father, an apothecary, on the principle "if a little helps, much will cure," had been giving her 150 grains of potassium bromide a day. The fits stopped, the child nearly did the same, lying for days in a state of imbecile collapse, but recovered rapidly when the drug was stopped.

In two children, to each of whom 100 grains of lithium bromide was given by mistake, a similar, though milder, condition developed. There were curious disturbances of memory, and they were quite unable to walk, the left leg being worse than the right. In many cases he had seen melancholia and mental depression, even a suicidal degree, produced by the continued use of the drug. In one singular case a doctor's wife, who had been mildly melancholic for years, on approaching the menopause, began to be troubled with marked suicidal tendencies at her menstrual periods. These she confided to her husband, and he brought her to Dr. Mitchell, when, after much questioning, she confessed for the first time that ever since a furious attack of sciatica years ago, she had been taking sixty grains of mixed bromide daily "for fear the pain would come back." She was advised to stop this practice at once, and to her surprise her next period passed without any unpleasant symptoms, and in a few weeks she was rid of her melancholia entirely. A year later, in the course of a neuralgic attack, she was given ninety grains of bromide by an attendant, with the result that her melancholia returned and lasted until the effects of the dose had passed off. In other epileptic cases the drug would increase irritability of temper to the verge of homicidal tendencies.

Some years ago a young farmer was brought in by his friends with this sort of a history. Dr. Mitchell was then utterly skeptical as to the possibility of such an effect, and in spite of the great reluctance of the patient's family, insisted on putting him upon the usual bromide treatment. The experiment at the end of three days came most perilously near resulting in a tragic homicide, and the doctor was fully convinced without further trial. In two instances young boys were reported by their parents as "ugly" and unmanageable whenever they were taking the bromide, though at other times good-tempered and obedient.

The drug also produced marked maniacal excitement, which passed away on its stoppage.

In the discussion following, Dr. Janeway mentioned several fatal cases of bromide poisoning with doses of three, six and eight drachms respectively. Two other similar cases had been reported to him by the coroners of New York. The excessive use of "bromo-soda" by alcoholics for sobering up had caused symptoms closely resembling those of general paralysis. He was sure that many cases of mental depression in convalescence from typhoid were due to the bromides taken.

Dr. Hare questioned whether the potassium element might not be the dangerous one—even citrate of potash in large doses had been known to cause collapse. In the use of bromo-caffeine or bromo-soda might not the caffeine be responsible? He had seen large doses of it, given in heart disease, produce acute mania.

Dr. Lyman questioned whether heredity and the arthritic diathesis might not contribute largely to the irritability and mania. He had avoided the potash salts for years.

Dr. Thomson added cases corrobative of the paper.

Dr. Dana rejected the idea of the special harmfulness of the potash salts. He thought the chief danger was from the bromide alone, and that if the doses were not so unnecessarily large it would all be avoided. In his experience three to five grains produced as marked effects in most cases as twenty or thirty grains.

Dr. Mitchell, in closing the discussion, said that personally he had seen as depressing effects from the sodium and lithium as from the potassium salts. He urged a more sparing use of the bromides which seemed to be regarded as a therapeutic necessity in nearly all nervous affections, as he seldom saw a case in consultation in which they had not been prescribed. —*Am. Jour. of Insan.*

A New Method of Treatment of Hysterical Aphonia.—Michelson, (*Jour. Eye, Ear, and Throat*).—The method consists in, after certain preparations as though something important were about to occur, placing the finger in the naso-pharynx as in adenoid operations. The manipulation causes frequently great commotion. Then, it is probably terror that causes the return of the voice. After the patient is through crying out, he is made to count with a loud voice, and then discharged. The novelty of the method has doubtless much to do with the reported good results.

NOSE AND THROAT.

IN CHARGE OF

J. MURRAY McFARLANE, M.D.,

Laryngologist to St. Michael's Hospital. 32 Carlton Street.

THE TREATMENT OF ATROPHIC RHINITIS, WITH A CASE.*

BY. W. PEYRE PORCHER, M.D., CHARLESTON, S.C.

The object of this paper is to elicit a consensus of opinion in regard to the best method of treatment of atrophic rhinitis. It is pitiable to find out what desperate measures are resorted to for the relief of this condition, because people believe that doctors are helpless to relieve them, and therefore willingly accept the most violent or disgusting remedies. For example, I was recently informed by a comparatively intelligent man that he had been almost cured by inhaling his own urine. This he practised continually until he was induced to discontinue it by the fear of gonorrhœal or syphilitic contagion in the nose and eyes.

It is hard to find any two authors who agree upon a specific line of treatment. The journals team with innumerable suggestions, the majority of which are generally utterly useless, because they are not directed to the cause of the disease, and very often even aggravate a condition which is already almost, if not quite, incurable. In order, therefore, to get the best result possible—which is at best a palliative one—it is necessary to determine what is the exact cause of the disease and what is the *status præsens* of a case which aggravates the condition and completely obviates Nature's efforts at repair.

Many theories have been advanced of the ætiology of this disease. Dr. Mackenzie says: "That atrophic rhinitis always appears as a sequel of a pre-existing catarrhal inflammation is rendered highly probable from a number of clinical and pathological facts. If the clinical history be accurately taken, it will point to a pre-existing catarrhal process. As has been indicated above, the rapidity with which the hypertrophic passes into the atrophic form of rhinitis is proportionate in all probability to the possession of some constitutional taint, such as congenital or acquired syphilis."

Dr. Bosworth says that a purulent rhinitis in childhood is a catarrhal process in the first year and a catarrhal process always, and that it consists essentially in an increased secretion of mucus in the earlier stages, together with a rapid desquamation of epithelial cells, which, running its course as a purulent disease in from five to ten years, develops finally into what is known as atrophic rhinitis. The disease, in fact, is the first

* Read before the American Laryngological Association at its eighteenth annual congress.

stage of so-called dry catarrh or ozæna. The theory that a purulent inflammation of the accessory cavities was the cause of atrophic rhinitis was advanced many years ago by Michel.

An hypertrophied mucous membrane was found in one nostril with atrophic degeneration in the other, but that does not prove that either condition is dependent upon the other.

Syphilis frequently results in atrophic degeneration of one or both nostrils as a natural result of the ravages of that disease.

Purulent discharges originating in any of the accessory sinuses or resulting from a simple acute inflammation may likewise result in atrophic degeneration, with more or less complete destruction of the muciparous glands and follicles.

The effect of pus on the epithelia and glandular structures, especially in the nose, need not be dilated on here, but it has been a well-observed fact that atrophic degeneration almost always begins upon the middle turbinate bones, and it has also been noted that scabs which become incrusted there and elsewhere almost always contain some particles of pus incarcerated on the under surface of them. Of course, it may be said here that atrophy may result from the simple non-use of any organ without the presence of any inflammation—simple or purulent—to produce it.

Paradoxical as it may appear, but nevertheless true, the nostrils of habitual mouth breathers or those to whom the nose is little more than an ornament on the face, instead of becoming larger from atrophy of the mucosa, become narrower and more occluded, almost as though an hypertrophic instead of an atrophic process had been established, so that it cannot be said that atrophic degeneration is in any case due to simple non-use of the organ—first, because of the reason above cited; and, second, because the worst cases of atrophic rhinitis are often found in those who live in workshops where they breathe the most foul air, sooty emanations, etc.

Atrophic rhinitis occurs quite often at a very early age. Large green scabs forming complete casts of the nose have been found in children of seven years and younger. In these cases the ætiology of hypertrophy—dust inhalation, etc.—has to be entirely excluded. This was notably the case in a child of six or seven years that was brought to the writer several years ago. There was no specific taint in this case, and hence there could be but one cause to which the disease could possibly be attributed—namely, a prolonged acute rhinitis, resulting in an acute cold, which had been left to run on until the nasal mucosa was almost entirely destroyed.

It is apparent, then, as has been stated by some writers, that atrophic rhinitis, is not a disease *per se*, but is the result of any inflammation, acute or chronic, specific or non-specific, whether excited by exposure to cold or continuous inhalation of irritating dust, vapors, etc., which ends in a purulent discharge, and which may or may not involve the accessory sinuses, but is sufficiently prolonged to wash away the epithelia and destroy the nasal mucosa, turbinates, etc. If this is true, what measures should best be instituted for the relief of the patient, and what hope have we that the formation of scabs may be stopped?

It would be but a simple matter to search for and give free outlet to

all pus cavities, scrape away carious bone, and wash out scabs, etc., but it has heretofore been the humiliating experience of the writer, in common with other physicians, to find that the scabs continued to reform exactly as they did before, and that the douche had to be used as persistently as ever.

It is with great hesitancy, therefore, that I venture to offer a method of treatment which in one case at least has exerted a marked influence in stimulating the nasal mucosa to an almost hypersecretion, and causing the scabs to move from their former site, so that they might more easily be blown out of the nose.

The patient was a lady, aged thirty-four years, without any specific taint that I could detect, of splendid physique, and in excellent health otherwise. The scab formations were first noticed about fifteen or more years ago, following an attack of measles. Since then she has suffered much at the hands of many doctors and from varied treatments. The inferior and middle turbinates are gone on the left side and seriously injured on the right. When she came to me I first suspected involvement of the accessory sinuses, but, on account of uncertainty, I resorted to almost every kind of local stimulating application in combination with iodide of potassium, freely administered internally. This was given not for its antisyphilitic effect, but on account of its influence on lacrymation, etc.

Scarcely any local improvement resulted from this. Finding, then, that the left side was the most seriously affected, I opened the anthral and ethmoidal sinuses on that side thoroughly, and irrigated them daily with antiseptics, but this also failed to afford relief.

Acting upon the suggestion of the Gottstein cotton tampon, I saturated a pledget with a strong solution of iodine, glycerin, and the iodide of potassium as follows:—

℞ Iodide of potassium ..... ℥ ijss.;
Iodine ..... gr. xl;
Glycerin ..... ℥ j.
M.

This was packed daily between the upper turbinate and the roof of the nose, and allowed to remain for twenty-four hours. Profuse lacrymation and supersecretion were caused, and the scabs were forced from their old location and collected in the lower nostril and were blown out. The scabs still continued to form, but the patient is enabled to get them out much more readily and to partially do away with the use of the nasal douche.

As already above stated, this paper is written purely in hopes that it may elicit the best practical measures for the relief of these cases because they are surely regarded at present by the laity and general profession as the *opprobria medicorum par excellence*.

[NOTE.—Commenting upon the above article upon atrophic rhinitis, I have found the "plasma nasal tablet" (Parke, Davis & Co.), added to two ounces of warm water, used three times a day as a spray or douche, to be of great utility in the disease, two cases upon my books having apparently been cured by the persistent use of the plasma solution with no other local treatment whatever.—MURRAY MCFARLANE.]

CASE OF LARGE PAPILLOMA, WITH OBSTINATE HYSTERICAL APHONIA.

BY A. B. FARNHAM, M.D., MILWAUKEE.

On March 2, 1894, N. B., nearly 14 years of age, consulted me. Family history showed father and mother died of phthisis. When ten years and six months old, she had measles, on recovery from which she noticed a slight hoarseness. This rapidly increased, and in three weeks she could talk only in a whisper. Difficulty in breathing began later, and gradually increased until in November, 1893, respiration had become somewhat difficult. Her general appearance was anemic in the extreme; weight, 45 lbs.; glands of neck enlarged, notably on the left side, head drawn to that side; breathing stridulous.

Mirror showed swollen arytenoids and an appearance like extensive ulceration between the swollen membranes. Unfavourable prognosis given. Immediately lanced the swollen tissues on the left side, with slight but instant relief. Next day, lanced the right side, and then could see that there was a large growth of some kind apparently filling up the whole larynx. Removed with Mackenzie's forceps quite a mass of papillomatous growth. The blood running into the trachea caused me to suspend the operation. At the next sitting, used my pharyngeal finger-nail, and scooped out all I could reach. The fragments secured filled a drachm vial. The stump was treated with chromic acid fused on point of small applicator. The attachment was on under surface of left cord at anterior commissure.

Her breathing became normal, her cords perfect in action; but six weeks of treatment did not enable her to talk out loud, although she gained rapidly in flesh, became rosy-cheeked, active and vivacious. For a time, I heard from her directly—no improvement in voice. Five months after, through a letter written to a nurse, I learned that while with a chorus of many children, she found herself making as much noise as any of them. This was afterwards corroborated by the physician, who reported this year that she had no further trouble.

I report the case for what interest it may have. The using of the finger-nail and clearing the growth to the stump was a great satisfaction.—*Laryngoscope.*

INSANITY AND HEADACHES DUE TO NASAL INFLAMMATION.—Dr. J. H. McCassy (*Cincin. Lancet-Clinic*) says that as a result of his observation in the examination of about eight hundred cases, several times a week, in the Kansas State Insane Asylum, he is convinced that hypertrophies, vaso-motor rhinitis, polypoids, deflections of the septum, chronic inflammation of the ethmoidal, frontal and maxillary sinuses, etc., are frequently the cause of headache, and in not a few cases of insanity.

NASAL HYPERTROPHY IN ITS RELATION TO EAR DISEASE.—MacNaughton Jones (*Annales des mal. de l'Oreille*, Vol. 22) concludes, as the

result of long observation and careful investigation, that hypertrophies of the turbinates as ætiological factors of deafness, present a smaller percentage than would appear probable at first. An examination of 300 cases of aural disease revealed only 69 hypertrophies of the turbinates and 18 deviations of the septum; in only 25 per cent. of the cases, therefore, can nasal obstruction be regarded as causing deafness. He lays stress on the too frequent and too severe treatment directed toward hypertrophy of the turbinated bodies for the relief of deafness, and cautions against too free an application of the cautery and snare in the consequent turbinatomy.—*Laryngoscope.*

INTRATRACHEAL MEDICATION.—Dr. J. L. Barton, in an article in the *Med. Record*, reports having treated twenty-five cases by intratracheal injections, including cases of severe laryngo-tracheitis, bronchitis, and tuberculosis, and one case of asthma. He cites as the advantages of this form of medication:

"1. The remedy is applied directly to the irritated mucous surface.

"2. It immediately alleviates the most distressing symptoms, adding at once to the comfort of the patient.

"3. In a certain number of cases, the antiseptic effect of the medicine is very pronounced, as shown by the longer interval between the febrile attacks and by their lessened intensity, when they do occur.

"4. The tracheal and bronchial mucous membrane rapidly absorbs the medication, so that we may expect a general as well as a local effect.

"5. We avoid disturbing the patient's stomach with nauseating doses and the shattering of his nervous system with opiates.

"6. This method of alleviating the most distressing and annoying symptoms does not interfere in the slightest degree with any other line of general treatment which may be deemed advisable.

"7. In cases characterized by an atrophic condition of the tracheal mucous membrane or of pulmonary disease with cavitation leading to retention and decomposition of the secretions, intrabronchial injection will remove the disgusting fetor of the breath consequent upon this condition."

The remedies employed should be soothing and the vehicle non-irritating, the preferable vehicles being the petroleum oils.

From one-half to one drachm may be injected at each insertion of the tube, and this may be repeated at one sitting until from two to four drachms have been used.—*Laryngoscope.*

HYPNOTISM IN THE CURE OF STAMMERING.—Thomas B. Keyes, in the *Columbus Medical Journal*, reports his success with hypnotic suggestion in the treatment of severe cases, after methods of exercise, breathing, elocution, etc., had been tried to no purpose: "Though it would be difficult to trace the exact details through which the cure is effected, it is probable that in these cases it was brought about more particularly by suggestions made with a view of giving to the patient confidence in his ability to talk without stammering; though by hypnotism an influence may be exerted upon any organ or part of the body."—*Laryngoscope.*

EYE AND EAR.

IN CHARGE OF

D. J. GIBB WISHART, B.A., M.D.C.M., L.R.C.P.L.

Professor of Ophthalmology, etc., Ontario Medical College for Women; Rhinologist and Laryngologist to the Hospital for Sick Children; Assistant Rhino'ogist and Laryngologist Outdoor Department Toronto General Hospital, etc.

THE EFFECTS OF NASAL OBSTRUCTION ON ACCOMMODATION.

BY P. W. MAXWELL, M.D., EDIN., F.R.C.S.I.

Assistant Surgeon to the National Eye and Ear Infirmary, Dublin.

In Ireland ophthalmic surgeons are also aurists. For the last ten years I have observed how frequently the same patient seeks advice about his eyes and ears at the same time. On examining these cases more minutely it would appear that the eye symptom is almost invariably accommodative asthenopia, while the ear trouble is chronic catarrh.

It is generally supposed that accommodative asthenopia, when once established, will remain as a permanent condition unless the patient consents to use his eyes less or to wear glasses. When ordering glasses the surgeon generally informs the patient that they will not cure him, but that as long as he wears them he will be free from symptoms, and that, instead of being able to give them up after a time, it is more probable that he will require a stronger pair later on.

This is in the main true, but everyone must have seen cases where the asthenopia subsides and the glasses are given up. In my experience this has happened with comparative frequency in the combined eye and ear cases to which I have referred. These patients received some nasal treatment. This has led me to think that an abnormal condition of the nose might cause asthenopia. At the time that this idea occurred to me I could recall no case in which an asthenope had made any complaint about his nose. This was, however, no disproof, as the majority of cases of catarrhal deafness are unconscious of rhinitis, and are much surprised that nasal treatment should be suggested.

Seeing, therefore, that the condition I wished to investigate was, as a rule, not noticed by the patient, it became necessary where it was suspected to examine the nose and naso-pharynx for myself. Accordingly in every case of accommodative asthenopia, where the degree of hypermetropia or astigmatism was small, the patient young and the vision good, I observed whether the patient breathed through his mouth or nose, and inquired whether he were subject to colds in the head, and if not, whether the opposite condition were present, namely, an uncomfortable dry condition of the nose. Lastly, anterior and posterior rhin-

oscopy were employed. Where the latter was impossible the naso-pharynx was examined by palpation.

I have now come to the conclusion that asthenopes who frequently or habitually breathe by the mouth are more likely to be benefited by nasal treatment than are those in whom the nasal mucous membrane is quite as abnormal, but who can breathe freely through the nose. The most usual causes of nasal obstruction in this connection are adenoids in the naso-pharynx and enlarged turbinals.

Where the nasal mucous membrane is too dry, relief is usually got by sniffing up the nostrils once daily ℥j of common salt with gr. v. of sod. bicarb. dissolved in a tumbler of hot water. If there is too much secretion, ℥j of a mixture in equal parts of common salt, pot. bicarb. and pot. chlorat. should be used in the same way. Adenoids, if large enough to stop nasal respiration, should be removed as freely as possible. Enlarged turbinals which are not reduced after a few weeks' use of one of the above washes, should be scored along their inner surface by a thermo-electric cautery drawn from back to front, the septum being protected by a guard.

Schmidt-Rimpler has shown that carious teeth may cause asthenopia by diminishing the accommodative power.* Irritation of the fifth nerve in the teeth or nose may reflexly inhibit accommodation.

Direct stimulation of the long ciliary nerves causes a dilatation of the pupil, and will also, if accommodation has already been induced by pilocarpin, lessen or abolish it. Jessop, in a most interesting lecture at the College of Surgeons, in February, 1887, showed that, though stimulation of the cervical splanchnic dilated the pupil, it had no effect on accommodation. The origin of the fibres which inhibit accommodation has, so far as I know, not been found out, but they can be traced as far as the Gasserian ganglion. At this point they must come into close relationship with the sensory fibres of the fifth nerve, which probably explains the clinical fact that irritation of the teeth or nose has a special influence in arresting accommodation.

Dr. FitzGerald, of Dublin, at the meeting of the British Medical Association in 1883, showed that many chronic cases of conjunctivitis and blepharitis, especially the latter, resisted all treatment till some concomitant error of refraction was corrected. I have frequently seen cases of old-standing blepharitis under his care recover after glasses were ordered without any local treatment at all. The same result has in my experience often occurred where the nose only has been treated Both sets of cases may be explained in the same way. In hypermetropes the excessive accommodation must determine a greater than usual flow of blood to the eye and its appendages. This habitual congestion will not cause inflammation, but it must tend to keep it up when once otherwise established. Nasal obstruction, by making accommodation more difficult, will tend to act in the same way.

* *Graefe's Archiv.* xiv., p. 107.

TREATMENT OF CORNEAL OPACITIES BY ELECTROLYSIS.

BY EDGAR STEVENSON, M.D.,
Assistant Surgeon, Liverpool Eye and Ear Infirmary.

In bringing before the Section this form of treatment, I wish at the outset to emphasize a fact which is well known to all who interest themselves in eye diseases, and especially to those who are connected with large eye clinics—namely, that opacities of the cornea, in which I include all those caused by keratitis, ulcer, or direct injury, are among the commonest, and at the same time the most intractable, of all eye complaints; and I do not think it is any exaggeration to say that, except in infants, and in the very slightest cases in childhood, the recognized treatment by stimulating ointments, or any other of the ordinary means, is a more or less disheartening failure. Indeed, beyond the making of a false pupil, which at the best is generally of doubtful value, and the still more dubious transplantation of the cornea, which appears to have been successful only in the hands of its inventor, I do not think that any surgical procedure for the relief of this affection has been seriously attempted; and it has always seemed to me to be somewhat of a reproach to ophthalmic surgery that an eye, possessing in every other respect all the essentials of perfect vision, should be rendered practically useless by the presence of a small central nebula left by an ulcer from some attack of measles or some digestive trouble of childhood. Any treatment, therefore, which seems to hold out hopes of better results than are usually attained is certainly worth a trial; and I am sure that in electrolysis of the cornea we have a method which in some cases is brilliantly successful, and in all cases will do more good than years of treatment by yellow ointment.

The application of the galvanic current to the eye, is, of course, no new thing, and for this particular class of cases it was tried by Adler some years ago. He reported favourably of it, but used far too strong currents, and his method of application was faulty. His good results were more than counterbalanced by the pain, and occasional damage caused, and the treatment was dropped as too uncertain and dangerous.

I heard of this while working in Germany, and determined to try it for myself on the first favourable opportunity. Since, however, I started experimenting in this direction, I saw that it had been revived in America by Dr. Dennis, of the Erie Eye Hospital, Pa. He appears to have given an exhaustive trial to all the various methods of massage with stimulating ointments, pressure, inunctions, etc., but finds that nothing equals or even approaches electrolysis in good results. I have been in communication with Dr. Dennis, and am indebted to him for some valuable hints and records of cases.

The method that I employ is as follows: the current may be taken from the street main, if the supply be of the constant variety, or may be taken from a good battery; the latter is simpler and more easily managed, and a reliable galvanometer and rheostat must be included in the

circuit. (If the main current is used, the greatest care should be taken in the construction of the switchboard, and a volt regulator and meter must be employed as well as the current rheostat and meter.) The kathode is the active pole, and is applied to the eye by means of a small silver rod with rounded end. The anode is of the ordinary sponge or disk type, and may be applied to the cheek of the patient on the opposite side to the eye to be treated. I find that with everything in proper order a pressure of $1\frac{1}{2}$ to 3 volts is sufficient to give the requisite current. This should be about $\frac{1}{4}$ m.a., and should never exceed $\frac{1}{2}$ m.a. The eye is cocoanised, and the patient, who should be lying down, is directed to hold the anode on the cheek. The current is then turned on, and the lids being held apart by fingers, the silver rod is rubbed lightly over the opacity for about one minute. The galvanometer should be just beside the patient's head, so that the variation of the current may be watched. The cornea should be kept moist. A slight frothing is generally seen in the track of the rod, but no pain, or at most a slight pricking sensation is felt. A little vaseline is put into the eye, and bandaging should be avoided. If, as sometimes happens, there is any photophobia or lachrymation, it can readily be treated by the ordinary methods. The treatment may be applied every day or at longer intervals; as a rule, I find every other day most suitable. By keeping to this small current, and by not allowing the electrode to rest any length of time in the same spot, all damage to the cornea can be avoided; a current of 1 to 2 m.a., as used by Adler, might easily cause serious mischief.

The length of the course of treatment depends on the density and nature of the opacity. Faint nebulæ, which, however, have resisted ordinary treatment, are disposed of in six to ten applications. The denser opacities begin to clear at the edges, and it requires much perseverance on the part of both surgeon and patient before, in some cases, any great improvement in central vision is noticed. The very dense opacities resulting from sloughing and perforating ulcers I have always regarded as practically hopeless from any point of view, and have avoided wasting any time on them which might be more profitably employed on more hopeful cases.

After 15 to 20 applications of the current it is well to stop the treatment for a month or two, as the cornea appears to get thin and soft, and its curvature may be permanently altered.

I am unable to say what is the exact nature of the change that takes place in the part of cornea treated, whether it be a real electrolytic action, or only an improved method of irritation; it is perhaps a combination of both, but that some electro-chemical action is taking place is shown by the fact that permanent damage may easily be caused if the current be too strong and the electrode be allowed to rest too long on one spot.

To Remove Fish Bones From the Throat.—*Gen. Pract.*—Fish bones can sometimes be expelled from the throat by giving from four to six ounces of milk, and forty minutes later an emetic dose of zinc sulphate. The vomit of coagulated milk carries the bone before it as a rule.

PAEDIATRICS.

IN CHARGE OF

J. T. FOTHERINGHAM, B.A., M.B., C.M.,

Physician to Out-door Department Toronto General Hospital; Physician to Out-door Department Hospital for Sick Children.

ADHERENT PERICARDIUM IN CHILDREN.

Swift and Freman of St Mary's Free Hospital for children, New York, conclude as follows in a recent investigation of this subject:—

Cases of adherent pericardium in children, although probably not rare, are apparently frequently overlooked. Our knowledge of this condition has received very valuable accessions recently from Broadbent in England.

Adherent pericardium arises from a single attack of pericarditis or from repeated attacks which may have a sub-acute character. The adhesions may be partial or complete. A marked hypertrophy and dilatation of the heart often accompanies this condition, although in some cases the heart remains normal in size or atrophied. Symptoms arising from embarrassment of the circulation due to this condition are dyspnœa, œdema, ascites and vomiting.

The physical signs of adherent pericardium depend on the extent and position of the adhesions and on whether they involve only the two layers of the pericardium or exist between the pericardium and chest wall or adjoining pleura, diaphragm or other parts of the mediastrinum. Of the physical signs often found the following are important:

1. Marked enlargement of the heart is present in many cases, accompanied by various murmurs.
2. Systatic depression at site of apex beat.
3. Systatic retraction of lateral and posterior walls of thorax.
4. Impeded descent of diaphragm in inspiration.
5. Dilatation of the veins of the neck with sudden emptying in diastole.
6. Absence of feebleness of apex beat.

In three of the four cases which they studied the adhesions of the pericardium were complete and were associated with marked cardiac hypertrophy and dilatation, and gave double murmurs at both the apex and base of the heart. In none of the cases was a history of a previous attack of pericarditis obtained. *Arch. of Pœdiatrics*, Oct., '96.

THE PRODUCTION OF ILL-HEALTH AND DEATH BY THE USE OF CARBOLIC ACID AND ALLIED ANTISEPTICS.—Von Stuhlen (*Kinderarzt*, 1896, vii. 42) draws the following conclusions from his investigations of the subject:

1. The use of carbolic acid and allied disinfectants are responsible for shattered health and deaths, but more often is death produced than serious chronic illness.

2. Most accidents are due to carelessness, usually through the careless setting away of the poison, so that a mistake is easily made by exchanging it for other medicines or liquids.

3. Medical poisonings occur very seldom, and when they do occur are usually due to the use of solutions of too great strength.

4. Children and weakly persons are very susceptible to the poisonous actions of antiseptics, particularly to carbolic acid poisoning, and in these patients it is possible that the usual strength of the solution may produce bad effects.

5. The application of carbolic acid to mucous membranes in large quantity is very dangerous, on account of the rapid absorption which takes place—above all is the use of carbolic acid, even in small quantities, dangerous as an injection.

6. It is well to be somewhat skeptical as to the absolute immunity from poisoning by the newer antiseptics. There is no absolute proof that they are perfectly harmless; in fact, a few cases of accidents have already happened through them. They are, however, as a rule, much less dangerous than carbolic acid.

7. The autopsies in cases of poisoning by the above-mentioned antiseptics were not very satisfactory.—*Pediatrics.*

Martin, of Colorado Springs, has an interesting paper in *Arch. of Pœdiatrics* for October on a case of nocturnal enuresis in a male 16 years of age. The affection had existed in very severe form since birth. All the usual remedies had been employed, and on coming under Martin's care, ergotin and atropin made some impression at first on the condition, so that one or two nights a week he might remain dry, but never unless he got up several times a night to empty bladder. During the day the bladder had to be emptied at least every two hours. Examination of the penis, rectum and urine showed nothing abnormal, but the bladder was found to have a full capacity of only four ounces. This gave the necessary hint, as to both cause and treatment, and by careful distension with a Davidson syringe the capacity of the bladder was raised in about two weeks to seventeen ounces. Atropin and ergotin still kept up and faradism applied by varnished sound to neck of bladder, other pole placed upon hypogastrium. As this time patient could generally go all night dry by getting up once. Fourteen months after this, treatment having been discontinued for a year, patient reports himself to wet the bed an average of once a week. Nearly three years afterwards, or about five years after treatment, he reports that without any treatment in the interval, bedwetting occurs about once a month, though he still rises to void the urine in amounts of about six ounces at a time. Recontraction seemed to have occured, as the bladder could hold by injection one pint easily when treatment was stopped. The condition is interesting, though paralleled in other cases, as when urethral stricture after dilation contracts unless redilated at intervals.

When Shall Alcohol be Given to Children.—Grocz (Budapest) (*Centralblatt für innere Medicin*, Vol. 17, No. 21) warns against the abuse of giving children wine or brandy in an unsystematic way and in reckless doses, as also against the early use of alcoholic beverages. Besides reporting two cases of acute alcoholic intoxication, which evidenced itself in a comatose condition and severe tonic and clonic convulsions, he mentions severe dyspepsias, cases of epilepsy and chorea as the sequel of an early abuse of alcohol. A certain number of neurasthenic conditions in children are to be traced to it. There are only two effects of alcohol to be made use of therapeutically—namely, its stimulant qualities on the heart and as a preserver of tissue. In its first property it may be a direct saver of life, in cases where a sudden collapse of strength and rapid heart failure makes its appearance; also in acute infectious diseases, in the collapse of infants suffering from intestinal troubles and in great loss of blood. As a conserver of tissue it may be given in chronic complaints which have a tendency to gradually weaken the system (rhachitis, tuberculosis and scrofulosis). As a general rule the principle should be adhered to that alcoholics be only given children for therapeutic purposes, and exclusively for the above indications.—*Pediatrics*, Aug., '96.

Treatment of Post-Scarlatinal Dropsy in Childhood.—F. Schmey (*Allgem. Medic. Central. Zeitung*, 1896, No. 1) has for ten years followed successfully the plan here given in numerous cases. The child is wrapped from head to foot in a wet sheet, then tightly wound in a woollen blanket. The patient now receives every hour a teaspoonful of Syr. Jaborandi (Preparation: 0.3 grm. fol. jaborandi are heated in a steam bath with 20 grm. water for ten minutes, the strained liquid filtered and 10 grm. of sugar dissolved in it by boiling) until free perspiration takes place. Only then is he freed from his covering. This is to be repeated daily until the œdema has been removed, which usually is effected within two or three days. There have never been any annoying consequences. In children over fifteen years old, he gives pilocarpine hypodermatically, and places the child in a hot bath before packing in the sheet.

Congenital Teeth.—Ballantyne, of Edinburgh, after a careful study of seventy cases, arrives at the following conclusions in a paper published in the Edinburgh *Medical Journal*, No. 491, 1896:

1. Congenital teeth form a rare anomaly, but one which has long been known both to the profession and to the public.

2. Their presence has often an ill effect upon lactation, partly on account of the imperfect closure of the infant's mouth, and partly by the wounding of the mother's nipple; sublingual ulceration may also be a result, and infantile diarrhœa and atrophy are more distant consequences. Sometimes, however, symptoms are altogether absent.

3. Congenital teeth have probably little or no prognostic significance as regards the bodily or mental vigour of the infant carrying them.

4. The teeth usually met with are lower incisors, but sometimes upper incisors may be seen, and very rarely molars of either the upper or lower

jaw. Other facial or buccal malformations may occasionally be met with.

5. They are caused by the premature occurrence of the processes which normally lead to the cutting of the milk teeth; in a few cases it would seem that the anomaly is due to a true ectopia of the dental follicle and its contained tooth.

6. In a few instances a hereditary history has been established.

7. As congenital teeth are usually incomplete and ill-developed, and likely to be more an inconvenience than an advantage to the infant, they are best removed soon after birth, an operation which can be easily, and, except in very rare instances, safely performed.

8. The occurrence of premature teeth in certain well-known historical personages is an interesting fact, the importance of which has been much exaggerated.—*Archives of Pediatrics.*

[NOTE.—With regard to conclusion No. 3, the only case known to the writer was undoubtedly one of very well-marked idiocy, the other evidences of deficiency, both physical and mental, being abundant.]

BATHING.—The newly-born babe must not remain uncovered for any length of time. The nurses who spend—with more pedantry, emphasis and self-consciousness than intelligence—much unnecessary time in oiling and soaping and washing and bathing, turning this and that way, drying the surface, wrapping the navel, applying the bandage, and dressing the newly-born in fineries, in which it finally arrives, shivering with a cold nose and blue feet, are not infrequently the causes of ill-health or death. In a case recently seen, the pneumonia of the newly-born was undoubtedly due to the fact that the baby was neglected while both physician and nurse were engaged about the fainting mother. Craig must have seen many such cases, for with him, "no baby is ever washed, dressed, fed, tied up; the cord is not wrapped up, but the infant is anointed with fat and wrapped in flannel the first twenty-four or thirty-six hours."—A. Jacobi, *Pediatrics.*

POST MORTEM DELIVERY.—The following case illustrating certain factors of much medico-legal importance, which underlie post-morten delivery, has lately been reported in the *London Lancet:* A twenty-year-old primipara, in the last month of pregnancy, died suddenly from eclampsia. Two hours after death she was laid out on a bed covered with a sheet. Fifty-three hours afterward an autopsy was made at the direction of the court. There was then found between the thighs of the girl a fully developed child with the back upward, the chin on the breast, the legs extended at the knees, but fixed at the hips with the feet near the chin. The fundus of the inverted uterus was visible outside the vulva, with the placenta hanging from it. The funis was uncommonly short. After removal of the placenta the uterus was replaced, but the intra-abdominal pressure immediately expelled it again. There was considerable laceration of the perineum, but no sign of blood on the bed. The body was already advanced in decomposition.

The Canada Lancet

A Monthly Journal of Medical and Surgical Science, Criticism and News.

☞*Communications solicited on all Medical and Scientific subjects, and also Reports of Cases occurring in practice. Address,* DR. J. L. DAVISON, 20 Charles St., Toronto.

☞*Advertisements inserted on the most liberal terms. All Cheques, Express and P.O. Orders to be made payable to* DR. G. P. SYLVESTER, Business Manager, 585 Church St,, Toronto.

AGENTS :—Eastern Agents, MONOHAN & FAIRCHILD, 24 Park Place, New York ; J. & A. McMILLAN, St. John, N.B.; Canadian Advertising Agency, 60 Watling St., London ; 5 Rue de la Bourse, Paris.

The Largest Circulation of any Medical Journal in the Dominion.

Editorial.

RETRODISPLACEMENT OF THE UTERUS.

To the general practitioner, as well as the specialist, the above form of uterine disease is always of paramount importance. It will be interesting, therefore, to our readers to note the results of one hundred and ten operations done for such displacements by A. Lapthorn Smith, M.D., of Montreal. In forty-two cases Alexander's operation of shortening the round ligaments was done and in sixty-eight ventro-fixation, or suspensio-uteri, was resorted to. Dr. Smith feels justified in coming to certain conclusions concerning those two operations, having been performing them for over six years.

Most of the patients had been seen and examined not only by himself but also by many other physicians and students attending his clinics, while the few who had not been seen had been heard from through the physicians who had sent them to him. The results of both operations had on the whole been very satisfactory, with the exception of two cases, in which the ligaments broke, being very fatty, and also partly owing to the method of operating, which he has since improved; in one of these cases he immediately performed ventro-fixation with good results; the other was a complete failure, having declined further operation. Also in one of the Alexander cases the uterus remained in good position for six months, when it began to fall a little. The failures all occurred among his earlier cases, none having occurred among those operated upon during the last two years. So far no case of hernia had resulted from the operation. The ventro-fixations gave even better results than the Alexanders. They were performed for the most part upon women who not only had retroversion with fixation, but the ovaries and tubes were at the same time prolapsed and bound down by more or less dense adhesions. In many of these, also, there was laceration of the cervix and perineum with cystocele and rectocele. In those cases in which he had performed seven operations at one sitting occupying from an hour and ten minutes to an hour and a-half, he had obtained the most gratifying results. These operations were: 1st, rapid dilatation with Goodell's

dilator; 2nd, curetting with Martin's curette; 3rd, repair of lacerated cervix by Emmett's method, or amputation by Schroeder's method; 4th, tightening up the relaxed anterior vaginal wall by Stoltz's method; 5th, repair of the perineum by Hegar's method; 6th, removal of diseased tubes and ovaries, and breaking up all adhesions binding uterus down; and 7, scarifying the anterior surface of the uterus and posterior surface of abdominal wall, and stitching the uterus to the latter by two fine buried silk sutures, most carefully sterilized. The disasters following ventro-fixation were two hernias and one relapse, all of which were subsequently remedied by a second operation. At the present time Alexander's operation has no death rate, while ventrofixation, while it has not any death rate in simple non-adherent cases of retroversion, yet it must have a small death rate, at least when it follows the removal of very bad pus tubes.

He had performed both Alexanders operation and ventro-fixation for prolapse as well as for retroversion, and as the results were excellent provided the pelvic floor was at the same time repaired, he much preferred these operations to vaginal hysterectomy for prolapse, as an operation which he had performed a few times, and found easy, but which he hardly felt justified in doing.

Although several of the Alexanders had subsequently become pregnant, in no case did any untoward accident happen. But he had heard that some one on whom he had performed ventro-fixation had subsequently become pregnant and aborted, but he had so far been unable to verify it. He was not aware that any of them had even become pregnant. This was probably owing to the fact that he had in most of them removed the tubes and ovaries, while in those in which he had left one or both ovaries and tubes, they were diseased and unable to functionate. He was frequently asked which of the two operations he preferred. This was difficult to answer. Alexander's was safe, but he preferred ventro-fixation, because it had given him the best results. He would probably continue to do Alexander's operation in young married or marriageable women in whom the ovaries and tubes were perfectly free from organic disease; while he would reserve ventrofixation for women who were sterile or who had marked adhesions, and who had suffered so much and so long in spite of treatment that the appendages had to be removed.

THE ACTION OF BISMUTH SUBNITRATE.

The subnitrate of bismuth is one of the most frequently prescribed of the whole list of drugs. We were taught that its action in disease of the stomach, where it finds its most frequent application, is chiefly, if not entirely, mechanical, like that of charcoal or binoxide of manganese. While it no doubt has a beneficial mechanical effect, recent investigations by Carles, *Br. Med. Jour.*, Gayon and others have proved that it has a powerful bactericidal action, and that an easily decomposable solution containing subnitrate of bismuth keeps indefinitely. Gosselin and Heret have made it useful for cleansing putrid wounds. To understand its ac-

tion when given internally, one must remember that the purest specimen tends to split up into bismuth oxide and nitric acid when in contact with water. (1) Action on the stomach. The oxide, which is in excess of the acid, acts first as a detergent to the gastric mucous membrane and precipitates the mucus, and, secondly, exercises its germicidal power. The nitric acid has a tonic astringent and also antiseptic power. (2) In the intestine it meets with sulphuretted hydrogen gas, which converts it into black sulphide, thus liberating a further portion of its acid, which is again partially transformed into nitrous vapours, the antiseptic action of which has been proved by Girard and Pabst. For these reactions to take place, it is necessary: (1) That the subnitrate should be pure and not mixed with carbonate. (2) That it should be as finely powdered as possible. This latter point is easily proved in the laboratory.

JENNER'S EPITAPH.

Within this tomb hath found a resting place—
The great physician of the human race—
Immortal Jenner!—whose gigantic mind
Brought life and health to more than half mankind.
Let rescued Infancy his worth proclaim,
And lisp out blessings on his honored name;
And radiant Beauty drop one grateful tear,
For Beauty's truest friend lies buried here.

Dr. Jenner died January 26th, 1823, aged 74.

CONFIRMATION BY BACTERIOLOGIC DIAGNOSIS OF EPIDEMIC CEREBRO-SPINAL MENINGITIS.—When Heubner announced his discovery on the living of the microbe of this disease, he remarked that lumbar puncture would become still more important as a means of differentiation. Fürbringer now reports several cases (*Deutsch. Med. Woch.*) diagnosed by lumbar puncture promptly and accurately, with the discovery of the meningococcus intracellularis in the spinal fluid. The cultures showed the characteristic diplococci enclosed in the capsules which refracted the light like a halo around them. The cocci were often assembled in four, six and eight pairs, especially in the older cultures. The median dividing line in the pairs of cocci forming tetrads was very distinct and noticeable. Gram's solution usually decolourized them like the gonococcus, but occasionally the microparasites partially retained their colouring.

CHLOROFORM ANESTHESIA PRODUCED DURING SLEEP.—The experiments of Dolbean, of administering chloroform vapours to persons physiologically asleep and affected with somatic diseases, have been repeated by Dr. R. Gurriere, upon persons who had passed through some mental disease, but were cured so that their discharge could take place a short time after the date of the experiments, and who were perfectly healthy physically. *Riv. Spr. Fren.; Jour. Nervous and Mental Disease.*

The *technique* was to begin the administration of the chloroform very cautiously. A handkerchief drenched with chloroform was first kept about 3 inches from the nostrils, then gradually approached. If reflex movements or wiping off the nose with the hand followed, a short interruption was made. The patients were not informed what was going to be done with them, all possible precautions were taken not to make them suspect anything. The result of the experiments was positive in 4 cases out of 9 examined ones. In one of the cases which gave a negative result the experiment was repeated and was a success after one-twelfth grain of morphine had been given to the patient without his knowledge, some hours before bedtime. The narcosis was not pushed to the degree required for surgical operations, but only to the extent necessary to leave no doubt as to the presence of anesthesia. The limbs were perfectly relaxed; flapping the body and making noise did not awake them; only by forcibly shaking did they finally become conscious. The next morning, however, they did not remember that they awoke during the night, and had not the least idea that chloroform had been administered to them. The result of the experiments is important from a medico-legal point of view, as it proves the possibility of bringing about an anesthesia in a person during sleep, for criminal purposes.

ALCOHOL IN THE TREATMENT OF CARCINOMA.—Dr. H. C. Howard reports (*Medical Standard*), satisfactory results from hypodermic injections of absolute alcohol, to which, if there is an open ulcerating surface, is added from 15 to 25 per cent. of tannic acid; this solution is also employed as a dressing to the surface. Of carcinoma of the breast he says: "I have employed this treatment in ten cases. Nine of the patients recovered and are in good health; in one case secondary extension to the liver took place. In these cases it is my custom to pass the needle through and below the tumour and during the retraction of the needle to inject ten or fifteen minims of absolute alcohol into the tumour. This injection is repeated in four or five points in the tumour. The injections are repeated at intervals of two or three days and the time required for the complete removal of their growth is ordinarily about three months."

CURRETAGE AS A METHOD OF INDUCED ABORTION.—Puech presents the following conclusions (*Ann. de Gyn. et Obst.*):—(1) Curettage should have a place among the approved methods of artificial abortion. (2) Before the fourth month it is efficacious and free from danger. (3) It should be adopted, particularly whenever rapid evacuation of the uterus is indicated. (4.) It should be adopted whenever economy of blood is especially indicated—in anemia and enfeeblement from any cause. (5) In intractable vomiting; particularly is it indicated by two reasons already advanced—rapidity in performance and economy in blood.

HYPERIDROSIS.—An alcoholic solution of formalin, says *The Med. Rev.*, of the strength of from ten to twenty per cent., will speedily check excessive sweating. Tannoform, a mixture of formalin and tannin, dusted on the affected part acts favourably in hyperidrosis or bromidrosis.

A HIGH REPUTATION SUSTAINED.—*The Medical Times and Hospital Gazette*, London, May 30th, 1896, speaks so favorably of its experience with the American analgesic, antipyretic and anodyne, a preparation the medical profession has become accustomed to regard as one of the certainties of medicine, that we reprint below its words of approval, knowing them to be in accord with the consensus of opinion as expressed by the medical men in this country. "Antikamnia—under the above name, a free translation of which is 'opposed to pain'—now being introduced to the profession in the United Kingdom is an analgesic, antipyretic, and anodyne drug, which has already gained a high reputation in the United States. It is a coal-tar derivative, and belongs to the series which form the various amido compounds. It differs therapeutically, however, from most coal-tar products in producing a stimulating, instead of a depressing action on the nerve centers, especially those acting on the heart and circulatory system; hence, it may be administered, even in large doses, without fear of producing collapse and cyanosis, as occasionally occurs after the administration of antipyrin and other similar analgesic compounds. It has been very largely used in influenza, hay fever and asthma, with good results; but its most markedly beneficial effects are experienced when administered in neuralgia, rheumatism, sciatica, headache and pain due to disorders of menstruation. As an antipyretic, it is recommended to be given in doses of from five to ten grains every ten minutes, until the temperature has been reduced, or until forty or fifty grains have been taken, after which the remedy should be given at intervals of greater length. To relieve pain it is recommended to begin with a five grain dose; three minutes later the same dose to be repeated, and if the pain continues, a third dose to be given a few minutes after the second. In our practice we have not found it necessary to give the remedy at such short intervals. In the treatment of neuralgia and headaches we have had satisfactory results from giving five-grain doses at intervals of ten to twenty minutes, until three or four doses have been taken. We may add that the drug is sold in tablets (three and five grain sizes) as well as in the powdered form. The former may be swallowed whole, or crushed and dissolved in glycerine and water, or in an alcoholic menstruum. The powder is conveniently given in cachets, or dissolved in a little wine or aromatic tincture, combined with glycerine or syrup. The drug is deserving of trial, and those among our readers who have not yet tested it should write for a sample."

FOR RINGWORM.—An ointment of resorcin containing thirty to forty grains to the ounce is serviceable in the treatment of the various forms of trichophytosis. Although it is not superior to other remedies of this class, it has the advantage of being a cleanly application, far more so than sulphur and tar which are so commonly employed as parasiticides. In tinea versicolor an alcoholic solution, twenty to thirty grains to the ounce, may be painted over the affected area with a large camel-hair brush nightly, until free desquamation takes place. If the disease is not completely cured when desquamation is completed, the application may be repeated a second or third time.—*Hartzell, Therap. Gaz.*, 1896, *xx.*, 363.

THE LOYAL SURGEONS OF THE REVOLUTIONARY WAR.

To the Editor of THE CANADA LANCET :—

SIR,—Having had occasion during a recent visit to England to make a search for some facts relating to the American Revolutionary War, I came across the names of many of the surgeons of the Loyalist Volunteer regiments. It occurred to me to rescue them from oblivion by publishing the list. Since my return I find that Dr. Canniff, in his admirable work on the "Medical Profession in Upper Canada," has collected many of them. Incidentally the list is of interest in bringing to recollection he names of some of the loyal corps which have been well nigh forgotten. I have been unable to obtain personal data of any importance.

James Lynah, Director General of Military Hospitals.
Wm. McKinstry, Surgeon General of Hospitals.
Richard Bell, Surgeon, Royal Garrison Battalion.
Walter Cullum, Surgeon, Royal Fencible Americans.
Lewis Davis, Surgeon, King's Rangers.
Charles Doughty, Surgeon, DeLancy's 3rd Batallion of Vols.
Alexander Drummond, Surgeon, King's American Regiment.
R. Tucker, Surgeon's Mate, King's American Regiment.
Timothy Dwight, Surgeon's Mate, King's American Dragoons.
Philip Hatchell, Surgeon, Loyal American Regiment.
Wm. Edwards, Surgeon's Mate, Loyal American Regiment.
Thomas Gibb, Surgeon, New York Volunteers.
Gregory Gray, Surgeon's Mate, British Legion.
John Hammell, Surgeon, 3rd Battalion New Jersey Vols.
John Huggerford, Surgeon, Loyal American Regiment.
John Johnson, Surgeon, DeLancy's 2nd Battalion of New Jersey Volunteers.
Archibald Macdonald, Surgeon, Guides and Pioneers.
Murdoch McLeod, Surgeon, North Carolina Loyalists.
Joseph Merren, Surgeon, Georgia Loyalists.
Wm. Patterson, Surgeon, 2nd Battalion New Jersey Volunteers.
J. Peterson, Surgeon, 2nd Battalion New Jersey Volunteers.
John Piper, Surgeon's Mate, North Carolina Highland Regiment.
Nathaniel Smith, Surgeon, DeLancy's 1st Battalion.
William Stofford, Surgeon's Mate, Maryland Loyalists.
Nicolas Humphries, Surgeon, New Jersey Volunteers.
Absolum Bainbridge, Surgeon, New Jersey Volunteers.
John Smith, Surgeon, Connolly's Corps.
Nathan Smith, Surgeon, Rhode Island Loyalists.
Wm. C. Wells, Surgeon, Georgia Loyalists.
James Davidson, Surgeon, Royal Canadian Volunteers.
Cyrus Anderson, Surgeon's Mate, Royal Canadian Volunteers.

It will be noticed that in some instances two or more names are given as surgeons of a corps; the explanation probably is that there were changes in the personnel of the corps. I cannot find any trace of such functionaries as stretcher bearers or ambulance men. It was only during

the Peninsular war, thirty years later, that the Director General, Sir J. McGrigor, attempted first to organize a field hospital and transport for sick and wounded.

Yours,

Toronto, Sept. 21, 1896. G. STERLING RYERSON.

APENTA (APERIENT) WATER.

BY CHARLES R. C. TICHBORNE, F.I.C., F.C.S.,

Dip. in Public Health and L.R.C.S.I. ; Analyst to the County of Longford ; Author of "Mineral Waters of Europe," &c.

The Apenta Water was submitted to careful analysis, and the figures given below represent the composition of this water as bottled by the Uj Hunyadi Company, Limited, at the Uj Hunyadi Springs, Buda Pest.

Apenta Water belongs to that large class of aperient waters which come from the neighborhood of Buda Pest, commonly known under the generic name of Hunyadi, such as Hunyadi Mattyas, Hunyadi Janos, Hunyadi Lajos, Hunyadi Ferenez, Hunyadi Alajos, &c.

We learn that the Uj Hunyadi Springs, from which the Apenta Water is drawn, have been placed under the control of the State Chemical Institute of the Ministry of Agriculture of Hungari, and the bottling of the water takes place subject to the direct supervision of this Department.

The writer examined this water many years ago, and finds that it is constant as regards its general characteristics. This water, on careful analysis, gave the following as its composition in parts per 10,000 :—

	Parts per 10,000.
Magnesia (MgO)	70·2
Lime (CaO)	11·5
Iron (Fe_2O_3)	0·43
Alumina (Al_2O_3)	0·30
Silica ($Si O_2$)	0·32
Potash (K_2O)	0·45
Soda (Na_2O)	92·45
Lithia Li_2O)	0·20
Sulphuric Acid ($S O_3$)	259·66
Chlorine (Cl)	10·81
Bromine (Br)	0·10
Carbonic Acid ($C O_2$)	3·94
Fluorine	trace
Ammonia	trace

When arranged and calculated, according to their affinities, these results give the following as to the composition of the Apenta Water :—

	Grns. per Gal.	Parts per 10,000.
Magnesia Sulphate	1474·2	210·6
Magnesia Carbonate	12·8	1·82
Magnesia Bromide	0·85	0·12
Sodic Sulphate	1307·9	186·84

	Grns. per Gal.	Parts per 10,000.
Calcic Sulphate	184·31	26·33
Potassic "	5.92	0·84
Lithic "	5·31	0·75
Sodic Chloride	123·80	17·69
Fluorine	traces.	—
Sodic Carbonate	33·47	4·78
Calcic "	8·20	1·17
Ferrous "	5·42	0·77
Ammonia (free and albuminoid) traces	0·004	0·0005
Alumina	2·10	0·30
Silica	2·24	0·32
Total (Anhydrous) Solids	3166·56	452·3

Carbonic Acid Gas not determined.

The above salts are all estimated in their anhydrous condition, and the carbonates of lime and magnesia directly determined in the precipitate obtained on boiling. This water is practically free from organic matter, and when examined bacteriologically with nutrient gelatine, seemed to act almost as a preservative when placed in the incubator—rather than as a carrier of germ life.

The Apenta Water is a strong purgative water, containing the two valuable aperient salts known as Epsom salts (or sulphate of magnesia) and Glauber salts (or sulphate of soda) in large proportions, the former preponderating in a very marked degree, and thus giving to the water the right to be styled a bitter water, and one which for the same reason is most pleasant to the palate, and is highly valued by the medical profession. The result is a purgative combining a secretion-promoting and peristaltic action.

The tumbler (10 ozs.) of this water would contain—

Purgatives.	Antacids.	Salines.
370 grains.	3·6 grains.	8·5 grains.

This Apenta Water, however, possesses special properties which are found combined in a very few natural mineral waters, and which specially marks it out for the treatment of gouty patients.

First amongst these peculiarities is the large amount of lithia, which is almost unique amongst strong purgative waters. The lithia sulphate was directly estimated after separating it by alcohol. It is also markedly chalybeate, although not excessive in astringent properties.

When examined with litmus paper, it shows a faint acid reaction, due to free carbonic acid. On boiling this off, it is found to be alkaline, chiefly from the presence of sodium carbonate. This alkalinity is a most desirable adjunct to a water of this character. The presence of a small proportion of bromine is of some therapeutic value.

To sum up my remarks upon the Apenta Water, we may say that, taken as a whole, we could hardly wish for a more happy combination for a strong aperient water, both for general use, and as a special remedial agent. From a bacteriological point of view, it is everything that can be desired.—*Medical Press and Circular, 25th March,* 1896.

FIGURES SPEAK FOR THEMSELVES.

During the past year Messrs. John Wyeth & Bro. have sold over 500,000 bottles of their nutritive preparation, Liquid Malt Extract, and they claim that each month the demand is increasing. It is not only held in favour by the public, but the medical profession throughout the Dominion have no hesitation in endorsing all the claims that have been made for it. J. B. McConnell, Esq., M.D., one of the leading physicians in Montreal, in a letter dated October 6th, says: "I have for a number of years freely prescribed Wyeth's Liquid Malt Extract, and it always gives the results expected of it and desired."

The preparation is a most palatable and valuable nutrient, tonic and digestive agent, and contains the smallest amount of alcohol found in any liquid preparation of malt. It is particularly adapted to nursing mothers.

THE ALKALOIDS OF COD LIVER OIL.

The alkaloids of Cod Liver Oil are stimulants to the appetite, digestion and process of tissue building, and the fatty matter of Cod Liver Oil is utterly unfit for food on account of its nauseous taste, tendency to cause eructations and to disorder the stomach. In the alkaloids reside the virtues of the oil, not in the fatty matter. As a food the fatty matter has nothing to recommend it in place of butter and cream, which are far more palatable and digestible.

The reason why a man can sometimes gain a pound a day on an ounce of Cod Liver Oil can be found by reading the account of the physiological action of Cod Liver Oil alkaloids as contained in the paper read before the French Academy of Medicine by M. M. Gautier and Morgues, and entitled "Les Alcaloides de L'Hulle de Foie de Morue."

It is due to the presence of the alkaloids which stimulate the appetite, digestion and tissue building. Appetite causes him to eat a larger quantity of food with relish, digestion is set to work by the alkaloids—not by the fatty matter of the oil; digestion gets the pound for him out of his common food; and the metabolic power of the body stimulated by the alkaloids builds that food into healthy tissue. Therefore, why give the nauseating fatty matter when you can gain the same end in a better way by prescribing Stearns' Wine of Cod Liver Oil. It contains the alkaloids of Cod Liver Oil—none of its nauseating fatty matter. It is pleasant to take, agrees with the most delicate stomachs, and when given to your patient with his food will aid in its digestion and assimilation, and will "rebuild the body."—*The New Idea.*

We note with pleasure that The Holgate, Fielding Co., of Toronto, are introducing a number of new pharmaceutical preparations, amongst them "CARNOGEN," which has been well received by the profession in the United States and Canada. We would especially draw your attention to their advertisement on another page.

Book Reviews.

YEO ON FOOD IN HEALTH AND DISEASE.

New Edition Just Ready.

FOOD IN HEALTH AND DISEASE. By I. BURNEY YEO, M.D., F.R.C.P., Professor of Therapeutics in King's College, London. New (2d) edition. In one 12mo. volume of 592 pages, with 4 engravings. Cloth, $2.50. *Series of Clinical Manuals.*

The subject of this volume is one of unexcelled importance. The character, force and destinies of nations are determined in large measure by the average of their food, and in sickness the results obtained by physicians often depend more upon proper nutrition than upon drugs. Conversely errors in the prescription of diet may be quite as serious as mistaken medication. In this authoritative volume Professor Yeo, one of the ablest therapeutists, furnishes specific guidance for the physician in the proper use of foods in the various diseases, approaching the subject naturally and rationally from the qualities and values of foods in health. Every physician will therefore find in this compendious and convenient work an aid of the utmost value.

HARE'S PRACTICAL DIAGNOSIS.

PRACTICAL DIAGNOSIS. The use of Symptoms in the Diagnosis of Disease. By HOBART AMORY HARE. M. D., Professor of Therapeutics and Materia Medica, in the Jefferson Medical College of Philadelphia, Laureate of the Medical Society of London, of the Royal Academy in Belgium, etc. In one octavo volume of 566 pages, with 191 engravings and 13 full-page colored plates. Cloth, $4.75.

The experience of the author in both didactic and clinical teaching has shown that the all-important subject of diagnosis can be relieved of much of its difficulty by treating it exclusively from a clinical standpoint. The object of this volume is to place before the physician and student a guide to this art as it is actually used in practice. To accomplish this the symptoms used in diagnosis are discussed first, and their application to determine the character of the disease follows. Thus, instead of describing locomotor ataxia or myelitis, there will be found in the chapter on the Feet and Legs a discussion of the various forms of and causes of paraplegia, so that a physician who is consulted by a paraplegic patient can in a few moments find the various causes of this condition and the differential diagnosis between each. So, in the chapter on the Tongue, its appearance in disease, both local and remote, is discussed. In other words, this book is written upon a plan quite the reverse of that commonly followed, for in the ordinary treatises on diagnosis the physician is forced to make a supposititious diagnosis, and, having done this, turn to his reference book aud read the article dealing with the disease supposed to be present, when if the description fails to coincide with the symptoms of his case he must make another guess and read another article. In this book, however, the discovery of any marked symptom will lead directly to the diagnosis. Thus, if the patient is vomiting, in the chapter on Vomiting will be found its various causes and their diagnostic significance, and the differentiation of each form of this affection from any other.

JACKSON'S READY-REFERENCE HANDBOOK OF SKIN DISEASES.

THE READY-REFERENCE HANDBOOK OF DISEASES OF THE SKIN. By GEORGE THOMAS JACKSON, M D., Professor of Dermatology, Woman's Medical College of the New York Infirmary and in the University of Vermont, Chief of Clinic and Instructor in Dermatology, College of Physicians and Surgeons, New York. New (2d) edition. In one 12mo. volume of 589 pages, with 69 illustrations and a colored plate. Cloth, $2 75.

This volume fully deserves the title aptly chosen for it. The classification of skin diseases according to their natural relationship is appropriately explained, but the body

of the volume is devoted to the various affections under an alphabetical arrangement. The practitioner and specialist will thus find it a prompt and ready source of knowledge on all the points of terminology, symptoms, varieties, etiology, pathology, diagnosis, treatment and prognosis of dermal affections. Tables of differential diagnosis and standard prescriptions will be found scattered through the text and the work ends with an appendix of well-tried formulæ. The series of illustrations is rich and instructive.

DEFORMITIES—A TREATISE ON ORTHOPŒDIC SURGERY—INTENDED FOR PRACTITIONERS AND ADVANCED STUDENTS.—By A. H. TUBBY, M.S., Lond., F.R.C.S., Eng., etc., etc., etc. Macmillan & Co., Ltd., London. Copp, Clark & Co., Toronto.

This handsome and copiously illustrated volume will be prized by surgeons interested, as all are more or less in the orthopœdic branch of their profession. Beginning with the Deformities of the Spine, which it treats fully and illustrates clearly, it goes on to take up deformities of the neck, chest and upper extremities, rachitis, deformities of the lower extremities, and finally the various deformities arising from ankylosis, congenital displacements from cerebral and spinal paralysis. The book is well up to date, and the illustrations are so numerous and so good as of themselves to make it attractive. There are no less than fifteen plates and 302 figures in an octavo volume of 598 pages. The author holds many excellent appointments in connection with his specialty in London, England, and we can commend his work as a good one, as his opportunities for seeing and doing surgery of this kind are in the world's metropolis unsurpassed.

SYDENHAM HOUSE, OTTAWA (Photo View).

For Incipient Phthisis
(Pretubercular without expectoration.)

Heart Disease
(Schott Method.)

Rheumatisms Neuroses, etc.

Tubercular Phthisis
With expectoration.)

TREATED AT

GATINEAU MOUNTAINS,

Near Ottawa.

(SEE BELOW.)

Dr. Edward Playter's Sanatorium for the treatment of the above named diseases and any intractable cases which cannot be successfuly treated at home.

Situation: Delightful, elevated, sandy soil, extensive river and country outlook; all advantages of both city and country.

Hydrotheraphy (warm, medicated rain and other baths) a specialty: with massage, electricity, and any special medication; as may be indicated.

Cases of Marked tubercular phthisis taken to Gatineau Mountains, a few miles away: elevated 1,000 feet; delightful sunny outlook southeastward; protected north and west by wooded elevations.

Midway between the Atlantic and Great Lakes, the atmosphere here is dry, sunny, aseptic and most invigorating,—sparkling with "highly vitalized oxygen"; practically germless, in winter especially from the constant sheet of snow over the ground; and free from the moister air of the alternate thaws of Western Ontario and the more cloudy Muskoka: Studiously selected, on *meteorological data*, as of the best on the continent for curable cases of consumption; consumption being comparatively rare.

The Principles of Treatment of Phthisis, chiefly, the trinity of remedies: Super-respiration of cold air, night and day; attention to the skin for relieving the lungs; and nourishment adapted to the individual assimilative powers.

ADDRESS:

EDWARD PLAYTER, M.D.,
OTTAWA, ONT.

OF DR. PLAYTER'S RECENT BOOK ON CONSUMPTION

The British Medical Journal records:—"The parts . . . dealing with prevention and treatment are full of thoughtful suggestions." The New York Med. Jour.:—"This is a remarkably interesting book, in which the whole subject is treated in a clear and able manner. . . . . Sufficiently complete and scientific to satisfy the needs of the physician." The Dominion Med. Monthly:—"Chapters 8, 9 and 10 are alone well worth the price of the book." In one volume, 343 pages, strongly bound in cloth, price, $1.50. Toronto: William Briggs. New York: E. B. Treat.

Established 1850. Incorporated by Act of Parliament.

TRINITY MEDICAL COLLEGE, TORONTO.

In affiliation with the University of Trinity College, The University of Toronto, Queen's University, The University of Manitoba, and specially recognized by the several Royal Colleges of Physicians and Surgeons in Great Britain.

THE WINTER SESSION OF 1896-7 WILL COMMENCE OCTOBER 1, 1896.

FACULTY.

PROFESSORS.

WALTER B. GEIKIE, M.D., C.M., D.C.L., F.R.C.S.E., L.R.C.P., Lond.; Dean of the Faculty; Member of the Council of the College of Physicians and Surgeons of Ont.; Member of the Consulting Staff of the Toronto General Hospital.—Holyrood Villa, 52 Maitland Street.

Professor of Principles and Practice of Medicine.

J. ALGERNON TEMPLE, M.D., C.M., M.R.C.S., Eng., Gynæcologist to the Toronto General Hospital; Physician to the Burnside Lying-in Hospital.—205 Simcoe St.

Professor in Obstetrics and Gynæcology.

THOMAS KIRKLAND, M.A., Principal of Normal School, Toronto.—432 Jarvis Street.

Professor in General Chemistry and Botany.

C. W. COVERNTON, M.D., C.M., M.R.C.S., Eng., Lic Soc. Apoth., Lond.; Ex-Chairman and Member of the Provincial Board of Health.

Emeritus Prof. of Medical Jurisprudence and Toxicology.

FRED. LEM. GRASETT, M.D., C.M., Edin. Univ.; F.R.C.S.E.; M.R.C.S. Eng.; Fell. Obstet. Soc., Edin.; Member of the Acting Surgical Staff of the Toronto General Hospital; Physician to the Burnside Lying-in Hospital; Member of the Consulting Staff of the Toronto Dispensary.—208 Simcoe St.

Professor of Principles and Practice of Surgery, and of Clinical Surgery.

W. T. STUART, M.D., C.M., Trin. Coll., and M.B. Univ. Toronto; Professor of Chemistry, Dental College, Toronto.—195 Spadina Avenue.

Professor of Practical and Analytical Chemistry.

CHARLES SHEARD, M.D., C.M., Fell. Trin. Med. Coll., M.R.C.S., Eng.; Member of the Acting Staff of the Toronto General Hospital; Consulting Physician to the Victoria Hospital for Sick Children.—314 Jarvis Street.

Professor of Physiology and Histology, and of Clinical Medicine.

G. STERLING RYERSON, M.D., C.M., L.R.C.P., L.R.C.S. Edin., Surgeon to the Eye and Ear Dept., Toronto General Hospital, and the Victoria Hospital for Sick Children.—60 College Ave.

Professor of Ophthalmology and Otology.

LUKE TESKEY, M.D., C.M., M.R.C.S., Eng., Member of the Acting Surgical Staff of the Toronto General Hospital, Member of Staff Hospital for Sick Children, and Professor of Oral Surgery, Dental College, Toronto.—612 Spadina Avenue.

Professor of Anatomy and of Clinical Surgery.

JOHN L. DAVIDSON, B.A., Univ. Tor., M.D., C.M., M.R.C.S. Eng.; Member of the Acting Staff of the Toronto General Hospital.—12 Charles Street.

Professor of Clinical Medicine.

G. A. BINGHAM, M.D., C.M., Trin. Coll., M.B. Univ. Tor.; Surgeon Out-door Department, Toronto General Hospital; Surgeon to the Hospital for Sick Children.—64 Isabella Street.

Professor of Applied Anatomy, and Associate Professor of Clinical Surgery.

NEWTON ALBERT POWELL, M.D., C.M. Trin. Coll., M.D. Bellevue Hosp. Med. Coll., N.Y.; Lecturer on the Practice of Surgery, Woman's Medical College, Toronto; Surgeon Out-door Dept., Toronto General Hospital.—Cor. College and McCaul Streets.

Professor of Medical Jurisprudence and Toxicology, and Lecturer on Clinical Surgery and Surgical Appliances.

D. GILBERT GORDON, B.A., Tor. Univ.; M.D., C.M., Trin. Univ.; L.R.C.S. & P. Edin.; L.F.P. & S. Glasgow; Physician Out-door Department, Toronto General Hospital.—646 Spadina Avenue.

Professor of Sanitary Science, and Lecturer on Clinical Medicine.

E. B. SHUTTLEWORTH, Phar. D., F.C.S.; Late Principal and Professor of Chemistry and Pharmacy, Ontario College of Pharmacy.—220 Sherbourne Street.

Professor of Materia Medica and Pharmacy, etc.

H. B. ANDERSON, M.D., C.M., Fell. Trin. Med. Coll.; Pathologist to Toronto General Hospital.—233 Wellesley Street.

Professor of Pathology, and in Charge of the Trinity Microscopic Pathological Laboratory Tor. Gen. Hosp.

LECTURERS, DEMONSTRATORS, INSTRUCTORS AND ASSISTANTS.

E. A. SPILSBURY, M.D., C.M., Trin. Univ.; Surgeon to the Nose and Throat Department, Toronto General Hospital.—189 College Street.

Lecturer on Laryngology and Rhinology.

ALLAN BAINES, M.D., C.M., Fell. Trin. Med. Coll.; L.R.C.P., Lond.; Physician Out-door Department, Toronto General Hospital; Physician to the Victoria Hospital for Sick Children.—194 Simcoe Street.

Associate Professor of Clinical Medicine.

D. J. GIBB WISHART, B.A., Tor. Univ., M.D., C.M., L.R.C.P., Lond.; Professor of Ophthalmology and Otology, Woman's Medical College; Surgeon Eye and Ear Department, Hospital for Sick Children.—47 Grosvenor Street.

Senior Demonstrator of Anatomy.

J. T. FOTHERINGHAM, B.A., Tor. Univ.; M.D. C.M., Trin. Univ.; Physician Out-door Dept., Toronto General Hospital and the Hospital for Sick Children; Professor of Materia Medica, College of Pharmacy.—492 Yonge St.

Lecturer on Therapeutics and on Clinical Medicine at Toronto General Hospital.

H. B. ANDERSON, M.D., C.M., Fell. Trin. Med. Coll.; Pathologist to Toronto General Hospital.—233 Wellesley Street.

Second Demonstrator of Anatomy.

C. A. TEMPLE, M.D., C.M.—315 Spadina Avenue.

FREDERICK FENTON, M.D., C.M.—Cor. Scollard and Yonge Streets.

A. H. GARRATT, M.D., C.M.—160 Bay Street.

HAROLD C. PARSONS, B.A., M.D., C.M.

Assistants in Practical Anatomy.

C. TROW, M.D., C.M., Trin. Univ., L.R.C.P., Lond. Surgeon to the Eye and Ear Department of Toronto General Hospital.—57 Carlton Street.

Clinical Lecturer on Diseases of the Eye and Ear.

W. H. PEPLER, M.D., C.M., Fell. Trin. Med. Coll. L.R.C.P., Lond.

Assistant in Pathology.

FRED. FENTON, M.D., C.M.

Assistant in Histology.

CLINICAL TEACHING.—The Toronto General Hospital has a very large number of patients in the wards, who are visited daily by the medical officers in attendance. The attendance of out-door patients is also very large, and thus abundant opportunities are enjoyed by students for acquiring a familiar knowledge of Practical Medicine and Surgery, including not merely major operations, but Minor Surgery of every kind, ordinary Medical Practice, the treatment of Venereal Diseases and Skin Diseases, and the Diseases of Women and Children. The Burnside Lying-in Hospital, amalgamated with the Toronto General Hospital, has recently had the staff largely increased, and will afford special and valuable facilities for the study of Practical Midwifery. The large new building, close to the Hospital and School, will be very convenient for students attending in practice. The Mercer Eye and Ear Infirmary is also amalgamated with the Toronto General Hospital, and affords special facilities for students in this department.

Daily Clinical instruction in the spacious Wards and Theatre of the Hospital will be given by members of the Hospital Staff on all interesting cases, Medical and Surgical. ☞ Arrangements have also been made for the delivery of *daily clinics*, out-door, in-door and bedside, in the *Hospital*, by the respective members of the in-door and out-door Hospital Staff, which has been recently largely increased.

FEES FOR THE COURSE.—The Fee for Anatomy, Surgery, Practice of Medicine, Obstetrics, Materia Medica, Physiology, General Chemistry, Clinical Medicine and Clinical Surgery, $12 each. Applied Anatomy, $10. Practical Anatomy, $10. Practical Chemistry, Normal Histology and Pathological Histology, $8 each. Therapeutics, and Medical Jurisprudence, $6 each, Botany and Sanitary Science, $5 each. Registration Fee (payable once only), $5. Students are free in all the regular branches after having paid for two full courses. Surgical Appliance sis an optional branch; fee, $5.

Full information respecting Lectures, Fees, Gold and Silver Medals, Scholarships, Certificates of Honor, Graduation Diplomas, Fellowship, etc., will be given in the Annual Announcement.

W. B. GEIKIE, M.D., D.C.L., Dean, 52 Maitland Street.

PRIZE WINNERS

IN THE

"Borolyptol"

LITERARY CONTEST

1st Prize, $250 in cash, Dr. E. P. Bailey, Yardley, Pa., "A very poor leech-fecit."

2nd Prize, $150 in cash, Dr. H. C. Harris, De Lay, Miss., "Aliquis."

3rd Prize, $75 in cash, Dr. Howard Lilienthal, New York City, "A little leaven leaveneth the whole lump."

4th Prize, $50 in cash, Dr. W. R. D. Blackwood, Philadelphia, Pa., "Per Vias Rectas."

5th Prize, $25 in cash, Dr. D. S. Maddox, Marion, O., "Rob Roy."

$10 Prize, Dr. Russell Pemberton, Philadelphia, Pa., "Rontafeli,"

$10 Prize, Dr. F. H. Strong, Yonkers, N.Y., "Saccharum Lactis, M.D."

$10 Prize, Dr. Chas. A. Hough, Lebanon, O., "Dr. H. Hugo."

$10 Prize, Dr. C. Fred. Durand, Lockport, N.Y., "Ad astra per aspera."

$10 Prize, Dr. D. W. Dryer, La Grange, Ind., "Roentgen X Rays."

The various essays were, with but few exceptions, of a high order of excellence, both from a scientific and literary standpoint. We have been much gratified to note the interest to which this competition has given rise, and desire to extend our thanks to each and every contestant whether successful or otherwise.

A pamphlet containing the successful essays, with portraits of the authors, is now in press; it is being printed on good paper and in legible type, and will be mailed, together with a handsome fac-simile of Prize Painting in 14 colors, suitable for framing, to every physician sending his request for same to

THE PALISADE M'F'G CO.,
YONKERS, N.Y.

"Without wishing to even question the possible advantages of antiseptic treatment in many cases of excessive intestinal fermentation, I am, however, inclined to lay special stress upon the influence of diet in such disorders. Everything else being equal, it is obvious that the more digestible the food-stuffs ingested, the less tendency there will be for intestinal fermentation. On the other hand, the accumulation of difficultly digestible material in the intestinal tract affords one of the best possible conditions favorable for putrefaction,"—CHITTENDEN, *"Intestinal Fermentation."*

Peptonised Milk, prepared with Fairchild's Peptonising Tubes, is a perfectly digestible and absorbable food. Its use precludes all accumulation of unassimilable matter in the intestinal tract.

FAIRCHILD BROS. & FOSTER,
NEW YORK.