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Original Communications.

JUDGMENT IN THE CRICHTON CASE.

SIR JOHN BOYD, CHANCELLOR.

Re CRICHTON.

DECEMBER 15, 1906.

This lengthened enquiry has resulted in a mis-trial. To manifest this it is necessary to consider the proceedings briefly.

The charge, as originally launched on 24th January, 1905, was that A. Crichton "did in the years 1902-3-4 cause to be issued to the public and the drug trade, circulars and advertisements as to the efficacy of 'grippura' as a cure for grippe and influenza, and in so advertising was guilty of infamous and disgraceful conduct in a professional respect."

There was no publication in the newspapers, but the objectionable circular was sent by mail to various persons, "intelligent persons," says the accused, selected from names in the directory and Bradstreets, page 40. The circular is in the form of a broad sheet (22 in. x 14 in. in size) except that it is printed on both sides and contains a miscellaneous jumble of testimonials, references to different diseases, commendation of grippura, information about the doctor himself and his discovery, and quotations as "to many important discoveries being fearfully hindered and opposed at the start," page 21.

At the opening of the investigation particulars of the charge were sought, but this was refused by the prosecution on the ground that all might be found in the circular.

The doctor was then questioned at large under oath as to all

the circulars, including that of 1905. Substantially they are the same; and as to all that is stated therein respecting his secret remedy, "grippura," and its power to cure certain ailments and alleviate certain others, he affirms their truth or his belief in their truth. The testimonials printed from persons benefited are all genuine, and generally it was spoken of by the witnesses for the prosecution thus: "There was nothing in the wording of the circular offensive or of objectionable character," Dr. Field, page 55. "It is not the contents of it I am objecting to; the claims he makes are enurely objectionable," Dr. Henderson, page 72.

The accused declined to disclose the ingredients of his preparation, but offered to submit it to be practically tested in the hospital and to have it "sifted to the bottom" (as he expressed it), page 26.

It was also proved that the accused was a graduate in Arts in the University of Toronto and silver medallist in Classics; that he had studied and completed his course in medicine in the Toronto school, and had been in practice since 1892. Four physicians were examined for the prosecution, and their evidence in the main agrees that the conduct of the accused in keeping his remedy a secret and in advertising its benefits publicly was disgraceful and infamous in a professional point of view under the statute, and this even if the remedy was a good one. But they all discredit the truth of what is claimed, and though they have not tried the mixture and have not any practical knowledge of it, they give expert opinion in contravention of the testimonials and of the statements of the accused and others examined. The underlying belief in the mind of these professional witnesses may be thus expressed: The fact of the formula being kept a secret indicates *fraud*; the fact of advertising the nostrum indicates *quackery*.

Dr. Ferris explains his point of view in this way: "If he is right the circular might not prove to be misleading, but at the present time it would be. . . . It should be subject to test at the hospital, and if he is right the circular is not misleading." Pages 49-50.

Dr. Douglas (who was formerly a partner of the accused) says, "I believe the object is to deceive the public." Page 52.

Dr. Ferris thinks it "not intentionally misleading." Page 50.

Dr. Douglas proceeds: "This conduct is little better than a 'quack,'" who, he explains, is "a man who advertises to the public that he can do a certain thing, and gets money out of

them when what he advertises is no good." Page 65. And again, "It is misleading to the public because I don't think he can accomplish what he claims." Page 66.

He places no value on the lay testimonials, and says medical people are best able to judge, and he agrees with Dr. Ferris that it would be a fair test to submit the preparation to be applied in a hospital. Page 67.

Dr. Henderson says: "The claims he makes are objectionable unless they were proven to be true," page 72, and further, that the accused's own experience and the testimony of laymen are not proper tests or proofs. Page 73.

The accused then put in a Presbyterian and a Methodist clergyman and an old resident of Castleton (where the accused practiced), who proved that he had a good reputation for honesty, integrity and truthfulness. These witnesses also spoke generally of the benefits they and their families had derived from the use of "grippura."

Upon these materials the Committee of Enquiry reported on the 5th July, 1905, that they had failed to arrive at a conclusion, and asked leave to consider further the evidence, exhibits, and the case generally.

In submitting this report the Chairman said that "All agreed that it was disgraceful conduct and came under the statute . . . that although from all the facts the advertisements and statements were such as were very misleading to the public and had the effect of taking money out of the people's pockets; yet that the Council had never recommended that any man should be struck off for advertising alone. There has always been something more in connection with it. . . . He did not feel that the case was sufficiently strong to bring in a verdict against him. . . . It is a very difficult case. . . . He firmly believes he is doing what is right. He thinks he is sure to help poor suffering humanity for consideration. If the consideration was not there, I don't think he would do it. . . . We do not want to report a man where the evidence is in our minds not quite strong enough. . . . If Council says this evidence is not sufficient we will try to get some more."

It was then referred back to the Committee to take further proceedings, if the accused did not stop advertising.

The second notice of proceedings to erase the name was served on the 27th of April, 1906, alleging that the appellant had been guilty of infamous and disgraceful conduct in a professional respect, and giving in the notice as particulars these: That he did infamously, improperly and unprofessionally

advertise and distribute advertising circulars claiming to have discovered a remedy which would cure la grippe or influenza in a few hours (and assist in curing a number of other diseases), and did solicit and request that all letters of enquiry in reference to the remedy should be sent to him, etc., and that said advertising pamphlets were distributed to some of the residents of the county of Ontario and throughout the province.

In answer to a letter from the appellant's solicitor asking for full particulars as to wherein the advertisement or circular was infamous or disgraceful, the solicitor made response, referring to the words quoted, and saying: "No further particulars necessary. The mere fact of Crichton permitting his name to be used in connection with an advertisement of a patent medicine, which apparently this is, is sufficient to bring him within the wording of the Act. We cannot see that we can give any further particulars." Letter, 23rd April, 1906.

Thereupon and thereafter the enquiry was resumed, and a second trial had with the taking of further evidence, in addition to what had been given on the former enquiry.

The rule of law in such trials is that "The accused person is not to be taken unawares. . . . Full particulars should be given so that he may be fully apprised with what he is being specifically charged." *Re* Washington, 23 O. R., 309. The charge was not substantially varied from what it was at first, and the new evidence given was not essentially different from the old, with this single exception, that "grippura" had been meanwhile analyzed and its ingredients reported as being about 8 per cent. of hydriodic acid and the rest glycerine and water. This analysis was *ex parte*, and the accused asserts that in addition to these there are other ingredients which he did not disclose. Page 147.

Dr. Crichton was again called, and repeated his honest belief that all the statements were true. He referred to Dr. Smith, a medical graduate of Queen's (not licensed in this Province), who writes: "After using thirty bottles" (not personally, I assume), "he was convinced that many of the statements in the circular are true." He also repeats his offer to have the medicine tested by other doctors in fair cases, or in any hospital (119).

The prosecutor then called Dr. Pyne to prove his analysis. He said: "It is disgraceful to advertise something, and to get money by it, when it will not cure; it would be misrepresentation and misleading." Page 126. "That composition would

cure nothing that I know of. I would not say it is impossible to cure anything, but I do not know that it does. It is because it is against professional etiquette (to advertise cures and to keep remedies secret) that I say it is disgraceful and infamous; that is, from a doctor's point of view." (Page 130.) "If the statements are true I would not consider it disgraceful in an ordinary person to publish. but in a doctor it is contrary to rules laid down by the Ontario Medical Council, and would be disgraceful." Page 131.

(I would just note here that the accused was admitted to practice before these rules were passed by the Council.)

He continued: "Hydriodic acid is not in the British Pharmacopeia; it is not recognized as an official preparation; it is hardly used at all. It is supposed to act as an alterative and lowerer of the temperature, but that does not seem to be stated on very good authority. . . . It is probable it may have that effect." Page 134.

Dr. Field, having heard read the analysis as to "grippura," said: "It is absolutely worthless; I never tried it for grippe." Page 135.

In re-examination he is asked, "It would be imposing on the credulity of the people?" A. "Yes; obtaining money for something which was not true."

Mr. Kerr objects to the leading, and asks: "If it does what they say the people are not being defrauded." A. "If it does what he says they are not." Page 141.

Dr. Ferris, again examined, said: "It was infamous to withhold a valuable remedy from the profession if it was, as claimed, of general benefit." Page 143. "And that the statements in the circular are infamous and disgraceful from a medical standpoint." Page 142.

Upon all the evidence the Committee then made a written report to the Council, finding proved the charge that the appellant did infamously, disgracefully, improperly and unprofessionally, advertise, and also that the said appellant endeavored to impose on the credulity of the public for the purpose of gain by attempting to deceive the said persons as might read (sic) the said advertisements.

My brother Mabee has commented on the refusal to furnish particulars and to supply a copy of the first evidence, and in the apparent neglect of the Council to read or master all the evidence; and I agree with his observations on these points.

I proceed to what was said by and before the Council when the report was adopted. Dr. C. "The question is a very

simple one; it is not whether this man has violated any code of ethics or not. . . . it is not whether he has advertised or not. The question is simply this: He is an educated man, medically educated, and a graduate of the College. Can an educated medical man, acquainted with the action of drugs, advertise to the whole community that a remedy which he keeps secret, but which consists of a few drops of hydriodic acid, (will) cure any particular disease and every case of it in an hour or two. Is that fraud or not?" Dr. H. "It is fraud, of course."

Dr. B. (the Chairman of Committee). "This man has had two trials; there was evidence taken at both of these trials, and . . . I maintain that he has been conducting a fraud, and . . . the Council cannot do anything else than striking off the registry."

The President: "Not to punish him, but to protect the people."

Upon which the motion to adopt was carried, one member not voting and one member voting "nay." Report of 1906-1907, page 220.

The report was then affirmed with the rider disclosing a new phase of the investigation, the result of which that the *bona fides* and truthfulness of the appellant are negatived and his fraudulent and deceitful conduct affirmed. Without taking him to task on these grounds it is in effect assumed that he did not and could not believe in the efficacy of his alleged discovery; that what was put forth in his circular was false; that acting as an imposter he seeks to impose upon and lead astray a credulous public, and that his whole conduct was fraudulent with intent to deceive the community for his own personal gain.

Surely in an investigation of such serious moment, involving professional extinction to the party inculpated, there should have been at the outset the charge formulated in this aspect of fraud and falsity. The whole evidence for the defence must have assumed a very different aspect had the prosecution been framed and conducted on these lines.

Starting with the simple yet comprehensive charge that the man advertised his business, setting forth the curative virtues of his medicine (which of itself, in the opinion of the witnesses constituted infamous and disgraceful conduct from a professional point of view), this was covertly directed during the course of the proceedings, so that in the issue it is found that the statements in the circular were false; that he knew them to be false; that he made them with intent to deceive and

impose on the public, and that the whole system of falsehood and imposition was merely for the purpose of making money.

I might stop at this point and say nothing more; but in view of what was argued, and having regard to the tenor of the evidence, and the offer to test the remedy, it may not be improper to say something about the law and other surroundings of the case.

No doubt the provincial legislation was suggested by the provision found in the English Medical Act of 1858, 21 and 22 Vict., ch. 90, sec. 29. By this, if a medical practitioner was, after due inquiry, adjudged by the Medical Council to have been guilty of infamous conduct in any professional respect his name may be erased. The Council were made the sole judges and no appeal lay if one was found guilty by the Council after due enquiry. But internal evidence indicates that the real original of our statute is sec. 13 of the English Dentists' Act of 1878 (21 and 42 Vict., ch. 33), by which it is enacted that if a person registered as a dentist has been guilty of any infamous or disgraceful conduct in a professional respect, he shall be liable to have his name erased by the Council; other provisions followed as to trivial offences, etc., which are found in our legislation, thus ear-marking its origin. The section of the Ontario Act applicable to this prosecution first appeared as a new provision by way of amendment to the existing Medical Act in 1887 (50 and 51 Vict., ch. 24, sec. 3) (34) (1), which is now found in the present revised statute, R. S. O., ch. 176, sec. 33 (1) (1897). Power is given to the Council to erase the name of any registered physician who has been guilty "of any infamous or disgraceful conduct in a professional respect." These words have been located in the mouths of witnesses as if the last word was "aspect" and not "respect." The meaning of the statute is not what is "infamous" or "disgraceful," from a professional point of view, or as regarded by a doctor and as construed in the light of the written or unwritten ethics of the profession; it is whether his conduct in the practice of his profession has been infamous or disgraceful in the ordinary sense of the epithets, and according to the common judgment of man. The language of the English judges as to the words in the Medical Act afford a good definition.

In *Allison v. General Council of Medical Education and Registration*, 1894, I. Q. B. 750, at p. 761, Lord Esher, Master of the Rolls, and his brethren construe the words "infamous misconduct in a professional respect" thus: "If it is shown that

a medical man in the pursuit of his profession has done something *with regard to it* which would be reasonably regarded as disgraceful or dishonorable by his professional brethren of good repute and competency; that it is open for the Medical Council to say that he has been guilty of infamous conduct in a professional respect." The meaning is perhaps made more clear when we couple to this the words of Barr, L. J. (speaking as to the Medical Act): "Upon a charge of infamous conduct in some professional respect, the particulars which should be brought to this attention in order to enable him to meet that charge ought to be particulars of conduct which, if established, is capable of being viewed by honest men as conduct which is infamous. . . . If nothing is brought before the tribunal which could raise in the minds of honest persons the inference that infamous conduct had been established, that would go to show that there had not been a due enquiry." Leeson *v.* General Council, 43 Ch. D. 383-4; Regina *v.* General Council, 3 E. & E. 525 (1801) the judges, Compton, J., and Hill, J., treated the phrase "infamous conduct in a professional respect" as equivalent to "infamous professional conduct."

Now the essence of the enquiry here is (not as it was begun, but as the Committee regarded it at the end), falsehood or no falsehood; fraud or no fraud; deceit or no deceit.

As said by Halsbury, L. C., in B. C. *v.* Lea (1897), A. C. 230, "A false statement made knowingly in order to gain some benefit is whatever is the subject matter of the Statute, and in every sense of the term, an immoral act." And as to defraud and to deceive, we cannot find a more terse or happy elucidation of the meaning than is given by Mr. Justice Buckley in *re* London, 10 Mans., B.C. 202: "To deceive is to induce a man to believe that a thing is true which is false, and which the person practicing the deceit knows or believes to be false. To defraud is to deprive by deceit: by deceit to induce a man to act to his injury. To deceive is by falsehood to induce a state of mind: to defraud is by deceit to induce a course of action."

Thus tested, how stands the evidence? The statements made were believed to be true by the appellant, and he is a man of learning and of professional skill, and besides in good repute for truth and integrity. The fact of "grippura" being efficacious is attested by the written certificates of people of intelligence and of well known reputable character—some of them also of medical learning. As a proof of *bona fides* the physician offers to submit his medicine to any fair test; and in

the books and pamphlets laid before us it is manifest to us that hydriodic acid is now well known and is accounted to be of varied excellence by American physicians—against whose competence no suggestions have been made.

On the other hand, expert opinion is offered of the worthlessness of hydriodic acid by gentlemen of the medical profession who do not know and have not used or tried the acid. Surely the better plan is to waive matters of personal etiquette and have the thing brought to a practical, satisfactory, as well as scientific test by skilled observers in applied medicine.

The broad distinction between the Washington case, 23 O. R. 299 (from which judgment the framers of the "rider" in this case appeared to have borrowed their language), and the present is that there he dared not or would not or did not deny what was charged against him—by his silence he in effect confessed its truth and admitted the falsehood (see page 310). The false statement there acted upon by the Council and confirmed by the Court as sufficient to be "infamous," was the representation that persons in the last stage of consumption were suffering from catarrhal bronchitis, and that he could cure them.

Now, I am far from belittling the importance of professional ethics in regard to physicians or other learned professions. There is no doubt that this man has grievously offended against their conventional rules, well recognized, though, it may be, not forming a written code, which obtains among the members of every learned and honorable profession. In two respects he has violated proper decorum: Modesty and propriety have been forgotten in his self-advertising and discreditable proclamation; and he has, in the second place, kept to himself and for himself this apparently valuable remedy, and has not made known the formula in order that its benefits may be shared in by the profession and the public.

But neither of these offences against the comity of the profession invites *per se* imputation of moral delinquity—which is, I think, contemplated by the terms infamous and disgraceful. Yet the obnoxious conduct is sufficient to put the offender practically outside of the professional pale, but whether it can call down the statutory punishment of exclusion from practice seems to me, as at present advised, to be answerable in the negative.

To resort to the advertising question the English rule against it, even in the most marked form, is exceedingly strict; not so in America and Canada, where a moderate and limited use of

advertisement is permissible. One reason of this rule (though there are others) grows out of the desire to mark emphatically the distinction between a trade and a profession. In the case of a mere money-making business, advertising in any and every extreme of extravagance and exaggeration is considered a legitimate outcome of sharp competition. The professional man, however, is not on this plane; he is not to thrust himself forward and solicit particularly any form of public appeal. It was regarded in the profession as a badge of charlatanism to advertise in any but the simplest way of giving notice of the whereabout of the practitioner's office. The vendor of patent medicines and proprietary remedies might puff their uses and publish their testimonials and tout for customers; but not the physicians. No doubt, as said by Dr. Brundette Coates, medical men, from the necessity of living, have become indifferent to the censures of the body of the profession or to the knowledge that they are offending against the great concensus of professional opinion. They have a living to get and they get it by such means as offer themselves. Competition induces struggling physicians to follow courses not always consistent with self respect, and which fall short of a high standard of honor and propriety. II. International Treatise of Ethics, page 28. This is the shelter under which the appellant takes refuge, and though his action may be undesirable and reprehensible, derogatory to himself and injurious to the higher interests of the profession, it perhaps has to be left to himself as to its discontinuance.

To deal further with his "secretiveness," as a witness calls it, the rules which govern English medical practice (*e.g.*, those promulgated by the Royal College of Physicians and Surgeons) forbid the use of secret remedies and methods of treatment, and the rule is enforced by appropriate penalties. These secret remedies (commonly called nostrums) are special preparations of which the formulæ are unknown in whole or in part. The reason why they should not be encouraged is because it is unscientific to prescribe a dose of anything the nature of which the physician does not know. Hence it easily follows that if one discovers something which proves of real efficacy in disease, the ethical claims of the profession persuades, if not compels, him to place his discovery at the disposal of his brethren and the public without other reward than professional approval and public esteem.

If, however, a stronger compulsion, arising out of his own needs and the stress of competition among the ranks of a

crowded profession, overmaster his ethical claim, and he retains control and proprietorship of his nostrum, then he has to incur the condemnation of his fellows in placing money above the high standard of his profession.

There is, however, a distinction marked in the cases between patent and proprietary medicines. Patent medicines are properly those, the component parts of which are of record in the patent office, and anyone can by enquiry find out of what they are made up, whereas the ingredients of a nostrum or proprietary medicine can only be ascertained by analysis. Pharmaceutical Society *v.* Armson, 1894, 2 Q. B. 720 at p. 726. It is permissible for the physician to prescribe this kind of patent medicine, and even as to nostrums there is to be observed if knowledge exists or is obtained of the substantial ingredients entering into the composition of the secret remedy, then its use might be justified both by the discoverer and other members of the profession. Dr. Saunby's Medical Ethics, 1902, p. 67.

I think there is no doubt but that the substantial ingredient which gives importance to "grippura" has been laid bare by analysis, and that it is sufficiently made known to the profession to induce the next step (which I venture to recommend) namely, to apply the practical test as to its alleged efficacy in various ailments.

If the use of hydriodic acid in this and other like preparations known and prescribed by United States physicians is in truth an agent of varied use and value in the treatment of disease, it is surely the thing to be taken up by the profession and applied to public needs. If after satisfactory testing it stands approved, it will not need to be circulated by advertising as a valuable secret, but will be generally prescribed and distributed by the profession and used by their patients.

There appears to me to be a good suggestion in the view presented by Dr. Saunby (though he writes of cases which do not respond to the usual treatment). He writes: "The application of new methods of treatment or new remedies ought not to be undertaken without due and great care. The general reason for such experiments is the impossibility of progress without the trial of new suggestions, and on particular grounds the remedy may be resorted to, if there is reasonable prospect of its affording relief and that it is harmless." Medical Ethics, 1902, p. 55.

Upon the present evidence it does not appear to be proved (always assuming honesty and fair dealing, to begin with)

that the alleged discovery is a mere pretence; that the remedy is worthless and neither cures nor helps those who take it; that the whole scheme is a delusion; that it is put forward dishonestly or carelessly, not for the good of the public but for the gain of the advertiser.

If, however, it fails to stand the scientific, as well as the empirical, testing the situation may be very materially changed. The question after that would probably be whether he could reasonably and sincerely retain faith in the virtues of "grippura," and honestly recommend and advertise it on that footing.

The Medical Council does not appear to possess such extensive power to discipline and exclude delinquents as has been given by the Legislature to the Law Society. To the Benchers is entrusted power to enquire into the conduct of lawyers who are charged with professional misconduct or of conduct unbecoming a member of the Law Society. R. S. O., 1897, ch. 172, sec. 44. Under such language there is power to deal with cases where the charge is a violation of the conventional or other regulations, which are either described or commonly observed in the profession. See *re* Rythe, 6 B. & S., 704 per Cockburn, C. J.

So to a more limited extent in medicine, if one has been admitted to practice on certain explicit conditions and has given an undertaking to observe them (*e.g.*, a promise not to advertise in any offensive way), his breach of that engagement might well be regarded, if wilfully and deliberately made, as disgraceful conduct in a professional respect. Such a case was considered in Ex. Partridge, 19 Q. B. D. 467, and again in the same connection in Partridge *v.* General Medical Council, 25 Q. B. D. 95.

That element is wanting in the case now in hand; at all events no definite delinquency is charged in that respect, for no code of medical ethics was in force here till about 1898; before that time the method of confining oneself to medical ethics or etiquette rested in the honor and good sense of the individual.

The conclusion I reach is that there has not been a due enquiry in this Crichton case, and the appeal should be allowed. As a consequence, his name (if struck off) should be restored to the register; but this judgment is to be without prejudice to the question whether on subsequent enquiry there may not appear to be on proper grounds for erasing his name. This

is the term which was imposed in the Partridge case, 25 Q. B. D. 95.

As to costs I cannot say that this proceeding has been frivolous or vexatious. The conduct of the appellant has been such as to provoke complaint and to invite investigation. It has offended against the provisions of the Ontario Code of Ethics, which declares it to be derogatory to the dignity and prestige of the profession to resort to the practice of secrecy on the one hand and publicity on the other—which though not in force when he was registered—yet declare the professional standard of conduct which he has disregarded, to set up a trade standard for himself, so that while in the result he may be right legally, he is wrong professionally.

Having regard to these and like considerations I do not think the Council, who are discharging a quasi-public duty, should be called upon to pay costs of the investigation of this appeal.

HON. JUSTICE MAGEE.

I concur fully in the admirable judgment of my Lord the Chancellor and have but little to add as to the proceedings taken against the appellant.

Under sec. 33 of the Ontario Medical Act the Council may cause enquiry to be made into the case of a person alleged to be liable to have his name erased from the register, and sec. 35 enacts that the Council shall ascertain the facts by a committee, and a written report of the committee may be acted upon, and a standing committee is to be maintained for such purposes.

By sub-section 5 of the same section, notice of the meeting held for "taking the evidence or otherwise ascertaining the facts," shall be served upon the person whose conduct is the subject of enquiry, and such notice shall embody a copy of the charges made against him, or a statement of the subject matter of the enquiry.

The By-laws of the Council, as published in the annual announcement, which is among the exhibits, also provide for a committee on discipline, whose duty it is to consider all complaints against members that may be referred to it by the Council, and shall be governed in its precedence by statute, and the by-laws also provide that a committee appointed to report on any subject referred to them by the Council shall report a statement of facts and also their opinion thereon in writing.

In this case the Council adopted a report of the Standing

Committee on Discipline, recommending that "the cases of alleged unprofessional conduct on the part of Dr. A. Crichton (and another doctor named), be referred to the Committee on Discipline for investigation. Nowhere do I find that any charge of "infamous or disgraceful conduct" was referred by the Council to the Committee.

The Committee, acting under this resolution, held two meetings for enquiry, the first on the 10th of February, 1905, and the second on 7th May, 1906. For each of these meetings a separate notice was served on Dr. Crichton, purporting to specify the charge to be made—the two notices differed in the specific charges, and neither referred to the other. Before the second meeting the Committee reported upon the first charge that they had not arrived at a conclusion, and asked leave to further consider it. The have never since brought in any finding on that charge. It is only the second charge that they have reported proved, adding to it a finding upon something that Dr. Crichton was not charged with upon either occasion. On the second meeting in May, 1906, it was agreed that the evidence given in February, 1905, should be taken as if given again. Apart from that none of the evidence at the first meeting should be availed of on the second charge, and, indeed, Dr. Crichton's counsel was informed that he would not be entitled to a copy of it unless it were made a part of the enquiry. So that the evidence on the only charge reported upon by the Committee was but a small part of the evidence relied upon to support the action of the Council.

The Committee did not comply with the statute or by-law, by ascertaining or reporting facts upon which the Council could act, but they simply laid before the Council the whole evidence and assumed to themselves the duty of the Council in finding the accused guilty. The unfairness of the course pursued is manifest on a reference to what occurred when the report was presented and the resolution for erasing thse name passed. Dr. Adams.—"May I ask if there is anything in the statement that the accused made before he left the room that no man is allowed to, or should, give his vote unless he has heard the evidence in both trials. I for one have not had the opportunity." The President.—"I think the registrar caused Mr. Ross to place a copy of the evidence before every member seated." Mr. Curry.—"Any man, if he is satisfied with the finding of the Committee, has a perfect right to vote. There is no onus on him to read over any more evidence than he wants to." Thus, the Committee undertook not only to investigate

the charges of "infamous and disgraceful conduct," which had not been deputed to them to inquire into, but they also undertook to find it proven and to add matters which had not been contained in the charge made, and the Council were informed they could act upon that.

It is proper, I think, also to call attention to the evidence itself. Each of the medical practitioners called was asked to give his opinion as to the conduct being infamous or disgraceful in a professional respect. This was practically asking each to decide that which the Council itself is the proper tribunal for the decision of. The testimony of this sort makes up the bulk of that given. Its value in other ways has been fully dealt with in the judgment of my Lord the Chancellor. They could not be expected to speak from their own experience or professional knowledge as to the effect or value of a remedy, the composition of which was unknown to them, and which, in consequence, none of them dare take the responsibility of prescribing. By keeping secret the ingredients in his alleged discovery, whether it was new or old, and whether beneficial or not, he effectually prevented other physicians from making use of it or assuming any responsibility for its use by him, and he was thereby endeavoring to cut both them and the public off from the benefit even of consultation between other physicians and himself. By advertising it as a remedy for so many diseases over his name, with the added standing he derived as a member of the College, and recommending purchase of it and doing this for gain, he was in fact inviting the public to place confidence in him as a physician and to pay him for the remedy put forward, and this to the exclusion of confidence in other practitioners. It is the duty of a physician towards those he induces to place reliance upon him and to pay him for the benefit to be conferred, that he recommends for their ailments the best available remedy known to him in each case, and not to protract or palter with disease by putting forward for the sake of gain something which he knows may be quite inert or but slightly alleviate or be curative, even if not harmful. When the latter course is adopted, and in addition secrecy is adhered to and disclosures thereby prevented of the total or comparative ineffectiveness of the remedy, the conduct might well be classed as disgraceful, and if the evidence were precise enough and the proceedings regular, a court might not feel called upon to interfere with a decision which so characterized it.

The appeal should be allowed and the appellant's name restored if erased in the register.

HON. JUSTICE MABEE.

Under the Ontario Medical Act the Council may direct the erasure from the register of a practitioner who has been found to have been guilty "of any infamous or disgraceful conduct in a professional respect." The Act provides the machinery for ascertaining the facts connected with the particular charge or complaint and witnesses may be summoned and evidence taken upon oath before a committee appointed by the Council. In January, 1905, Dr. Crichton was charged with having printed and issued to the public and to the drug trade certain circulars and advertisements as to the efficacy of "Grippura" as a cure for grip and influenza, and that in so doing he had been guilty of infamous and disgraceful conduct in a professional respect. The hearing came on before the Committee at Cobourg on February 10th, 1905, and at the opening of the proceedings counsel for Dr. Crichton stated that he had asked for particulars of the portions of the circulars that were objected to, but had received none, and thereupon requested the counsel for the prosecution to point out the particular points in the circular that were considered infamous and disgraceful in a professional respect, so that cross-examination might be directed to these points, that he found it difficult to meet the charge, and that it might mean calling a large number of witnesses at great expense. The importance of this lay in the fact that the circular contained a large number of testimonials and letters from persons who had used the medicine, and names of others to whom it had been sold and used with alleged beneficial results, and the case for the defence was to be that the testimonials were genuine, that the names given were those of existing persons, who would testify to the benefits received by them from using the medicine, and that the statements in the circular were true. Particulars were again refused, and the demand was answered by the statement that the charges were within "*the four walls of the circular.*" The case then proceeded and evidence was given at large and the prosecution was allowed to attack the truth of some of the statements appearing in the circular, although as I think from the course taken that was not put in issue, and that the charge was limited to merely printing and issuing the circular—in other words, mere advertising. Dr. Crichton was called by the prosecution and examined at great length. He stated that all the testimonials were genuine and the references given were to persons who had purchased and used the medicine and that all the statements contained in the circular were true. He offered to submit the

medicine to any hospital or other test that might be suggested, but his offer was declined or not accepted. Several doctors were examined for the prosecution; none of them had ever used the medicine, they did not know the formula, some of them stated that in their opinion Dr. Crichton had offended against the statute, but in cross-examination it is apparent that some of them regarded the sending out of a circular by a medical man as an offence within the Act, even if all the statements made in it were true. On July 5th, 1905, the committee reported to the Medical Council that after considering the evidence they had failed to arrive at a conclusion and asked leave to further consider the evidence, exhibits and case generally.

In April, 1906, the appellant was served with another notice; the particulars set forth in it were that he "did infamously, disgracefully, *improperly and unprofessionally* advertize and distribute advertising circulars, claiming to have discovered a remedy which would cure la grippe or influenza in a few hours and assist in curing a number of other diseases, and did through said advertising circular solicit and request that all letters of enquiry in reference to said remedy be sent to him and that said advertising pamphlets did appear and were distributed to some of the residents of the County of Northumberland and throughout the Province of Ontario." It will be observed this goes much beyond the first charge and beyond the statute, as the words *improperly* and *unprofessionally* are not found there. The Committee sat at Cobourg on May 7th and Dr. Crichton's counsel asked if it was a continuation of the former enquiry, and was told that it was. He then contended that he was entitled to put in as part of the case the proceedings of the Medical Council, connected with the report made by the Committee on February 5, 1905. This was objected to. Demand was also made upon his behalf for a copy of the evidence taken at the former sitting, and although it appears he had offered to pay for a copy, such copy was refused him and the case proceeded, counsel for the prosecution having a copy of all the former evidence and counsel for the appellant being compelled to conduct his case as best he could without the assistance of the evidence already given. Several more witnesses were examined and the only additional evidence given of any importance was an analysis of the medicine that had been advertised. Dr. Crichton had refused to give the formula and states that the analysis does not show all the ingredients. On July 3, 1905, the Committee reported to the Council that the appellant had been guilty of infamous and disgraceful conduct in a professional respect and that he had endeavored to impose upon the

credulity of the public for the purpose of gain, by attempting to deceive the said persons as might read the said advertisements; and the Council on July 6th adopted the report and ordered Dr. Crichton's name to be erased from the register. Section 36 of the Act gives the right to a medical practitioner whose name has been erased to bring the whole matter before a Divisional Court for review, and the Court may order the restoration of the name so erased, and also make such order as to costs as to the Court shall seem right.

I think there is a wide distinction between mere advertising, that is, simply sending out advertisements containing truthful statements, and deceitful and fraulent advertising, that is, putting before the public false and untrue statements. At the opening of the enquiry an attempt was made to ascertain whether the truth of the statements in these circulars was questioned and the appellant was practically told that all he was charged with was advertising, and as I have said the truth of the matter advertised was not put in issue. The appellant is admitted to honestly believe in the virtue of his compound; he positively denies any deception or attempt to deceive; he produces a large number of letters from various parts of the Province, testifying to the benefit received from his medicine; thees are from gentlemen of standing and of education, and it is fair to assume some or many of them could have been subpœnæd to give evidence upon behalf of the appellant had not the course taken by the prosecution made that step unnecessary. It seems to me most unfair and improper simply to make a charge of advertising and then convict of deceitful and fraudulent advertising; such a thing could not take place in a court of justice and should not be permitted in a case where the loss of a man's profession is at stake.

I am also of the opinion that there is no sufficient or proper evidence upon which the appellant could be convicted of deceitful advertising, or attempting to impose upon the credulity of the public. The good faith of the appellant and his honest belief is admitted; his offer to submit his compound to a hospital or other test and the refusal by the prosecution cannot be overlooked; the written certificates of persons who had used the medicine are admitted to be genuine and against this is only the opinion of a few medical men who have never used it, and may not know all its component parts. It plainly appears from the evidence of all those called for the prosecution that the mere sending out of these circulars, quite apart from the truth or falsity of the contents, were offensive to them, and regarded by them as being unprofessional and a disgrace-

ful thing for a medical man to do. No doubt this sort of advertising is quite opposed to the ethics of the profession, and one can have entire sympathy with those who stand firmly for high professional honor and the upholding of the dignity and best traditions of the medical profession; much can be said in favor of the necessity of the Council having wide and extensive powers over the members of the profession, to the end that the standard of dignity may be maintained; on the other hand, it is equally the duty of the Court to see that the powers of the Council have been fairly and properly exercised, that the man charged has had a fair trial and been convicted upon evidence that would have justified a conviction had he been upon trial for an offence in the Criminal Court, and no matter how strongly I may desire to assist the Council in their endeavors to put down what they regard as disgraceful or infamous conduct, I am driven to the view that Dr. Crichton had not had a fair trial and has not been properly convicted. The Medical Act provides for the election of the Council and sec. 35 is as follows: "The Council shall, for the purpose of exercising in any case the power of erasing from, and of restoring to, the register, the name of any person or any entry, ascertain the facts of such case by a committee of their own body not exceeding five in number, of whom the quorum shall be not less than three, and a written report of the committee may be acted upon for the purpose of the exercise of the said powers by the Council." Now, in July, when the report of the Committee came before the Council and the motion was made to erase the name from the register there were some twenty-seven or twenty-eight members present. It is apparent that the moving reason for the motion carrying was that Dr. Crichton had been "*conducting a fraud*"; it is so put by several of the members of the Council—he had not been charged with that—and it was so pointed out to the Committee at the time by counsel for Dr. Crichton, and again complaint was made of the manner in which the proceedings had been carried on, and of the refusal to furnish a copy of the evidence at the first enquiry. I cannot believe that the members of the Council read the evidence that had been taken. As Dr. Crichton was asked to retire, he made the following statement: "It has been admitted at a previous trial that the High Court expects every man to have read this evidence before he comes to his decision." After he retired one of the members asked if there was anything in the statement of the accused that no one is allowed to or should give his vote unless he has had the evidence on both trials, and that he for one had not had an opportunity, the President then said

he thought the registrar caused a copy of the evidence to be placed before every member seated, the solicitor for the Discipline Committee thereupon stated: "Any man, if he is satisfied with the finding of the Committee, has a perfect right to vote; there is no onus on him to read over any more evidence than he wants to." This may be strictly accurate if it means that if a member reads enough of the evidence to satisfy himself that the report of the Committee is well founded; if, on the other hand, it means that the members of the Committee need read none of the evidence, but may act on the report alone if they so choose, it is not in harmony with what the Court said in Dr. Washington's case, where it is distinctly stated that the members of the Council should read the evidence. This man was entitled to the individual judgment of each member of the Council, and from the report of what took place I am not satisfied he had it.

Complaint was made throughout the trial that Dr. Crichton refused to make the formula of his medicine public and this was said to be against proper practice; it may be so—he was not charged with that and was not convicted of it.

I do not deal with what was said upon the argument about the beneficial use of this medicine, or some of its component parts in the class of troubles set forth in the circular, nor do I think it needful to make reference to the medical works that were referred to, as in the view I take of the case it is not necessary to do so. The charge was mere advertising; he was convicted of fraud, or something he was not charged with. The evidence is not sufficient to convict of fraud, even if he had been so charged, and the trial had not been conducted with those safeguards that should be carefully observed upon a case fraught with so serious consequences as the present. I have not overlooked the fact that it was objected to our admitting the proceedings of the Council when the vote was taken upon this appeal, but I think they are admissible.

I would allow the appeal and order the name to be reinstated.

JUDGMENT IN THE COURT OF APPEAL FOR ONTARIO AS TO THE MEANING OF THE WORDS "TO PRACTICE MEDICINE."

Wednesday, the twenty-first day of November, 1906.

The Honourable the Chief Justice of Ontario.
The Honourable Mr. Justice Osler.
The Honourable Mr. Justice Garrow.
The Honourable Mr. Justice Maclaren, and
The Honourable Mr. Justice Meredith.

In the Matter of the Ontario Medical Act, Revised Statutes of Ontario, 1897, Chapter 176, Section 49.

The question submitted is as to the meaning of the words "to practice medicine," in Section 49 of the Ontario Medical Act.

The Court answers the question as follows:

"That each case must depend or be determined on its own circumstances; but dependent upon the facts in each case there may be a practicing of medicine which does not involve the use of drugs or other substances having or supposed to have the property of curing or alleviating disease."

Opinion of the Chief Justice of Ontario.

The Chief Justice delivers a somewhat elaborate judgment on the power of the Lieutenant-Governor-in-Council to submit such a question, and holds that there is such power, and proceeds as follows:

"I am not one of those who are of the opinion that the Ontario Medical Act is an Act not passed in the public interest. That it is a public Act in the fullest sense, and not a merely private Act, is shown by its inclusion in the Revised Statutes. Its early origin was due to an intelligent, wise and far-sighted apprehension by the Legislature of the policy of protecting the public from the dangers and inconveniences arising from unskilful and unqualified persons assuming to practice as physicians and surgeons. The Legislature of that early day showed its appreciation of the need of thorough education in medicine as in every other department of knowledge. Experience has proved that the means then adopted of requiring all persons

desirous of so practicing to submit to examination and obtain a license, were undoubtedly productive of benefit and advantage to the Province. They have since developed into the system of study, preparation and examination now provided for by R. S. O., 1897, Cap. 176, and it cannot be doubted but that the public at large share very largely in the advantages derived from the presence in their midst of a body of learned and skilled practitioners. It is not merely by what has been and can be done in the cases of individual patients, but (as has been well said by a great modern physician) as much by what is accomplished in the way of protection of the public generally against disease and contagion, that medicine proves itself a great science as well as a delicate craft.

"And it cannot but be in the public interest to secure to the community the services of persons accredited as they must be under the Ontario Medical Act.

"And in placing a construction upon the part of the Act in question we are not to close our eyes to the great changes which have taken place in recent years in therapeutic methods. It is common knowledge that there has been a marked change, almost a revolution, in the position assigned to drugs as therapeutic agents. While they are not discarded, their use or application is by no means so extensive as formerly, and the well-equipped practitioner of to-day seeks to study thoroughly and apply scientifically a few real medicines or healing agents, and does not feel under obligation to give any medicine in cases where in earlier times he would have considered any treatment that dispensed with it unscientific and improper.

"Section 49 ought not to be read otherwise than in the light of considerations such as here suggested.

"If the answer given was that if it were shown that a person not registered under the Ontario Medical Act attempted to cure or alleviate disease by methods and courses of treatment known to medical science, and adopted and used in their practice by medical practitioners registered under the Act, or advised or prescribed treatment for disease or illness as would be advised or prescribed by the registered practitioner, then although what was done, prescribed or administered did not involve the use or application of any drug or other substance having or supposed to have the property of curing or alleviating disease, he might be held to be practicing medicine within the meaning of Section 49, it would still leave the matter to be dealt with in a concrete case in which the ultimate decision must turn upon the facts found."

OPINION OF THE HONOURABLE MR. JUSTICE OSLER.

"The question now proposed does not admit of an answer covering definitely and categorically all cases which may arise under Section 49 of the Ontario Medical Act, R. S. O., 1897, Ch. 176. To practice medicine has long since ceased to convey the idea that it is confined to the administration of drugs, nor do I agree that this expression in the Medical Act is limited to so bald a meaning. To hold that it is would be to refuse to recognize that the thoughts of men in the most liberal of all the learned professions have widened in the past half century and to affirm that legislation has gone backward instead of keeping pace with the knowledge of the times.

"Nevertheless, we cannot say that the profession, wide as have been its conquests and extended the scope of its practice, has taken all knowledge of the art of healing for its province, and therefore the question submitted (in its alternative form) does not admit of an universal answer in the affirmative. We can only say that the words 'to practice medicine,' *may* include cases in which the remedy prescribed, etc., does not involve the use of drugs or other substances. Every case must stand and be determined upon its own facts and circumstances. We cannot lay down a rule or formulate an answer which will include all. I ought to add that I regard the Medical Act as one passed, as its predecessors have been from a very early period, mainly in the interest of the public and not for the purpose of creating a close professional corporation. The observations addressed to us during the argument, founded on the latter assumption, as if the present proceeding had been promoted, as certain rules of equity are said to have arisen, less from a spirit of piety—sc. public policy—than the love of fees, seem hardly warranted."

OPINION OF THE HONOURABLE MR. JUSTICE GARROW.

Mr. Justice Garrow is of opinion that the Medical Act was passed, not in the interests of the public, but in the interests of the medical profession:

"'Practicing medicine' is not a definite and finally established term. There is much room for argument, both as to what should be called 'medicine,' and as to what should be called 'practicing.'

"And for these reasons the question, which must always depend for its proper and complete answer upon the facts as well as the law, is in my opinion incapable of a satisfactory or categorical answer, yes or no, upon the material before us.

The nearest I can come to it is this. The term 'practicing medicine' need not and does not, in my opinion, necessarily involve only the prescribing or administering of a drug or other medicinal substance, but may well include all such means and methods of treatment or prevention of disease as are from time to time generally taught in the medical colleges and practiced by the regular or registered practitioner.

"The Statute intends, I think, as I have said, to protect him in the monopoly of practicing his profession, and not merely to protect him in the prescribing and administering of drugs.

"The medical practice changes as scientific knowledge broadens.

"The difficulty, however, is in the practical application of the prohibition to the other methods.

"The thing practiced must to be illegal be an invasion of similar things taught and practiced by the regular practitioner, otherwise it does not affect his monopoly, and is outside the Statute. And it must be practiced as the regular practitioner would do it, that is, for gain, and after diagnosis and advice. And it must be more than a mere isolated instance, which is insufficient to prove a 'practice.' See Apothecaries Co. *v.* Jones (1893), I. Q. B. 89."

OPINION OF THE HONOURABLE MR. JUSTICE MACLAREN.

"The best definition of the word 'medicine' that I have been able to find is that in Murray's New Oxford Dictionary. The first meaning there given to it reads as follows: 'That department of knowledge and practice which is concerned with the cure, alleviation and prevention of disease in human beings, and with the restoration and preservation of health. Also in a more restricted sense applied to that branch of this department which is the province of the physician, in the modern application of the term; the art of restoring and preserving the health of human beings by the administration of remedial substances and the regulation of diet, habits and conditions of life.' The practice of medicine would be the practice of the art set out in the foregoing definition, especially in the latter part. Diagnosis and the giving of advice are usually important elements."

Mr. Justice Maclaren expresses an unqualified opinion that the use of drugs is not a necessary incident to the practice of medicine.

OPINION OF THE HONOURABLE MR. JUSTICE MEREDITH.

Mr. Justice Meredith dissents from the rest of the Court, and is of opinion that there can be no practice of medicine without the use of drugs.

PROPOSED OSTEOPATH BILL.

WHEREAS it is expedient to extend to duly qualified practitioners of the system known as Osteopathy certain rights and privileges.

THEREFORE HIS MAJESTY, etc., enacts as follows:

1. Until other persons be appointed, as hereinafter provided, R. B. Henderson, of the City of Toronto, Edgar D. Hoist, of the Town of Berlin, James S. Bach, of the said City of Toronto, J. T. Atkinson, of the City of Brantford, and A. K. Pigott, of the said City of Toronto, shall be members of the Council of the College of Physicians and Surgeons of Ontario to represent the Practitioners in Osteopathy who shall become registered under the provisions of the Medical Act, as amended by this Act, and the said members shall forthwith without examination be registered under the provisions of the Medical Act and be entitled to practice Osteopathy.

2. The persons mentioned in Section 1 of this Act shall continue in office as members of the said Council until their successors are appointed as hereinafter provided.

3. At the first general election for the appointment of members to the said Council under the provisions of the Medical Act, after the expiration of three years from the date hereof, five duly qualified members shall be elected by the registered Practitioners in Osteopathy to succeed the members appointed under Section 1 of this Act, and they shall be deemed to have been elected under Section 6 of the Medical Act (as amended by this Act).

4. Section 4 of the Ontario Medical Act is amended by adding the following subsection thereto:

"Any member of the said College registered as an Osteopathic Practitioner shall have all the rights and privileges enjoyed by the members of the said College, provided, however, that he may not prescribe medicine to be used either internally or externally (except anesthetics, antiseptics and antidotes), nor perform major or operative surgery unless qualified to do so as hereinafter provided.

5. Subsection 2 of Section 7 of the Ontario Medical Act is amended by striking out paragraph (*c*) thereof and by inserting the following as paragraphs (*c*) and (*d*) thereof respectively:

"(*c*) Five members to be duly elected by the licensed Practitioners in Osteopathy who have been registered under the provisions of this Act."

" (*d*) Seventeen members to be elected in the manner hereinafter provided from amongst and by the registered members of the profession other than those mentioned in the preceding clauses of this Section."

6. Subsection 2 of Section 7 of the Ontario Medical Act is repealed and the following substituted in lieu thereof:

" In the event of the death or resignation of any member of the Council representing the Practitioners of the Homeopathic System of Medicine or of the Osteopathic System of Treatment, the remaining representatives in the Council of the practitioners represented by the member who has so died or resigned may fill such vacancy by selecting from amongst the duly registered Practitioners of their System a member to fill the said vacancy."

7. Subsections 2 and 3 of Section 17 of the Ontario Medical Act are hereby repealed and the following substituted in lieu thereof:

" (2) Until a Homeopathic Medical College or a College of Osteopathy for teaching purposes is established in Ontario, candidates wishing to be registered as Homeopathists or Osteopathists, respectively, shall pass the matriculating examination established under this Act as the preliminary examination for all students in Medicine, and shall present evidence of having spent the full period of study required by the Curriculum of the Council under the supervision of a duly registered Homeopathic or Osteopathic Practitioner, as the case may be.

" (3) Such candidates must also have complied with the full Curriculum of studies prescribed from time to time by the Council for all medical students except as hereinafter provided, but the full time of attendance upon lectures and hospitals required by this Act or by the Curriculum of the Council may be spent in such Homeopathic Medical Colleges or Colleges of Osteopathy—as the case may be—in the United States or Europe as may be recognized by a majority of the Homeopathic or Osteopathic members, respectively, of the Council, but in all the Homeopathic or Osteopathic Colleges where the winter course of lectures is only of four months' duration, certified

tickets of attendance on one such course shall be held to be equivalent to two-thirds of one six months' course, as required by the Council, and when such teaching bodies or either of them has or have been established in Ontario it shall be optional for such candidates to pursue in part or in full the required Curriculum in Ontario.

"Provided that attendance at a College of Osteopathy in the United States or Europe, duly recognized as aforesaid, for three winter courses of not less than nine months shall be deemed full attendance for a student of the Osteopathic System.

"Provided, further, that it shall not be necessary for a student of the Osteopathic System to attend any lectures or to pass any examinations in Materia Medica, Therapeutics and Pharmacy."

8. Section 23 of the Ontario Medical Act is amended by adding Subsection 5, as follows:

"Any person who was actually practicing Osteopathy in the Province of Ontario on the 1st day of January, 1907, and who shall within one year from the passing of this Act present to the Members of the Medical Council representing the Practitioners of the Osteopathic System of Treatment, a diploma from a College of Osteopathy recognized by a majority of the said members as a College in good standing, shall on due proof thereof and on payment of such fees as Council may by general by-law establish for all persons desirous of being registered, be entitled without examination to be registered, and in virtue of such registration to practice Osteopathy in the Province of Ontario."

9. Section 25 the Ontario Medical Act is amended by adding the following provisoes thereto:

"Provided that every person desirous of being registered under the provisions of this Act as an Osteopathic Practitioner shall, before being entitled to registration, present himself before the Board of Examiners mentioned in Section 28 for examination as to his knowledge and skill for the efficient practice of his profession, and upon passing the examination required, and on proving to the satisfaction of the Board of Examiners that he has complied with the provisions of Section 7 of this Act, and on payment of such fees as the Council may by general by-law establish for all persons desirous of being registered, such persons shall be entitled to be registered, and in virtue of such registration to practice Osteopathy in the Province of Ontario.

"Provided, further, that it shall be sufficient for any person

who on or before the 1st day of January, 1910, is desirous of being registered as an Osteopathic Practitioner as aforesaid to prove to the satisfaction of the Members of the Council representing the Practitioners of the Osteopathic System of Treatment that he holds a diploma of graduation from a College of Osteopathy recognized by a majority of the said members as a College in good standing, instead of and in lieu of proving that he has complied with the provisions of Section 7 of this Act as in this Section provided."

10. Section 29 of the Ontario Medical Act is hereby amended by adding thereto Subsection 2, as follows:

"A candidate who at the time of his examination, as provided for in Section 25 of this Act, signifies his wish to be registered as an Osteopathic Practitioner shall not be required to pass an examination in Materia Medica, Therapeutics or Pharmacy, and shall not be required to pass examinations in the principles, theory and practice of Osteopathy, Obstetrics, Gynecology, Chemistry, and Diagnosis (physical and general) before any examiners other than those approved of by the representatives in the Council of the Osteopathic System."

11. The provision in Subsection 1 of Section 17 of the Ontario Medical Act, that "any change in the Curriculum of Studies fixed by the Council shall not come into effect until one year after such change is made," shall not apply to any change in the Curriculum of Studies which shall be made by the Council during the years 1907 and 1908 for the purpose of giving effect to this Act.

12. The following Section is to be added to the Ontario Medical Act:

"From and after the first day of March, 1907, the provisions of this Act shall (except as hereinbefore provided) apply to Practitioners of Osteopathy in the same manner and to the same extent as they now apply to Practitioners of Medicine, Surgery and Midwifery, and wherever throughout the said Act any of the following words, namely, Physician, Doctor of Medicine, Surgeon, Practitioner, General Practitioner, Medical Practitioner, or Practitioner of Medicine occur, they shall, when not inconsistent with the provisions of the said Act and amendments thereto, be construed so as to include Practitioners of Osteopathy, and wherever throughout the said Act the words Medicine, Surgery or Midwifery are used, either separately, or collectively, they shall, when not inconsistent with the provisions of the said Act and amending Acts, be deemed to include Osteopathy."

13. The following Section is to be added to the Ontario Medical Act:

"Any member of the said College registered as an Osteopathic Practitioner, or any candidate for registration as an Osteopathic Practitioner who wishes to be entitled to perform major or operative Surgery, shall, upon giving notice thereof to the Registrar, and upon proving to the satisfaction of the members of the Council representing the Practitioners of the Osteopathic System of Treatment that he has spent at least one year, in addition to the time required to obtain his diploma as a Graduate in Osteopathy, in the study of Surgery at some College of Osteopathy, recognized by the majority of the said members of the Council and that he has received a diploma in Surgery from such College, and on passing the examinations in Surgery required by the Board of Examiners mentioned in Section 36, be entitled to perform major or operative Surgery.

Selected Article.

THE CARE AND FEEDING OF PREMATURE INFANTS.

By John Lovett Morse, A.M., M.D., Boston.

Viability.—There are very few authentic cases of the survival of infants born before the twenty-seventh or twenty-eighth week of pregnancy, although Home's case, which was supposed to have been born in the eighteenth week, was alive and well at nine years. Very few survive any length of time if the weight is under two pounds or the length less than thirteen inches. Oberwarth recently reported a case, and collected seven others from literature, however, in which the weight was less than two pounds, which lived months or years. Home's case, just referred to, measured but eight inches. It is not of much practical importance, except for medicolegal reasons, however, to know the exact age of the premature infant. No matter how young it is, how little its weight and length, or how poor its prospects of survival, it should always be treated as if its chances for life were of the best.

Development.—The premature baby is not merely a small baby; it is an undeveloped baby. It is not ready to be born or to live under extrauterine conditions. The younger it is, the less developed it is and the less prepared to struggle against the abnormal conditions in which it is placed. It is intended to float in warm water of a constant temperature; it has, instead, to be handled and exposed to air of all degrees of temperature. Its circulation is compelled to change from the fetal to the adult form months before it is ready for the change. It is compelled to breathe air into lungs only partially ready for use with an undeveloped thorax and respiratory muscles. It is obliged to use digestive organs only partially completed, instead of obtaining nourishment already prepared through the circulation. In short, it is not prepared for an independent existence, and has to depend for its life on organs only partially ready to perform their functions. The more these facts are appreciated the more care and attention will be given to these infants.

In a general way, all the peculiarities and weaknesses of the infant at term are exaggerated in the premature infant. Certain points in their development are, however, worthy of

more detailed consideration. The lungs at full term are poorly enough fitted for use; they are even less so before term. They contain comparatively little alveolar structure and on account of the loose attachment of the blood vessels are very prone to congestion and inflammation. The pulse and respiration are irregular in rhythm, partly from lack of nervous control and partly because of the underdeveloped condition of the organs and muscles concerned.

The capacity of the stomach is limited, ranging from 5 c.c. to 20 c.c., according to the age and size of the individual infant. All the functions of digestion are feeble, that for sugar being more developed than those for fat and proteids. The amylolytic function is practically non-existent. Premature infants should not, therefore, be given starch in any form.

The function of the sweat glands is not developed at full term, and hence is not, of course, in premature infants. The premature infant is thus deprived of one of the most important ways of losing heat. High external temperatures are, therefore, extremely dangerous for them, and may comparatively easily cause a heat stroke.

Animal Heat.—On account of their small size, the surface area of premature infants is proportionately larger than that of full term babies. Their heat regulatory centres are, moreover, poorly developed. Consequently they lose heat very rapidly. They cannot, therefore, bear low temperatures or exposure. They must be protected in every way against cold and exposure. The importance of this protection can hardly be exaggerated. It is perfectly possible for a single slight chill to turn the scale from life to death and undo the labors of weeks or months. On account of their greater loss of heat, premature babies need relatively more food; that is, more calories per kilo than full term infants. Experiments show that they require from one-fifth to one-quarter more calories per kilo than do normal infants. In spite of their greater need for food, they are, however, less able to take and digest it. This illustrates very forcibly the disadvantages under which they labor.

Resistance to Infection.—The resistance to infection of premature babies is, for many reasons, very slight. Their respiration is feeble, their digestion imperfect, their tissues undeveloped, and their vitality low.

Care of Premature Infants.—There are two objects to be attained in the care of premature infants. The first of these is to keep the baby alive; the second to develop its organism to

the stage normally reached at full term. The second of these is often forgotten, but is almost as important as the first.

The two most important points in the care of premature infants are the maintenance of the animal heat and the provision of a suitable food. It is unquestionably of advantage to protect them from noises, bright lights and handling, because in this way the normal intrauterine conditions are more nearly approached, but the importance of all these measures is infinitely less than the maintenance of the animal heat and the provision of a suitable food. Premature babies must be left alone and not handled. Handling cannot possibly do them any good and is almost certain to do them harm. They should not be picked up or disturbed in any way. Premature babies should not be regarded as curios and shown to everyone who happens to come along. Every person that sees them disturbs them to some extent and increases the chances of exposure and the dangers of infection. No one but the immediate family should be allowed to see them, and they should be allowed but one look.

Maintenance of Animal Heat.—While attempting to keep up the infant's animal heat, it must not be forgotten that both fresh air and pure air are necessary for its well being. It cannot thrive on air which has lost its oxygen, and it will be infected by bacteria-laden air even if it is kept warm. There are two means by the use of which the animal heat may be kept up These are incubators and substitutes for incubators.

Incubators.—The ideal incubator is one which will maintain any temperature desired constantly, and at the same time provide a sufficient supply of pure, fresh, warm air. I have never seen one which will do this. Most of them will maintain a constant temperature, or can be made to do so. None of them provides a sufficient supply of pure, fresh, warm air. None of them can do so unless some better system of ventilation is provided than has been up to the present time. Such a system would, moreover, probably be applicable only in hospitals. One result of the lack of fresh air is a diminution in the baby's vitality and in its resistance to infection. Bacteria grow most luxuriantly at the temperature at which the incubator is kept, so that another result of the lack of fresh air is an increased liability to infection. My experience leads me to believe, moreover, that premature infants do better if they have air to breathe of a slightly lower temperature than that at which the air of the incubator is kept. Personally, therefore, I prefer, at any rate in private practice, some substitute for an incubator to the incubator itself.

The best and most available substitutes for the incubator are the padded crib or basket. If a crib is used, it must be a small one. An oval clothes-basket is very satisfactory. The bottom and sides of the crib, or basket, must be padded thickly with cotton. The top should be covered with a blanket which reaches to a little below the baby's neck. The temperature of the baby's immediate surroundings can be kept at any temperature desired by the judicious use of hot water bottles or bags. This temperature should be between 95 deg. F. and 90 deg. F. The temperature should be taken from a thermometer which is wrapped in the baby's clothing, and not from one hung in the crib. The dangers of over-heating and of chilling have already been mentioned. Both can be to a certain extent guarded against by the regular observation of the infant's rectal temperature. The temperature of the room should be kept between 85 deg. F. and 80 deg. F., thus giving the baby air to breathe of a somewhat lower temperature than that of its immediate surroundings. The infant should be kept in a room by itself. The room should be sunny, and have an open fireplace with a fire in it. The crib should be protected from draughts by screens. If it is possible to do so without getting the temperature too low, the window should be open.

Other important methods of keeping up the animal heat are those which prevent the loss of heat. Most of these methods have an additional advantage in that they prevent handling. The baby should not be bathed, not even at birth. It should be oiled with olive oil then and every two or three days afterward. This gradually cleans it and keeps the skin in good condition. It should be oiled in its crib, not in the nurse's lap. It should not be dressed, but should be wrapped in absorbent cotton, or better, in a quilted gown with a hood. The gown is made by quilting cotton between two layers of cheese-cloth. This protects the baby as well as cotton alone, and makes the care much easier. A diaper may be used in fairly strong babies; absorbent cotton makes a satisfactory substitute in the feeble.

Feeding.—The best food for premature babies is human breast-milk. All the reasons which make breast-milk the best food for full-term babies are doubly applicable in the case of premature infants. If much premature, they cannot be put to the breast because of the consequent exposure and handling. Very feeble babies are, moreover, unable to suck. In some cases the nurse can lean over the crib and thus put the nipple in the baby's mouth. In many cases, however, the milk must for a time be taken with a breast-pump and fed in some other way.

Many premature infants, in fact, most in the beginning, are unable to digest full-strength breast-milk. It is safer, therefore, at any rate at first, to dilute the breast-milk with water, in the proportion of two or three parts of water to one of milk. A small amount of milk sugar may or may not be added. Premature infants usually do better on milk two weeks or more old than on the colostrum. In the beginning, therefore, the milk of a wet-nurse is better than that of the mother.

The most suitable food, if breast-milk cannot be obtained, is some modification of cow's milk. Whey mixtures are better than ordinary mixtures, because the proteids are in a more easily digestible form, and hence throw less work on the feeble digestive organs. Very weak mixtures should be used at first. If the baby is not satisfied, it is very easy to increase the strength of the mixture. If too strong a mixture is given in the beginning, it may kill the baby, and will certainly cause disturbances of digestion which will require days or weeks to correct. It is never a mistake to give too weak a mixture in the beginning, even if for a time it has to be strengthened every day or two.

The following mixtures are suitable ones. It is never a mistake to begin with the weakest one. Strong babies and those near full-term may, however, take the stronger ones at once without harm.

Fat	1.00
Sugar	3.00
Total Proteids	0.25
Fat	1.50
Sugar	4.00
Total Proteids	0.25
Fat	2.00
Sugar	5.00
Total Proteids	0.50

It is better to split the proteids in all these formulæ by using whey mixtures, making the lactalbumen and caseinogen the same. These formulæ, unfortunately, cannot be made with gravity cream, as a cream containing at least 32 per cent. of fat is needed. They must, therefore, be prepared at a laboratory or with a high-percentage cream. Five per cent. of lime water should be added and the mixture pasteurized at 155 deg. F.

It is better to begin by giving 5 c.c. at a feeding. If the baby

is not satisfied, it is very easy to gradually increase the amount. No harm can be done by giving too little at first; irreparable harm may be done by giving too much.

It is rarely advisable to feed a premature infant as often as once an hour, as this gives it almost no time for rest or sleep. The best interval in the beginning is usually one and a half hours. The food should be given at this interval both day and night, making sixteen feedings in twenty-four hours. This interval should be lengthened to two hours as soon as possible. Feeding should be commenced as soon as the food can be prepared, that is, within a few hours after birth.

When the infant is strong enough to take food from a nipple, it should be fed from the bottle. Many babies are not strong enough to do this, however, and have to be fed in some other way. The most satisfactory way of feeding such babies is with the "Breck Feeder," designed by Dr. Samuel Breck, one of the physicians to the Boston Floating Hospital. It consists essentially of a graduated glass tube open at both ends. On the smaller end is a nipple about the size of the rubber of a medicine dropper. This is perforated and goes into the baby's mouth. On the other end is a large rubber finger-cot. By squeezing the finger-cot milk is forced into the baby's mouth and efforts at sucking aided or induced. Some babies are too feeble to take food even in this way, and have to be fed with a dropper. It is almost never advisable to use a stomach tube, as the shock of passing it usually does more harm than the food does good.

Stimulation in the form of brandy in doses of 1 or 2 drops, or of strychnia in doses of 1-1,000 of a grain, is often necessary for a long time. Oxygen is very useful when there is cyanosis, and will sometimes carry babies through very critical periods. It is always well to have oxygen close at hand. Babies who have a plentiful supply of fresh air rarely need it, however.

Nursing.—It is evident from what has been said that it will require the whole time of two able-bodied women to care for and feed one premature infant. No one person can do it properly, as the constant attention and frequent feedings never allow more than an hour of consecutive sleep, and usually much less. Everything depends on the care and watchfulness of the attendants. Their position is a far more important one than that of the physician. Trained nurses are much preferable to unskilled attendants, especially if they have been trained in the care and feeding of infants.

I realize, of course, that I am describing ideal conditions which can only be attained when people are well-to-do and do not have to spare expense. There is no reason, however, why they should not be kept as ideal in other cases in which the circumstances are less favorable, and approached as nearly as possible. When everything can be done, regardless of expense, I think premature babies do much better in their own homes than in a hospital. They receive more individual attention, and are much less exposed to infection. For the same reasons I prefer even only moderately good surroundings at home to those of a hospital.

Prognosis.—The prognosis depends chiefly on the age and weight of the infant and the care which it receives. The older the infant, the better the prognosis. Every day counts. There is of course, nothing in the old saying that seven months' babies are more likely to survive than eight months' babies. It probably originated in the fact that seven months' babies were given special care, while eight months' babies were treated in the same way as those born at full term. The prognosis is almost absolutely bad when the weight is under two pounds. It is very fair when it is over four pounds. Every ounce of weight over two pounds increases the chances of survival. The importance of care and of attention to the minutest details of the treatment has already been mentioned. Too much stress cannot be laid upon it.

Premature infants that are doing well usually run a slightly elevated temperature; those that are doing badly almost always run a subnormal temperature. A drop in the temperature should always be regarded as a sign of danger, even if all other conditions seem favorable. Premature infants that are apparently doing well in other ways often go many weeks without any gain in weight. This is not a cause for discouragement, because during this time they are almost always gaining steadily in development and approaching the status of the normal full-term infant. We should be satisfied, for the time, if we are developing a normal baby; it is easy enough to make it gain later.

Premature babies are very apt to die suddenly without any apparent cause. It is never safe to consider them out of danger until they are thriving under normal conditions. Up to this time the prognosis should always be guarded. If they survive, they become as vigorous and as large adults as do full-term babies.—*Amer. Jour. Obst.*

70 Bay State Road.

Progress of Medical Science.

MEDICINE.

IN CHARGE OF W. H. B. AIKINS, H. J. HAMILTON, C. J. COPP, F. A. CLARKSON AND BREFNEY O'REILLY.

The Treatment of Insomnia.

Dr. T. J. W. Burgess, in a paper on "The Family Physician and the Insane" (*Montreal Medical Journal*), gives the following hints as to the treatment of insomnia:

Insomnia is often one of the most troublesome symptoms we have to combat in mental disorders, patients sometimes remaining abnormally wakeful for days unless steps are taken to relieve them. To procure sleep there is no panacea, and first we should try to woo it by measures intrinsically harmless. There is no sleep so refreshing as natural sleep, a fact well recognized by that master-student of nature, Shakespeare, who makes Iago say of Othello,—

> "Not poppy, nor mandragora,
> Nor all the drowsy syrups of the world,
> Shall ever medicine thee to that sweet sleep
> Which thou ow'dst yesterday."

For this reason drugs should be a last resort. Open air exercise, pushed to the point of pleasant muscular fatigue, such as an hour's walk or a drive, when strict confinement to bed is not deemed advisable, will often quiet a patient and secure refreshing slumber, thus obviating a recourse to the pharmacopeia. In many cases sleep can be procured by a prolonged warm bath. It is best given just before bedtime, with water at a temperature of about 90, and should last from twenty minutes to half an hour. Often the hot wet pack is even more effectual than the ordinary hot bath. In some cases when simple irritability produces insomnia, a stimulant will induce sleep, and it has been customary with me to first try a sleepless patient with a hot bath, followed by a night-cap of hot Scotch, often with surprisingly good results.

Should these simple means fail, drugs must be resorted to, but in their use we must beware that nature does not come to depend upon them. Of these one of the best is sulfonal, alone or combined with trional. The great objection urged against sulfonal is the slowness of its action, for which reason, if

administered alone, it should be given about four or five o'clock in the afternoon. This objection is greatly lessened by its combination with trional, which is more speedy in its effects. Ten or twelve grains of each given in gruel, milk or water, as hot as it can be swallowed, at bedtime, will often induce rapid and prolonged slumber. Another excellent hypnotic, though much less used than formerly, is chloral. It is most applicable to acute hallucinatory conditions, and the insanities connected with epilepsy and chorea. Hyoscine is indicated when there is motor excitement, and has the advantage that it is prompt in its action, and can be administered hypodermically. Paraldehyde is highly extolled by some authorities, and, having no bad effect upon the heart or circulation, can be safely administered in cases where sulfonal, chloral and hyoscine are contra-indicated. In melancholia and alcoholic insanity, opium and its alkaloids are valuable. As a rule, however, and especially in acute maniacal conditions, they are useless and harmful, impairing digestion, and thus combating the effects we most desire. Either morphine or codein may be given hypodermically, but the latter, I think, is preferable.

In the use of any of these drugs it is well to intermit them from time to time to see if the patient cannot sleep without them. Frequently, two or three doses having produced their effects, nature will take care of itself, and the patient rest without their use. It is advisable also to change the hypnotic used after a few doses, so that the patient will not become too much accustomed to any one drug. In this way we lessen the risk of forming the drug habit, and avoid the evil of setting up a tolerance which will require constantly increased doses to produce the usual effect. I need hardly say that in no case should the patient be told the name of the drug employed.

Prostatic and Seminal Albuminuria.

W. G. Young (*N. Y. Med. Journal*), of Washington, reports several cases of the above, and attaches to it great importance, especially with regard to the examination of applicants for life insurance. There is considerable literature on the contamination of urine with pus or blood, and the so-called "functional," "physiological" or "cycical" albuminuria, but the presence of albumen of seminal or prostatic origin is generally overlooked. In these latter cases the albuminuria is intermittent, sometimes being only present at certain times of the day. The reaction for nucleo-albumen is usually the most distinct, but serum-albumen and globulin may also be detected.

This form of albuminuria seems to occur in cases of prostatic congestion, also in cases with habitual sexual excitement without gratification, and is intensified by constipation. The prostate is usually slightly enlarged, soft and tender, the posterior urethra sensitive and the vesicles frequently distended.

The patient is instructed to urinate into one glass, not completely emptying the bladder; the prostate and vesicles are then palpated per rectum and their contents expressed; finally, the subject completes the act of micturition, flushing out the urethra and from it the seminal and prostatic secretions.

The author does not believe that the presence of normal prostatic fluid will give the reaction for albumen.

The first portion of urine referred to above is usually clear, and may or may not give a faint reaction; the second is frequently turbid, containing bluish-white, tapioca-like bodies, and showing albumen to be present in considerable quantities.

The Urine after Renal Palpation.

In the "Roussky Vratch" (*N. Y. Med. Journal*) appears an article by Zhelerofski, in which he reports having succeeded in evoking an albuminuria (palpatory) in all cases, while in some he could detect a distinct difference in the urinary sediment obtained after palpation, as compared to that seen before the manipulation. Palpatory albuminuria is a constant phenomenon, but is minimal in normal kidneys and much more marked in diseased organs. Whenever on palpation a measurable amount of albumen is passed, as determined by Brandberg's method, we have to deal with a pathological renal organ; otherwise, especially if no change is found microscopically, we conclude that the organ in question is healthy; thus we may be able to localize a lesion in one or other kidney.

Functional Albuminuria.

An article by Collier appears in the issue of January 5th, 1907 (*British Med. Jl.*), relating to the appearance of albumen in the urine, following violent exercise, in individuals in perfect health and whose urines when at rest were normal. From his observations on large numbers of the Oxford rowing crews he finds albumen to be present in practically every specimen an hour after severe exercise, in half of these cases in considerable quantities; among the urines passed by men in ordinary training shortly after moderate exercise nearly 50 per cent. showed presence of albuminaria. The late Dr. Morgan, of Manchester, made exhaustive inquiry into the after health of nearly 300

men, who had during their undergraduate days been competitors in the Inter-University boat race, and came to the conclusion that the chances of long life in their case was distinctly greater than that of the average individual. The practical issue lies in the question as to whether insurance companies are wise in refusing candidates between the ages of, say, 18 to 30, whose urines are found to contain albumen after exertion only; many men who have been examined after rest would thus be passed, who, had they been seen, say, after exercise, would not have been accepted. That this unsatisfactory state of things exists is a plea in itself for further investigations.

Diet in Oedema.

In the "Medical Magazine" of January appears an article by Hertz, read before the Therapeutical Society, dealing with the diet in cases of oedema, with special reference to the benefit of deprivation of sodium chloride. It is generally recognized that in parenchymatous renal disease, acute and chronic, the output of chlorides in the urine is reduced, in such lesions as granular kidney, which are usually unassociated with oedema the output is normal; these facts are obviously important both from a diagnostic and therapeutic standpoint.

In reviewing the subject of renal oedema Hertz lays stress on the following points: A normal adult can excrete 20 to 30 grams of salt taken in the course of one day within 48 hours; deficient power to excrete sodium chloride is apparently the essential factor in the production of both renal and cardiac oedema, hydraemic plethora resulting from the retention of salt, but only if accompanied by increased permeability of the vessel walls.

So far no relation between the excretion of such substances as urea, uric acid and the phosphates, and the chloride of sodium has been found; nor has any definite anatomical change corresponding been noted. The former belief that salt was only retained in order to prevent the osmatic pressure of the body fluids sinking too low owing to the primary retention of water has been generally abandoned, as the percentage of salt in blood and various fluids is frequently above normal. Narie and Halpern found that during the period of diminishing oedema much more salt was excreted than corresponded to the loss of fluid as estimated by the diminution in the patient's weight. It is only possible to explain these facts by supposing the salt retention to be primary and the oedema, though possibly due in part to deficient renal function, to be mainly brought about by the regulating mechanism associated with osmosis.

These conclusions have been confirmed in cases of unilateral renal disease, unassociated with oedema, but in which the urine from the diseased side showed a smaller percentage of salt. In calculous anuria, which may last for ten or more days, during which time a considerable quantity of fluid must of necessity accumulate in the body, oedema seldom occurs. Hertz believes that retention of salt, due to impaired renal circulation, gives rise to a secondary retention of water, and thus brings cardiac oedema into the same category as renal dropsy. Deficient cardiac power and the resulting increase in venous and capillary pressure, together with increased permeability of vessel walls, he believes should receive due attention.

As regards an exclusive milk diet, except in acute exacerbations of nephritis, Hertz is inclined to think that it is insufficient to nourish the already weakened renal cells. Widal and Jarval have observed in a patient with chronic parenchymatous nephritis, whose kidneys were excreting only two grms. of salt, a change from milk diet, in which a small but constant increase in oedema was occurring, to one of meat, bread and potatoes, all prepared without salt, the oedema gradually disappear, as only one grm. of chloride sodium was daily ingested (a carefully mixed diet, apart from the addition of salt, is found to contain one grm. less salt than three pints of milk).

A mixed diet has the double advantage of maintaining the tissues in a better state of nutrition and permitting the slight restriction of fluid sometimes advisable on account of the renal insufficiency in the more acute stages. The argument in favor of a milk diet, that increased albuminuria follows one more varied, is negativ ' by the removal of salt from latter, when as a close relation between the excretion of salt and albumen is admitted, the increased albuminuria referred to is not present, the nephritic patient frequently excreting no more albumen than when on one of pure milk. Owing to the necessity of making the food palatable and keeping up the patient's appetite, skilful preparation of food with such substances as butter (fresh), sugar, lemon juice and vinegar, is recommended. In cardiac cases one need not limit the proteids, as the renal function of excreting nitrogen is usually but little disturbed, but the carbohydrates on account of their tendency to formation of gases and thus interference with cardiac efficiency, must be carefully administered. Such diuretics as diuretin, caffein, are theoretically useful in renal disease, as under their influence an increase in the percentage of salt in the urine is noticed, but on account of their irritant action on the renal cells may be injurious. There are no objections to the use of either

caffein or digitalis in cardiac dropsy. Purgatives, on account of the small quantities of salt excreted by the bowel, can apparently be of little use, but Hertz does not deem it wise to attempt to check the spontaneous diarrhea so frequently met with. He advocates diaphoresis in all cases, but believes it only to be of distinct value in cases where the power to excrete water by the kidneys is deficient.

He suggests substituting isotonic dextrose solution (in plain water for rectal injections), in place of the normal saline subcutaneous injections usually given.

Referred Pains.

There are a great many conditions of disease in which more or less severe pain is felt in various parts of the body at a distance from a diseased organ. The explanation for the referring of these pains to a part of the body which is really not affected is as follows:

The branches of the visceral nerves and of the general sympathetic nervous system enter the spinal cord at various levels throughout its entire length. Irritation sent into the spinal cord through these nerves set up sensory impulses in the various segments of the cord, each segment receiving impulses from a certain organ. These sensory impulses are sent upward to the brain, and become conscious perceptions. They are referred by consciousness not to their actual point of origin, but to the part of the body from which sensations usually come when received at the particular segment irritated. Thus, as in general experience, sensations and pains coming from the various segments of the spinal cord have been due to irritation in the surface of the body corresponding to these segments; these various visceral sensations are referred to the surface of the body. Some examples of such referred pains will make this matter clearer.

It is not at all uncommon in eyestrain to have a pain felt in the forehead or in the back of the neck, neither of which parts is in direct connection with the eye.

The pain produced by decayed teeth may be felt in the temple or behind the ear, instead of in the jaw.

Severe pain in the back of the head is a common symptom of uterine disease or of inflammation of the bladder.

Pain down the left arm is a common symptom of heart disease, and may be attended by hyperaesthesia in the region of the fourths and fifth dorsal nerves on the chest.

Pain in the wrist on the flexor surface is frequently felt in disease of the uterus, ovaries or bladder.

Pain under the right shoulder-blade is frequently felt in disease of the liver, and is often attended by hyperaesthesia in the domain of the eighth to the twelfth dorsal nerve.

Pain under the left shoulder-blade is common in enlargement of the spleen.

Pain between the shoulder-blades is a very common symptom of gastric affections of any kind. It may be attended by hyperaesthesia in the epigastric region, and the nearer the disease to the cardiac end of the stomach—*e.g.*, ulcer—the higher the pain is felt. In severe vomiting, pain may be felt on the back of the arms or even down the back of the forearms.

Pain across the small of the back is common in colitis, or in impaction of feces within the colon.

Pain across the upper sacral region is very common in uterine disease.

Pain over the outer side of the hip is usually due to ovarian congestion.

Pain down the inner side of the leg is also due to the same cause.

Pain on the inner side of the knee is an early symptom of hip-joint disease.

Pain in the heel is a frequent symptom in lithaemia, and may also be felt in ovarian disease.—From "Organic and Functional Diseases," by M. ALLEN STARR (last edition).

Spirocheta Pallida.

In the January issue of *American Medicine* appears a note on the technic of Nattan-Larrier and Bergeron used in the demonstration of Sp. Pallida in the blood during life.

They advise withdrawing 10 cc. blood from a vein; place half in each of two flasks containing 100 cc. of sterile water, centrifugalize 15 minutes, make smears from the precipitate, dry at 37 degrees C., fix in alcohol and ether, and treat as tissue sections, using Van Ermengen's or Heidenbain's stains.

Plantar Reflex and Toe Sign.

Noica concludes from his research on the plantar reflex that the centre governing the external plantar reflex and abduction of the toes, and the Babinski toe sign is located in the fifth lumbar segment. When the reflex is limited to the muscles of the foot it is physiologic, but when it includes the muscles of the leg (Babinski sign) it indicates pathologic conditions.—*Semain Med. and J. A. M. A.*

LARYNGOLOGY AND RHINOLOGY.

IN CHARGE OF J. PRICE-BROWN.

Koplik Spots: Their Relation and Interest to Laryngologists.

H. G. Longworthy (*Medical Record*, Oct. 20, 1906).

The earliest manifestation of Koplik spots is upon the mucosa about the angles of the mouth, and in the region of the gums. The eruption may appear fully five days before the exanthema of measles manifests itself, and the presence of the Koplik spots is a sure sign of the immediate advent of this disease. The spots are irregularly stellate or round, and are of a rose color. In the centre of each spot there is a bluish-white speck, and this appearance in the strong sunlight, of the two combined, is pathognomonic of the onset of measles. The number of specks at the outset may be less than half a dozen. In a short time they become more numerous, and the rose-colored spots become confluent, forming diffuse red patches of buccal mucous membrane, studded with bluish-white specks. They are seen only on the inner surface of the lips and gums. The spots are named after their discoverer, "Koplik."

From Practical Problems in Otology and Rhinology.

Dundas Grant (*Laryngoscope*, Jan., 1907).

The writer draws attention to the fact that during vigorous inspiration the expansion of the chest must mechanically induce a certain amount of dilatation of the thoracic cavities and great vessels. In-suction of the blood is thus produced, and this must, *ceteris paribus*, lead to a diminution of the blood pressure in the peripheral vessels, and, among others, those of the upper respiratory passages. The direction of suction favors the formation of coagulation plugs in vessels which may have been opened by operations upon the nose and throat.

Patients are, therefore, instructed to avoid blowing the nose, but, on the contrary, to snuff vigorously up through the nose, and expectorate out by the mouth any blood which has been drawn into the back of the throat from the site of the nasal or throat operation. Dundas Grant has found the hemorrhage after operations for adenoids diminish to an extraordinary degree when these instructions have been carefully followed.

Another application of inspiratory effort is its use in the emptying of accessory sinuses. Mott, of Arnheim, recommended, in cases of acute catarrh of the frontal sinuses, that the patient should pinch his nostrils and then draw in a full

breath, thus exercising suction more or less on all the sinuses, but as a rule chiefly in the frontal, as it has the most dependent opening. By changing the posture, the drainage of the various cavities during the act of suction can be favored; the sphenoid sinus, for instance, by bending the head downwards and forwards.

Various mechanical contrivances, also, have been recommended for the purpose of suction of the nasal sinuses, prominent among which is that of Sondermann, which consists of a nose-piece, provided with pneumatic India rubber cushions to render the fit air-tight. The air ball and tube are so arranged as to allow of suction only.

The Indications for Operation in the Treatment of Sinusitis.

A. Capart (*La Presse Oto-Laryngologique Belge*, Feb., 1906).

In this paper three questions are discussed: The relative frequency of intra-cranial complications in affections of the sinuses; the dangers of certain operations, and the prognosis of intra-cranial complications. The answer to the first is, that, considering the frequency with which sinusitis occurs, and the histories that we have of intra-cranial complications, we must regard dangerous sequelæ as very rare. Second: As published records of radical operations indicate that many serious results have occurred, judicious procedure is advisable in regard to both recommendations and operation. Third: When a serious complication has occurred it is the absolute duty of the surgeon to operate, although, from the small number of successful cases on record, the issue and prognosis may be very doubtful.

Eustachian Catheterization Through the Mouth.

Hugo A. Kiefer (*South Cal. Practitioner*, April, 1906).

In cases in which catheterization of the eustachian tubes is necessary, but impossible through the nasal cavities, owing to mechanical obstruction, catheterization through the mouth can be accomplished without great difficulty. The technique is as follows: First, bend the catheter into a long curve of about 90 degrees at the distal end. Then, anesthetize the naso- and oropharynx and the soft palate. Next, have the patient depress the tongue. After which, the surgeon uses his throat mirror with one hand and guides the tip of the catheter into the orifice of the eustachian tube with the other. And, finally, withdrawing the mirror, he uses the same hand to compress the Politzer bag, while retaining the catheter *in situ*.

The Operative Treatment of Laryngeal Papillomata.

D. R. Paterson (*The Lancet*, Jan. 21, 1906).

This author is an advocate of the endo-laryngeal method of treatment. After reviewing the various operative measures in vogue for the removal of laryngeal papillomata in children, he describes the method by which, in his experience, the larynx can be most easily brought under direct inspection, and the endo-laryngeal method simplified.

For the direct method of removal, he uses a fish-tail tube spatula, with handle attached and a straight forceps. For illumination, he recommends the Kirstein electric head lamps. The operating-table should be of sufficient height to enable the operator, when seated on a low chair, to work conveniently. The patient should be placed on the back, with the head hanging over the end of the table, and a low pillow under the shoulders. Chloroform is the most suitable anesthetic, and full anesthesia should be maintained. The pharynx is washed lightly with a 10 per cent. solution of cocaine, the tube spatula introduced, and through it the entrance of the larynx and the under surface of the epiglottis are similarly brushed. In the introduction of the spatula, its point is passed along the under surface of the epiglottis and then tilted upwards, so that it carries that structure forward and enables an admirable view of the larynx to be obtained. In some cases, placing the fish-tail end of the spatula on the base of the tongue, immediately in front of the epiglottis, and tilting it upward is quite sufficient to bring the interior of the larynx into view, without touching the epiglottis, the whole operation of removing the papillomata being done without removing the spatula.

For the removal of the papillomata he uses a straight forceps, with cutting edges formed on the crocodile principle and designed by himself. It is used through the tube spatula and is lightly built so as not to interfere with vision of the parts during operation.

The work is done rapidly, the growths being removed successively. The hemorrhage is not very great. The two parts of the larynx most difficult to reach are the anterior commissure and the subglottic space. It is in these places that recurrence is most likely to occur, as the removal may be imperfect. In these regions he sometimes uses a modified Löri's curette.

When recurrence persists, he likewise advises the wearing of a tracheotomy tube for a time. This materially aids in producing a radical cure.

The Indications for "Curative" Tracheotomy in Laryngeal Tuberculosis.

Henrici (*Archiv. fur Laryngol.*, Vol. XVIII., Part I, 1906).

This author records four cases of laryngeal phthisis which were completely cured after having tracheotomy performed, not to relieve dyspnea, but simply to put the larynx at rest. All were in children from eleven to thirteen years of age, in whom the laryngeal disease appeared to be primary, as there was no evident lung disease to be detected in any of them. The permanent nature of the healing is shown by the fact that it remained complete at periods of nine months, two years, three years, and five years after the tracheotomy.

The three indications for curative tracheotomy which the writer deduces from his experience are:

1. Youthful age of the patient. This, he thinks, may extend throughout the whole period of bodily development up to the age of twenty.

2. The absence of, or only very slight, disease of the lungs.

3. A relatively benign form of laryngeal disease—a tendency to tumor formation and infiltration without much ulceration.

In all four cases the disease had continued to progress, notwithstanding ordinary endo-laryngeal treatment, before tracheotomy was performed.

(In conection with the above, the abstractor might recall to the memory of the reader the one he reported to the journals in 1903. This was the case of a young man, aged 31, upon whom he did tracheotomy, not for the sake of rest, but to relieve rapidly advancing dyspnea. The operation was done in November, 1902. The lungs were somewhat affected, but not very seriously. The voice had been inarticulate for one and a half years, and the laryngeal infiltration was very marked, rapidly advancing cyanosis being a very prominent symptom. The operation removed the dyspnea and furnished the patient with the rest cure. He is now, and has been for a long time, perfectly well, following his regular occupation in a piano factory. The only difficulty is that the cicatricial adhesions in the larynx necessitate the continued use of the tracheotomy tube. Vocalization has materially improved, and, on closing the opening in the tube with his finger, he can speak in a distinct and loud but guttural tone.—*Abstractor.*)

Editorials.

TWO IMPORTANT JUDGMENTS.

We have much pleasure in publishing in this issue the judgment of the Court in the Crichton case. There has been much misconception regarding the case, which a perusal of this admirable judgment will assist in relieving. We have every reason to believe that the Ontario Medical Council had no desire to deal harshly with Dr. Crichton, who is an intelligent and well-educated man, being a graduate in Arts and Medicine of the University of Toronto. That Body did desire, however, that Dr. Crichton should act in a professional way. It seems hard to convince the lay public, and especially the editors of newspapers, that unprofessional conduct on the part of a physician is not in the interests of the public. We believe that the lay press of Canada has become a great power for good in the Dominion of Canada, but we have to say with considerable regret that its tone is not at all times quite fair to the medical profession.

We are also publishing the judgment delivered by the Court of Appeal regarding the question submitted to them as to what was intended in the Medical Act as to the practice of medicine. This judgment is of great interest in consideration of certain demands made by a body of people who call themselves Osteopaths.

In connection with the same we are also publishing a copy of the proposed Osteopathy Bill.

THE PUBLIC CHARITIES OF ONTARIO.

We find much interesting information in the 37th annual report on Public Charities, prepared by Dr. R. W. Bruce Smith, the Inspector, and presented to the Legislature by the Hon. Mr. Hanna, February 12th. There are in the province 61 Hospitals, 37 Refuges, 30 Orphanages, 3 Homes for Incurables, 2 Magdalen Asylums, and 25 County Houses of Refuge.

In regard to Toronto, the Inspector speaks in very high

terms of the Hospital for Sick Children, but considers that there is great need for increased hospital accommodation for the city with a population of a quarter of a million. He thinks the new General Hospital will not be completed for four or five years, and by the time that institution is opened the population of the city will probably be greatly increased. He thinks, therefore, that every encouragement should be given to the existing hospitals to enlarge their accommodations and improve their facilities for the care of the sick poor in the community.

The Inspector also refers to the success of the psychopathic wards in the Toronto General Hospital. He considers the importance of the work done in such wards cannot be too highly extolled. Unfortunately insanity is increasing in Ontario, and we should endeavor to prevent any further advance by adopting prophylactic measures. The psychopathic hospital has passed the experimental stage, other counties have proved its usefulness, and it is hoped that all the asylums in the province will in the future do much good work on this line.

The Inspector also recommends that a large modern psychopathic hospital be built in Toronto in the near future. We understand that the erection and proper equipment of such a hospital is now receiving the careful consideration of a number of men who take a deep interest in this subject.

ONTARIO MEDICAL ASSOCIATION.

In October, 1880, a meeting of the profession was held at the Canadian Institute, Richmond Street East, Toronto, at which a committee, consisting of Drs. C. W. Coverington, J. E. Graham, Jos. Workman, J. E. White, J. H. Burns and A. H. Wright, was appointed to take the necessary steps towards the formation of a Provincial Association. As a result of the labors of this committee, the inaugural meeting of the Ontario Medical Association was held in Toronto in June, 1881, and there were present at that meeting one hundred and thirty-two.

Dr. Joseph Workman, of Toronto, was the first President. Those who followed him in the presidency up to 1890 were:

Drs. C. W. Coverington, of Toronto; J. D. Macdonald, of Hamilton; Daniel Clarke, of Toronto; A. Worthington, of Clinton; G. A. Tye, of Chatham; Jas. H. Richardson, of Toronto; J. W. Rosebrough, of Hamilton; W. J. Henderson, of Kingston; and J. Algernon Temple, of Toronto.

The first Secretary was Dr. J. E. White, of Toronto, who remained in office from 1881 to 1888, when he was succeeded by Dr. J. Gibb Wishart, of Toronto, in 1889. The first Corresponding Secretaries appointed were Drs. Stewart, of Brucefield—who afterwards went to Montreal; Dr. Wolverton, Hamilton; Dr. Hamilton, Port Hope; Dr. Macdonald, Alexandria. The office of Corresponding Secretary was abolished in 1890. Dr. J. E. Graham, of Toronto, was the first Treasurer, and held office from 1881 to 1886, when he was succeeded by Dr. N. A. Powell, of Toronto.

The next meeting of this Association will be held in Toronto, May 28, 29, 30. We have to state with much regret that the interest of the profession outside Toronto has been steadily declining for some years. We are told that only forty-eight non-resident members attended the meeting in 1905. The Committee on Papers and Business expresses the positive opinion that there are many live questions of general interest to the profession, apart from the treatment of typhoid fever, appendicitis, etc., which vitally concerns its welfare in relation to the public, and in consequence there should be a strong representative Provincial Association.

In the endeavor to stimulate general interest in the Association, the committee has arranged for a general discussion upon "The Profession in Relation to the Public," to be discussed under four heads:

1. "Medico-Legal Aspects," embracing the subjects of coroners, post-mortem examination, medical evidence and court fees.

2. "Public Health Aspects," embracing county health officers, attendance upon the poor, fees for registration of births, deaths, infectious diseases and compulsory vaccination.

3. "The Ideals for Ontario in Asylum Work."

4. "Water Supplies of the Province, and the Methods of Prevention of their Infection"

The opening of this discussion has been placed in the hands of competent men, who will be followed by many well-known authorities who are interested in these various subjects.

RESIDENCE FOR NURSES SICK CHILDREN'S HOSPITAL.

The new residence for the nurses of the Hospital for Sick Children, of Toronto, erected by Mr. J. Ross Robertson, the Chairman of the Board of Trustees, is a magnificent structure. We are told by *The Canadian Nurse* that a prominent authority from the United States says: "There is no other Residence for Nurses in the world that approaches this one in its design, exterior and interior, or in its plan of rooms necessary for the work of training nurses." Another authority says: "Its equipment and furnishing are absolutely perfect, it possesses features to be found in no other such building." The building is situated at the southern end of the hospital property between Laplante Avenue and Elizabeth Street, about three hundred feet south of the main building, and cost about $130,000.

The editor of *The Canadian Nurse* does well in praising the great work of Mr. J. Ross Robertson in connection with that magnificent charity, the Sick Children's Hospital. She says: "Mr. Robertson will leave the world better than he found it; his example has done good; he has helped to save suffering; to lengthen life and to restore health to many children." "In these things is great reward."

"We do not wonder that the nurses of the Children's Hospital, Toronto, are said to have changed the name of their new abode from the Nurses' Residence to the 'Nurses' Paradise.' It is all that one can wish. We say this after spending hours inspecting it carefully on two different occasions, and with all the plans and details before us. Approaching it from the north, we passed the nurses' skating-rink (a tennis-court in summer time), and looked up at the roof garden, which will be such a charming retreat when summer comes again. Entering

the building, one is filled with pleasure and satisfaction at every step. We cannot speak of one room or part of the building without mentioning all, so perfectly adapted is it to its purpose and beautiful and artistic withal. . . . The vista from the dining-room, the reading-rooms and library, the bedrooms, reception rooms, kitchen and trunk rooms, the maids' parlor, the swimming-bath, everything once seen will not be forgotten, so pleasing are they all and so perfect."

THE STERILIZATION OF MILK.

Milk cannot be effectually cleaned when once it has been contaminated. "Were new-fallen snow once sullied," says the heroine, the beautiful daughter of Sir Henry Lee, in "Woodstock," "not all your art could wash it white again, and it is the same with a maiden's reputation." It is somewhat the same with milk. The one thing to do is to keep it clean. Besides, the "fresh element" and the more unstable (and very nutritious) albumens are destroyed by sterilization, so that the profession are in complete accord with the views of Sir Thomas Barlow, Sir Lauder Brunton and other members of the Infants' Health Association who waited upon Mr. John Burns to deprecate proposed legislation *re* the sterilization of milk. Mr. Burns promised careful consideration to these representations and to any further information that might be laid before him.

The annual elections of the Medical Society of the University of Toronto, and also the Medical Athletic Association, were held on January 25th in the Medical Building. The following were elected as officers for the session 1907-08 Medical Society: President, R. O. Davison; Vice-President, R. H. Thompson; Corresponding Secretary, F. W. Wallace; Recording Secretary, W. D. Slatter; Curator, D. A. Campbell; Treasurer, O. S. Large; Assistant Treasurer, G. L. McDougall; Councillors, D. W. Allan, E. M. Horton. Athletic Association—President, C. S. Mahood; Vice-President, R. O. Miller; Secretary-Treasurer, P. D. Spohn; Councillors, H. C. Davis and A. B. Lawson.

Personals.

Dr. A. G. McPhedran (Tor. '06) is practicing at Stroud.

Dr. Thos. R. Henry (Tor. '04) is practicing at Burgessville.

Dr. Vaux, of Toronto, sailed for Naples, November 29th, 1906.

Dr. H. M. Torrington (Tor. '03) has removed to 20 Woodlawn Avenue, Toronto.

Dr. A. J. Mackenzie, of Toronto, has been elected Vice-President of the Canadian Club.

Dr. G. B. Archer (Tor. '04) sailed on January 11th for Ranagthe, Bengal, India, where he will engage in missionary work.

Dr. W. J. Charlton, of Weston, has been made one of the License Commissioners of West York, in the place of E. R. Rogers.

Dr. Jack Chisholm (Tor. '01), who is practicing at Fort William, visited his friends in Toronto and Berlin, Ont., in January.

Dr. Geo. R. McDonagh, of Toronto, sailed from New York for Egypt February 1st. He expects to return to Toronto about April 1st.

Dr. J. L. Turnbull, formerly of Goderich, who has recently been abroad, has returned to Canada, and has commenced practice at Listowel.

Dr. W. H. Lowry, of Toronto, specialist in diseases of the eye, has been appointed a member of the staff of the Hospital for Sick Children, Toronto.

The following Doctors have been appointed Associate Coroners: Dr. Geo. Gilbert Roe, Toronto; Dr. W. Dales, Warren, and Dr. J. T. Clarke, Toronto.

Dr. T. A. Davies, of Toronto, sailed for Liverpool February 23rd. He will be for some time engaged in post-graduate work in London and on the Continent.

Dr. F. E. Watts (Tor. '04) has been appointed assistant to Dr. Bell, on the Provincial Board of Health, and is spending the winter among the railway and lumber camps of Northern Ontario.

Dr. T. M. Wilson (Tor. '06) has resigned his position as Assistant in the Department of Physiology in the University of Chicago, to accept a position under Dr. Jno. Murphy in the Presbyterian Hospital of the same city.

Dr. Wm. J. Bell (Tor. '02), after acting for two years as surgeon on one of the C. P. R. Pacific steamers, went to London, England, and did post-graduate work in the London hospitals. He is now practicing at North Bay.

The profession of Fort William and Port Arthur have organized a medical society under the title of the Thunder Bay Medical Society. Dr. Birdsall, of Fort William, is President, and Dr. Pratt, of Port Arthur, is Secretary.

The many friends of the Hon. Dr. Reaume, who were for a time anxious about his health, are pleased to know that he has quite recovered. Since the opening of Parliament he has been actively engaged in the conducting of his Department.

The new Medical Council for Alberta consists of the follow-following members: Dr. Braithwaite, of Edmonton (who has been elected President); Dr. Hotson, of Strathcona; Dr. Simpson, of Lacombe; Dr. Brett, of Banff: Dr. Laferty, of Calgary; Dr. Kennedy, of Macleod, and Dr. Mewburn, of Lethbridge.

Marriages.

Dr. W. C. Arnold was married to Miss Etta Mackenzie, of Toronto, January 2nd.

Dr. S. J. Boyd, of Richmond Hill, was married to Miss Maude Kerr, December 25th.

Dr. Thomas W. B. Edmunison, of Hamilton, was married to Miss Marguerita Banton, December 26th.

Dr. Robert A. McClung, of Battleford, Sask., was married to Miss Louise Allan, January 1st.

Dr. Bryce McMurrich, of Toronto, was married on January 9th to Miss Beatrice Myles, also of Toronto.

Obituary.

SIR WILLIAM HALES HINGSTON, M.D.

Canada has lost one of her greatest men and one of her best surgeons through the death of Sir William Hingston, of Montreal, which occurred February 19th. We are told that he was going about as usual on the morning of February 18th, and had luncheon with some friends at the Mount Roval Club on the same day. During the meal he did not appear to be quite himself, and after luncheon he fell asleep in a chair in the smoking-room, and his friends could not rouse him. He was then taken to his home and was cared for by several physicians. He never recovered consciousness, but continued to sleep peacefully "as if in a trance" until the following morning, when death came.

He was a son of the late Lieutenant-Colonel Hingston, of Her Majesty's 100th Regiment, and was born in Hinchinbrook, Quebec, June 29th, 1829. He graduated from McGill in 1851, and practiced all his life in Montreal. He always took a great interest in municipal affairs, and served as Mayor of Montreal from 1875 till 1878, when he declined re-nomination. On account of the excellent judgment he displayed during the Guibord excitement in Montreal, he received the thanks of the then Governor-General of Canada, the Earl of Dufferin; was appointed a Commander of the Royal Order of St. Gregory in 1875; was knighted by her late Majesty on May 2nd, 1895; and was called to the Senate of Canada by the Earl of Aberdeen on January 2nd, 1896.

He took a great interest in all matters pertaining to the medical profession, and was for many years a very regular attendant at the meetings of the Canadian Medical Association and many other medical societies. He was one of the very few from the province of Quebec that frequently attended the meetings of the Ontario Medical Association in Toronto. He came to Toronto in 1889 and delivered an address on Surgery to the alumni of Trinity at one of their annual meetings. His good-natured spar with our good friend Dr. Carstens, of Detroit, at that meeting created much interest and not a little amusement.

He was a man of exceptional ability, and an exceedingly good speaker. In debate he could hit deftly and forcibly, but he did it in such a graceful and charming manner that his

opponent could hardly take offence. Mr. Lawson Tait discovered that he was a "hard hitter" at the meeting of the Canadian Medical Association in Montreal in 1884. On that occasion Mr. Tait delivered an address on "Abdominal Surgery," which contained a somewhat bitter attack on Sir Spencer Wells, and some remarks favoring Batty's operation in certain cases. In an extended discussion which followed, Sir William deprecated the attack on Sir Spencer Wells, who was very highly respected, both in Great Britain and on this continent. He also entered a dignified but emphatic protest against the indiscriminate mutilations of women by removing the uterine appendages. He said an unnecessary operation of this nature was a crime against society and interfered with the interests of the State. Mr. Tait and Sir William had two or three other tilts during the meeting, but they became warm friends, and at the banquet, over which Sir William presided "with the great ability and rare grace for which he had been so long distinguished," Mr. Tait during the evening paid him a very neat compliment by saying, that the chairman while speaking reminded him of England's silver tongued Paget.

Sir William was a prominent member of the British Medical Association, and delivered the address on Surgery at the Nottingham meeting in 1892. The *British Medical Journal*, in referring to this address, spoke as follows: "For the first time in the history of the Association one of the addresses to the general meeting is this year to be delivered by a Colonial member of the British Medical Association. Prof. Flint and Prof. Gross have been heard as representatives of our American colleagues, and it was only right that the first opportunity should be taken to ask a representative of one of the many colonial branches, which have recently been called into existence, to become the spokesman of the science and practice of our art in Greater Britain."

At that same meeting Sir William said "he trusted that at no very distant date the British Medical Association would visit Canada. They would there find a heterogeneous population—French, English, Scotch and Irish—but amongst them they would find, too, an attachment to her Most Gracious Majesty, Queen Victoria, an intense love of British institutions, and a very deep feeling of loyalty to the Crown, and if the Association would do them the honor suggested, he could assure for the profession a most cordial and hearty welcome."

In private life Sir William was one of the most charming and lovable men that we have ever met. It seems fit that a

man who has been so active during the whole of his useful and long life should, in the midst of loving friends, simply fall into a peaceful sleep, and pass away "as if in a trance."

With deep grief we offer our loving sympathy to Lady Hingston, and her five children, Rev. William Hingston, Dr. Donald Hingston, Miss Ailaen Hingston, Mr. Basil Hingston and Mr. Harold Hingston.

J. G. HARDY, M.D.

Dr. Hardy, of Moose Mountain District, Sask., died January 14th.

CHAS. M. HAGER, M.D.

Dr. Hager graduated M.D. from Queen's University in 1904. He died in Rochester, N.Y., January 12th.

C. S. PARKE, M.D.

Dr. C. S. Parke died November 29th, 1906, of inflammatory rheumatism, aged 63. He graduated M.D. from McGill University in 1866.

SIR MICHAEL FOSTER, M.D.

Sir Michael Foster died suddenly on January 29th, aged 74. He was Professor of Physiology at Cambridge University from 1883 to 1903. In 1889 he was President of the British Association for the Advancement of Science.

J. D. CAMERON, M.D.

Dr. John D. Cameron died in the General Hospital, Montreal, Jan. 5th, of typhoid fever after a brief illness. He graduated from McGill in 1893. After spending a year in the Montreal General Hospital, and a second year in the Royal Victoria Hospital, he commenced general practice in Montreal. At the time of his death he was assistant gynecological surgeon in the Montreal General Hospital.

G. A. L. PAYNE, M.D.

Dr. Payne, a graduate of McGill in 1906, died in Montreal, January 4th, of typhoid fever, aged 27.

R. H. DAVIS, M.D.

Dr. Davis died suddenly at his home in Cayuga, February 11th, aged 79. He graduated M.B. from the University of New York in 1856, and M.D., Queen's University, in 1858. After graduating he was engaged in active practice for a time, but was appointed Sheriff of the County of Haldimand many years ago. After receiving this appointment he practically relinquished general practice.

GEORGE DUNCAN, M.D.

Dr. Duncan died in Victoria, B.C., December 2nd, 1906, aged 45. He graduated M.D. from McGill in 1890, and immediately went out to the Pacific Coast. After practicing for a time in Victoria he went to Dawson and remained there for a few years, then returned to Victoria, where he resumed practice.

Book Reviews.

A Text-Book upon the Pathogenic Bacteria. For Students of Medicine and Physicians. By Joseph McFarland, M.D., Professor of Pathology and Bacteriology in the Medico-Chirurgical College, Philadelphia. New (5th) Edition. Octavo volume of 647 pages, fully illustrated, a number in colors. Philadelphia and London: W. B. Saunders Company. 1906. Cloth, $3.50 net. Canadian agents, J. C. Carveth & Co., Toronto.

We have had great pleasure in reviewing the above mentioned work and deem it worthy of unstinted praise. Since the former editions great portions have been entirely rewritten and much new matter added, all of which have added greatly to its value.

The first section is comprised mostly of general definitions, methods of observing bacteria, their cultivation and staining peculiarities. The most important chapters are those dealing with immunities, agglutinins, cytotoxines, Erlich's "lateral chain" theory, etc., all of which are well up to date.

We note excellent charts dealing with ptomaines, tables of the spirillæ, of differentiation of the typhoid bacillus, etc., also Chester's synopsis of the groups of bacteria.

The micro-organisms are divided into the following groups: Phlogistic, Toxemias, Bacteremias, and finally such organisms as Proteus and bacilli of malignant edema and symptomatic anthrax. We regret that the article on the Spiroclaeta Pallida is not more extensive.

The author has rigidly held to the description of pathogenic organisms, except in the case of the spirillæ. Throughout are foot-notes with references to various monographs on the subject under discussion, which will, no doubt, prove of great value to the advanced student. It is to these men especially, and to practitioners who graduated before modern bacteriology was in existence, that we recommend this volume.

The Mind and the Brain. By Alfred Binet, Directeur du Laboratoire de Psychologie à la Sorbonne (being the authorized translation of "L'âme et le corps"). London: Kegan, Paul, Trench, Trübner & Co., Limited, Dryden House, Gerrard Street W. 1907.

The above volume (LXXXIX.) of the "International Scientific Series," edited by F. Large, is comprised of about 275

pages dealing in an exhaustive manner with "mind" and "matter." It is, in short, an effort to draw a distinction between them.

The first part is entitled "Definition of Matter." Here the author discusses sensation, with stress on our knowledge of external objects and the mechanical theories involved. Then follows a treatise on "Definition of Mind," taking up cognition, emotions, consciousness, etc. Finally comes the "Union of the Soul and the Body," where Spiritualism, Idealism, Materialism and various modern theories receive due attention. To one who is interested in these matters the volume will be of great value, and to them we heartily recommend it.

THE ELEMENTS OF THE SCIENCE OF NUTRITION. By Graham Lusk, Ph.D., M.A., F.R.S. (Edin.), Professor of Physiology at the University and Bellevue Hospital Medical College, New York City. Octavo of 326 pages, illustrated. Philadelphia and London: W. B. Saunders Company. 1906. Cloth, $2.50 net. Canadian agents, J. A. Carveth & Co., Toronto.

We find in this volume a complete and somewhat exhaustive review of all that pertains to the subject of nutrition in both health and disease. It is, besides being scientific, practical from a physician's point of view.

The author's main aim has been to present a work which he hopes will act as a stimulus to modern laboratory research. The book will undoubtedly be a great addition to the library of the scientific investigator. The book contains innumerable charts and tables which serve to forcibly impress certain vital facts and statistics on the mind of the reader. The author has also allotted a limited space to the life history of the mineral constituents of the body.

The chapters which seem specially worthy of note from practitioners are those on metabolism in fevers, diabetes and gout, the food requirements during the period of growth, while those dealing with the influence of fats and carbohydrates are of special interest.

THE PRACTITIONER'S MEDICAL DICTIONARY. By George M. Gould, A.M., M.D., Author of an "Illustrated Dictionary of Medicine, Compiled and Allied Sciences, etc." Philadelphia: P. Blakiston's Son & Co., 1012 Walnut Street. 1907.

The object of this book is to supply the medical practitioner with definitions of such medical words and terms as he may need in his reading of standard medical text-books. It is an illustrated dictionary of medicine and allied subjects, including all the words and phrases generally used in medicine, with their proper pronunciation, derivation and definition. The price of the book is $5.00 net.

TEXT-BOOK OF PATHOLOGY. By Alfred Stengel, M.D., Professor of Clinical Medicine, University of Pennsylvania; Physician to the Pennsylvania University and the Philadelphia Hospitals. With 399 illustrations in the text, many of them in colors, and seven in full-page chromolithographic plates. Fifth edition, thoroughly revised. Philadelphia and London: W. B. Saunders Company. 1906.

That a fifth edition of Stengel's Pathology is necessary in less than nine years is sufficient evidence of its worth and popularity. The many drawings are clear and intelligible, the enlarged microscopic sections being especially good in their definition. A little less than one-half the book is devoted to general pathology, in which is included a complete review of the animal parasites, the field of which has been enlarged considerably the last few years. The chapters on immunity and inflammation have also been thoroughly revised and brought to date. The special pathology is complete, with the exception of pathology of the organs of special sense and the skin, which have been purposely omitted. No expense or pains have been spared to make this the text for the student and the friend of the practitioner. Canadian agents, J. A. Carveth & Co., Toronto. $5.00.

TUTTLE ON DISEASES OF CHILDREN. A Pocket Text-Book of Diseases of Children. By George M. Tuttle, M.D., Attending Physician to St. Luke's Hospital, the Martha Parsons Hospital for Children, and Bethesda Foundling Asylum, St. Louis, Mo. New (2d.) edition, thoroughly revised. In one 12mo volume of 392 pages, with 5 plates. Cloth, $1.50 net; flexible leather, $2.00 net. Lea's Series of Pocket Text-Books, edited by Bern. B. Gallaudet, M.D. Philadelphia and New York: Lea Brothers & Co. 1907.

The excellence of Prof. Tuttle's work has carried it through two editions. Dealing as it does with the whole subject of pedi-

atrics in a concise, pointed style, the book is admirably suited to the use of the advanced student. It forms a creditable addition to Lea's well-known series of pocket text-books.

Anatomical Nomenclature. With Special Reference to the (BNA). By Lewellys F. Barker, M.D., Professor of Medicine, Johns Hopkins University; formerly Professor of Anatomy in Rush Medical College, Chicago. Vocabularies in English and Latin. Two colored and several other illustrations. Octavo. Cloth, $1.00 net. Postage prepaid to any address. Philadelphia: P. Blakiston's Son & Co., Publishers, 1012 Walnut Street.

The Basle Anatomical Nomenclature (better known as the BNA) is the result of an earnest, concerted effort to systematize and simplify a nomenclature which has grown haphazardly, become burdened in numerous instances with several terms for one structure, and in general has deteriorated in scientific accuracy and value. The BNA is now so widely used in English and foreign tongues by teachers of and writers on anatomy, histology, embryology and biology that Dr. Barker's book is most timely.

In no other work in English are the purposes of the (BNA) described, its scheme explained, and its vocabulary given.

Plaster of Paris and How to Use It. By Martin W. Ware, M.D., Adjunct Attending Surgeon, Mount Sinai Hospital; Surgeon to the Good Samaritan Dispensary; Instructor in Surgery, N. Y. Post-Graduate Medical School. 12mo; 72 illustrations, about 100 pages. New York: Surgery Publishing Co., 92 William Street. Cloth, $1.00.

This is one of the most useful books ever presented, not only on account of the general demand for the information and instructions upon the subject which this book so explicitly, practically and comprehensively covers, but because this knowledge was not previously available except from such a vast experience as enjoyed by Dr. Ware, or, in part, by reference to many books on allied subjects.

It is a vivid narrative, profusely illustrated, of the many uses to which plaster of Paris is adaptable in surgery. The whole subject, from the making of the bandage, to its use as a support in every form of splint, corset or dressing, is graphically described and illustrated. The use of plaster of Paris in

Dental Surgery is also covered. The book is presented in the artistic manner characteristic of the productions of the Surgery Publishing Company. It is printed upon coated book paper and attractively bound in heavy red buckrum, stamped in white leaf and gold.

RYTHMOTHERAPY. Price, $1.50 net; postage, 10c. Chicago: The Ouellette Press

This handsome volume of over two hundred pages is the most recent, and in many respects, the most satisfactory contribution to the literature of the subject yet produced.

The busy practitioner, whether using a vibrator or not, will find many valuable suggestions within its covers, and the entire subject treated from the logical and physiological aspects without a long prelude, historical mention, or description of vibrators.

A chapter is devoted to a "Digression on Diet," of value to every physician, and the "Dictionary of Diseases" is a very complete statement of the technic of vibratory treatment.

The illustrations are unusually fine, and two colored charts are included.

STARR ON NERVOUS DISEASES. Organic and Functional Nervous Diseases. By M. Allen Starr, M.D., Ph.D., LL.D., Professor of Neurology in the College of Physicians and Surgeons, New York; ex-President of the American Neurological Association and of the New York Neurological Society. with 282 engravings and 26 full-page plates. Cloth, $6.00 net; leather, $7.00 net. Philadelphia and New York: Lea Brothers & Co. 1907.

The author's position in the forefront of neurologists has been shown anew in the rapid exhaustion of the first edition of his work, limited though it was to organic nervous diseases. An even warmer reception is assured for this revision, which brings the organic portion to date and adds a section covering the functional diseases, so that the volume now presents the whole field of neurology as understood and practiced by a master. The author is the reverse of abstruse or nihilistic. On the contrary, he is straightforward and direct, and justifies his optimism as to the advanced position of neurological diagnosis and treatment by the wealth of information placed at command of his readers. Paying due regard to theory, he

devotes especially full attention to etiology, diagnosis and treatment, both medical and surgical. The book is largely based on the solid foundation of long experience, but it also embodies the well-attested knowledge of other authorities as gleaned from a thorough sifting of the vast literature of neurology. Practical, authoritative, covering the whole subject in all its aspects, and abundantly illustrated, this new edition of Prof. Starr's work answers the needs of students, practitioners and specialists.

NURSING IN THE ACUTE INFECTIOUS FEVERS. By George P. Paul, M.D., Assistant Visiting Physician and Adjunct Radiographer to the Samaritan Hospital, Troy, New York. 12mo of 200 pages, illustrated. Philadelphia and London: W. B. Saunders Company. 1906. Toronto: J. A. Carveth & Co., 434 Yonge Street. Cloth, $1.00 net.

The author has divided this work into three parts: The first treats of fevers in general; the second of each fever individually; the third deals with practical procedures and information necessary to the proper management of the various diseases discussed, such as antitoxins, bacteria, urine examination, poisons and their antidotes, enemata, topical applications, antiseptics, weights and measures, etc. Altogether, it will be found that Dr. Paul has rendered a valuable service, not only to the nursing but also to the medical profession, as much of the information given is not without the frequent needs of the general practitioner.

W. B. Saunders Company, of Philadelphia and London, have just issued a revision of their handsome illustrated catalogue of medical, surgical, and scientific publications. Beyond question this is the most elaborate and useful catalogue we have ever seen. The descriptions of the books are so full, the specimen illustrations are so representative of the pictorial feature of the books from which they are taken, and the mechanical get-up so entirely in keeping with the high order of the context. The authors listed are all men of recognized eminence in every branch and specialty of medical science. The catalogue is well worth having, and we understand a copy will be sent free upon request.