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THE

# Canadian Practitioner

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## Original Communications.

### BIOLOGY IN MEDICAL EDUCATION.

BY PROF. R. RAMSAY WRIGHT, UNIVERSITY COLLEGE.

A question of the greatest interest to the profession is at present engrossing the attention of the Senate of the University of Toronto;—whether it is possible to bring about a more intimate relationship between the University and her medical undergraduates than is at present effected by the system of examinations. One of the proposals made, which would certainly result in bringing together more closely the arts and medical students, is that the preliminary scientific training of undergraduates in medicine shall be entrusted to the University Professoriate. It is this proposal which induces me to offer a statement of my views on the character and extent of previous training which a student ought to have before entering on the study of the medical sciences. I begin with the subject of Biology, which is under my own supervision.

It is the more necessary that I should do so, because the opinion has been freely expressed by at least one gentleman engaged in Medical Education, not only that the knowledge required to pass the University Examination in Biology is entirely useless to the medical student, but that the falling off in the numbers of medical graduates is to be wholly attributed to the imposition of this Examination. I hope to show (1) that the latter statement is not correct, and

(2) that, even if it were, the University would not be justified in dispensing with the Examination in question.

I do not propose to support the first assertion further than by stating that some gentlemen, who have looked very closely into the matter, agree with me in attributing the diminished number of graduates in medicine (1) to the imposition of a separate Matriculation Examination; (2) to the elevation in standard of the New Curriculum; (3) to discrepancies between it and that of the Council; and (4) to the exacting of Annual Examinations. Since these changes were carried out in 1878 the regulations have been from time to time modified with regard to the 1st, 3rd, and 4th particulars, with the result of a corresponding increase in the number of candidates presenting themselves for examination at the University. It is improbable that the University will desire to add to the number by lowering the standard of Examination.

The remainder of the space kindly placed at my disposal I propose to occupy by defending my second position, viz., that an examination in Biology, similar to that at present held by the University, must be continued, because it aims at ascertaining whether the student is possessed of a kind of knowledge and of a kind of training which are invaluable to him at that period of his studies.

It is surprising that so much ignorance and misconception prevail as to the place which Biology now occupies in the higher liberal education of to-day as to its objects, and as to its

scope. The word itself is as old as the century, but the kind of teaching which Biologists now aim at—the inculcation of general principles on a foundation of thoroughly practical knowledge—has raised the Biological studies to a much higher position in liberal education than the Botanical and Zoological teaching of the past generation ever had accorded to them.

Biology investigates the form, structure and development of organisms; the modes in which the various parts perform their functions, and the relations between the organisms themselves, and between them and their conditions of existence.

Medicine is based on two sciences—Pathology, which discusses the nature and causes of departure from the normal in structure and function, and Therapeutics, which investigates how, by varying the conditions of existence, an organism may be restored from an abnormal to a normal state. As the abnormal can only be understood in terms of the normal, it is obvious that the medical sciences fall within the domain of Biology, and that the best introduction to the study of the former is a clear grasp of the elementary principles of the latter.

How, then, can such a clear grasp be best obtained? In the first place the student must be familiar with the chief sub-divisions of the vegetable and animal kingdoms, and have some knowledge of the reasons for arranging the different forms of plants and animals under these. But he ought not to be required to burden his memory with details of the classification of animals and plants, or with explanations of the often unwieldy nomenclature of the specialist. It is in such directions that mistakes have been made in the past, where Botany, *e.g.*, seems to have retained a place in Medical Education more as a survival of the knowledge of the Herbalist, than as an aid to understanding the general phenomena of life. What is wanted is an orderly arrangement and extension of what may be termed ordinary Natural History knowledge, and which, in fact, the student should bring with him in suitable form from his High School.

In the second place the student must proceed to a careful study of the structure of some well-selected types of the Animal and Vegetable

Kingdoms. Biology has arrived at its principles by means of observation and comparison, and the student, in accordance with a well-established pedagogical maxim, can only obtain an insight into these principles by following the same road. But there are other reasons besides the desirability of cultivating the faculties of observation and induction, which render such a course necessary. Firstly, a thorough elementary knowledge of the minute structure of cells and tissues, and of the varied technique required in their study, can only be acquired comparatively. Secondly, the student must familiarize himself with the general structural features of those animals, on which his physiological knowledge will afterwards be based; and thirdly, he ought to be familiar with the structure and life-history of those pathogenic organisms, animal and vegetable, which are responsible for such a large class of diseases. Lastly, it is a significant circumstance that all universities of the first class impose a similar course and a similar examination on candidates for their degrees in Medicine.

In the third place, before the student proceeds to study Physiology he must already have mastered the rudiments of Chemistry and Physics, for Physiology is the attempt to follow the chemical and physical phenomena occurring within organisms, and consequently the methods of these sciences and their laws must be learnt, not from books alone, but by actual laboratory practice. As with Botany, so with Chemistry; its relations to the Art rather than to the Science of Medicine have been kept in the foreground, while Physics, which is of equal importance, is, in most cases, ignored in medical education. I hope to return in a future article to this important subject of the necessity for preliminary work in Chemistry and Physics before the student approaches the study of Physiology.

It may be asked how far the university requirements in Biology accord with the scheme of preliminary training laid down above. It is quite possible that these requirements may be modified in the future, but the most important of them, which insists on the thorough study of certain typical organisms in the laboratory, will always be retained. It is a matter of quite

subordinate importance whether the text book at present employed (that of Huxley and Martin) be continued; some of the chapters might advantageously treat of different forms, while others again, such as those on bacteria, moulds, the frog, etc., are quite necessary for reasons referred to above.

It is hardly to be wondered at that the significance of such a course should have remained obscure to those whose education would dispose them to look at medicine rather as an art than as a science, and that it should have earned among them the "not contemptuous but playful" sobriquet of "frogology." Nevertheless, as the advance of medicine as an art must depend on its development as a science, it is difficult to regard such an attitude playfully and not contemptuously.

Should such a more intimate connection between the University of Toronto and medical education be effected as is proposed, I trust that the medical profession will see not only that the Medical College is fully equipped with pathological, bacteriological and pharmacological laboratories, which will permit students to gain such a practical acquaintance with these specially medical sciences as will enable them to assimilate with greater ease the vast body of knowledge which they must acquire, but also that there is ample provision made in the University for the preliminary scientific training in those subjects already forming parts of the Arts Curriculum, which alone can render them capable of profiting to the utmost by such opportunities. In this way, while the Medical Council is responsible for the practical efficiency of its licentiates, the University will turn out annually a body of graduates more interested in the progress of their Alma Mater, and more in sympathy with the development of scientific education in the Province.

The German Physicians' Union has issued a paper advising young men against entering the medical profession, as the prospects of doctors are becoming worse yearly.

‡ An American Journal of Biology has been started in Chicago. Edited by Dr. H. D. Valin.

## THE SUBIODIDE OF BISMUTH IN THE TREATMENT OF WOUNDS.

BY L. M. SWEETMAN, M.D.

(Read before the Toronto Medical Society, Mar. 10th.)

The subiodide of bismuth in the treatment of ulcerations was the subject of a very clear, original and instructive paper by Dr. A. S. Reynolds of Philadelphia, which appeared in the *Medical News* of October 9, 1886.

In 1876, while resident surgeon to the Presbyterian Hospital of Philadelphia, an experimental chemist sent to Dr. Reynolds a sample of the subiodide of bismuth. The effect of this sample upon some cases of ulcers then under his care was, he states, simply marvellous. He procured a further supply, and now, after a thorough trial extending over ten years, he claims that it is almost a specific in gonorrhoea, in various specific and septic inflammations, oral and nasal catarrh, ophthalmias, and in chancroids, rectal ulcers, and in various discrasic and cachectic ulcers.

Impressed with the enthusiasm with which Dr. Reynolds recommended this compound, and the results which he reported as following its use, I determined to procure a sample to be used in a case of indolent ulcer situated over the outer malleolus. Two days after first applying the subiodide, the ulcer assumed a healthy appearance, and within ten days it was completely healed. A few days later a somewhat similar case was brought to me. This time the ulcer was situated over the belly of the tibialis anticus, and measuring 3 inches long and  $1\frac{1}{2}$  in width. After bathing the part thoroughly with a saturated solution of boracic acid, I sprinkled on the powder, strapped and bandaged carefully, and left it for two days, after which I reapplied the dressing; and on calling three days later was surprised, on removing the dressings, to find the ulcer almost healed, a small circular patch about the size of a ten cent piece alone remaining open. This cicatrized a few days later. The patient, a woman of about 60 years, was allowed to go around as usual.

Living in a portion of the city in which accidents are of very common occurrence, I have often felt the need of a satisfactory dry dressing, but think I have at length found it in the

subiodide of bismuth. Allow me to relate a case or two.

A man, upwards of 45 years of age, came to me with the statement that he had lost the end of the index finger of the right hand. It had become engaged in a newspaper folder, and was crushed through just before the last phalangeal articulation. It was a compound fracture of the last phalanx, the integument and a little connective tissue alone remaining. The hand was placed upon a broad padded splint, the wound flushed with boracic solution, the parts placed in position, no sutures being used, as the edges of the wound were badly bruised. The subiodide was applied under gutta percha tissue. Every two or three days the wound was washed with boracic solution, and fresh iodide applied. The bone united, and the wound healed without the formation of a drop of pus.

A few weeks ago I was sent for to see a man who had run his right hand through a pane of glass, dividing three of the extensor tendons. Assisted by Dr. W. H. Aikins, I proceeded to suture the tendons. The proximal ends had, by attempts at using the arm, become much retracted, and now lay under the upper margin of the annular ligament of the wrist. To save this we opened up the sheath above the ligament, and threading the tendons separately, drew them down into their proper grooves, united the tendons, and stitched up the wound. The subiodide and a compress of absorbent cotton saturated with boracic solution applied. The whole healed without the formation of pus, although a portion left open for drainage healed by granulation.

I have also used the subiodide in several small plastic operations where considerable surface was left denuded of epithelium, and in these cases also granulation was completed without suppuration.

Two weeks ago a young man was brought to my office, a solid piece of steel about the size and shape of a stove-pipe having dropped upon his foot, crushing badly the three first toes. After removing the nails and considerable integument and connective tissue which only remained connected by a few shreds, I dressed the wound with the subiodide of bismuth. In five days, on washing off the powder, two of the toes were

found to be entirely healed; and now the large toe, from which fully half an inch had been removed by the squeezing, is almost skinned over. In this case also no pus was formed.

But the cases in which I have used the subiodide with most satisfaction have been severe labor cases occurring in primiparæ, where, from want of proportion between the size of the head and the pelvis, or from a too early rupturing of the membranes, the maternal soft parts have suffered considerable bruising. In these, since using the subiodide, the highest temperature noted has been 100 $\frac{2}{3}$ , and that for less than 36 hours. Repair has been completed without the formation of pus, and even the usual heavy odor of the lochia disappears. In these cases no syringe is used. The powder is applied by means of a powder blower, with or without the assistance of a speculum. I have no desire to add to the contents of the obstetrical bag, but those who use the subiodide in these cases will not, I am sure, regret the extra labor incurred either by their carriage or use.

*Mode of application.*—In incised wounds which are not too deep, after arresting all bleeding and securing perfect coaptation of the parts, the line of incision is painted over with a paste of the subiodide, which is renewed every two or three days, the old powder being washed off with a solution of boracic acid, aluminium acetate or weak alcohol.

Abrasions are to be rendered aseptic by the application of one of the above solutions, and the powdered subiodide dusted on. In these cases this form of treatment is especially convenient, as the parts are not easily bandaged; or if the bandage is applied it is at the expense of comfort, as in abrasions of the face, elbow or knee; here the dry coating of subiodide forms an admirable protection to the denuded surface.

In deep wounds, especially if there has been much bruising so as to render it probable that there will be much oozing, it is better, after stitching and applying the powder, to adapt a compress of absorbent cotton, and cover with oil silk or gutta percha tissue and a bandage. Catgut will be found to be the most convenient suture, and may be prepared either by Kocker's method, by placing the raw gut in English oil of juniper for two or three days, then transfer-

ring it to absolute alcohol, in which it is kept until required for use; or by the chromic acid process, in which the gut is placed in a 10 per cent. solution of carbolized glycerine for 48 hours, then placed in a half per cent. solution of chromic acid for five days, and afterwards preserved in absolute alcohol. Prepared in the latter way the gut can ordinarily be relied upon to keep parts in contact for from twelve to fourteen days, producing no irritation.

*Mode of Application in the Treatment of Ulcers.*—The surface of the ulcer and the surrounding parts are thoroughly washed first with warm water, then with an antiseptic solution; the powder is then applied liberally to the surface of the ulcer; the limb—if the ulcer be situated upon a limb—is held verticaly for a few minutes to drain it; then strapping, one inch wide, extending several inches above and below the ulcer, and a bandage commencing at the foot, if the ulcer be upon the leg, are applied. The patient is allowed to go about as usual, the dressing being changed every two or three days.

Its advantages as a dressing are—

1. That it is a reliable antiseptic.
2. That it is not easily volatilized, and when properly applied the dressing may remain untouched for several days.
3. That it has no objectionable odor.
4. That it produces no irritation.
5. That there is no danger from absorption, and is harmless even when taken by the mouth.
6. That if the subiodide of bismuth is used properly, the prognosis in every case may be certain cure in half the time, and with far better results than can be maintained by any other treatment I have seen employed.

**HYSTERICAL SLEEP.**—Charcot recently had a woman under his care in whom sleep continued for 54 days, and was followed by two days of restlessness, accompanied by hallucinations. There was no difficulty in feeding the patient, reflex movements of deglutition occurring whenever anything was placed in the mouth. The urine and fæces were passed involuntarily. The patient awoke spontaneously and had no recollection of her long slumber.—*Birmingham Review.*

## CLINICAL LECTURE ON A CASE OF COMPLEX LABOUR.

BY A. T. CARSON, M.D., EDIN.,

Lecturer on Midwifery, Woman's Medical College, Toronto.

**LADIES,**—I have just attended a case which illustrates a number of the questions we have lately been considering with reference to complex labour. I had previously attended the patient, and with the exception of a slight narrowing of the outlet, causing some delay towards the end of the second stage, her obstetric history was particularly good. Under these circumstances, and as she lived near me, I was tempted to leave my obstetric bag behind, to be sent for if necessary, but luckily did not do so. The case progressed naturally, and the birth took place after the usual slight delay. It was at once seen that the child was dead, and discolored, and that it was a twin. Having ascertained that the second was also a cranial presentation, I gave a gentle, steady support to the uterus and waited. At the end of twenty minutes I proceeded to excite the uterus by pressure, gave a dose of ergot (this being the sole case in all midwifery in which I consider it good practice to administer ergot to hasten the birth of a viable child), and ruptured the membranes. With the rush of waters the funis was brought down, and with a pain the head descended right into the cavity of the pelvis, so that there could be no question as to the possibility of replacing the cord. There was then no pulsation in it, and, as the first child had evidently been dead some time, one might naturally have supposed that both were so and that interference was unnecessary; but, remembering that we may easily fall into a fallacy if the examination be made only during a pain, I retained the cord in my fingers, and as the pain passed off the pulsation returned. The pains now became very frequent, so that had it not been for the narrow outlet the case would have terminated promptly and satisfactorily without further trouble; but as it was evident that a delay sufficient to terminate the life of the child would occur, the use of the forceps was imperatively called for. And now the activity of the uterus, which under other circumstances would have been the salvation of the child, almost

caused its death. One of the fundamental rules for the use of the forceps is that they must be introduced only between the pains—not even the imminent danger to the child could justify the risk of injuring the mother—and as the pains were nearly continuous a greater delay than I could have wished, when moments were precious, was unavoidable. On birth the child seemed dead, and, directing the nurse to support the uterus, and observing that there was no appearance of hemorrhage, I proceeded to resuscitate the child, in which I happily succeeded, the nurse in the meantime assuring me that she was giving good support and that there was firm contraction. Notwithstanding this statement, on taking charge of the uterus myself I found it fully distended with huge clots, and as large as a six months' pregnancy, and this in a patient who had never had any hemorrhage in previous labors and with no external loss. On expressing the clots and placenta the hemorrhage ceased, and both mother and child have since done well.

To recapitulate the lessons this case teaches. Always go to every case prepared for emergencies. Twenty minutes or half an hour is a long enough rest to give the uterus after the first birth before exciting contractions. The use of ergot to hasten the birth of the second twin is admissible, provided there be no special contraindications. Be sure to examine a prolapsed funis for pulsation in the interval between the pains. Never attempt to introduce forceps during a pain. Twin cases are more liable to hemorrhage. There may be severe internal hemorrhage without any external loss. Never trust an inexperienced nurse to support the uterus any longer than you can possibly avoid.

Heller (*Tageblatt der Ärzte zu Berlin*) considers that the majority of cases in which endocarditis develops as a complication of an infectious disease it is due to the presence of micro-organisms. He examined several cases of valvular endocarditis in phthisical subjects, and discovered in five of them the tubercle bacilli on the valves.

Thirty of the students of Upper Canada College are the sons of physicians.

## THE BACILLUS OF TYPHOID FEVER.

BY W. H. B. AIKINS, M.D.

(Read before the Toronto Medical Society.)

It will be my endeavor to give a brief *resumé* of what has already appeared in the literature on this subject, and refer to some of the many experiments which have been the outcome of the growing belief that there is in connection with typhoid fever a specific micro-organism, and also to demonstrate that micro-organism which the investigators are agreed is present in all cases of typhoid fever. There yet remains unconnected, however, one link which would seem to place typhoid with the four diseases already fully accepted as being due to the presence of an organized pathogenic poison, namely, tuberculosis, anthrax, cholera and relapsing fever; and that link is missing owing to the impracticability of testing pure cultures on man, and for animals the bacillus is not pathogenic, although its introduction into the bodies of animals may evoke symptoms and pathological changes which might, were the constitutional conditions similar, appear analogous to the lesions in the human body.

Eichorst, the Director of the Zurich Medical Clinic, and Rindfleisch, in his latest edition, seem to accept fully the bacillus of Eberth—who was the first to describe it—as the casual agent of typhoid fever, and Stümpell in a few words leaves no doubt as to his acceptance of the bacterial origin of the disease, viz., "That typhoid fever can result only from an infection of the body with actual typhoid bacilli, and never through any other bacteria—never through the products of decay and decomposition, tainted food and the like." There does not yet exist the slightest proof that typhoid bacilli can be developed from any other micro-organism. Concerning the exact manner of production views differ greatly. Rindfleisch mentions that the bacteria grow particularly well in spring water; Pettenkofer regards the ground soil as the chief place of development for the schizo-mycetic fungus of typhoid. As regards the possibility of infection, various sources must be considered—polluted water, infected food, or the emanations from the dejecta. Sewer gas in itself is not an exciting cause, but it may be

come so through typhoid dejections being constantly added to the contents of sewers where the conditions are favorable to the growth and development of the bacteria.

Hueber and Becker, and also Flugge, give accurate descriptions of the appearance and growth of these bacilli. Their growth on potato is most characteristic and important—though in a negative way—for the certain differentiation of typhoid bacilli from all the other known bacteria. Many of the other forms of bacteria present a distinct growth on potato, but if a small quantity of typhoid bacilli be taken and spread on a cooked potato, almost no change will be observed on the inoculated surface, even after two or three days. Perhaps a moist, glossy appearance may be present, but nothing more. If this part of the potato, however, is rubbed over, the impression is left that the potato is covered with a resistant skin, but when a small amount from the surface is examined microscopically, we can then readily be convinced that this skin consists of masses of bacilli which have covered the whole of the culture surface. If the potato be placed in a temperature of 35° C. the development progresses rapidly, but the surface of the potato remains still unchanged. On plates of nutrient jelly, the colonies are seen in 36 hours as small white points, which assume in 48 hours a greyish white appearance and have an irregular contour. In *stick cultures* in gelatine the part inoculated appears as a thin white thread, for the bacteria grow more rapidly on the surface of the nutrient jelly than where air is entirely excluded. On agar-agar the colonies appear as greyish whitedrops. In milk, Wolfluge<sup>1</sup> Reidel found that they grew with great rapidity but without causing any macroscopic change. The organism is a short, thick bacillus with clearly rounded ends which, in many cases, contain spores. They are endowed with great vitality and are particularly resistant to dryness. Some which Seitz experimented with, after having been kept in a perfect dry condition for four weeks, produced in nutrient jelly the typical colonies. Examination of the culture in a cell slide with *bouillon* shows that the bacteria possess active motion. Between 30° and 42° C. the spores develop rapidly.

Seitz was not able to find the bacilli in the blood or roseolar patches of typhoid patients, but the examination of the dejecta invariably gave positive results, being found in the second and third weeks of the disease. He also found the characteristic bacilli in the urine in two cases out of seven which he examined. In each of these two cases the urine was albuminous.

Fraenkel and Simmonds found the bacillus in the spleen, and were able to make pure cultures which gave the characteristic growth, a peculiarity which Gaffky first pointed out.

In the liver, also, masses of the bacteria were found which were well stained by methyl blue. These investigators established an important point, namely, that the bacilli as such do not cause inflammation and suppuration in the organs. In six cases with complications—one suppurative parotitis, one lobular and two lobar pneumonias, one suppurative meningitis and pleuritis, and one post-pharyngeal abscess—these bacteria were not present, but always micrococci of different orders were found. Their results, like those of Seitz, were negative with regard to the blood and positive in the examination of the dejecta.

Their experiments on animals are interesting, guinea-pigs, grey mice and rabbits being used. The rabbits were inoculated in different ways, (a) through injections into one of the ear veins, (b) injection into the belly, (c) injection into the duodenum, (d) through inhalation of pure culture which had been dried and powdered.

In a few hours most of the animals which had been infected by the intra-venous and intra-peritoneal injections became ill; there was great depression, and marked languor in movement, and no attempt made at eating. Four of the animals had diarrhœa; the temperature was not taken. Death resulted in from two to four hours, seldom later than two or four days. Those animals which lived lost flesh rapidly.

The post-mortem appearance in the animals of all kinds was typical—swelling of the spleen, the mesenteric glands enlarged and blood-colored, and a marked swelling of peyers follicles. In several cases there were hemorrhages in the mucous membrane of the intestines and on the serous surfaces (pleura and pericardium), and,



lastly, there was in most animals a swelling and cloudy condition of kidney and liver.

Microscopical sections were made from these organs, and the position and arrangement of the bacilli resembled closely sections made from the human organs from a typhoid patient.

Somewhat similar results have been obtained by allowing rats and mice to be without eating for twenty-four hours, and then giving them food well impregnated with culture of typhoid bacilli.

The testing of the action of the different antipyretics—quinine, cairin, antipyrin, thallin, salicylic acid, and naphthalin—on the cultures led to the conclusion that all of these, save naphthalin, held in check the development of the typhoid bacilli, whether the drugs were in solution or not.

### COCAINE DOSAGE AND COCAINE ADDICTION.

BY J. B. MATTISON, M.D., BROOKLYN, N. Y.

The sad story, in a recent *Record*, of the Russian surgeon's suicide from sorrow or remorse due to his belief that a patient had died from an overdose of cocaine, points a moral, the import of which demands more than a passing notice.

No advent in the therapeutic arena during the last decade, has been attended with such varied and extensive claims for favor as cocaine. Its marvellous effect in ophthalmic surgery roused a spirit of experimental research in other directions which has added largely to its well proven power for good; but, as has been well observed, a potency for good implies a potency for harm, and the risk impends of its ardent advocates being carried by over-enthusiasm, beyond the limit of a safe regard for the welfare of their patients or themselves, that may imperil an otherwise well-founded success.

Surely it is, in the writer's opinion, full time to draw the line; to re-voice a warning as to the use and abuse of this valued, but, at times, toxic drug, lest the roll of alarming, dangerous and fatal effects from its ignorant or incautious using be sadly extended, and a reaction ensue

that, by creating distrust within and without the profession, will damage its good repute, and hinder its use in cases where it would be almost certain of serving us well. And the need of this seems all the more called for in view of opinions expressed, the past year, in certain quarters, affirming the harmless character of cocaine—opinions which, I am convinced, are at variance with well accredited facts, and should not be allowed to pass uncontradicted.

Cocaine seems to have secured for itself a more than usual share of attention aside from the professional press. One metropolitan daily, in particular, has, again and again, given its columns to a discussion of the topic, and in a somewhat lengthy article not long ago, an "eminent but unnamed specialist"—Dr. Francke H. Bosworth—was reported as saying "there is not a well-authenticated case on record, as yet, where cocaine has effected injury."

In view of cases cited in this paper, and others elsewhere recorded, such a statement is no longer tenable, and any conclusion based thereon as to the harmless nature of cocaine is misleading and incorrect.

And the evidence herewith presented weighs even more heavily against an assertion by Dr. Wm. A. Hammond, at a recent meeting of the New York Neurological Society, in the course of his "Remarks on Cocaine and the so-called Cocaine Habit," when, after telling of his taking eighteen grains at a subcutaneous dose, he asserted "he did not believe any dose that could be taken was dangerous!" What might be the outcome of such an opinion put in practice? The Russian surgeon's error of judgment, fatal to his patient and himself, was largely due to his reliance on the asserted use by other surgeons of large doses without ill-effect. Might not a like result follow an incautious dependence on Dr. Hammond's disbelief in the toxic power of cocaine? The *Record* well said of Prof. Kolomnin's case: "The experience, though so sad, may not be without its lesson," and put a very pertinent query as to whether "there are not other surgeons who could report very serious, if not fatal results from injudiciously or ignorantly using too large a dose of cocaine?"

Fifty cases herewith noted, attest a power in this drug on some patients, that warrants caution with all.

"A young woman, aged twenty-three, was sent to Prof. Kolomnin, and found to have a large ulcer of the rectum, which was diagnosed to be of tuberculous nature. He decided to scrape and cauterize the lesion and to use cocaine anæsthesia during the operation.

"In order to produce anæsthesia, he had fifty grammes of a five per cent. solution of hydrochlorate of cocaine prepared: of this, thirty grammes were brought into use, containing exactly twenty-four Russian grains of the salt, or twenty-three English grains—the Russian grain is exactly one-sixteenth of a gramme—six grains being injected at a time into the rectum. After the third of these injections, it was found on examination that the part was still sensitive. A speculum was then introduced, the ulcer dabbed with a dry sponge, and then the fourth injection given, making twenty-four grains in all. After this the parts were tolerably anæsthetic. The ulcer was scraped, and a tampon saturated with oil inserted. The pulse was then accelerated. During the operation the patient groaned, so that even the twenty-four grains had not produced complete anæsthesia.

"After the operation, Kolomnin went round his ward, and in three-quarters of an hour a message was sent to him that the patient was very low. He found the pulse very weak, the face and hands cyanotic, and the respiration labored. He considered that she was in a toxic state, and used every means to bring her round, Prof. Sushchinski being also invited to a consultation. Faradization, artificial respiration, hypodermatic injection of ether, administration of ammonia, tracheotomy for the inhalation of oxygen, stimulating and nutrient enemata—all were tried, but without success. Kolomnin had no doubt that death was due to cocaine."

Dr. W. H. Long, U. S. Marine Hospital Service, reports in the *American Lancet*, the case of a man aged thirty-three, to whose larynx he applied, three times, a four per cent. solution of cocaine. Prompt relief was given, but three and one-half hours later the patient was found unconscious; breathing, labored; res-

pirations, twenty; pulse, ninety; general condition, one of profound anæsthesia. Diagnosis, cocaine poisoning. Several doses of whiskey were given subcutaneously. In half an hour, consciousness partially restored, then gradual and full improvement save a feeling of great exhaustion.

Four days later cocaine was again used. Thinking the former toxic effect due to swallowing some of the solution, and probable absorption by larynx, extra precaution was taken to have it expelled and the pharynx well rinsed. Two applications of a two per cent. solution were made. Relief was again complete, but three and one-half hours after, patient was in same condition as before, except the anæsthesia not so profound. Frequently injections of whiskey were again used with partial success—could swallow and answer questions—but, soon after, he suddenly ceased to breathe. The heart beat a short time longer. All efforts at resuscitation failed. The probable immediate cause of death was paralysis of the respiratory centre due to cocaine.

Dr. F. M. Thomas, Leonardsville, Kansas, reported to Prof. R. Ogden Doremus, as follows:

"Friday morning, October 23rd, 1885, I was called to see Mrs. —, aged thirty-nine, whom the messenger reported as dying. I found her unconscious; breathing heavily and irregularly; pulse, thirty-five, intermittent; temperature normal; left pupil largely dilated, right natural; right arm and lower limbs motionless; face spasmodically drawn upwards toward the dilated eye.

"Spasmodic action of the left arm and upper part of the body came on regularly at intervals of a few minutes, during which she clutched the bed-clothing, and seemed to be trying to vomit. Twice during my attendance she ejected small portions of the previous evening's meal. Salivation was excessive; retained a dorsal decubitus; would not lie on either side. Heart seemed almost exhausted.

"I saw her at 5 a.m. and was with her nearly all the time till she expired, apparently completely exhausted, about 8:30 a.m."

On inquiry, the doctor learned that Mrs. — had been freely using a four per cent. solution

of cocaine, for toothache, due to several much decayed left upper molars. His diagnosis was cocaine poisoning.

Dr. Knabe, of Berlin, records the case of a girl aged eleven, who was given four to twelve drops—the exact amount was not determined—of a four per cent. solution of cocaine, by injection over the deltoid, to remedy frequent fainting fits—she having cardiac degeneration, sequelae scarlatina. In less than forty seconds the girl took a deep breath, became deadly pale and dropped unconscious. One minute later she was dead.

In the *Australasian Medical Gazette*, August, 1886, Dr. W. E. Ramsden Wood reports this case: "A. B. suffered from neuralgia, due to a defective tooth. Extraction being impracticable, cocaine—amount not stated—of a ten per cent. solution was injected, with prompt relief, lasting some hours. Next day, the pain, being very severe, patient sent to his chemist for a similar solution, and three minims were injected, but without the desired effect; he returned it to the chemist and asked him to make it stronger, which he did, making it twenty per cent. He brought this to me, but omitted to tell me that the solution was double the strength of that which I had used. He told me that three minims had not given him the relief that he had experienced from mine; I therefore gave him four minims of what I believed to be a ten per cent. solution, and within five minutes he became restless and inclined to vomit; he then began to feel a sensation of pins and needles in the left hand and arm, which rapidly extended to the right side. This was speedily followed by contraction and rigidity of the fingers, arms and legs; there was also a tendency to opisthotonos. His pulse became extremely rapid and feeble, his face livid, and the muscles of his mouth and cheeks strongly contracted. His respirations were short and convulsive, his feet and hands very shortly became cold, and a profuse perspiration broke out on his head and face.

"I first gave him half a tumbler of brandy, followed at short intervals by drachm doses of spiritus ammon. aromatic, and applied strong mustard over cardiac region, and used friction to the upper and lower extremities; at the same time I let him inhale a few drops of chloroform

to try and check the spasmodic contractions. After continuing these remedies for nearly an hour the pulse began to improve, the color to return to the face, and the rigidity of the muscles lessened, but returned immediately I stopped the friction. At the end of two hours he improved more rapidly, but felt somewhat drowsy, and it was not until about four or five hours that all the symptoms had subsided.

"On questioning him afterward regarding his sensations, he told me that although he was unable to speak coherently, he knew all that was passing, and it was not until he felt the abdominal muscles becoming rigid that he felt anxious, for then he thought he was dying, and a sensation of suffocation came over him."

Dr. T. H. Burchard, in the *Medical Record*, December 5th, 1885, reports a case in which he injected ten drops of a four per cent. solution to induce local anæsthesia before removing a needle from the foot. "In about four minutes my patient suddenly clutched his throat, exclaiming 'I am dying!' and fell from his bed unconscious. Respiration ceased, his jaw dropped, his eyes rolled upward, and to all appearance he was dead. His heart was beating very faintly, although his radial pulse was imperceptible." Artificial respiration, hypodermics of ammonia and atropia, alcohol, sinapism over heart and hot bottles were employed, and in "fifteen minutes after the catastrophe, his pulse was about forty-eight, very feeble, and respirations seven to eight. Unconsciousness continued twenty minutes." Patient recovered.

Dr. Spear, U.S.N., in the *Medical Record*, reports the case of a man aged twenty-nine, who took, subcutaneously, within seventeen hours, to remove the effect of a rum debauch, nearly ten grains of cocaine, Squibb's make. He was found in a toxic state; unconscious; face congested, and whitish grey; hands and lips blue; pulse feeble, fluttering and uncountable; face and neck streaming with sweat, and body bathed in cold perspiration. Under treatment, in about ninety minutes he began to be conscious and gradually recovered.

C. S. Kilham, L.R.C.P., Sheffield, England, read before the Sheffield Medico-Chirurg. Society, November 25th, 1886, this case: On

November 9th, 1886, at twelve noon, John B— accidentally took four and four-fifth grains of cocaine hydrochlorate in the form of solution. At 12.30 he was seized with severe cramps in the stomach, nausea, throbbing and feeling of bursting in his head, failure of eyesight, loss of use of his legs, incoherence of speech and confusion of ideas, and drowsiness, but could always answer questions when aroused. No delirium; appeared as if drunk, and got quite helpless. Brandy was given to him, and he vomited after it, but only the remains of food. About 12.50 he commenced sweating most profusely, shirt, etc., being soaked through, perspiration streaming down his face and body, and his head steaming. Pupils were normal and equal. No loss of taste. The sweating lasted some time, and was succeeded by very severe prostration, shivering, and feeling of impending death. At intervals, the patient had severe cramps in the stomach with retching and vomiting of a quantity of clear mucus, which relieved the pain. About 1.15 p.m., the pulse became intermittent—missing every fifth beat. This was accompanied by cyanosis of the face, and intense feeling of suffocation over the cardiac region. Relief was afforded by sinapisms. The pulse varied from eighty to eighty-six, never more, and became gradually regular. About 1.45 p.m. he began to have cramps in the legs and feet—especially on dorsal surface of right foot—and tingling and numbness in both hands. Later on the pupils became dilated: The vomiting and cramps ceased about 4 p.m.—unless food were taken—but the drowsiness, throbbing of head and prostration, continued up to 6 p.m., when the patient began to get warm and feel relieved. The improvement continued, and he could be moved at 8.30 p.m. There was great weakness, with swimming of head all night.

Next day there was still weakness, continual vomiting, a dry, leathery feeling in the mouth, with loss of taste, partial loss of power in the legs, and tingling and numbness of the fingers, especially of the right hand. These symptoms commenced nearly thirty-six hours after taking the cocaine, and most of them disappeared in twenty-four hours. The loss of power in the

legs lasted three days, and the tingling and numbness of fingers longer. He was not able to write a letter until the sixth day, as he could not feel the pen between his fingers before.

An emetic was at first given, with sinapisms over the heart and stomach; afterwards, warmth and stimulants—principally compound spirit of ammonia.

The patient was in the habit of taking one-fourth grain of cocaine for neuralgia of the stomach. The most remarkable symptoms were the severe sweating, the intense prostration and the intermittent pulse.

Dr. Geo. Elder, Nottingham, Eng., in the *Lancet*, October 30, 1886, says: "Preliminary to opening a superficial abscess, twelve minims of a freshly-prepared ten per cent. solution were injected under the skin; three or four minutes after, syncope supervened, followed by twitchings of the face, falling of the jaw, coldness of the body, clammy perspiration, lividity of the face—in fact, all the appearances of imminent death. The patient was several minutes in recovering consciousness, and during the remainder of the day felt very prostrate." Dr. E. adds: "Several similar occurrences have been noted, showing that cocaine is not so innocuous as has been generally supposed."

James Leslie Callaghan, in the *London Lancet*, June 12th, 1886, reports as follows: "A patient of mine who was suffering from toothache resulting from a hollow tooth, applied some of a four cent. solution of hydrochlorate of cocaine to the tooth and gums. He did not spit it out, but, according to his story, swallowed from twenty to thirty drops. Within half an hour he was seized with a feeling of faintness and giddiness, then an attack of palpitation of the heart came on, and he complained of tingling and numbness, dryness of the throat, and a sensation of heat and flushings moving over the body, but especially on the spine. Suddenly a rash, like scarlatina, made its appearance over the body; vision was somewhat dimmed. I immediately gave him a strong dose of mustard and warm water, which did not cause emesis. I then administered twenty grains of sulphate of zinc, but without effect; it was only by repeating the

dose that vomiting took place. The patient was relieved for a few minutes and seemed brighter, but the symptoms soon returned, and he felt so weak that he thought he was dying. I held some strong ammonia to his nostrils, but he said he could not smell it. I kept walking him about, but his legs tottered so much I had to support him. He constantly felt a desire to have the use of his bowels and bladder. The pulse became fast, weak and intermittent; the mind remained clear."

Dr. Frederick S. Williams, of Puyallup, Washington Territory, reports in the *Medical Record*, September 25, 1886, this case: "A lady on whom he wished to operate for a lacerated cervix, had a pledget of cotton saturated with a twenty per cent. solution of cocaine placed over the cervix, and four minims of the same solution injected on each side of the wound. "In about a minute and a half the patient began to speak as with an effort, saying, 'I feel so faint,' and gasped as if struggling for breath. She was immediately placed on her back, with head lowered, and told to breathe deeply. She obeyed for a few times, then recommenced her gasping, which she continued for about a minute. Then followed shallow breathing for four or five minutes, when she began to rally a little, and the breathing became gradually stronger but irregular.

"Her pulse at first was very rapid, irregular and weak, then became during most of the time of the shallow breathing almost imperceptible, gradually returning with the approaching normal respiration.

"Consciousness at once was dulled, and during the period of the shallow respirations was completely lost.

"At the end of about ten minutes she rallied, pulse, respiration and consciousness becoming normal."

Myerhausen relates the case of "a girl, twelve years old, in whom two drops of a two per cent. solution were instilled in the conjunctiva four times, at intervals of five to eight minutes. In all, only a little over one-tenth of a grain was administered, of which, certainly, one-half must have been lost through the tears. Immediately after the operation, the child commenced to complain of head-

ache, which became more and more severe until it was almost unbearable. Nausea and vomiting persisted through the entire day. The patient was greatly prostrated; stumbled in walking; speech was almost entirely destroyed, as though the tongue were paralyzed. These symptoms of poisoning lasted all through the night, in which no rest was possible, and gradually disappeared towards the evening of the following day."

Dr. Robt. Newman, New York City, kindly sent me this report: Patient, a female, aged thirty-seven, was treated for chronic cystitis by washing out and dilating the bladder daily. To allay the pain, fifteen minims of a four per cent. solution of cocaine were injected per urethra. This, increasing the drug a little each day, was used three times. After the third injection, while the cystic pain was allayed, a severe headache ensued which persisted for several hours. On the fourth day, having increased the cocaine to twenty-five minims, "while still washing out the bladder with hot water, a piercing pain in left temple occurred, running round the back of the head in a circle, and feeling as if the top of the head would split open. Pupils dilated; expression anxious; restlessness marked. More than a week passed before all toxic traces ended. There can be no doubt cocaine caused the trouble, and the symptoms were alarming."

In the *London Lancet*, 1886, is recorded the case of a female, aged twenty-five, who had a watery solution containing fifteen centigrammes of hydrochlorate of cocaine injected into the nose. In twenty minutes, giddiness, weakness and impaired vision ensued. A little later she was semi-comatose, with slight dyspnea and pulse uncountable. These symptoms disappeared in three hours under friction and internal stimulation.

Dr. Schilling, in the *Pharmaceutical Journal*, records a case in which the injection of six drops of a two per cent. solution into the gums of a woman, aged twenty-six, to prevent pain of extracting a molar, was followed by toxic symptoms, of which facial rigidity, deafness, blindness, complete loss of motion and sensation, and unconsciousness for a half-hour

were the chief. They subsided after inhaling nitrite of amyl.

Dr. Heyman reports a case in which the effects following the use of cocaine closely resemble that noted by Myerhausen. The patient, a boy, had a solution of cocaine liberally applied to his pharynx and larynx. Toxic symptoms soon set in. He was apathetic, with speech and walking disturbed. Pulse and respiration increased. Temperature rose to  $100\frac{3}{4}^{\circ}$ . Five hours after, patient could not walk. Symptoms persisted ten hours.

Dr. Schwarzbach, Australasian *Medical Gazette*, January, 1886, reports the case of a lady who used cocaine, locally, for pain in the eye. She suddenly became very ill; stupor, pallor, slow pulse and cold perspiration. Under wine and strong coffee, recovered in a few hours.

G. Bockl observed alarming effects follow an injection of six drops of a two per cent. solution into the gums. In ten minutes patient became unconscious, with gaze fixed, vision defective and delirium. Nitrite of amyl gave relief.

Dr. Landesburg, New York City, used two grains subcutaneously, as an experiment, on himself. In less than two minutes he felt his heart beating violently and blood rushing to his head, quickly followed by fullness and roaring in the latter, and noises in the ears. Thought was confused, volition impaired. Great restlessness, and numbness with twitchings were felt in toes and fingers. Nausea and epigastric pressure marked. Face very pale and covered with cold sweat. Pulse feeble, eyes sunken, pupils dilated, vision dim. In thirty minutes, took to bed with nausea, headache and general prostration. Recovery followed a night's sound sleep.

Drs. Bardet and Meyer, assistants of Dujardin-Beaumetz, anæsthetizing, for experiment, their own skin, observed, half an hour after the injections, dilated pupils and comatose symptoms. One of them fell in a state of vertigo, with pallid face and extreme heart weakness. These toxic symptoms followed hypodermic doses, never exceeding one-third of a grain.

Dr. Ziem, of Dantzic, in 1885, reported a

case in which a solution applied to the eye caused pallor and embarrassed breathing, and said that, up to that time, seventeen cases had been cited in ophthalmological literature, in which toxic effects followed the use of cocaine. In three, by injection; fourteen applied to the eye. Pallor, giddiness, dyspnoea, malaise, apathy, great prostration, tottering gait, difficulty of speech, mental confusion and extraordinary restlessness were symptoms noted in both strong and feeble men and women.

Dr. G. W. Kennicott, in the *Chicago Medical Journal*, October 20, 1885, reports: A young woman, aged twenty-five, of good constitution, had been using per medical advice, a two per cent. solution of cocaine for hay fever. The supply becoming exhausted, she procured two five grain vials of the muriate, full strength, and applied two-thirds of the contents of one bottle to both nostrils with a small glass insufflator. In twenty minutes she became dizzy, vision dark, and a sinking sensation occurred, with great weakness. In half an hour she was semi-comatose, pulse scarcely countable, so rapid and weak; pupils widely dilated; speech and swallowing difficult; dyspnoea; nausea; throat dry; teeth chattered and she shivered with cold. Later, drowsy; eyes closed; face muscles affected; weakness extreme, she could not support her head. She recovered in three hours under brandy, ammonia, digitalis, heat to epigastrium, and heat and friction to extremities.

Dr. Geo. J. Engelman, in the *Medical Review*, June 13, 1885, records these cases: Mrs. C., aged twenty-eight, in fair health, at five p.m., took one-sixth of a grain by the mouth; one hour later this dose was repeated, and soon after she felt a tingling in her fingers, hands and wrists, with discomfort and oppression about the chest, and vomiting the moment she turned in bed. At 7.30 she took a third dose, same amount, and in fifteen minutes was excessively restless, great difficulty of breathing; tight band-like feeling about chest, faint, and felt as if dying. At 8 o'clock still faint, was dyspnoeic and tingling had extended to feet and legs. At 8.15, tingling gave way to numbness, beginning in hands and extending to feet; "became perfectly still, as if breathing her last;"

quite numb and stiff; thumbs adducted; pulse feeble, frequent, irregular and intermittent. These toxic symptoms subside after one-sixth of a grain of morphia, hypodermically.

Mrs. F., aged thirty-five, eniente, took forty drops of a four per cent. solution to relieve nausea. Immediately she felt a complete numbness along the tongue and throat; to test the feeling, she bit her tongue, and found it perfectly numb. She became weak, perfectly relaxed, with oppression about the heart, and felt as if dying. In twenty minutes the entire body became cold and numb. Pulse feeble and very rapid. Heart felt as if constricted by an iron band and "hammered loudly at a fearful rate." Symptoms persisted several hours.

Dr. Litten, at a meeting of the Berlin Medical Society, November 4, 1885, in a debate on the action of this drug, cautions against its too general use. He said that among other ill effects known to occur after an injection are attacks of mania, sometimes very violent, which may prove dangerous; and he asserted the various toxic effects, in some individuals, reach such a high degree that actual danger to life seems to threaten the patient. The three cases next cited are of interest in this regard.

Dr. Geo. T. Stevens, *Medical Record*, January 17, 1885, reports that he injected four minims of three and one-half per cent. solution under the conjunctiva of a strong man. In eighteen minutes "violent convulsions set in, attended with desperate struggles to breathe. The face became livid, consciousness was lost, and the patient became uncontrollable. After struggling in an easy chair for some time, he arose in a state of frenzy and struck violently about. Stimulants were administered, and the most alarming stage of the paroxysm ceased after a duration of nearly twenty minutes. Fully half an hour, however, passed before we could regard our patient as beyond danger. I believe that this paroxysm was the manifestation of the toxic influence of the drug."

Dr. Robert Newman, of New York, has reported to me the case of a gentleman, aged forty, in whose urethra a physician injected one drachm of a cocaine solution—strength not stated—prior to cutting the meatus. In half a minute, patient's face flushed, he felt a general

pricking sensation, followed by a piercing sting in his temple, violent headache and great excitement. Then he became maniacal, and under the delusion that he had been attacked by a robber, sprang from his seat, seized the doctor by the throat and began to beat him. The delirious excitement persisted three hours.

A well-known physician of this city gave me his experience with cocaine. Suffering from an attack of otitis media, he used freely, by advice of his medical attendant, a ten per cent. solution in the ear. It caused flushed face, quickened pulse, and breathing—the former, 130—wild look, fixed gaze, hallucinations and delusions—the latter homicidal—attempting assault on a near relative—which persisted three hours, followed by decided depression.

Dr. J. P. Knoche, in the *Kansas City Medical Record*, December, 1885, reports the case of a man, aged 23, to whom he gave cocaine, hypodermically, for anæsthesia, using, in several injections, within thirty-five minutes, about two and two-fifth grains. In seven minutes patient was cold, and sensation lost in hands, forearms, chest and legs. In twenty minutes breathing was difficult, interrupted, sighing. Pulse almost imperceptible, intermittent and very rapid; lips and skin generally pale and cold. Patient was semi-comatose for a time. Numbness in extremities lasted four hours; imperfect palmar sensation ten hours. Nine hours after, severe renal pain and copious diuresis; the tremor and weakness continued twenty-four hours. Symptoms gradually decreased under free alcoholic stimulation.

(To be continued.)

DIAGNOSTIC VALUE OF URINARY EXAMINATIONS IN ABDOMINAL SURGERY.—Thiriar states that after a laparotomy, when the quantity of the chlorides in the urine sinks below one gramme in the 24 hours, a septic peritonitis is threatening; whereas if the quantity remains above one gramme, this is not to be feared, notwithstanding the presence of alarming symptoms, vomiting, fever, etc. If the urea sinks below 12 grammes in the 24 hours, this fact indicates, in case of an abdominal tumor, its malignant nature. The same means may serve for the diagnosis of a malignant or benign pyloric stenosis.—*Le Spérimentalé*.

## Selections.

*We are indebted to DR. NEVITT for the translations from the Italian and to DR. ZIMMERMAN for the French.*

### THE TREATMENT OF NEPHRITIS.

Clinic by Prof. NOTHNAGEL.

With regard to the prognosis of contracted kidney very little need be said. A restoration to the normal physiological condition and a cure are absolutely impossible and a fatal termination comes sooner or later. This may occur in different ways. Sometimes through hemorrhage into the brain, sometimes through uræmia and sometimes through complications, among which are dropsy and anasarca.

The treatment of chronic granular contracted kidney is limited to appropriate dietetic measures. We observe that the patient continues to feel well so long as the excretion of the urine is normal, but if the diuresis is diminished the patient feels worse and is liable to uræmic symptoms. We are aware that the amount of urine depends in part upon the tension of the arteries, and it behooves us, therefore, to keep up the strength of the heart. In other words we meet with all those conditions in granular atrophy of the kidney, which we observe in valvular disease of the heart. Therefore we prohibit too great bodily exertion, over-indulgence in alcoholic drinks, coffee, tea, warm beverages and the like, endeavoring to keep up the power of the heart's action. I would like here to point out to you that we sometimes have in such patients with marked hypertrophy of the heart a diminished heart performance, whilst the tension of the arteries is good—that is really above the normal, but relatively for these patients, on account of the greatly increased power from the hypertrophy the tension is diminished. If the strength of the heart has diminished we must strive to increase it. Therefore we administer diuretics, and best of all for this purpose is digitalis, but you must be very cautious in its use. One can very easily, through careless and excessive use of this remedy, so increase the pressure that the consequences are injurious, the pressure in the arterial system may become so great that cerebral

hemorrhage is the result. Therefore be very cautious in the use of digitalis in contracted kidney. Then you put your patient on a plain milk diet, and you send him to a warm climate where he can have an equable warmth of the surface of the body during the winter, and that is really all that you can do.

I shall not enter into the details of the symptomatic treatment, nor into the subject of nephritic asthma, (for which we prescribe pyridin and morphine as being the best,) nor into uræmic attacks. I shall here mention only the principles of treatment of contracted kidney. I wish to say particularly that the treatment by excessive sweating, which is used in such cases in spite of the increased tension and absence of œdema is of no value, indeed under the circumstances it can only do harm. The sweating cure in contracted kidney can be used only when the patient is dropsical. The question then arises, What can we do therapeutically in such cases? We have no remedies which directly affect the inflammation of the kidneys. The *indicatio causalis* we are not able to satisfy, nor can we satisfy the *indicatio morbi*. Of the remedies which are used in Bright's disease, a great number are given which are quite useless. A favorite preparation is tannin, which is administered in many different forms: as tannic acid, pure gallic acid, or in combination with quinine as tannate of quinine, and so on. Experience has doubtless taught that all these preparations are entirely useless, they have not the slightest effect on the course of the nephritis. Alum is also without value. Of internal remedies nitric acid in small doses has been given, and it has recently been again affirmed that it is of benefit, but I have never been able to satisfy myself of it, and although for forty years it has been recommended by English authors, I do not believe it is of any value at all.

The same may be said of iodide of potash and iodide of soda. The only preparation which perhaps has a certain effect in the acute hemorrhagic form is acetate of lead.

The treatment of this form of nephritis—the granular contracted—must be looked at from quite another point of view. In the first place, experience teaches one that



movement increases the albumen and also the inflammatory process. Such patients, therefore, must have perfect rest, and this is best accomplished by sending them to bed for weeks, or even when necessary for months. You satisfy in this way two indications—first, you give them absolute rest, and secondly, you keep them in an equable temperature. Bartels declares that he has seen in these cases the best results from keeping them in bed for months at a time. As a rule, however, the patients are not willing to remain in bed so long. In the acute form, with great œdema, it is very well, but when the œdema has disappeared it is difficult to keep the patient longer in bed. The second indication, which can perhaps of itself produce a good effect in nephritis, is the maintenance of the surface of the body at an equable temperature. This latter is secured in bed, although still better in some suitable climate where the atmosphere is dry and warm. Of the numerous health resorts Cairo in Egypt is perhaps the best known and most favored, and there the patient finds himself comparatively well. The climate of Algiers is also very good, but Algiers has not such favorable communications with Europe. When the people are financially in a position to carry out this plan of treatment, you may let your patient remain there two or three years. You understand you will very rarely succeed in accomplishing this object, but you must do whatever is possible. Accordingly, you must keep such a patient constantly warm—in winter, when it is possible, in bed, and in some dry, warm resort during the summer. Then, again, we endeavor, by other means, as much as possible to produce a derivation of the blood to the surface of the body. This we accomplish by tepid baths, which the patient may take daily, and afterwards being well wrapped he goes to bed, and thus a gentle hyperæmia of the skin is induced. Another point of importance is the regulation of the diet. All those articles of food which cause any irritation of the kidneys—as, for instance, spices, pepper, cinnamon, vanilla, ginger, etc., also asparagus, are prohibited, likewise alcoholic drinks, as beer and wine, and especially the strong drinks containing alcohol. Thus, if you would give the patient what is really most suitable, you

must restrict him to a purely milk diet—milk cold or warm, sour or sweet, milk soups, milk rice, and so on, whatever form best agrees with him, and causes the least irritation. It is a disputed point whether eggs should be allowed, but probably in small quantities they do no harm. In those cases, then, of chronic nephritis without œdema the treatment consists in rest, equable warmth of the surface of the body, warm baths, transpiration and milk diet, or at least a non-irritating diet. The natural mineral waters have been much vaunted in these cases, but it has not been proven that they are of much value. If you wish to try them the best are Karlsbad, Kissingen, Homburg and Vichy.

Two conditions you will often meet with in the treatment of Bright's disease, viz., small quantity of urine and severe dropsical swelling. For the removal of the dropsy, diuretics and diaphoretics are introduced as being the best means. Formerly, for this purpose, very free evacuations of the bowels, ten to twenty stools a day, were relied upon, but this treatment was of more injury to the patient than advantage in the removal of the dropsy. We endeavor to keep the bowels regular in these patients, but absolute catharsis is now no longer resorted to in the treatment because it would remove the contents of the small intestines also, and thus deprive the patient of some nutritive matter as well. By means of diuretics and diaphoretics it is much easier to get rid of the dropsy. Diaphoresis satisfies at once two indications; one, symptomatic through the removal of the dropsy, the other an indication of the disease by the production of a hyperæmia of the skin. Formerly two medicines were much used as diaphoretics, namely, flores sambuci and flores tiliæ, made into a decoction; but our experience of those remedies, however, is that they produce at the best very mild diaphoresis. For the last fourteen years we have had in jaborandi a remedy which is quite a specific diaphoretic. Owing to the tendency however of jaborandi to cause nausea and collapse, and also the want of accuracy in the dose, its active principle, pilocarpine, is now more used in doses of 1—3 centigrams hypodermically. Its action is to cause marked ptyalism and diaphoresis, but in some cases the

former is the greater increased, in other cases the latter, a fact which we are unable to explain. By previously having the patient well warmed, the diaphoretic effect is thereby much improved. The effect of pilocarpine depends upon its action on the nerves supplying the salivary and sweat glands, and is therefore fundamentally different from other sudorifics, which act only secondarily by increasing the blood supply to the skin. Now, there are patients to whom you may not give pilocarpine, either because it does not produce diaphoresis in the ordinary way, or because too severe nausea results from it. In such a case you must devise some means of inducing hyperæmia of the skin. You may, for instance, give him a warm bath, and then after friction of the skin with a coarse towel, envelop him in flannel and give him warm drinks, such as elder flower tea or hot citron lemonade, etc., or you can put him in a sweat-box. In this way, by a one to two hours' sweat daily, you can reduce the dropsy. Finally with regard to diuretics. We were in the habit formerly of avoiding diuretics in the acute form of nephritis, lest by promoting the blood supply to the kidney they should thereby increase the inflammation, but experience has taught us that this is a mistake, and diuretics can be given in these cases and still retain perfect rest for the kidneys. The preparations most used are digitalis in the form of an infusion, or squills, either the acetate or the tincture, in combination with some salt, for instance—the preparations of potash, especially the nitrate or acetate.

The newest diuretic which we possess is calomel. The first publications on this subject appeared only a few months ago, although the subject was discussed by me in a private communication some time previously. Prof. Jendrasik, in Pesth, observed by chance in a patient whom he was treating for syphilis, and to whom he gave calomel, that free diuresis occurred. He subsequently further investigated the circumstances, and discovered this most surprising action, which indeed with regard to calomel in general was hitherto quite unknown. We have had opportunities in our own clinic since the publication of Jendrasik's work to confirm the same in many cases. The increased diuresis in some cases was quite astonishing, and the œdema

disappeared entirely. I have met with cases in which digitalis was given without any marked increase in the quantity of urine or noticeable diminution of the dropsy, and afterwards on calomel being given the dropsy completely disappeared. One must, however, follow an exact method in the administration of calomel. We are accustomed to administer it in doses of 0.2 (about 3 grains) grams daily for three or four days. Of course at the same time you must give chlorate of potash both internally and also as a wash for the mouth, in order to prevent any salivation. The effect of the calomel begins to be shown generally about the second or third day, rarely later, and then often quite suddenly the diuresis commences, and the amount of urine increases from 400 to 700 cub. cm. in 14 days up to 2,000 or even 5,000 cub. cm. daily. After three or four days again it diminishes down to the original quantity. In this way the dropsy can be made completely to disappear, or if there is still no affection of the gums the calomel can be repeated several times and its effects watched. There are cases in which the calomel will not work the first time; then it should be tried again, and even a third or fourth time before it is relinquished. The consequences which are to be feared in the administration of calomel are its liability to cause—(1) stomatitis, and (2) diarrhœa. In these cases it is better to combine with it a little opium. Jendrasik formerly gave jalap in combination, but this is not necessary. The effect on the pulse tracings and on the heart is but slight, and it is interesting that we get simply an increase of the diuresis. Of the *modus operandi* of calomel in its action on the kidneys we know absolutely nothing. The observations of Jendrasik are most interesting and important because they have disclosed an action of calomel hitherto unknown. As we do not always have the same result in nephritis from diuresis, it is better to combine the diuresis with diaphoresis.—*Translated from the Wiener Med. Zeitung by Dr. McDonagh.*

The *Medical Register*, edited by Drs. J. V. Shoemaker and W. C. Wile, is the name of a new weekly journal published in Philadelphia. We are glad to have it on our exchange list.

**SALICYLATE OF LITHIUM IN RHEUMATISM.**—M. Vulpian has read, before the Académie de Médecine, a summary of the results of his experiments on salicylate of lithium in articular rheumatism. He states that his experiments indicate that lithium salts are not so poisonous as they are supposed to be. Salicylate of lithium is not more dangerous than salicylate of sodium, and can be administered in almost equally strong doses. In acute articular rheumatism salicylate of lithium relieves the pain which often remains in the joint after the swelling has disappeared, whereas colchium and salicylate of sodium have no effect. M. Vulpian believes that salicylate of lithium is especially beneficial in fibrous rheumatism. In progressive subacute rheumatism M. Vulpian has seen salicylate of lithium produce great improvement. Salicylate of sodium has been successful in such cases, and produced amelioration of the patient's condition; but both greater and more lasting benefit is obtained by salicylate of lithium. In chronic articular rheumatism M. Vulpian has found salicylate of sodium useless, whereas salicylate of lithium has had a marked effect on the joints, which become less swollen than before the treatment. In order to obtain evident results, four grammes, sometimes four and a half or five grammes, must be given daily. Larger doses are followed by toxic symptoms. This drug sometimes induces headache and deafness, but is never followed by the distressing noises which characterize treatment by salicylate of sodium. The headache and deafness disappear quickly.—*London Medical Record.*

**SOME EXPERIMENTS WITH TUBERCLE BACILLI.**—Dr. de Toma arrives at the following conclusions from a series of experiments made to determine certain points concerning the tubercle bacillus. The first question was how long dried tuberculous sputum can retain its specific virulence. He says that the sputum may remain virulent for nine or ten months if thoroughly dried and kept free from moisture at a temperature of 77° F. When transplanted to blood-serum such sputum will result in fresh virulent cultures of the tubercle bacillus. In a temperature of from 86° to 95° F. the sputum loses

some of its specific activity in about two months, and becomes inert when kept for a month in a temperature of 122° F., or for an hour in one of 176° to 212° F. The second question was what are the means of entrance of the tubercular infection into the organism, and especially whether the specific bacillus can be introduced by inhalation. He finds that the artificial inhalation of pulverized tuberculous sputum may, indeed, cause a tubercular infection, but only under certain circumstances, when the system is weakened by fasting or long confinement, or when there is a solution of continuity in the mucous membrane of some portion of the respiratory tract. The last point to determine was the paths by which the bacilli were transported in the body after having once gained admittance. The author says that the bacilli begin to grow and increase in number at the point of inoculation, and are thence carried to other parts in the lymph-current. Very probably, however, the wandering cells, which take up the bacilli and their spores, play a not unimportant rôle in the generalization of tuberculosis. The bacilli are found most plentifully in young tubercles, and their number decreases directly in proportion to the age of the latter.—*Medicinische Central-Zeitung—Medical Record.*

**BILIOUSNESS.**—The victim of an acute bilious attack will generally get righted in a few days by, first, abstinence from all food, then a diet of porridge and milk, or skimmed milk alone, and a very gradual return to solid food, which for several days should be restricted to toast, a little lean meat or broiled fish, with some succulent vegetables or ripe fruit. As for medicines, saline aperients, such as sulphate of soda, Epsom or Rochelle salts in full doses in the morning, or the now fashionable tumblerful of Hunyadi Janos will generally suffice to clear the *primæ viæ*; the latter has especially a reputation for evacuating bile. The striking relief obtained by free bilious evacuation has often been remarked, and the veteran transgressor resorts to his blue pill or podophyllin with every recurrence of his malady. Of late euonymin has come much into use as a cholagogue. Harley recommends to persons who seem to have a more than usual tendency to biliousness

traceable to sluggish biliary secretion, and where there seems also to be defective nerve action, small doses of nux vomica or strychnia after their meals. This may be combined with belladonna and aloes as in the aloin, strychnia and belladonna pill. The bilious person is generally constipated, hence such a pill has a special utility. Fothergill's pill of ipecac, capsicum, and pil. aloes et myrrh., has done good service in such cases. Nitro-muriatic acid and taraxacum have a reputation which is probably not altogether built on imaginary results. But bilious dyspeptics, while they should be attentive to the functions of eliminations (and doubtless the ancient predilection for purgatives has been justified by modern scientific research, which finds in intestinal septicæmias and alkaloids of putrefaction many of the evils formerly attributed to peccant humors and atrabiliary disorders), should aim specially to be good hygienists and learn to live right; but this is counsel which everybody gives and nobody takes.—*Boston Med. and Surg. Jour.*

#### GASTRIC ULCER.—ALBUMINATE OF IRON.—

Many physicians proscribe iron in the treatment of gastric ulcers, alleging that ferruginous preparations are ill borne by these patients. Gempt (*Berlin Klin. Wochens*) relates several cases of round ulcer of the stomach in which remarkable success followed the use of a solution of albuminate of iron. He gives three times a day, either pure or in a cup of milk, half to one coffee spoonful of syrup of albuminate of iron (2 to 4 grammes per dose). The preparation used contained half per cent. of oxide of iron. It is well to give it a short time before meals, as it is readily absorbed and seems to improve the appetite and never causes pain or vomiting. The hematemeses ceased constantly from the commencement of this treatment. As a result of the author's observation, all the symptoms in the majority of patients treated disappeared when 300 to 450 grammes of the syrup of albuminate of iron had been administered. Morphine was given for the acute cardialgic pains, and Carlsbad salt, very largely diluted, was given every morning to counteract the constipating effect of the iron.—*Bull. Gen. de Therap.*

OVER-WORK—WORRY.—There is doubtless no class of diseases more largely preventable than diseases of the nervous system, and though the causes of these disorders are sometimes remote, yet they are usually traceable to violations of the laws either of mental or bodily hygiene. Over-study in early life, without causing an immediate break-down, may dwarf the development and lay the foundation for future invalidism, and we believe that a considerable proportion of nervous disorder is attributable to such influences that, in early life when the nervous system is sensitive and impressible, check its normal growth and leave it ever after irritable and unstable. The same considerations apply to over-work in adults. There is much brain-failure now-a-days from what is called over-work, and yet much of it is probably due more to the *manner* of work than to the amount of work. Hard and prolonged mental labor is not injurious if carried on under proper conditions; the brain is strengthened by exercise, and the work of a man of an intellectual pursuit, if properly diversified, is recreation. The harm of mental labor is in working at wrong hours, or without system, or with both, and tension that wear upon the brain more than work. In this age men rush, and rush means high tension, and tension means rapid wear and waste of vitality. Emerson says "all haste is vulgar," and he might have said it is injurious to health, and those who work with that high pressure which haste invites, are certain to suffer for it. It should be considered one of the beatitudes of mental physiology, that systematic, deliberate mental labor is normal; it develops the brain and prolongs the period of its activity in old age, and the converse of this is also true, that mental labor performed with anxiety, haste and high pressure is exhausting and is certain, sooner or later, to produce injurious results. Those who deal much with nervous disorders know how large a share of these troubles is due to the habit of worrying. People fall into the habit of worrying about those little mishaps that of necessity come up in the life of every one, and the habit once formed is a difficult one to overcome; worry, above all things, consumes vitality, and disarranges the harmonious workings of the functions; it leads to loss of appe-

tite, to sleepless nights, to irritable nerves, to impaired nutrition; it robs the disposition of attractive qualities, it lessens the mental vigor and it not infrequently is a father in the production of nervous disorder. Sensitive people, those who are easily wounded and discouraged, are most apt to worry when affairs go wrong, and yet they are just those whom worry will harm the most and who will lose the most in life by indulging in it. Trials and reverses may destroy the over-sensitive or the weak, unless such persons prepare for them by the cultivation of patience and courage. Those, however, who are not fretted and depressed by the small mishaps and adversities of life are the better for encountering them, for they are a part of the necessary and kindly discipline of experience that helps to build up character, and strengthens it, as the storm that bends the vigorous tree strengthens and consolidates its health fibre.—*Alienist and Neurologist.*

**MORAL INSANITY.**—Dr. P. Bryce (Alabama Insane Hospital Report) says: "This is a form of deficient cerebration in which there is an absence of moral principle without notable, and in many cases, without any perceptible lesion of the intellect. I object to the popular term 'Moral Insanity,' because there is in it an implication of disease, whereas, the condition of brain which induces it is the result of hereditary transmission, and not of disease. There may be cases of moral insanity supervening upon disease of the brain, as reported by others, but I have never met with such a case, that is to say, where the moral obliquity has not been conjoined with defective reasoning powers. Moral imbecility is the best name for this condition, since it conveys the correct idea of its etiology." He has had twenty-eight such cases under observation. He has known such persons (and has such at present under care), blessed with fortune, brought up in cultivated Christian families with all the advantages that education and polite society could give them, who would talk well, even eloquently, of the charms of chastity and probity, and were ready on all proper occasions to express a contempt and even scorn for licentiousness and dishonesty, but would not hesitate, when opportunity afforded,

to appropriate the unguarded property of others, or to give themselves away to the first libertine who solicited their favors. The unfortunate subjects are regarded by the mass of mankind as simply vile or wicked instead of morally imbecile. Nor is this surprising in view of the fact that the intellect, so far as can be ascertained, is perfectly normal—no delusion of any kind seeming to affect it. But the actuality of such cases is well calculated to embarrass our courts of justice in discriminating between them and those in whom the intellectual and moral faculties are better balanced, and whose criminal conduct would seem to be the result of bad training or vicious surroundings and associations in early youth.—*Alienist and Neurologist.*

**ELECTRO-PLATING OF CORPSES.**—One of the most recent discoveries applied to the preservation of the dead is that known as electro-plating. The details of the process we quote from the *Sanitary News*: "The body is washed with alcohol and sprinkled over with fine graphite powder, to insure the ready conduction of the electricity. It is then placed in a bath of metallic solution containing a piece of the metal to be used. To this is attached the positive pole of a strong battery. The negative pole is applied to the body, and at once a fine film of metal begins to cover the body entirely and evenly. This may be continued until the coating attains any degree of thickness." This method, which has the merit of durability, cheapness and ease of application, should justly become popular, and might be rendered applicable to many cases in which cremation would be objectionable.—*Medical Register.*

**COCAINE IN PERTUSSIS.**—Dr. A. Bianchi administers the hydrochlorate internally in doses of 30 to 80 centigrammes per day, giving a dose every two or three hours; and in bad cases even so much as one gramme. No evil effects were observed; on the contrary, from the very first, there was an improvement. The attacks became less frequent from 30 or 40 in the 24 hours to 10 or 12, or even less. The vomiting ceased, and consequently nutrition improved; along with the appetite the gastro-enteric functions were performed with regularity. The cure in

some cases was complete in a week, in others from 15 to 20 days. The cough did not cease but the spasmodic attacks became less and less frequent and severe. Sudden cessation of the medicine was followed by a return of the frequency of the attacks, but gradual withdrawal was satisfactory. Ill effects were seen only twice, and passed away suddenly on suspending the administration of the medicine and giving 10 drops of laudanum. In the cough of bronchitis or phthisis cocaine appears to be useless or uncertain.—*Lo Sperimentale*.

**DURATION OF INFECTIOUSNESS OF ERUPTIVE FEVERS.**—F. Pearse, in the *British Medical Journal*, fixes the duration of infectiousness of the principal contagious fevers as follows: Measles, from the second day for three weeks; scarlet fever, from the fourth day for six or seven weeks; small pox, from the first day, under one month, probably three weeks; diphtheria, under three weeks.

### Therapeutical Notes.

Prof. Bartholow still continues to advocate the use of carbolic acid in typhoid fever. He states that no form of treatment has, in his hands, been so successful. It modifies the disturbances of the intestinal tube, reduces temperature, and promotes quiet. Two drops of a solution consisting of equal parts of carbolic acid and Lugol's solution may be given every three hours.—*College Clinical Record*.

#### INJECTION ANTIBLENORRHAGIC. —

R Sulphate of quinine . . . 1 gramme.  
Glycerine . . . . . 25 "  
Distilled water . . . . . 75 "  
Rabel water . . . . . Q. S. ℥

Dissolve as far as possible. Inject lukewarm thrice daily, each sitting comprising three injections. Continue till all running ceases, for fear of relapse.—*L'Union Med.*

#### ANTISEPTIC POWDER.—(Lucas-Campionnière.)

R Equal parts of iodoform, powdered cinchona, benzoin, carbonate of magnesia, saturated with essence of eucalyptus. Mix carefully. Apply directly to the wound, or preferably over the protective, then cover with tow or a sponge and

oiled-silk, or rubber tissue and a bandage. For large operations change the third day; in the case of minor wounds it may be left on eight days.—*L'Union Med.*

#### CHILBLAIN PENCILS.—

R Camphor . . . . . 2½ grammes  
Iodine . . . . . 5 "  
Olive oil . . . . . 50 "  
Paraffine . . . . . 45 "  
Alcohol . . . . . Q. S.

Dissolve the camphor in the olive oil and the iodine in the least possible quantity of alcohol. Mix and add to the paraffine melted, and run into moulds. The consistency may be varied by increasing or diminishing the proportion of olive oil.—*L'Union Med.*

**TINCTURA FERRI CITRO-CHLORIDI** (Tincture of Citro-Chloride of Iron—Tasteless Tincture of Iron): Solution of chloride of iron (U.S.P.) 4 fluid ounces; citric acid, 2100 grs.; bicarbonate of sodium, 2270 grs.; alcohol, 4 fluid ounces; water, sufficient quantity to make 16 fluid ounces. Dissolve the citric acid in 4 fluid ounces of water, heat the solution to the boiling point, and gradually add the bicarbonate of sodium. When effervescence has ceased, add the solution of chloride of iron and cool the mixture. Then add enough water to make it measure 12 fluid ounces, and finally add the alcohol. Each fluid dram contains about 7.5 grains of dry ferric chloride.—*National Druggist*.

**GLYCERINE IN FEVERS.**—M. Semmola has made use of glycerine diluted with water as a drink in the thirst of fevers; this he orders to be sipped throughout the day. His formula is:

R Glycerini pur. . . . . 300  
Ac. Citr. v. Tartar . . . . . 2  
Aquæ . . . . . 600

Of this mixture he gives five to seven drachms every hour. Of this drink M. Semmola states the thirsty patient never wearies, and of it the stomach is exceedingly tolerant, so much so indeed, that he has never seen any intestinal derangement when as much as an ounce and a half of glycerine was taken in the twenty-four hours.—*Journ. de Médecine—Birmingham Review*.

Prof. Gross's favorite prescription for secondary syphilis is—

R. Hydrarg. iodid. viridis. . . . . gr.  $\frac{1}{2}$   
 Antimonii et potassii. tartrat,  
 Morphiae sulphat. . . . .  $\bar{a}\bar{a}$  gr.  $\frac{1}{4}$  ℥  
 Ft. pil.

For a cure, take one after each meal; after two days, take two pills after dinner; in a few days, if no bad symptoms arise, increase to three pills after dinner and two after breakfast. Increase until it is found what patient can tolerate; five pills a day about the usual amount. This should be persisted in until all symptoms disappear; then cease for a short time, and then renew with two-third dose. With intervals of a few weeks every two or three months gradually reduce the dose. After two years in this way we may then cease, but keep the patient under observation for eighteen months longer.—*College Clinical Record.*

THE

## Canadian Practitioner.

(FORMERLY JOURNAL OF MEDICAL SCIENCE.)

TORONTO, APRIL, 1887.

### TORONTO UNIVERSITY MEDICAL COLLEGE.

We have heard much during the last few months about a new Medical School in Toronto, which will be closely connected with the National University and the General Hospital. It was hoped that an amalgamation of the two schools now existing would be brought about; but the chances of such an event are, at present, rather poor. There is a strong feeling, however, in favor of establishing a Medical College, to be known as the Toronto University Medical College, which shall be the Medical Faculty of the University. Mr. Falconbridge brought the question before the University Senate, and moved for a special committee to consider the matter. After careful deliberation the committee, which was a strong and representative one, brought in a report recommending the scheme.

There was a strong desire on the part of the Senate, to get the co-operation of the two

schools in Toronto, and a committee was appointed to confer with the Faculties of these colleges in reference to the matter. We are not in a position, at present, to state that these schools have finally decided as to their positions, but it is doubtful if both will accept the scheme.

There can be no doubt that there is, and has been for some time, a strong feeling among the members of the profession in all parts of the Province, in favor of the amalgamation of our two schools, and the formation of one strong school under the control of Toronto University and the Toronto General Hospital. We would gladly see such a school established, but regret to think that the prospects of such a consummation, at the present time, are not at all bright.

There can be little doubt, however, that a University School will be organized. No better time could be chosen for such action than the present, while the scheme of Federation is being carried out. Our National Institution, in which we take so much pride, is being surrounded by Theological and Arts Colleges, which give it great strength. We wish, in addition, to see Faculties in Medicine and Law which will do something more than grant degrees. We are pleased to see the Senate so united in favor of such additions or alterations, and, at the same time, disposed to deal generously with vested rights of the Faculties of the present Medical Schools of the Province.

In the Federation scheme, which is at present under the consideration of the Provincial Government, we understand that the efficiency and usefulness of the teaching in science will be greatly increased. This fact forms a very strong argument in favor of the formation of a Medical College, which will be enabled to take advantage of such a course of instruction. In the United States the courses in science in connection with the Medical Colleges have been rendered more efficient by numerous generous endowments for the purpose of building and equipping complete laboratories for practical teaching in this department. If we desire to keep abreast of the times we should duly consider the importance of this fact. While these facilities are being brought to our doors through the acts of our Government, in providing for higher education in our Provincial University,

we should not hesitate for a moment to take advantage of them, and thus raise materially the standard of medical education in this country.

It is not at present intended to ask for any money from the Government for the purposes of the new college. The promoters of the scheme will be satisfied to obtain the teaching in the school of Practical Science on the same terms as Arts students at present derive such instruction. At the same time we see no reason why the Government should not aid medical education, and we think there is much force in the remarks recently made by Mr. Falconbridge, that we will be more likely to get some assistance from the public treasury, or from private sources, when we have a college which is not proprietary in any sense of the word, but an integral part of the great educational system of the Province.

#### HINTS ON THE TREATMENT OF CHRONIC CONSTIPATION.

Prof. Jacobi is of opinion that in newly born and young children, obstinate constipation and even obstruction may be caused by the curving of the sigmoid flexure upon itself in such a way that one part presses upon another. He recommends the use of enemata given regularly for weeks or months until the condition is removed. The diet should be regulated, but purgative medicines should be avoided.

The continued administration of lime-water, bismuth and prepared chalk is a frequent cause of constipation.

Chronic constipation in nervous and hysterical women aggravate the nervous system. Dr. Peters, of New York, relates one of these cases in whom symptoms of mania developed. It was found impossible to administer medicine in any form, as she refused it. Dr. Peters discovered that she was fond of salad. One was prepared with olive and two drops of croton oil. She ate freely: the bowels were well moved, and the mental symptoms disappeared. Dr. Hudson gives in such cases, calomel grs. xii, with  $\frac{1}{3}$  gr. elaterium,  $\frac{1}{3}$ th belladonna. In the treatment of constipation

in elderly people it is of importance to attend to the condition of the rectum. Its mucous membrane is frequently dry, and allows the faecal matter to accumulate. This can be relieved by lubricating injections, always given with a rectal tube so that the enemata pass high up into the bowel.

Brown molasses, with an equal quantity of melted lard, has been used in this way. A weak solution of liq. potassæ and glycerine is also recommended. Liq. potassæ has the power of breaking up the hard faecal matter as it dissolves the fat and cholesterine. A solution of ox gall answers a similar purpose. In the general treatment of nervous cases and elderly people too little attention has been given to the condition of the bowels.

#### THE MEDICAL PROFESSION AND LIFE INSURANCE COMPANIES.

In another page we have alluded to the unsatisfactory nature of the relationship which the medical profession bears to life insurance companies. We here wish to speak of another matter in this connection, viz., the careless way in which the appointment of examiners is frequently made.

No sooner has a young physician commenced practice, especially if he locates in a city, than a life insurance agent appears, solicits and often succeeds in inducing the new-comer to take a heavy policy, with the promise that he will be made an examiner for the company, and that the premiums will be more than paid by examination fees.

For a week or two a rush of candidates for examination takes place, and the physician begins to think that his fortune is made. They, however, soon fall off, and the doctor finds out that he must either drop his policy or struggle on to pay heavy premiums without any help from the company.

We contend that the companies which allow their agents to act in this manner are indirectly responsible for what is not much better than a species of swindling. The medical is one of the most important departments of the life insurance business, and, other things being equal, that company will be the most successful which



is most particular about the standing and professional attainments of its examiners. We ought to look with suspicion on any company in which appointments are easily obtained.

As a matter of fact, the largest and most reliable American companies pay special attention to the medical department. They have not only one or two consulting physicians at the head-office, but they appoint superintending physicians in each state and province. In this way the companies are assured that examinations will be made by perfectly competent and trustworthy men.

### GONORRHOEA.

In 1879 Neisser observed in the gonorrhoeal secretion certain microbes to which he gave the name of gonococci. Their size is one twenty-five thousandth part of an inch in diameter, or even less. They lie in free masses, and also in the pus cells. In the early stage of the disease but few are present, but so soon as the purulent stage is established they are to be found in great abundance. These micro-organisms are not pathogenic for such animals as dogs, horses and monkeys, which seem to be entirely protected and cannot be infected with the secretion from a diseased urethra. Bockhart was the first to attempt inoculation in the human subject, and injected a quantity of culture into the urethra of a lunatic, who shortly afterwards died of pneumonia. During his life, however, this poor fellow had a typical gonorrhoea, and the gonococci were numerous present. Bumm also had a positive result from the experiment which he made on the healthy urethral mucous membrane of a woman; while Petrone and Kammer found the characteristic cocci in the purulent secretion of the knee joint in a case of gonorrhoeal rheumatism. Zeissel (*Centralblatt für Bacteriologie*) having studied over the subject in sixty-two cases of acute and chronic urethritis, and not being himself convinced, would leave the matter *in suspensa*, notwithstanding the convincing array of statistics and clinical facts in favor of Neisser's gonococci. In the treatment brilliant results are reported following the use of germicidal injections, more particularly a sublimate solution varying in

strength from 1 in 500 to 1 in 1,500. The germs possess wonderful vitality, and it is no unusual occurrence for some of them to become imbedded in the deeper layers of the lining membrane and in the urethral follicles, and to give rise, even months after the initial trouble, to a well marked urethritis without a second exposure.

### ONTARIO MEDICAL ASSOCIATION.

We invite the attention of the profession to the notice (which appears on page 16) of the coming meeting of the Medical Association of Ontario, to be held in Toronto on Wednesday and Thursday, the 8th and 9th of June. The energetic secretary, Dr. White, has made arrangements with the railroads to give reduced rates to all who intend being present at this meeting, which promises to be even more successful than any gathering hitherto held. Among the invited guests who have already signified their intention of being present are Dr. Satterthwaite and Prof. Wyeth, of New York, and Prof. Packard, of Philadelphia. The discussion on medicine will be opened by Dr. Arnott, Dean of the Medical College in London—the subject being "Phosphaturia." Dr. S. Lett, superintendent of Homewood Retreat, Guelph, will deliver an address on "The Relation of Insanity to Masturbation;" and Dr. Taylor, of Goderich, will lead in the discussion on obstetrics by reading a paper upon "The Functional Paralysis of Pregnancy." The meeting will be presided over by Dr. Jas. H. Richardson. Let come who can, the profession in Toronto will give to all a cordial welcome.

### MEDICAL ASSOCIATIONS IN CANADA.

We notice that efforts are now being put forth by the Management of the British Medical Association to obtain a foothold in Canada, by forming branch associations here as in Australia. So far as the movement serves to extend the circulation of their ably conducted journal, we wish them every success.

If, however, the intention is to supplant the already existing associations here, we hope and

expect to see a failure of the movement. We have a Dominion association which has already done some very creditable work, and we have a large and active association in this Province, one which compares favourably with that in many States of the Union.

We should prefer to see an extension of the provincial associations, and some relationship established between them and that for the Dominion. We are of opinion that the impulses and aspirations of Canadians are, in many respects already cramped by our colonial position, and we do not wish to see the system extend to the medical profession. In this respect we are entirely independent, and we hope to remain so.

#### UPPER CANADA COLLEGE.

From a medical point of view we must take great interest in the success of our high schools and colleges, from the fact that our medical students must of necessity obtain their preliminary education in these institutions. Among them all Upper Canada College stands prominent in occupying a position of which its friends and "old boys" may feel justly proud.

An attempt has been made to take away a portion or the whole of its endowment. A large number of the friends of the College made a grand rally on the evening of March 22nd, and made a vigorous protest against any action which would impair its efficiency or destroy its usefulness. We sincerely hope that the hands of the spoilers will not prevail, and that this grand old residential school will ever retain its present position among the educational institutions of Canada.

#### THE NEW UNIVERSITY SCHEME AND STUDENTS' FEES.

We would like our readers clearly to understand two features of the scheme for the new University Medical School, about which there appears to be some misapprehension:—

1. It is not intended that the University shall make any grant of money to the new School, but that it shall empower the College Board to borrow money, the interest of which shall be paid out of the proceeds of the School.

2. There will be no reduction of the fees required from the students. When a young man takes a medical course he is obtaining a professional education by which he afterwards intends to make his living. He should therefore expect to pay for the training.

#### INTERNATIONAL MEDICAL CONGRESS.

Considerable interest is being taken in the next meeting of the Congress at Washington, by the profession in Great Britain and on the Continent. Arrangements have been made by which return tickets will be given by a number of steamship companies at reduced rates. The meeting of the British Medical Association, which will be held in Dublin this year, has been fixed for the first week in August, in order to allow members attending it time to visit the Lakes of Killarney and other places before starting for America.

Weichselbaum, of Vienna, has been making careful observations on the varieties of bacteria found in exudations in eleven cases of primary pleurisy, (8 serous; 1 sero-purulent; and 2 empyema). He found that where there was pus formation, the streptococcus present appeared identical with the same form of bacteria found in any suppuration, while on the other hand, where the exudation was purely serous, no bacteria could be detected.

*The Annals of Surgery*, published monthly, by J. H. Chambers & Co., St. Louis, Mo., is without a doubt the finest periodical of the kind on this continent, being devoted entirely to surgery. All the articles are copyrighted, and are by men eminent in this branch. The subscription is not high considering the excellence of the publication.

"*Small Physicians' Pay*" is the subject of an editorial in a recent number of the *New York Medical Record*. It may do for the other side of the line, but in Canada we have no small physicians. They all pay their subscriptions with a graciousness which is positively charming!

## Medical Societies.

### TORONTO MEDICAL SOCIETY.

STATED MEETING, FEBRUARY 17TH, 1887.

The President, Dr. McPhedran, in the chair.

#### PATHOLOGICAL SPECIMENS.

Dr. McPhedran exhibited several enlarged suppurating glands which he had removed from the neck. The disease commenced about a year ago. At that time the glands inflamed, suppurated and were lanced. The openings continued to discharge freely and shewed no tendency to heal. The operation for their extirpation was then performed. Each sinus was slit up freely, and was found to be lined by a soft, gelatinous substance. This was scraped out with Volkman's spoons, the remains of the caseous glands were removed, and drainage-tubes laid in the sinuses. Moderate pressure was then applied over all by means of gauze and absorbent cotton. Healing took place for the most part kindly.

Dr. Sweetnam had used calc. chloride in rather large doses with marked beneficial effect in similar cases.

Dr. Atherton approved of the plan of slitting up the sinuses and removing the glands. He had not found much benefit from calc. chloride, but had extirpated the inflamed glands with gratifying success in several cases, one of syphilitic origin.

Dr. Oldright had used nitrate of silver as a caustic, by heating a knitting-needle, or probe, and then placing it in contact with the caustic, so that it acquired a thin coating. In this way caustic could be applied to the whole of the sinuses. At the same time he used cod-liver oil and the iodides internally.

Dr. Reeve presented (1) a specimen of calcified crystalline lens removed from the anterior chamber of the eye, into which it had been dislocated. Before operation, the pupil was strongly contracted with eserine sulphate so as to prevent the displacement of the lens backwards during operation. Cocaine was also instilled into the eye at the same time to relieve the pain caused by the eserine, and also to obtund the sensibility of the cornea, and

prevent spasm of the orbicularis muscle. The incision was made downwards, and the lens removed without trouble:

Also, (2) a glaucomatous eyeball in which there was dislocation of the lens downwards upon the iris and into the anterior chamber. The surface of the eyeball bulged in some places, owing to the localized thinning of the sclerotic, and the great tension of the intra-ocular fluids. The vitreous humor was quite fluid. At the time of operation there was pan-ophthalmitis of the affected eye, and as sympathetic inflammation of its fellow was feared, it was thought advisable to remove the inflamed organ.

Dr. Atherton had found a calcified lens at the fundus of an eye which he had removed for pan-ophthalmitis of three weeks duration. The retina was atrophied at and near the dislocated lens.

#### CASES IN PRACTICE.

Dr. McPhedran related a case of syphilis in which, two weeks after intercourse, a number of herpetic ulcers appeared in the sulcus behind the glans. Within a few days, four of these formed typical Hunterian chancres. The unusual number of hard chancres, and their early appearance are remarkable in this case.

Dr. Sweetnam reported a case of perforation of the soft palate from syphilitic ulceration. After ten days of anti-syphilitic treatment the palate was operated upon in the usual way. It did well for five days, when the stitches tore through from contact with solid food which had been taken contrary to orders. An ordinary rubber palate-plate was then made by a dentist, with a boss upon its upper surface, which exactly fitted the aperture. This produced great improvement in the voice, and was worn with comfort. The boss was snipped off when granulation commenced, and the plate still worn till complete healing took place. The support and rest given to the soft palate by the plate evidently promoted healing.

STATED MEETING, FEB 24.

Dr. W. H. B. Aikins read a paper on

THE BACILLUS OF TYPHOID FEVER,

illustrating the subject by means of some very interesting 'cultures' of the bacilli on potato,

and in gelatine, and agar-agar. Several microscopic specimens of the growing and stained bacilli, were also shown.

Dr. Hamilton followed with a paper on

#### REDUCTION OF HERNIA.

The methods of reduction upon which he dwelt were: (a) Gravity with succussion, as practised by inversion. (b) Taxis. (c) Application of cold externally, by means of ether-spray, ice-bag, etc., and internally, by means of cold water injections. (d) Digital dilatation of the constricting ring.

*Discussion.*—Dr. Oldright expressed the opinion that digital dilatation of the ring was, in the majority of cases, almost, if not altogether, impracticable, as it was found exceedingly difficult, even when the sac was empty, and after dividing the skin, to dilate the dense, fibrous, inelastic ring.

Dr. Doolittle mentioned a case in which reduction by taxis occurred in a few minutes, after suspension by the friends of the patient for nearly an hour had failed.

Dr. McFarlane had always availed himself of the advantages of gravity offered by elevation of the hips. In making taxis, the anatomical relations of the parts should be borne in mind, and pressure made exactly in the course of the axis of the canal.

Dr. Carson thought that both suspension and taxis have their uses in different cases. He illustrated by a diagram how suspension would favor reduction, when the contents of the sac consisted of coils of intestine, or a single knuckle with fluid contents. And also showed that if the contents of the sac were solid and firm, suspension would fail.

Dr. Atherton thinks rectal injection may be advantageously used in acute cases, *i.e.*, where the sac of the hernia is newly formed. He had succeeded in reducing a hernia, after withdrawing a small quantity of fluid by a hypodermic syringe.

Drs. Smith and McPhedran, showed a case of cancer of the breast in a woman aged 44. The growth commenced nine months ago. It is now nearly as large as a child's head, indurated in some parts, and cystic in others. The surface is quite nodular; and ulceration, giving rise to profuse hemorrhage and serous discharge,

has occurred in a few spots. The axillary and supra-clavicular glands are enlarged to such an extent that the Society thought operation would fail to eradicate the disease.

#### CHATHAM MEDICAL AND SURGICAL SOCIETY.

An ordinary meeting was held, March 11th, J. P. Rutherford, M.D., president, in the chair.

Dr. Holmes related a case of lithotripsy in a young man, aged 26. A phosphatic calculus was removed in two sittings, the fragments of which weighed 3iiiss. Patient made a good recovery.

Dr. Fleming read a paper on a case of Fracture of the Trachea, with Laceration of the External Soft Parts. He pointed out the dangers and the great rarity of this accident, as well as the causation of it in civil practice.

On March 6th, 1884, was summoned to see J. B., aged 46, a spare, muscular man. Found him suffering from a fracture of the trachea, with laceration of the soft parts, and just rallying from a profuse hemorrhage. An examination of the wound with the finger induced fresh bleeding, which nearly proved fatal from the loss of blood and from asphyxia. His violent efforts to expel the blood from his lungs made it almost impossible to do anything to stop the hemorrhage. He was placed on his side, as well over on his face as possible, and ice applied. The bleeding ceased in a few minutes and did not recur, though he coughed violently for some time. He was placed in an airy room, which was kept at a temperature of about 80° F., and its air moistened with steam. No attempt was made to close the wound, which was dressed with oil silk, over which an ice bag was kept constantly applied. Pulse 120; temp. 100° F. He was given ergot and bromide of potassium, with a diet of milk and beef tea. Five days later a violent hemorrhage set in, lasting half an hour. Similar treatment pursued as in the primary hemorrhage. A large quantity of fluid and clotted blood was coughed up, the bleeding ceasing when nature seemed about exhausted. He rallied slightly when, with an almost superhuman effort, he dislodged a firm, dense clot,

about as large as a horse chestnut, with immediate relief. Nourishment was given him as soon as expedient and the bromide increased. Pulse 125, temp. 102° F., though both were about normal before the hemorrhage. Thirty-six hours later moderate hemorrhage again occurred, lasting twenty minutes. The week following this his temperature ranged from 100° to 102°, but remained normal the balance of his convalescence. Six weeks after the injury the wound was closed by a fibro-cellular membrane, and during this time not more than  $\frac{3}{4}$  of pus was secreted. The 4th, 5th and 6th rings of the trachea were divided, the ends separating about half an inch, while the posterior portions of them were somewhat twisted upon themselves. The missile, a square-ended white ash stick  $3\frac{1}{2}$  ft. long,  $1 \times \frac{5}{8}$ ths in., was broken into two pieces by the resistance it met. It was shot like an arrow from a driving-wheel making 1,400 revolutions per minute, striking immediately above the sternum and a little to the left of the median line. Since the accident he has suffered from dysphonia, and experiences much difficulty in expectorating mucus.

*Treatment.*—The hemorrhage was controlled by ice, it being impossible to ligate the vessels or to apply sufficient pressure to control it. Inserting a tracheotomy tube and packing the wound was inadmissible while the lungs were loaded with blood. Ergot and pot. bromide were given to lower blood pressure and to lessen the irritation.

Dr. Holmes favored using ergot, but not the bromide, owing to its depressing action and its soothing influence on the bronchial tubes. Thought opium combined with atropine would, perhaps, be better.

Dr. McKeough said a night cap device, applied to the head and fastened to the chest, was very useful, controlling the movements and keeping the chin in flexed position. Opium open to the same objection as the bromide.

The President would be inclined to use ergot and bromide, carefully watching their effect upon the patient. Thought belladonna might be useful. He wished to know the prospects of the patient always retaining a patulous trachea.

Dr. Fleming, in reply, said he used bromide, as the patient had no symptoms of heart failure at any time. Did not fear contraction of the trachea.

### Hospital Notes.

#### REMOVAL OF A PORTION OF INFERIOR MAXILLA FOR MALIGNANT DISEASE, BY DR. GRASETT.

(Kindly reported by Dr. Dow of the Resident Staff.)

W. C., aged 50, born in England, occupation a baker; admitted to Toronto General Hospital Oct. 23, 1886; operated on January 16, 1887. Family history good.

Thirty years ago patient had gonorrhœa, bubo and chancres; twenty years ago he had small-pox; he has always used alcohol freely and has been a heavy smoker, holding his pipe in the left side of his mouth. One year ago he had a rash all over his body, accompanied with sore throat.

In October, 1885, patient felt a slight roughening on floor of mouth, under the tip of tongue, and on looking at it found a small white patch. He consulted his family physician, who gave him a stick of nitrate of silver, with instructions to cauterize it night and morning. This made it more painful and it continued to increase. He then consulted a quack surgeon who was travelling through Ontario, and who prescribed a lotion. This was useless, and since that time his condition has been becoming worse.

*Present condition.*—There is an indurated spot on floor of mouth, about the size of a five cent piece, just under the tip of tongue, and on the alveolus of lower jaw is a tumor extending from second incisor tooth on left side to second molar on right side. It is elevated, covered with creamy pus, and painless to the touch.

*Operation.*—Patient was anesthetized and an incision was made from above downwards in median line of lower lip, the flaps were then dissected away from diseased portion of jaw, the bone was sawn through with a Hey's saw, after which the muscles were separated and the bone removed. The hemorrhage was controlled by means of ligatures and the application of sponges wrung out of hot water, the flaps

were brought together by means of silk sutures, and the patient sent to the ward. For the first twenty-four hours his tongue was held forward by means of a ligature which was passed between the lips and held by relays of students.

After the operation the patient's temperature, at the end of four hours, was  $100\frac{1}{2}^{\circ}$  and his pulse 104; at the end of twenty-four hours his temperature was  $101^{\circ}$  and his pulse 120, and during the remaining period of convalescence his temperature never rose above  $99^{\circ}$  and his pulse 89. Nourishment for the first day was kept up by giving him enemata of milk and brandy; on the second day he was able to swallow milk, brandy, and oyster soup, and on the fifth day after the operation he was able to swallow bread, beef, etc. The wound healed from the first. The stitches were taken out on the eighth day after operation, and on Feb. 21, 1887, he left the hospital feeling perfectly well and able to speak quite distinctly.

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### Correspondence.

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To the Editors of the CANADIAN PRACTITIONER.

#### THE GAOL AND THE INSANE.

SIRS,—A long time ago, when people suffered from mental unsoundness, our forefathers used to stone them, stock them, duck them in ponds, whip them and hunt them, getting much amusement out of them; other races, more ignorant, quietly dispatched them to the other side of Jordan.

After a few hundred years our fathers considered that the devil had got into these people, and, after various devices had been employed to cast him out, would chain them up and feed them with various herbs which had the reputation of being able to purge his satanic majesty right out. By and bye, they got them into places of shelter, of which our modern asylums are the legitimate outgrowth.

But the partitioning of the afflicted into classes was never attempted until lately, and of all the divisions of mental diseases, what think you of that one under which we, in this evening of the nineteenth century, make, viz., the eminently scientific one of rich and poor?

If the friends of the unsound one have money they are taken into palatial buildings, kept pain-

fully clean and neat; but if poor the diseases with them are so different, so peculiar to poverty, that it is thought they require a little of the primitive forms of treatment meted out so skilfully by our forefathers; but as we have special laws against stone-throwing, no stocks, or ponds, our nearest implements of torture, physical and mental, are the terrifying bolts and bars of our common gaols, with all that these, to a person sick and sensitive, would imply; and whereas our forefathers could turn out *en masse* and pelt and jeer and have lots of fun with these people, now we reserve them for the jeers and jokes and diversion of our basest criminals, the most unfeeling and unsympathizing brutes we can collect in our gaols, and the larger our gaols the more fun there is.

There are some few in the community who think this classification of the insane not in accordance with true facts, but that does not matter much, the Government has placed its seal on it. The criminal classes must have amusement, and the least the Government can do is to let them get it out of those who, being sick, cannot pay to escape, and there is the end of it. Truly we are "chips of the old block."

Yours,  
Toronto, March, 1887.

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### Book Notices.

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In the notice of Strümpell's *Practice of Medicine* of last month, for *asthma*, read *anthrax*.

*The Antiseptic Treatment of Summer Diarrhœa.*  
By L. E. HOTT, A.M., M.D. Reprint.

*On Fevers: their History, Etiology, Diagnosis, Prognosis and Treatment.* By ALEXANDER COLLIE, M.D. P. Blakiston, Son & Co., Philadelphia.

*A Reference Handbook of the Medical Sciences, embracing the entire range of Scientific and Practical Medicine and Allied Sciences.* Edited by A. H. BUCK, M.D. Vol. IV. Wm. Wood & Co., Lafayette Place, New York. 1887.

*Some considerations concerning Cancer of the Uterus, especially its palliative treatment in its later stages.* By ANDREW F. CURRIER, M.D. Reprinted from *New York Medical Journal*, 1887.

*The Past, Present and Future Treatment of Homœopathy, Eclecticism and kindred Delusions which may hereafter arise in the medical profession, as viewed from the standpoints of the history of medicine and of personal experience.* By J. BOWDITCH, A.M., M.D. Boston: 1887.

Dr. Wm. A. Hammond will open the April *Popular Science Monthly* with an able article entitled "Brain-Forcing in Childhood." The paper gives a vivid picture of the evils of the book-cramming process, now so common in both public and private schools, and also contains a strong plea for fewer studies, more direct contacts with nature, and less of the intervention of books.

*The Science and Art of Obstetrics.* By THEOPHILUS PARVIN, M.D., LL.D., Professor of Obstetrics, etc., Jefferson Medical College, Philadelphia; octavo 697 pages, with 214 engravings. Philadelphia: Lea Bros. & Co. —\$4.25.

This is a good, well written work, which we can heartily commend. It will be found particularly useful as a text-book for American students. As the work is by no means overloaded, we would have been glad to see some notice of the British method of using forceps, more especially as the plan described by the author is a little complicated.

*The Year-Book of Treatment for 1886.* Philadelphia, Lea Brothers & Co., 1887.

This annual is as usual deserving of the highest commendation, for within the small compass of 300 pages, the busy practitioner will find short references to all the important therapeutical advances (medical, surgical and obstetrical) that have been made up to October, 1886. The books and periodical literature of all countries have been sifted by twenty-two English physicians and surgeons of eminence, and the result of their labors is here presented in a most available form for ready reference.

*The American System of Gynecology*, which for some time past has figured among the more important announcements of Messrs. Lea Bros. & Co., of Philadelphia, we are glad to learn is well through the press, and may be expected shortly. Numbering among its contributors such

prominent authorities as Professors Barker, Battley, Engelmann, Garrigues, Goodell, Reeves, Jackson, Lusk, Mundé, Reamy, Thomas, Van de Warker, etc., it will certainly present a thoroughly satisfactory and complete statement of the science in its most recent aspects, and we feel justified in congratulating the profession that what has been peculiarly an American specialty is about to receive from American hands the literary tribute due to it.

*Manual of Diseases of the Ear.* By THOMAS BARR, M.D. Glasgow: Maclehenose & Sons, 1884.

This work is designed to give students and practitioners of medicine a good general knowledge of diseases of the ear. The work is divided into four parts: the first is devoted to the methods of examination of the ear and the general causes, course and treatment of diseases. The second section takes up the parts of the ear covered by skin—the external ear. The third part discusses the mucous tract—middle ear; and the fourth part the nervous apparatus—internal ear. This is a convenient plan, although the frequent references, "to avoid repetition," from one part to another, especially a subsequent part, are often annoying. The chapters which are particularly worthy of notice are those on chronic mucous and dry catarrh of the middle ear, and chronic suppurative disease of the middle ear. There is a full index and a complete list of formulæ for use in the various diseases. The whole work is comprised in 529 pages and is well issued.

*Manual of Life Insurance Examination.* By JAMES THORBURN, M.D., Ed., Toronto.

The author of this book, Dr. Thorburn, is the chief medical officer of the North American Life Insurance Company, and has had an extensive experience for many years in the examination of risks. He is, therefore, in a good position to know the requirements necessary in this branch of medical practice. This little work is most conveniently arranged for reference, as the various diseases are placed alphabetically. We have no hesitation in recommending the work as one likely to be of great service to those practitioners who are engaged as medical examiners.

Too little attention has been paid to this subject both by the physician and by the insurance companies. The physician should look upon the position of examiner as one of great responsibility, and one which requires sharp and accurate powers of discernment as well as mature judgment. On the other hand the companies should consider the medical officers among the most important of the staff.

The whole success of a company depends on its medical examiner. This being the case, it is difficult to understand the carelessness shown by some companies in the appointment of its examiners, and the very humiliating manner in which the latter are frequently treated by the companies.

*A Manual of Microscopical Technology for use in the Investigations of Medicine and Pathological Anatomy.* By DR. CARL FRIEDLANDER, University of Berlin; translated by Stephen Yates Howell, M.A., M.D., pp. 249. G. P. Putnam's Sons, New York and London; D. O. Haynes & Company, Detroit, Michigan.

The name of the well-known investigator and scientist, Carl Friedlander, is, in itself, a guarantee of the useful character of this work, and we are safe in saying that the Manual has lost nothing in its translation by Dr. Howell, who has added numerous foot-notes, explanatory of the various views and suggestions of the author. The need for such a work as this has been great. Most of the treatises on this important branch of medical science are too comprehensive, and too expensive for the use of students and busy practitioners, but in this manual, Microscopical Technique is treated clearly and fully, in as few words as possible. A large portion of the book is devoted to the description of hardening reagents, and the preparation of sections and stains. There is a chapter introductory to the study of Bacteriology, and the examination of fluids such as sputa, urine, pus, etc., is fully considered. We cordially recommend it, especially to students and practitioners who require a brief yet comprehensive work on this important subject.

*Diseases of the Nerves, Muscles and Skin.* Being Vol. III. of DR. HERMANN EICHHORST'S Handbook of Practical Medicine, and Vol.

X. of Wood's Library of Standard Medical Authors, 1886 (consisting of 12 vols., price, \$15). Sold only by subscription. William Wood and Company, New York.

This work, though necessarily concise, is quite comprehensive, and thus forms a superior handbook of reference for the medical practitioner. It is profusely illustrated. Most of the cuts represent characteristic conditions, and hence are peculiarly instructive. The treatment of many of the diseases of the nervous system is disposed of quite summarily in some cases, or the reader is referred back to the treatment of some allied condition, without even the convenience of being told the number of the page. Sixty-five pages at the end of the book are devoted to the treatment of diseases of the skin and its appendages. We doubt whether any good purpose is served by the repeated employment of a series of half a dozen or more polysyllabic words, where simple English equivalents readily suggest themselves, but the general excellency of the work is such that this foible of the author may well be excused. The excellence of the type, paper and binding of Woods' Library, is too well known to need comment. On the whole this is a book that will be valued by the profession in this country, and we bespeak for it a favorable verdict from the readers of the PRACTITIONER.

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### Personal.

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Dr. Bethune, of Wingham, has removed to this city.

Prof. Arlt, the celebrated Austrian ophthalmologist, is dead.

Dr. Bigelow, recently returned from London, will practice in Parkdale.

Dr. J. H. Duncan, of Thamesville, has gone into partnership with Dr. Tye, of Chatham.

Dr. Coatsworth has returned from Edinburgh and commenced practice on Gerrard Street East.

Dr. James F. Bell is now practicing at La Grand, Union Co., Oregon.

Dr. Brien, M.P. for South Essex, is dangerously ill of typhoid fever.

Dr. P'Anson has started practice on Gerrard Street East, Toronto.



Dr. William Youker, Belleville, has been appointed associate coroner for the county of Hastings.

Dr. W. H. Montague, of Dunville, has, on a recount, been declared elected to the Dominion House.

Dr. Jas. C. Carlyle, who recently passed the triple qualification examination, Edinburgh, has returned to Toronto.

Dr. A. Robinson, of Hamilton, has gone to Unionville, to take the practice of Dr. Mitchell, lately deceased.

Dr. H. C. Wool, of Philadelphia, has been tendered the chair of medicine at the Johns Hopkins University, Baltimore.

Dr. William Giles, of the village of Haliburton, has been appointed associate coroner for the provisional county of Haliburton.

Dr. Geo. Dawson, son of Sir Wm. Dawson, Montreal, will have charge of the Yukon Valley expedition, which is to try and define the unsettled boundary of British Columbia and Alaska.

Some changes, rendered necessary by the death of Dr. Barrett, have been made in the staff of the Woman's Medical College: Dr. McPhedran was chosen Dean; Dr. Peters takes Physiology; and Dr. J. Cavin, Pathology.

Dr. N. S. Davis, of Chicago, the president elect of the ninth International Medical Congress, completed his three score years and ten last January, and in honor of the occasion received several addresses and numerous handsome presents.

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BIRTH.—At Kingston, March 11, the wife of Dr. W. H. Henderson, of a daughter.

A DISINTERESTED HUSBAND.—Wife (to husband)—John, mother is very sick this morning, and I wish you would stop at Dr. Pellet's office on your way down town and send him here at once. Husband—Why not employ young Dr. Smith? He is just beginning to practice and ought to be encouraged. I believe in giving young men a skow.—*New York Sun*.

TREATMENT FOR BOILS.—Cover the boil and the surrounding ring with a paste made of

honey and powdered arnica flowers, placing a piece of cloth over all. Change the dressing every two hours. The pain and tenderness will cease by the second or third day. If applied at the very beginning of the boil it will abate in 24 hours.—*Giornale Internazionale*.

A correspondent writing to the *Cleveland Medical Gazette* says Billroth is "a marvellous surgeon—operates like a god—with an elegance and certainty with which only Billroth can operate. But he is a very poor speaker, and it is extremely difficult to understand him. I saw an incident which I think will interest you. A patient was brought before Billroth with a swelling in the perineum. I thought of several things that it might be, and before I was aware of it, Billroth commences to lecture on the subject of hernia—for Heaven's sake, what had this to do with the hernia? But I was soon to find out. In the course of his elaborate lecture, he suddenly launched upon ischiatic hernia. Now I saw the connection, and I thought: 'This is the place to see rare things.' Well, after he was finished the patient was narcotised. The initial incision was made with Billrothian elegance and grace. Lo and behold! in the depth sat a beautiful, round, circumscribed and yellow lipoma. We are not infallible, Billroth included."

The attention of the medical faculty is specially directed to an advertisement of "Little's Soluble Phenyle," which appears on page 15 of this journal. Too much cannot be said as to its merited virtues, as a first-class disinfectant and antiseptic, so vividly shown from the many medical and other testimonies received in its favor. This article has been before the public for many years, and used in the different forms as prescribed in the circular, with the most satisfactory results, being, as claimed for it, superior to carbolic acid, having all the good qualities, but non-poisonous and non-corrosive, and leaves a pleasant and refreshing odor after use. Phenyle is so cheap as to render its use acceptable generally in the mansion, college, hospital, etc., for all purposes where an antiseptic, deodorizer, and disinfectant agent may be required.