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Original Communications.

CASES IN PRACTICE.*

GEORGE T. M'KEOUGH, M.D., M.R.C.S.ENG., CHATHAM.

Poisoning by Corrosive Sublimate from a Vaginal Tampon.

Mrs. J. W., aged 36 ; multipara, pregnant about three months, although she was not aware of the fact, as she had been losing blood periodically since the weaning of her last baby. I was sent for on the present occasion on account of profuse flooding and before I could reach her, some miles in the country, she had lost a large quantity of blood and presented on my arrival a decidedly anæmic appearance. About six months previously I had made an examination of her pelvic organs and found a large bilateral laceration of the cervix uteri, a profuse cervical catarrh, and a hyperplastic condition of the entire uterus. No treatment was however inaugurated except the use of hot water vaginal injections. I now could merely feel through the torn, cicatrised and but slightly dilated os, the contents of the uterus. I immediately proceeded to prepare a tampon, but unfortunately finding my boro-glycerine bottle empty, the medicinal agent I usually employ for disinfecting my tampons, I put about 5 grains of bichloride of mercury and a pinch of table.salt into a bowl containing about a pint and a half of warm water, moistened half a dozen good sized pads of cotton batting with the mixture, and with the aid of a Sims' speculum placed them in the vagina firmly around the uterus. I left her, expecting to return the following day. A few hours later, however, I was again summoned, and found my patient suffering severely from pelvic pain, not intermitting, nausea, and a general feeling of illness. Her temperature was normal, pulse quick and physiognomy distressed and anxious. Suspecting the probability of poisoning by the mercuric salt, I immediately removed the tampon, and syringed the vagina thoroughly with hot water and afterwards with a mixture of the white of eggs and milk. During the three following days she suffered from severe pains in the abdomen, frequent dysenteric stools, nausea, vomiting, stomatitis and general depression. She was given brandy and water, milk and raw oysters freely. A mixture of pot., chlor. suppository of opium and belladonna, with frequent vaginal injections of albuminous mixtures, constituted the treatment. The uterine contents becoming offensive with rise of temperature, denoting commencing septicæma, they were removed upon the third day with finger and curette, when the temperature became normal and remained so. After a few days of great anxiety to me, she quite recovered.

This case occurred in my practice some time ago, before mercurial poisoning from the generative tract was as well recognized as it is at present. At the time I was not sure whether the absorption took place from the vagina or injured cervix. I have learned since that usually toxic symptoms are the result of injection fluids being retained in the vagina and absorption occurring from the vaginal, mucosa. The uterus after an injection usually contracts and expels all fluids, which however, unless measures are taken to prevent it, may be retained in the vagina. In my case absorption probably took place both from the vagina and uterus, the anæmic condition of the patient facilitating the accident.

Malarial Hæmaturia (?)

A. Mrs. S., aged 36, a robust, red-faced English woman, recently arrived in this country. Mother of several healthy children. No history of a hæmorrhagic diathesis in her family. Consulted me on account of passing bloody urine, which had begun the day previous. In other respects felt tolerably well. Ordered gallic acid and ergot, which was taken for some days without controlling the hæmorrhage, when she was seized with what seemed a typical paroxysm of ague, for which quinine was ordered. Her stomach being irritable, the first mixture was discontinued. After taking quinine for twenty-four hours, the urine rapidly

*Read at the Chatham Medical and Surgical Society, March 2nd, 1888.

cleared up and there was no subsequent return of fever. On two subsequent occasions within a year from her first illness of this nature, she had two other similar attacks of hæmaturia without fever. Quinine was given on both occasions with immediate improvement.

B. Annie C., aged 3, had a chill followed by fever one afternoon, the following morning she played with other children and seemed apparently well. That afternoon she had fever again, and a severe convulsion; during the night following she passed bloody urine frequently. Quinine was administered during the second paroxysm of fever and continued for a day or two. The urine cleared up on the third day of her illness, during the afternoon of which she had a slight fever; she was, however, soon quite well. In both these cases the microscope revealed blood corpuscles apparently unchanged in shape. The nature of the morbid action in these cases is inferred to some extent by the mode in which they were effected by the remedial agent employed. The evidence, if not demonstrative, is highly probable.

Hysterical Vomiting.

Miss S., aged 19, a hyper-sensitive, active, highly strung young lady, neither petite nor corpulent. Had been ill for a year, vomiting daily once or more; there was no loss of flesh, and no symptons pointing to organic lesion. Her appetite was good, tongue clean, and bowels regular. She complained of heaviness of her limbs, weariness, melancholia, frontal headache, burning sensations in the stomach, cardialgia and gastralgia. She had been under the care of several physicians, and every known remedy had probably been tried and failed. Her uterine functions were normal, with the exception of slight dysmenorrhœa. Physic and diet evidently having been faithfully and systematically used without any encouraging results, and no lesion being discoverable, to account for the persistence of the vomiting, the difficulty was supposed to be neurotic. She was advised to desist from medicine entirely, to pay as little attention to the stomach as possible, to direct her attention to other subjects and to go out into the world. Her friends were instructed to pay little heed to her complaints or her vomiting. As a result, within a month, the vomiting almost ceased, and in a very short time she became, instead of a "hysterical vampire," a cheerful, useful member of society.

Sudden Deaths in Pneumonia.

W. K., aged 30, a young healthy man with a good family history, but at times somewhat intemperate in his habits. Had contracted pneumonia which progressed typically but favorably until the tenth day of his illness. I saw him on the morning of that day, when his condition appeared as propitious as could be desired. Temp. normal, resp. 22, and pulse 70. There were, however, some crepitations and bronchical breathing, with dullness in the lower half of right lung posteriorly. He was in good spirits and hungry. He felt so well that evening, that he requested his mother, who was nursing him, not to remain up during the night. She was however awakened by him, shortly after she had retired, and found him suffering severely from a cramp in one of his legs. Rubbing the limb briskly not relieving the pain, he insisted upon getting out of bed and walking it off. After taking about a dozen steps, assisted by his mother, he asked in a feeble voice to be laid on the bed again. On doing so, it was noticed that he seemed to gasp once or twice and then cease to breathe. His thoracic viscera were examined about 24 hours after death. The middle and inferior lobes of the right lung were found in a condition of red hepitazation,—there was also about seven ounces of bloody fluid in the right pleural cavity. The right side of the heart and pulmonary artery were filled with clotted blood, no evidence of endocarditis was discovered. About the same time, Dr. Bullis of Dresden lost a case of pneumonia that Dr. Holmes had seen in consultation, under somewhat similar circumstances. His patient was progressing favorably towards convalescence, when some one unwisely gave the alarm of fire just outside her room. She suddenly sat up, got out of bed and almost immediately fell back dead.

This formidable accident of sudden death in pneumonia, although not usually referred to in the text books, is one that must be apprehended in all cases until convalescence is fully established. It usually occurs during the period of supposed convalescence, when an early and perfect restoration to health is prognosed by the physician and looked forward to by the patient and friends. Sudden arrest of the heart's action, which is the cause of

these unfortunate occurrences, may be due to heart clot, owing partly to the hyperinotic state of the blood in pneumonia and partly to debility of the muscular walls of the heart from parenchymatous degeneration of its muscular tissue, or to endocarditis. The heart in this damaged condition may still be capable of doing its work with the body at rest in a recumbent posture; but any sudden elevation of the body to the erect posture, imposing an extra strain upon the organ, might cause a fatal paralysis. The practical lesson is obvious.

ON THE NECESSITY FOR A MODIFICATION OF CERTAIN PHYSIOLOGICAL DOCTRINES REGARDING THE INTERRELATIONS OF NERVE AND MUSCLE.

BY THOMAS W. POOLE, M.D., LINDSAY, ONT.*

HOW ARTERIAL SEDATIVES ACT.

Ergot of rye is an agent which produces in a marked degree contractions of involuntary muscular fibre everywhere, but whose effects are especially seen in the arterioles and uterus. Must not a uniform law or rule govern the occurrence of such contractions? We have seen that they occur best under a deprivation of nerve action, and are never so complete as in the general death of the body. How then can ergot be regarded as a stimulant? Who would ever think of administering it in cases of faintness and exhaustion as a restorative of nerve energy? Must it not act, like nerve section and nerve paralysis, in lessening the tone of the vascular and motor nerves, so setting free the contractile energy of the arterial and uterine muscles, which contract accordingly?

Dr. Sidney Ringer grows enthusiastic over the action of aconite in acute congestion of the tonsils, and that, too, in doses too small to reduce the action of the heart. Aconite undoubtedly causes contraction of the arterioles, and accordingly on the theory of the day it must be classed as a stimulant, as it actually has been by some authors, Dr. Edward Meryon, M.D., F.R.C.P., for instance, who holds that "it stimulates the dormant fibres of Remak and by so doing diminishes the calibre of the arterioles" (*a*). Errors of this kind must be charged to the misleading guidance of an erroneous theory. Aconite is a profound paralyzer, and in small doses, by lowering the activity of the vaso-motor nerves, it frees the contractile power of the muscular bands of the arterioles, which contract accordingly, lessening or curing congestive states.

Is not this precisely the *role* of the galvanic current, when brought to bear upon the cervical sympathetic, say in exophthalmic gottre? The thyroid gland and its appendages are being overfed by dilated arteries. Bring about contraction of these arterial tubes, by lowering the activity of the vaso-motor nerves in the way just indicated, and the congestion and hyperplasia are relieved if not cured. But the electric current, for therapeutic purposes, has been classed as a stimulant! So has strychnia; so ought to be prussic acid, for it, too, causes spasms and convulsions of muscle! So is fatal hemorrhage. All stimulants, as well as aconite, on the theory of the day! It would require a volume to elucidate these points, and I must condense what I have to say into a few paragraphs.

STRYCHNIA A PARALYZING AGENT.

Dr. Harley has shown that strychnia probably acts by preventing the oxygenation of the blood, which Dr. C. B. Radcliffe very properly holds cannot be the *role* of a stimulant. Dr. Ringer tells that "after traumatic and strychnia tetanus the functions of the motor nerves and muscles are depressed; the motor nerves conveying impressions imperfectly." But may not this motor nerve depression be due to a reaction from previous over excitement? Dr. Ringer says no! and adds, "Strychnia directly depresses motor nerves, for large doses kill without exciting convulsions, when the motor nerves are found to have lost their conductivity" (*b*). Which in physiological language means that the nerves are paralyzed. Dr. W. A. Hammond has recounted an experiment performed by himself and Dr. S. Weir Mitchell, which, he says, "shows that the action of strychnia is to destroy the nervous excitability from the centre the periphery" (*c*). Dr. Ringer further furnishes

* Read before the Physiological Section of the Ninth International Medical Congress, held in Washington, September, 1887.

(*a*) Rational Therapeutics, p. 52.
(*b*) Therapeutics, 5th American Ed., p. 499.
(*c*) Dis. Nerv. Syst., p. 539.

strong evidence that paralysis, and not over-action is the condition of the nerve centres in tetanus. He instances "certain poisons, like gelseminum and buxus sempervirens, which produce *at the same time* both weakness of natural co-ordinated reflex action, cord paralysis and *tetanus*." He says "it is impossible that the tetanus should depend on stimulation of the cord, for we have seen that the tetanus was preceded by considerable depression of the cord and continues until the depression ends in extinction of all cord function;" or, as he says again, the tetanus "occurred in a dying cord" (*d*).

In strychnia poisoning, death occurs from asphyxia (*e*), with its contracted and empty arteries and engorged veins:—the precise condition of the vascular system produced by destruction of the spinal cord, as in pithing, as already shown in a previous page. Do not the foregoing facts show that strychnia does not kill as a stimulant, or excitant, of the spinal cord? Moreover, medical literature clearly shows the value of alcoholic stimulants in strychnia poisoning, but I cannot delay to quote it. On the other hand, chloral hydrate, which has some reputation in these cases, is "not by any means antagonistic" to the action of strychnia. It acts by simply lessening the contractile energy of the muscles, like other anæsthetics, by de-oxidizing the blood, and thus retarding the chemical process in the muscle, whereby its contractile force is generated. In this way the convulsions are arrested, and time gained for the elimination of the poison. But dangerously large doses—seven or eight grammes—(about two drachms)—are required for this purpose (*f*). "Strychnia affects paralyzed, sooner than unparalyzed muscles," writes Dr. Ringer: but this is not exact. Strychnia does not affect the muscles at all, as Dr. R. himself shows; and the muscles are not paralyzed in the cases to which he refers. What he means is that strychnia induces twitches and spasms in muscles whose nerves are enfeebled, sooner than in muscles whose nerves are acting normally. Why is this? If strychnia were a stimulant, would it not sooner excite vigorously acting nerves than enfeebled ones? But since its effect is to cause "depression of the motor nerves," nerves already suffering in this way have their activity more easily extinguished, and their muscles set free, than is the case with healthy nerves. The same thing is equally true of the other paralyzer, electricity. Twitches, tremors, spasms and tetanus are all but varying stages of nerve paralysis and of muscular freedom.

(*a*) London *Lancet*, Feb. 17, 1887, p. 288; *Braith. Retros.*, July, 1887, p. 98.
(*b*) Fothergill, Antag. Ther. Agents, p. 55.
(*c*) Lyman's Anæsthetics, Wood's Library, pp. 264, 267, 275.

ELECTRICITY A PARALYZING AGENT.

Prof. Tyndall tells us that a mere trace of iron in the coils of a galvanometer, of even such splendid instruments as those used by Prof. Du Bois Reymond in his researches on animal electricity, caused a fallacious deflection of the needle, to the extent of thirty degrees and more (*a*.) It is therefore not to be wondered that erroneous conclusions were sometimes arrived at in experiments so beset with fallacies, even when conducted apparently with the greatest care. So mysterious a force, which exhibits itself alike in the lightning's flash, in a tiny spark and the quiver of the eminently sensitive protoplasm of a muscle, might well excite wonder and enthusiasm. As investigation proceeds, however, the exaggerated ideas as to the important part played by electrical currents in the phenomena of nerve and muscle, and even of life itself, which prevailed some years ago have been rapidly on the decline among students of electro-physiology; but will doubtless linger long in the popular and even in the professional mind. But electricity is not nerve force, nor can it cause the generation of nerve force, which is impossible in a mere nerve trunk separated from its nervous centre. This must be obvious. If it produce effects equivalent to a loss of vital action such as occurs in the death or destruction of portions of the nervous system, it must be classed as a sedative and not as a stimulant. In the experiments about to be mentioned the currents employed are those used for ordinary physiological and therapeutic purposes.

The effect of such a current applied to the inferior laryngeal nerves is to induce spasm of the muscles of the glottis. "The rima is completely closed" (*b*). That is to say, it does precisely what we have seen above is done by section and paralysis of these nerves. Applied to the lower ends

(*d*) Heat as a Mode of Motion, p. 34.
(*e*) Dr. B. Sanderson, Handbook, p. 308.

of the vagi it causes contraction of the œsophagus and stomach and "in most cases vomiting" (*a*). Just as we have before seen, results from section of those nerves. We have had proof that section of the spinal cord and of vaso-motor nerve trunks induce contraction of corresponding arterioles. Similar effect is produced by electrization of the same parts, the calibre of the arteries being sometimes reduced to one-sixth of their normal size (*b*).

Dr. M. Foster tells us that section of the spinal cord at the medulla, or in the dorsal region, arrests the secretion of urine; and such a section of the cord is of course a paralyzing act. He also tells us that the electrization of the spinal cord below the medulla also arrests the secretion of urine. Then is not this a paralyzing act also? It is unnecessary to multiply examples. Shall we continue to call an agent a stimulant and refer to it as an excitant of nerve activity, the ordinary effects of which on nerves are equivalent to nerve section, nerve paralysis and death!

MILD CURRENTS PARALYZE.

It is sometimes said that powerful currents may paralyze and even kill, but that mild or weak currents merely stimulate or excite. Is there any proof of this? Where in the records of electro-physiology do we find a claim for opposite effects from weak and strong currents? It is true that we are cautioned against the depressing effects of long continued applications of even mild currents. But this is not the present point. The short *seance*, with its mild currents, may and probably does afford a simulation of increased vigor, but this is mainly due to the moderate exercise which it gives the muscles and their consequently improved nutrition (*c*); perhaps also in some degree to the mental impressions of the patient. The longer *seances*, with stronger currents, are fatiguing and exhausting in proportion as they are depressing or paralyzing.

Is it not true that the weakest current which can affect a muscle at all, causes a momentary contraction of the muscle; and that the strongest current that can be borne during life, or that can be brought to play upon a still irritable nerve and muscle after death, simply produces a more vigorous effect of the same kind; the contraction becoming continuous in spasm or tetanus? It is never contraction on one hand and relaxation on the other, unless, indeed, other conditions intervene and muscular contractile energy is at an end. As a matter of fact, weak and strong currents act precisely in the same manner, and differ only in the lesser or greater contraction of the muscle which they produce. The process is a uniform one, as indeed it must be, since a purely physical force cannot change its character, and play fast and loose in the mode of its operation.

The treatises on this subject bear ample evidence of the paralyzing effects of electrization when even weak currents are used, as could only be the case for therapeutic purposes. Althaus found that the electric current produced an anæsthetic and paralyzing effect on the ulnar and sciatic nerves. Drs. Beard and Rockwell tell us that "in rhinitis, pharyngitis and laryngitis,"—where only very mild currents are admissible,—"they have for years been accustomed continually to make use of the benumbing effects of electrization" (*d*). Even "weak electrization of the upper part of the neck may arrest respiration," as well as produce spasm of the glottis and of the muscles of inspiration (*e*). Currents necessarily weak, because applied to the neck of "a sensitive young lady," induced anæmia of the brain, with drowsiness and other effects indicative of arterial contraction (*f*). Other authors equally allude to the "paralyzing effects of the constant current" (*g*). From these considerations I hold that there is no evidence whatever that weak and strong currents produce opposite effects, or that one may paralyze and the other stimulate.

DIRECT AND INVERSE CURRENTS.

A great deal has been written about the different effects of direct and inverse currents. Dr. J. Russell Reynolds, in reply to the question, "What current should I use to relieve pain and spasm, the direct or inverse?" answers:—"All I have to say is that so far as I have seen it does not make the smallest difference. Theoretically it makes a very great difference, but practically it makes none" (*h*). Now, I think that the evidence showing that both these currents are paralyzing is

(*a*) Meyer's Prac. Elec. Hammond, p. 87.
(*b*) Weber-Meyers, Ib., p. 88.
(*c*) Drs. Beard and Rockwell.
(*d*) Med. and Surg Elec., p. 123.
(*e*) Ib., p. 133. (*h*) Ib., p. 134.
(*f*) Valentine, Matteucci, Eckhard, Meyers,
(*g*) Clinical Uses, etc., p. 18.

indisputable. Take the direct current first. A nerve-muscle preparation is prepared. To the middle of the nerve trunk a salt solution or the poles of an induction battery are applied, and in either case the effect is so regulated as just to fail to cause a contraction of the muscle. If, now, the poles of a galvanic battery are applied to the distant end of the nerve-trunk, the P. pole furthest from the muscle, so as to produce a direct current, throwing the lower end into catelectrotonus, the muscle will contract at once. Hence the direct current issaid to increase the irritability of the nerve. But electricity is not nerve force, and nerve force cannot be generated in a mere nerve trunk. The true change in the nerve is not one of increased strength or vigor; it is simply that the feebly paralyzing action of the salt solution or of the induction battery has been supplemented or re-inforced by the additional paralyzing wave of the direct current, and nerve force is for the moment annulled. What is just asserted is nothing new. Thus, "According to Volta, both directions of the current are depressing in their effects" (*a*). Prof. Matteucci found that "the direct current" not only "diminished the excitability of nerves," but produced in them "a temporary paralysis" (*b*). Dr. W. B. Carpenter wrote "The direct current weakens and at last destroys the excitability of a nerve" (*c*). So much for the direct current.

The inverse current produces in the nerve trunk, between the electrodes and the muscle, a condition of analectrotonus, which is admittedly one of "diminished irritability," which term is in itself an acknowledgment of lowered vital activity, which can only be accounted for as a degree of paralysis, and is induced by weak as well as relatively strong currents. Dr. C. B. Radcliffe states of M. Eckhard:—"This very able physiologist has ascertained that so long as the inverse galvanic current is closed it is impossible to produce contraction of the muscle by pinching, pricking or otherwise acting on this part of the nerve . . . . which is consequently in a state of suspended irritability (*d*). This is a state of paralysis, because "a nerve that is deprived of its irritability can neither receive impressions nor transmit them" (*e*).

Drs. Beard and Rockwell say that "in regard to the differential action of the ascending and descending currents there has been an almost infinite amount of shallow observation and impulsive writing." These writers offer ample evidence that the effects in question are due, *not to current direction*, but to *the physical effects of the poles*, at one of which acids accumulate and alkalies at the other.

(*To be Continued*).

(*a*) M. Meyer, p. 57.
(*b*) Braith. Epit., Vol. II, p. 661.
(*c*) Hum. Phys., p. 351.
(*d*) Epilepsy, etc., p. 175.
(*e*) Epilepsy, etc., p 78.

NOTES ON THE CHANGES WHICH OCCUR IN THE EYE DURING THE PROCESS OF DISSOLUTION AND IMMEDIATELY AFTER DEATH.

BY GEORGE STERLING RYERSON, M.D., C.M., L.R.C.S.ED.
Professor of Ophthalmology and Otology in Trinity Medical School.

The opportunities for observation of the eye, ophthalmoscopically, immediately before and after death, are comparatively rare. One must happen on the right moment to make the visit. Consenting friends or the absence of friends are likewise necessary. Insensibility on the part of the patient is also desirable. It happened to me once to meet with this combination of circumstances; it was in this wise. During the winter of 1876-77 I acted at times as locum tenens for the house surgeons at the London Hospital, and particularly for Mr. Jonathan Hutchinson's. It was thus I happened to be in at the right moment. One evening about six o'clock a man was brought in who had been injured by a bale of goods falling on him. He was unconscious and the lower extremities were paralysed—apparently from dislocation of the spine. Respiration gasping; pulse uncountable. Mr. Buckland, one of the house surgeons, suggested that we should ophthalmoscope him, which we accordingly did. The media were clean and transparent. The retina and optic disc were pale. The arteries of the retina were scarcely perceptible. There was an occasional pulsation of the veins, which were irregular in calibre, looked as though they had clots in them, being thick at one point, then very thin. As life ebbed away all

movement in the veins ceased. A peculiar haziness stole over the fundus obscuring the view of the parts. I have seen some kind of ground glass which looked like it. I do not know whether it began in the lens or in the vitreous. A few minutes later the cornea became wrinkled and nothing more was discernible of the fundus. The pupil was moderately dilated. The man lived for ten minutes after having been brought into the hospital. I do not remember whether there was a post mortem or not. I have never seen any account in which the jerky pulsation in the veins and the apparent formation of clots in them are mentioned. The ophthalmoscopic examination of the eye after death is of much practical value and the most positive evidence of death. It would be impossible for a person to be buried alive, as in a prolonged trance, after such an examination. It could also be used to detect malingerers, such as criminals feigning death to enable them to attempt to escape from prison. Physicians unaccustomed to the use of the ophthalmoscope could determine the matter by concentrating the light upon the cornea with a 2½ inch convex lens (oblique illumination), when the cornea will be seen to be wrinkled, which never occurs during life so long as the fluids are not allowed to escape from the eye.

REGULATIONS FOR ARMY AND NAVY MEDICAL DEPARTMENTS AND INDIAN MEDICAL SERVICE.*

ARMY MEDICAL SERVICE.

Every candidate desirous of presenting himself for admission to Army Medical Service must be unmarried, not under 21 or over 28 years of age. Must produce a certificate of birth from the District Registrar, or affidavit from one of the parents; also a certificate of moral character from parochial minister. Candidate must make a declaration that he labors under no mental or constitutional disease or any imperfection or disability. His physical fitness will be determined by a board of medical officers, who are required to certify that the candidate's vision is sufficiently good to enable him to perform any surgical operation without aid of glasses. Moderate degree of myopia not a disqualification. Candidate must possess two diplomas, one to practise Medicine and the other Surgery in Great Britain or Ireland, and must be registered under the Medical Act in force at the time of his appointment. Certificates of registration, character, and age must accompany the declaration when filled up and returned.

Candidates will be examined by Examining Board in following compulsory subjects, and the highest number of marks will be distributed as follows: Anatomy and Physiology, 1000; Surgery, 1000; Medicine, including Therapeutics, Diseases of Women and Children, 1000; Chemistry and Pharmacy, 100. Examination in Medicine and Surgery in part, practical operation on dead body, approbation of surgical apparatus and examination of medical and surgical patients at bed side. Eligibility of each candidate for Army Medical Service will be determined by result of examination in these subjects:

Examination in following voluntary subjects for which maximum number of marks will be

For French and German (150 each) 300 marks.
For Natural Sciences . . . . . 300 "

Natural Sciences include Comparative Anatomy, Zoology, Natural Philosophy, Physical Geography, and Botany, with special reference to Materia Medica.

Number of marks gained in both voluntary subjects will be added to total number of marks obtained by those qualified for admission. After passing this examination for admission to Army Medical School at Netley, candidate will be required to attend one entire course of practical instruction on (1) Hygiene; (2) Clinical and Military Medicine; (3) Clinical and Military Surgery; (4) Pathology of Diseases and Injuries incident to Military Service. At the conclusion of this course, candidate required to pass an examination on the subjects taught in the school. If satisfactory evidences of qualification for practical duties of an Army Medical Officer have been given, he will be eligible for a commission as Surgeon. During period of residence at Army Medical School, each candidate will receive an allowance of 5 shillings or $1.25 per diem, with residence, or 7 shillings per diem without quarters, to cover cost of maintenance, and will be required to provide himself with uniform (regulation undress of Surgeon) but without sword.

[Dr. Charles W. Covernton has kindly prepared the above statement in answer to our correspondent. It was unfortunately crowded out of our last month's issue.—ED.]

MEDICAL DEPARTMENT OF NAVY

much the same as for Army after passing examination at Netley, drafted to Haslar Hospital for a time.

INDIAN MEDICAL SERVICE.

In addition to the requirements mentioned for Army and Navy Certificates of age, moral character and of registration of degrees, diplomas and licenses, candidates will be examined by the Examining Board appointed for the two other branches of service on the subjects previously detailed. Candidates who desire it will be examined in French, German, Hindostani, Comparative Anatomy, Zoology, Natural Philosophy, Physical Geography and Botany.

The Examiners in London will prepare a list in order of merit, with marks affixed on different subjects, to be transmitted to the Professors of Army Medical School at Netley. Candidate has then to attend entire course of practical instruction at Army Medical School before being admitted to his examination for a commission. Allowance per diem at Netley same as for Army and Navy.

AN UNUSUAL STRICTURE OF THE STOMACH.

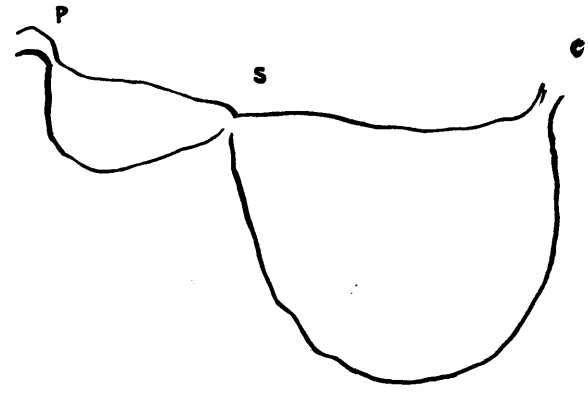
BY G. A. BINGHAM, M.D.,
Pathologist to Toronto General Hospital.

The following notes of the case I have obtained from Dr. Hillier, of Bowmanville, the attending physician :

Miss I., æt. 48 years, died December 2nd, 1887 ; tall, good figure, complexion blonde, good family history. About the age of puberty, an abscess developed in the region of the stomach, ulcerated through that organ and discharged its contents, which were vomited. After this and during the balance of her life she was troubled with dyspeptic symptoms, acidity, flatus, etc. Previous to coming under my care, some six years ago, she had a profuse hemorrhage which completely prostrated her. Some of her physicians diagnosed cancer of the stomach and fixed the limit of her existence at less than six months. She then removed from Michigan (her home at that time) and came to Canada, and since that time until her death she averaged one attack of hemorrhage each year, which usually came on in the autumn. The attacks came on gradually with soreness in the stomach, loss of appetite and finally vomiting. They lasted from three to six weeks, during which time she would have several attacks of vomiting partially digested blood, which would occasionally pass through the bowels as well. She never complained of any severe pain, the pulse ranged between 110 and 130 ; never any great elevation of temperature. During the attack she could not take food of any kind and was fed altogether per rectum, and fortunately she retained large quantities. Convalescence came on gradually.

During the intervals she was able to digest the ordinary diet of meats, vegetables, etc., and took food in sufficient quantities to keep her system in good condition. She was able to take long walks and do light housework, and suffered very little pain at any time, and between the attacks of hemorrhage enjoyed very good health. The last attack came on early in the summer of 1887 and rendered her very weak. For two months before her death, the quantity of food taken by the mouth was small.

Post-mortem appearance.—With the exception of the stomach, the abdominal and thoracic viscera were normal and the body fairly well nourished ; perhaps the calibre of the intestines was slightly diminished throughout. The walls of the lesser cavity of the peritoneum were adherent, and by this means the stomach was fastened to the pancreas behind and the transverse colon below.



C. Cardiac orifice. P. Pyloric orifice. S. Stricture.

There was a marked stricture of the stomach at the point of adhesion to the pancreas. The finger could with difficulty be passed through the stricture. Measuring along the lesser curvature of the stomach the stricture was situated two inches

from the pyloric and four and a half inches from the cardiac orifice. The pelvic orifice was also constricted to the diameter of the little finger. The walls of that portion of the stomach between the stricture and the pyloric orifice were much thickened, while the cavity between the stricture and cardiac orifice was considerably dilated, the walls thinned and catarrhal-looking on their inner surface.

There was an entire absence of ulceration and the hemorrhages were probably due to a hyper-congestion of the cardiac portion of the viscus.

I think it worthy of note that this patient was able, for about 33 years, to digest the ordinary quantity and quality of food, without any marked discomfort, and was thus enabled to maintain a fair degree of health. Judging from the literature of the subject, stricture in this location is a rare lesion.

Correspondence

OUR LONDON LETTER.

(From Our Own Correspondent.)

CLINICAL NOTES.

In cases of acute laryngitis in the adult, Dr. Wolfenden, of the Throat Hospital, prescribes a calomel purge, followed by the same drug in small and frequent doses combined with Dover's powder, at the same time administering the following if the pulse be full: ℞.—Tinct. aconiti, ♏xv; aq., ℥ij. Sig.—A teaspoonful to be given every fifteen minutes for four or six doses, then every half hour for several doses, and finally every hour or two hours; the time between doses being lengthened as soon as the skin appears moist and the heart's action reduced. When the disease has advanced and secretion is being poured out, the following mild expectorant is prescribed: ℞.—Ammon. carb., grs. v; tinct. scillæ, ♏x; tinct. camph. co. ♏xv; syr. zingib., ℥j; infus. serpentar. ad., ℥j. Every four hours. If the cough is very troublesome, ♏ij or ♏iij of liq. morph. hydrochlorat. are added to the above. Locally, he recommends cold compresses of ice or the Lieter coil.

In cases of sub-acute laryngitis he prescribes the following: ℞.—Tinct. benzoin co., ℥iv. Sig.—A teaspoonful in a pint of hot water for each inhalation, night and morning. The patient is cautioned not to go out of doors for at least half an hour after using the inhalation. Trochisi krameriæ are also ordered, each lozenge containing grs. ij or iij of the ext. of rhatany.

In some cases the following vapor is preferred: ℞.—Olei eucalypti, ℥ij; magnes. carb. levis, grs. lx; aq. ad., ℥iij. To be used in the same manner as the above.

In chronic laryngitis, in addition to any constitutional treatment required, he usually prescribes the following vapor: ℞.—Olei. pini. sylvestris, ℥ij; magnes. carb., levis, grs. lx; aq. ad., ℥iij. Sig.—A teaspoonful in a pint of hot water for each inhalation, night and morning, also troch. krameriæ. In tuberculous laryngitis he prescribes a vapor of benzoin and chloroform, as follows; ℞.—Tinct. benzoin co., ℥j; chloroform, ♏iv, in a pint of hot water for each inhalation, and as a local application uses solutions of lactic acid, varying in strength from 20% to 60%, and applied by means of a brush, twice a week. In granular pharyngitis he finds the galvano-cautery the most satisfactory treatment.

In the treatment of those troublesome cases of nasal polypi, which are so apt to recur, Dr. Greville Macdonald, of the same hospital, is markedly successful in obtaining curative results. His method is removal of the polypus by means of Mackenzie's écraseur, which he uses as follows: The meatus being well opened by means of a Thudichum nasal speculum, and the light thrown into the nares, the écraseur is passed in so that the wire-loop is kept close to the septum, until opposite the polypus, when it is turned so as to rest on the floor of the nose. The loop now being under the polypus, it is surrounded by the wire by drawing the instrument upwards and somewhat outwards until the loop is felt to be well up to the base of the peduncle of the polypus. The wire being now tightened the polypus is cut through, and is easily removed by forceps; the point of attachment being subsequently cauterized by means of the galvanuo-cautery.

In all cases of hypertrophy of the middle turbinated bones, he relies upon the galvano-cautery or the application of chromic acid, either of which, with persevering treatment, prove successful. In chronic atrophic catarrh of the oro- and naso-pharynx, he prescribes an alkaline lotion of the

following strength: ℞.—Sod. bicarb, grs. xv; acid carbolic, grs. ij; aq. ad., ℥j. Sig.—A teaspoonful to be added to half a teacupful of warm water, and used by means of posterior nasal syringe, or sniffed up the nose night and morning. The following being also thoroughly applied to the anterior and posterior nares and pharyngeal walls twice a week by means of a brush. ℞.—Iodoform, ℥j; ether, ℥j.

In chronic suppurative catarrh of the ear, where the discharge is slight, the perforation considerable and granulations absent or nearly so, Dr. Macdonald prefers the dry treatment, and considers pulv. acid boracic superior to all other powders. He orders the ear to be thoroughly cleansed by syringing, each time previous to the application of the boracic acid, which is to be blown into the ear through a quill or glass tube. This is repeated once daily at first, and after the discharge is consideraly diminished, every third day will prove sufficient.

CANADIAN.

OUR NEW YORK LETTER.

From our Own Correspondent

NEW YORK, March 20th, 1888.

Dr. Robinson treats epithelioma, where the disease has not progressed far enough to involve the glands, in the following manner, and promises a good result. Make a paste—"Marsden's paste." ℞—Ac. arseniosi; gum acaciæ āā ℥j. Sig. Apply enough to cover diseased tissue by means of rubber adhesive plaster, and leave on for about sixteen hours. Then wash with warm water and apply a simple dressing as ung't. zinc. ox., or vaseline for about a week. If all the pathological tissue be not destroyed, make further applications in the same way.

An interesting discussion on the question of treatment of syphilis in the primary stage, took place at the Academy of Medicine the other evening. Dr. Bronson read a paper advocating the treatment of the initial lesion locally by means of mercury, as soon as it became manifest. His belief was that the disease is at first a local one, and that it extends through the lymphatics and glands in proximity, to the general system. His plan was not to excise the chancre, or attempt to abort the disease by internal medication, but to bring the mercury either by hypodermic injection, or inunction into immediate contact with the syphilitic virus of the chancre, and extending the injections into the lymphatics and glands through which the virus could reach the general system. By this means the syphilitic poison, be it a germ or anything else, is met and combated before it has reached the general constitution. He admitted he had never been able to successfully employ this method, but thought that due to the patients on whom he had tried this treatment, not conforming to his directions. Theoretically, he thought the plan the proper one, and believed it would be practically demonstrated. Dr. R. W. Taylor agreed with Dr. Bronson, that the disease was at first a local one—but the question was as to how much of the surrounding tissue was involved. He did not think syphilis had ever been aborted by cauterization, excision or any local treatment, because it was impossible to reach all of the involved cells; if the chancre were treated locally, large amounts of mercury should be used. He did not believe in the efficacy of the treatment. He said it was unwise to treat the disease before the secondary manifestations, because the disease afterwards acted disorderly, and the patient's mind was always in a state of uncertainty. Mercury acted by causing a fatty degeneration of the syphilitic cells, and hence it was irrational to give mercury, internally at all events, until these syphilitic cells existed; until secondary symptoms appeared. Dr. E. L. Keys thought the disease a general one from the start, with the chancre a local manifestation, and hence. he had no belief in any topical application, or medication with the idea of aborting or curing the disease.

The examinations in the different medical colleges take place much earlier here than in Ontario. Bellevue Hospital Medical College graduated, a few weeks ago, about one hundred and fifty, with only seven candidates rejected. The term spent in college is nominally three sessions, and the majority attend three sessions, but a great many graduate in two years. The University of New York graduated one hundred and fifty-seven. The College of Physicians and Surgeons, which is so heavily endowed by the Vanderbilts, is undoubtedly the best medical college here, and their standard is much higher than that of either of the others. Three years of

nine months each is compulsory, and generally about 25% are "plucked" every year; but still they have much the largest class, the students this year being about eight hundred in number. I think Canada has just reason to be proud of her medical colleges, and of her high standard of medical education. CANUCK.

Selected Articles.

THE SIGNIFICANCE AND LOCALIZATION OF PAIN IN PELVIC DISEASES.

BY HENRY C. COE, M.D, NEW YORK.

Considering the fact that local pain is the symptom which usually impels a woman to seek the aid of the gynecologist, and that the relief of this pain is the object aimed at in most of his manipulations and operations, it would seem as if our information on this point ought to be more definite than it is. However satisfactory it may be to the surgeon to contemplate a neat and artistic bit of plastic work upon the genito-urinary tract, or to insure a rapid and easy convalescence after laparotomy, if the patient experiences but little mitigation of the pain, to be rid of which she submitted to the operation, in her opinion, at least, it has not proved eminently successful. This may be a narrow view to take of the subject from a scientific standpoint, but it is a practical one. In any branch of medicine the most intelligent patient measures the skill of the physician by his ability to afford prompt relief from present suffering, and it is difficult to convince her that there is any improvement in her condition so long as the pain persists. Pain is the popular indication of existing disease, the seriousness of the latter being proportionate to the severity of the former. This is especially true in pelvic troubles, where the subjective element is so prominent; that patients are constantly at fault in their inferences is a matter of common experience. How often does epithelioma of the cervix make fatal inroads without giving rise to much more pain than does a simple displacement! The inability of the average patient to describe clearly, and to localize, pelvic pain will be apparent on reviewing the vague symptomatology recorded in hospital and dispensary case-books; nor is the connection between the symptoms and the local condition always established by the vaginal examination. The question has often presented itself to my mind: If the true origin of this pain is obscure and ill-defined, how can one hope to remove it by treatment directed more or less at random? It is greatly to be regretted that this subject has not received more attention from neurologists, whose studies would naturally lead them to view it from a less materialistic standpoint. It certainly furnishes as legitimate a field for their investigation as do diseases of the central nervous system. It is with some trepidation that I bring this subject before the society, because I am conscious of the fact that you must regard with a certain degree of suspicion the off-hand manner in which gynecologists explain nervous symptoms, which you know to be by no means so easy of elucidation. However imperfect this paper may be, I trust that it may at least provoke a discussion which will be of peculiar value, in that it may tend to throw new light upon the obscure subject of pelvic pathology. The matter is naturally considered under two heads, the subjective and objective—the significance of pain as described by the patient, and its localization by the physician. Reflex pains will be discussed separately. It is unnecessary to call attention to the fact that it is a delicate and difficult matter to decide from a woman's own statement concerning the exact character and severity of the pain of which she complains, since there is a common tendency to exaggerate this symptom for which we may not make due allowance until after several interviews. Again, her ability to describe its exact character, site and mode of occurrence, is usually limited. Certain pains, such as back-ache, "bearing down" sensations, etc., are so vague and general that we cannot assign any special importance to them except in connection with more definite pelvic symptoms. Even the pains which are commonly regarded as more or less characteristic of a certain pathological condition are associated with other conditions of a widely different nature. Let us glance at a few of these pains which are sometimes referred to in the text-books as almost pathognomonic, and see if they cannot be reduced to a common basis. The throbbing pain of acute inflammation is excluded as possessing no features peculiar to the region of the pelvis. Among these are constant, aching pain over the lower part of the sacrum, shooting pain in the ovarian region, which is subject to exacerbations just before the menstrual period, and the peculiar "gnawing" pain in the pelvis which accompanies carcinoma uteri. The subject of dysmenorrhœa would be an interesting subject for discussion, especially with the view of determining how much of the pain is of uterine, and how much of ovarian, origin, but to treat it at length would lead us away from the main question.

Chronic pain over the sacrum (as distinguished from the back-ache so common in women) seems to point quite constantly to some morbid condition of the internal generative organs. It is to be carefully distinguished from purely referred pain similarly located, but having more of a neuralgic character, or from that due to direct pressure on

the sacral nerves. This symptom is indicative of some lesion in the posterior half of the pelvis, and it has seemed to me that it is nearly always referable to subacute or chronic inflammation of the perimetric tissues. It is, of course, noted in connection with retro-displacement of the uterus, prolapsed ovaries, and malignant disease; but a careful study of such cases will generally show that it is most constant and severe when these conditions are associated with inflammatory processes in the peritoneum, or connective tissue, or in both. With reference to the latter, "it by no means follows (to quote from Mundé's 'Minor Surgical Gynecology') that the plastic exudation is of great amount, forming an actual tumor." "As a rule," the author adds, "sacralgia increases in proportion to the size and extent of the exudation." This explains why pain in the sacrum is so common in connection with acquired anteflexion, where there is no question of direct pressure on nerves; the cause is to be found in the parametritis posterior which precedes, and leads to, the displacement. It explains, moreover, why adhesion of the retro-flexed uterus is associated with so much more constant and severe pain than is simple retro-displacement, without imprisonment of the organ. We can hardly attribute the pain to direct pressure on the sacral nerves, because the rectum is interposed and Barnes' explanation seems rather forced. This author (Diseases of Women, page 105) says: "The pain is probably not due so much to direct pressure of the body of the uterus, even when enlarged, upon the sacral nerves, as to the indirect pressure occasioned by the accumulation of hardened fæces in the rectum." The rectal symptoms due to the mechanical pressure of the fundus are unmistakable, but they are clearly localized, are not continuous, and are easily distinguishable from the deep-seated aching pain which results from chronic para- and perimetritis. From these brief statements it seems fair to assume that when a patient states that she has a more or less continuous, aching pain referred to the lower part of the sacrum, but seated deeply within the pelvis, we are justified in assuming that it is directly due to a subacute or chronic perimetric inflammatory process in the posterior pelvic fossa, which may, or may not, be associated with a retro-displacement or tumor. In other words, the pain is due principally to the inclusion of sympathetic nerves in the exudates or adhesions, and not to direct pressure on the sacral plexus. This will appear more plausible on studying the effect of such adhesions when situated in the broad ligaments.

In selecting as another fairly typical variety of pelvic pain, that due to malignant disease of the uterus, it may seem as if I had made a serious omission in not mentioning laceration of the cervix. But, it must be evident that not only is the cervix a relatively insensitive region, but that laceration is only one link in a pathological chain, so that by itself it cannot be regarded as giving rise to any distinctive symptoms.

The popular idea is that commencing epithelioma of the cervix is almost invariably accompanied by such pain as that described by Rigby, i. e., "A sudden, sharp, burning dart of neuralgic severity, always proceeding from one spot, and sometimes transfixing the whole pelvis." From what we know of the comparative poverty of the cervical tissue in nerve-filaments, we are forced to question its frequency on anatomical grounds alone; in this we are supported by the clinical evidence. Pain (to quote from Hart and Barbour) "is not present so long as the disease is limited to the cervix; hence, it is of no use as a diagnostic of carcinoma of the cervix in its early stage unless the cellular tissue has been at the same time involved." Hewitt (Diseases of Women, page 127) expresses the same thought when he says: "The pain due to cancer frequently arises from local attacks of peritonitis." In other words, the pain in this case has the same origin as in the former condition, although it is more severe, neuralgic and intermittent. Moreover the patient is more able to localize it, since it is at one time sacral, at another hypogastric, is sometimes described as "a dull, gnawing pain localized in the pelvis or back," sometimes as "a sharp pain, shooting through to the back or down the thighs to the knees." The latter points, of course to direct pressure on the nerve-plexuses by secondary growths.

Carcinoma of the body of the uterus early gives rise to pain, just as does disease of the cervix after it has extended to the body. Sir James Simpson describes it as "slight and intermittent perhaps, at first, but soon reaching a high pitch of intensity, at which it continues for an hour or two, and then gradually subsides." Sarcoma, on the contrary, often occasions remarkably little pain. Can it be because in the case of carcinoma the intra-muscular nerves are more directly affected by the inroads of the disease than occurs in sarcoma of the endometrium? The acute or subacute peritonitis, which invariably attends the progress of carcinoma, readily explains the more severe, continuous and diffuse pains which mark its later stages. Here again, it may be assumed that the pressure of exudates on included nerve-filaments is an important causal factor.

It remains to consider a third common variety of pelvic pain, which is frequently spoken of as "ovarian." It is variously described as "shooting," "darting," "sickening," and is usually located in the left groin or iliac region, is deeply seated, and is frequently associated with referred pains in the sacral and sciatic nerves, and mammary neuralgia, all of which are aggravated at

the commencement of the menstrual period. Pain of a peculiarly sharp, lancinating character in the same region has been ascribed to an accompanying affection of the tube, but it presents no peculiarities that could not be explained by localized peritonitis. Now, as is well known, the ovarian region is the seat of various reflex pains associated with disease of the uterus, of the opposite ovary, or even of the rectum, so that locality alone does not give a positive indication of disease of the gland. The true ovarian pain is probably only clearly defined in the case of the enlarged and prolapsed (but non-adherent) organ during defecation or coitus, when it is directly subject to mechanical pressure. But, when diseased ovaries and tubes are buried in adhesions, the characteristic pain (if there is any) is masked by that due to the adhesions. This is an extremely important practical point, which has only recently received careful attention. It has been shown by Hegar that cicatricial nodules in the broad ligaments may produce nervous symptoms identical with those referred to chronic oöphoritis, even including the exacerbations at the menstrual periods. If this is true, it seems to be a fair inference, as I have repeatedly urged in discussing this subject from a purely gynecological standpoint, that in the majority of the cases in which we assume that pain is of intra-ovarial origin, it is really due to pressure on the nerve fibres, *before* they enter the ovary, and not to pressure on the terminal filaments within the stroma, in consequence of general induration of tissue. If the pain was principally of centric origin it would not only be constant, but it would be unrelieved by electricity or by the separation of peri-oöphoritic adhesions, since the morbid conditions within an ovary would remain unchanged. We shall have occasion to refer to this again under the head of treatment.

I have alluded very briefly to three varieties of direct pelvic pain, which differ not only in their location, but in their character and mode of occurrence, since they seem to illustrate most clearly the point which I wish to make, viz., that when a patient describes a chronic and more or less continuous pain situated over the sacrum, the hypogastrium or the ovarian region, we are safe in inferring that, although there may exist disease or displacement of one or more of the pelvic viscera, the chief causal factor in the accompanying para and perimetritis; that is, it is due more to pressure upon, or irritation of, the nerves within the pelvic connective tissue and peritoneum, than to irritation of their terminal filaments within the generative organs, or to the mechanical pressure of the latter upon adjacent nerve-trunks.

Having found that the significance of pain as described by the patient is vague and ill-defined, it remains to be seen if we can locate it more exactly by a physical examination. There are several natural obstacles in the way. In the first place only the cervix uteri is directly accessible to the touch, the rest of the genital tract being felt through the interposed vaginal vault and abdominal wall, with other strata of tissue that lie between. Then, it is a matter of common observation that certain regions are peculiarly sensitive to pressure under conditions which, so far as we know, are perfectly normal Firm pressure in the anterior, posterior, or either lateral fornix frequently gives rise to considerable pain, which in hyperæsthetic subjects may find forcible expression. Whatever may be the anatomical explanation, this pain evidently originates within the pelvic tissue proper, perhaps in the peritoneum. With the exception of the sensation which a patient describes when pressure is made upon an ovary displaced into Douglas's pouch, I can not recall any variety of pelvic pain which can be reproduced, as it were, by the pressure of the examining finger. Thus, by pressure on a retro-uterine exudate we cause pain, but it is referred rather to the point where the pressure is made; it is not an exaggeration of the diffused aching pain, of which the woman complains. Neither can we be said to reproduce the lancinating pains of malignant disease when we manipulate the cancerous uterus. The cervix itself is, as has been said, comparatively insensitive, and the cases in which direct pressure on the "cicatricial plug" in the angle of a laceration occasions direct and reflex pains are less common than is generally supposed. Exact localization of the pain in this condition is exceedingly difficult, because if the tear has involved the vaginal fornix, the resulting cicatrix in the latter may be quite painful. But, it is the secondary inflammation in the broad ligaments which give rise to the most marked pain, which is often referred to the ovarian regions; the painful bands, or nodules, when situated at the bases may be located quite distinctly through the lateral fornices. However, there are usually other complications (endometritis, hyperplasia, etc.) which doubtless in themselves cause more or less pain. The practical point is that we may reverse the pathological processes—repair the laceration, cure the endometritis and subinvolution—yet the pains, direct and reflex, persist. In many of these cases it seems as if we could establish a direct connection between their persistence and the persistence of the indurations in the broad ligaments.

The most difficult task is that of trying to establish by the bimanual examinatio the connection between pelvic pain, and obscure, ill-defined masses of exudates high up in the broad ligaments, which can often be mapped out only when the patient is placed under the influence of an anæsthetic, and then any estimation of the amount of pain is out

of the question. The great difficulty is that not only are these masses not directly accessible to the touch, but even when they consist of tubes and ovaries, these are so fused together and buried in adhesions that their original shape is lost, while there can be little hope of developing any characteristic "ovarian" pain by making pressure upon them. Circumscribed indurations in the broad ligaments are often found at autopsies, so situated that they could not have been detected during life, yet these may have given rise to marked nervous symptoms which were referred to an organ to which the indurations were adjacent. Without multiplying examples, it will be evident that a physical examination affords us but little aid in ascertaining the exact site, or origin of pelvic pain.

Before proceeding to make a few practical deductions, a brief reference may be made to some of the so-called reflex pains of pelvic origin. In my opinion gynecologists show a tendency to exaggerate their frequency. I agree with Dr. Dana ("A Clinical Study of Neuralgias, and of the Origin of Reflex or Transferred Pains," reprint, page 24), that vertex pain "is often an indication simply of anæmia,"—for out of twenty-five patients who attend my clinic in an afternoon, probably twenty will confess that they have cephalalgia, which can often be explained without reference to their local condition. I can also subscribe to the statement that "pelvic irritations are felt most frequently in the upper and short branches of the lumbar plexus, next perhaps in the intercostal nerves and upper cervical nerves," etc. Reflex arthralgiæ of pelvic origin I have seldom observed. I was not aware that sciatica was rare in connection with ovarian trouble. Mundé states that "a peculiar pain in the hip, somewhat above the ischiatic notch, is frequently indicative of ovarian disease." But, he adds (rather vaguely) that "a blister over the painful spot may relieve the pain and prove it to be merely sciatica."

Reference has already been made to pains in the lumbo-sacral region, radiating down the thighs, which some writers ascribe to direct pressure on the nerves from exudates or displacements of the uterus. This cause must certainly be rare. It is more probable that such pains are reflex in character. And this leads us to the question of pains referred to, but not originating in, certain regions within the pelvis itself, the significance and localization of which it is extremely difficult to determine. Of these the most complex is irritation in the vicinity of the ovary from disease of the opposite gland, of the rectum, uterus, or even from the presence of small indurations in the adjacent peritoneum. "Ovarian neuralgia" is a loose and convenient term in this connection. It is only necessary to allude to the sympathy which exists between the urinary and genital tracts in order to explain the interchange of pains between them. In fact, after studying the intricate relations of the pelvic sympathetic nerves we can readily imagine the possible combinations which may exist. Moreover, the conditions are too complicated to be explained by reference to Mr. Hilton's beautiful law. In general, it may be said of these reflex pelvic pains that, while there is no doubt as to there frequency, their is much uncertainty as to their origin. We may refer them to some lesion of the cervix, corpus uteri, or ovary, but positive proof is quite as often absent as it is present. In view of the great richness of the nerve-plexuses around the pelvic organs as compared with the terminal filaments in their substance (compare the cervix, the endometrium, and the ovarian stroma), it seems justifiable to refer most of the reflex, as well as the direct pains, to localized inflammatory processes in the parametric tissues, which may, or may not, be capable of detection. In addition to pain referable to coarse lesions, I need only hint at the subject of functional troubles in order to open up a field for discussion which is comparatively fresh.

The practical deduction which I desire to make relates both to prognosis and to treatment, and may be stated briefly as follows: Since we are seldom able to locate the exact site even of the most characteristic pelvic pain, we should be somewhat guarded in our promises to remove it by modification, or removal of, the supposed cause. Thus, we may repair a lacerated cervix, and yet the pains, direct and referred, are not removed, because we did not discover the true cause; or (and this is far more important), we may extirpate an ovary for the relief of pain apparently located in that organ, yet the same sensations persist. Without dwelling upon the latter theme, which has become rather trite, let me in passing quote from one of the most enlightened and conservative of German gynecologists (Winckel op cit.) who, in commenting upon oöphorectomy when performed for the relief of pain alone, says (following Hegar) that the operation should not be performed "when the broad ligaments are contracted and rigid, and when nodules and indurations are found in their structure, because it is possible that these abnormalities, which cannot be removed by the operation, may be the chief cause of the neurosis." Again, he remarks: "According to the law of eccentric projection toward the periphery, the sensation of pain which is felt in the ovary will persist after the latter has been removed, as we so often observe in other nerves, and in other parts of the body."

While desirous of carefully avoiding any criticism of the value of gynecological operations, I would call attention to the fact that many of those performed for the purpose of ameliorating

the symptom *pain*, must continue to be more or less empirical, until we attain such refinement in diagnosis that we are able to refer this pain to a certain definite, circumscribed area in the pelvis. Whether the plan advocated by Dr. Polk (in ercent papers read before the New York Obstetrical and the American Gynecological Societies) of separating the adhesions around the displaced uterus and appendages, will prove to be of permanent benefit to the patient as regards the relief of pain, is still doubtful. There is some reason to think that it may be, although the risks involved in the performance of this operation are scarcely less than those attending removal of the ovaries and tubes. But into this question I do not intend to enter here.

There is a therapeutic agent, the value of which is beginning to be appreciated by gynecologists, and which should be especially interesting to you, because you, of all the specialists, are most familiar with it—I mean the use of electricity. I do not refer to its use as an actual local application to diseased organs and tissues, but to its employment for the relief of pelvic pain. That it has a future in this direction will appear from the testimony of prominent gynecologists as to the sedative effect of galvanism in oöphoralgia, and more recently from that of Apostoli, of Paris, in his paper on the use of the "tension faradic" current in cases of pelvic exudation. The application of electricity in the one instance in the case of recognized adhesions of the appendages, and in the other in inflammation of the perimetric tissue, and the benefit obtained in both instances, may be regarded as a practical clinical argument in favor of the theory of the origin of pelvic pain which I have suggested in this paper.

This is not a new theory, of which I have given a mere outline. I am fully aware of the imperfect manner in which it has been presented, and of the fact that I may be open to the criticism of trying to materialize pain, so to speak. But do not gynecologists practically assume to do this when they direct their treatment to a single gross lesion in one of the organs?

The following is a brief resumé of my deductions:

1. That pelvic pain has its origin more often in the perimetric tissues than in any particular organ, being due to irritation of nerve-trunks rather than nerve-endings.

2. That the reflex, or transferred, pains commonly referred to certain lesions in the pelvic organs, may radiate from inflammatory foci in the peritoneum or connective tissues surrounding those organs.

3. That operations upon, or complete removal of, such diseased organs may fail to remove the pain for the reason stated.

4. That this pain, like other nerve pains, may be sensibly relieved by the proper application of electricity.—*Gaillard's Med. Jour.*

THE IMPORTANCE OF LOCAL TREATMENT IN DIPHTHERIA.

It is not needed that mention should be made in this association of the wide prevalence of diphtheria or of the great fatality attending it. Neither would I be thought to assert that local treatment is the most important part in the conduct of this dread disease. Surely it were better to entirely lose sight of local requirements than to be lacking in that care and alertness needed in the successful general medication of each case.

The thought I would present here is that efficient local treatment is always indicated in the early stages of the disease, and often of avail in the more advanced complications. It is to be regretted that the physician is not called sooner in many instances. Often not until the system is profoundly impressed by the diphtheritic virus is he summoned, and then asked to combat, not an incipient fire, but a conflagration rapid in its advance and destructive in its tendency.

First of all, I believe that diphtheria is in its attack a local disease, most prone to invade a mucous membrane denuded of its epithelium. How the specific poison first finds a foothold we know not, but probably a direct contact is quickly followed by growth and absorption. As in the well-known phenomena attending successful vaccination, the systemic infection is quickly followed by increased local disturbance and exudation, most likely at the point of the primary infection. This new development, the false membrane, in its turn becomes a distributing centre for all parts of the system.

If it were possible to antagonize the attack at the beginning, when the diphtheritic impression is first received, the problem of cure would be easily solved. And here let me say parenthetically, that I believe it is good practice to use, frequently and thoroughly, astringent and antiseptic sprays and applications with children who may not show evidence of diphtheria, but who are and have been exposed to it by living in the same house, or are in any known way in the line of invasion. Just as an intact mucous membrane completely covered by epithelial scales may be securely protected from attack, so I hold that, in cases where a denuded membrane offers an invitation for the ready reception of the diphtheritic germ, we may afford an artificial protection, or by proper means destroy an already present foe.

Yet it is not of prophylaxis that this essay is to treat, but of efficient conduct in cases where the disease is present. These conditions exist: 1, a

local specific inflammation; 2, a general septic condition, at first caused by, and afterwards aided by, absorption from this local inflammation.

While many eminent practitioners depend upon general medication, and some have quite abandoned all forms of local treatment, it is evident that all indications are not met unless attention is given to the local manifestation of diphtheria. If the disease is of local origin, if the systemic infection is constantly receiving fresh re-enforcement by means of the ready absorption of the specific poison—aid the system by all means to throw off the incubus of infection, but also limit if possible the further supply.

How shall this best be done? This depends upon the amount of local progress. I do not hesitate to say that I have seen a local diphtheritic exudation melt away in three or four days under proper local applications, the system being at the same time well guarded. But were these true cases of diphtheria? This much in affirmation: Several of these of which I speak were in families where one child had just died from diphtheria, where the symptoms were all indicative of diphtheria, and where there had been every opportunity for infection.

An old cry is that a physician who professes to conduct his cases of diphtheria to a favorable termination is an alarmist, and his cases are simply follicular amygdalitis. Such a pitiable antagonism is unworthy a scientist. Mistakes do occur, and it is better they should be on the safe side; but I am willing to call a case diphtheria where I find that the child, having been exposed to the contagium, has anywhere upon the mucous membrane of the upper passages a thick, continuous yellow exudation, closely adherent to the mucous membrane, with a tendency to necrosis and sloughing, especially if the pulse is quick and weak and the temperature above normal. It is possible that such a case is not diphtheritic, but it is not probable, and we deal with probabilities. The differences in local appearance and general condition between a follicular exudation and the characteristic false membrane of diphtheria are usually so marked that the physician need not be mistaken, and if he does err, let him give the child the benefit of the doubt.

Beyond this class we have another or advanced degree of the same class in which there can be no doubt as to the type of disease. We find it when called two or three days after the first attack. No longer is there now a small patch confined to the tonsil, or to a small part of the pharyngeal wall or soft palate. The natural guardians of the child have slept and the insidious enemy is in full possession. A dense dirty-yellow and sometimes disintregating exudation is found closely attached to the natural tissues in some places, and in others hanging in loose shreds, while the naso-pharynx is filled with detached portions of membrane, retained mucus, and sometimes blood, and poison from this septic hot-bed is being rapidly absorbed and carried to the most remote parts of the little frame. Each of these classes of cases demands special and distinct local management.

Let us consider the first class, where the membrane is yet small in extent and of recent formation. Can we close the portals of the absorbents and render the existing local focus of disease inert? After experimenting with many formulæ, I have for several years renewed my confidence in the mixture of equal parts of glycerin and tincture of chloride of iron. The most fashionable and really excellent practice of using bichloride of mercury provides for antisepsis, but not for the equally important matter of astringency. But little manipulation is needed in these early cases. A cotton-covered probe is by far the best instrument, and with it the solution is not merely brushed over, but pressed against, the point of attack There is no necessity of hurting the child if care is taken, but, on the other hand, I retain a vivid picture of the good old doctor, conscientiously bound to do something, his spectacles awry, plunging a "swab" at random down the throat of a kicking child, or through the clinched teeth, scraping the mucous membrane from the roof of the mouth by the good help of the ubiquitous tablespoon. By proper tact the application may be made easily, and, if it is repeated frequently—*i. e.*, every two hours—its efficiency will soon be demonstrated.

In the more advanced class of cases much more than this is needed. The extent of false membrane is greater, it is more difficult to reach, and the upper respiratory passages are obstructed. First, all of the detached membrane and *débris* should be removed by the syringe, and there is no better method of doing this than that described by Dr. Jacobi in the discussion following Dr. Billington's able paper on "Local Treatment in Diphtheria" (*Medical Record*, April 9, 1887). A tepid but weak solution of common salt is an effective cleansing agent, after which a spray of bichloride-of-mercury solution can be used. The spray should be used warm, and to protect the nostril I often pass over the end of the spray-tubes a small piece of rubber-tubing and roll it up, so as to fit the nostril fairly well. There is no use in attempting to employ the more direct and potent applications by means of the probe in these cases. Many other agents have been used by spray and inhalation or insufflation, such as carbolic acid, lime-water, weak solutions of iron, etc. These are useful, but time forbids speaking of all.

When there is great irritation from laryngeal involvement—if the exudation is not too great—the vapor from slaking lime often gives relief.

I should greatly exceed my limit of time did I attempt to discuss the relative value of tracheotomy and intubation. The opportunity is given, however, to call attention again to what I believe to be an important addition to the ordinary procedure in tracheotomy—*i. e.*, to fill the larynx above the artificial opening with a pledget of cotton or small sponge saturated with an antiseptic solution, to prevent, if possible, the extent of the local disease by continuity of surface.

Let me repeat these thoughts: 1. Diphtheria is in its incipiency a local disease. 2. Local treatment is important, an aid to, but never a substitute for, the careful general medication and cure. 3. The exact means used in local treatment may not be important, but the end to be accomplished is the speedy sterilizing and disintregation of the diphtheritic exudation, without injury to the adjacent tissues. 4. The local treatment must be conducted promptly, persistently, and carefully.—Dr. Porter, in N. Y. *Med. Jour.*

ABDOMINAL SECTION FOR DISEASE OF THE UTERINE APPENDAGES.

Dr. Charles B. Penrose read a paper on this subject, founded on eleven cases, all successful. The operations had all been performed in 1887, and the patients were at present well and able to attend their various duties.

In five of the cases the appendages were removed on only one side. In one of these (a case of pyosalpinx and cystic ovaries) the author had found it impossible to remove the left tube and ovary. They were firmly adherent in a knot on the side of the uterus, and the uterus was bound down in the hollow of the sacrum. In the other cases of unilateral removal he had intentionally left the appendages upon one side. Except in the case of dermoid cyst, the women were young and desirous of having children; and at the time of operation he could discover no sign of any pathological condition in either the tube or ovary. He was aware of the fact that in cases of tubal disease it was often unwise to perform a unilateral operation and to leave even an apparently healthy tube, as, in many cases, it subsequently became diseased from an infecting focus in the uterus.

Though sufficient length of time has not yet elapsed to come to any definite conclusion with regard to his cases, yet so far he had had no cause to regret having left the sound tubes; and in one case the patient had become pregnant since the operation.

A point of interest in connection with the first case (salpingitis and cirrhotic ovaries) was the length of time during which the patient was fed by the rectum. She began to vomit as she recovered from the influence of the ether, and she continued to vomit everything which was administered by the mouth for thirty-six days after the operation. There was no apparent cause for this excessive vomiting. The operation was simple, and was not followed by any obvious symptoms of peritonitis. The rectal injections, by means of which this woman was nourished for over a month, consisted of pancreatized milk, eggs, and whiskey. Two-thirds of a quart of milk, one egg, and three ounces of whiskey were administered in four or five doses during the twenty-four hours. During this prolonged course of rectal feeding she lost many pounds in weight. No food at all was taken by the mouth; the very small quantities which were occasionally administered experimentally, were always rejected immediately. When she finally became able to take food by the mouth it was necessary to give it in the form of twenty-drop doses of soup or beef tea. In the table he had made no distinction among the different forms of non-purulent inflammation of the Fallopian tubes. All thickened, enlarged, adherent tubes which did not contain pus he had put down as cases of salpingitis.

In all the cases of pyosalpinx there was a history of repeated attacks of pelvic pain and inflammation, which often confined the patient to bed for several weeks. In two of the cases of pyosalpinx there was also ovarian abscess. In these cases the abscess cavity in the tube communicated directly with the abscess cavity in the ovary, and the origin of the ovarian abscess was obvious. In case VII (salpingitis and abscess of the ovary), however, there was no pus in the tube. The tube was enlarged and adherent, and its fimbriated extremity was closed; and it did not communicate with the cavity of the ovarian abscess. The ovarian abscess contained about half an ounce of pus and had a distinct pyogenic membrane. The author thought that abscess of the ovary was of more frequent occurrence than works upon gynecology admitted And, though it probably was in general due to oöphoritis caused by inflammation of the tube, yet it was not always associated with pyosalpinx. In two cases of double pyosalpinx (cases V and IX) a thin purulent fluid was found in the peritoneal cavity, and the intestines were found to be deeply congested when the abdomen was opened. The patients had probably been suffering for some time with general chronic peritonitis, the patients having only complained of pelvic pain and pain in the back. The chance that such a condition might occur in connection with pyosalpinx was a strong argument in favor of removing these abscesses by abdominal section, instead of evacuating them by the vagina, as was so often done.

The danger of assuming any case of peritonitis in a woman to be idiopathic, without a thorough vaginal examination, was obvious. He had the

report of a case which had occurred recently, where the patient was treated for several weeks for idiopathic peritonitis, and an operation done a few hours before death revealed double pyosalpinx and a ruptured ovarian abscess.

In six of the cases reported, an abdominal drainage-tube was used. The average time of convalescence in these cases was no longer than in the cases where a tube was not introduced; and the severity of the symptoms following the operation —the elevation of temperature, the rapidity of pulse, and the pain—were much less marked in the drainage-tube cases than in the others. The absence of pain in the drainage-tube cases was probably in part due to the fact that most of them were cases of pyosalpinx, where the tissues which were ligated and cut were so far degenerated that their sensibility was much diminished. He thought that the danger of abdominal hernia following the use of a drainage-tube had been exaggerated. In one of his cases there was now a small hernia, but it had occurred above the position of the tube and was probably due to some error in introducing the sutures. In some thirty drainage-tube cases which he had seen in the practice of Dr. Joseph Price, there had, as yet, been no hernia. It was probable that hernia was due more frequently to a long or a high incision and careless suturing than to a drainage-tube. The average length of time before the glass drainage-tube was removed in his cases had been about five days, the shortest two days and the longest eight days. In but one case had the discharge from the tube become purulent. The use of a cotton rope to act as a capillary drain added greatly to the value of the glass drainage-tube. It prevented any fluid from remaining in the bottom of the tube, and it removed the deposits of fibrin from the perforations in the glass.

One case was reported at length on account of the interesting phenomena attending the development and the subsidence of the peritonitis, and because it was treated throughout by sulphate of magnesium and rectal injections, and not by opium. And, indeed, he had not found it necessary to use opium in any of the cases reported.—*N. Y. Med. Jour.*

THE RADICAL CURE OF HERNIA.

The change which has taken place in modern surgery as a result of the introduction of antiseptic methods, is nowhere better seen than in the rapidly increasing frequency of operations for the radical cure of hernia and their great apparent success. At the annual meeting of the British Medical Association, held last year in Dublin, a series of interesting papers was read, which have only recently been published in full. (*Brit. Med. Jour.*)

The most important points to be noted are: (*a*) The treatment of the sac. (*b*) The treatment of the rings and edges of the canal. (*c*) The after-treatment as to the employment of pressure by truss or otherwise. Many details which cannot be considered as unimportant must be omitted from a brief summary, and should be studied in the original papers, which were remarkably concise and practical. Strict antiseptic methods were employed in every case.

Dr. Macewen carefully separates the sac from the entire inguinal canal and from the abdominal aspect of the internal ring; fastens a stitch in the fundus, throws the whole sac into a series of folds, transfixing them with the same stitch carried through one after the other up to the ring, threads the free end of the stitch in an eyed needle, and passes it through the abdominal wall an inch above the upper border of the internal ring, the skin at that point being pulled up so that it is not included. While traction is made on that thread, pulling the sac into the ring, so that its distal extremity is furthest backward and upward, the conjoined tendon is pierced by a ligature, so as to leave a loop inside; the lower end of that stitch is then carried through Poupart's ligament from within outward, the upper end through the transversalis, internal and external oblique muscles. Similar stitches may be introduced lower if necessary. The free end of the ligature through the sac is then fastened by passing it several times through the external oblique muscle, and the other stitches are tied, closing the internal ring. Chromicized catgut is used for these sutures, and to unite the skin. A decalcified bone drainage tube is laid in the lower angle of the wound. No truss is used. He states that the principle of the operation may be applied to femoral hernias, but gives no details.

Mr. Banks dissects out the sac, opens it, replaces bowel, ties and cuts away adherent omentum, pulls the sac well down, ligatures it as high in the canal as possible, and removes it. Finally, the pillars of the ring are brought together by two or three silver sutures, which are left in position. In femoral hernia the cleaning and removing of the sac constitute the whole operation. In ventral and umbilical hernia the sac is used as a plug to stop the aperture. He considers "freshening" the edges of the canal with the idea of securing union, to be "utter nonsense." He encourages his patients to wear light trusses afterward.

Mr. Ball isolates the sac completely, twists it on itself four or five times, and transfixes it with two sutures, passed first through one pillar of the ring, then through the sac, and then through the opposite pillar, after this the sac is excised, and the sutures tied over leaden plates. He objects to the subsequent use of a truss.

Mr. Stokes dissects the sac from the elements of

the cord, divides it between two catgut ligatures, twists the proximal portion until distinct resistance is felt, and transfixes it with two silk sutures passing through both pillars and walls of the canal. These are brought through the skin an inch from the incision on either side, and tied "button fashion," over a leaden plate. He thinks the sutures serve a merely temporary purpose, and should be introduced loosely, and objects strongly to the permanent metal sutures. He is convinced that the after application of the lightest truss, fitted with a pad, is hurtful, and uses a linen dressing known in Dublin as "Harrison's truss."

Mr. Barker clears the neck of the sac close to the external ring, surrounds it with a silk ligature, opens it longitudinally, to to see that it is free from gut or omentum, ties it tightly, leaving long ends to the ligature, and cuts it away, allowing the lower portion to take care of itself. One of the ligature ends is then threaded in a needle, which is carried up the inguinal canal, forced through one border of the in ernal ring, and out through the external oblique muscle, the other end is put through the opposite border, when the two are tied, drawing the stump of the sac into the internal ring and closing it. The walls of the canal are then closed by four to seven ligatures; the ends are cut short. The skin wound is then stitched. No drainage is used. The use of trusses is avoided.

Mr. Franks closes the internal ring with silver sutures, two or three in number, transfixing the sac and excising it below them; he also closes the external ring. He leaves the sutures *in situ*, and believes their retention "materially fortifies the parts." He thinks a truss rarely necessary, and uses a cotton wool pad held in place by a bandage.

Mr. Mayo Robson ligatures and excises the sac and draws the pillars together with silver sutures.

Other gentlemen reported cases, and Mr. Puzey called attention to the need of prolonged rest after these operations. The aggregate number of cases operated upon, including those in which strangulation was present, was about 450; the deaths from the operation were very few; but the total percentage on the whole number of operations cannot be calculated, as exact figures were not given in each case. The mortality was, however, beyond donbt very trifling, as taking, for example, the cases of Macewen, Barker, Ball, and Franks, we have an aggregate of 168 cases without a single death. Only 10 deaths are mentioned out of the whole number, and of these 2 were from bronchitis.—*Am. Jour., Med. Sciences.*

ALL women are kleptomanic to a certain extent; they will hook dresses.

ON THE USE OF STRYCHNINE AS A HYPNOTIC.

Quiet sleep usually comes readily and quickly to any healthy person who is tired, but not overtired, with bodily or mental work. But as too many know, there is a condition of excessive fatigue, either bodily or mental, and more especially of that fatigue which follows intense mental strain or worry, which prevents the unhappy sufferer from obtaining the rest and refreshment by sleep of which he stands so greatly in need. The treatment of such cases is very difficult. The use of opium or other narcotics is objectionable, not only because it may tend to induce that dreadful condition, the opium habit, but because it frequently happens that the sufferer from sleeplessness is obliged to have all his faculties clear and all his wits about him in order to get through his daily work. The administration of opiates at night tends in many people to produce a certain amount of dulness through the day, which would render the use of these drugs inadmissible, even if there were no other objection to their use.

Chloral is not so objectionable on this account, as it may induce sleep without in the least obscuring the mental faculties next day, but the use of chloral also is objectionable both because of the tendency to the formation of a chloral habit, and because its long continued use may have a weakening action on the heart and also a deleterious action on the brain. I have seen at least one case in which the continued use of chloral appeared to induce mania, which began to improve as soon as the patient was removed to an asylum and cut off from the use of the drug.

Bromide of potassium is probably the least objectionable of all, but in many cases of overwork it seems to lose entirely, or almost entirely, its hypnotic action.

In treating some cases of persons engaged in literary work who were suffering from sleeplessness and yet were obliged to have their brains perfectly clear during the day, it occurred to me that if I could convert the condition of over-tiredness into a condition of simple tiredness, the patient would naturally fall sound asleep without the use of any hypnotic. One can sometimes do this to a certain extent by giving some warm beef-tea or a tea-spoonful of Valentine's meat juce in water either hot or cold, or by giving a little alcoholic stimulant, such as whiskey and water or brandy and water. It is probable that these substances have a double action, tending to dilate the vessels of the stomach and withdrawing blood from the head, as well as tending to exert what we may vaguely term a stimulant action on the nervous tissues themselves, without understanding what the exact nature of this stimulant action is. It occurred to me that as strychnine is one of the

most powerful stimulants, if not the most powerful nervous stimulant that we possess, a small dose of it might have the effect of bringing the depressed nervous system up from the condition of over-fatigue to that of simple fatigue, and thus inducing sleep. I accordingly tried it, and was much pleased with the result. It acted exactly in the manner that I expected, and induced comfortable healthy sleep without any disagreeable effects next day. The way in which I have used it has generally been either in the form of the tincture of nux vomica in doses of 5 to 10 minims or in the form of Schieffelin's granules, containing $\frac{1}{100}$ of a grain of sulphate of strychnine in each. One, two, or more of these granules were given at bedtime, and the dose was repeated if the patient happened to wake within one or two hours afterwards.

I think it is very doubtful indeed whether strychnine would answer in other cases of sleeplessness than those arising from overwork or worry, and more especially from overwork. I have tried it however in a case of sleeplessness occurring in anemia, but as the patient at her next visit complained that the medicine made her sleep rather too heavily, I am not quite sure how mere suggestion may have played a part in effecting the result, nor have I been able as yet completely to eliminate this factor in other cases. The results which strychnine has yielded in my hands being so good, and the condition for which I have used it being so distressing, I have thought it worth while to mention its use as a means of affording sleep in order that others may try it as well as myself, and may, I hope, obtain from it equally good results; although it only too frequently happens that a drug seems to prove very much more effective in the hands of the man who first employs it than of those who try it afterwards.—*T. Lauder Burton, M.D., F.R.S., in The Practitioner.*

SOME USES OF CANNABIS INDICA.—It is in certain conditions in which apparently the use of cannabis is not so well known or widely employed in this country that the writer invites attention.

One of these conditions is anorexia—loss of appetite consequent upon exhausting diseases, such as prolonged fevers, diarrhœa, dysentery, phthisis, etc. This, a very common circumstance in India, causes at times much anxiety to the physician. The stomach suffers from the same debility as the other organs of the body, aud there is a repugnance to and intolerance of food in almost every form, which does not always yield to acids, bitters, and nux vomica as usually prescribed. In such cases cannabis indica in small doses (♏ v.-x. of the tincture or gr. $\frac{1}{4}$-$\frac{1}{2}$) of the extract have been found very useful. The former preparation may be ordered in mixture (emulsion), with a small quantity of mucilage and simple syrup, and flavored with rose-water; the latter as a lozenge or *bonbon*,—the extract being rubbed up with white sugar, gum acacia, etc., to suitable consistency. Such a mixture or lozenge given three times a day, half an hour before meals, will frequently, in two or three days, bring back appetite for food and promote its digestion. I need hardly say that both these preparations are very palatable and readily taken by even fastidious patients.

It is well known that consumers of the drug in India, have, as a rule, voracious appetites,—a fact or indication which appears to have been lost sight of in practical therapeutics.

Another condition is dyspeptic diarrhœa and the diarrhœa which is associated more frequently in the tropics than here, with defective action of the liver and deficient secretion of bile, and which constitutes the earliest and most prominent symtom of that obstinate and specific disease the diarrhœa alba of the tropics (hill or tropical diarrhœa). Speaking more particularly of the latter affection, a characteristic feature is the tendency to action of the bowels soon after meals, and the consequent hurrying of the imperfectly digested food through the intestines, accompanied by remarkable and active vermicular movements of the latter, with much flatulency, borborygmi, etc.

In the earlier stages of this disease cannabis often proves of great service in controlling the diarrhœa. But even in more advanced cases of tropical diarrhœa cannabis will sometimes prove very useful. I have most usually prescribed it in the form of mixture, beginning with ♏ x. of the tincture and gradually increasing the dose to ♏ xv., xx., or even xxx., three times a day or oftener. A suitable combination is the following:

℞.—Tincturæ cannabis indicæ, . . . ♏x.-xx.
Bismuthi subnitratis, ... grs. x.
Mucilaginis acaciæ, ... ʒss.
Spirit. chloroformi co., ... ♏xx.
Aq. cinnamomi *vel* aq. menth. pip., ℥j.
Misce.

This mixture may be given before or after food, preferably the latter, and more particularly when the dose of the tincture is increased. By exhibition soon after food the liability to unpleasant symptoms (headache, giddiness, hallucinations, etc.) is greatly reduced, even in persons who are very susceptible to these effects of the drug.

In both true tropical diarrhœa and the more simple dyspeptic diarrhœa cannabis has this distinct advantage,—that it in no way interferes with the bile-forming functions of the liver, as opium undoubtedly does; and yet the latter drug, though so valuable in other forms of looseness of the bowels, is apt to be incautiously used, and to my knowledge has been thus used with disastrous results, the proper nature of the above affections and their primary dependence upon altered hepatic function not being rightly comprehended.

The third and last condition in which Indian hemp has been found useful by me is in cases of chronic cardiac disease and in chronic Bright's discase as an hypnotic.

In cases where there is distressful sleeplessness and general inquietude, rendering the sufferer's condition most miserable, where the heart is en feebled as well as over-taxed and chloral seems inadmissible, or, on account of the engorged state of the lungs or of the defective action of the kidneys, opium must be avoided,—in such cases the administration at bedtime ot ℥ xv.-xx. of the tincture of cannabis indica, combined with a small dose of chloral (grs. x.) and ʒss of bromide of potassium, will often act magically in giving not only sound and refreshing sleep for several hours, but also in greatly alleviating the general disquietude and distress of the patient; and that this effect is to be attributed to the combination of chloral and potassium bromide (as might by some be supposed), I have assured myself of by check experiments, both on the same and on different patients, on many occasions.—*Practitioner.*

Sir Morell Mackenzie.—Three generations ago a Rossshire Highlander put a shilling about some part of his person and set his face across the Scottish border. His name was Mackenzie; he amassed a good fortune, and his grandson grew into a mad doctor of much ability but of retiring habits. To this physician, then living at Leytonstone, England, there was born fifty years ago a son who was named Morell, after an uncle who perished very creditably in the loss of the Pegasus. Young Morell was left to run wild in Epping Forest to an advanced boyhood, but he progressed well later; took a high degree at the University of London; abjured the retiring habits of his father; screwed a brass plate on his door; and took to looking down people's throats for guineas. His success in private was great and immediate, and a few years after setting up he could give to physicians who had been established a life-time a score of patients and a beating. He became a specialist. He wrote books on "Diseases of the Throat and Nose," and on the "Hygiene of the Vocal Organs." He founded the Hospital for Diseases of the Throat, in Golden Square, obtained all the professional honors in general which throat and nose can give, and became the special champion of specialism in medicine as opposed to general routine; in which capacity he largely developed and amply displayed the bellicose and controversial predisposition he had inherited from the original Highlander. A few months ago he was called in to deal with the throat of the Crown Prince of Germany, which had baffled all the German doctors; and this he has treated with such success that it has been made the occasion for conferring upon him the distinction of a knighthood. Sir Morell is a man of wealth, of capacity and of strong individuality. He has long been the physician and friend of all singers and actors, and he has a son who is already making a name as a comedian. He can often see a joke, which is unusual for a Scotchman.—*Vanity Fair.*

The Green Diarrhœa of Children.—Another alleged triumph of the microbe is brought to light through the researches of M. Hayem and his assistant, Lesage, who affirm that this industrious creature is the cause of the green stools of children. These investigators assert that for the first twenty to twenty-five days after birth, diarrhœa occurring in children is apt to be bilious in nature, but such a form of diarrhœa becomes more and more rare up to the age of six months. After this time, if the discharges are examined in cases of green diarrhœa, an innumerable number of pathogenic bacilli will be found, to such an extent that to their presence is due the peculiar mucous character of these stools; while the coloration is due not to the bile-pigments, which are entirely absent, but to a peculiar pigment secreted by the bacilli themselves, and which may be reproduced in artificial cultivations of the microbes. It would, therefore, seem clear that because the passages in a case of diarrhœa are green it is not warrantable to speak of them as bilious, since in many cases bile-pigments will be entirely wanting in cases of green diarrhœa. Further than this, it would seem that this form of specific diarrhœa is contagious, and may be produced in different animals by the induction of the bacilli through various means. While it is claimed, however, that there is a certain amount of probability in the contagion of the disease, of course it does not imply that dyspeptic troubles are without influence on the development of this form of diarrhœa, since it is readily conceivable that indigestion, by preparing the soil, may favor the production of this bacillus. Hayem and Lesage have found the greatest success in the treatment of this form of diarrhœa by the administration of a two per cent. solution of lactic acid in teaspoonful doses. Of course, in this form, as in other forms of diarrhœa, the diet must be regulated. Care must be taken to employ disinfection of the stools to prevent the spread of the affection, and by proper care it is claimed by these means the mortality of this microbic form of diarrhœa may be reduced to a minimum.—*Therap. Gazette.*

Treatment of Syphilis.—In a late issue of the *Bulletin Gén. de Thérap.* is a useful paper on the treatment of syphilis, by Prof. Verneuil. As a representative of the more conservative of French surgeons, Verneuil speaks with authority on such topics. The conclusions at which he arrives

harmonize with the opinions most generally held. He maintains the superiority of mercury. As respects the diagnostic value of the two agents—iodides and mercury—he never decides the question of specific lesion or not, except from the results of a trial of mercury. In three examples of old syphiloma of the testicle—cited for illustration—the iodide of potassium in massive doses failed to disperse the tumor, but mercurial treatment effected a cure in a few weeks, thus demonstrating the nature of the neoplasm.

Professor Verneuil does not advocate the huge doses of iodide of potassium now in vogue—30 to 45 grains per day being his maximum—except in cases of rapidly destructive ulcerations of the nares, veil of the palate, and similar lesions, and even then in quantity not exceeding 75 or 96 grains *per diem*. He has never favored the conjoint administration of mercury and iodides. He prefers to give mercury by itself, and associated with remedies to improve the general state of the patient. He has occasionally made use of the combination of these remedies in slowly developing secondary or tertiary accidents when mercury does not act well, or has not been given at all. Under such circumstances he prescribes in the simplest way ¾ grain of protoiodide of mercury and 15.5 grains of potassium iodide.

Mercurial frictions, although in some cases acting energetically, do not commend themselves to his jndgment. When he has employed inunction, he has not dispensed with the internal administration of the protoiodide or some other mercurial, in small doses. Nor has he practised the method of subcutaneous injection of mercurials, which often cures, apparently, in twenty to thirty days. He holds that the most certain curative results are obtained by the slow saturation of the organism as effected by the stomachal administration rather than by sudden impression.

For the local treatment of syphilitic ulcerations, mucous patches, etc., the early manifestations of the constitutional state, he employs nitrate of silver, or chloral solutions, topically, in conjunction with the use of mercury internally. —*Am. Jour. Med. Sci.*

THE TREATMENT OF EXOPHTHALMIC GOITRE.—Dr. R. Vigourour (*Le Progrés Med.*) lays great stress upon the kind and method of application of electricity in the treatment of this affection. He employs faradization in the following manner: (1) A large electrode from 7 to 8 ctm, in diameter is is applied to the inferior part of the neck posteriorly, and is held in position by the means of a band. The other electrode is olive-shaped or button-shaped, less than 1 ctm. (⅜ in.) in diameter, and is connected with the negative pole of the battery. This electrode is applied behind the angle of the jaw, in front of the sterno-mastoid muscle, and is made to press upon the carotid artery. The application is made during a minute and a half, and is then transferred to the opposite side, where it is continued for the same length of time. (2) The small electrode is then passed lightly over both orbiclares palpebrarum in turn. (3) The olive elcetrode is now replaced by a plate 4 ctm. (1⅝ in.) in diameter, and is applied to the thyreoid tumor. (4) The small electrode is now rendered positive, and is applied to the precordial reigon, in the third intercostal space, to the left of the sternum, and and the current should be sufficently strong just to excite fibrillar contractions. The application is made for to or three minutes. The seances are repeated every second day. There is no advantage in repeating them daily. The ill success of the of this affection by some, the author thinks, is due to want of attention to the foregoing details. In most cases it was the only treatment he employed, and his results were exceedingly good. Hydrotherapeutics is unnecessary with this form of treatment.—*N. Y. Med. Jour.*

THE THERAPEUTIC VALUE OF BORACIC ACID. —Recently much has been written concerning the value of boracic acid in leucorrhœa and in gonorrhœa of the male and female.

The merits of this agent have been long recognized in ophthalmological practice, and it has been lauded greatly in the treatment of inflammations of the lining membrane of the bladder.

As an antiseptic. its claims are established. It is said to possess no value as a germicide.

A three per cent. solution is the one usually prescribed in all departments. In weaker solutions than this its antiseptic effect is said to be not so marked. Its use in the treatment of nasal catarrh is also worthy of mention. We have prescribed it in this condition in the strength of a teaspoonful of the powdered acid to a pint of warm water. Three or four tablespoonfuls of this are to be poured into each nostril two or three times a day. We often prescribe it in this condition also in the following combination:

℞ —Cocaine hydrochlor, ... gr. ij.
Acidi boraci, ... gr. xv.
Listerine, ... ℥j.
Aquæ destill, ... ℥j.

M. D. Sig —Use as a spray for the nose morning and night.—*Gaillard's Med. Jour.*

ON REVACCINATION.—Dr. G. Somma is an enthusiastic partisan of vaccination and recommends energetically the introduction compulsory revaccination in this country. Taking into account the whole foreign and Italian literature on the subject, he formulates his view in the following sentences.

1. The protective effect of vaccina against small-pox is indubitable. 2. This effect is limited

in time, and vanishes after ten or twelve years. 3. Revaccination, therefore, is indispensable, for those successfully vaccinted in childhood, as well for those who have passed through variola and variolaids. 4. Revaccination almost perfectly protects the body from an attack of small-pox. 5. Its necessity is founded on scientific and experimental facts. 6. The age of adolescence offers the best opportunity for effective vaccination. 7. It is to be performed with animal lymph exclusively. Vaccination and revaccination are the only means to put an end to continuously returning smell-pox epidemics.—*Am. Med. Dig.*

TYPHOID BACILLI AND BOILING WATER.—In order to test the destructive power of boiling water on typhoid bacilli, Dr. Vilchur, of St. Petersburg, made a number of pure cultures in broth, keeping them in a thermostat for two days at a temperature of about 92° F., and then mixed them with known proportions of boiling water, immediately afterward sowing the mixtures in jelly. The results showed that, when the volume of boiling water equalled that of the culture, the bacilli were partially but not wholly destroyed. When double the volume of boiling water was used, the bacilli were all killed. From experiments with typhoid stools, he found that all the bacilli, however numerous, were invariably destroyed by the addition of a volume of boiling water equal to four times that of the stool. In this way he suggests it will be easy to disinfect with certainty all the dejections of typhoid patients.—*Lancet*, January 14, 1888.

THE TREATMENT OF URÆMIA.— Lancereaux prescribes, to favor the secretion of urine :

Pulv. scillæ,
Pulv. scammon.,
Pulv. digital., ... āā gr. $\frac{3}{4}$.

In one pill.

From four to six may be taken daily, for from five to six days.

Roland prefers the following combination, which acts on all the emunctories :

Ext. jaborandi (alcohol.),
Ext. scillæ,
Resin. jalap.,
Resin. scammon., . . āā grs. $\frac{3}{4}$.

In one pill.

Four or five pills may be taken daily, for several days. If preferred, nitrate of pilocarpine may be substituted for jaborandi, in doses of from 1-35th to 1-15 of a grain.—*Rev. de Clin. et de Thérap.*

WHY SOME DOCTORS FAIL—

They are too lazy.
They are easily discouraged.
They do not try to improve.
They fail to know what the world is doing.
They have too much outside business.
They talk politics too much.
They fail to have new ideas.
They are not polite enough.
They think most things take too much trouble.
They read no professional papers or books.
They are trying to go into something else.
They follow the same method with each patient.
They attend no professional meetings.
They complain too much.
They fail to practice what the professional papers tell them.
They do not determine to be the best doctors in the place,
They do not seek information by studying the methods of the best teachers.—*Lansing Republican.*

THE ETIOLOGY AND PERIOD OF INCUBATION OF CROUPOUS PNEUMONIA.—R. Caspar (*Berlin klin. Woch.*) has carefully studied two hundred and four cases of croupous pneumonia which have come under his care within the past five years, with the view of determining the etiological factors and the perlod of incubation of this disease. He believes it is infectious, and some cases which he observed favor this belief very much.

One of the most striking instances was where a son from another village came to visit his father, who was lying ill with pneumonia. The son remained only part of the day and then returned to his village, which was entirely free from cases of pneumonia. Four days afterward he was taken ill with an attack of that affection. A number of other cases that the author observed made him draw the inference that the period of incubation was four days. He could not observe any meteorological conditions to explain the outbreak of the epidemics, nor during an epidemic did he notice that different conditions of the barometer had any influence upon the spread of the disease. His cases occurred also mostly during the first four months in the year. He does not consider, as some observers do, that pneumonia is secondary to bronchitis. He concludes his article as follows : 1. Fibrinous pneumonia is an infectious disease. 2. It is contagious. 3. Its period of incubation is four days. 4. Low temperature, slight absolute humidity, and strong winds seem to favor its spread.—*N. Y. Med. Jour.*

A SIMPLE METHOD OF DISLODGING IMPACTED GALL-STONES.—Lawson Tait describes the following simple procedure, which he has used in one case sucessfully. It consists in passing a fine needle through the wall of the intestine from below (that is from the empty part of the intestine) into the gall-stone. The stone is thus easily and immediately split up into fragments and passes readily along the intestine, and the grave com-

plication of opening the intestine is rendered unnecessary. The operation is, in fact, little more than an exploratory incision.—*Lancet*,

RESECTION OF LEFT LOBE OF LIVER.—Dr. Langenbuch (*Berl. Klin. Woch.*, 1888, No, 3) records a case in which he successfully resected the greater part of its left lobe, which had been extensively deformed by tight lacing, and had caused great inconvenience and trouble to the patient. The woman, about thirty years of age, was, in November, 1886, under treatment for erysipelas at the Lazarus Hospital, and when about to be discharged convalescent, she begged that she might be relieved of a painful abdominal tumor that rendered life unbearable, and caused pain both on standing and on lying down. On examination a tumor of the size of the fist was detected in the epigastrium—dense, elastic, not fluctuating, moving with respiration, and its dulness continuous with that of the liver. The diagnosis lay between hydatid tumor and deformity from tight-lacing (*Schnür-leber*), although the latter condition usually involves the right lobe. An exploratory incision proved that the case was of this kind, but involving the left lobe, and probably for that reason producing the painful symptoms. Dr. Langenbuch decided that it would be advisable to remove the source of so much distress, especially as the portion of the lobe forming the tumor was practically cut off from the rest of the organ by a broad but ligamentous pedicle, and therefore it was functionally of no service. Accordingly, the pedicle was transfixed by ligatures, and the lobe excised. The same evening symptoms of severe internal hemorrhage appeared, and, on re-opening the wound, the abdominal cavity was found to be filled with blood; this was sponged out, the bleeding vessels secured, and no further trouble arose from that source. The wound healed, but recovery was somewhat retarded by the development of ascites, which necessitated tapping on two occasions. It could not be determined how far the ascites were due to the cardiac debility and hydræmia resulting from the previous prolonged attack of erysipelas and the profuse hemorrhage, or how far it might have depended on the diminution of the hepatic circuit. There was œdema elsewhere, so the former hypothesis had some support. At any rate it was not permanent, and the patient left in February quite well. The portion of liver removed weighed three hundred and seventy grammes (about twelve ounces), and Dr. Langenbuch says that the case shows the feasibility of removing the lobe of a tight-laced liver when this gives rise to serious discomfort.—*Lancet.*

MERCURY WITH CHALK IN THE TREATMENT OF TAPE-WORM.—The writer has sometimes found mercury with chalk a most effective tæniacide, and cites the following case in illustration: "G. W., aged thirty-one, a blacksmith by trade, had complained of an indescribable feeling in his stomach, bowels, and all through him, as he termed it, for three or four years. There was a wild look in his eyes, and a pecular appearance of the skin which attracted people's attention, so they would ask what ailed him. His appetite was fastidious; at times he would eat voraciously, then again eat nothing. He became greatly emaciated, and vomiting grew so incessant that he was unable to retain any food. The vomiting had continued about six weeks when I first saw him. He had been treated by several physicians, but said he was getting worse instead of better. I gave him three powders of hydrargyrum cum creta, with directions to take one, morning, night, and morning, with a dose of castor oil after the last powder. He came back in three days surprised, smiling, and happy, saying he had passed a tape-worm thirty feet long. He was no longer troubled with vomiting, ate heartily, improved rapidly, and he has felt like a new man ever since the worm was expelled."—Dr. Squires, in *N. Y. Med. Rec.*

FLUID EXTRACT OF ERGOT FOR INCONTINENCE OF URINE IN CHILDREN.—I have been using for many years the fluid extract of ergot in the treatment of incontinence of urine in infants and children; and I almost regard it as a specific for the disease. I prefer to give it simply, and to treat separately any condition of the patients that may require therapeutical aid to correct those states of physical debility which either predispose to incontinence of urine or aggravate its presence. I give to an infant from one to three yeaas old, 5 to 10 drops; and to a patient from three to ten years, 10 to 20 drops every three hours. Few children object to its taste, and it should be continued nninterruptedly for two or three weeks, and resumed if the disease should return, in which case the doses ought to be gradually increased.—Dr. Johnson, in *Med. and Surg. Reporter.*

IT is stated, in the *N. Y. Med. Rec.*, that Nussbaum claims to quickly cure erysipelas by the use of ichthyol. The erysipelatous surface is first disinfected, and then painted with ointment made of equal proportions of ichthyol and vaseline. The part thus painted is covered with ten per cent. salicylic lint, and fixed with a gauze bandage. Next day the border is found to have remained stationary, while the inflamed surface is shrunken into yellowish-brown creases, and is painless. After three days the dressing is discontinued. Five consecutive cases treated on .his plan gave equally successful results. Icythyol colodion is recommended for applications to the face, and ichthyol soap for the scalp.

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TRINITY MEDICAL SCHOOL AMENDMENT ACT.

Most of our readers may have noticed than an act, affecting Trinity Medical School, introduced during the late session of the House of Assembly, became law. Under it this institution so long and favorably known, becomes *Trinity Medical College*, a standing which it has well earned. The other amendments were merely to enable the "College" to hold a larger amount of property, and refer to investments.

As the Bill was going through the House a short section was added, which would have enabled the "College" to admit to its own examinations candidates who might not have been educated within its walls.

The examinations have been held ever since the first incorporation of the school, and have been always very stringent, with the view of ensuring that a good position should be taken by successful candidates at other examining boards, *e. g.*, those of the several Universities with which this Medical College is affiliated, as well as before the Examiners of the Medical Council, which body alone has very properly the power to grant a "license to practise." Now and then application has been made to the school by registered men in practice, to be allowed to go up for this Medical School Examination—the reason given in every case for making such a request being, that the certificate of Trinity Medical Faculty, although very properly carrying no "license" with it, stands high in general estimation.

These applications have been all refused—and it was felt to be rather an anomalous thing to refuse a request so reasonable, as permission to undergo the same examinations taken by Trinity Medical students, in order if possible, to get a coveted certificate. To meet such cases, the fourth short section above referred to was introduced into the act, and passed through the Private Bills Committee. This section simply added the words "or others" to one of the sections of the original Act of Incorporation. This change, which seems to us rather insignificant, was however held by some of the members of the Faculty of the Toronto School to be equivalent to granting to Trinity "full University powers," a position which is, we think, absurd. If the parties who made the statement that such enactment would give Trinity "full University powers" believed it, we are pretty certain that no one else who knows anything about medical education in Ontario would do so. We understand that some of the highest functionaries connected with Toronto University were so much interested in the matter as to do some lobbying against it amongst the members of both sides of the House. The authorities of Trinity Medical School, were somewhat surprised at the amount of interest so trifling a matter excited, and were not over-pleased at the misrepresentation which they believe was made of their case.

The proposed change is really of little importance to Trinity and certainly encroached in no degree upon the privileges of any other institution in the Province, and could not have proved, had it become law, "perilous" to the medical profession in Ontario.

The letters F. T. M. S. are not, we apprehend, the most important that may be appended to a man's name, and yet they are of sufficient importance to be coveted by not a few in this province and out of it, but so far as subversion of our medical liberties is concerned, they are powerless.

It is well known that Trinity Medical College is a steadfast upholder of the Medical Council as the sole licensing body. Alter this, and in Ontario the medical profession would just be where it was many years ago, when every graduating and teaching body was also a licensing body, and when the

question amongst students was chiefly, through which of these numerous portals, they could most easily enter the profession.

But for this one central board, we in Ontario would not to-day be one whit above our friends in the United States as regards the status of the profession, and the standard of medical education.

Nor does Trinity Medical College desire university powers—she is quite content with those she possesses, and has no desire to encroach on the privileges of any other teaching, or degree conferring body in the province. At the same time it does appear singular that her rivals should be so afraid of any one being able to obtain the "*imprimatur*" of this particular Medical Faculty. It speaks well for the standing of that "*imprimatur*," and Trinity medical professors and students will hereafter think more highly than ever of the honors their College has to bestow.

As Trinity regarded the very slight changes proposed in the new section of the Amended Act as of little value, the member who had charge of the bill was asked by the school to withdraw the section altogether.

It is to be hoped that the future of Trinity Medical College, under its new name, may be all that its friends could wish, and may be fully worthy of its past long and distinguished record.

MERCURIAL FUMIGATIONS IN LARYNGEAL DIPHTHERIA OR DIPHTHERITIC CROUP.

The above is the caption of a very interesting and instructive article in the N. Y. *Med. Jour.*, by Dr. Cobbin, of Brooklyn. He draws attention to the nearly hopeless condition of the patient when the membrane has extended from the fauces to the larynx, and to the small benefit, other than a more easy mode of death, which in nearly every case follows tracheotomy undertaken for this condition. Of intubation he speaks more hopefully, and mentions the fact recently published that a favorable result has been noted in about thirty per cent. of a certain series of cases.

He first attempted fumigation in 1874, with the result of seeing the child recover after the hoarse and stridulous cough had set in, and there had been complete loss of voice. The writer goes on to give a statement of a considerable number of severe cases in which the happiest results followed this plan of treatment. No salivation or mercurial toxæmia are reported by him, or by several other medical men with whom he had communicated on the subject. He does not propose that this treatment shall take the place of tracheotomy or intubation, but says that it should be adopted as soon as the physician is satisfied the larynx is invaded. As to the details of the treatment he gives the following:—

I insist, when possible, that the patient be in a room where the sunlight has free entrance, that the temperature of the room shall not be lower than seventy-five degrees, and that the air shall be kept moist by the evaporation of water. During the time of the fumigations the patient receives no medicine whatever. At the beginning and end of a fumigation, milk-punch or wine is given. This I insist upon. A child's crib with barrel-hoops across the top, secured, and over these spread a flannel blanket, makes a suitable canopy or tent. In the case of a child eight or ten years of age I volatilize from forty grains to a drachm of the mild chloride. I keep the child under the canopy twenty minutes, when the blanket is removed. This is repeated every two or three hours during the first day. After this period I expect to find the cough loosened, giving directions to prolong the intervals of the fumigations, and at once to resort to them if the cough tightens. I have had cases where they had to be continued for over a week, but not more than two or three each day. The aphonia may not disappear for a week or two, but this need excite no alarm. Let the patient receive the most thorough alimentation. The fumes are not offensive and as a rule the child makes no resistance after the first fumigation. Generally the patient falls into a refreshing sleep, and sometimes he will point to the lamp, indicating that a fumigation is desired. The lamp had better be powerful enough to volatilize a drachm of calomel in one minute. The lamp I have constructed does this. By this means the air of the tent is not raised to too high a temperature for respiration.

The whole returns so far show a mortality of 16 per cent., and of these some died from albuminuria two weeks after apparent recovery, some from discontinuance of the treatment by the family and from other causes, none of which were

apparently due to laryngeal trouble. This is an exceedingly good showing, and the plan should certainly be adopted if even a much less favorable result should be the outcome of a more extended experience of it.

TRAINED NURSES.

It is a matter of sincere congratulation that nursing is rapidly rising to the status of a profession. We are sure we express the opinions of the vast majority of medical practitioners, when we say that this is as it should be.

As we advance in the science and art of healing, our faith in medicines as *specifics* passes away, and more and more do we come to regard good nursing as a *sine qua non*, in the successful treatment of disease. No one who has not had the benefit of the assistance of trained nurses in his practice, can appreciate fully the vast importance to the patient and comfort to the practitioner of having always present in serious cases, one who by education, intelligence, and scientific training, is able to act as his efficient collaborateur in his effort to combat disease. The great success which attends the treatment of disease at sanitariums, rest cures, and retreats of various kinds, depends certainly not upon the drugs that are taken while there, but upon intelligent methods as to sleep, rest, food, exercise, etc., and, as has been well remarked, those who have made such resorts a notable success, "have laid the foundation of that success by employing efficient nurses."

The training of nurses is of comparatively recent date in America. We in Canada, following the example of the New York hospitals, have now several training schools, and the results of the education of nurses at these schools is already felt, especially in Ontario.

The demand for skill and professional training in this walk of life is rapidly increasing. In Toronto it is often with difficulty that the services of a trained nurse can be obtained, though the school at the Toronto General Hospital is always full, and is certainly turning out large numbers of young women fully qualified to take the office of *aide* to the medical attendant in all classes of cases. Large numbers of young ladies are now applying for admission to the schools—ladies by birth and education, who are ready to take their places as units in this sphere of self-supporting, active, useful life. To be a good nurse requires more than intelligence and education. There must be refinement, quick sympathy, a capacity for governing, and a promptness in meeting sudden emergencies which must always be arising in their daily lives.

The social position of nurses is rapidly improving, as indeed it should do. The educated and trained nurse should be quite on a par, socially, with the doctor, and we are happy to state that in Canada the good sense of the people is placing these women in their true place. There is no reason why the nurse should not be the friend of the patient, and when that day shall have arrived when lady patients need not feel they are treating with inferiors in their nurses, we shall see the best results from a medical standpoint, of professional nursing. The days of Sairey Gamp and Betsey Prig are rapidly passing, and patients, friends and doctors are beginning to understand what a comfort and a blessing in a sick room is one who has the true spirit of nursing, backed by a sufficient training. The two years' course is general in this country and in England, but a movement is now on foot in the latter country to extend the novitiate over three years' time.

The British Nurses' Association has lately been called into existence under the patronage and control of some of the first men in England, among whom may be mentioned Mr. Savory, Sir Joseph Lister, Sir Dyce Duckworth and Dr. Quain, as showing the sense of the importance of the profession, felt by those eminent medical men. It is proposed to adopt a system of registration, so that the public may be able to distinguish thoroughly trained nurses from others who are not. This right of registration of members of the body is sought to be obtained by a charter giving the Association legal power to examine and register nurses; the examinations to be held either by the authorities of the different hospitals or by a central board of examiners. In regard to our own country we are perhaps not yet in a position to take so high ground, or, owing as their greater numbers and means the English are able to do; but we can and should encourage by every means in our power the growth of professional spirit and *esprit de corps* among our trained nurses. There

can be no doubt but that a wide field of usefulness is opening up for numbers of our young women, and already our trained nurses are justly held in high estimation by the profession and laity, not only in our cities, but in the towns and country, whither not a few have gone to practise their profession, the true spirit of which was so well expressed by Princess Christian at a late meeting for the furtherance of the aims and objects of the British Nurses' Association, in the following words :—

" Perfect service rendered, duties done,
In charity, soft speech, and stainless days,
These riches shall not fade away in life,
Nor any death dispraise."

BINIODIDE OF MERCURY IN SCARLET FEVER.—Dr. Illingworth, in the course of a discussion on scarlet fever (*Ed. Med. Jour.*), spoke strongly as to the great value of this drug in the treatment of scarlet fever. He has had the happiest results from its use, as it "modifies the course of the fever, reduces the temperature, checks or altogether prevents the inflammation of the skin, and prevents the dreaded sequelæ." He ascribes these benefits to the germicidal properties of the drug. By giving the bichloride solution of the B. P., with pot. iod. in excess, he holds it in solution and prevents mercurialism. For a child of seven years he orders half drachm doses of the bichloride solution, with one and a half or two grain doses of pot. iod., every two, three or four hours. As soon as the rash disappears and the temperature becomes normal, iron is given. He applies the biniodide locally to the throat when necessary. The exact formula for this preparation is as follows :—Add 10 minims of a 1 in 4 solution of potassic iodide to an ounce and a half of a 1 in 500 solution of the bichloride, and sweeten with glycerine. This he applies to the throat three times a day by means of a brush. In malignant cases he gives iron. In kidney troubles, with dropsy, he depends upon iron, with an occasional dose of jalap powder. When convulsions from uræmia supervene, he practises venesection, and believes he has saved life thereby. He does not keep up the quarantine more than ten or twelve days if the throat be free from mischief, regardless of desquamation. He thinks one or two carbolic soap baths about the tenth day are sufficient to prevent infection. When the stomach will not bear the solution, he gives $\frac{1}{16}$ of a grain in powder, three times a day, with pulv. sacch. He believes in the prophylactic action of the drug.

CALOMEL IN CROUP.—Dr. Davis Phillips (*Med. Reg.*) believes that calomel is indicated in the treatment of croup, both from our pathological knowledge of the disease and clinical experience. He has had more favorable results from it in his practice, than from any other method of treatment. He speaks definitely as to its action as follows :—*Action of Calomel.*—First. Removes thickened and infiltrated condition of the laryngeal mucous membrane, with the accompanying sub-mucous œdema Second. Renders the exudated lymph less fibrinous and more readily absorbed, and diminishes its cohesive attachment to the mucous membrane. Third. Seems, *by its peculiar effects on the intestinal tract, as a whole*, to produce a peculiar impression on the economy *which tends to stop the inflammation*, reminding one, in this respect, of the action of large doses of iron when given in erysipelas.

As to the details of the plan of treatment which he insists should be *carefully* carried out, he gives the following :—An emetic to commence with—preferably the yellow sulphate of mercury—which may be repeated at intervals, if thought necessary ; the throat enveloped in a hot poultice, which should be renewed every half-hour or hour ; the room kept constantly full of the vapors of water and turpentine—made by floating a little turpentine on water, in a vessel, and keeping up constant heat ; from a half to a teaspoonful or more of whiskey in a tablespoonful of milk every hour, and the administration of calomel in one-grain doses every hour until the characteristic calomel stools are produced. The calomel should then be stopped and the chloride of iron and potash mixture given every hour. If the heart becomes weak, strophanthus or digitalis should be given. Relapse should be met by a renewal of the calomel, and if intubation or tracheotomy be necessary, the same treatment should be continued, as neither operation in any way affects the course of the disease.

BORACIC ACID IN CHRONIC SUPPURATION OF THE MIDDLE EAR.—At his clinic recently, Prof. Seely (*Cin. Lancet Clinic*) gave the following conclusions regarding the use of boracic acid in the above

disease: 1. Only a pure and absolutely impalpable powder should be employed. 2. The large majority of these cases get well by simple cleanliness, and keeping the ear in as dry a condition as possible. 3. Boracic acid used by packing the meatus more nearly accomplishes this than when used by inflation. 4. If the powder remains dry, the ear may be inflated occasionally to determine the condition of the middle ear, whether dry or moist. 5. If employed in this manner the boric powder is not only safe, but efficient in many obstinate cases. 6. We can not tell definitely beforehand in what class of cases it will yield good results, unless it would be in those cases where the tympanitic cavity is filled with exuberant granulations. It can be said with all sincerity and safety that little fear need be entertained from the packing of the meatus with boracic acid in chronic purulent inflammation, if the physician inflates the ears daily. The air rushing through the perforation leaves a vent for the pus, if any has accumulated, or it can escape through the Eustachian tube into the mouth.

CROUP AND DIPHTHERIA.—Dr. Ouchlerlony, of St. Louis, in an article in the *Am. Pract. and News*, on the non-identity of pseudo-membranous croup and diphtheria, concludes by giving the following differential diagnosis:

DIPHTHERIA.	CROUP.
Occurs in epidemics.	Not so.
Infectious.	Not so.
Has a period of incubation.	Not so.
Most common in children but occurs at all ages.	More common in children. Rare in adults.
Principal seat, tonsils and parts above the glottis. When invading the larynx it is secondarily.	Primary and principal seat, the larynx and treachea. Implicates the upper parts but to a slight degree.
Grandular enlargements present.	Not so.
Asthenia early and marked.	Not so.
Febrile disturbance more or less prominent.	Generally high.
Symptoms largely due to toxaemia.	Symptoms chiefly due to mechanical obstruction.
Nephritis a common accompaniment.	Not so.
Acute fatty degeneration of the heart frequent.	Not so.
Muscles of the arms, legs. chest, and eyeball in a state of fatty or waxy degeneration, often with paralysis.	Not so.
Duration often more protracted.	Runs it course in a few days.

TREATMENT OF THE COUGH OF PHTHISIS.—J. Milner Fothergill, writing of the early treatment of phthisis, says (*Lond. Hosp. Gaz.*) of the means to be used to allay the troublesome cough: Plain steam is good in irritative cough with dry air-tubes. Iodine, carbolic acid, eucalyptus, Friars' balsam, or ordinary terebene are often excellent medications, and allay cough. The other is a resort to a cough linctus. On this matter opinions may differ. Some use paregoric to allay ceaseless cough, and do a great deal of harm very often therewith, though paregoric is the least objectionable of "cough medicines." The reckless resort to something "to allay the cough" has, in my experience, been too frequently followed by disaster to recommend itself to a thoughtful practitioner. Something to allay cough and preserve sleep at night certainly does more good than harm; but "cough stuff" in the day is my abhorrence. It may be no more than prejudice, perhaps.

THE USE OF SACCHARINE IN DIABETES.—The importance of this compound in giving sapience to food for diabetics has been widely noted, and a good deal of useful discussion has taken place in regard to its value. Dr C. W. Purdy in the *Jour. of the Am. Med. Assoc.*, writes that the following conclusions are justifiable:

1. That in this product we possess a flavoring agent for food and drink, the palatability of which is quite equal to that of the finer grades of sugar, and which may be used by diabetic patients with the greatest impunity. 2. That, through its antiseptic properties, it retards the abnormal fermentative changes in the stomach so common in diabetic patients—thus promoting digestion and relieving flatulence. 3. That, while as yet we are without sufficient practical data to judge of its effect in large doses to diabetic patients, yet both chemistry and physiology would indicate its use for the purpose of favorably influencing some of the more fatal complications of the disease.

TREATMENT OF ABORTION.—The following rules have been observed for three years by Fasala (*Annali di Obstet.*) with good results:—1. An expectant course is pursued when the cervix uteri is closed, and can be dilated with difficulty, and if no signs of the decomposition of the fœtus are

present. 2. Under conditions favorable for the introduction of instruments or the hand, the ovum and its appendages are promptly removed. 3. If decomposition has begun, the cervix is dilated by laminaria tents or metallic dilators, and the ovum is removed. 4. Intra-uterine injections for antisepsis are made with warm solution of bichloride of mercury, 1 to 2,000; in case of hemorrhage, hot solution of bichloride of mercury, 1 to 4,000, and tamponing the vagina, are used.

MEDICAL TREATMENT OF VAGINISMUS.—Dr. Girard gives (*Med. Age*) the following:—1. Bromide of potassium in 2-gramme doses daily. 2. Sulphate of quinine, because of a certain accession of intermittent fever. 3. Friction on the dorso-lumbar region with a liniment composed of 60 grammes of the ext. of hyoscyamus and 15 grammes of chloroform. The author adds that when the vaginismus is accompanied by a fissure in the vulva, he adds to the foregoing treatment the use of suppositories of krameria, made after the following formula:

℞.—Cocoa butter, ... 3 gr.
Extract of krameria, . . . 2 gr.

GLYCERIN IN CONSTIPATION.—Dr. J. Althaus (*Prov. Med. Jour.*) calls attention to a new indication for glycerin. He finds it useful even in habitual constipation. He states that a teaspoonful or even less injected into the rectum, causes a speedy evacuation without pain or irritation. It cures *cito, tute et jucunde.* He explains its action as follows:—"Glycerin, when brought into contact with the mucous membrane of the rectum, withdraws water from it, causing hyperæmia and irritation of the sentient nerves of the rectum, which lead by reflex action to powerful peristaltic contractions, ending in defecation."

DEATH FROM CHLOROFORM.—Dr. Chisholm (N.Y. *Med. Rec.*), in an interesting article, gives the result of his experience in the use of anæsthetics. He has administered or superintended the administration of chloroform in over ten thousand cases. He believes that inversion of the patient who is in danger from the administration of chloroform is the safest plan of treatment. He does not resort to artificial respiration. He also directs that the pillows be taken from beneath the head as soon as narcosis is complete, so that the head may be during the whole operation the most dependent part of the body.

STROPHANTHUS IN METRORRHAGIA.—Dr. Poulet (*Gaz. de Gynecol.*) speaks of the use of this drug in metrorrhagia occurring at the menopause and in stout women during the period of fecundity. He has used strophanthus in both classes of cases for about 3 years. He prescribes 5 centigrams of the powdered seed in a pill made with honey. 2 pills are the dose for the first day, 3 for the second, and 4 for the third, if the flow have not ceased.

SORE NIPPLES.—Dr. Scarff (Maryland *Med. Jour.*) writes as follows:—The following is a recipe that I have been using for a long time for sore nipples in nursing mothers. I cannot report a single case of failure when it has been used as directed. I would like my professional brethren to know of it, not that I consider it a specific, but that it has done me service in many cases when other means had failed. The nipple should be cleaned with a little warm water, to which has been added a small amount of borax, before applying.

℞.—Balsam Peru, ... ʒss.
Tr. arnica, ... ℥ss.
Sweet almond oil, . . } āā ʒss.
Lime water, . . . }

M. Sig.—Shake well and apply to nipples with camel's hair brush.

ACNE.—Prof. Shoemaker prescribed (*Med. Times*) for a case of seborrhœa sicca, accompanied by acne, conditions frequently seen in youth:—

℞.—Calcis sulphuratæ, ... gr. ⅛.
Ext. calami, ... gr. ij. M.
Make into a pill. Take three times a day.
Apply locally:
℞.—Extracti hamamelidis. fld. . fʒj.
Hydrargyri chloridi cor. . gr. viij.
Aquæ, ... fʒiv. M.

ARSENIC should not be prescribed for women during lactation, say Brouardel and Pouchet (*Jour. de Med.*) In proof of this position, they give a case in which the nursing infant died from arsenical poison, after an unsuccessful attempt had been made to kill the mother by arsenious acid.

Experiments on nursing-mothers, and on the lower animals, confirm this opinion.

NEW TEST FOR SUGAR.—Mr. Marson gives (*Med. Press. and Circ.*) the following:—One and a half grains of the pure salt is dissolved in about 120 minims of urine by the aid of warmth, then add five grains of caustic potash and boil. If sugar be present a dark green precipitate will form, the superjacent liquid being reddish-brown or black, according to the amount of sugar. If no sugar be present the precipitate is greenish-brown in color, and the liquid is colorless.

PHYSIOLOGY "AS SHE IS TAUGHT."—The following (*Ind. Med. Jour.*) is from the pen of a school boy taught in one of our public schools. "The human body is made up of the head, the thorax, and the abdomen. The head contains the brains, when there is any. The thorax contains the heart, lungs and diaphragm. The abdomen contains the bowels, of which there are five - A, E, I, O, U, and sometimes W, and Y."

BRIGHT'S DISEASE.—Dr. Semmola recommends (*N. Y. Med. Rec.*) the following in the treatment of any form of albuminuria dependent on nephritis. Fifteen grains of iodide of sodium, thirty of phosphate of sodium, ninety of chloride of sodium, dissolved in water, and given in the twenty-four hours, alone or with milk.

TO CURE HICCOUGH.—Dr. Dresch (*Bulletin Gén. de Thérap.*) says, instant relief from hiccough may be had by causing the sufferer to close the external auditory meatus with the tips of his fingers, making firm pressure, while at the same time he is given water to drink in small swallows.

At New Glasgow, N.S., Dr. George Murray, aged 63.

By Dr. Murray's death Picton County loses one of her most clever physicians and surgeons. He was strictly honorable in his intercourse with his professional brethren, kind to the poor, and courteous to all.

BRIEGER says he has demonstrated that the bacillus of typhoid secretes a ptomaine which he has named typhotoxine. The injection of this into animals produces lesions similar to those caused by typhoid in man.

AN EMBARRASSING SITUATION. — Mrs. Mixer—How sad it is that Mrs. Smith should have had so much illness in her short life. People say, you know they will talk, and for my part I am sure of it, that her death was caused by the last operation she underwent.

Dr. Bismuth—Well, I should not like to say that. But perhaps in this matter I may not be quite unprejudiced, as it was I who performed the operation.—*Translated from German Puck.*

THE COMING ELECTION FOR THE SENATE OF TORONTO UNIVERSITY.—Dr. James Richardson, of Toronto, J. M. Gibson, M.P.P., of Hamilton, and Prof. Alfred Baker, are candidates for election to the Senate of Toronto University. The ticket is a strong one and we have no doubt will receive the hearty support of the medical profession throughout the country.

A Sanitary Convention will be held at Manistee, Mich., June 6th and 7th, under the auspices of the State Board of Health. There is a programme of interesting subjects laid down, and it is expected that the Convention will be a success.

DR. AUMAITRE (*Gaz. Méd.*) says he has had excellent results from salicylate of sodium in whooping cough. He gives two or three grains twice or thrice daily.

JONATHAN HUTCHINSON makes the suggestion that the long-continued administration of arsenic in large doses may produce a form of cancer, closely allied to epithelioma, but presenting peculiar characteristics.

DR. FORDYCE BARKER, says that the most valuable remedy for hemorrhages, occurring near or at the climacteric, is a combination of equal parts of fluid extract of hamamelis and fluid extract of hydrastis.

IT is stated that 15,000 children are annually killed by the use of soothing syrups and other similar preparations.—*Ex.*

DR. J. A. Temple says that the addition of a few drops of oil of sassafras to powdered iodoform, completely destroys its odor.

Books and Pamphlets.

DISEASES OF THE HEART AND CIRCULATION IN INFANCY AND ADOLESCENCE. By John M. Keating, M.D., Obstetrician to the Philadelphia Hospital, etc., etc.; and William A. Edwards, M.D., Physician to St. Joseph's Hospital, etc., etc. Illustrated with photographs and wood engravings. Philadelphia: P. Blakiston, Son & Co. Toronto: Carveth & Co. pp. 207. $1.50. 1888.

This work takes up in an able and scientific manner diseases of the heart in children. This is a part of the field of medical science which has not been cultivated to the extent that the importance of the subject deserves. Most of us have been disappointed at the small amount of information which is to be gained from works on diseases of children, in this particular line. The matter has been collected chiefly from medical journals, clinical lectures, theses, and reports of societies. It is a fairly complete presentation of the whole subject, as applied to young persons, and will be of interest to every practitioner. It is a question whether the photographs, showing mitral disease, give the reader any clearer conception of the lesion than he could gain from the letter-press.

THE CONCISE IMPERIAL DICTIONARY OF THE ENGLISH LANGUAGE, LITERARY, SCIENTIFIC, ETYMOLOGICAL AND PRONOUNCING. By Charles Annandale, M.A., LL.D., Editor of the Imperial Dictionary, etc. Edinburgh: Blackie & Son. Toronto: J. E. Bryant & Co. $4.50. 1887.

We can heartily recommend the work as the best one volume English Dictionary we have seen. It fulfils all the requirements of a dictionary for ordinary use, and is up to the latest date as regards vocabulary, etymology and definition. The printing and binding are excellent, and altogether it is one of the most complete and perfect books in the market.

A MANUAL OF PHYSIOLOGY; a Text-Book for students of medicine. By Gerald F. Yeo, M.D., Dublin, F.R.C.S.; Professor of Phyisology in King's College, London. Third American from the second English edition with three hundred and twenty-one illustrations. Philadelphia: P. Blakiston, Son & Co.; Toronto: J A. Carveth & Co. $3.00.

This book has now become so well and favorably known to students of physiology that a new edition will be of special interest. The arrangement is much the same as the previous edition, but a number of new cuts have been added, which materially improve the work.

The chapter on the nervous system is a volume in itself, and most ably and concisely handled, whilst on the phenomena of nerve and muscle, it is particularly to be commended. We consider it a most reliable work, and one which every student of physiology can carefully read with very great advantage and profit. It is especially to be commended as a text-book.

A MANUAL OF MEDICAL JURISPRUDENCE; with special reference to Diseases and Injuries of the Nervous System. By Allan McLane Hamilton, M.D., Consulting Physician to the Insane Asylums of New York, etc. Illustrated. New York: E. S. Treat & Co. P.p. 390. $2.75. 1887.

This is not a work on medical jurisprudence, in the ordinary sense of the term. Its contents are as follows: Insanity, Insanity in its Medico-legal aspects, Hysteroid conditions and feigned diseases, Epilepsy, Suicide, Cranial Injuries, Spinal Injuries. Thus it will be seen that it does not cover the ground usually included in works on medical jurisprudence.

The book is well written and the points made are illustrated by numerous cases. It seems to be a book more for the lawyer than for the doctor but will be useful as an elementary book of reference for either.

THE PASSAGE OF AIR AND FÆCES FROM THE URETHRA. By Harrison Cripps, F.R.C.S., Assistant Surgeon to St. Bartholomew's Hospital, etc., etc. London: J. & A. Churchill. Toronto: Williamson & Co. 1888.

An interesting account of this rare lesion, containing a short history of sixty-three recorded cases. The pathology, symptoms, prognosis and diagnosis are concisely and clearly given. As to operative treatment the author suggests three methods as theoretically possible, viz.: Colotomy, supra-pubic cystotomy and abdominal section.

THE TREATMENT OF HEMORRHOIDS BY INJECTIONS OF CARBOLIC ACID AND OTHER SUBSTANCES. By Silas T. Yount, M.D., Physician to St. Elizabeth's Hospital, etc.; 2nd edition. Lafayette, Indiana: The Echo Musical Co. $1.00.

In this little work of one hundred and two pages, a modern treatment for hemorrhoids is very ably handled; it is a practical work and will be well received by many practitioners.