ominion Medical Monthly HE Ontario · Medical · Journal Sent to every Member of the Profession In-ONTARIO, · BRITISH · COLUMBIA, · AND · NORTH-WEST · TERRITORY By the Medical Councils of the respective Provinces TORONTO, FEBRUARY, 1896. No. 2 VOL. VI.

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WM. F. MITCHELL, M.D.

Addison, Pa.

FRIENDLY ADVICE. — Gilhooly went to an Austin doctor for advice. "What is the matter with you?" "I am as hungry as a wolf. I work like a horse, but I can't sleep." "I guess you had better see a veterinary surgeon," said the doctor, sarcastically. "What do I want to see him for? I am no veteran."—*Texas Siftings*.

The Treatment of Influenza or I a Grippe.

It is quite refreshing these days to read of a clearly defined treatment for the grip. But in an article in the *Lancet-Clinic*, December 28th, 1895, Dr. James Harvey Bell, 251 East 32nd Street, New York City, says he is convinced that too much medication is both unnecessary and injurious. He has few remedies; prescribes them with confidence, and "trusts the rest to nature."

When called to a case of influenza, the patient is usually seen when the fever is present, as the chill, which occasionally ushers in the disease, has generally passed away. Dr. Bell says he then orders that the bowels be opened freely by some saline draught, as hunyadi water or effervescing citrate of magnesia.

For the high fever, severe headache, pain, and general soreness, the following is ordered :

R Antikamnia Tablets (5 gr. each), No. xxx. Sig. One tablet every two hours.

If the pain is extremely severe, the dose is doubled until relief is obtained. Often this single dose of ten grains of antikamnia is followed with almost complete relief from the suffering. Antikamnia is preferred to the hypodermic use of morphia, because it leaves no bad after-effects; and also because it has such marked power to control pain and reduce fever. The author says that



unless the attack is a very severe one, the above treatment is sufficient.

After the fever has subsided, the pain, muscular soreness and nervousness generally continue for some time. To relieve these and to meet the indication for a tonic, the following is prescribed :

R Antikamnia and Quinine Tablets, No. xxx. Sig. One tablet three times a day.

This tablet contains two and one-half grains of each of the drugs, and answers every purpose until health is restored.

Occasionally the muscular soreness is the most prominent symptom. In such cases, the following combination is preferred to antikamnia alone :

R Antikamnia and Salol Tablets, No. xxx. Sig. One tablet every two hours.

This tablet contains two and one - half grains of each drug.

Then again it occurs that the most prominent symptom is an irritative cough. A useful prescription for this is one-fourth of a grain sulphate codeine and four and threefourths grains antikamnia. Thus :

R Antikamnia and Codeine Tablets, No. xxx. Sig. One tablet every four hours.

Dr. Bell also says that in antikamnia alone we have a remedy sufficient for the treatment of nearly every case, but occasionally one of its combinations meets special conditions. He always instructs patients to crush tablets before taking.

IATROL

As an Antiseptic and Germicide

HE Ideal antiseptic and germicide should be non-toxic, non-irritating and without odor. Corrosive Sublimate does not come up to these requirements, for while it is the best germ destroyer, its liability to produce poisonous symptoms, and its irritating properties, prevent its general use.

Carbolic Acid is open to like objections, and the same holds true for most of the antiseptics and germicides employed in medicine to-day. Iodine combinations come the nearest to filling the requirements of the ideal antiseptic.

The use of iodoform has been attended with the best results, and it is probably the most frequently used of all remedies having for their object the rendering of wounds aseptic. Instances are numerous, however, where its use has been followed by poisonous symptoms, or it has so irritated the parts that some other remedy had to be substituted for it.

Besides these objectionable features, Iodoform is characterized by such a disagreeable odor that its employment is oftentimes restricted.

The keeping of wounds aseptic, which has heretofore been accomplished by having the parts contacted and covered with an antiseptic in solution, is rapidly giving place to the so-called dry method. Moisture is a necessity for germ development. To carry out the dry treatment of wounds, it is necessary to have an antiseptic in an impalpable powder, free from all irritating properties, and non-toxic, so that it may be freely used over the wound surface, in order to prevent germ entrance.

IATROL is an inodorous and non-toxic, antiseptic powder, abtained synthetically from certain coal tar derivatives. It is a desideratum in antiseptic surgery, and may be safely used in the treatment of Eye, Ear, Nose and Throat, as well as in Vaginal, Rectal and Uterine Affections.

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DOMINION MEDICAL MONTHLY

THERE is no doubt but that many patients, when convalescing from what has perhaps been a prolonged illness, relish a little fish as part of their bill of fare. The question, however, for the physician to decide is what kind of fish should be permitted, and in what form. The wellknown firm of J. W. Beardsley's Sons & Co., of New York, manufacture, by a process of their own, shredded codfish. The fish is picked up by machinery, stripped of every particle of skin and bone, and the flesh thoroughly teazed until it assumes an appearance as fine as silk fibre. Only the finest codfish are selected. As soon as this article was put upon the market it was recognized as a good thing, and, of course, firm after firm

attempted to imitate the process ; but they were promptly stopped by law. The shredded codfish is very easily cooked and in a very few minutes. and owing to its process of manufacture is easily assimilated by the most delicate stomach. We take pleasure in directing the attention of our readers to page 134 of this issue. where the advertisement of this firm appears. Shredded codfish can be secured at any good grocer's, purchasers being warned, however, to be careful and get only the brand marked Beardsley's Sons, New York.

A STARVED tramp said he was so thin that when he had a pain he couldn't tell whether it was a stomachache or a back-ache.

LET THEM DISSOLVE ...

In about ten minims of water in the barrel of your syringe.

We refer to our

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THEY ARE RAPIDLY AND PERFECTLY SOLUBLE

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D) YOU USE ERGOTOLE HYPODERMICALLY ? IT NEVER PRODUCES IRRITATION OR ABSCESS.

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others just as good

If a placebo be prescribed, it matters little who fills the prescription. But when the issue is one of great moment, the dispenser becomes a most important party.

> There are cod-liver oil "emulsions" on the market in which it is impossible to find a particle of cod-liver oil.

> There are cod-liver oil "preparations" on the market in which there is not the slightest amount of oil.

Scott's Emulsion of Cod-liver Oil, with the hypophosphites of lime and soda, contains a definite quantity of cod-liver oil thoroughly emulsified; and an exact amount of the hypophosphites.

The prescriber knows far better than the patient or the dispenser what remedy is best and whose preparation is the most reliable.

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OPERATIVE TREATMENT OF TRAUMATIC RUPTURE OF THE DIA-PHRAGM.-Schlatter (Korrespondenzblatt fur schweizer Aerzte) reports an instance of successful operation for a penetrating wound of the chest, which extended through the diaphragm into the abdominal cavity. The patien had received several wounds by stabbing in the left side of the chest Through one of these, which was situated in the ninth intercostal space, there was a protrusion of omentum. on the reduction of which a penetrating wound could be felt in the diaphragm. After the protruded omentum had been replaced in the abdominal cavity, and the wound in the thoracic wall enlarged, the slit in the diaphragm was closed by sutures. Healing occurred by first intention,

and the patient made a good recovery. —Britisk: Medical Journal.

OUININE AS A PROPHYLACTIC AGAINST INFLUENZA.-Graeser (Wien. klin. Rundschau) was led to try the effects of quinine in the prevention of influenza by the similarity shown by the onset and course of this disease to those of malaria. During the influenza epidemic he administered quinine to some of the employees of various establishments but not to others, and found that the former acquired a considerable amount of protection. Thus, for instance, in one out of five squadrons encamped at Bonn, 0.5 g. quinine hydrochlorate was administered daily to each man in his schnapps for twenty-two days. During this treatment only seven men in the squadron

[Continued on page 124



CANADIAN MEDICAL PRACTICE OFFICE.

Conducted for the Convenience and Protection of the Profession, for the rurchase and sale of practices, the arrangement of partnerships, securing eligible openings, etc. All transactions and communications strictly confidential.

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- No. 57.—\$2,000 jrural practice, unopposed, on railway, county of Simcoe, large territory and introduction, \$200.
- No. 56.-\$2,000 to \$3,000 practice in city in Western Ontario, and introduction to anyone renting the doctor's fine home at \$400 per year for first year, and \$300 per year after.
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- No. 51.-93.000 practice in town of 3.500 population, on the St. Lawrence River, with horse, buggy, cutter, harness, office furniture, good-will and introduction. Price, \$600 cash. This is the best practice in the town. Best of reasons for selling Terms, half cash.
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17 Letters must be direct from medical practitioners interested, and must enclose stamp for reply, otherwise they will remain unnoticed.

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DOMINION MEDICAL MONTHLY.

contracted influenza, of whom three fell ill on the first day of the experiment; in the other four squadrons there were respectively twenty-two, nineteen, thirty-two and forty-two cases. After the sixth day of treatment there were no further cases in the squadron, while the disease continued to progress in the other detachments. Graeser therefore considers it proved that quinine is not only a specific against influenza, but if given at the right time and in sufficient doses, can also prevent the outbreak of the disease. Mosse has more recently confirmed these views by experiments on rabbits.-British Medical Journal.

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advances made in chemical discovery in its application to medicine and surgery. A noteworthy fact in this connection is the production of Borine, a preparation which possesses the properties of being not only antiseptic and prophylactic, but what is still more desirable, that of being non-toxic and non-irritating. It can be used both externally and internally, features which cannot fail to convince both the profession and the laity of its inestimable value, and that in using it the profession will see owing to its harmless nature they avoid risks which attend the employment of other antiseptics, the proof of which is well illustrated by the following sad accident. The fact that carbolic acid was the first antiseptic employed in wound treatment

[Continued on page 126

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has been in many ways unfortunate for the human race. Surgeons and dentists have, until the discovery of Borine, regarded it as indispensable to have their instruments in a tray of carbolic solution which, if it was strong enough to sterilize the instruments, destroyed the surgeon's hands for practical purposes. A dentist, after completing an operation, accompanied his patient to his outer office to give some directions, leaving a small bottle of carbolic acid (open) on the bracket of his dental chair ; during his brief absence his little boy about two years old, entered the surgery, climbed upon the chair, and with child-like curiosity proceeded to examine the bottle, and finally drank the contents. The result is evident. Now is not this proof irre-

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The Collegiate course of the Faculty of Medicine of McGill University begins in 1895, on Tuesday, September 24th, and will continue until the beginning of June, 1596. The Primary subjects are taught, as far as possible, practically by individual instruction in the laboratories, and the final work by clinical instruction in the wards of the hospitals. Based on the Edinburgh model the instruction is chiefly bedside, and the student personally investigates and reports the cases under the supervision of the professors of Clinical Medicine and Clinical Surgery. Each student is required for his degree to have acted as Clinical Clerk in the Medical and Surgical wards for a period of six months each, and to have presented reports acceptable to the Professors on at least ten cases in Medicine and ten in Surgery. About \$100,000 have been expended during the last two years in extending the University buildings and laboratories and equipping the different departments for practical work. The Faculty provides a Reading-Room for Students in connection with the Library, which contains over 15,000 volumes.

volumes. MATRICULATION.—The entrance examination of the Medical Boards of the different Provinces in Canada is accepted by the University as equivalent to the Matriculation Examination which is held by it in the months of June and September. COURSES.—The regular course for the degree of M.D., C.M., is four sessions of about nine months each. Arrangements have been made with the Facul y of Arts of McGill University by which it is possible for a student to proceed to the degrees of B.A., and M.D., C.M., within six years, the Primary subjects in Medicine, i.e., Anatomy, Physiology and Chemistry, being accepted as equivalent for Honour Natural Sciences of the third and fourth years of the Arts course.

ADV ANCED COURSES.—The Laboratories of the University and the various Clinical and Pathological laboratories connected with both Hospitals will, after April, 1896, be open for graduates desiring special or research work in connection with Pathology, Physiology, Medical Chemistry, etc. A post-graduate course for practitioners will be established in the month of April, 1893, and will last for a period of about six weeks. **HO SPITALS.**—The Royal Victoria, the Montreal General Hospital, and the Montreal Maternity Hospital are Professors of the University. These two general hospitals have a size of the Clinical State of the Clinical State of the Clinical State of the Clinical State of the University.

These two general hospitals have a capacity of 250 beds each, and upwards of 30,000 patients received treatment in the out d or department of the Montreal General Hospital alone last year. For information, and the Annual Announcement, apply to

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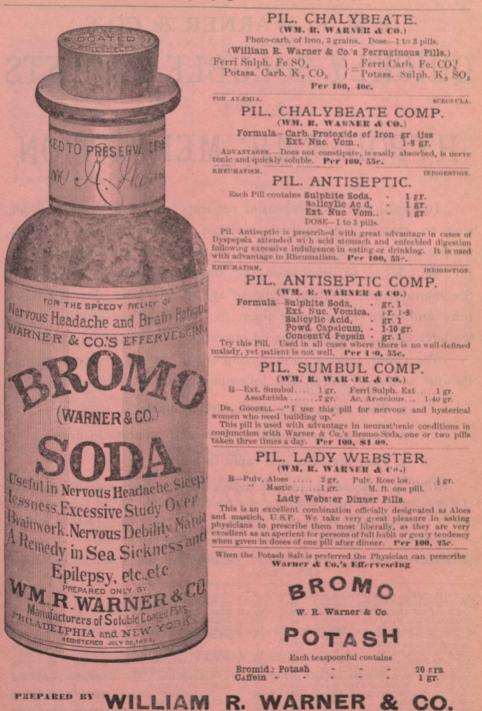
SPINAL PUNCTURE. — Fürbringer (Deut. med. Woch.) refers to a few cases in which no fluid could be obtained by him, although there was every reason to believe that the needle had entered the dural sac. In one case the puncture was made as many as fourteen times. He relates the following case in an infant aged five. and a half months which was admitted with fever, stupor, marked opisthotonos and bulging fontanelle. Only a few drops of fluid could be obtained by spinal puncture, although, contrary to his usual practice, he employed aspiration. At the necropsy, in addition to distension of the cerebral ventricles, the pia mater at the base of the brain was converted into a dainty yellowish-white mass with numerous tubercles in it. The same

condition was noted in the spinal cord. The dural sac was distended, not by fluid, but by this ædematous spongy material. There was evidence that the needle had entered the dural sac. but had not injured the cauda equina. The negative result was due to the absence of fluid. Among the author's three or four negative cases, there was one case of uræmia without necropsy. Fürbringer has obtained by spinal puncture fifty and ninety c.cm. of fluid respectively from two cases of uræmia; but in one case where only a few drops could be obtained there was no fluid found after death .--British Medical Journal.

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MORPHINE MURIATE	50	14	/ Morphine Sulph. 1-2 gr. 1		100314
MORPHINE NITRATE 1-4 gr.	90	22	Atropine Sulph. 1-150 gr. / "	\$ 75	\$ 19
MORPHINE NITRATE 1-6 gr.	70	18	MORPHINE AND ATROPINE No. 14,		
MORPHINE NITRATE	55	15	f Morphine Sulph. 1-2 gr.)		
MORPHINE NITRATE1.12 gr	50	14	Atropine Sulph. 1-120 gr. (75	19
MORPHINE SULPHATE 1-8 gr.	30	10	MORPHINE AND ATROPINE No. 15,	Statement Statement	
MORPHINE SULPHATE 1.6 gr.	35	11	(Morphine Sulph. 1-2gr.)		
MORPHINE SULPHATE 1.4 gr.	40	12	Atropine Sulph. 1-100 gr. [75	19
IORPHINE SULPHATE 1-3 gr.	50	14	MORPHINE AND ATROPINE No. 16,		
IORPHINE SULPHATE 1-2 gr.	65	17	Morphine Sulph. 1-2 gr.)	~	10
ORPHINE AND ATROPINE No. 1,			Atropine Sulph. 1-240 gr. J	75	19
[Morphine Sulph. 1-8 gr.]	45	13	NITROGLYCERIN	40	12
Atropine Sulph. 1-200 gr. J	A TRACK	and the part of the	NITROGLYCERIN1-150 gr,	40	12
IORPHINE AND ATROPINE No. 2,			NITROGLYCERIN1-100 gr.	40	12
(Morphine Sulph. 1-6 gr.)	45	13	NITROGLYCERIN 1.200 gr.	40	12
Atropine Sulph. 1-180 gr. J. IORPHINE AND ATROPINE NO. 3.			NITROGLYCERIN, 1-100 gr. &		
			STRYCHNINE, 1-50 gr.	40	12
{ Morphine Sulph. 1-4 gr. } Atropine Sulph. 1-150 gr. [···	50	14	PHYSOSTIGMINE SULPH., 1-60 gr.		
IORPHINE AND ATROPINE No. 4.			(See Eserine Sulph.)	80	20
(Morphine Sulph. 1-4 gr.)			*PILOCARPINE MURIATE1-5 gr.		
Atropine Sulph. 1-100 gr. [60	16	*PILOCARPINE MURIATE 1-8 gr.		
IORPHINE AND ATROPINE No. 5.			*PILOCARPINE MURIATE 1-20 gr.		
(Morphine Sulph. 1-8 gr.)			*PILOCARPINE NITRATE 1-20 gr.		
Atropine Sulph. 1-150 gr.	45	13	*PILOCARPINE NITRATE1-8 gr. *PILOCARPINE NITRATE1-4 gr.		
ORPHINE AND ATROPINE No. 6.			SODIUM ARSENIATE	-	
(Morphine Sulph. 1-8 gr.)			STRYCHNINE NITRATE1-150 gr.	30	10
Atropine Sulph. 1-100 gr. [···	50	14	STRYCHNINE NITRATE	50 35	14
ORPHINE AND ATROPINE No. 7.			STRYCHNINE NITRATE	40	12
(Morphine Sulph. 1-6 gr.)			STRYCHNINE SULPHATE 1-150 gr.	30	10
Atropine Sulph. 1-150 gr. [50	14	STRYCHNINE SULPHATE1-120 gr.	30	10
ORPHINE AND ATROPINE No. 8,			STRYCHNINE SULPHATE1 100 gr.	30	10
(Morphine Sulph. 1-6 gr.)	12.20	and an ere	STRYCHNINE SULPHATE 1-60 gr.	30	10
Atropine Sulph, 1-120 gr, 1	55	15	STRYCHNINE SULPHATE 1-20 gr.	40	12
ORPHINE AND ATROPINE No. 9.	1.1.1.1.1.1		STRYCHNINE SULPHATE 1-30 gr.	30	10
(Morphine Sulph. 1.4 gr.)	50		STRYCHNINE SULPHATE	30	10
Atropine Sulph 1-200 gr. [50	14	STRYCHNINE AND ATROPINE NO. 1.	100	
ORPHINE AND ATROPINE No. 10,			(Strychnine Sulph, 1-50 gr,)		
[Morphine Sulph. 1-4 gr.]	55	15	Atropine Sulph. 1-150 gr. ["	50	14
Atropine Salph. 1-120 gr. J	00	10	STRYCHNINE AND ATROPINE No. 2,	Sinty 160	
ORPHINE AND ATROPINE No. 11,			{ Strychnine Sulph. 1-30 gr. }	10	-
[Morphine Sulph. 1-4 gr.]	60	16	Atropine Sulph. 1-120 gr. J	50	14
Atropine Sulph. 1-60 gr. J	Contraction of	10	STRYCHNINE AND ATROPINE No. 3.	1000	
ORPHINE AND ATROPINE No. 12,			[Strychnine Sulph. 1-60 gr.]	50	1
(Morphine Sulph. 1-3 gr.)	75	19	Atropine Sulph. 1-150 gr. ["	50	14
Atropine Sulph. 1-120 gr. J	1	and the second	*Prices on application.	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	

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I have used Messrs. Warner Co.'s Ingluvin with great success in several cases of Dyspepsia and Vomiting in Pregnancy. In one case of the latter which I was attending a few weeks back, Ingluvin speedily put a stop to the vomiting, which was of a very distressing nature, when other remedies had failed.

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Dr. C. F. Clark, Brooklyn, N.Y., has used INGLUVIN very extensively in his daily practice for more than a year, and has fully tested it in many cases of VOMITING in PREGNANCY, DYSPEPSIA, and SICK STOMACH, and with the best results.

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Aqua Calcis f 3 ij. R R Sacch. Lac..... gr. x. Spts. Lavand. Comp. Misce et ft. cht. No. x. Syr. Rhei. Arom. . aa f 3 j. Tr. Opiigtt. x.

Sig.—One every 4 hours.

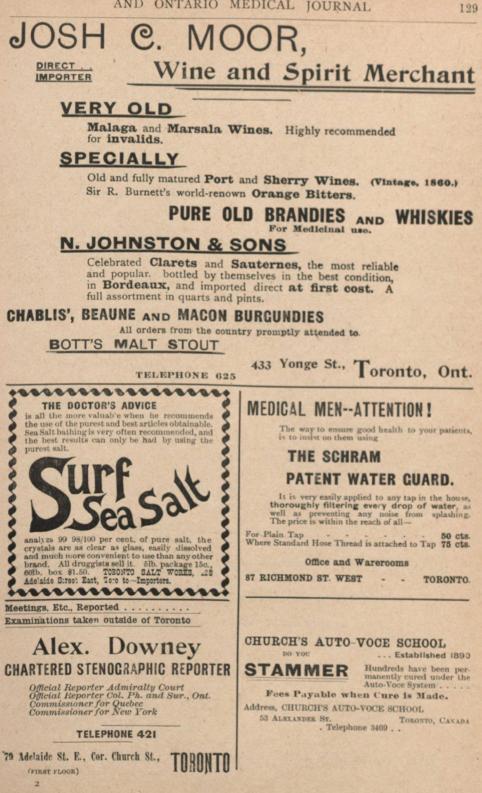
Misce-Sig. - A teaspoonful every 2 to 4 hours.

In inflammatory affections INGLUVIN is combined with Subnitrate of Bismuth, equal parts, and oleaginous mixtures with OI. Terebinth, instead of Aqua Calcis. Should the evacuation be suddenly arrested, and Tympanitis supervene, follow with a dose of oil or magnesia, or injections. In many cases of sick headache and indigestion the most happy results follow from the combining of INGLUVIN with Pv. Nuc. Vomica, the one-twentieth to one-tenth grain.

HOLLOWAY, ENGLAND, Dec. 29th, 1895.

DEAR SIRS :-- I duly received the sample of INGLUVIN you kindly forwarded me at my request. I am very much pleased to inform you that the results achieved by it are most satisfactory. I prescribed one powder, 15 grains, twice a day, in case of obstinate vomiting during pregnancy; after taking six powders the vomiting and nausea had quite ceased, and the patient can now take her ordinary food with relish. I thank you for the sample, and beg to state that you can make what use of this letter you please. I remain, yours faithfully,

EUSTACE DEGRUTHER, L.R.C.P., L.R.C.S., etc.



DOMINION MEDICAL MONTHLY

TO MAKE PURE ICE .- The New York Post-Graduate Hospital has inaugurated a new system to destroy microbes. In an article written by an authority on bacteriology, printed in the New York Sunday World of December 29, the menace to the health of the people of New York in their daily supply of ice was clearly set out. Scientific analysis had been made of five samples of ice. Four of them were from a leading hotel, a cafe and two restaurants. They were found to teem with the germs of disease. The illustrations showed ferocious looking creatures that represented all forms of malignant fevers. A fifth specimen analysis was made of ice that had been artificially made by scientific process from water that had been filtered by the Pasteur pro-

cess through charcoal. This ice was absolutely without tenants swimming about and waging war on each other. In a popular way the fact was made clear that the freezing of water containing microbes does not destroy the disease germs. They are simply put into a sort of trance. Animation is temporarily suspended. In other words, a chunk of sewer ice dissolved is as foul and as death-dealing as a cupful of the same foul sewer water dipped up in the summertime. The faculty of the New York Post-Graduate Hospital, on East Twentieth Street, are now prepared to make public the fact that their experiments in the line of the manufacture of sterilized ice-that is, ice that is absolutely free from taint-have been crowned with success. A simple ap-[Continued on page 139

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To each fluid ounce

DOMINION MEDICAL MONTHLY

paratus, elaborate in design, representing much thought, yet as simple as a churn, is a part now of the paraphernalia of this well-equipped institution, and ice as pure as that to be found at the poles or on the trackless arctic wastes, where man's contaminating influence has never obtruded, will hereafter cool the drinks of its fevered patients. This hospital is famous for its surgery, and physicians distinguished in their profession return to avail themselves of the clinical examples, especially in the line of gynæcology, there daily presented. Dr. Eugene Wynkoop is an enthusiast who believes that with proper surroundings all accidental injuries to the human system may be repaired. The wonderful surgical successes of the past decade he

attributes entirely to the use of antiseptics. He is ready to aver that the surgeon of old, with his microbecovered hands, killed as many patients as did the original injuries. To-day the surgeon approaches the operating table only after he has thoroughly cleansed himself in antiseptics, and he works only with instruments that have been freshly sterilized by immersion in superheated water. All water used is filtered and sterilized. And now this attention is to be paid to the ice. The apparatus which will furnish the daily supply of ice necessary in the summer is not as yet completed. but will be in season. The smaller plant that meets the present demand may be thus described : Fifty to one hundred gallons of water are placed in a retort, under which there is a [Continued on page 134



In consequence of the membraneous coating they are FREE FROM THE OBJECTIONS TO ALL GELATINE CAPSULES.

They do not dissolve until they have passed the stomach, entered the bowel, hence, avoiding all nausea, eructations, and repeating from the stomach. Savaresse's Capsules have been PRESCRIBED BY THE FACULTY IN ENCLAND FOR 50 YEARS.

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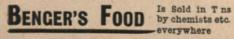
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brisk anthracite fire. This water, when at a boiling point, passes in the shape of steam through a worm, where it is condensed in a reservoir. From this point it is drawn into a separating chamber that does not differ from those used in the breweries. Pipes in which flow anhydrous ammonia furnish the cold. The water flows into pans of varying sizes. Ice for the pitcher or the wine cooler may be produced at will. This frozen water, it will be observed, has not been exposed to the air from the moment it was placed in the boiling receptacle. It is absolutely pure. It will be used in the sick wards. For other purposes about the hospital ice will be made from water that has been simply filtered by approved scientific process. The doctors at Bellevue, Roosevelt,

the Flower, Presbyterian, St. Luke's and other hospitals have been watching the experiments at the Post-Graduate Hospital with interest and, no doubt, the practical production of sterilized ice in this instance marks an era of its general adoption in the hospitals of the United States.

CHRONIC DRY NASAL CATARRH. —The following prescription is recommended by one who has successfully tried it for chronic dry nasal catarrh :

Liquid vaseline	I	OZ.
Sanmetto	3/4	oz.
Glycerine	1/4	oz.

To be used as a spray three times daily through an atomizer, and to take internally Sanmetto in teaspoonful doses four times a day.

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READY IN TEN MINUTES. ENTIRELY FREE FROM ANY DISAGREEABLE ODOR.

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It is imitated. See that you get Beardsley's, the original and only Shredded Codfish.



135

RECURRENT MUMPS .- Albert (Revue de Medicine) relates two cases, both occurring in trumpeters, each of whom had three separate relapses at intervals of some three to five months or so. Each attack was characteristic of the disease, and in one case orchitis complicated a relapse. In both cases hypertrophy of the parotid remained behind. The author excludes the possibility of the disease being any other lesion than mumps, such as suppurative parotitis, gaseous tumor of Steno's duct, or of the gland, or the special gaseous peribuccal tumor seen in musicians, etc. The occupation of trumpeter was an important, and at least a predisposing, factor in the relapse. In 1893-94, forty-five cases of mumps occurred in the regiment ; of these, forty-three presented nothing unusual, and thus the two trumpeters alone formed an exception. The'relapses occurred when they went back to their occupation, and disappeared

when they discontinued it. The only objection against the view is that the relapse did not appear at once on their resuming their usual occupation. On examining the mouth, Steno's duct was found in both cases patent, but not abnormally so. Perhaps micro-organisms from the mouth penetrated along the dilated ducts into the glands, or perhaps a retention of micro-organisms was produced by the c.osure of the ducts during the act of insufflation. This latter view would conform better to the opinion that relapses in mumps are not due to a fresh infection, but to a recrudescence. The hypertrophy still present eighteen and twenty-two months respectively after the first attack is rare after mumps. The glands were not much enlarged and were painless. The hypertrophy was no doubt due to overgrowth of connective tissue. At present the patients are not inconvenienced by the enlargement, and [Continued on page 138



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the parotid function appears to be normal. It is possible that a subsequent atrophy may occur. The author concludes that (1) the efforts of insufflation such as are made by military trumpeters may lead to relapse in mumps; (2) young trumpeters, owing to closer application, are more prone to suffer than the older ones; and (3) the relapses may be complicated by a lasting lesion of the parotids. The glands hypertropy and become hard, forming a kind of chronic mumps.—*British Medical Journal.*

RENAL DISEASE.—Have practiced medicine thirty years, and during that time I have constantly suffered from disease of the kidney—passing calculi. When I procured a bottle of Sanmetto I had been down over two months. I took two teaspoonfuls four times a day. It promptly relieved me. I think Sanmetto is the finest remedy that has ever been produced for diseases of the genito-urinary organs. Were it necessary I would give the full history of my case. Sanmetto surely can never be improved upon. In my long run of practice I have used hundreds of remedies for such cases, but none equal to Sanmetto. J. C. Scott, M.D., Waynesville, Ill.

WATTS—" Do you believe that the use of tobacco tends to shorten a man's days?" Dr. Bowless—"I know it does; I tried to quit once, and the days were about eighty hours long." —Indianapolis Journal.



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Medical men and others interested are cordially invited to call and see the Institution.

The charges for Rooms, Nursing, and Medical Attendance, will be \$25.00 per week in advance.

For Rooms, Nursing, etc., without Medical Attendance, the charge will be \$6.00, \$10.00 and \$12.00 in advance.

For Massage, Electrical Treatment, etc., without residence, the fee will be \$1.00 per treatment.

References given when required.

TORONTO. September 4, 1893.

AUSCULTATORY SIGNS OF MITRAL STENOSIS.-Graham Steell (Medical Chronicle) has systematically analyzed sixty cases (forty-one female, nineteen male) of mitral stenosis from the point of view of physical investigation. Seventeen died, and the post-mortem records are given. The results are compared with a table published by the author in 1888 as the outcome of his clinical experience. Of changes in the natural sounds of the heart, accentuation of the pulmonary second is unimportant, since it is common to all forms of cardaic disease; accentuation of the first and reduplication of the second sound in the mitral area are, however, both common signs, each occurring in about two-thirds of the cases. Absence of the second sound from the mitral area is, however, comparatively rare. With regard

to murmurs, the apical presystolic was only present in just over half the cases. while a diastolic could be heard in four-fifths; this latter was more frequently audible both at the apex and above than at the apex alone. In three-fourths of the cases an apical systolic murmur was present, often not conducted round to the back ; in 83 per cent. there was a systolic murmur in the pulmonary area; in 68 per cent. in the tricuspid region. Steell lays especial stress on the very great frequency of diastolic murmurs in mitral stenosis ; no satisfactory theory of their origin has as yet been put forward. The heart in this disease is much enlarged transversely, the right auricle being, of course, increased, but the left ventricle also gaining to an extent more in accordance with clinical experience than with a priori rea-

[Continued on page 142

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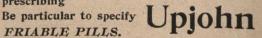
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DOMINION MEDICAL MONTHLY

soning. There is no pathognomonic pulse in mitral stenosis, though three stages can be roughly distinguished according to the successive conditions of tension and regularity through which it passes.— British Medical [ournal.

WHAT physician has not heard of Hot Springs, Arkansas, as a resort for his patients who wish to have applied "the finishing touches" to complete their convalescence? This well-known city has been indeed the "Mecca" to many thousands and is so still. The climate of the State of Arkansas is perfectly salubrious almost throughout the year, and the waters at Hot Springs have without a doubt a wonderfully medicinal action. There is at the Springs hotel accommodation second to none on the American continent, the menu

being perfect, and the price charged for board most reasonable. Every stranger visiting the Springs, by consulting Mr. Herbert Durand, manager of the Hot Springs League, will receive the most courteous attention, and this gentleman will see that everyone is referred to just that class of hotel he is looking after. The Hot Springs League was organized some years ago by the combined business interests of this Carlsbad of America for its promotion and development. so that no visitor need fear in the least but that he will have every attention. We take pleasure in referring our readers to page 113 of this issue. where the advertisement in this connection will be seen, and we confidently recommend any practitioner who has a suitable case to advise their taking a sojourn south and spend a few weeks amid the azure skies of Arkansas.

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No. 2

ORIGINAL ARTICLES.

(No paper published or to be published elsewhere as original, will be accepted in this department.)

RELATION BETWEEN CHOREA AND RHEUMATISM.*

By J. W. SHAW, M.D., Clinton.

The protean aspect of the causation of disease is, to say the least, bewildering, if one is to take the ordinary text book as authority.

Over or underfeeding, too much heat or too much cold, excessive humidity or dryness of the atmosphere, exposure to the weather or close confinement to well-protected buildings, miasm (whatever that is) or the omnipresent germ-each and all of these may be assigned as possible etiological factors to any number of diseases.

In certain cases, however, cause and effect stand so closely interrelated that no room for doubt is left in the minds of even the most superficial observer. In the latter category rheumatism and chorea, standing the former for cause and the latter for effect, would undoubtedly fall. Indeed the veriest tyro in medicine knows something of the intimate relationship between them.

Let us briefly review the grounds for belief. Germain Sée found, out of one hundred and nine cases of rheumatism, sixty-one followed by chorea, and out of one hundred and twenty-eight chorea patients sixty-one (or about one-half) who suffered with rheumatic pains in the joints. Strumpell found that more than one-half of his choreic clinical patients gave the history of rheumatism in themselves or parents; or had unequivocal signs of heart disease. Dr. McKenzie, of England, from an analysis of seventytwo cases, found that rheumatism had pre-existed in nearly one-half, and that there were strong grounds for believing that it had been antecedent in very much larger proportion. Goodhart gave a record of thirty fatal cases

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of chorea when endocarditis, in the form of vegetation on the valves, was present in twenty-eight, doubtful in one, absent only once. You will pardon me for just one more reference to statistics. In Pepper's "System of Medicine" it says, "rheumatism is certainly a predisposing cause of chorea," and goes on to show that in two hundred and eighty cases examined, one-third gave evidence of pre-existing rheumatism or these existing endocardial murmurs. These are records the truth of whose conditions have been substantiated by scores of other observers.

Up to this point the profession is practically a unit, so much so that on a case of chorea presenting itself to a physician, the question as to the preexistence of rheumatism should naturally arise in the mind.

So if I have a case of rheumatism in a child I always warn the parent of the probability of chorea. Now, is it possible that there may be a relationship even more intimate than that of cause and effect? When we get beyond this fact we are treading on debatable ground, and yet occasionally a case comes up in one's practice which would suggest the possibility, at least, of a closer connection.

Let me here cite two cases that came under my own observation during the past few years. A tailoress, aged twenty-eight, single, came to my office complaining of precordial pains and nervousness, the former partly the result of indigestion, the latter evidenced, as I at once observed, by slight twitchings of the left hand and arm. Questioning her as to the latter, she said that when she was nine years of age she was attacked in the face with acute articular rheumatism, affecting nearly the whole body, which persisted in spite of medicine until spring. As the warm weather came the rheumatism gradually lessened, but shortly afterwards it showed signs of increasing. -Muscular twitchings of chorea commenced, and as one disease subsided the other developed until at times she was unable to sit on a chair. During the whole summer there was almost absolute freedom from rheumatism, but the chorea remained at its worst. On the approach of cold weather of the following winter a reversal of the order of things which had existed in the spring previous took place, the chorea gradually subsiding and the rheumatic affection assuming prominence. Thus it went on for seven successive years, or until the girl reached the age of sixteen, when a final summer attack of chorea drew the curtain upon the scene which had been so trying to the patient and doctor, but not quite completely, for the spasmodic twitchings of the hand and arm, which I mentioned before, have persisted ever since (that is, for thirteen years), constituting a chronic chorea.

Case 2 is one I had when I was a clinical clerk in Toronto General Hospital, and in my history book of cases I find the notes. The patient was a female factory operative, aged seventeen, who complained of nervousness and cardiac palpitation. Very cursory examination revealed the former to be choreic in character, and a distinct mitral incompetency was evident. The facts elicited from the girl were, that about a month before this she had suffered from joint pains, not very severe and not requiring a physician. After

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persisting for a time they had gradually left her and this choreic condition had developed which, under the treatment of a city physician, also improved. There still persisted enough of the old pain to justify the diagnosis of rheumatism if, indeed, it needed such justification, with the cardiac murmur then existing. Under the salicylates, both improved. These are two specimen cases; more might be cited if necessary.

Now, from an etiological and pathological standpoint, rheumatism and chorea are plunged in obscurity. We know very little as to the causation of the one or the morbid anotomy of the other. Every few years some new theory is developed to explain some hiatus in the previously existing theories about these two diseases, only to be found wanting when the searchlight of scientific investigation is turned upon it.

The lactic acid, the bacillar, the nervous theory, that which holds to an excess of sulphur in the blood, and that which attributes the condition to imperfect metamorphosis,—each of these has been presented as explaining the etiology of rheumatism.

With chorea, on the other hand, hyperæmia of the brain cord, hyperplasia of the connective tissue of the latter, embolic plugs in the cerebral capillaries, a rheumatic inflammation of the connective tissues of the cerebro-spinal system, are all claimed as pathological factors of the disease.

Notwithstanding, however, that there is so much we do not know, the common valvular complications of rheumatism and the endocardial lesions found in almost all fatal cases of chorea are something proven beyond doubt by clinical and post mortem tests. The endocardial lesion in fatal cases of chorea has led to the extreme view that chorea and rheumatism were simply two phases of one and the same disease, while other observers, noting the frequency with which chorea results from other causes, as fright, nervous shock, have refused even to give rheumatism an important place as a causative agent in chorea.

In this as in all other cases the truth lies probably in the middle ground. There certainly is a close connection between the two diseases, and yet chorea is not rheumatism nor rheumatism chorea, unless, indeed, we regard rheumatism as a neurosis, which is doubtful.

The most plausible explanation seems to me to be that on recognizing the frequent existence of these fibrinous deposits or granulations on the heart's valves in chorea, I should be much inclined to look upon those post mortem appearances rather as results of some antecedent general condition of the blood common also to the choreic condition. It is very freely recognized that this affection is frequently in some way or other connected with that condition of the blood which obtains in what we call anæmia, or that existing in rheumatic constitutions. In both of these states we know that the fibrin of the blood is much in excess, and that this fibrin is very prone to be precipitated upon the heart's walls and valves. May not this hyperinosis be the explanation of the coincidence alluded to, namely, the occurrence of chorea in those affected with rheumatism?

Reports of Societies.

THE HURON MEDICAL ASSOCI-ATION.

Specially reported for the DOMINION MEDICAL MONTHLY and ONTARIO MEDICAL JOURNAL.

For twenty-five years the above Association has been in existence, and has live meetings every quarter, the place of meeting usually alternating between Clinton and Seaforth. The last regular meeting was held in Seaforth, January 15th, Dr. A. Dalton Smith, of Mitchell, presiding ; Dr. C. Mackay, of Seaforth, acting as Secretary. There was a good attendance.

The Secretary read letters he had received in regard to the matter contained in the following resolution :

Moved by Dr. Rollins, and seconded by Dr. Ames, of Exeter,—

That the Huron Medical Association, assembled, hereby resolve,

1. That in the opinion of this Association, sexual vices in the young, as masturbation, exist to a detrimental extent.

2. That association in schools and colleges tends to its development.

3. That its victims physically and mentally deteriorate.

4. That it is a frequent cause of insanity.

5. That its victims are usually ignorant of its effects.

6. That it is a subject urgently calling for discussion, action and education.

7. That education of parents and children affords the only means of permanent improvement.

8. That no false modesty should stand in the way of medical men, school boards, teachers' institutes, health boards and government departments lending their aid to its extinction.

9. That in our opinion, the most effective way of reaching the evil would be by popular, judicious lectures to the different sexes and ages, under the auspices of school boards or health boards, sanctioned by such provincial department.

10. That a copy of this resolution be sent to associate medical associations, Ontario Board of Health, Minister of Education, and such other bodies as the president and secretary may deem advisable.

A note from Dr. Bucke, of London Hospital for Insane, said, "I have grave doubts as to the truth of almost all the resolution, but it is impossible for me to go into the subject at present."

Dr. D. Clark, Superintendent of the Hospital for Insane, Toronto, referred the society to the chapter on that subject in his recent work on medical diseases, adding, "I quite endorse the subject matter contained in the circular sent and hope that it will materialize in some definite action being taken."

The reply from the Simcoe Medical Association said, "Your communication *re* masturbation was discussed, and it was unanimously resolved, 'That this Association learns with pleasure of the efforts of the Huron Medical Association; that it is the opinion of the members of this Association that masturbation is one of the greatest and most dangerous evils with which young people of both sexes meet; that it is an evil that calls forth every effort on the part of all medical men in order to have the growing vice, if possible, stemmed; and it is our desire to strengthen the hands of the Huron Medical Society."

Dr. Russell, Superintendent of the Hospital for Insane, Hamilton, wrote that in his opinion a good deal of misconception exists in the public mind as well as among the profession on the subject of masturbation. "I have grave doubts," he says, "as to whether masturbation ever produces insanity in those of a good mental and physical constitution. But I have no doubt whatever that a weak mentality is an almost invariable cause of masturbation. The public appear to be already over-educated on this subject, or rather improperly educated, and if there is one thing more than another that the public require protection against, it is the medical quackery practised upon them by the ignorant cupidity of designing charlatanism. The country is flooded with advertisements and pamphlets on this subject which tend to inflame and excite morbid apprehension in the public mind, with a large expenditure of money on medical nostrums which are worse than useless. There is no doubt a good deal may be done in educating the public mind to more correct ideas on the subject of mental and physical culture, and it is gratifying to know that modern tendencies are all in this The rage for athletic direction. sports and out-door life, within legitimate bounds, is strongly to be commended, and there is little to fear from masturbation where physical culture engrosses public attention. It is the youth who mopes around the house, who shuns the companionship of his fellows, who is the spoiled

child of over-indulgent parents who fear moral contamination by allowing him to mingle in the rough and tumble of life, that is in danger of suffering from this habit. His very desire for seclusion is evidence of a weak mentality and is usually hereditary. I have grave doubts as to the wisdom of singling out the subject of masturbation for lectures to the different sexes under the auspices of school boards or health boards. Under the general head of mental and physical culture it would not be amiss to refer to it : but to single it out for special attention would, I fear, be attended with unprofitable results. The great law of suggestion is to be reckoned with, and to many pure and unsophisticated minds of both sexes the subject might be both distasteful and repugnant. The true remedy for this and other forms of mental and physical degeneration is education on broad and general lines, the reading of good literature, out-of-door life, and healthy home environment."

Dr. P. H. Bryce, Secretary of the Provincial Board of Health, in writing, said the subject was a most serious and important one. Speaking for himself, he thought there were many difficulties in dealing generally with the matter, being necessarily individual in its application. He had his doubts as to the practicability, and, perhaps, to the advisability of popular lectures on the subject. The matter should be treated in the most delicate and judicious manner or evil as well as good results might arise. He suggested that the Association might select from amongst its members one or two gentlemen who had

the confidence of the community to deliver lectures and report to the society their impressions as the results of their efforts.

Dr. J. Campbell maintained that there was too much made of the subject, and from an experience of eight years as a school teacher, he repudiated the statement of the prevalence of the vice among school children. He never knew of a case among his pupils.

Dr. Taylor, of Goderich, said he agreed thoroughly with Dr. Russell, that an individual with a strong, healthy mind would not masturbate. The mental trouble arose through the dissemination of pernicious quack literature. The victim reads the symptoms described in these pamphlets and becomes filled with the idea that he is similarly affected. He questioned very much the propriety of having teachers bring this matter up in schools, especially to innocent girls. He ventured to say the great majority of girls and many women knew nothing about the vice.

As the mover and seconder of the resolution were absent, further action was postponed until the next meeting.

Dr. A. Bethune reported the history of a case. The patient was a man who had been ailing three or four months, complaining of considerable abdominal discomfort. On examination the doctor found considerable enlargement of the liver. Constipation had been marked. The most prominent feature was a high temperature accompanied by asthenia. The patient was ordered to bed, where he remained for the past six weeks. He complained of no pain or headache, and at no time was there any tympa-

nites. There was no eruption. The fever was only slight in the morning, but rose to 102°, or as high as 104°, in the evening. Quinine was administered in antipyretic doses. During the first week there was a tremendous hæmorrhage, which was followed later in the disease by others. The doctor presented several specimens of matter passed from the bowel. These were irregular cylindrical masses several inches in length, showing the mould of the bowel, covered with a soft. grayish, shreddy material. When broken across a semi-solid, friable substance, dark red in color, was to be seen. The appearance of these being somewhat reptilic in form, the patient's mind was greatly relieved when informed that he had passed the menagerie. The speaker stated that as these were the only symptoms he was uncertain as to the diagnosis, but it seemed to him a continued fever of a bilious, malarial, or intermittent type. He asked the opinion of the members as to what the specimens were.

Dr. Mackay, who had seen the case, thought the case was one of typhoid. The specimens appeared to him to be composed of partially digested blood surrounded by mucous tissue and organized lymph. Dr. Burrows and Dr. Graham agreed with Dr. Mackay's opinion of the specimens.

Dr. Woods, of Mitchell, reported a case of cardiac disease with embolism of the brain. The patient was a woman aged fifty-six, the mother of eight healthy children. Family history negative; was always a strong healthy woman until 1886, giving no history of rheumatism. On March 23, 1887, he and Dr. Hodge, of London, had seen her. She had

complained of shortness of breath and palpitation of the heart for several months, aggravated very much by even a little exercise. There was no œdema in any part of the body, and no pain. There was a slight cough with a scanty mucoid expectoration. The general health was fairly good. Was well nourished and had not lost flesh. Physical examination showed nothing abnormal in the lungs. The apex beat was found in the fifth interspace. one-half an inch to the right of the nipple line. The cardiac dulness was increased. The subclavian on the left side was seen and felt to pulsate. A thrill could be distinctly felt. The first heart sound was distinct but weak. The second was slightly accentuated. At the apex a harsh murmur, feeble, but distinct, could be heard with each systole, not audible toward the axillary line, but increasing in intensity up the sternum. At the second costal cartilage on the right side it reached its maximum, intensity, being loud and harsh. The murmur was traceable up the carotids. There was no heaving impulse or bulging of the chest wall. The diagnosis of aneurism was excluded. Cardiac tonics gave relief. In 1893, six years afterwards, the condition was much more marked, the heart having increased very much in size. The dyspnœa was very marked. On the morning of the 14th of March she was seized with a sudden attack of unconsciousness, partial consciousness returning in a few minutes, becoming complete in a few hours. Upon examination it was found she had complete right hemiplegia with limited aphasia. The power of speech gradually returned, but never became

perfect. She ultimately gradually regained fairly good power over the leg, but only a limited amount over the arm. An interesting feature in the case was noted after this apoplectic seizure-the dyspnœa immediately became less severe and infrequent, and her life became more comfortable. On examining the heart the murmur was not to be found which, before the attack, could be heard by the ear alone some inches from the chest. Until November last her health continued fair though the dyspnœa was increasing. The heart increased in size and the murmur again made its appearance. At this time one morning she woke up and found she was blind in the left eye. The larger retinal vessels were small, and the smaller ones invisible. The optic nerve was pale. The blindness persisted. The heart became weaker and very much dilated, dulness reaching to the second rib and one-half an inch to the right of the sternum. Death followed another unconscious seizure on January 9th. The doctor then commented on the prominent features of the case: the very loud heart murmur, aneurismal in character; the occurrence of embolus of the brain with the abatement of symptoms and disappearance of the murmur, which was probably explained by the dislodgment of the vegetation on the aortic valve; the later embolus plugging the central artery of the retina, followed by blindness in the left eye; and the final attack of unconsciousness which might have been due to an embolism or hæmorrhage-the former being more probable-thearteries were, judging from the radial, in fair condition.

Dr. A. D. Smith commented on the absence in the history of any apparent cause which would account for the pathological condition of the heart, and referred to a case of this sort of his own. The patient was an athletic young man who gave a history of never having suffered any illness. The speaker said the gravity of the lesion did not correspond to the loudness or harshness of the murmur.

Dr. Graham drew attention to the uric acid theory as a cause of rheumatism. The attack of endocarditis might be so slight that symptoms might not attract notice. He related a case similar to the one reported. He could get no history of a previous attack of rheumatism or endocarditis. An attack of hemiplegia ensued. The murmur was not a marked one. A second embolus of the leg was followed by gangrene, causing the death of the patient. He (the doctor) knew that two years previous there was no the statistics give us an idea of. disease of the heart

Dr. Dewar related the history of a case, a woman aged sixty-four. A slight murmur could be heard. Left hemiplegia developed and total blindness on the right side. She recovered from the hemiplegia, but her mental faculties remain impaired. Vision improved somewhat. An interesting feature of the case was the presence of Cheyne-Stokes respiration.

Dr. Taylor related a case which showed that a loud, harsh heartmurmur might be present for many years unaccompanied by any serious symptoms.

Dr. Bethune related a case in which hemiplegia and aphasia occurred in a

patient with pernicious anæmia. The murmur was only slight. There was no history of rheumatism.

Dr. Shaw, of Clinton, then read a paper on "RELATION BETWEEN CHOREA AND RHEUMATISM." (See page 145.)

Dr. Smith said there was no one who had been long dealing with cases of chorea and rheumatism but would notice the frequency with which they were associated. His little daughter, aged nine, some years ago had an attack of rheumatism-so slight that had he not known of the prevalence in the family of the disease, and not been looking for it, he would not have recognized it as an attack of rheumatism. The only complaint was of a little stiffness and soreness in one of the knees. A short time after a marked attack of chorea developed. He believed the number of cases in which the rheumatism preceded the chorea was greater than

Dr. Graham said Dr. Hague, of London, had proven that the presence of uric acid in the blood produced rheumatism, asthma, epilepsy and other diseases. Might it not also cause chorea, a disease so closely allied to rheumatism?

Dr. Wood said that his experience went to show that rheumatism and chorea were separate manifestations of the same causative agent. The number of diseases was, under scientific study, lessening. As an instance, formerly white swelling, scrofula and lupus were entirely separate diseases, but it was now known that they were all the result of one poison-that of tuberculosis.

Dr. Machell related the history of

a case of chorea occurring in a young girl. There was no previous history of rheumatism; but a short time before he had attended a sister who had an acute rheumatic attack.

Drs. Campbell and Bethune also discussed the paper, relating cases.

Dr. A. D. Smith read a paper on " TREATMENT OF ULCERS OF THE NON - SPECIFIC. NON - MALIGNANT VARIETY." They were usually found on the lower extremity, the result of a variety of local conditions, and associated with general constitutional depression, he said. One pathological condition underlay all-the failure of circulation resulting from malnutrition. Varicose veins were a frequent cause and complication. Local applications such as poultices, washes, powders, ointments, as a routine treatment, were valueless. For some years he had been using the dry treatment, which consisted first in rendering the ulcer surgically clean, dressing antiseptically and giving proper support to the weakened and badly nourished tissues. To bring about the first he uses a Volkman's spoon to scrape away all necrotic and unhealthy tissue. It was necessary to go down to the superficial fascia. If the edges of the ulcer are thick and indurated they should be cut down and removed. The pain may be obtunded by the application of a pledget of cotton soaked in a ten per cent. solution of cocaine. He then cleanses it with ethereal antiseptic soap, followed by irrigation with 1-2000 bichloride solution. It is next strapped with strips of lead plaster three quarters of an inch wide, extending nearly around the leg, each strap overlapping the previous one. The

strapping extends two inches beyond the ulcer above and below. A pad of borated cotton is then laid on and held by an adhesive strip. A bandage firmly applied to the leg, commencing at the toe and extending up over the site of the ulcer, completes the dressing. The dressing may be left in place ten days or two weeks if it does not become soiled Rest and the recumbent position would hasten recovery, but was not essential, for many of his cases kept on their feet. In one obstinate case, where the edges of the wound were very thick, he applied a thin piece of galvanized iron of the shape of the ulcer, and large enough to overlap its edges about one-half an inch, held on by a broad adhesive strap, which gave a speedy cure. The essavist demonstrated the efficiency of this mode of treatment by the relation of a case upon which other forms of treatment had failed to effect a cure.

A pleasing feature of the meeting was the presentation of the following :

To John Campbell, M.D., L.R.C.P., Edin .:

DEAR SIR,-We, the members of the Huron Medical Association, learn with regret that you intend removing beyond the limits of our society. We assure you that we feel grieved at your removal from amongst us, inasmuch as since the inception of the Association (now over a quarter of a century) you have been one of its diligent workers, promoting its success by actively engaging in discussions, reading papers, producing cases of interest, and doing your utmost for the welfare of the society. Your conduct toward your fellow-members has invariably been characterized by fraternal courtesy and kindness, with a considerate regard for a high standard of professional ethics, as many of those who know you best and longest can testify. We especially desire at this time to convey to you our friendly feelings and kind regards, and it is our fervent wish that wherever your lot in the future may be cast, you may long be able to perform the noble work of a noble profession, and may happiness and prosperity attend you.

To this Dr. Campbell made a feeling reply, recalling his past experience among his confreres in the Huron Medical Association, which had been a long and pleasant one.

The officers for the ensuing year were then elected : President, Dr. J. W. Shaw, Clinton ; Vice-President, Dr. C. Mackay, Seaforth ; Secretary-Treasurer, Dr. Turnbull, Clinton.

New members elected : Dr. Dewar, of Seaforth, and Dr. J. N. E. Brown, of Toronto.

On motion of Dr. Mackay, seconded by Dr. Taylor, of Goderich, a hearty vote of thanks was tendered to the DOMINION MEDICAL MONTHLY AND ONTARIO MEDICAL JOURNAL for sending a representative to report their proceedings. The members highly commended the idea of securing full reports of meetings of the various district organizations.

A spirit of great cordiality and earnest work is a pleasing feature of the Huron Medical Association.

OTTAWA MEDICAL SOCIETY.

At a regular fortnightly meeting of the Ottawa Medical Society, held on the evening of November 22nd, Dr. Horsey presented a patient to the

society and related his case as follows: "This boy, aged eighteen, was brought to me by his mother through the advice and kindness of Dr. Cousens on November 4th, eighteen days ago, complaining that for the past three weeks his sight had been failing so that he now cannot see to read ordinary print, and in consequence was unable to continue at school She dates his trouble three weeks back, since having three teeth extracted; two upper second molars, one on either side, and one lower right molar, for which he took nitrous oxide gas. There was nothing, as far as I could learn, unusual either with the gas administered or the extraction. The teeth were pulled because of severe aching, and extended neuralgic pain in the face and because some of them were decayed. Previous to extraction he had excellent sight. He has suffered no pain or other trouble in his eyes, or elsewhere. His mother, an intelligent woman considerably afflicted with the cacoëthes loquendi, wanted to know whether it was the gasor the teeth extraction that was the cause of his blindness. Here was a question directly put which required, or rather demanded, a direct answer. The knowledge that a relationship sometimes exists between diseases of the eye and those of the teeth, and also that some drugs and gases seriously impair vision, flitted across my mind. However, I proceeded to solve the problem submitted to me, 'secundum artem.' On inspection there is seen a slightly congested and raised spot on the sclerotic at the outer border of the cornea (an episcleritis) which is of old standing, and is thought to be apart from the

question. Otherwise there is no congestion or visible departure from health in the pobes or lids or fundi. The pupils are dilated, the right more so than the left ; both are inactive or extremely sluggish to light, but contract somewhat during convergence. There is ptosis of the right lid. His vision in the right is $\frac{29}{40}$ or $\frac{1}{2}$. In the left 38 or 3/4, which can with weak plus lenses be brought up to nearly normal. He reads Jaeger 12 at 40 centimetres with either eye, but soon tires and fails to read it, but on putting up a + 3 sph, reads Jaeger No. 1 readily. This shows conclusively that there is paralysis of the ciliary muscles by which accommodation is accomplished. His distant vision is imperfect, but we do not know that he was emmetropic in the first instance. The opthalmoscope reveals no changes in the fundus, which is also significant. His voice is whispering, nasal and indistinct, which caused me to examine his throat. The uvula may be seen to be deflected to the right, the arch of the soft palate on this side is narrowed, while that on the left side is broadened and lowered, indicating paresis of this (left) side. He was asked if he had any difficulty in swallowing liquids and replied that he had, and that they came through his nose. When asked to whistle he could not, unless he held his nose. Here are clearly demonstrated conditions frequently seen after diphtheria, viz., paresis, both in his eyes and throat, and the gas and teeth causation are far afield.

"The question: Has your son had a sore throat during the past few weeks? was asked with considerable

confidence, expecting an affirmative reply; but was answered he had not; that he was well up to taking the gas. In writing to Dr. Cousens of the case I stated that his condition was just such as one might expect after diphtheria, but that he had not recently been ill nor had a sore throat. But at the next visit his mother remembered that the week before the exhibition, about September 20th, he had a sore throat, not very bad; that he had a lump beneath the right lower jaw; that he was kept from school a week, and that she swabbed his throat with vinegar, borax and honey. So I will leave you to say if the case has been properly solved, and what part, if any, the gas and teeth extraction had in it. It is instructive inasmuch as it strengthens the belief that mild diphtheria may be followed by severe paralysis; also that it generally manifests itself about the third week after convalescence; that we are to be on our guard and not be led astray by erroneous preconceived opinions of patients or their friends, but to judge the case by the light of such scientific knowledge as we are able to shed upon it. The case has also a medicolegal bearing, as there was a fixed, and even fierce opinion in the mind of the mother that the gas, or its administration, or the teeth extraction were faulty."

TORONTO MEDICAL SOCIETY.

The regular meeting was held January 9th, 1896.

Dr. Oldright presented a fibrosarcoma which he had removed from the sacral region. He had seen the patient first twelve years ago, and although he had forgotten it, the patient says he then pronounced the tumor of little consequence, as it was simply a small hard nodule beneath the skin. It commenced to grow about four months ago. Its surface was smooth and reddish in appearance, so that it might have been taken for a carbuncle, there being a little oozing from it. The medical man who saw the case first incised it, thinking there was pus. He (Dr. Oldright) considered it sarcomatous and removed it.

Dr. Peters said the case was interesting on account of the growth occurring in this region, in the same place where tetromata, spina bifida and monsters attach themselves to the body. He thought it was wise in all such cases to remove all suspicious growths, for it was generally known that in many instances these apparently benign tumors became malignant and destroyed life.

Dr. W. J. Wilson reported the history of a case of melanotic sarcoma which had started from a nævus.

Dr. Oldright presented a patient, a syphilitic, who had a peculiar eruption on his trunk, principally on the back. It consisted of patches of small dark papules corresponding to the position of the sebacious glands. Small quantities of sebum could be squeezed out. The patient had been on anti-syphilitic treatment internally, with applications of green soap externally. The rash was disappearing.

Dr. Oldright then presented some pathological specimens which he had just secured at a post mortem. He had seen the patient, a woman, about a year ago last June. At that time she was suffering from

symptoms of indigestion. severe She presented a cicatrix on the left side of the chest, at the situation of which she said a tumor had been removed. There were little nodules in the vicinity of it. The other breast was hard. A hard mass could be felt in the epigastrium. In the following December she suffered from œdema in both legs. The pain was so great from the swelling that incisions were made to allow the fluid to escape. This gave temporary relief. Subsequently the abdomen became ascitic and several aspirations were made. An exploratory incision was made but without permanent relief. Post mortem showed one pleural cavity filled with lymph which had become caseated. A large carcinomatous mass was found in the colon; and the stomach, uterus and omentum were infected. The right lung was small and presented nodules while the left was very large. The heart was extremely small.

Dr. Ross related his experience in regard to malignant tumors of the breast, and discussed the question, When should we operate? His conclusion was that if the glands were badly affected it was better not to operate.

Dr. Price Brown said that in his experience he had never seen any of his cases live longer than two years after the operation. A great deal depended on the character of the tumor. He was consulted in one case where the cancer was small and hard. He advised against removal and the woman lived four years.

Dr. W. J. Wilson reported several cases. In one case where there was no operation the patient lived seven years. In another, death occurred in three years from recurrent cancer in another part of the body. Where the swollen glands caused swelling of the arm with very great pain, he recommended operation. If the operation did not shorten the disease, it rendered life more tolerable.

Dr. Britton reported a case in which ulceration was present, which made the patient's life extremely uncomfortable. He thought operation would have been advisable had there not been organic disease of the heart. The patient lived nearly ten years, dving from asthenia. The cancer was an extremely hard one. His experience was that the average length of life after operation was two or three years. He thought many of the cases which were reported as living longer were not cases of cancer at all. It was such cases as these latter that the quacks made their reputation upon.

Dr. Oldright related the history of several cases where operation had proved satisfactory. He did not believe that removal hastened the development of the disease in other parts of the body. He had seen, while in London in the past summer, in a consultation clinic, a partial removal of the breast. This he did not think was wise. He thought one should either operate thoroughly or not all.

Dr. Ross reported a case of ectopic gestation and presented the specimen. This patient had gone two weeks beyond her monthly period and was suddenly seized one evening with collapse. She was immediately taken to the hospital and operated on with happy results. The ruptured tube was shown with the placentia protruding from it. The doctor reported that this was his eighteenth case with only three deaths.

Dr. Oakley asked in what way tubal disease predisposed to ectopic gestation.

Dr. Ross said that his theory was that it did so by destruction of the cilia of the tube. Their absence permitted the spermatozoa to enter the tube.

Dr. Starr showed the heart of a child aged seventeen months that had died of pneumonia. It presented a patent ovale. He also showed an inflated cæcum, demonstrating the integrity of the valve.

Dr. Price Brown related the history of a case in which the symptoms were sudden and severe pain and collapse. The patient was a man aged forty-two, married and temperate. The stools were of a black color, but microscopically did not show any blood cells. Temperature, 99° to 100°; pulse, feeble. Patient was improving. He thought himself that the diagnosis pointed to duodenal ulcer. In reply to members he said that patient had not been taking iron or bismuth.

The society then adjourned.

MEDICAL DINNER.

The first annual dinner of the Vancouver and New Westminster Medical Associations took place on Wednesday evening, December 18th, at the Merchaund's Exchange, Vancouver. Dr. D. Bell-Irving, president of the Vancouver Association, presided in a manner which made everyone feel at home, and Dr. Fred. T.

Underhill, president of the New Westminster contingent, occupied the vicechair. The other practitioners present were: Drs. Fagan, McGuigan, Walker, Drew, Wilson, Langis, Boggs, Weld and Carroll. Dr. W. A. DeWolf-Smith, of New Westminster, had come over, but unfortunately had to return immediately in consequence of an urgent telephone message from the Royal City, one of his patients having taken a bad turn, and would not be satisfied without seeing his medical attendant. It is hard to say whether it is the patients of themselves who contrive on any special occasion when a medical man goes out for a jolly evening to spoil his fun by getting particularly worse just then, or whether that much-abused old scoundrel popularly known by the name of Old Nick, out of pure malice, enters into the interiors of the sick and presses upon some very sensitive tactile corpuscle with the result mentioned above in the case of Dr. DeWolf-Smith's patient. For some similar reason quite a large number of the prominent members of the Vancouver Association were absent also. Letters of regret were read from Sir John Reid, Drs. Johnson and Thomas, all of whom, for one reason or another, were unable to attend. However, those who were present enjoyed themselves thoroughly. The president of the Vancouver Association in his opening remarks, after a lengthy menu of solids and liquids had been thoroughly discussed, welcomed the New Westminster brethren in a few felicitious terms, pointing out the social benefits to be derived from such gatherings of medical men around the festive board. He went

on to say that it was pleasant once in a while to get away from the undertaker, who, instead of being the friend, as is popularly supposed, of the medical man, is his deadliest foe and the arch disturber of his peace of mind. He said, however, that though the of $\pi o\lambda \lambda oi$ as a general thing were in the habit, when in good health, of sneering at the physician, yet a champion sometimes arises even amongst these and says a kind word for the medical profession. In illustration he quoted the following lines from Byron's "Don Juan":

"Physicians mend or end us Secundum artem; but although we sneer In health—when ill we call them to attend us Without the least propensity to jeer."

Dr. Underhill replied in suitable terms, followed by Dr. Fagan, who said he rose as an Irishman and not as vice-president of the New Westminster Association. The duty of the physician was to be an observer and Irishmen were observers, and consequently made good physicians. Irishmen were good judges of everything, even of whisky. Remarks followed from Drs. McGuigan, Wilson and Carroll, who, it appears, also have claims on Ireland; but whether as physicians or as judges of potheen our special reporter did not quite understand. At this point Dr. Henri Everiste Langis sang his favorite French comic song : "Parlez vous Francais, mademoiselle?" which set the table in a roar.

Dr. Weld proposed the toast of the Provincial Board of Health, which has lately been organized, and coupled therewith the name of Dr. Walker, who is a member of that body.

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Dr. Walker felt sure that the Board would be flattered by this recognition by the two medical associations of the mainland, but the Board had done nothing yet, and what it intended to do he did not know, but they might feel assured it would endeavor to keep the province in a healthy state.

Dr. Bell-Irving remarked here that he hoped they would not make the province too healthy, nor keep down diseases too much. It was so healthy now that the physicians in it had scarcely anything to do.

Dr. Walker then continued to speak on another subject, viz., the amalgamation of the two societies into one, which might be called the "Mainland Medical Association."

Dr. Boggs, the energetic and genial secretary of the New Westminster Society, on rising to speak was received with great enthusiasm. He told the gathering that he was a supporter of amalgamation and would encourage the reading of papers on medical topics of interest. He was pleased to tell them that every medical men in the city of New Westminster belonged to the Association, at which statement the Vancouver men held down their heads in shame, for it is a well-known fact that there are quite a number of practitioners in the Terminal City who do not work with their brethren in professional matters. much to the enjoyment of a certain class of the public, who like nothing better than to see the disciples of Galen fall to cutting one another's throats. Dr. Boggs urged the Medical Council to be even more energetic than they have been in putting down irregular practitioners, and mentioned a

preacher near New Westminster who should be carefully looked after, as he is said to be caring for the bodies as well as for the souls of his parishioners, which, of course, is a very wrong thing for the said preacher to do, who, by the way, is of the class known by the Germans as Landgeistliche, or country clergyman, one who is supposed to know a little about everything, theology included.

After a few final words by Dr. Drew the New Westminster men had to retire, as the train which conveyed them to Vancouver was about to return. So after singing "Auld Lang Syne" and "A Jolly Good Willie-Waught," the first joint banquet of the two medical associations came to an end. Next year the Vancouver society will return the visit of the New Westminster Association, and a good time may be expected.

Special Selections.

SOME RECENT OBSERVA-TIONS ON INFANT FEEDING.

By SIR WM. O. PRIESTLEY, M.D., LL.D., Consulting Physician to King's College Hospital, London.

[The following fragment, read by desire of the East London and South Essex District of the Metropolitan Counties Branch, does not claim any originality. It was intended only to call attention to M. Budin's recent observations, and elicit discussion upon them.]

In the early summer of this year, I paid a visit to Paris, mainly for the purpose of seeing my old friend, the celebrated M. Pasteur. He was then so feeble that I feared it was the last time I should see him alive, and he has since gone to his rest amid universal mourning.

While in the French capital I took the opportunity of inquiring what advances were being made in the departments of obstetrics and gynæcology, and I was particularly impressed by the admirable and original work respectively of M. Budin and M. Pozzi. I was especially interested in the clinic of M. Budin, where a series of investigations had been undertaken concerning the best way of feeding newborn infants. It is on these investigations I propose to say a few words in the present paper.

A large proportion of medical men in general practice, as well as obstetric physicians, have constantly to consider and give advice on the management of newborn children, and it is a subject which so nearly touches the affections and interests of so many households, that any fresh contribution, placing it on a scientific and successful basis, must necessarily be welcomed by all of us.

In truth, the well-being of infants is so important, not only in a domestic sense, but in its relation to the state, that it may well engage the best faculties of the medical man, and not be left, as it too frequently is, to the bungling mismanagement of ignorant and opinionated nurses.

We are all aware that the mortality of children during the first year of life is very large in all countries. In certain portions of France, not more than ten years ago, it amounted to more than 50 per cent.; at Lille, in 1850, it actually amounted to 89 per cent. Even in Paris, no longer than ten years ago, it was found by Dr. Lede to be more than 27 per cent. In this country the percentage is apparently not quite so large, but the Registrar-General's reports show a large preventable mortality, and the question for medical men to solve is, how these deaths of young children are to be obviated.

When we look at the domestic surroundings of the poor, the bad sanitary conditions in which we live, and the ignorance, from a scientific standpoint, they show of the proper methods of feeding and rearing children, we cease to wonder that so many children die in infancy; we rather wonder that so many survive Unfortunately, of those who live. many, as the result of mismanagement in the early months of life. emerge from infancy enfeebled and stunted in growth ; eventually, if they live long enough, they themselves become the parents of a degenerate race. But it is not among the poor only that the children are mismanaged; the children of the rich are commonly entrusted to the care of women nurses, imperfectly educated for the important duties they undertake. If they are quick enough, they generally contrive to pick up a little traditional lore from other nurses. whose sources of information are anything but scientific, and who make up for their lack of knowledge by selfassertion and deprecation of the interference of the doctor. The widest prevailing fallacy among these women is, that infants' food cannot be nutritious unless it is thick, and hence they feed infants soon after birth with various admixtures of farinaceous

stuffs which the young stomach cannot assimilate.

All instructed medical men now know that some form of animal milk. without the admixture of any farinaceous material, is the most suitable food for children during the first months of life, but the difficulty hitherto has been to find with exactitude the best substitute for mother's milk, and to prevent misadventures when, for any reason, the child cannot be suckled by its own mother. The researches of M. Budin and of his assistant, M. Chavane, have shown conclusively that one of the chief difficulties in the artificial feeding of infants is in keeping the milk of the cow, or other animal, free from contagion of bacilli, which are always floating in the atmosphere, and which, when introduced into the digestive organs, produce green motions and diarrhœa. Milk of every kind is found to be an admirable medium for the cultivation of these microbes, and its exposure to the air for even a short time, more especially with a warm temperature, is sufficient to favor their very rapid development. The result of imbibing these organisms, even in small quantity, is that the child is seized with diarrhœa and vomiting, and these, unchecked, speedily exhaust vitality and extinguish life.

MM. Budin and Chavane start with the proposition, which they cannot too strongly emphasize, that of all ways of feeding a newborn infant that of suckling by the mother or by a healthy wet nurse is the safest and the best. The substitute of a wet nurse, when the mother for any reason is unable to suckle her child, is much

more prevalent on the Continent than in Great Britain. Even in hospitals, when a woman cannot nurse, the state provides a wet nurse ; and there seems to be no difficulty in providing an adequate supply of wet nurses. M. Budin has charge in his maternity hospital of a department in which all the premature babies born in certain parts of Paris are brought together. Here are dozens of small and imperfectly developed infants, some being kept in couveuses or incubators, to maintain their bodily temperature, and all, except those suffering from syphilis or other diseases, are nourished from the breast. I saw several of these wet nurses suckling two diminutive babies at the same time. one at each breast. Those whose condition rendered it inexpedient to put them to the breast were fed either with human milk, drawn previously from a woman, or on cows' or asses' milk, specially prepared for the purpose. In Great Britain there is a certain prejudice, besides the difficulty and expense of providing a wet nurse, and feeding by hand is much more universal.

Most of us know something of the difficulties surrounding hand-feeding, of the small or more serious ailments which spring up in connection with it, and the constant need of prescriptions to combat these inconveniences. But all of us may not have appreciated the true causes of these inconveniences, nor understood that they represent but another link in the chain of microbic pathology, which we owe primarily to the rescarches of the great man who was finally interred, with such well merited honor, at the Pasteur Institute, on November

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25th. We have rather been disposed in past times to attribute the derangements of digestion to that indefinite change in the milk which we call "turning sour," or to the casein of cows' milk being too strong for the infantile stomach, and the necessity for further dilution with water. This idea has been strengthened by observing the masses of undigested curd passed in the evacuations. When some other food has been added to the milk, this perchance has been blamed for the derangement.

M. Budin's researches clearly indicate that next to mother's milk, the milk of some other animal, like that of the ass, the goat, or the cow, and this undiluted with water but properly sterilized, is absolutely the best. As the milk of the cow is the most readily available, this is used by M. Budin, and his experiments were made chiefly with cows' milk.

Since it was discovered that various zymotic diseases have been produced by drinking infected milk, various sanitary authorities have impressed upon us as a measure of precaution the necessity of always boiling milk for household purposes, and there can be no doubt that boiling is a very effective method of sterilizing milk, But boiling milk has unfortunately the effect of giving it a disagreeable taste, and it seems besides to have the effect of so firmly coagulating the casein as to render it less easily digestible for the infantile stomach. The method of sterilizing milk recommended by M. Budin is to allow it to remain in a bath of boiling water-a bain marie, as he calls it-for forty minutes. The apparatus he advises consists of a series of bottles, each capable of holding a child's meal, and furnished with indiarubber stoppers. These bottles are placed in a pan of water or water-bath, which is kept boiling for the prescribed time. The covers or stoppers are so adapted that they allow vapor to escape during the heating process, but as the bottles cool they are drawn down into the opening by atmospheric pressure, and fit like suckers into the orifice, thus showing that they are air-tight. It is a notable fact, not generally known, that it requires a higher temperature to boil milk than water, and consequently milk can be immersed in boiling water for forty or more minutes, without being itself boiled. The temperature is, however, raised high enough to disinfect it of all commoner germs of disease, while the flavor of boiled milk is not imparted to it; indeed, the taste is little altered from that of new milk. But the additional advantage gained is that the curd of the milk is separated into minute particles or flocculi and so softened that it does not form hard concretions in the digestive tube of the infant. It is much better adapted. therefore, for infant feeding, and is likely also to be of great use in the case of adults who have feeble digestion, or for other reasons find ordinary milk objectionable. M. Budin deprecates very much diluting milk with water or even barley water for infant feeding. He holds that it is much wiser, and more in the interests of the child, to give a smaller quantity of pure milk properly sterilized than a larger quantity diluted with water. In all the observations made in reference to this point he found that the greater quantity of fluid, necessitated

by dilution, tended to derange digestion, while the normal and progressive increase of weight was not maintained. Always supposing that too large a quantity of sterilized milk was not given, and it was regulated in accordance with the age or needs of the child, there was no difficulty in the assimilation of the pure milk.

M. Budin insists that both in hospital and private practice the progressive well-being in the infant is best ascertained by weighing it. In his hospital the children are weighed every day, and their weight is registered, so that an increase or diminution is readily observed. He has constructed an ingenious table which serves as a register. In the first column are figures in grammes, the lowest ones at the bottom, with an ascending scale. The days and weeks are indicated along the top, and thus a curve may be traced with pen or pencil, as in temperature charts. Even under normal circumstances the weight of the child drops a little during the first week after birth, but after that time it ought steadily to advance. In the charts alluded to, whenever water was added to the milk there was always a little drop in the curve, showing that less nourishment had been absorbed, and a like drop was noticed if, perchance, the child had diarrhœa, or catarrh, or other infantile ailment, showing that nutrition was impaired. To make the sterilization of milk effective, great care must be taken to exclude every source of infection from germs which may get access to the milk after the process is completed, either in the vessels themselves or in the apparatus used for feeding. Many of the misadventures were found to arise from

the lack of precaution in this respect. Sometimes the milk, after being duly sterilized, was again exposed for some time to the air before being used, and thus became again the medium for development of bacteria, more especially in a warm atmosphere. The Academie de Medecine, in Paris, does not think it beneath its dignity to express an opinion on babies' feedingbottles, because it concerns a matter of vast importance to the community, and it has emphatically condemned all feeding-bottles with long and complicated tubes, because it is impossible to keep them clean and sterilized. Consequently they become the nidus for bacterial development, particularly at the joints. The simplest bottle, which can be scalded throughout, is the best; but there may be great difficulty in persuading poor women to adopt them, because although a siphon bottle may be the means of poisoning her baby, yet she can put it beside the child in its cot and go about her other occupations, leaving it to absorb its nourishment automatically.

If pathogenic organisms can be prevented getting access to the digestive organs of young children, one of the most fertile sources of infantile diarrhœa would be removed and the mortality from this cause greatly lessened.

Sterilized milk seems in certain cases actually to be a remedy for infantile diarrhœa, for always supposing that a fresh supply of irritating organisms is not poured continuously into the digestive canal, nature will eliminate the poison up to a certain amount, and then untainted milk is retained and becomes nutritious.

If M. Budin's deductions turn out

to be correct-and he is a careful and earnest observer-the use of condensed milks may, to a large extent, be discarded ; these have crept largely into use, and no doubt are very convenient in emergencies. They may seem to answer for a time, but in my experience they are very defective sources of nourishment, and should never be employed when fresh milk can be procured. Dr. Barlow, who has written so ably on infantile scurvy, believes that by the condensing process milk loses its antiscorbutic property, and so favors scurvy in children. This may possibly occur when milk is boiled, but the risk is minimized when it is simply sterilized and not boiled.

To sum up M. Budin's conclusions, therefore, one may say :

1. That he regards breast milk as absolutely the best and safest nourishment for an infant, and that when a mother cannot nurse her own child the best substitute is a good wet nurse.

2. When artificial feeding must be had recourse to, cows' or another animal's milk, sterilized by the method alluded to, is by far the best substitute; but even when milk has been sterilized it must be guarded by certain precautions, and the simplest feeding-bottle is the best.

3. Sterilized milk is best given undiluted with water, the quantity given to vary with the age of the child and other circumstances.

This, I presume, implies that the child is in normal health. If any derangement of the digestive organs or other abnormal condition is present, dilution with barley water or other modification of food may be required as well as medicines. He objects to all farinaceous forms of food during the first year of life.

The method of sterilization of milk. as recommended by M. Budin is not new, and he does not claim any originality in this respect. Inexpensive apparatus for this purpose is to be found with many instrument makers. I learned quite lately that the calves used for vaccination at the National Vaccine Institution are now fed on sterilized milk to keep them healthy. It would certainly be a satire if we were not to adopt the same measures of safety for human beings which we provide for the lower animals. Sir Dyce Duckworth, who has just returned from America, tells me that a system is making way there in which medical men habitually write prescriptions expressing the exact amount of casein of cream and of sugar which milk is to contain. in accordance with the age and condition of the infant. The milk is at the same time carefully sterilized. In Boston and New York especially laboratories have been established to make up these prescriptions. Sir Dyce has furnished me with a pamphlet by Professor Rotch, of the Harvard University, in which all the details are set forth with great ingenuity and clearness.

This is bringing the science of feeding children to very exact proportions, but entails great trouble and possibly expense. Budin's and Chavane's method, if generally successful, can be more readily adopted for domestic use, as it is very simple and entails little expense. The more elaborate one may be reserved for special cases or until it is more generally available.—*British Medical Journal.*

THE USE OF ANTISEPTICS IN THE TREATMENT OF IN-FANTILE DIARRHOEA.*

By W. SOLTAU FENWICK, M.D., M.R.C.P., Research Scholar to the British Medical Association, Assistant Physician to the Evelina Hospital for Sick Children.

During the last few years a considerable amount of attention has been directed to the various chemical changes which occur in the digestive tract as the result of bacterial activity. and certain facts have come to light which prove beyond doubt that many clinical phenomena, which formerly were either ignored altogether or regarded as symptoms of a fortuitous nature, must now be attributed to the direct absorption of organic poisons from the stomach or intestine. The various researches which have so materially contributed towards this discovery have also indicated that certain morbid conditions of the digestive organs which are usually assigned a simple etiology owe their origin in reality to diverse and often complex causes which are themselves intimately connected with abnormal fermentations of the food. In view of these facts, it is not surprising to find that the principles which were formerly laid down for the treatment of disordered digestion have undergone a corresponding change, and that instead of employing sedatives or astringents for the relief of gastric or intestinal irritation, our principal efforts are now directed to control the immediate cause of the disorder by the exhibition of drugs which possess

the power of inhibiting the processes of fermentation.

The question of gastro-intestinal antisepsis extends over such a wide field, and embraces so many subjects, that any attempt to deal with it in an adequate manner is beyond the scope of a single paper. I will therefore confine the few remarks I have to make to the antiseptic treatment of the intestinal dyspepsia of infants, the chief symptom of which is diarrhœa.

ETIOLOGICAL CONSIDERATIONS.

The researches of Escherich, Van Puteren and others have shown that, although at birth the contents of the digestive tract are sterile, bacterial infection is brought about within the first twelve hours of life through the medium of the atmospheric air which the infant swallows in large quantities. The various micro-organisms thus introduced into the system thrive and multiply in the mucus and undigested food which soon fills the intestine, and are constantly reinforced in numbers and diversified in species by the ingestion of contaminated milk or the swallowed secretions of the mouth. The danger which arises from these natural sources of infection is greatly increased by the fact that during infant life the gastric juice is incapable of exerting any decided control over microbic growth, owing to its comparative deficiency in free hydrochloric acid. Milk fermentation ensues from the presence of B. lactis aërogenes and the B. butyricus, which, along with several other varieties of lesser importance, are constantly found in the stomach of infants suffering from indigestion. The first-named converts the milk sugar into lactic

^{*}Read in the Section of Pharmacology and Therapeutics at the annual meeting of the British Medical Association, held in London, July-August, 1895.

acid with the precipitation of caseine, while the latter changes a portion of the lactic into butyric acid, and in so doing liberates free hydrogen gas. The presence of these abnormal products in the contents of the stomach give rise to abdominal pain, distension and vomiting—a series of symptoms which characterize the disorder known as acute dyspepsia.

The entrance of undigested and fermenting material into the intestine induces violent peristalsis, with the result that the infant suffers from colic and diarrhœa until the bowel has succeeded in ridding itself of its irritating contents. If proper means be taken to assist this effort of nature and to prevent a recurrence of the disorder, the stools soon resume their normal appearance and perfect recovery ensues. But if these evidences of digestive derangement are overlooked or neglected, and the child is constantly plied with food, each fresh supply of milk undergoes the same process of fermentation in the stomach and hastens the advent of the second stage of the disorder, namely, gastro-intestinal catarrh. This inflammatory condition probably arises from direct irritation of the mucous membrance of the digestive tract by the acid products of fermentation, and since it is always accompanied by a diminution in the secretion of hydrochloric acid, gastric digestion becomes greatly enfeebled, and the various bacteria are afforded an unlimited scope of action. Within a short period of time the intestine becomes affected in a similar manner, and the child begins to lose flesh and strength and to present all the symptoms characteristic of chronic intestinal catarrh. The third and last stage of the disease is marked by a more or less extensive cirrhosis of the mucous membrane of the digestive tract, often associated with the follicular ulceration of the colon. The diarrhœa continues and the stools are largely mixed with mucus or streaked, with blood ; the marasmus increases, and death finally ensues either from exhaustion or from some nervous phenomena due to the absorption of toxins from the alimentary tract. This sketch of the etiology of the infantile diarrhœa serves to emphasize three important facts. In the first place, the disorder is a direct result of the activity of certain bacteria which produce abnormal fermentations of the food with subsequent inflammation of the stomach and intestines. Secondly, the intestinal derangement is primarily dependent upon gastric indigestion, and hence the symptomatic diarrhœa will not be overcome until the gastric disorder has subsided. Lastly, the prognosis in chronic cases depends upon the extent of the organic changes which have taken place in the digestive organs and the influence they exert upon the assimilation of the food.

MEDICINAL ANTISEPTICS : THEIR ADMIN-ISTRATION AND MODE OF ACTION.

Although the theory of intestinal antisepsis is comparatively modern, its practice dates from the earliest times. Thus the empirical value of emetics and purgatives in cases of dyspepsia obviously depends upon the fact that these measures serve to rid the system at once of the agents of putrefaction and their products; while in the routine treatment of diarrhœa by such drugs as calomel and subnitrate of bismuth the same unconscious adoption of antiseptic principles may be discerned.

The various antiseptic drugs which are specially adapted for medicinal use can be roughly divided into two classes, according as they are soluble or insoluble in water. The first group comprises such substances as carbolic acid, perchloride of mercury, lactic acid, hydrochloric acid, salicylate of sodium and resorcine. The chief members of the insoluble class are naphthalin, β -naphthol, betol, benzolnaphthol, salol, the salicylates of bismuth and strontium, and calomel. In addition to the question of solubility there exists another and more important distinction between the members of the two classes. The soluble varieties possess germicidal and toxic properties in direct proportion to the dose in which they are administered, and since they are absorbed rapidly from the alimentary tract, it is obvious that they can only exert their specific action in the stomach and upper part of the small intestine. The insoluble drugs, on the other hand, remain for the most part unaltered in the stomach, and therefore exert but little influence upon the fermentative processes which occur in that organ. In the intestine, however, the majority of them are subjected to chemical influences by which they are decomposed, with the ultimate production of secondary substances that exhibit both antiseptic and poisonous properties far in excess of the original drug. These latter remedies are accordingly reserved for cases where it is necessary to control bacterial activity in the intestine, and for this purpose they are administered in full doses at short intervals of time

Hydrochloric acid inhibits the growth of most species of bacteria when it exists in the proportion of more than 0.17 per cent. (Miller). It is probable that in its natural combination with pepsin the acid not only kills, but actually digests many bacteria, and in this manner serves to protect the intestine from the action of pathogenic organisms introduced with the food. The acid has been much extolled as an efficient antiseptic in cases of infantile dyspepsia, and is usually administered either in the form of 0.4 per cent. solution, or as the Pharmacopœia preparation of the dilute acid. Its use is contraindicated by the presence of gastric catarrh.

Lactic acid possesses less than onefifth of the antiseptic power of the mineral acid aforementioned. It has been chiefly recommended by certain French physicians as a remedy for the green diarrhœa of infants, attributed by them to the presence of a chromogenic bacillus. It is most advantageously employed as a 2 per centsolution, of which a teaspoonful may be given every two or three hours. This acid occasionally gives rise to gastric pain and vomiting, especially if the mucous membrane of the stomach be inflamed. It is excreted by the kidney in the form of lactate of sodium.

Carbolic acid is undoubtedly one of the most powerful germicides we possess, but unfortunately its medicinal value is considerably impaired by its unpleasant taste and poisonous character.

Although the presence of pyrocatechin in the urine does not necessarily indicate danger to life, it should always be regarded in the light of a warning, and the dose either decreased or the drug discontinued altogether. Carbolic acid can be administered to children either in the form of the pure acid (one minim well diluted), or as the glycerine preparation (two to four minims).

The use of perchloride of mercury is also somewhat limited on account of its toxic properties. In severe cases of diarrhœa it has been used with success when given in doses of one-sixteenth to one-twelfth of a grain every two hours. It is rapidly eliminated by most of the excretory organs of the body.

Resorcin (metadioxybenzolum) is a crystalline powder, freely soluble in water and possessed of a harsh sweet taste. Its solution is powerfully antiseptic, 0.4 of the substance inhibiting the growth of all the micro-organisms which are found in the stomach and intestine. It is rapidly absorbed by the mucous membrane of the alimentary tract, and can be detected in the urine by means of perchloride of iron (violet color) within a short time of its ingestion. In moderate doses resorcin is devoid of toxic properties, but when a drachm or more is given at a time, giddiness, headache and sweating are apt to supervene. For these and other reasons, which will be mentioned immediately. I consider it one of the most useful remedial agents we possess for the treatment of infantile diarrhœa.

Among the insoluble aromatic compounds of the carbon series, naphthalin has, perhaps, enjoyed the greatest amount of reputation. Although insoluble in water, a certain amount is absorbed by the intestine, and is ex-

creted by the kidney in the form of naphtho-sulphite of sodium, thereby producing a brownish-black coloration of the urine. When mixed with nutritive media this substance exhibits comparatively feeble antiseptic properties, as much as 1.5 per cent. being usually required to inhibit the growth of the intestinal bacteria. Naphthalin possesses a powerful and disagreeable smell, and in certain cases its administration is followed by renal and vesical irritation. The dose for a child is from two to five grains, either mixed with sugar or suspended in some sweet emulsion.

Naphthol is a powerful germicide when it exists in a proportion greater than 0.08 per cent. It is only slightly poisonous, but its taste and smell are unpleasant. It has been used with success in cases of infantile diarrhœa, about two grains being given every four hours, either mixed with white sugar or dissolved in olive oil and emulsified.

Salol (salicylate of phenol) is a white, tasteless powder which remains unchanged in the stomach, but in the duodenum is rapidly split up into phenol and salicylic acid, the latter of which can be detected in the urine within seventy minutes of its administration. In test-tube experiments this substance only retards the growth of bacteria when it exceeds 0.6 per cent. of the medium. To infants, ten grains may be administered in divided doses during the course of the twentyfour hours.

Benzol naphthol is a tasteless powder, which in the intestine becomes decomposed with the liberation of naphthol and benzoic acid. The latter is excreted in the urine, partly in combination with alkaline bases and partly in the form of alkaline hippurate. This substance is not poison when given in moderate doses, and it is therefore of considerable value in cases of infants and young children, to whom it may be administered in doses of thirty grains per diem.

Iodoform was formerly advocated as a medicinal remedy, but it has now been to a great extent replaced by the beforementioned preparations. Its antiseptic properties are probably greater in the intestine than laboratory experiments would indicate (0.3 per cent.), since it undergoes partial decomposition in the bowel with the liberation of free iodine. In combination with charcoal, it has been strongly recommended by Bouchard as a means of diminishing the toxicity of the urine and fæces.

The salicylates of bismuth and strontium both undergo chemical changes in the intestine with the formation of salicylic acid and the corresponding metallic sulphides. The acid exerts a powerful antiseptic influence upon the contents of the bowel and is slowly eliminated by the kidney. The sulphite of bismuth betrays its presence by the characteristic blackening of the motions. Both preparations are tasteless and insoluble, and may be given to infants in doses of one to three grains every four hours. It is usually stated that the salicylic acid exerts an irritant action upon the kidney, and that the drugs which cause its elimination in the urine are contra-indicated in cases of albuminuria. This objection is, I believe, more theoretical than real.

Calomel is an excellent example of that class of remedies which owe their antiseptic properties to a change in their chemical composition occurring after ingestion. It is probable that the subchloride of mercury, when given in minute doses, is partially converted in the stomach into the perchloride, and in the intestine into the sulphide. It is by far the most reliable remedy we possess for acute cases of diarrhœa in infants when administered in fractions of a grain at frequent intervals.

RESULTS.

In the selection of an appropriate drug for a child, several factors have to be taken into consideration which in the case of an adult can safely be neglected. Substances which possess a nauseous taste or offensive smell are hardly tolerated by a child, even when mixed with an excess of sugar ; and hence naphthalin, β -naphthol, and iodoform can seldom be prescribed with success. Again, absorption takes place so readily from the alimentary tract of an infant that it is often impossible to obtain any degree of intestinal antisepsis from the use of perchloride of mercury and the phenol compounds without running great risk of poisoning the patient in the process. Lastly, powders like charcoal, which have to be administered in large bulk in order to produce any affect at all, are obviously inapplicable to the treatment of disease in infants. In the majority of cases, therefore, our choice is limited to the tasteless and comparatively non-toxic powders, such as calomel, benzol-naphthol and the salicylates of bismuth and strontium, or to the soluble antiseptics like resorcin and the acids. During the last three years I have used the various medicinal antiseptics in more than five hundred

cases of digestive disorders in children which have come under my notice at the Evelina Hospital and elsewhere. The results which have accrued from their use in cases of infantile diarrhoea have been so satisfactory that for more than twelve months I have never once had occasion to resort either to astringent drugs or to opium, whilst in almost every instance where these latter remedies had been previously tried without effect the substitution of an antiseptic was at once followed by complete success. Acute dyspepsia is readily cured by dietetic treatment combined with the use of castor oil or an emetic. Antiseptics are only necessary when the disorder has already continued for several days and has resisted the simpler methods. Under these conditions calomel is of the utmost value when administered in doses of one-sixth to one-third of a grain every three or four hours. Hydrochloric acid has been extolled by many authorities, but, according to my experience, the mineral acid more often does harm than good. It is most serviceable when all acute symptoms have subsided and the child is suffering from weak digestion as the result of cattarrhal process. It may then be combined with pepsin with great advantage.

It is in cases of chronic diarrhœa due to fermentation that the systematic employment of antiseptic drugs proves of the greatest value, and for this purpose the insoluble substances which act exclusively upon the intestine are usually recommended. This, however, is a mistake. The disorder always commences in the stomach, and is most easily controlled by the administration of remedies

which exert their specific action within that organ. Formerly I was wont to employ carbolic acid for this purpose in all cases of infantile diarrhœa; but its hot taste and unpleasant smell, as well as the occasional occurrence of carboluria, has made me transfer my allegiance to resorcin. This drug has the advantage of being extremely palatable to children, devoid of toxic properties when given in ordinary doses, and very inexpensive. According to the Pharmacopœia, the dose of resorcin is one to five grains, and it is probably on account of this insufficient dosage that the value of the remedy has been so much overlooked. As a matter of fact, the drug produces no ill effects in an adult unless the dose exceeds a drachm, and I have long been accustomed to prescribe three grains everyfour hours to infants only a few weeks old without the least ill effect.

In cases of diarrhœa the first effect of the drug is usually noticeable after the third or fourth dose, when the motions decrease in frequency and in amount, the dejecta at the same time acquiring a more natural appearance and losing their excessive foetor. At the end of the second day the diarrhœa has generally ceased, and is not infrequently replaced by obstinate constipation. I have before me the notes of 120 cases of intestinal dyspepsia in infants and young children which have been treated in the manner described. Of these, in 53 per cent. the disorder had lasted from one to two weeks, in 34 per cent. from two to four weeks, in 10 per cent. from four to eight weeks, and in the remaining 3 per cent. for a period of more than two months. Out of the

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entire number, in only nine instances did the diarrhœa continue after the treatment had been pursued for a week, the majority ceasing within three days. Of these nine refractory cases two were instances of cholera infantum, both of which succumbed within a short time of being brought to the hospital; in one case tuberculous ulceration of the intestine was found to exist after death, while the remaining six, most of which were very chronic in their nature, were rapidly cured as soon as benzonaphthol or salicylate of bismuth were added to the original mixture. These results go to prove that when given in sufficient quantity, resorcin constitutes a reliable remedy in cases of infantile diarrhœa arising from fermentative processes in the stomach and intestine. When, however, the disorder has lasted for a long time and follicular ulceration of the large intestine exists, the drug may be advantageously supplemented by those remedies which exert their antiseptic properties in the intestine. Benzolnaphthol is particularly valuable in this connection since it is but slightly toxic, but in order to prove effective it must be given in full doses at short intervals. Thus in some cases where the symptoms were obstinate I have prescribed as much as forty grains to a child during the course of twenty-four hours with only the most excellent results. My experience with the most recent antiseptic, the salicylate of strontium, has not been altogether satisfactory, and I have been unable to convince myself that it possesses any superior advantages over the corresponding salt of bismuth.-British Medical Journal.

REMARKS ON THE EDUCATION AND TRAINING OF GIRLS OF THE EASY CLASSES AT AND ABOUT THE PERIOD OF PUBERTY.*

By W. S. PLAYFAIR, M. D., LL. D., Professor of Obstetric Medicine, King's College; and Physician for Diseases of Women and Children, King's College Hospital.

In the few remarks I propose to make on my subject I do not, of course, aim at laying before you any novel matter. What I have to say is merely a little common-sense statement of general principles familiar to us all, but too often neglected. I have rather selected this subject as one which may possibly give rise to a discussion of interest, since it refers to matters constantly coming within the province of practitioners to whose charge the health of families is entrusted, and whose opinion on the questions raised may often be sought. We are all willing to admit, theoretically, that "prevention is better than cure;" practically we are apt to overlook prevention, and limit our efforts to cure. My object to-day is to insist on the endeavor at a peculiarly sensitive age in girls of so regulating their lives as to avoid sowing the seeds of mischief, which may, and often do, in future years develop into a disastrous crop.

What I think we ought especially to bear in mind is the highly sensitive nervous organization of the human female, the development of the emotional element which distinguishes the woman from the man, and influences the character and pro-

^{*} Read in the Section of Obstetric Medicine at the annual meeting of the British Medical Association, held in London, July-August, 1895.

gress of all kinds of disease in women, but much more especially diseases of the reproductive organs. Up to the time of puberty there is comparatively little difference between the sexes in health, in disease, or in any other condition. Conventionally they are separated, and different modes of education and training will soon make such difference as there is more marked, but boys and girls will play together, work together, and so on, and are generally on a footing of perfect equality, there being little essential which distinguishes one sex from the other

As soon, however, as the great function of menstruation is established, the sexual period of a woman's life begins, which must henceforth dominate her whole existence to a greater or less degree during the continuance of menstrual activity. The entire system now undergoes a marked change, the asexual child becomes a woman; her body shows the characteristic modifications fully described in all works on physiology and obstetrics, and with them are to be observed the not less important changes in character and in the general development of the nervous system which distinguish the woman from the girl. It is at this important time that the conduct of the health of the growing girl may influence for good or for evil the whole future of the woman. Judiciously managed, she may be so trained that she will be able to meet successfully the strain on the nervous system which she has so often to cope with in after-life, such as the duties of a wife and mother, or the struggle with domestic anxieties, worries and sorrows which

are rarely altogether absent from the lot of women. Injudiciously managed. as so many are at this important epoch, all these things which the strong-bodied and healthily-minded woman may bear with no permanent bad results will tell terribly upon her. She will have no stamina, no power of resistance, and she may become the wretched broken-down invalid so often met with in the present day, especially in the upper ranks of life. in which the evil effects of unbalanced culture, and the bringing-up of girls like hot-house plants are so frequently seen.

These are my reasons for asking your attention to a few words on what should and should not be done in the education and training of girls before and after the establishment of puberty. This is all the more necessary since the higher education of women has taken such enormous strides of late years, so that it is now regularly recognized and is almost universal. Everywhere the so-called "high schools" for girls are to be met with, and the still more advanced colleges of the type of Girton and Newnham are increasing in number. and are full of students. The oldfashioned girls' boarding schools, with their perfunctory education and their elegant accomplishments, are driven out of the field, and a movement. which at first was scoffed and jeered at, has now gained the day.

Let me say at once that with limitations which are essential because of the question of sex, which cannot be got over, the movement is one which seems to me an enormous gain, and which I write of in no spirit of opposition. This statement is needful, since there is an unfortunate tendency on the part of many mistresses of high schools to listen to the warnings of medical men with incredulity, to accuse them of narrow-mindedness and opposition, which, as a matter of fact, the great majority of them are in no way guilty of. The recognition of and warning against possible evils are neither the one nor the other.

The one great fault which those who manage these educational establishments appear to commit is that they have started on the absolutely untenable theory that the sexual question is of secondary importance, that there is little if any real distinction between a girl between the ages of fourteen and twenty and a boy of the same age.

I know of no large girls' school in which the absolute distinction which exists between boys and girls as regards the dominant menstrual function is systematically cared for and attended to. Indeed, the feeling of all schoolmistresses is directly antagonistic to such an admission. The contention is that there is no real difference between an adolescent male and female, that what is good for one is good for the other, and that such as there is is due to the evil customs of the past which have denied to women the ambitions and advantages open to men, and that this will disappear when a happier era is inaugurated. If this be so, how comes it that while every practical physician of experience has seen many cases of anæmia and chlorosis in girls, accompanied by amenorrhœa or menorrhagia, headaches, palpitations, emaciation, and all the familiar accompaniments of breakdown, an analogous

condition in a schoolboy is so rare that it may well be doubted if it is ever seen at all? It is certainly not necessarily from work. The successes of women in the schools have been so striking and numerous that their capacity for intellectual work cannot be doubted for a moment. One chief reason probably is that the male's work is safeguarded by an amount of physical exertion in the way of sports, which tends to keep him in health. It is true that in a few girls' schools attention has of late been paid to this point, but it is in a perfunctory sort of way at the best. There may be a gymnasium or some form of game; but while at a boys' school cricket and football are compulsory, to say nothing of the natural disposition of a boy to athletic pursuits, at a girls' it is merely optional, and if a pupil tending to illhealth avoids exercise little or no attention is paid to it.

As an evidence of this, within the past week I have been consulted in the case of two young ladies, aged respectively fourteen and sixteen. One was chlorotic, and her menstruation had ceased for a year. On taking her time table at a well-known high school, I found she had seven hours and three-quarters of work, an amount not in itself, perhaps, excessive in a healthy girl. From 2.30 to 4 there were no lessons, and, if the weather permitted, she might, if she liked, take a walk, but it was not insisted on, and being naturally languid and listless, as all such cases are, she rarely did so. There was no other opportunity for exercise at all.

The other suffered from pronounced menorrhagia, anæmia and debility.

Her time table also was seven to eight hours, and she "occasionally took a walk."

In neither of these cases had the school authorities ever inquired into the state of an all-important bodily function which in both was very markedly aberrant, and yet, considering the paramount importance of such symptoms of impaired health in girls of these ages, it might fairly be held to have been part of the duty of those in authority in such schools to make the necessary inquiries which might have led to some alteration in the course of study or in her general mode of life.

While it is questionable whether in boys' schools the attention given to exercise and athletics may not be excessive, in girls' schools it is, on the other hand, not nearly sufficient. And yet this is a fault which might very easily be remedied. It would not be difficult to make games compulsory as they are in public schools for boys, and there are some which are admirably adapted for women, as, for example, golf, or rowing when it is feasible, or it may be by cycling. Each of these exercises the muscles generally, without those spasmodic efforts required in cricket, football, or even lawn tennis, which are, perhaps, too violent for girls. The results when well and freely used must be well known to all who have a knowledge of what a thoroughly healthy English girl may be. No better description of this could be given than that contained in a leading article in the Speaker, on what the writer calls " the lawn tennis girl."

"Sensible people have long ago agreed to accept this new type of

womanhood as distinctly admirable. She has made her influence felt everywhere, both in real life and fiction. In real life we meet her in every country house, in every foreign hotel, and in almost every London square. And everywhere we meet her we come upon an excellent example of the healthy, well-developed, and unsentimental girl-the girl who does not think it necessary to devote herself to the study of her own emotions, and who finds in active physical exercise an antidote to the morbid fancies which are too apt to creep into the minds of the idle and self-indulgent."

This is an excellent description of a type we are all familiar with, and which, it is needless to say, we all admire. If high class educational establishments could succeed in turning out girls of this kind in larger numbers than they do at present they would do more towards lessening the number of neurotic women that the medical profession has to deal with than the medical profession can possibly do by any exercise of its own art.

One other regulation in girls' schools I should like to see made compulsory, and that is that no form of corset should be worn. The evils of these have so often been pointed out that it is needless to dwell on them in such a paper as this. Possibly in adult women the exigencies of dress and of custom make it hopeless to expect that more rational dress should be adopted, and it may even be that in child-bearing women they have certain uses. In adolescent girls, however, who are still in statu pupillari, nothing can be said in their favor, and it would be very easy for

schoolmistresses to issue a sumptuary law prohibiting their use altogether.

It is an obvious corollary from what has been said that it is the bounden duty of mistress, parent and doctor at once to insist on the cessation of all severe study as soon as any of the physical signs of illness have shown themselves, such as it is impossible to be mistaken in, as, for example, chlorosis, amenorrhœa, or menorrhagia, wasting, complete loss of appetite, and the like, and yet this is not generally done. Quite recently I was consulted by a medical man, whose daughter was a pupil at one of the principal and best known colleges for girls. Her menstruation had ceased for a year, and she had lost over a stone in weight. On this account her father, and I think very properly, removed her, on which the head mistress remonstrated, and wrote saying that they considered the menstrual function was not of consequence, and that when it was in abeyance for a time it came all right afterwards, when the girls left school. Any theory more unphysiological and more likely to lead to subsequent shattered health in girls it would be difficult to imagine.

It is not work which, in my judgment, hurts, but the perseverance in work after nature has hung out its danger signals, work in an unhealthy body; the attempt, in fact, to fight nature. Then, indeed, the careless, prejudiced, or unwise mistress or parent may well find that "over-pressure," the very existence of which so many deny, is a stern reality, which may shatter the whole future of the girl.—Brit. Med. Jour.

A TOXIC SUBSTANCE TAKEN FROM THE SUPRARENAL CAPSULES.

GOURFEIN (Rev. Méd. de la Suisse Rom.,) gives the results of his researches. The method at first used to isolate the substance was to precipitate a glycerine extract of the capsules by alcohol. Later, as the glycerine itself proved to some extent toxic, he devised the following method : Cut up and triturate the suprarenal capsules of oxen, calves, or sheep in a mortar with a little water; pour several volumes of warm water over them, and leave in a water bath for a guarter of an hour; filter and add to the filtrate the liquid obtained by pressure from the residue on the filter; evaporate in a water bath to a syrupy consistence, and add four times its volume of alcohol; leave the mixture for twenty-four hours in a cool place and filter. The precipitate by alcohol (chiefly albuminoids), when redissolved in water and injected into animals subcutaneously is quite inactive, but the residue obtained after evaporating the alcoholic liquid is very toxic. This substance, which is not destroyed by heat, injected hypodermically into animals produces a series of constant symptoms. (1) Green frogs, after an injection of a quarter of a Pravaz syringe, become motionless immediately, but are not paralyzed, as mechanical irritation of the foot causes reflex action. This weakness increases; if placed on the back the animals cannot turn over again. Respiration is first slowed, then accelerated and weak-

ened, and finally stops. The heart is affected later ; in twenty experiments the auricles continued beating twenty to thirty minutes after death. The spinal cord and motor nerves do not lose their electric excitability for three or four hours after death, which ensues a quarter to three hours after the injection. In those frogs where the glycerine extract was used tetanic convulsions also set in. These proved to be due to the glycerine, as in control experiments where glycerine and water (one to four) was injected the same convulsions occurred without being fatal. (2) Mammals. The first symptom, after injecting from one-half to one Pravaz syringe of the extract subcutaneously in white rats, mice, guinea pigs, and rabbits, is dyspnœa, which progresses till death takes place. Inspiration is prolonged, expiration is short and forcible. Extreme weakness, caused by depression of the central nervous system, is present, but no paralysis. General sensation and the sensorium are intact. Electric excitability of motor nerves lasts fifteen to eighteen minutes post mortem, but the vagi are paralyzed. If artificial respiration is used in rabbits they die later through paralysis of the heart. Animals which are able vomit repeatedly soon after the injection, this being preceded by copious salivation. The toxic substance, however, is not excreted in the saliva as when precipitated by alcohol; evaporated and injected

into mice hypodermically it produces no symptoms. No diarrhœa or intestinal symptoms were observed. In all the experiments on mammals paralysis of the respiratory centre was the principal cause of death. Convulsions were frequently present. but were asphyxial. Post mortem the lungs are found congested, the heart flaccid in diastole, the stomach and intestines sometimes hyperæmic Twenty control experiments, where hypodermic injections of extracts of spleen and muscles of the same animals, and prepared in the same way as the suprarenal extract, were given to cold and warm-blooded animals, proved that these produce at most a slight malaise. The proportion of the active substance present in a given quantity of capsules is very variable, the length of time the animals survive the injection being proportional to this toxicity. Coldblooded animals are less sensitive to the extract than warm, probably owing to their cutaneous respiration. The author's results differ from some of those obtained by Gluzinski, who observed immediately after the intravenous injection of a glycerine extract paraplegia with anæsthesia of the posterior limbs and slight convulsions or even opisthotonos in the anterior half of the body, while hypodermic injection caused only a slight illness with rigors. Vomiting is not mentioned by him -- British Medical Iournal.

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MORAL CENSORS.

The lay press, more especially the daily, assume the position of moral censors to the people of Canada, and seek to lead their steps in the straight and narrow path of press opinion. While no one is foolish enough to attempt to overlook the great and undoubted good that the press of this country have done in the interest of social and moral reform, yet there is one point in particular in which it is necessary to suggest that they "take the mote out of their own eye" before undertaking to "remove the beam" out of the eyes of others.

We have in this city a department devoted solely to the suppression of vice in all forms, the suppression of evils real or imaginary, with a prefer-

ence for the latter. Of course, the primary efforts of this institution are directed to the suppression of prostitution (female, of course). The lords of creation, in providing police departments, seldom make any arrangement for interfering with their own doubtful pleasures. In all forms of wickedness and in all forms of vice. the great moral maxim of the nineteenth century is, "Thou must not be found out," and in order that the women and girls of our country may partake of pleasures, at least, illegitimate, without breaking the great moral maxim of the nineteenth century, we find that one evening paper advertises the fact that "women in doubt "should use pennyroyal wafers ; other papers advertise the same thing,

with a little more disguise. How a paper that pretends to be decent, clean and fit to be brought into the homes of the people of Canada should continue to parade before the wives and daughters of this country a select series of abortifacients, is something that surpasseth the knowledge of a physician. Most nostrums of this kind seldom contain more than a laxative, and are entirely useless for the special purpose for which they are advertised ; but they are none the less damnable, because of their suggestiveness and for the reason that a girl or woman, after having gone the rounds of tansy pills and pennyroyal wafers, speedily resorts to the hair-pin or the elastic catheter. It seems disgraceful that papers should be allowed to publish such advertisements, and we are sure it only needs that the attention of the proprietors of these papers be drawn to the class of advertisements that are being received to make them close their columns to them. Strange to say, that in this respect the religious papers are often the greatest sinners. As we said before, the lords of creation are not so well provided for in the police department, but we find that the daily newspapers meet this long felt want with a select line from "Ricord's specific" to big G. We will conclude by expressing the desire that this class of advertisements will disappear once and for all from the columns of our daily press, and from all other papers that go into the homes of the people of Canada, because no man who has any feeling of respect for his wife and daughters would have them for one moment contaminated by reading such damnable stuff.

HURON MEDICAL ASSOCIA-TION.

Pursuant to promise in our January number, we give the first stenographic report ever given in Canada of a local medical association meeting. Any physician who reads the report of the Huron Medical Association will be at once struck with the exceedingly practical nature of the meeting, and the manner in which everything was handled purely from the standpoint of the practising physician. A journal, such as the DOMINION MEDICAL MONTHLY aims to be, is something more than a mere record of successful laparotomies.

Of the many operations on which long papers are published in the medical journals, there are not half of one per cent. which the general practitioners are ever called upon to perform; on the other hand, matter of the practical nature discussed by the gentlemen of the Huron Association interests every physician.

As before stated, we are willing and anxious to give a full report of these interesting Association meetings whenever we are notified regarding them, and we hope that the Associations at large will take advantage of this offer, as the Huron Association has done.

NEW YEAR'S HONORS.

Surgeon-General Sir Joseph Fayrer receives a baronetcy. The following are the latest medical knights: Sir Willoughby Wade, Sir Robert Martin Craven, Sir J. A. MacCullagh, Dr. H. A. A. Nicholls, C.M.G., Dr. S. H. Browne, C.I.E.

LODGE PRACTICE.

Our British brethren seem to be having their own troubles in the matter of lodge practice. The following appeared in the *British Medical Journal* of January 4th, 1896 :

THE BATTLE OF THE CLUBS. Folkestone.

As the outcome of a discussion opened by Dr. Frederick Eastes before the Folkestone Medical Society, the following memorandum has been signed :

"We the undersigned being medical practitioners in Folkestone and the neighborhood, hereby undertake and agree neither to accept any appointment in any 'medical aid (or similar) society,' nor to have any professional intercourse whatsoever with any medical practitioner holding any appointment in or associating himself in any way with any of the so-called 'medical aid societies,' or with any similar company, so long as the methods adopted by these societies include:

"(a) The virtual sweating of their medical officers by the appropriation of the profits earned by his work.

"(b) Canvassing for members in the interests of individual practitioners.

"(c) The absence of a wage limit.

"We sign this on the understanding that the clause implying professional ostracism be not enforced till the new provident association is formed."

(To this was appended some thirty names.)

A sub-committee has been appointed to draw up rules for the proposed "Folkestone Medical Provident Association." These rules will be brought before the Folkestone Medical Society at the annual meeting on January 8th, 1896.

We recommend this example to the councils of the local branches of our association.

NOT THE OYSTERS.

An interesting investigation has been held in what is known as the Stirling County Ball Poisoning (British Medical Journal, January 4th). In this instance several cases of enteric fever occurred, following and apparently due to some conditions present at the ball. The first point was to exclude the food supply and especially the complicity of the succulent bivalve. This was satisfactorily done, and the report shows that there were defective drainage conditions which might have been the origin of the trouble. That the oysters were thought to be not without suspicion would appear from the fact pointed out that a number of cases showed features of ptomaine poisoning without developing enteric symptoms. On the other hand one patient with typical enteric fever had not partaken of the oysters.

Personal Items.

DR. J. MOORE HART is settled at 232 Shaw Street.

DR. W. W. BALDWIN has moved from Spadina Avenue.

DR. J. D. TYRRELL has moved to 591 Sherbourne Street.

DR. EDWIN M. HEMSTEAD'S address is 331 Shaw Street.

DR. R. O. SNIDER has settled down in practice at 41 Wilton Crescent.

DR. SAMUEL BARTON has moved from Bloor Street to 16 Charles Street.

DR. W. A. DIXON, late of Carlton Street, has returned from the States and is now practising at Chatham. DR. R. A. TOPP has moved to corner of Bloor and St. Thomas Streets.

DR. E. H. ADAMS has been appointed member of the Collegiate Institute Board.

WE are glad to know that Dr. D. J. Gibb Wishart is recovering from his recent illness.

DR. F. N. G. STARR has removed his office to the corner of College and Markham Streets.

DR. WESLEY ROBINSON, of Markham, has received the appointment of coroner for the County of York.

DR. W. L. COULTHARD has taken up house at 111 Avenue Road, the residence until lately occupied by Dr. H. H. Wright.

AT the recent elections Dr. Noble was elected school trustee for Division No. 2, Dr. W. W. Ogden for No. 4, and Dr. Buck with Dr. A. E. Awde for No. 6.

DR. J. A. BURGESS is at present at New Orleans, but intends proceeding to New Mexico. We are glad the doctor has, to some extent, recovered his health.

THERE was a meeting of the members of the West Territorial Division (Toronto) called for January 15th, but no quorum being present no business was transacted:

WE beg to congratulate Dr. Gilmour, of Toronto Junction, on having received the appointment of warden to the Central Prison, Toronto. Ex-Warden Massie will fill the registrarship of East and West York, vacated by Dr. Gilmour.

DR. CHARLES SHEARD, having found that his duties as Medical Health Officer for Toronto take up a large part of his time, has sold out his interest in the *Canada Lancet* to Dr. Sylvester, who will from this date assume the business management of that able medical publication. Dr. J. L. Davison will, as before, be editor-in-chief, and will be assisted by several well-known practitioners, who are known to be versed in their various specialties. We understand that Dr. N. A. Powell will conduct the department of surgery.

Births.

ON Monday, January 20th, the wife of Dr. J. Hunter Emory of a daughter.

Deaths.

DR. GEO. DUNCAN, of Embro, aged seventy-six years, died suddenly on the 15th of January. He had practised in Oxford for fifty years and was widely known and highly esteemed.

JUST on going to press for this issue, we have the sad duty to perform of recording the death on Tuesday night last, January 21st, of Dr. K. N. Fenwick, of Kingston. The doctor was one of the best and most favorably known physicians in all Ontario and his peculiarly sad demise at so early an age in the midst of a career so full of honor is most painful. The doctor operated the week before his death upon a child suffering from septic peritonitis, and accidentally cut his finger. Inflammation set in in the arm and extended higher and higher until gangrene commenced, resulting in his death as recorded. The profession will indeed miss a warm friend now that Kenneth Fenwick is gone.

Book Notices.

The Physician's Visiting List for 1896. Philadelphia : P. Blakiston, Son & Co., 1012 Walnut Street.

Doctors cannot do without a visiting list, and the mere fact that the firm of Blakiston, Son & Co. have published one for forty-five consecutive years should at once recommend it to the profession. It will be found to contain a dose table, a table for converting apothecaries' weights and measures into grams, the metric system of weights and measures, and a new complete table for calculating the period of utero-gestation.

Clinical Lectures on Diseases of the Nervous System. Delivered at the National Hospital for the Paralyzed and Epileptic, London. By W. R. GOWERS, M.D., F.R.S., Physician to the Hospital; Consulting Physician to University College Hospital, formerly Professor of Clinical Medicine in University College. Philadelphia: P. Blakiston, Son & Co., 1012 Walnut Street. 1895.

Coming from the pen of a man of such world-wide renown and such an authority on nervous diseases as Dr. Gowers, of London, this manual ought to have a very large sale. The lectures will be found most interesting and instructing, comprising, as they do, facial and bulbar paralysis, acute ascending myelitis, locomotor ataxia (two lectures), the foot clonus and its meaning, syringomyelia, neuralgia, head palsy, etc. The price is only \$2.00.

Consumption : Its Nature, Causes and Prevention. With an outline of the principles of treatment, for all classes of readers. By EDWARD PLAYTER, M.D. (and Medallist, Tor. Univ.), M.C.P.S. Ont., author of "Playter's Physiology and Hygiene" (authorized by the Ontario Education Department); Editor of *The Canada Health Journal*; Member Canadian Medical Association, American Public Health Association, and American Academy of Political and Social Science. Toronto: William Briggs. C. W. Coates, Montreal; S. F. Huestis, Halifax. 1895.

A small concise work as this, dealing with such a disease, now too well known and experienced by many, and laving down in a clear and wellwritten style before its readers the nature, causes and prevention of consumption, should and, we doubt not, will meet with a ready sale. The author in the introductory chapter takes up the prevalency, the "communicability" and curability of consumption ; in the second chapter he goes fully into the questions of respiration, the functions and uses of the lungs, proportionate chest measurements, etc. In the remaining chapters of Part I., the matter becomes more practical and much more interesting, taking up, as it does, the causes of phthisis from many standpoints, and the infectiousness of the disease. Chapters eight, nine and ten are alone well worth the price of the book Part II. goes somewhat at length into the prevention of consumption from the standpoints of (1) general essentials of health, (2) special individual preventive measures, (3) state and municipal preventive measures, and (4) climate and prevention. We feel sure that every physician in general practice would find it to his advantage to buy this book, costing as it does only a trifle.

Favorite Prescriptions of Distinguished Practitioners, with Notes of Treatment. Compiled from the published writings or unpublished records of Drs. Fordyce Barker, Robt. Barthalow, Samuel D. Gross, Austin Flint, Alonzo Clark, Alfred L. Loomis, F. J. Bumstead, T. G. Thomas, H. C. Wood, William Goodell, J. M. Fothergill, N. S. Davis, J. Marion Sims, Wm. H. Byford, E. G. Janeway, J. M. DaCosta, J. Solis Cohen, Meredith Clymer, J. Lewis Smith, W. H. Thompson, C. E. Brown-Sequard, M. A. Pallen, W. A. Hammond, etc., etc. By B. W. PAL-MER, M.A., M.D. New York : E. B. Treat, 5 Cooper Union. Chicago: 199 Clark Street. London: 136 Grower Street. Price \$2.75.

Surrounded by the voluminous medical publications of the times, the busy practitioner is often at a loss to select from the mass of material at his disposal, without monopolizing time that he can ill afford to spend in this way, that combination of therapeutical agencies which the experience of the most learned, successful and best trained medical minds of the age has proven is best adapted to meet the indications for treatment in well-known conditions of disease. The author has striven, in this presentation of favorite prescriptions and practical points in treatment, to place before the profession for constant reference in a condensed, readily accessible way, matter that could only be gleaned from careful study and association with the medical writers and teachers of the times.

A Treatise on the Science and Practice of Midwifery. By W. S. PLAYFAIR, M.D., LL.D., F.R.C.P., Physician Accoucheur to H. I. and R. H. the Duchess of Edinburgh; Professor of Obstetric Medicine in King's College ; Physician for the Diseases of Women and Children to King's College Hospital: Consulting Physician to the General Lying-in Hospital and to the Evelina Hospital for Children; late President of the Obstetric Society of London; Examiner in Midwifery to the Universities of Cambridge and London and to the Royal College of Physicians. Sixth American from the eighth English edition, with notes and additions by ROBT. P. HARRIS. A.M., M.D.; Honorary Fellow of the American Gynecological Society and of Philadelphia Obstetrical Society, Corresponding Member of the Obstetrical Society of Leipzig and of the Royal Medico-Chirurgical Academy of Naples, etc. With five plates and two hundred and seventeen illustrations. Philadelphia : Lea Brothers & Co. 1803.

During the intervening four years since the last American edition was issued, very decided advances have been made in the field of obstetric surgery, particularly in the adoption of methods that have resulted in the saving of human life. The conservative Cæsarian operation in the most carefully managed European maternities and even in the general practice in our own country, may be honestly claimed to save ninety per cent. of the women ; sixteen having died out of one hundred and sixty cases in certain European hospitals and two out of the last twenty in the United States. The Porro-Cæsarian record of all countries now shows a mortality which has been reduced to fourteen per cent. as proven by the record of 1890-91; and the subperitoneal replacing the fatal intraperitoneal method has saved twenty-two women out of twenty-five. Special notice has been given in this

edition to the operation of symphyscotomy, only introduced about three years ago into this country. The term laparotomy has been abandoned in this volume, and the term colliotomy used in its place. The operation of cranistomy is somewhat frowned upon by the American editor, because of the now diminishing danger of Cæsarian and svmphyscotomic deliveries. In this edition of this old reliable work, much information has been added in all departments and the book will form a valuable addition to the practitioner's library shelves.

The Pathology and Treatment of Venereal Diseases. By ROBERT W. TAYLOR, M.D., Clinical Professor of Venereal Diseases at the College of Physicans and Surgeons, New York; Surgeon to Bellevue Hospital and Consulting Surgeon to Charity Hospital, New York. Philadelphia: Lea Brothers & Co. 1895.

This work, new from title-page to index, may be regarded as the ripened result of the labors, continued for more than a quarter of a century, of the surviving author of "Bumstead and Taylor on Venereal Diseases," a book of which five large editions were sold. It has been in preparation for some years, but the mass of new material to be sifted and digested has been so great and the advances in our knowledge of each one of the three venereal diseases has been so rapid that delay in its appearance has been unavoidable. Now that the work has appeared, the name of its author and his established reputation as the leading authority upon venereal diseases in America will create for it an active demand. It is

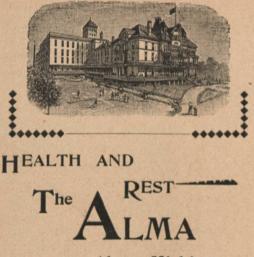
certain that no surgeon called upon to see much of these diseases can afford to be without it. All that is latest and best in their pathology is here presented, and every therapeutic suggestion likely to be of value has been subjected to extended and accurate clinical tests. The illustrations throughout are admirably chosen, are new with but few exceptions, and they add greatly to the interest of the text.

Materia Medica and Therapeutics. A Practical Treatise with Especial Reference to the Clinical Application of Drugs. By JOHN V. SHOE-MAKER, A.M., M.D., LL.D., Professor of Materia Medica, Pharmacology, Therapeutics, and Clinical Medicine, and Clinical Professor of Diseases of the Skin, in the Medico-Chirurgical College of Philadelphia: Physician to the Medico-Chirurgical Hospital, Philadelphia, etc., etc. Third edition-thoroughly revised. Reset with new type and printed from new electrotype plates. Royal 8vo., pages ix., 1108. Extra cloth. \$5.50 net; sheep, \$6.50 net. Philadelphia: The F. A. Davis Co., publishers, 1914 and 1916 Cherry Street ; and for sale by their Canadian agents, A. P. Watts & Co., 10 College Street, Toronto.

In preparing a third edition of this work the author has taken the opportunity of combining into one the two volumes which had been separately published, believing that the value of the book would be thus enhanced. The skill of chemists and the zeal of clinicians have during the past two years introduced many new preparations to the profession. New applications of the older remedies have also, in many instances, been discovered. Since the publication of the second edition, the field of usefulness of many medical substances has been greatly enlarged. Based upon increasing experience, much additional matter has required insertion in the descriptions of acetanilid, antipyrin, creosote and its derivatives, hydrogen, dcoxide, salophen, trional, dermatal, new napthal and phenol compounds. Among the most recent compounds upon which new articles or sections have been written are tolysal, tolypyrin, salocoll, salacetol, chlorphenol, bromphenol, ethylendiamine, silver phosphate, etc., etc. The subject of treatment by means of animal extracts, secretions or juices, and immunized serum or antitoxines has been re-written, and the endeavor has been made to give a fair presentation of the present state of knowledge concerning the value of those agencies in combating disease.

A System of Surgery. By American Authors. Edited by FREDERIC S. DENNIS, M.D., Professor of the Principles and Practice of Surgery, Bellevue Hospital Medical College, New York ; President of the American Surgical Association, etc., assisted by JOHN S. BILLINGS, M.D., LL.D., D.C.L., Deputy Surgeon-General, U. S. A. To be completed in four imperial octavo volumes, containing about 900 pages each, with index. Profusely illustrated with figures in colors and in black. Volume III., 908 pages, 207 engravings, and ten colored plates. Price per volume: \$6.00 in cloth; \$7.00 in leather; \$8.50 in half Morocco, gilt back and top. For sale by subscription. Full circular free to any address on application to the publishers, Lea Brothers & Co., Philadelphia.

The third volume of this great System of Surgery deals with the larynx, tongue, jaws, teeth, salivary glands and chest, the diseases and surgery of the eye and ear, the surgical diseases of the skin, the surgery of the genito-urinary system, and with syphilis. In the assignment of these important subjects the editor has given continued evidence of his knowledge of the American profession and of his ability to marshal its leading minds for the production of a complete and systematic work in every way creditable and helpful. The list of contributors to this volume comprises Drs. D. Bryson Delavan, of New York; H. H. Mudd, of St. Louis; Charles B. Porter, of Boston: Willard Parker, of New York ; F. S. Dennis, of New York; George E. DeSchweinitz, of Philadelphia; Henry D. Noves, of New York; Gorham Bacon, of New York; L. McLane Tiffany, of Baltimore; William A. Hardaway, of St. Louis; J. William White, of Philadelphia, and Robert W. Taylor, of New York. The early appearance of the fourth volume will mark the completion of a work of great magnitude and unrivalled importance as a practical exposition of the world's most advanced surgery at the close of the nineteenth century. Comprising four thousand pages. about fifteen hundred engravings and thirty colored plates, Dennis' System of Surgery will constitute a complete encyclopædia of modern surgery. authoritative in text, abundant in illustration, serviceable for every surgeon and for every general practitioner.



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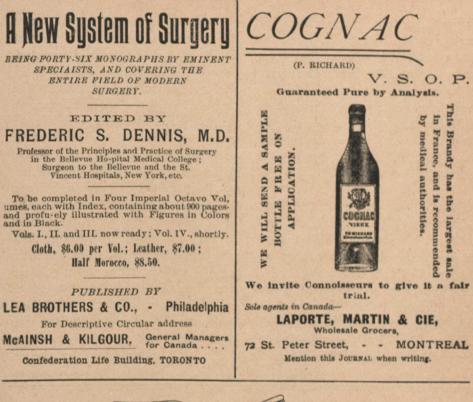
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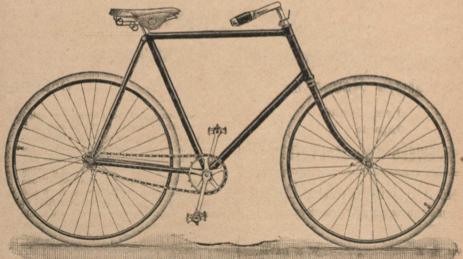
An American Text Book of Gynecology, Medical and Surgical, for Practitioners and Students. By HENRY T. BYFORD, M.D., J. M. BALDY, M.D., EDWIN B. CRAGIN, M.D., J. H. ETHERIDGE, M.D., WILLIAM GOODELL, M.D., HOW-ARD A. KELLY, M.D., FLORIAN KRUG, M.D., E. E. MONTGOMERY, M.D., W. R. PRYOR, M.D., GEO. M. TUTTLE, M.D. Edited by J. M. BALDY, M.D. With three hundred and sixty illustrations in text and thirty-seven colored and half-tone plates. Philadelphia : W. B. Saunders, 925 Walnut Street. 1894. For sale by their Canadian agents, A. P. Watts & Co., 10 College Street, Toronto.

The rapid and progressive advances in the science and art of gynæcology during the past dozen years have created an almost constant necessity for the revision of works on this subject. For this reason, and for the purpose of presenting gynæcological surgery and treatment, as it is practised in America, the country of its birth and of its most substantial improvements and progress, the present text book has been prepared by American authors, all of whom are teachers of this branch of surgery in the leading medical schools and hospitals. It is thoroughly practical in its teachings, and is, as its title implies. a "working text book" for physicians and students. Several new chapters have been added, such as "Technique" and "After-treatment." so that the student will be more readily aided in an intelligent understanding of their details. By some very fine colored illustrations the anatomy of the parts under discus-



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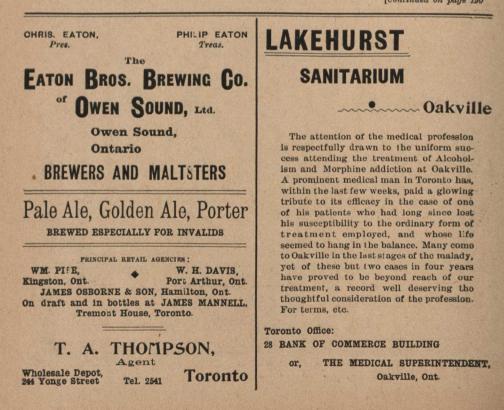
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sion are very well demonstrated and explained, so that much irrelevant and cumbersome matter has been excluded from the text. The work embodics as nearly as possible the combined opinions of all the authors. All extraneous matter and discussions have been carefully excluded from the book and everything in it is thoroughly up-to-date.

SUBJECTIVE VISUAL PERCEPTIONS. —Zehender (*Klin. Monatsbl. f. Augenheilk.*), in a series of articles on this subject maintains the following propositions: (1) That the circulation of the blood in one's own eye can always be easily seen without the aid of any apparatus, or even the pressure of the finger on the ball of the eye. (2) That the visibly circulating blood is not in

the capillaries of the retina, but of the choroid. (3) The blood current is net regular; it is now accelerated. now slowed, sometimes at a standstill. and even flowing backwards. The irregularity of the current seems to be influenced by steadily fixing the (4) That the movement is gaze. never synchronous with the action of the heart nor with the respiration. (5) That the vessel walls are never to be seen in these phenomena. The blood apparently flows in channels of its own choosing. (6) Bright little points which, with attention, are to be seen by day as well as by night, are the expression of what Pflüger has called "cell explosions." (7) Zehender holds with other physiologists that objective light primarily produces a chemical decomposition of the re-[Continued on page 190



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tinal pigment, and only secondarily affects the rods and cones ; and that similar pigment decomposition can be produced through the blood. (8) The pigment grains and their movements are, under favorable conditions, actually visible in one's own eye. (9) By the movements and displacements of the pigment grains there arise at times strikingly regular polygonal figures ; similar figures have recently been described by other writers. (10) These figures and pictures of retroretinal structures behave in many respects like the pictures thrown by a magic lantern on the wall; they are perhaps comparable to what creatures with facetted eyes see. Zehender has not remarked that these images alter their position with movements of the eyes or head. - British Med. Journal.

LAPAROTOMY FOR TUBERCULOSIS. -Mazzoni (Supplem. al Policlinico) at the Italian Surgical Congress, reported thirty-five laparotomies done by him for peritoneal tuberculosis : of these thirty-three were cured and two died, one as the result of a resection for tuberculous disease of the knee-joint. The cause of the peritoneal tuberculosis appeared to be in one case intestinal tubercle, in another tubercle of the retro-peritoneal glands. in seven tubercle of the uterine adnexa, in eight pleuro-pulmonary tubercle, and in sixteen the disease was primarily peritoneal. A second laparotomy was done in two of the cases (in one for tubercle in the sinuses and in another for abdominal hernia) ; it was then seen that the greater part of the tubercles in the peritoneum had [Continued on page 921



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disappeared. Those remaining were generally pedunculated with small filiform peduncles. The adhesions were slender and filamentous. There was free vascularization of the tissue surrounding the tubercles, which were either enmeshed in a richly vascular connective tissue or else undergonig cystic degeneration.—*British Medical Journal.*

TANNIN AND IODOFORM IN THE TREATMENT OF WOUNDS.—Ceccherelli (*Rif. Med.*) draws attention to a method of treating granulating wounds which he has tried with success for the last six years. The method consists in dusting the surface with an equal mixture of iodoform and tannic acid. He finds that tuber-

culous ulcers, granulating wounds, etc., heal better under this treatment than under a simple iodoform dressing. At first he tried tannic acid and potassium iodid. in solution, but this proved too irritating and had to be abandoned. An iodo-tannic syrup (KI gr. 2, ext. rhatan. gr. 8, syr. ad I kil.), given internally, seemed to be of much use in tuberculous cavities of bone. In fungating wounds with flabby granulations the mixture of iodoform and tannic acid acted very well. The astringent and stimulating action of the tannin, as well as its chemical action, added to the antiseptic and anti-tuberculous action of the iodoform, made the wounds heal more quickly than they had done on a simple iodoform or tannic acid dressing .- British Med. Journal.

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Alphabetical Index of Formulæ.

(Continued.)

NEPHRITIS.-

₿¢	Tr. ferri chlor f 3 iij.
	Acid. acetici dil f 3 iss.
	Syr. simp f 3 ss.
	Liq. ammon. acetat, q.s.
	ad f Z iv.
	M. Sig.: Dessertspoonful ever

three or four hours.—Basham.

B. Pulv. jalapæ comp 3 j.

Div. in chart. No. xii. Sig.: One powder every four hours until catharsis occurs. To be given after the patient has been rolled in blankets wrung out of hot water. (In acute nephritis.) —Fothergill.

 B Potass. bitartratis...... 3 ij. Aq. ferventis Oij. Corticis limonis, Sacch.......āā q.s. ad concilian-[dum gustum.
 Sig.: Use ad libitum.— Joy.

₿.	Tr. ferri chlor	₹m.
	Syr. limonis	mj.
	Aquæ	

M. Sig.: Take three times daily in a wineglassful of water.—Da Costa.

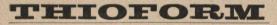
M. Sig.: Tablespoonful every hour or two.—*Phæbus*.

B. Sodii iodid..... gr. xv, Sodii phosphatis..... gr. xxx. Sodii chlor gr. xc.

M. Sig.: Dissolve in water, and give in the course of the twenty-four hours, either alone or in milk.— Semmola.

B. Pulv. scillæ, Pulv. digitalisāā gr. ½. Ex. gentian gr. j.

M. Et ft. pil. No. i. Sig.: One pill three times a day.—Stewart.



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NEPHRITIS (Continued) .---Lanolini. R Sodii phosphatis. Ungt. belladonnæ...āā 3 ss. Sodii chloridi. M. Sig.: Apply to the abdomen. Sodii iodid.....āā 3 ij. Sodii bromid 3j. Aquæ f 3 xiiss. M. Sig.: Tablespoonful four times congestion.)-Da Costa. a day in milk, used with the following : B Acid. tannic., Ex. cinchonæ gr. xxx. Fuchsin gr. xv. M. Et ft. pil. No. xx. Sig.: One pill morning and evening. (In chronic

B. Infus. digitalis..... f 3 iss. Spt. æther. nitros...ad f3vj. Syr. simp..... f 3 ss.

M. Sig.: Tablespoonful three times

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Ellsworth Ave., Pittsburg.

R Camphoræ..... gr. v.

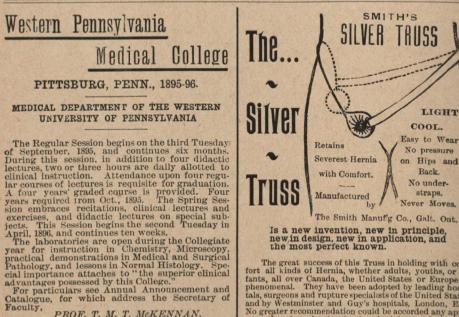
(For tympany occurring in chronic Bright's disease, and due to peritoneal

B Tr. ferri chlor f3j. Acid. acetic. dil.... f3iss. Liq. ammon. acetat ... f3x. Elix. aurant. f3v. Svr. simp..... f **Z** j. Aquæq.s. ad f 3 vj.

M. Sig.: Tablespoonful three or four times a day for a child of four years--Starr.

B. Ex. jaborandi fl. f Z j. Elix. simp., Syr. simplāā f 3 ss.

M. Sig.: One to two teaspoonfuls. (With uræmia.)-Bartholow.



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Aquæ.....ad f z vj.

a day.-Stewart.

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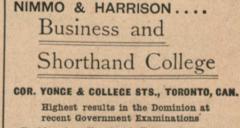
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- NEPHRITIS (Continued) .--

M. Sig.: Teaspoonful every four hours for a child of five years, used with the following :

B Resinæ podophylli.... gr. j. Sacch. alb Ð j.

M. Et ft. chart. No. viii-xii. Sig.: Take one powder. Repeat if necessary. (To produce catharsis.)—J. Lewis Smith.

B Ex. jaborandi fl f 3 j.

Sig.: Five or ten minims every hour or half hour, until free diaphoresis occurs. (In acute nephritis.)—Da Costa. NEURALGIA.-

Ŗ	Quininæ sulphat	3 j.
	Morphiæ sulphat.,	
	Acid. arseniosiāā	gr. iss.
	Ex. aconiti	gr. xv.
	Strychniæ sulph	gr. j.

M. Et ft. pil. No. xxx. Sig.: One pill three times a day.—S. D. Gross-

₿.	Thein,	
	Sodii benzoatāā	3 j.
	Sodii chlor	
	Aq. destillat	fZj.

M. Sig.: Three to twenty drops, as required.—*Mays*.

B. Menthol f3 j. Lini. saponis co f3 ij.

M. Sig.: Use locally.—Witherstine.



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For the year ending Dec. 31st, 1894.

Income	\$2,249,398.12
Paid Policy-holders	1,427,818.32
Assets	1,787,181.85
Liabilities, Actuaries' 4 per cent.	
Valuation · · · · · · ·	960,930.53
Surplus, Actuaries' 4 per cent.	826,251.32
Policies issued in 1894	22,114,526.00

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NEURALGIA (Continued).-

R Menthol..... gr. xxiiss. Cocaini muriat gr. viiss. Chloral hydrat gr. ivss. Vaselini 3 iiss.

M. Sig .: Apply to the painful part and cover with court-plaster .-- Galezowski.

R Aconitiæ gr. iss. Spt. vini rect..... q.s. Adipis præp 3 ij.

M. Sig .: To be rubbed in three times daily .- Brockes.

B Ferri carbonat..... 3 ij. Quininæ sulphat gr. vj. Ex. opii gr. 3/4. Syr. simp..... q.s.

M. Et ft. pil. No. xvi. Sig.: Eight pills during the day.-Jolly.

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R Chloral hydrat., Pulv. camphoræāā 3 iv.

M. Sig.: Apply with a camel'shair brush.-George Bird.

R Methyl chlor. pur f 3 j.

Sig.: Apply with brush to the painful parts.-Debove.

B Sol.nitro-glycerin (I per cent)..... 3 ss.

Sig.: One or two drops on the tongue every four to six hours .---Trussewitech.

B. Tr. cannabis indicæ... Mxv. Spt. vini rect..... Mxlv.

M. Ft. haustus. Sig.: To be mixed with water at the time of taking. -Donovan.

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NEURALGIA (Continued) .---

R Aconitiæ.						gr. iv.
Veratriæ.						gr. xv.
Glycerinæ						3 ij.
Cerati						3 vj.

M. Sig.: To be rubbed over the parts. Do not apply to any abrasion of the skin.—*Da Costa*.

R Pil. phenacetini (Bayer) gr. ij.

Sig.: Two pills three times a day. -Powell.

 B. Arsenic. iodid gr. j. Ex. belladonnæ, Morphinæ valerianat, ää gr. viij. Ex. gentian. pulv.... gr. v. Ex. aconiti fl. rad..... gtt. v.

M. Et ft. pil. No. lx. Sig.: One to three pills in twenty-four hours.— *Covert*.

& Antipyrin						3 iss.
Aquæ	• •		•••		•	f 3 v.

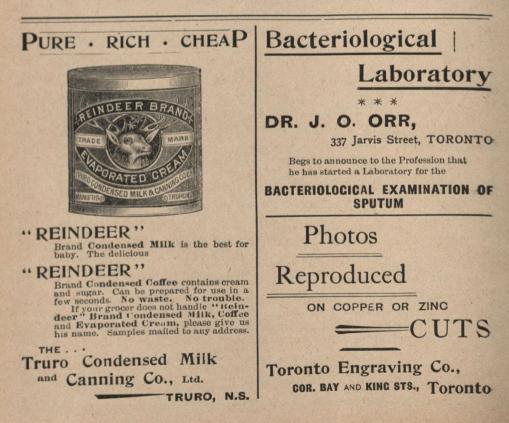
M. Sig.: Twenty-five minims hypodermically every three or four hours till relieved.—*Witherstine*.

Ŗ	Quininæ sulphat	gr. 1/2.
	Morphinæ sulphat	gr. 10.
	Strychniæ sulphat	gr. 120.
	Acid. arseniosi	
	Ex. aconiti	

M. Sig.: One tablet, repeated every hour.—Vanderbilt Clinic.

B Delphinii (alkaloid of staphisagria) gr. xv. Ex. tritici repentis 3 ss. Pulv. althææ..... q.s.

M. Et ft. pil. No. l. Sig.: Four to six pills daily.—*Turnbull*.



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 NEURALGIA (Continued).— B. Ex. hyoscyami, Pulv. valerianat. rad., Zinci oxidiää gr. j. M. Et ft. pil. No. i. Sig.: A pil¹ 	 B. Camphoræ
 twice a day.—Day. B Ferri sulphat. exsiccat., Potass. carbonatisāā gr. ccl. M. Et ft. pil. No. c. Sig.: Begin with three a day and increase to six. 	 B. Ex. cocæ fl f3 j. Syr. aurant. flor f3 v. Aquæad f3 ij. M. Sig.: A teaspoonful every hour until relieved. (For gastralgia.) -D'Ardenne.
-J. E. Garretson. B. Ex. belladonnæ 3 iss. Tr. opii Mlxl. Chloroform f3 j. M. Sig.: Apply locally.—Hazard.	 B. Menthol gr. xxx. Cocaini hydrochlorat. crystal gr. vj. Alcoholq.s. ad f3 j. M. Sig.: Use locally.—<i>Palmer</i>.
 B. Veratrinæ, Morphinæ sulphatāā gr. x. Adipis	 NYMPHOMANIA.— B. Potass. bromid f3 vj. Aq. cinnam f3 v. M. Sig.: Three teaspoonfuls be- fore dinner and four at bedtime.— Brown-Séquard.

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NYMPHOMANIA (Continued) .--

B Pulv. camphoræ, Ex. lactuçæ.....äā Điiss.

M. Et ft. pil. No. xx. Sig.: Four to six pills daily.—*Ricord*.

OBESITY .---

B Ex. fucus vesiculosus fl. 3 viij.

Sig.: Tablespoonful three times a day.—*Chapman*.

B Potass. permanganat . . gr. iv-xvi. Aquæ..... f
ğ iv.

M. Sig.: Dessertspoonful three times daily.—Bartholow.

B. Ammon. brom 3 ij. Aquæ..... f3 viij.

M. Sig.: Dessertspoonful three times a day, well diluted.—*Tanner*.

ONTARIO

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ONYCHIA.---

R Pulv. plumbi nitrat.... 3 ss.

Sig.: Dust on diseased tissue night and morning. *Scott and McCormack*.

Use hot flaxseed poultices for three or four days, before each renewal of the poultice, thoroughly washing with—

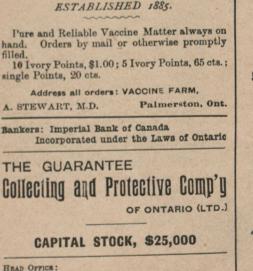
B. Tr. iodi., Tr. belladonnæ, Tr. opiiāā f 3 ij.

M. Sig.: Then dust with iodoform and dress antiseptically.—*Agnew*.

B. Acid. arseniosi..... gr. j. Glycerol. amyli..... f3 j.

M. Sig.: Apply with a soft rag. —Agnew.





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ONYCHIA (Continued) .--

In the early stages a couple of leeches above the nail will have a good effect.—*Agnew*.

B Ungt. hydrarg...... \mathfrak{Z} ss. Sig. : Apply for ten minutes every hour, applying poultices at other times. *—Ringer.*

B Ol. terebinthinæ..... f 3 ij. Sig. : Apply a pledget of lint wet with the solution.—*Ringer*.

OPHTHALMIA.-

B. Pulv. aluminis..... gr. x. Aq. rosæ f 3 iij.
M. Sig.: Apply three times a day. *Brande.* B. Hydrarg."chlor. mit... 3 ij.

Sig.: Evert the lid and dust over once or twice daily.—*Bartholow*.

B Argenti nitratis..... gr. iv. Aq. destillat. f **Z** j.

M. Sig.: One drop in the eye every five or six hours. (In catarrhal ophthalmia and superficial ulceration. — Mackenzie.

B Hydrarg. chloridi corros. gr. j. Aq. destillat..... f **3** ix.

M. Sig.: Use locally. (In gonorrhœal ophthalmia.)—*Ellis*.

B Iodoform 3 ss. Sacch. lactis 3 iij.

M. Sig.: Evert the lids and dust over. (In granular form.)—Witherstine.

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M. Sig.: Apply to the everted eyelids and on the free border of the lids. (In chronic scrofulous form.)— Dupuytren.

M. Sig.: To be applied with a camel's-hair brush.—Leahy.

M. Sig.: Apply to the free border of the eyelids once daily. (In chronic blepharitis.)—*Parinaud*. B. Acid. boracic...... gr. xvj.
 Acid. salicylici..... gr. ij.
 Glycerinæ Mxl.
 Aq. bullientis.....āā f 3 j.

M. Sig.: Instil into eye, after cauterizing trachoma follicle with the thermo-cautery. (In trachoma.)— Armaignac.

M. Sig. : A piece the size of a pin's head to be put within the eyelids and repeated according to the degree of inflammation produced. (In opacity of the cornea.)—Guthrie.

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B. Zinci oxidi..... 3 ss.

Div. in pil. No. xxx. Sig.: One pill once daily, increasing to tolerance. (For vomiting and diarrhœa.)-Da Costa.

B. Tr. capsici..... f 3 iv. Potass. bromid..... 3 iv. Spt. ammon. aromat. . . f 3 iiiss. Aq. camphoræad í Zvj.

M. Sig.: Dessertspoonful several times daily for the depression .---Ringer.

B. Zinci valerianat gr. xxiv. Ouininæ sulphat. gr. xij. $\tilde{\mathbf{E}}\mathbf{x}$. lupuli (B. P.).... q, s.

M. Et ft. pil. No. xii. Sig. : One pill morning and evening, every second day, alternating with some form of iron.-Fleming.

B. Acid. phosphoric. dil . . f3 x. Tr. lupulini f3xx.

Sig.: Dessertspoonful in a M. wine-glass of water every four hours, one hour before food.-Fleming.

- B Tr. cannabis indicæ... 11 xl-lx. Spt. ætheris..... f3j. Aquæ.....q. s. ad f3 j. M. Sig. : One dose, if insomnia is
- very protracted .- I-leming.
- R Tr. nucis vomicæ..... gtt. xij. Acid. phosphoric. dil . . . gtt. xx. Syr. pruni virg..... 13 ss. M. Sig.: To be taken twice daily. -Witherstine.
- B Strychniæ sulph gr. ss. Tr. belladonnæ,

Tr. capsici āā f 3 iij.

M. Sig.: Ten drops in water every three hours, increasing three drops daily .- Potter.

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ORCHITIS .-

B Keep the testicles elevated.

B. Strap with adhesive strips.

Sig.: First envelop scrotum in a thick layer of cotton; over this rubber-dam; then use an ordinary suspensory that is close-fitting.-*Horand-Langlebert*.

M. Sig. : Apply locally after acute symptoms are past.—*Martin*.

B. Ungt. hydrarg., Ungt. belladonnæ...āā 3 ss.

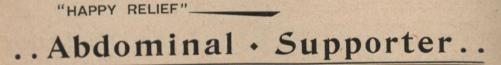
M. Sig.: Apply locally morning and evening.—*Martin*.

M. Sig.: Two teaspoonfuls three times a day.

M. Sig.: Give at one dose, and repeat thrice daily or oftener if required. (Have testicle strapped.)—*Philadelphia Hospital.*

B. Ammon. chloridi..... 3 ij. Spt. vini rectificat., Aquæad f 3 ij.

M. Sig.: Saturate thin cloths and apply frequently, allowing the fluid to evaporate.—*Bartholow*.



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Wheeler's Compound Elixir of Phosphates and Calisaya. A Nerve Food and Nutritive Tonie for the treatment of Consumption, Bronchitis, Scrofula, and all forms of Nervous Debility. This elegant preparation combines in an agreeable Aromatic Cordial, acceptable to the most irritable conditions of the stomach: Say-Bone Lime Phosphate, Soda Phosphate, Iron Phosphate, Phosphoric Acid, and the active Principles of Calisaya and Wild

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ORCHITIS (Continued) .--

B Tr. iodi..... f3 ij. Sig.: Paint affected parts after acute symptoms are over.

M. Sig.: Apply twice daily. (To remove induration.)—Marshall.

B Tr. pulsatillæ..... gtt. xxiv-[xlviij.

Syr. zingiber..... f3 j. Aquæ.....q. s. ad f3 iij.

M. Sig.: Teaspoonful every hour or two.—Sturgis.

OTITIS AND OTORRHCEA.-

B Tr. aconiti rad..... f3 iss. Glycerinæ..... f3 iss.

M. Sig.: To be warmed and dropped into the ear. (In earache.) — Gerhard.

B Sol. boroglyceride (50 per cent.)..... f Z j.

Sig.: Drop a few drops into the ear, after cleansing it, two or three times a day.—L. W. Fox.

B. Chloral camphorat.... gr. v. Glycerinæ...... gr. xxx. Ol. amygdal. dulc.... gr. x.

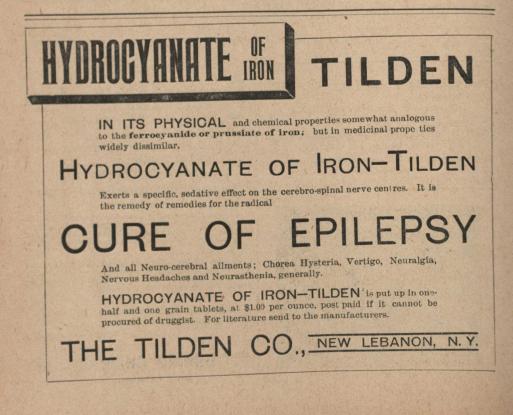
M. Sig.: Apply a little on absorbent cotton and place in the ear. (In earache.)—*Journal de Médecin*.

R Acid. carbol., Zinci sulphat., Plumbi acetat.....āā gr. x. Aq. desillat..... f 3 viij.
M. Sig.: Inject twice a day.

(When the discharge is offensive.)— Hazard.

B. Glyceriti acid. tannic. . f 3-j.

Sig.: Fill meatus and plug with cotton. (In chronic form.)—*Ringer*.



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48 GUTTER LANE CHEAPSIDE, E.C.

OTITIS AND OTORRHEA (Cont'd) .--

B. Liq. hydrogen. peroxid

(10 vol.)..... \mathfrak{Z} iv. Sig.: Syringe the ear carefully with one part solution to two of water, and when cleansed drop in a few drops of the above solution.—*C. H. Burnett.*

B Ungt. hydrarg. nit. rub. 3 ss. Sig.: Apply a small quantity to the affected skin. (In chronic inflammation of external meatus.)—Bartholow.

B Acid. carbol..... f3j. Glycerinæ f3ix.

M. Sig.: Drop a few drops into the ear two or three times daily, after cleansing.—*Hartmann*.

B. Pulv. iodoform..... 3 ij.

Sig.: Insufflate into the ear, after thoroughly cleansing and drying it. (In chronic cases when discharge is ight.)—Bezold.

OXALURIA.-

R	Acid. hydrochlor. dil.	. f <u>3</u>	SS.
	Tr. ferri chlor	. f 3	1].
	Syr. simp	. f 3	1155
	Aquæ	. 13	11].
		1 + 1	- tin

M. Sig.: Tablespoonful three times a day through a glass tube. (With anæmia and nervous atony.)--Hazard.

B Glyceriti pepsinæ..... f **ʒ** iss. Acid. lactic.....ad f **ʒ** ij.

M. Sig.: Teaspoonful after meals three times a day.—Bartholow.

OZÆNA.-

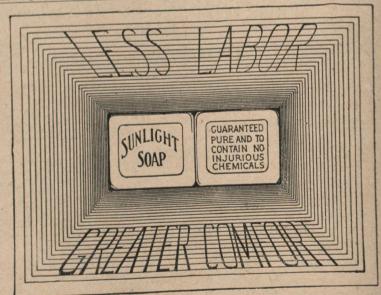
times a day.

B Ex. hydrastis fl..... f Z ij.Sig.: Five minims in water three

B. Ex. hydrastis fl..... f 3 j. Aquæ Oj.
M. Sig.: Use for syringing the nares.—Bartholow.



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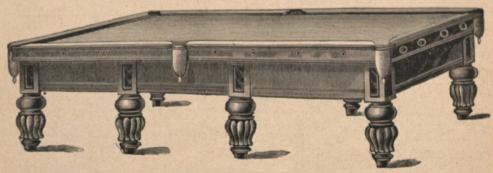
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OZÆNA (Continued) .-

M. Sig. : For insufflation. - Trousseau.

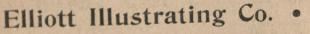
- B Creolin...... gtt. v. Aquæ..... Oj.
- M. Sig.: For douching the nose. —Lichtwitz.

B. Sodii biborat., Ammon. chloridi....āā Đj. Potass. permanganat... gr. x.

M. Sig: To be dissolved in one pint of water, and used with a syringe three times a day.—*Sajous*.

B. Sodii carbonatis, Sodii borat.....āā 3 ij. Liq. sodæ chloratæ.... f 3 ss.-ij. Glycerinæ f 3 j. Aquæ.....q. s. ad f 3 vj.

M. Sig.: Use as a spray.—Thornton.



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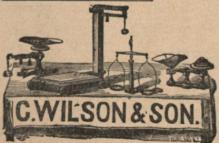
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OZENA (Continued) .--

R Potass. permanganat. . 3 ss. Tr. myrrhæ..... f3 ij. Aquæ Oj.

M. Sig.: Use as a douche three times a day.-Hazard.

B. Tr. iodi..... f3iv. Acidi carbol f3i-ij.

M. Sig.: Use on sponge in a widemouthed bottle as inhalation .- Potter.

R Puly, saloli,

Pulv. talc.....āā 3 ij.

M. Sig.: Insufflate the nose every two hours .- Georgi.

R Acid. carbol Mxx. Aq. calcis..... Oj.

M. Sig.: Use as a wash or spray. _Potter.

Alcoholis f 3 iv.

M. Sig.: Place in wide-mouthed bottle; hold in the hand and snuff the vapor well into the nose .--Bartholow.

PARALYSIS .--

B. Hyoscyam. sulph.... gr. ss. Aquæ f3 vj.

M. Sig.: Five minims hypodermically once daily, or by the stomach twice daily. (In paralysis agitans.) -Séguin.

R Strychniæ sulph..... gr. ij. Aq. destillat.... f3 j.

M. Sig.: One to five minims hypodermically. (In infantile paralysis, etc.)-Bartholow.

St. Leon Springs Water-

DR. SEVERIN LACHAPELLE, Editor-in-Chief of the Journal & Hygiene, in two well-written articles, recently published on the virtues of the

CELEBRATED ST. LEON WATER.

gives a very careful analysis thereof, and he states the various diseases for which this water is positively efficacious ; amongst others Dyspepsia, Scrofula, Rheumatism, Hemorrhoides, Liver, Kidney and Skin diseases. He says this Water, drank habitually, is the most powerful agent in destroying the germs of Rheumatism, which undermine the constitution. Typhoid Fever, St. Leon Water is the basis of treatment.

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		Sulphate of Lime	.0694 grains.
Chloride of Sodium	677.4782 grains.	Phosphate of Soda	
Potassium	13.6170 "	Bi-Carbonate of Lime	
# Lithium	1.014/	Bi-Carbonate of Line	
# Barium		" Iron	.6856 **
# Strontium	.5070		.5830 **
	3.3338 "	Alumina	1.3694 **
" Calcium		Silica	1 0110 11
Magnesium		Density	1.0110
Iodide of Sodium	.8108 "		

I hereby certify that I have analyzed a sample of "St. Leon Water," taken from the bulk from the Bromide of Sodiun store cellars in Montreal, and I am able to confirm the general result of the analysis published by Dr. T. Sterry Hunt., F.R.S., published in the report of the Geological Survey, 1863; also the analysis of Prof. C. F. Chandler, of Columbia College, New York, made in 1876.

(Signed) JOHN BAKER EDWARDS, Ph.D., D.C.S., F.C.S., and ex-Professor of Chemistry and Public Analyst.

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 PARALVSIS (Continued).— B. Strychniæ sulph gr. ij. Aquæ Mc. M. Sig.: Two to four minims hypo- dermically every second day or daily. (In all forms of paralysis except cerebral and spinal paralysis.)—Bar- well. 	 B. Phosphorigr. ij. Alcoholis absolut f3 xxij. Tr. vanillæ f3 ss. Ol. aurant. cort Mxij. Alcohol. absolut.q. s. ad f3 iij. M. Sig.: Twenty to forty minim two or three times a day. (In cerebra softening and hysterical paralysis.)- Hammond.
 B. Ammon. iodid	 B. Ex. physostigmatis gr. j. Ex. gentian

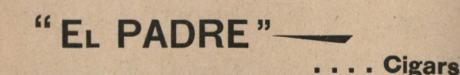
M. Sig.: Instil into the eye. (In ocular spasm and paralysis.)—*Wharton Jones.*

Aq. menthæ viridis ... f **š** j. M. Sig.: Dessertspoonful every

three hours.-Hazard.

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