CONTENTS.

Publishers' Department.

List of Advertisers.

CANADA'S GREATEST EXHIBITION.—Strenuous efforts are made annually to keep Toronto Exhibition ahead of all rivals. Naturally year by year the task becomes harder, as the greater the success in Toronto the more vigorously do the managers of other exhibitions strive to get to the front. This year the Toronto management has simply outdone itself, for such a list of attractions were never before offered by any one institution. Nor is it only in the attractions that a great move forward has been made, for the exhibits this year are on a more extensive and varied scale than ever. A particularly interesting feature will be a demonstration in road-making under the direction of officers of the Ontario Good Roads Association, a piece of road with culvert and bridge being actually built upon the grounds. There will also be a complete exhibit of road-making machinery and material. The art gallery will contain an unusual number of works of art, including three large pictures painted by F. M. Bell-Smith, illustrating incidents in the death and funeral of Sir John Thompson. For one of these pictures Her Majesty the Queen, the Princess Beatrice and several members of the royal household gave Mr. Bell-Smith special sittings. The wonders of the Fair will be Edison's latest invention, the sidoloscope and Sosman & Land's marvellous electrical theatre. The spectacle connected with the fire-

works will be the Taking of the Bastille. Members of the medical profession are noted for their love of driving, and they will consequently be pleased to hear that Mr. Aurel Batongi, the most expert handler of the ribbons in America, and possibly of the world, has accepted an invitation to be present to judge four-in-hands, tandems and the driving classes, and to give exhibitions daily of his skill with a four-in-hand and a tandem to be supplied by Mr. John Macdonald. To go into all the wonders and marvels that will be on view at Toronto Fair from September 1st to 12th next, both dates inclusive, would exhaust more space than we can spare, but it is pleasant to be able to announce that as the live stock are to be on the grounds the first week, the railways have granted a single-fare round trip during the entire exhibition from any point in Canada or Michigan, with a fare and a third from points in New York State. Mention should perhaps be made that in addition to the dog show, a cat show, being the first ever held in Canada, will be one of the novelties.

Anxious Wife—"They say but one man in a hundred afflicted with this disease ever recovers." Doctor—"Take courage, madam. Your husband is the hundredth patient of the kind which I have had under my care, and the other ninety-nine are all dead."—*Ph. Era.*

CANADIAN MEDICAL ASSOCIATION.—Very low rates have been arranged by the Richelieu & Ontario Navigation Co., America's Scenic Route, for delegates to the above convention to be held in Montreal, August 26-28. Attention is drawn to the time-table of the R. & O. Nav. Co., given on another page. The splendid steamers of this line leave Toronto daily (Sundays excepted), calling at Bowmanville, Port Hope, Cobourg, Kingston, Clayton, Round Island, Thousand Island Park, Wells Island, Alexandria Bay, Brockville, Prescott, Cornwall, Montreal, Quebec, and up the far-famed Saguenay River. These are the only steamers shooting all the rapids of the St. Lawrence, and giving passengers the grandest and most delightful trip in the world.

When Dr. Bowling, a pioneer medical man in the South, began practice, he settled in the wilds of Kentucky, where he sat in front of his cabin for six months without a call. At last he heard the clatter of a horse's hoofs, and a lank, barefooted Kentuckian appeared. "Are you a doctor?" he asked. "Yes, and a good one," said Bowling. "What's the matter with that'ar foot?" the man inquired, placing his heel on the fence. The doctor examined it closely, and replied: "That, sir, is erysipelas." "Ery-hell!" the man replied; "a bee stung me." The doctor moved to Nashville.

S. H. KENNEDY,

Dear Sir,—Your remedies are certainly par excellence in diarrhœa, especially the old army diarrhœa, as I treated an old soldier with it who told me that he had tried all the professors in Philadelphia and New Jersey, and never till I gave him your "Quercus Alba" did it tell him anything. I have had quite a run on chronic diarrhœa of army life.

Yours, etc.,

D. A. STUBBS, M.D.,
Grad. of Jeff. Med. College,
Philadelphia, Pa., class of 1876.
Oxford, Pa., July 24, 1896.

PREGNANCY AND SMALL-POX.—Van der Willigen (*Nederland. Tijdschr. voor Geneesk.*) in closely observing 432 cases of small-pox in women under fifty, made particular note of eighty who were pregnant. Of these 15 per cent. died, whilst the mortality of the non-pregnant cases was 11.08 per cent. Van der Willigen, like some previous authorities, finds that pregnancy increases the predisposition of a patient to the graver forms of variola. In the eighty cases, confluent small-pox was seen in four and hæmorrhagic in six cases; all the ten died. In the 352 non-pregnant cases the confluent form was observed in three, and the hæmorrhagic in eleven patients; two of the confluent cases recovered. Two pregnant women died of milder forms; of the total, twelve, the e died five undelivered, and most of the others shortly after birth without any trace of puerperal infection. Of the primiparæ, 9 per cent died, of the multiparæ 17.25 per

cent. 6.25 per cent. of women attaked by small-pox early in pregnancy died, whilst the mortality of those who were affected later amounted to 20.83 per cent. Abortion or premature delivery was noted in twenty-three of the eighty cases during the course of the attack of small-pox. In six the same took place after convalescence from the disease. Sixteen children were delivered alive in cases where the small-pox was still in progress, eight at term, and eight prematurely; only three lived longer than six months. Several died of variola; two were clearly born with it. —*Brit. Med. Jour.*

IN cases of pernicious, progressive anæmia in young girls, no matter from what cause, Dr. Mary Ward Mead, Camden, Ill., writing, says: "The arrest of development of the generative organs retards cure. I am early on the track for a speedy development in those slow puberty cases; and when I see the dormant spot puff for a mammary gland I know that restoration will surely follow, and to arouse this slumbering, sympathetic and vaso motor system sanmetto is truly great."

Gentleman from Soho (driving behind a mule on an ash-cart)—"Docther, docther,—hey, there, docther,—me bye has the scairlet fever." Doctor (on sidewalk)—"All right, Mike, I'll come out and see him." G. F. S.—"Aw, docther, niver moind! Wait till me little gurrel gits it to! Thin you can trate 'em both to wunst."

McGILL UNIVERSITY, MONTREAL

Faculty of Medicine. Sixty-Fourth Session, 1896-97.

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The Collegiate Course of the Faculty of Medicine of McGill University begins, in 1896, on Tuesday, September 22nd, and will continue until the beginning of June, 1897.

The Primary subjects are taught, as far as possible, practically by individual instruction in the laboratories, and the final work by clinical instruction in the wards of the hospitals. Based on the Edinburgh model the instruction is chiefly bedside, and the student personally investigates and reports the cases under the supervision of the professors of Clinical Medicine and Clinical Surgery. Each student is required for his degree to have acted as Clinical Clerk in the Medical and Surgical wards for a period of six months each, and to have presented reports acceptable to the Professors on at least ten cases in Medicine and ten in Surgery.

About $100,000 have been expended during the last two years in extending the University buildings and laboratories and equipping the different departments for practical work.

The Faculty provides a Reading-Room for Students in connection with the Medical Library which contains over 15,000 volumes.

MATRICULATION.—The Matriculation Examinations for entrance to Arts and Medicine are held in June and September of each year.

The entrance examinations of the various Canadian Medical Boards are accepted.

COURSES.—**The Regular Course** for the Degree of M.D. C.M. is four sessions of about nine months each. **A Double Course**, leading to the Degrees of B.A. and M.D. C.M., of six years has been arranged.

Advanced Courses are given to graduates and others desiring to pursue special or research work in the laboratories of the University and in the Clinical and Pathological laboratories of the Royal Victoria and Montreal General Hospitals.

A Post-Graduate Course is given for Practitioners during May and June of each year. This course consists of daily lectures and clinics as well as demonstrations in the recent advances in Medicine and Surgery and laboratory courses in Clinical Bacteriology, Clinical Chemistry and Microscopy.

Hospitals.—The Royal Victoria, the Montreal General Hospital, and the Montreal Maternity Hospital are utilized for purposes of Clinical instruction. The physicians and surgeons connected with these are the Clinical Professors of the University.

These two general hospitals have a capacity of 250 beds each, and upwards of 30,000 patients received treatment in the out-door department of the Montreal General Hospital alone last year.

For information, and the Annual Announcement, apply to—

R. F. RUTTAN, B.A., M.D., Registrar,
McGill Medical Faculty.

TAKING PILLS.—Doctor—"Well, Pat, have you taken that box of pills I sent you?" Pat—"Yes, sur, be jabers, I have, but I don't feel any better. Maybe the lid hasn't come off yet."

IT is sometimes a very difficult matter for a physician to decide as to which sanitarium he will send a particular case to. Some of those institutions are not what they are cracked up to be by any means, and it is just such places that very frequently make the practitioner fight shy of everything by the name of a sanitarium. One of the exceptions, however, to the above is that of Jackson Sanitarium, at Dansville, N. Y. Its situation is twelve hundred feet above the sea level, right on the side of a hill, and fairly hidden amongst the firs. It commands a simply magnificent view of the whole Genesee Valley, and by the visitor standing on the verandah directly over the front entrance, he can see for many miles in every direction. To our mind, nothing could be more conducive to health of mind, as well as body, as a stay of a few weeks to two months in this the Mecca of the United States.

"I don't feel right about going in there," said Chillison Feevor, in front of a physician's house. "Pshaw! He's one of the best doctors in the city," replied Coffin Coles. "I know, but look at his sign—'9 to 1'." "Well?" "Well, I don't take any such chances as that."

A HIGH REPUTATION SUSTAINED. —*The Medical Times and Hospital Gazette*, London, May 30th, 1896, speaks so favorably of its experience with the American analgesic, antipyretic and anodyne, a preparation the medical profession has become accustomed to regard as one of the certainties of medicine, that we reprint below its words of approval, knowing them to be in accord with the consensus of opinion as expressed by the medical men in this country. "Antikamnia—under the above name, a free translation of which is 'opposed to pain'—now being introduced to the profession in the United Kingdom is an analgesic, antipyretic, and anodyne drug, which has already gained a high reputation in the United States. It is a coal-tar derivative, and belongs to the series which form the various amido compounds. It differs therapeutically, however, from most coal-tar products in producing a stimulating, instead of a depressing action on the nerve centres, especially those acting on the heart and circulatory system; hence, it may be administered, even in large doses, without fear of producing collapse and cyanosis, as occasionally occurs after the administration of antipyrin and other similar analgesic compounds. It has been very largely used in influenza, hay fever and asthma, with good results; but its most markedly beneficial effects are experienced when administered in neuralgia, rheumatism, sciatica, headache and pain due to disorders of menstruation. As an antipyretic, it

is recommended to be given in doses of from five to ten grains every ten minutes, until the temperature has been reduced, or until forty or fifty grains have been taken, after which the remedy should be given at intervals of greater length. To relieve pain it is recommended to begin with a five-grain dose ; three minutes later the same dose to be repeated, and, if the pain continues, a third dose to be given a few minutes after the second. In our practice we have not found it necessary to give the remedy at such short intervals. In the treatment of neuralgia and headaches we have had satisfactory results from giving five-grain doses at intervals of ten to twenty minutes, until three or four doses have been taken. We may add that the drug is sold in tablets (three and five-grain sizes) as well as in the powdered form. The former may be swallowed whole, or crushed and dissolved in glycerine and water, or in an alcoholic menstruum. The powder is conveniently given in cachets, or dissolved in a little wine or aromatic tincture, combined with glycerine or syrup. The drug is deserving of trial, and those among our readers who have not yet tested it should write for a sample."

A FALSE REPORT.—Bunsby—"I am awfully glad to see you, old man. I read in the paper that you were dead." Bixby—"Yes, I saw it too, and I knew it was a lie the moment I read it."

WE take pleasure in drawing the attention of medical men to the following article, which appeared in the columns of the *Pharmaceutical Era*, published in New York, July 2nd last. It will show the difficulties which the well-known firm of Fairchild Bros. & Foster have had to surmount regarding the substitution by retail druggists who have no conscience, and who should therefore be studiously avoided by physicians, of their pepsin and other preparations. We hope there are very few druggists who would stoop so low as to deliberately dispense another firm's goods when those of Fairchild Bros. & Foster have been distinctly ordered by the physician, and we sincerely trust that the injured firm will come out of the contest "more than conquerors." We think we cannot do better than give our readers a copy of the letter written by the firm in question to medical men generally in this connection. It will explain itself:

DEAR SIR,—We beg to call your attention to the following statement of facts, which we believe will be of great interest to you as a practising physician, relying upon the pharmacist for dispensing the medicine which you prescribe: On a recent date, a prescription of a . . . . physician, ordering "Essence of Pepsine, Fairchild's," was sent to . . . . drug store. The bottle dispensed upon this prescription was immediately sealed in the presence of a witness and expressed to us. A copy of the pre-

scription was asked for and obtained, which proved to be an accurate transcript of the prescription, bearing date and number corresponding to those upon the label of the bottle dispensed. Upon examination, the content of said bottle was found to be a fluid differing materially from Fairchild's Essence of Pepsine, so as to be obviously recognizable as a plain violation of the physician's prescription. Another written order for Fairchild's Essence of Pepsine was sent to Druggist . . . . Upon examination, this proved likewise to have been filled with a different and inferior fluid. Subsequently, the same day, a messenger was sent to . . . . and asked verbally for four ounces of Fairchild's Essence of Pepsine. He received a wrapped vial, for which he paid 50 cents. This bottle was found without label, and the messenger returned and asked to have the bottle labeled. The druggist then simply labeled it "Essence of Pepsine." Thereupon, the messenger requested the druggist to put "all the name on the bottle." The druggist told the messenger that he "would not dare to put Fairchild's name on the label, although it was all the same." The druggist finally admitted to the messenger that he was "out of Fairchild's Essence," and then returned the 50 cents. There is one significant fact

that should also be mentioned; the price charged in these cases (as in every instance coming to our knowledge) is the same as the patient would be charged by pharmacists who dispense the genuine medicine ordered. Comment is unnecessary. In defence of your own rights, and in order that you may take such means as you deem best to protect yourself and your patients, we advise you of these facts. We further respectfully request that in prescribing Fairchild's Essence of Pepsine, you will kindly send the prescription to pharmacists, of whom there are many, who will faithfully respect their legal and professional obligations to physicians and to the public. These prescriptions, sealed and certified, are in our possession, and we stand ready to still further substantiate these statements.

Very respectfully yours,

[Signed]

FAIRCHILD BROS. & FOSTER.

CANNOT BE TOO CAREFUL.—A doctor cannot be too careful. I once knew a young surgeon to operate for appendicitis on a large, roomy man, and had it not been for a timely autopsy he would not have known to this day that a good twenty-cent cigar dropped out of his pocket during the operation and was sewed up in the patient's annex. Had it not been for the post-mortem, the cigar would have been a dead loss.—*Bill Nye.*

PHYSICIANS from Toronto and the western part of Ontario, who intend being present at the meeting of the Canadian Medical Association at Montreal at the end of this month, will be glad to know that they can travel from Hamilton or Toronto to Montreal by the magnificent steamers of the Richelieu and Ontario Navigation Company, thereby enjoying a magnificent sail down the St. Lawrence River. By leaving on Monday, the 24th inst., they will reach Montreal on Tuesday early in the evening and therefore be on the ground in plenty of time to register at the opening on Wednesday forenoon. Full particulars can be obtained from the Company's popular representative, Mr. Jos. F. Dolan, 2 King Street East, Toronto.

WE notice that Mr. S. H. Kennedy, of Johnstown, N. Y., manufacturer of the concentrated extract of oak bark (Quercus Alba), has taken the opinion of the well-known American lawyer, Judge R. P. Anibal, regarding the claims made by the Rio Chemical Co., of St. Louis, Mo., that Mr. Kennedy is manufacturing a counterfeit of their Pinus Canadensis. Judge Anibal gives it as his firm opinion that there is no infringement whatever, as fl. ext. Quercus Alba is made from oak bark and Pinus Canadensis, as made by the St. Louis firm, is manufactured from hemlock bark.

THE Woman's Medical College, of Baltimore, has lengthened its annual course to eight months, from October to May inclusive.

TAKE YOUR VACATION NOW.—Go to picturesque Mackinac Island via the D. & C. (Coast Line). It only costs $13 50 from Detroit, $15.50 from Toledo, $18.00 from Cleveland for the round trip, including meals and berths. Tickets good for sixty days. bicycles carried free. One thousand miles of lake and river riding on new modern steel steamers for the above rates. Send two cents for illustrated pamphlets. Address, A. A. Schantz, G.P.A., Detroit.

DIGESTIVE DISORDERS OF CHILDREN.—The value of listerine in those digestive disorders of childhood, which lead to what is commonly called cholera infantum, can scarcely be overrated. A teaspoonful of listerine administered per oris has been known to dissipate the most alarming symptoms, cutting short the attack and apparently saving life. A good way is to begin something like this: Calomel and chlorate of potash each one grain, to be rubbed well together and to be divided into ten powders, one to be given every five minutes until vomiting ceases and the nature of the stools have been changed; then commence and give teaspoonful doses of listerine every four hours until convalescence.—*Medical Progress.*

PATIENT—What, doctor! One dollar a visit! Physician—Why, that's not much. It's less than most of my patients pay. Patient—That may be, doctor, but remember it was I who brought the fever into the neighborhood.

THE Dominion Medical Monthly
. . . AND . . .
Ontario • Medical • Journal

Vol. VII. TORONTO, AUGUST, 1896. No. 2

ORIGINAL ARTICLES.

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

A PLEA FOR CONSERVATIVE ORAL SURGERY, WITH PRACTICAL ILLUSTRATIONS.

(Continued.)

By G. LENOX CURTIS, M.D., New York City.

Mr. L. presented himself with the characteristic swelling in the temporal region and complaining of great pain. Deep fluctuation was readily observed, denoting the presence of pus beneath the temporal muscle. The gums along the alveolar border extending back of the cuspid were highly inflamed and œdematous. The root of the first bicuspid tooth was found almost covered by the gum and abscessed. This had from time to time given him considerable trouble. Attributing to this the cause of the trouble, I removed it and found that I could pass a probe beneath the periosteum as far back as the wisdom tooth. An incision was made through the gum and periosteum extending well back around the ramus. This enabled me to pass a large probe beneath the periosteum up the ramus and beyond the coronoid process, following the temporal muscle until I had reached the abscess, the pus from which flowed freely down beside the probe and, out into the mouth. The bone immediately under the periosteum was covered with granulations and pus. This, along with that underlying the temporal muscle, was curetted away. The wound in the jaw was packed, while that in the temporal region was douched and sterilized twice daily, and applications of ice were made to the exterior. The stiffness of the jaw at once began to improve and in a few days it was normal in its action. The treatment covered a period of ten days, when the patient was dismissed cured, and now nearly four years have elapsed without any sign of return.

The origin and progress of this case were identical with that of Mrs. M. already mentioned, and had she had similar treatment at the same stage of her disease, the result would have been as happy as in this case and without any external disfigurement.

A similar but more perplexing condition than that referred to above, is one with the following history and results: Four years prior to May, 1892, the patient, while suffering from a severe pulpitis caused by exposure of the pulp in the inferior left third molar, had the tooth extracted, which was immediately followed by *excruciating* pain, but of a vastly different character from those which he had previously suffered. He likened the pain unto a severe bruise. The pain continued to increase, and the following day he returned to the dentist and insisted upon his extracting the second molar, although it was not decayed This the dentist did reluctantly, thinking that perhaps the extraction of the wisdom tooth might have ruptured the nerve, because of the fact that the ends of the roots were bent like a hook. The pain continued for several days, when another dentist was consulted, who continued the process of extracting teeth, but with no relief.

Medical counsel was then sought, but the case baffled all treatment for several months. The patient's health diminished, and the pain continuing in the jaw, he sought relief at the hands of the third dentist, who, like a true knight of the forceps, removed the remaining teeth of both left superior and inferior jaws. The shock to the nervous system and the profuse hæmorrhage which followed, owing to the weakened physical condition of the patient, gave him temporary relief. But the old trouble soon returned, and he found himself back under medical treatment—from which he realized no improvement, finally abandoning his business and becoming an invalid.

After the lapse of two years, he sought the aid of a general surgeon, who, concluding that the trouble was in the gums and alveolar process in the inferior maxilla, cut and chiselled them entirely away, but to no avail. For two years more suffering and medical treatment continued until the patient was little short of a wreck and all but insane. He had lost forty-six pounds in weight, was emaciated and anæmic, and he grew despondent and longed for death to relieve him of his agony.

Diagnosis of the seat of the trouble was based upon the early history of the case at the time of the extraction of the wisdom tooth. It was plain that the inferior dental nerve had been lacerated in the locality of the wisdom tooth and that no relief could be hoped for until the nerve was severed between it and its centre. To make sure of the result, I decided to remove the entire nerve within the jaw. An incision, about an inch long, was made through the mucous membrane, directly above and back of the location of the wisdom tooth, and the tissues were separated until the nerve was reached as it entered the inferior dental foramen. The nerve was caught up and held with the bull-dog forceps, and severed at this point.

An incision was then made over the mental foramen, the tissues dissected away, and the dental nerve, where it emerged, was separated. The forceps was then tightly grasped and with a steady tension the nerve was drawn out of the canal its entire length. The hæmorrhage was readily controlled by means of hot water, but owing to the general flabby condition of the tissues, and to the fear of a secondary hæmorrhage, the wound was packed and allowed to

fill in by granulation. The patient soon recovered from the ether, declaring on his return to consciousness that "for the first time in four years" he "was free from pain." The parts healed rapidly and no untoward symptoms followed the operation, save a little numbness noticeable at times in the left half of the lower lip. The patient soon recovered health, strength and weight, returning to business in two months, and there has been no return of the trouble.

I will next report a very remarkable case which came to me in April, 1892, as it may materially assist in the treatment of orchitis—being the details of one of several cases coming under my observation.

Mr. B., aged thirty-seven years, with no specified history, was referred to me by Dr. L. Bolton Bangs, of New York City, to whom the patient had been brought for consultation, with the request that I examine his jaw to ascertain whether there was any oral lesion to account for a pain complained of that day. On inquiring into the dental treatment received by Mr. B., I drew from him the following statement: Five years before the gums over the inferior left wisdom tooth, which was retarded in its eruption, became suddenly swollen and very painful. He applied to his dentist, who, in attempting to extract the tooth, broke off the crown, leaving the root, over which the gum healed, completely embedding it. Since that time he had realized uncomfortable sensations on that side of the face with some soreness of the inferior second molar which baffled the skill of those hunting for the cause.

The patient supposed the root to have been extracted at the time the crown was separated from it. Three years following this visit to the dentist, he was attacked by excruciating neuralgic pains in the left side of the face, which until two months before calling on me unfitted him for business. This pain gradually worked its way down the left side of the body, extending to the groin and left testicle, which became inflamed, swollen and troublesome. All efforts on the part of his surgeon to relieve his suffering were unavailing.

One of the peculiar features of the treatment in this case is, that when hot or cold applications were made to the testicle, the pain ceased in it, but immediately appeared in the left side of the face. As soon as the applications were removed, the pain returned to the testicle.

After examining him, I concluded it was a case of metastasis, such as is frequently connected with mumps. I sent the patient back to Dr. Bangs with the following note: "I believe I have found the cause of this long and persistent neuralgia, and that, if I operate the patient will no longer have need of your services, as the orchitis will disappear with the healing of the wound."

The patient was not long away, for the wide-awake specialist sent him back with a note stating, "You cannot operate too quickly to suit me, you have awakened my curiosity. I am interested and will be pleased to follow the case with you."

Examination revealed a slight necrosis of the alveolar process immediately back of the inferior second molar, the pulp in the distal root of which was dead and abscessed, the pulp in the anterior root being vital and exposed.

There was a large cavity in the distal surface of the tooth, below the enamel, concealed by the gum, hence the long continued soreness of the tooth. I extracted this tooth and removed the slight diseased condition made by the abscess.

The cavity in my opinion was caused by secretions forming between the second molar and the wisdom tooth, which abutted horizontally against it. There was no satisfactory evidence of the extraction of the root of the wisdom tooth, and the gum over it appeared normal. But, to be sure that all possible cause for the pain was removed, I laid open the gum, cut through the periosteum and bone, and suddenly struck upon the root which had so long been buried. In examining to ascertain its position in the jaw, I plunged my probe into the living pulp of the root. You can better imagine the result of this thrust than I can here tell it. The patient's actions reminded me of the antics of a jumping jack when the string is pulled. Under an anæsthetic I dissected out and removed this root. The wound healed readily, all pain ceased with the operation and the patient made a complete recovery. There was no swelling of the testicle the day following the operation—all pains and soreness disappearing within forty-eight hours. It has not since returned, the patient being restored to perfect health.

It gives me great pleasure to mention here the praiseworthy attitude of Dr. Bangs in contra-distinction to that of the surgeon who handled the case of Mrs. M.

The next case is one in which the cause is so plainly discernible that it is liable to be overlooked. An old lady in her sixties had for many years suffered intensely from facial neuralgia. After repeated failures of medical skill, the patient was transferred to the general surgeon, who, in six years did several operations in the right superior and inferior maxillæ, resecting the nerves and deforming and disfiguring that side of the face. When I was called to see the patient all the teeth had been extracted from the right side of the mouth, but the pain remained incessant—less, however, at night, and when she lay upon her right side, or when her face was swathed in flannel and protected from cold blasts of air.

Her general health in consequence of her long continued suffering was greatly enfeebled. Examination of the mouth was unsatisfactory, so I looked for the cause, which I apparently found in two large "seed" moles, one of which was situated immediately in front of the ear, and the other three inches below on the affected side of the face. A few drops of cocaine were injected beneath the tissues at the base of these moles, and the skin dissected sufficiently for a small ligature to be thrown about them and firmly tied. The moles were snipped off with scissors and the stumps cauterized with nitrate of silver. The ligatures came away with the sloughs which formed, and the wounds healed without further treatment.

An examination of the moles revealed an exposure of the nerves, which were also intensely inflamed.

Several months subsequently I received a letter from the patient's son, stating, "Since the simple operation which you did for my mother, she has not experienced the slightest pain and daily blesses you."

Similar cases are common where patients have travelled the world nearly over consulting physicians in search of relief at an enormous expenditure of time and money.

The operations described are not new to those familiar with the progress of oral surgery as worked out by the more advanced members of the dental profession, but the fact remains that the general information given to the medical student is insufficient for the proper handling of these cases.

I speak within bounds when I say that maltreatment at the hands of men ignorant of the higher development of this branch of surgery has given me the greater number of my patients.

There is no question that the more cultivated dentists know the surgery of the mouth better than the surgeon who has been only generally trained; know better also the relations of disorders of the oral cavity with contiguous and distant tracts, and are better prepared to diagnose the cause of many obscure lesions connected with those relations.

I would therefore recommend to the surgical profession, particularly to those who have had no special opportunities for studying the diseases of the mouth, the calling in of a skilful dentist at least for the benefit of his judgment in diagnosis, whenever there is room to suspect oral complications.

Our medical schools will not do their entire duty by their students until they add to their list of teachers dentists of the ability to instruct their students in diseases following affections of the teeth; and our text-books will be lacking until they give proper attention to oral surgery as viewed from a conservative standpoint.

SYMPHYSEOTOMY AND CRANIOTOMY.*

By CHARLES MAYGRIER, Accoucheur de Lariboisière, Paris.

With reference to symphyseotomy it is necessary that we be able to distinguish the conditions which justify the procedure. These I understand are: The inability of the delivery to terminate spontaneously, ineffectual application of the forceps and the life of the child continuing. There remains then nothing but embryotomy if we nave not at our disposal symphyseotomy and Cæsarean section. The latter I purposely leave out of consideration, as a question I do not wish at this time to discuss. As to symphyseotomy, it is necessary to state that the extremely happy results of Sigault's operation have been to relieve us from the painful necessity of so frequently sacrificing the living child.

The indications for symphyseotomy are seen under various circumstances, of which I wish to describe but one. I have seen in labor slight deformities

* Translated from "L'Obstetrique," by ERNEST HALL, Victoria, B.C.

of the pelvis, those which in appearance do not seem to demand any grave interference, yet sufficient to prevent spontaneous termination. I refer exclusively to those cases where the physician is called after a woman having a deformity of this kind has commenced labor. On account of the feebleness of the uterine contractions, too great disproportion between the volume of the fœtal head and the area of the superior opening, the engagement does not take place, the confinement continuing beyond all expectancy, and the application of the forceps of no avail. These comprise the indications for symphyseotomy for the purpose of saving the life of the child. However, a very important limitation must be considered. It is of utmost importance that this procedure does not seriously imperil the mother, and that it will beyond doubt be profitable to the child; also having decided to serve symphysis for the purpose of saving the child the operator ought to seriously consider the conditions of the mother and that of the child. The operation should not be undertaken unless the mother is capable of undergoing it without peril, and that the vitality of the fœtus be not compromised to such an extent as to render its subsequent vitality doubtful; craniotomy should be undertaken and not symphyseotomy in the vain pretext of saving the life of the child.

The most recent statistics of symphyseotomy are yet somewhat discouraging. Neugebauer gives a maternal mortality of 11.1 per cent., and that of the child 19 per cent. The operations of M. Pinard and his followers in the last four years have given a mortality of 10.14 per cent. for the mothers and of 11.59 per cent. for the children. Perhaps this mortality would diminish considerably if all the operators were careful as to the foregoing considerations and abstained from interfering whenever any unfavorable conditions exist in the mother or in the child which would compromise the success of the operator.

Such is the course followed in the two cases which, with an interval of two days, came under my care, and which, though very similar in appearance, yet differed essentially in the conditions in which the mothers were placed. I thought it would be interesting to contrast the one with the other, and to show the practical lessons which they contain.

Case 1.—Woman, aged thirty-eight, domestic, first pregnancy, medium size and good constitution, presented herself at Maternité de la Pitié for accouchement; had been in labor some hours. She did not know at what age she walked; had always enjoyed excellent health; menstruated at seventeen; had been somewhat irregular, lasting but two or three days. Pregnancy uneventful. Examination revealed slight indication of rickets. The limbs showed neither œdema nor varices; urine free from albumen. Vaginal examination showed cervix dilated to extent of 1.5 cent., membranes intact and bulge with each pain. No part of the fœtus is accessible to the finger, and it is only after deep exploration with the finger in the anterior cul-de-sac that a round, hard and very movable mass could be felt above the upper opening of the pelvic canal. The examination of the pelvis revealed the cause of non-engagement in a slight lessening of the outpost diameter.

The sacro-vertebral angle could be reached, but with some difficulty. Digital measurement showed the subpubic sacral diameter to be 11.3 cent. The pelvic sides were not deformed. Upon palpation, the head was found at the superior opening, movable and projecting somewhat upon the symphysis; the back directed to the left, the limbs to the lower and right. Auscultation showed the heart sounds to the left free and regular and heard most distinctly upon a level with the umbilicus.

We then had to deal with an aged primipara in labor at term, having a slight pelvic contraction, the promonto pubic diameter estimated at 9.8 cent., the membranes intact, the child living, and the condition of the mother excellent. Patient was given bath, injection, etc., and removed to the lying-in chambers. Pain continued regularly with intervals of five minutes. Cervix dilated somewhat, membranes ruptured spontaneously, after which cervix contracted a little and became slightly œdematous. The head became now accessible, and remained fixed at the superior opening, inclined upon the parietal with the sagittal suture placed transversely in proximity to the promontary. The posterior fontanelle could be felt to the left. The head was hard, densely ossified and apparently very slightly reducible. Five hours after the rupture of the membranes the contractions became more frequent and painful; local conditions about the same; however, the head appeared to have descended somewhat. Hot water douches had little effect upon dilatation. After forty-eight hours of labor the head had not progressed, and became fixed at the superior outlet, the cervix dilatable, contractions more feeble, the condition of the child excellent, and the mother exhausted. It seemed evident that engagement would not take place spontaneously. I administered an anæsthetic and applied Tarnéer's forceps. After vigorous traction, the head still refusing to engage, the forceps slipped. It was certain that the forceps could be of no further use without damage to the child, and with version impossible, there remained but symphyseotomy or craniotomy. The conditions of the mother and child being good, the former was indicated.

The operation was done in the usual way, and presented no difficulty, except that the presence of the head interfered with the passing of the finger behind the symphysis. The articular ligament was easily found and incised from above downwards and from before backwards. The wound was packed with iodoform gauze. The forceps applied, during which time opening of the pelvis bones remained moderate, the thighs being held by assistants, the head engaged and was extracted without difficulty. The child was cyanosed but quickly recovered; placenta and membranes extracted by introducing the hand into the uterus. The wound was closed with five sutures and packed with iodoform gauze. The pubes were held together by a simple bandage around the hips, and the thighs held together by means of a napkin bound around them. Convalescence normal. At the end of ten days the dressings were removed; union formed perfect. The child, female, weighed 3,280 grammes—the head large and very much ossified. The principal diameters were: O.F., 11.6; O.M., 12.5; S.O. Br., 9.9; Br. P., 9.7; Br. T., 7.3. Both left the hospital in excellent condition.

My next case was that of a woman with a pelvic contraction similar to the preceding. The fœtal head could not pass the boundary of the superior opening neither spontaneously nor with the aid of forceps. As the condition of the mother was serious, I performed craniotomy. The premature rupture of the membranes, albuminuria, the prolongation of labor, complicated by a troublesome adhesion of the vagina, the deformity of the pelvis, and the large size of the child, placed the patient in an extreme condition. The fœtus had suffered during the progress of labor. There were yet occasional pulsations when we commenced the operation, but the child had lost the chance of life and certainly could not survive. Of what use, then, would it have been to make a futile attempt and do upon the mother a symphyseotomy considerably more serious than an inoffensive craniotomy ?

Case 3.—The patient, aged twenty-three, primapara ; walked at the age of four years ; menstruation appeared at thirteen, and regular ; pregnancy progressed normally until the last two months, when swelling of the limbs and body appeared ; she continued to work until the last day. Examination showed general œdema more marked in the lower limbs ; the skeleton did not present definite indication of rickets ; the abdomen very large ; the urine contained a large amount of albumen, eight grammes per litre ; she was easily put out of breath and coughed a little ; palpation difficult on account of œdema and tension of abdominal walls. However, the head was felt at the superior opening and the back appeared to be to the right ; the heart sounds dull, regular, heard on a level with umbilicus, a little to the right of median line ; œdema of labia. The finger introduced into the vagina was arrested a short distance from the hymen by a cul-de-sac, presenting at the back a small opening, through which it was impossible to penetrate. Under anæsthesia a transverse partition of vagina was revealed. Through the orifice instruments were inserted and the obstruction dilated. The cervix was found open, the membranes intact and the fœtal head fixed at the superior opening, already presenting a sero-sanguinous swelling which rendered the determination of the sutures and fontanelles very difficult. The sacro-vertebral angle could be felt, and I was able to measure the promonto subpubic diameter, which was 11.3 cent. The head making no progress, section of the posterior margin of the vaginal partition was made. The fœtal heart sounds were weak, but not intermittent. After forty hours of labor, the woman very much fatigued her features wan, her tongue dry, and the œdema of the labia increased, I decided to interfere. After the administration of chloroform, I applied the forceps. Through the influence of heavy and continuous traction the head appeared to descend a little, but I felt the instrument slip. Disarticulating, I reapplied them three times, without success. At this time the fœtal heart sounds began to diminish, and were reduced to fifty to the minute, becoming also irregular.

Between symphyseotomy and craniotomy, any hesitation was but temporary. The general conditions of the mother, the albuminuria, her extreme exhaustion, and the condition of the child, caused me to reject the former

operation and to decide upon the latter. The operation presented no difficulty, the extraction easy. The liquor amnii had a fœtal odor. Extra-uterine injections of permanganate of potash, 1-2000, were given. Some slight rise of temperature followed for seven days. Under a diet of milk exclusively the albumen completely disappeared.

In review, I would say that the indications for symphyseotomy cease when the woman shows any defect that would place her in an unfavorable condition to resist the traumatism of operation. When such defect exists, craniotomy is preferable, even with a living fœtus, for the safety of the mother should transcend all other considerations. Such is, moreover, the advice of a great number of accoucheurs who refuse to practice section of the symphysis in infected women in the fear of meeting defeat, which could not but result in discredit to symphyseotomy.

SECONDARY SECTION FOR INTESTINAL OBSTRUCTION—IN THE SERVICE OF DR. DAVIE, SURGEON TO JUBILEE HOSPITAL, VICTORIA, B.C.*

Reported by ERNEST HALL.

Mrs. B., aged thirty-one, mother of three children (no miscarriages), presented with hyperplastic metritis, elongated and lacerated cervix and bi-lateral ovarian cysts. It was decided to do the triple operation of curettage, amputation of cervix and section under single anæsthesia, but as the patient took ether badly the latter operation was postponed. Three weeks afterwards double ovariotomy was performed through abdomen. Operation was uncomplicated, wound closed in usual manner by superimposed gut suture, peritoneum, fascia and muscles, and lastly skin. Immediate convalescence normal, no vomiting, bowels acted on the eighth day, and daily until the twentieth, when a full dose of pulv. glyc. co. was administered, resulting upon the following day in four slimy motions with considerable flatus. Patient began to complain of a sense of constriction about umbilicus, and increasing pain. Abdomen became somewhat distended, and vomiting ensued; temperature, 99; pulse, 75. On the following day—the twenty-second since operation—large quantities of bile-stained fluid were vomited; no movement of bowels; oil given, but not retained, followed by calomel, grs. x. Vomiting continued, nutrient enemata retained; temperature, 98; pulse, 110. Next day vomiting became stercoraceous; slight movement of the bowels by enema, tympanitis and pain increasing. The following day—the twenty-fourth since operation — patient became restless, with typical abdominal expression; vomiting continued, tympanitis increased, severe pain on pressure

* Read before Victoria Medical Society.

over seat of former incision, hiccough, some flatus passed, enema of oil and turpentine given without result; temperature, 97 2-5; pulse, 120, and feeble.

As intestinal obstruction was now beyond question, and the condition of the patient such as to warrant no further expectant treatment, the abdomen was reopened through former cicatrix. A coil of ilium was found densely adherent to tine of parietal cicatrix, and a knuckle of bowel found adherent to and incarcerated between the recti. These adhesions were separated with great difficulty; so closely was the bowel united to the recti muscles that it was necessary to leave a thin layer of muscle attached to the bowel, as a separation could not be done without seriously endangering that structure. Sterilized oil was freely spread over the parts after the manner of A. Martin, and the abdomen closed in the usual manner.

A few hours after operation patient passed flatus, and retained nutrient enemata. On the following day an enema of ox-gall and turpentine was retained, and patient afterwards took half an ounce of castor oil, followed by ten grains of calomel; slight vomiting, strychnine hypodermic; temperature, 96 3-5; pulse, 106. Next day milk-and-soda was retained, flatus and fluid fæces passed freely. Subsequent history uneventful.

The question arises as to the cause of such adhesions as were presented by this case. Implication of the bowel during the operation could not have taken place since a sponge is retained between the intestines and abdominal wall until the first layer of sutures are in place, and after removal of the sponge the parietes are held free from subjacent parts until the peritoneum is united. Or, the deep sutures might have given way, although the nurse reported neither vomiting nor straining. The incarceration of the knuckle of bowel lends support to this view. A third point to be considered is the fact that the wound, immediately before closing, is frequently sponged with a weak bichloride solution which, coming in contact with the peritoneum, is capable in susceptible cases of setting up localized plastic inflammation.

This case is also interesting as giving an example of the density of adhesion which forms when muscle divested of its sheath is brought in contact with peritoneum, a condition which has been but lately emphasized.

Edebol has shown the importance of the application of this principle in the closure of the abdominal wound, and we wait to see its application extended to many points in connection with intra-abdominal work where fixation of organs is desired.

Reports of Societies.

NIAGARA DISTRICT MEDICAL ASSOCIATION.

The annual meeting of the Niagara District Medical Association was held at the American Hotel, Niagara Falls, on Wednesday, July 8th. There were present Drs. Clark, King, Armour and Leitch, of St. Catharines; Dr. Dee, of Stamford; Dr. Schooley, of Welland; Dr. Olliver, of Niagara Falls; Dr. Thompson, of Niagara Falls South, and Drs. Johnstone and Campbell, of Thorold. Dr. Schooley, of Welland, occupied the chair.

The following officers were elected for the coming year: Honorary President, Dr. Clark; President, Dr. King; Vice-Presidents, Drs. Johnstone, Leitch, Trimble (Queenston), and Thompson; Secretary, Dr. Campbell; Treasurer, Dr. Armour; Auditors, Drs. Leitch and Clark.

As the meeting was called especially for the election of officers, no papers had been prepared.

Dr. Schooley described a very interesting case which occurred in his practice last winter. Primipara. Age, twenty-two. Pregnant nearly ten months. It was a breech presentation and apparently coming down well when it stopped at the vulva, and not finding any progress I made a thorough examination, using strict antiseptic precautions. I found the posterior wall of the vagina ruptured to such an extent that I could pass my hand into the pelvic cavity. The vagina was torn right up to the uterus, but the latter organ was intact. With the assistance of one of my confreres I delivered the patient carefully, but when this was over she was pulseless, and I told her friends she would die. However, we stimulated her with brandy and strychnia, carefully washed out the vagina and pelvic cavity with a 1:2,000 bichloride solution, put in a drainage tube, and applied antiseptic dressings to the vulva, and in a few hours she began to rally. I did not stitch the vagina, for I thought my patient would certainly die. I have been sorry afterwards that I did not. She recovered slowly, but surely, without peritonitis or any other complication.

Dr. Clark—What were the evidences of extended pregnancy?

Dr. Schooley—The patient's husband had been away for three months, and dating pregnancy from his departure, it must have been nearly ten months.

Dr. Armour—How do you account for the rupture?

Dr. Schooley—The child was a large one and the uterus projected forward, and I think the contractions produced a force slightly more backward than usual, bringing more pressure on the posterior wall of the vagina than it was able to bear. I have only cited this case as one of extreme gravity in which nature, practically unaided, came to the rescue and effected a cure.

Dr. King—What kind of drainage tube did you use?

Dr. Schooley—Rubber. It was all I had at hand.

Dr. Olliver presented a five-months abnormal fœtus, having right elbow ankylosed, right foot partially divided into two equal parts instead of having toes; left foot having six toes, left

hand seven fingers, right hand normal. Mother and father perfectly robust and well formed.

Dr. Armour wanted to know the percentage of patients that could take morphia alone better than in combination with atropia. He thought his percentage was about one in ten. He also thought that about one in fifty of his patients could not take morphia in any form without having produced continued restlessness, vomiting, etc.

No gentleman present could give the percentage of persons differently affected in his practice, but all had met with experiences similar to those of Dr. Armour.

The modifying and antagonistic effects of opium and belladonna were intelligently discussed by Drs. Clark, Johnstone, Olliver, Armour, King and Schooley.

Dr. Olliver described a case of severe morphia poisoning markedly benefited, and he considered the recovery chiefly due to hypodermic injections of a preparation of belladonna. The effects of the other alkaloids of opium in common use were then discussed at length.

Dr. Armour asked for the opinion of the members present on a case which he has now in his practice in which there is every day or two a profuse discharge of liquor amnii. The patient is six months pregnant, and this has been going on for about a month.

Dr. Clark thought she would abort very soon.

Dr. Armour said he had a case which went to full term in which this had occurred nearly every day after the end of the seventh month.

The Secretary was instructed to send letters of condolence to the relatives of the late Drs. Reade and Sayers, of Niagara Falls.

It was decided to hold the next meeting in Thorold, on Wednesday, October 14th, 1896, when a number of interesting papers will be read and discussed.

NEIL CAMPBELL, Secretary.

AMERICAN ASSOCIATION OF OBSTETRICIANS AND GYNÆCOLOGISTS.

The ninth annual meeting of the American Association of Obstetricians and Gynæcologists will be held at the Hotel Jefferson, Richmond, Va., Tuesday, Wednesday and Thursday, September 22nd, 23rd and 24th, 1896.

The proprietors of the "Jefferson" offer special rates to the Fellows of the association, their families and guests, as well as to any physicians who come to attend the meeting. It is confidently expected that the railways will offer transportation at a uniform rate of a fare and a third on the certificate plan to all in attendance. Let all obtain certificates from their local ticket agents, or from the nearest point where certificates are granted.

OUTLINE PROGRAMME.

The association will meet in executive session with closed doors on Tuesday, September 22nd, at 9.30 o'clock a.m., for the election of new Fellows. The open session for the reading of papers will begin at 10 o'clock a.m. Recess for luncheon at 1 o'clock p.m. Afternoon session at 3 o'clock p.m. An evening session will be held on Tuesday at 8 o'clock.

Morning session will begin Wednesday at 9.30 o'clock for the reading of scientific papers. Recess at 1 o'clock. Afternoon session at 3 o'clock. Adjournment at 5 o'clock. Executive session at 6.30 o'clock. Annual dinner at 8 o'clock p.m.

Thursday morning the session will begin at 10 o'clock. Recess at 1 o'clock. Afternoon session at 3 o'clock. Final adjournment at 5 o'clock. A full attendance is specially requested at the final session.

A very large number of papers have been promised by all the prominent obstetricians of the United States. Dr. J. F. W. Ross, of Toronto, is to read a paper on "Unnecessary and Unnatural Fixation of the Uterus and its Results."

THE American Association of Genito-Urinary Surgeons closed its annual meeting at Atlanta City, June 3. The officers elected for the coming year were: Claudius H. Masten, M.D., of Mobile, President; F. S. Watson, M.D., Boston, Vice-President; W. K. Otis, M.D., New York, Secretary; L. Bolton Bangs, M.D., and J. A. Fordyce, M.D., New York, members of the Council; R. W. Taylor, M.D., New York, delegate to the International Convention, and E. L. Keys, M.D., alternate. The next meeting will be held in Washington.

THE American Health Resort Association will hold its annual meeting in Chicago, November 10.

THE International Congress of Dermatologists will convene in London, August 4 next.

MISSISSIPPI VALLEY MEDICAL ASSOCIATION.

The date of the meeting of the above association has been changed to September 15th, 16th, 17th and 18th, in order to permit the members and their families to take the opportunity accorded by this change to make a pleasant tour through the Yellowstone Park, so justly celebrated as the Wonderland of America. It is expected that there will be a very large number of medical men present. Dr. Hanan W. Loel, of St. Louis, is Secretary.

Special Selections.

SARCOMA OF THE KIDNEY.

By JAMES A. BARTHOLOMEW, M.D.
Professor of Surgical Anatomy, College of Physician and Surgeons, Chicago.

In this paper I wish to report two cases of sarcoma of the kidney which have come under my care during the past year, with a few remarks on the etiology, diagnosis, and treatment. The pathology will not be touched upon, as that would require more time than the limits of the paper would permit.

Case 1. Mrs. N., aged 29, American, married, previous health good. Came under observation April 10, 1895. Her symptoms date back about twelve months. On examination a tumor could be readily detected in the region of the left kidney, which was fixed, had no respiratory movement, was situated posterior to the

colon. No metastasis could be found. The patient was informed of the probable nature of the growth, but, owing to the probable involvement of other organs, a nephrectomy was not urged. However, at the solicitation of the patient, an exploratory incision was made. The lymphatics of the mesentery and surrounding tissues were so invaded that a good result was despaired of, and the contemplated nephrectomy was abandoned. She survived about six weeks.

Case 2. Mrs. E. R., aged 20, stenographer, was first examined July 23, 1895. She gave the following history: Previous health good, although not robust. Her present illness dated back three years, when she had received an injury to the left lumbar region from a fall against the edge of a stone door step. Soon after the injury she passed bloody urine. With the exception of this hæmaturia, no symptoms that pointed directly to the kidney were noticed for one year, although after the fall she never felt quite well. At the end of this time increased hæmaturia began to be noticed, also slight rise of temperature, 99 degrees to 102 degrees, and marked emaciation. Unfortunately, the urine was not examined. After two months the fever disappeared, and the patient improved to such an extent that she was able to again take up her work as a stenographer. This state of affairs continued for another year, during which time the only symptom complained of was the hæmaturia. It will be noticed that up to this date, two years and two months after the injury, the only symptom pointing to a kidney lesion was the hæmaturia, although for months the kidney was probably seriously diseased, a fact which a careful examination of the urine would probably have revealed. At this time she again saw her physician for a slight rise in temperature, pain in the lumbar region, and more constant hæmaturia. Upon examination he found a tumor in the left lumbar region, not sensitive to pressure, although much manipulation was always followed by increased blood in the urine. The patient was kept under observation about four months, at the end of which time the writer first saw her. During these four months the tumor had grown rapidly, almost doubling in size. Sarcoma of the kidney was evident, and nephrectomy was recommended, to which the patient reluctantly consented. The kidney was removed on the following day. Owing to the large size of the tumor, the intraperitoneal route was selected, through an incision along the left linea semilunaris; the technique did not differ from that usually employed in this operation.

Some observations made during the operation may be worthy of mention. The peritoneum which covered the tumor was traversed by several enormous veins, which did not seem to communicate with the growth beneath. The renal vessels, artery and vein had entirely disappeared, and no trace of them could be found. No source of blood supply could be discovered, and not a vessel was ligated.

The ureter was dilated and filled with broken-down tumor tissue. With the exception of one gland, which rested directly against the abdominal aorta, and which was removed, the

growth appeared to be confined to the kidney.

Drainage was established posteriorly. The postperitoneal cavity was shut off from the abdominal cavity by closing the incision in the posterior peritoneal wall with continuous catgut sutures. The incision in the anterior abdominal wall was closed in the usual manner.

Convalescence was rapid and uninterrupted. At the present time, eleven months after the operation, there has been no recurrence. The patient is following her occupation, and reports herself as feeling perfectly well.

The interest which attaches to sarcoma of the kidney relates chiefly to the etiology and diagnosis. That heredity plays an important role in the etiology of this disease cannot, I think, be disputed. Sarcoma occurs at all periods of life, but occurs much more frequently in childhood and youth. In youth it attacks the bones by preference, in old age the glandular tissue, and in young and rapidly developing adults the sexual organs. Sarcoma in the majority of cases develops without any apparent exciting cause. That there is probably a microbic cause for its development from previously healthy connective tissue cells is, I think, doubted by no one, but, as yet, that microbe is unknown to us. As evidence of the probable microbic origin of sarcoma I would mention the fact that the most frequent seat of this neoplasm is a position farthest removed from the possibility of injury, viz., the marrow of bone, lymphatic glands and periosteum, all of which structures are well protected from external violence. Without question, chronic irritation does play an important role, and has long since been acknowledged to be a causative factor. The traumatic origin of sarcoma is beautifully but very conclusively shown in cases where the growth has its origin in warts and pigment moles, which are so often in a state of inflammation from chronic irritation.

Two such cases have come under my observation within the past year. One, a woman forty years old, for whom a small growth, which had its origin in a large pigment mole, had been removed from the anterior surface of the left forearm five years before, presented metastasis in various parts of the body, one large mass springing from the pericranium in the left frontal region, one springing from the periosteum covering the lower anterior portion of the left radius, and a very large mass on the upper portion of the anterior surface of the sacrum. These growths were probably secondary, the original tumor being that removed from the forearm, which, upon examination, proved to be a round celled sarcoma.

The second case was that of a man sixty years of age, from whose right scapular region a small growth had been removed eighteen months before. This growth also had origin in a pigment mole. Local recurrence took place. Eleven months ago I removed the diseased portion, amounting in all to about eight pounds. The growth had encroached on the axilla, and it was necessary to clean out the entire axillary space. No recurrence has taken place.

Both of these cases had their origin in pigment moles, and beautifully

illustrate not only the influence of a trauma in the production of sarcoma, but also suggest to us that the histological structure of the mole has less resisting power against the microbe than the normal tissues. Some cases seem to be directly traceable to a contusion, as was the second case reported in this paper. It is well known that the subepithelial connective tissue cells of developing tissues or organs have a tendency to revert to their original embryonic condition, as the result of an injury. It is worthy of note that this tendency is greater in developing tissues or organs than in those which are already fully developed, and this is the probable explanation of the well-recognized fact that children and rapidly developing adults are much more prone to this disease than are fully developed adults or the aged. The possible influence of a previous trauma in the production of a primary lesion, which may subsequently lead to the development of a sarcoma, should not be lost sight of. The primary lesion may consist of a denudation of the epithelium over a circumscribed area, either with or without an injury to the subepithelial connective tissue.

I submit this explanation of the occurrence of primary sarcoma of the kidney. The constant contact of the urine with the contused subepithelial structure is a sufficient irritant to keep it in a state of chronic inflammation, causing the subepithelial connective tissue cells to revert to their original embryonic condition, which constitutes the essential tumor matrix.

A matter of the most vital importance in sarcoma of the kidney is an early and accurate diagnosis. The many accurate and valuable means of examination into the surgical diseases of the kidney which have recently been brought forth are matters of the utmost satisfaction. Notwithstanding this, a diagnosis is too frequently not made until the organ has become not only functionally useless, but until the surrounding tissues have become hopelessly invaded. There is no neoplasm in which an early diagnosis is of more importance than the one under discussion. Upon its early recognition rests the only hope of a thorough eradication of the growth. Fortunately, the tendency of sarcoma of the kidney is to confine its growth for a time to the tissue within the kidney capsule.

The diagnosis depends on the following means of examination: First, the history; second, the urine; third, the presence of an enlargement; fourth, exploratory incision.

A complete history is of the utmost importance, particularly on the following points: Pain, condition of urine, history of traumatism, the presence of an enlargement, if one exists; its character, position and history of growth; chances of infection, either by tuberculosis or through a diseased condition of the lower urinary tract.

The facts to be obtained from a careful and exhaustive chemical and microscopical examination of the urine are indispensable. By such examination suppuration can be definitely determined. The various micro-organisms are so well understood as to be of much diagnostic value. Hæmaturia is very significant

as denoting traumatism, including calculus, tuberculosis or tumor. Blood in the urine is one of the earliest, most constant and valuable symptoms prior to the stage of renal enlargement, if traumatism and tuberculosis be excluded. Hæmaturia from trauma—and by the term trauma we also include calculus, is always transitory and increased by exertion or manipulation of the diseased organ. A tubercular kidney is betrayed by the presence of the bacillus in the microscopical findings. A careful search should also be made for epithelial and subepithelial elements, casts, blood corpuscles, tumor cells, in the granular and necrotic tissue, as indicative of beginning renal degeneration. Pus from the kidney can be distinguished from that coming from the ureter, bladder or urethra in that it is acid and is not mixed with mucus. Of course, a microscopic examination of the urine is not complete without a search for the hooklets of echinococcus. The most difficulty is experienced in differentiating between calculus and sarcoma, but fortunately both conditions usually call for an exploratory incision. A diagnosis ought readily to be made after the beginning of renal enlargement. Roughly speaking, if a kidney can be palpated, unless it is a floating kidney, it is enlarged.

It is very desirable that a diagnosis of renal sarcoma be made before enlargement of that organ takes place, and I believe it is not impossible to do this, especially in cases where the ureter can be catheterized. A renal tumor can be readily diagnosed by the presence of a tumor which enlarges upward and forward, which is posterior and external to the colon, does not move on palpation or respiration. It is always a fixed tumor.

The only treatment is thorough eradication. In removing the kidney a few simple rules should be strictly adhered to. First, all kidneys which are not too large should be removed through a posterior incision. Second, tumors too large for the posterior incision are best removed through an incision along the linea semilunaris. Third, in removing an infected kidney the peritoneum should not be opened. If the infected organ is too large to be removed through the posterior incision, one of two methods are to be selected. Either remove the tumor piecemeal, or make the incision down to the peritoneum along the linea semilunaris, then separate the peritoneum from the transversalis down to the tumor and remove the growth through the opening thus made. Whether or not the kidney is infected can only be determined before the operation is begun by an examination of the urine.

The percentage of mortality after nephrectomy by the posterior incision is about twenty-five ; by the anterior incision, fifty per cent. In a series of seventeen cases of primary sarcoma of the kidneys in the adult, collected by Gross, five cases were well thirty-one and one-half months after the operation, on an average. In other words, in his series of seventeen cases, nephrectomy was successful in about one-third of the cases. These statistics were presumably derived from cases operated on when the disease was far advanced. Is it not possible that with improved methods of examination which are now at our

command, the disease may be earlier recognized and the percentage of mortality still much reduced by resorting to total eradication before the diseased process has extended beyond the kidney capsule?

STRANGULATED HERNIA.

By ALEXANDER HUGH FERGUSON, M.D.
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Strangulated hernia is a much neglected subject. In the few minutes allowed on this occasion we shall only consider some of its important features. The affection being a disturbance of the intestines and omentum, the early symptoms and signs are almost invariably referred to the bowels. There is, of course, usually constipation with pain in the abdomen and pain and tenderness at the seat of strangulation. The hernia is down and cannot be returned. Early vomiting of intestinal contents means great danger. There may be gangrene of a knuckle of bowel without any vomiting as in Littre hernia, and an omentum is frequently strangulated with very little or no disturbance of the stomach. Early and persistent vomiting is the signal of immediate and complete occlusion of the lumen of the bowels. Swelling, pain and tenderness in the hernial region are common, and important manifestations of this condition. Sometimes, however, the swelling may be very little, and the pain and tenderness insignificant, as compared to the cramps in the abdomen, due to increased peristalsis. I well remember the case of an aged lady with an old, incarcerated femoral hernia, who was treated for six days for peritonitis by a skilful practitioner. The constitutional disturbances became alarming, and I was called to see her in consultation. The local manifestations were so little complained of that we found considerable difficulty in convincing her and her family that the cause of all the trouble was in the hernia. The findings at the operation were (*a*) pus in the sac, (*b*) gangrene of the bowel, and (*c*) septic peritonitis. Death followed.

The patient may suffer severely for a variable time; it may be for hours or even days, and then a lull of all the symptoms occurs, which brings new hope to patient and friends that all may be well without an operation. A close examination will elicit the real condition of affairs. The hernial swelling is not so tender or painful, but it is not less in bulk or tension, and it may give a crackling feel. The pulse rate has quickened, a fever has set in, induration is felt and there is absence of peristalsis near the obstruction. It is not uncommon for this "delusive calm" to deceive the attending physician until it is too late. Beware of it! Prostration, anxious expression, meteorism, hiccough, inability to pass gas, desire to stool, inability to pass water, etc., are some of the other symptoms. Diarrhœa and convulsions are rare signs of strangulation, the "cholera herniare" usually ceasing as the stercoraceous vomiting begins. The convulsions have been mostly met with in children.

Taxis and opium have their place in the treatment of a strangulated hernia, but I vouch to say that they have been more accountable for the high rate of mortality than the opera-

tion of herniotomy. Peritonitis, the most frequent danger of opening the abdomen, having been practically overcome by asepsis and antisepsis, an early operative interference offers the safest and most gratifying results, for not only is the sufferer relieved of his imminent danger, but an opportunity is afforded to cure the rupture. The patient himself has usually tried taxis to the point of safety, before the physician is summoned. Judicious and persistent taxis, carried out for five minutes, is long enough to tell of its inefficiency without an anæsthetic. This being administered, taxis is now tried for five more minutes by a skilled man. I say skilled, because who of us has not seen or heard of the bowel being ruptured by the roughness of the manipulator. At the expiration of this time, all preparations for herniotomy should be complete, and if taxis had failed, no time would be lost before liberating the strangulation.

The dangers of prolonged taxis are:

1. Ultimate failure and increased injury to the hernial contents.

2. Rupture of the bowel.

3. The reduction of so traumatized and gangrenous a bowel, as to cause peritonitis.

4. Reduction en masse, *i. e.*, without liberating the bowel.

5. Intraparietal reduction and reduction into the canal.

6. The non-detection of a second strangulation should it be present.

7. The rupturing of the sac and the forcing of the gut through the rent between the peritoneum and abdominal wall.

8. A diseased and perforated vermiform appendix may be reduced.

9. Reduction en bissac, *i. e.*, the forcing of hernial contents into a congenital pouch or diverticulum.

10. Bruising of the contents and hæmorrhage into the sac is common.

Most of these complications are rare, but they have all been encountered.

Herniotomy. It is utterly impossible to judge of the condition of the contents by the length of time the hernia has been strangulated. An omentum and large bowel will stand strangulation much longer than the small intestine.

The Hospital, volume xvii., 1895, furnishes statistics of 940 cases of herniotomy, showing up to 1884 a mortality of 43 per cent. This includes the cases of prolonged taxis, etc. The statement made by Treves, that the mortality after herniotomy has not diminished since the advent of antiseptics is quite untenable, because peritonitis is much less frequent, and operations are allowed much earlier. It has been proven by Croft, Bowlby and others that the mortality of herniotomy within twelve hours is trifling, and that peritonitis is a very rare complication. This has been our own experience. It is well to point out to the patient suffering with strangulation that without operation death has often occurred within forty-eight hours. Pirrie quotes two cases from Larrey, in which only two hours elapsed between the occurrence of strangulation and the death of the patients. (Macready, p. 335.) There are other reports of deaths within ten hours, sixteen hours, twenty-one hours, etc., but the average duration of life is between nine and ten days. Peritonitis is the cause of death in the vast majority of cases. (69 per cent.,

Bryant.) The statistics given by Macready in this connection are valuable.

In doing the operation the surgeon should, if possible, see, as well as feel, all the structures to be severed. A liberal incision and the use of good retractors accomplish this. The sac is opened in all instances; the fluid often within it allowed to escape; the parts cleansed with warm water; the constricting tissues cut through; an omentum, if present, is always pulled out and removed, whether gangrenous or not; the bowel is carefully withdrawn and constantly bathed for about five minutes with a salt solution at the temperature of 110 degrees F.; if the circulation is not then restored, the suspicious gut is reduced within the abdomen, thus relaxing the vessels which may have partly occluded by overstretching; at the expiration of five minutes it is inspected and should its color be now red and surface shining, it is unhesitatingly returned to the abdomen; and the operation for the radical cure of the hernia then performed. There are at least three clear indications for herniotomy: (*a*) when judicious efforts at reduction have failed; (*b*) when the symptoms of obstruction continue after reduction, and (*c*) when acute symptoms arise in an old incarcerated hernia.

In 66 per cent. of the cases of strangulated hernia, a serous fluid is found in the sac. It has recently attracted the attention of investigators. Most observers found no germs in it. One authority (Garre) found bacteria only once in eight cases examined. Ziegler failed to find them in five cases. Rovsing also failed in five cases. They were present in two out of seventeen cases examined by Travel and Lanz. Even when the fluid contains blood, plastic lymph, or necrotic tissue, bacteria are not necessarily present (Welch). Others again have been more fortunate in demonstrating their presence. It has been shown by Arndt that bacteria may pass through the wall of a strangulated bowel without necrosis of the bowel ensuing. It is even stated by Tietze that the fluid in hernial sacs has bactericidal powers. Welch has pointed out that the colon bacillus may enter the circulation without a lesion of the intestinal mucosa, and that absorption of pyogenic cocci from a diseased intestinal mucosa is a fruitful source of septic infection. We know that a strangulated knuckle of bowel frequently inflames and pus forms around it within the sac, and occasionally extends to form an iliac abscess. While it is not clear what the conditions are which permit bacteria to wander from the lumen of the bowel to the peritoneal surface, the fact of their migration is established both experimentally and clinically. It is not unlikely that the return of this fluid into the abdominal cavity, when an hernia is reduced, accounts occasionally for the peritonitis which then occurs.

Lesions observed in the intestine. The strangulated bowel may be (*a*) congested, (*b*) inflamed, (*c*) ulcerated, (*d*) pressure atrophy, and (*e*) necrosed. A congested gut is œdematous, thickened and altered in color, but its lustre is preserved and it bleeds on being pricked. The bowel may be black in color, its circulation not yet completely obstructed and when returned will live. The engorgement

may be so extreme that the loop, though not gangrenous, does not recover its function, and, if reduced, the patient will die of peritonitis. Many such cases are reported. The favorable signs of its vitality are (1) the lustre of the serous coat persists; (2) when the bowel is stroked the vessels are seen to empty and to refill; (3) when pricked it bleeds freely, and (4) the color changes when bathed with hot water. Some idea may be formed by examining the mesenteric vessels. If they are felt to be occluded with coagula it is a bad sign, and the bowel will likely die.

In the *Provincial Medical Journal*, January 1st, 1895, O'Callaghan takes the view that no matter how black the bowel may appear, he would return it if a graduated line of blackness exists at the point of constriction. He considers it a sign of returning vitality when the line of demarkation is not distinct, and should then preserve the bowel. If local peritonitis over the loop of intestine is present, it is reddened, lustreless, hot and swollen, with flakes of lymph here and there adherent to it. Great care must be taken to thoroughly cleanse it and to liberate all adhesions before returning it within the abdomen, and should any pus be present the wound in the abdomen should be enlarged to enable the employment of iodoform gauze as a protection of the loop from the rest of the intestines. Pressure atrophy of the bowel at the seat of constriction is common. The mucous and submucous layers suffer most. The bowel may be all right, and the lesion may only implicate one arm of the loop. By suturing the bowel so as to invert the lesion, it may be safely returned. Limited areas of ulceration may be dealt with in the same manner; but if perforation has occurred, even though pinhole in size, the case is much more serious, and if sutured and returned, it should be anchored in the wound and protected with gauze until all danger of leakage is seen to be over before the abdomen is completely closed. When fecal extravasation has occurred, an artificial anus may or may not be established. The escape is usually within the abdomen. If within the sac, the case is more easily dealt with, for nature has already partly formed an artificial anus which is completed by opening into the sac.

When the bowel is in a doubtful condition as to whether it will die or not, it had better not be returned within the abdomen. The stricture is freely cut and bowel may be left in the sac until its vitality is determined. When the bowel is gangrenous, and there is no doubt about it, there are two procedures to be chosen from, viz., (1) enterostomy; (2) enterectomy. Which shall it be?

CASTS OF THE URINIFEROUS TUBULES.

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Tube casts, renal casts or cylinders are casts of the uriniferous tubules, caused by the presence of a coagulable substance in the tubule. This substance when coagulating entangles in its body anything that had been surrounded by it while yet a liquid. From this fact, or from differences

in composition of the coagulable substance, the various casts take their names. If loose epithelial cells happen to be in the tubule before solidification of this material, we have an epithelial cast; if blood, a blood cast, and so on for the other varieties.

Very great variations in size are met with, the diameter and length varying with the size and condition of the tubule in which formed. Casts from the convoluted tubules are much narrower than those from the straight or collecting tubules. If the tubules are denuded of their epithelial lining we get an increase in diameter corresponding to the thickness of the epithelial layer. In many cases great increase in diameter is due to dilatation of the tubule, due to plugging near its orifice and consequent packing of the cast-forming material above the plug. As a rule, the variation in diameter is from 1-2500 to 1-500 of an inch. The length may vary greatly, but we never see complete casts of the whole tubule, for they must necessarily become broken in their passage downward. Casts of the straight tubules are usually the longer.

Regarding the source and composition of the cast-forming material there is considerable difference of opinion. Some investigators consider the material to be a coagulable constituent of the blood introduced into the tubule by capillary rupture or otherwise. This is undoubtedly true in some cases. Others claim that the colorless casts do not consist of fibrin and differ materially from other varieties of albumen. Then again, some consider these colorless casts to be a product of a disturbance of nutrition of the glandular epithelium lining the tubules; or, in other words, a degenerative product. Others, again, think that the epithelial cells have the power to elaborate and pour into the tubule a coagulable substance not a product of degeneration. Since we can have casts formed in tubules entirely bereft of epithelial lining, it follows that the last two theories cannot be true in all cases. It is probable that all theories mentioned are correct in respective cases. Staining experiments are under way that may be helpful in clearing up some disputed points regarding the composition of certain casts.

In the following pages I shall endeavor to classify the various varieties of casts according to their characteristics, that they may be more available as aids to accurate diagnosis.

For all practical purposes we may divide casts into the following varieties: hyaline, fine granular, coarse granular, brown granular, epithelial, blood, fibrinous, fatty, waxy, crystalline, bacterial and purulent. They differ from each other either in composition of the coagulable material forming them or in the character of the substances which become entangled in their bodies when coagulating. In many instances sharp lines of demarcation cannot be made between certain varieties, but it is essential that this be done to the fullest extent, for in this way alone is it possible to derive information of the probable extent of inflammatory or degenerative processes in the kidneys.

Hyaline casts, so called from their structureless and hyaline appearance, come from tubules where the epithelial lining is intact, firmly attached to

the basement membrane or from tubules entirely denuded of epithelium. They are structureless and colorless, very difficult to see in many cases, and their recognition is of the highest importance. As a rule, the cast is not entirely hyaline, but has a few granules adherent in different places, or perhaps a few minute oil drops. The pure hyaline casts are difficult to see, being of about the same refractive index as the urine in which floating, and, since they are of about the same specific gravity, settle with difficulty. The threads of mucus, so-called mucous casts found in highly acid urines, may easily be mistaken for hyaline casts. They do not come from the kidneys, and differ from hyaline casts by their usual great length, fibrillated appearance, difference in diameter at different places, and terminating at one or both ends in a point. Hyaline casts are found in all affections of the kidneys, whether temporary or permanent.

It must be borne in mind that some observers claim the presence of hyaline casts in normal urines. An experience of ten years with many thousands of normal and pathological urines has failed to furnish such evidence to the writer.

Granular casts are nothing more than the hyaline variety rendered opaque by a mixture with or covering of granular matter derived from degenerated epithelium or blood. If from blood, we have the heavy brown granular cast. Whether a cast is finely or coarsely granular is of some importance. As a rule, the more acute the affection the more granular debris and the coarser the casts. The fine granular casts are found under about the same conditions as the hyaline variety. The coarse and brown granular casts are, as a rule, found only in acute processes, as severe active hyperæmia and acute parenchymatous nephritis.

Epithelial casts are, as the name suggests, casts that are covered wholly or in part with renal epithelial cells. True epithelial cylinders are also found, composed of a shell of cells due to the whole epithelial lining coming away in one piece. They are rarely seen. The epithelial casts proper were primarily, at least in many cases, true hyaline casts, but, due to disease of the tubular lining cells, they became loosened or detached and affixed to the cast. Oftentimes we find the epithelium on one side only. They are recognized without difficulty, and when present in any amount usually denote either an active hyperæmia or acute parenchymatous nephritis.

Blood casts may be either hyaline casts originally, which entangled blood in their substance while coagulating, or they may be pure clotted blood introduced into the tubule by capillary rupture. It is usual to consider a cast as a blood cast even though it has comparatively few blood corpuscles on its surface. In size they are the same as other casts subjected to the same conditions. They are easily recognized, particularly if formed of clotted blood, and as a rule the corpuscles on the surface are very distinct. They are found only in acute processes, the typical specimens occurring in acute parenchymatous nephritis.

Fibrinous casts are those highly refractive casts varying in color from

light yellow to deep yellow, or even brown. Usually they are of a large diameter and have a peculiar convoluted appearance, as if the tubule in which formed was dilated or sacculated, or as if the substance was introduced under pressure. They are supposed to be formed by the exudation and coagulation of blood plasma. This variety is found in acute parenchymatous and septic nephritis.

Waxy casts, so called from their wax-like appearance, are colorless like the hyaline, but very refractive. Often they have the convoluted appearance of the fibrinous, but without the color. The composition of these casts is not known. Many give the amyloid reaction with iodine solution, but this is not the rule except with those found in amyloid degeneration. They are found in all chronic diseases of the kidneys nearing a fatal termination, but, as would be supposed, their appearance in amyloid disease is comparatively early. In chronic interstitial and parenchymatous nephritis they appear late, and always warrant the prognosis of a speedy fatal termination. Many writers make no distinction between the waxy and hyaline casts, and fibrinous also are indiscriminately called waxy, hyaline or refractive. The question of differentiation between these three varieties of casts is of considerable importance, both from a diagnostic and prognostic point of view. The fibrinous casts are highly refractive, always colored, and are found only in acute processes. The waxy casts are similar in appearance to the fibrinous, but without color. They are found only in chronic affections. The hyaline casts are colorless, but not refractive like the waxy.

Fatty casts are those containing oil drops on their surface, either free or as fatty degenerated cells. The basis substance is the same as the hyaline casts; but during or after setting of the plastic substance the oil or fatty degenerated cells become entangled or adherent to its surface. They are found in chronic parenchymatous nephritis, in acute parenchymatous nephritis during convalescence, and in severe, long-continued, active hyperæmia.

Crystalline casts—that is, casts containing uric acid, urates, calcic oxalate or cystine—are occasionally met with. These crystals may accidentally become adherent to the cast after it has left the tubule, but casts are met with containing them embedded in their substance, and are interesting as showing that these crystals may separate in the kidney tubules. In infants suffering from uric acid infarction of the kidneys, we find casts in the urine composed almost entirely of uric acid and urates.

Bacterial casts are those composed of or containing bacteria. Usually they are of large size, and resemble a granular fibrinous cast. As the bacteria are at rest they have simply a granular appearance, but proper staining and examination with a high power will reveal their true nature. They are associated with purulent casts and found only in septic nephritis.

Purulent casts are found under the same conditions as the preceding. In general appearance they may closely resemble epithelial casts, but as a rule they are of larger diameter; coming from the straight tubules and their associates, free pus in quantity and

bacterial casts render their nature evident. By the addition of acetic acid the granular matter of the corpuscles may be dissolved, thus showing up the two or three nuclei characteristic of pus.

An absolute diagnosis of a pathological condition in the kidneys cannot be made from casts alone. We must take into consideration the sediment as a whole, and even then in many cases we must have a chemical analysis of the urine and know the average amount passed in twenty-four hours. This last factor is of the greatest importance.

Active hyperæmia is characterized by hyaline and fine granular casts, with an occasional blood and epithelial cast from the larger tubules. If very protracted and severe we may find a few fibrinous and brown granular casts and possibly a few fatty epithelial casts. In connection with these casts we find free blood and renal cells. The renal epithelial cells are usually of the larger variety, tending toward the battledore shape and come from the straight tubules. In mild cases this sediment may resemble that of amyloid degeneration or interstitial nephritis. It is differentiated from these two affections by the fact that the total amount of urine is always less than normal, while in amyloid and interstitial disease the amount is largely increased.

In passive hyperæmia we rarely find more than a few hyaline and fine granular casts associated with a few renal cells and amorphous urates. This affection is even more likely to be confounded with amyloid or interstitial than the preceding. It differs from both by an increase in the total solids and having a small amount, high color and high specific gravity, although at times we may have a low specific gravity and pale color, but never so low as in amyloid or interstitial disease.

In acute parenchymatous nephritis, in the early stages, we find blood, epithelial, brown granular and fibrinous casts; rarely hyaline and fine granular casts. These various casts are associated with much blood, leucocytes and renal cells of all kinds, all colored brown by blood pigment. As the case progresses we begin to find fatty elements—fatty casts, fatty renal cells and compound granule cells. The appearance of these fatty elements in a case of acute nephritis indicates the beginning of convalescence and the patient will probably recover. As the fat increases the blood diminishes, as do also the blood, fibrinous and brown granular casts. Finally the fat disappears also, and we find only renal cells, hyaline and fine granular casts, with few blood globules and an occasional blood cast. The fatty stage of acute nephritis is very liable to be confounded with the chronic parenchymatous nephritis, therefore a guarded diagnosis should be given. The principal point of difference is the presence of more or less blood in the acute form.

In the active stage of chronic parenchymatous nephritis we find hyaline, granular, fatty and fatty epithelial casts, associated with free fat, fatty renal cells, compound granule cells and amorphous urates. During the inactive stage, when the patient feels better and has returned to work, the sediment decreases in amount, though still containing the same elements

with the exception of the amorphous urates, which have entirely disappeared. If life is prolonged a sufficient length of time, which is rarely the case, the large fatty kidney becomes atrophied and we have the so-called atrophic stage. The sediment, and in fact all the characteristics of the urine in this stage are very similiar to the interstitial nephritis. The only point of difference is the presence of fatty elements in the parenchymatous variety. If at any time during the course of the disease we find waxy casts we may soon expect a fatal termination.

In amyloid degeneration we find hyaline, fine granular and at a late period waxy casts. The waxy casts appear much earlier in this affection and do not have the same importance as when appearing in interstitial or parenchymatous nephritis.

In chronic interstitial nephritis we find a few hyaline and fine granular casts associated with a few renal cells. This form of Bright's disease is the most common, most important and the most difficult to detect. As a rule the disease continues for years with slight symptoms, and in many cases no symptoms at all, until uræmic intoxication appears. After this, if the patient lives, we find waxy casts in addition to the first stage elements. The characteristics in this affection and in amyloid degeneration are about the same. As a rule the amount is larger and the specific gravity higher in amyloid disease. The solids are much diminished in the interstitial, while in the amyloid they are normal or only slightly diminished. The amount of albumen throughout the whole course of interstitial is very small and may be absent for a few days at a time. It never exceeds 0.25 per cent. In amyloid disease the amount of albumen is small at first, but gradually increases to 0.50 per cent. near the end.

It must be understood that this scheme of differential diagnosis from the sediment characteristics of the urine is based on typical cases and is liable to considerable variation from complications of one pathological process with another. We may have many first stages in the course of an acute nephritis due to exposure or other causes, particularly in hospital cases. This, of course, would modify to some extent the sequence of changes in the characteristics of the sediment as mentioned. The fatty changes may take place and the sediment begin to clear up, when suddenly the whole preceding process may be repeated. In chronic parenchymatous nephritis we may have many acute exacerbations from time to time, and at such time the sediment presents the characteristics of both the acute and the chronic nephritis. This condition of affairs resembles exactly the fatty stage in acute nephritis, and the differentiation must be based on the chemical analysis and previous history. Complications of chronic parenchymatous and amyloid disease are not rare and this double process is difficult to diagnose. The sediment possesses the same characteristics as in pure chronic parenchymatous, but usually the amount of urine is larger and the color is paler. Previous history of extensive suppuration or syphilis and evidence of amyloid disease in other organs will confirm the diagnosis.

The commonest complication is interstitial, with parenchymatous nephritis, usually spoken of as diffuse nephritis. There is usually no great difficulty in diagnosticating the complicated condition, and, as a rule, the degree of one or the other can be determined with a fair degree of accuracy. As the parenchymatous changes increase, so does the amount of albumen and fatty elements, and the total amount of urine and the specific gravity decrease. As the interstitial variety predominates the converse applies.

The above examples of complicated conditions will illustrate how the character of the urine and sediment may be modified. If the results of examination are inadequate for a diagnosis the fault will probably be due to lack of care in examination, regarding which a few words will not be out of place.

Centrifugation of a sample is, of course, a valuable and perhaps the best means of obtaining a sediment for examination. But few physicians possess an apparatus of this character; therefore the following instructions will enable one to obtain the best results without a centrifuge.

The glasses used for the collection of specimens must be scrupulously clean, particularly if they were used for the same purpose before. One drop of a stale sample will speedily render a new one unfit for examination. If the conditions are such that we may expect rapid decomposition, as in warm weather or in samples containing much pus, it may be prevented by using perfectly clean tightly-stoppered bottles, into which has been introduced a little salicylic acid, chloral hydrate or a few drops of chloroform. By this means a sample can be kept several days in good condition. If possible, we should always use a part of the whole amount passed in twenty-four hours. If this cannot be obtained, use that passed in the afternoon. It should be allowed to settle in a tall glass with a rounded concave bottom and parallel sides. The conical glasses so often used allow too much sediment to settle on the sides, where in this shape of glass we can usually find more casts at the bottom. As a rule, from four to eight hours is sufficiently long for settling, except in those cases where we have a pale urine, of low specific gravity, large amount and no appreciable sediment. In such cases—that is, of suspected interstitial nephritis—the sediment may contain only a few pure hyaline casts, associated with a few renal cells, and, as a rule, is small in amount, hard to find and settles with difficulty. In these cases allow it to settle for twenty-four hours. The use of staining fluids is rather superfluous, except perhaps in such cases as the last mentioned. A few drops of a concentrated solution of fuchsine or methylene blue may be added to the whole amount set aside to settle.

In those samples containing a heavy sediment of amorphous urates it is well to add about an equal bulk of warm water before setting aside to settle. This will accomplish their complete solution and leave the field clearer for careful observation. For the same reason large deposits of phosphates had better be dissolved. This can be accomplished by rendering the sample distinctly acid with acetic acid.

A great deal of the success in

examining urinary sediments depends on the manner of using the pipette. The tip of the pipette should be drawn out long and at the orifice should not be over two millimeters in diameter —better, about one and one-half millimeters. It should be introduced into the fluid with the index finger pressed firmly over the top and lowered until the sediment is reached; then rotate the pipette, still keeping the finger pressed over the top, thus allowing the sediment to run in very slowly. By doing this we get as much sediment as possible in proportion to fluid, which is an important point when few casts are present. Before transferring to the slide, wipe off the fluid adhering to the outside of the pipette, otherwise that fluid containing no sediment will be deposited on the glass. It is better to use only a small drop on the slide and have only one layer of sediment to examine. It is easier, facilitates the rapid hunting over a slide and we are not so apt to miss delicate casts as if we were focusing rapidly through a long distance. Satisfactory work cannot be done with an amplification less than 350 diameters. Systematic examination of a slide is a material aid in hunting for casts. Beginning on one side go up and down on successive parallel lines until the whole slide has been traversed. Manipulation of the cover-glass with the fingers is apt to lead to error by rolling up mucus and granular matter, forming bodies not unlike casts in appearance.

If necessary, there are many fluids in which an organized sediment may be preserved. The best is a solution of potassic acetate of specific gravity 1.050, to which has been added 95 per cent. carbolic acid in the proportion of 5 to 1,000. After settling and pouring off the supernatant urine add the preservative, let it settle and decant again. This process may be repeated two or three times to entirely replace the urine with preservative solution. The sediment may then be preserved in small bottles for future reference or mounted in shallow cells, the cover-glass being cemented down with one of the many cements used for this purpose. Bell's cement is as good, if not better, than any other. Asphaltum varnish should not be used, for in the course of a few years it cracks, allows the fluid to evaporate and thus spoil the mount.

CAUSES AND TREATMENT OF CHLOROSIS.

Dr. Ralph Stockman, in the *British Medical Journal*, ably discusses this question. The following are his suggestions as regards treatment:

Iron.—When a fully developed case of chlorosis presents itself for treatment, clinical experience has abundantly shown that the chief remedial measure is the administration of iron. Whether given by the mouth, by the rectum, or subcutaneously, it is absorbed and utilized for the formation of new corpuscles. (Stockman, *British Medical Journal*, 1893, f.) There has been much discussion regarding this, but Macallum (*Journal of Physiology*, xvi., 268, 1894) has recently demonstrated its direct absorption from the intestine. It appears to be stored in the liver, and is there converted into an albuminous compound which is the predecessor of hæmoglobin, but

exact details regarding the steps of the process are wanting. Treatment by iron ought to be continued for eight or ten weeks, because comparatively little is absorbed, and the corpuscles which have been formed during the anæmic state are poor in hæmoglobin; they disappear slowly from the circulation. and are only gradually replaced by others rich in iron.

Any one of the ordinary Pharmacopœial preparations suffices, as they can all be absorbed, and no one preparation in the present state of our knowledge can be definitely said to be much better than another merely as regards iron. The choice of the particular preparation to be used should be guided to a very large extent by the condition of the stomach. If, as is so often the case, the stomach is irritable, it is best to use the least irritating preparations, such as reduced iron, ferrous carbonate in its various pharmaceutical forms, or one of the scale preparations, and these will be found most generally suitable. Hayem strongly recommends the oxalate, while lactate of iron is also much used in France. The protochloride and sulphate are distinctly more irritating, and the ferric salts still more so. Large doses are generally given, and are held to be most efficacious and rapid in action, probably because more iron becomes absorbed, but many cases recover well in which comparatively small doses, such as 1 g. of reduced iron twice or thrice daily, are administered.

Manganese and *arsenic* given along with the iron are supposed to increase its efficacy. The former is certainly of no use, and the latter is unnecessary. It is supposed to stimulate the formation of red corpuscles, but in chlorotic anæmia such stimulation seems to be rarely required, for as soon as iron in sufficient quantity is supplied, the manufacture of hæmocytes goes on with great rapidity, generally leaving the hæmoglobin lagging behind.

Diet.—No specific dietetic rules can be laid down for all cases, as the diet must be regulated by the condition of digestion. The most easily absorbed and utilized diet is the best, although, as has been previously pointed out, farinaceous foods contain less iron than flesh. If gastric digestion is good, then an ordinary full mixed dietary is most suitable; on the other hand, if there be severe dyspepsia or gastric ulcer, the diet must be regulated accordingly, so as to give the patient most comfort and the food which can be digested most easily, and with most benefit to general nutrition.

Once a patient is markedly anæmic the amount of iron furnished by an ordinary diet can go only a very little way towards providing the iron necessary for recovery. Say that the blood is deficient in iron to the extent of 20 gr., it is evident, from what has been previously stated, that it will be a very long time indeed before this can be made up from the small amount of surplus iron in an ordinary dietary.

Nasse (*Cbl. f. med. Wiss.*, 1877) states that fat hastens blood formation, which is confirmed by Cutler and Bradford (*Amer. Journ. Med. Sci.*, lxxv., 1878), and Ebstein ("Corpulence and its Treatment." London, 1884) recommends the treatment of

corpulent anæmics by means of fatty and albuminous food.

Rest in Bed.—Many patients who are severely anæmic do best when kept in bed, and some few recover only after this is enjoined. The explanation seems to be that the most distressing symptoms arise from lack of oxygen and debility of the heart and muscles, so that when complete rest is obtained there is less fatigue, and less oxygen is required for muscular exertion. The supply can therefore be used almost exclusively for purposes of nutrition, and thereby the digestion and general health are improved, so that the food and iron can be better absorbed and utilized. Slighter cases do best with an open-air life and a very moderate amount of exercise (taking care not to overstrain the heart) as the appetite and general nutrition are thereby stimulated.

Improvement of Appetite and Digestion.—Good general surroundings and personal hygiene, treatment of dyspepsia and of constipation are of the utmost importance, as thereby the appetite becomes larger, and the patient gets into the habit of taking sufficient quantities of food. The same is true of country air, spa treatment, hydrotherapy, and massage (Mitchell, *Amer. Jour. Med. Sci.*, 1894), all of which may be useful adjuncts to more direct methods of cure. If the patient be not placed under favorable conditions, or remain under the influence of the causes which originally produced the anæmia, then treatment may be inefficacious or very prolonged. For instance, in many factories the girls employed often take Blaud's pills as regularly as their meals, and yet they remain more or less anæmic chronically.

Prophylaxis.—Seeing that undue menstrual losses and insufficient food are the two great, if not the only, immediate causes of chlorosis, prevention seems simple enough. If the menstruation is relatively or absolutely too abundant, it can be held in check by giving ergot. In two severe cases of menorrhagia, where ergot did not control the bleeding, I have ordered hot douching with successful results.

More important still is the cultivation of a habitually good appetite and vigorous health, because sufficient iron is thereby ingested, and, as has been previously pointed out, healthy women bear menstrual blood-loss without serious deterioration of the blood. Leichtenstern found that when he lived generously and put on weight his hæmoglobin also increased in amount, and it is obvious that abundance of food means a sufficiency of iron.

Good general surroundings, fresh air and exercise, are essential to a healthy appetite and digestion, and are of the utmost importance in preventing anæmia. Tea has often been blamed for causing chlorosis, but if taken at proper times it can scarcely exercise any deleterious effect. Many women, however, use it as a substitute for food, or take it before their meals, thus diminishing appetite and bringing on dyspepsia, both of which interfere with the ingestion of a normal amount of iron by means of the food.

THE DOMINION · MEDICAL · MONTHLY
... AND ...
ONTARIO MEDICAL JOURNAL

EDITORS:
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THE VIAVI MEDICAL COMPANY.

When the members of the new Medical Council took office in the month of May last they made up their minds that they would try and do their duty by the profession throughout British Columbia, and to root out quacks, vendors of cureals, and the whole genus of unlicensed practitioners generally seemed the best way to do it. There is an association established in the cities of this province called the Viavi Medical Company, which is doing a thriving business amongst women, and which had hitherto baffled the skill of the best detectives who were put on their track to catch them. But at last they have been brought to time in Vancouver, and the representative of the Council there has covered himself with glory. Mrs. Montague Waller is the agent in that city, a lady we can conscientiously say of prepossessing appearance and refined manners, and represents herself as being the wife of a London, England, physician who is dying of diabetes. She has the gift of speech highly developed, and has been in times past a lecturer of some kind in England. We are told that she talked for two hours in order to convince the city solicitor of Vancouver (Mr. A. H. George Hamersley) that she was not entitled to pay a license as a vendor of medical nostrums, and, it seems, succeeded in doing so, for though she has been in the Terminal City for some weeks she has never paid a cent into the civic treasury. But License Inspector

Brown felt easy in his mind all the same, as he had good grounds to believe that he would have his satisfaction before long at the hands of the Medical Council, and he was not disappointed. On the 25th day of June the police magistrate imposed a fine upon her of $25 and costs for practising medicine for hire, gain and hope of reward, and promised that if any more cases were proved before him to inflict the highest penalty of the law, which is $100. The Viavi Company employed counsel to defend the accused, and attempted to avoid the consequences of practising medicine by pleading that they were merely medical vendors, and not physicians in any sense of the term. But the evidence clearly proved that Mrs. Waller not only sold medicine, but also diagnosed disease in her own way by questioning the patients and inquiring as to their symptoms, which is manifestly practising medicine according to the meaning of the Act. Too much praise cannot be given to the police of Vancouver for the able manner in which the case was worked up, and if the representatives of the Council in Victoria, Nanaimo, New Westminster and Kamloops follow up the action of the Vancouver man, the Viavi Company will soon be a thing of the past.

The Doctor Himself.

The Publishers will be pleased to receive at any time, local or personal items from physicians which will prove of interest to the profession generally.

WE are glad to be able to announce that Dr. Murray McFarlane, of Carlton Street, has recovered from his recent bicycle accident.

DR. GEO. A. CARVETH has resumed practice again after his vacation.

DR. MCDONAGH, of Church Street, has removed to 140 Carlton Street.

DR. J. A. TEMPLE intends returning from England about the 1st prox.

DR. ALLEN BAINES left for London, England, last month, but expects to return shortly.

DR F. P. COWAN intends commencing practice again, and will locate on College Street.

DR. AND MRS. CRUIKSHANKS, of Inverness, were visiting in Toronto the first week of this month.

DR. BYRON S. PRICE and Mrs. Price, N. B., were registered at the Walker House on the 6th inst.

DR. P. H. BRYCE, Secretary of the Provincial Board of Health, inspected Guelph sewage system last month.

DR. EASTMAN, of Indianapolis, was the guest of Dr. S. M. Hay, of Spadina Avenue, Toronto, ten days ago.

DR. HARDY, the missionary for Corea, was in Toronto last month on furlough, and stayed with Dr. Forfar, of Carlton Street.

HARVARD University has enjoined the Harvard Medical College, of Chicago, from the use of the name "Harvard," and we understand that the school has decided to change its title.

DR M. ALLEN STARR, of New York, has been elected President of the American Neurological Association for the ensuing year. The next session will be held in Washington in 1897, in connection with the American Congress of Physicians.

DR. JAMES F. W. ROSS, of Toronto, will deliver the address on obstetrics and gynæcology at the approaching meeting of the Canadian Medical Association.

DR. LEHMANN, of Spadina Avenue, Toronto, was married on August 12th to Miss Janie Cameron, of Woodstock. Dr. W. B. Thistle once more officiated as groomsman.

DR. FOTHERINGHAM, of Carlton Street, has taken charge of the Department of Pediatrics on the staff of the *Canada Lancet*, and Dr. Murray McFarlane of the Eye and Ear Department.

WE herewith beg to tender our sincere sympathy to Dr. Burt, of Paris, Ont., who lost his daughter on the 6th inst., in such a tragic manner. The doctor has the sympathy of the whole profession in this sad event.

Correspondence.

The Editors are not responsible for any views expressed by correspondents.
Correspondents are requested to be as brief as possible.

To the Editor:

A. M. Sutton, M.B., M.R.C.S., of Nicola Lake, British Columbia, in reporting a case of epitheliomatous neoplasm, asks for suggestions that may illustrate the obscure cerebral symptoms described by him in the July number. I can only refer him to case report No. 4, furnished by Dr. Lewers, of the London hospital, when describing his supra-vaginal operations for the relief of carcinoma of the cervix uteri. Those who compare these two reports can draw their own conclusions.

O. MCCULLOUGH.
Spencerville, Aug. 1, 1896.

The Physician's Library.

Hand Book of Diseases of the Ear, for the use of Students and Practitioners. By URBAN PRITCHARD, M.D. Edin., F.R.C.S. England, Professor of Aural Surgery at King's College, London; Aural Surgeon to King's College Hospital; Senior Surgeon to the Royal Ear Hospital. Third edition, with illustrations. London: H. K. Lewis, 136 Gower Street, W. C. 1896.

In this the third edition of Pritchard, the whole book has been carefully revised, a large portion re-written and upwards of thirty pages of new matter added. Such strides have been made of late years in for instance the diagnosis and operative treatment of mastoid troubles and intracranial suppuration, that the author has gone into details on those points more than ever before.

The Multum in Parvo Reference and Dose Book. By C. HENRI LEONARD, M.A., M.D., Professor of the Medical and Surgical Diseases of Women, Detroit College of Medicine. Flexible leather, 143 pages. Price 75 cents. Detroit, 1896: The Illustrated Medical Journal Co., Publishers.

This is a recent edition of the Dose Book, of which the title page informs us some forty thousand copies have been issued. The present edition is printed on very thin paper, and is bound in red leather, round corners, so as to make it specially light and handy for the pocket; the weight is not two and a half ounces. Besides the doses of some 3,500 preparations being given, it has numerous tables, such as the solubility of chemicals, pronunciation of medical proper

names, poisons and their antidotes, incompatibles, tests for urinary deposits, abbreviations, table of fees, etc. It will be found a handy pocket companion.

Cricket.

BENEDICTS vs. BACHELORS.

The much-talked-of match between the married and unmarried practitioners of Toronto took place on Thursday, July 30th, at Rosedale, before one of the largest crowds ever witnessed on the grounds. The bachelors, eager for the fray, were early on the oval, and in their preliminary practice showed much form —much more so than they did during the actual contest, when their extreme modesty, together with their overconfidence, lost them the match. The benedicts, more reticent, and knowing from years of experience in family matters, etc., that every contest is uncertain, looked, and we presume thought, that their play would be governed by greater deliberation.

Captain Harrington, gathering his Senecas about him, reminded them that the victory was not always to the strong, and exhorted them to carefully watch every weak spot of the enemy. Captain Smith, on the other hand, repeated to his followers the old story of the bundle of fagots, that in unity lay their strength, and his good advice was perceptible on several occasions. When a ball was knocked into the air there was a concerted rush to it, with the result that several players came into collision, and the ball was thus prevented from striking any of them, and thus they were saved much injury from it. In the toss-up Captain Smith won and the benedicts took the field. Macallum and Dawson were sent in to face the bowling of Creasor and Scadding. First over was a maiden by Creasor, and Captain Harrington's face illuminated with a glow that shone as resplendent as a medical student's when he gets his first accouchement. "They will not do much with that style of bowling," he said, as he strode up the crease, and so it proved, for Dawson was clean bowled by him the next over for four runs.

Goldsmith now sauntered out on the field, bat under arm, and with an air of confidence only gained by long experience; but alas for hard luck, the first ball from Creasor struck his housemaid's knee and he was retired for a duck's egg—l.b.w. Foster replaced him and was taken in the slips by Pepler, a most brilliant catch of a most difficult ball. With a colossal stride, George Bingham walked out and asked for centre, and the first ball he smashed towards Forfar, who was playing long-on; but Jimmy was not stopping electric flashes, so he let it go by for two; another hit to square-leg gave him a single; the next ball beat him completely and he was forced to retire. In the meantime Jim Macallum, who was playing cricket all the time, had scored seven runs. Badgerow now faced Creasor, and thinking of his old baseball days asked the pitcher for a low ball, which was accordingly given him, and he fanned the air in a desperate attempt to get under it, but alas and alack, his off stump went spinning. Mayburry now came in, and after making two

was clean bowled by Scadding. He was replaced by Captain Smith—the score was sixteen and six wickets down. With a look of determination the captain, his right-hand officers laid low, made up his mind to do or die. "Beautiful hit," says he, as Macallum hit Creasor for two. "How is that?" says Captain Harrington, as he grabbed the ball which ticked Mac's bat. "He's out," says the umpire, and Jim was forced to retire, although he did not relish the decision, as there was no bell on his bat to ring. Captain Smith soon followed him, being clean bowled by Scadding. Fred Fenton, with a smile as if he had been reading the "Heavenly Twins," waddled out and replaced Macallum, Smith's place being occupied by Boultbee.

"Get away from the front of your wickets," says Creasor to Fred Fenton, which he very obligingly did. He had forgotten that his superabundant adiposity was obscuring the bowler's view of the wickets. Boultbee, drawing in a long breath and closing his eyes, let out and hit Scadding to the fence for four. The crowd cheered and the batter wondered what the fun was. "It's a boundary," says the umpire. "Thank you very much," says the batter. Fenton was now clean bowled by Creasor after a single and Watson took his place. Scadding, who is a near neighbor of Watson, intending to show that Sherbourne Street was made of good sound muscle, now bowled a slow lob which Watson smashed to the fence. "A boundary," says the umpire. "What for?" says Watson. "Four," says the umpire. Watson looked mad, but made up his mind to watch the umpire. Boultbee was caught in the slips next over. Smith took his place and was bowled by Creasor for two. Ferguson replaced him and Watson hit Creasor for two. The assembly noticed it and appreciated. He was caught in the slips by A. R. Gordon next ball. Stacey now took his place and Ferguson was caught in the slips by the very much present Andy Gordon in one of the most brilliant catches ever witnessed in Europe, Asia or Africa. Anderson, the last man, came in only to wonder how his wickets happened to fall, for he avers the wicket keeper must have bowled the ball, as he did not see it.

Thus fell that mighty host, but like good men and true. Captain Smith says, "Just watch the slaughter of the innocents," as Scott and Pepler walked out to smite in the cause of the married. "Go after that," says Scott, as he hit Goldsmith to the south fence for four and another drive for two; then a single gave Pepler the delivery and he was clean bowled by Goldsmith for 0. Grasett followed Pepler's footsteps and Topp joined Scott, and when the telegraph showed 25 Topp was unfortunately run out. Captain Harrington followed and hit Foster to fence for four. Scott was shortly bowled by Foster and Creasor came in. Harrington, in trying to cover a wide, was caught by Dawson. Beemer now came in and gave a beautiful exhibition of old-time cuts. Creasor was cleverly caught by Macallum and Milner was served similarly by Badgerow after making three. This was a grand catch, for George sat upon the green sward, and singing "Come to my arms, Nora darling," he grasped the sphere around

the waist, and bringing his fourth nerve into action he gently fondled the rotund beauty. Greig was soon bowled by Goldsmith, and A. R. Gordon, wandering too far from his grazing ground, was promptly stumped by Fenton. Scadding now came in, and the way he knocked that bowling around was remarkable. The field became paralyzed as they dodged the repeated drives to on, to off, and to every quarter of the field. "That's your ball," says Bingham to Watson as one passed a few inches from him. "Not so, that's Boultbee's." Eventually Ferguson threw it in. "You need bicycles" says one of the spectators, as the ball was knocked to different quarters. Beemer retired and Thorburn was given out l.b.w. "Hurrah for Ireland," says Fred Grasett as Verner, the hero of many a century-circled game, walked with a mesenteric air upon the field. "He's mine," says Macallum, as he grabbed a slip off his bat and the emerald lad returned to the club house, and Grasett smiled. Forfar now went in and struck out boldly, but Arthur Mayburry, who should have bowled earlier in the game, took his middle stump.

E. P. Gordon, the last man, now come in and Scadding, who had put together 42, was bowled by Goldsmith, and the band played "Annie Laurie," and the great unwashed were defeated.

Births.

MACHELL — On July 30, at 95 Bellevue Avenue, the wife of Dr. H. T. Machell of a son.

LYND — On July 12, at Queen Street West, Toronto, the wife of Dr. Adam Lynd of a daughter.

SCADDING—On July 16, at 311 Sherbourne Street, Toronto, the wife of Dr. Crawford Scadding of a son.

Marriages.

SPILSBURY–HIPWELL—On Wednesday, July 29, at All Saints' Church, Buffalo, N. Y., by the Rev. Herbert Gaviller, Frederick C. Spilsbury, M.D., to Emma R. Hipwell.

MINTIE–CRITTENDEN—On Tuesday at noon, June 30, 1896, at Simpson Church, Los Angeles, California, Dr. Alexander Erwin Mintie, to Miss Essie Pearce Crittenden.

START–FRASER—On July 8, at Bloor Street Baptist Church, Toronto, by the Rev. C. A. Eaton, M.A., Frederick William Start, of Gloucester, England, to Wilhelmina Grant Fraser, M.D., of Toronto, daughter of the late Rev. John Fraser, M.A.

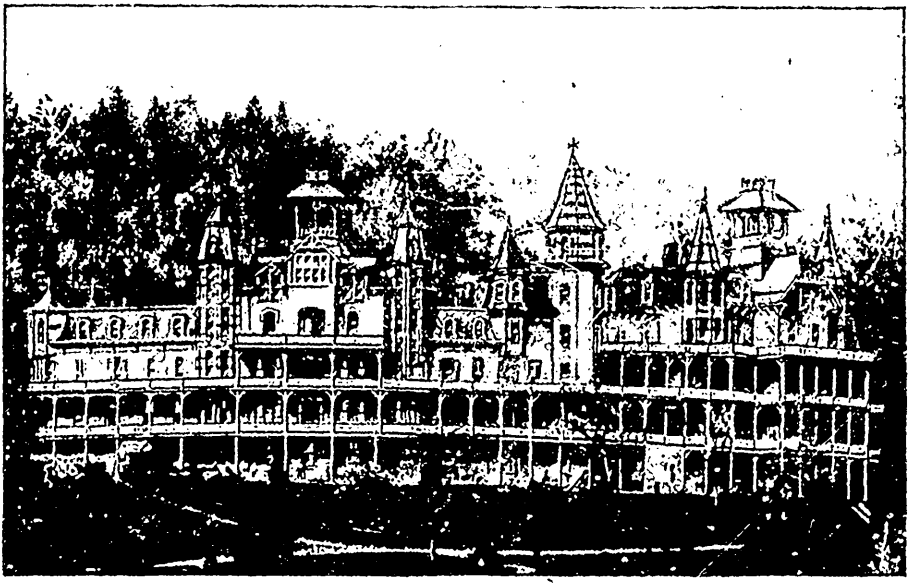
WATSON-EAKIN—On the 12th of August, 1896, at the residence of the bride's grandmother, Mrs. Clarkson, 30 Beaconsfield Avenue, Toronto, by the Rev. P. Nicol of Tottenham, John Watson, M.D., to Miss Laura May Eakin, daughter of the late David Eakin, Esq., all of Unionville.

Deaths.

MACHELL—At 95 Bellevue Avenue, on July 30, Gordon, infant son of Dr. H. T. Machell.

BURT — On August 6, at Paris, Kathleen, aged ten years, the youngest daughter of D. W. Burt, M.D., died from the effects of a burn.

AMERICAN BICYCLES IN ENGLAND.—No more important topics occupy the editorial space in the columns of the English cycle publications than the invasion of Britain by the American manufacturers. Every week the papers comment either favorably or adversely on the product of some United States maker who has introduced into England a consignment of his wares, and it must be said their opinion has of late changed from a bitter antagonism to extreme favoritism. In commenting on this Editor Sturmley of *Cyclist*, one of the most prominent cyclists in England, writes editorially on the subject as follows: "Hitherto the English cycling press has been solely dependent upon English manufacturers for its advertising support, in other words, for its very existence, but appearances seem to indicate that in the near future American manufacturers, who are notoriously larger advertisers than the English, will be no inconsiderable portion of its clientele, and this prospect has doubtless been responsible for the columns of unstinted praise with which the firms from the other side, who have this year made their entry into our markets, have been greeted, but it does not redound to the credit of the English cycling press that it is so, nor is it at all a gracious thing to gratuitously administer a slap on the face to their previous sole supporters in a fatuous attempt to please the new comers, as some of our contemporaries have done. By this we do not mean to say that because a



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machine is not English it should receive but scanty courtesy. That would be equally unfair the other way. But we do say that the mere fact of a machine being of a foreign production, with an advertising backing, should not, ipso facto, entitle it to be written up as superior to English goods, which appears to be the policy of the journals in question. It really matters but little, however, what journals of such calibre assert. The proof of the pudding is in the eating thereof, and in cycling more, perhaps, than in many other things, the gospel of the survival of the fittest is inevitably borne out in the end. If American manufacturers can make a machine which will suit the requirements of the British public in fittings and design, and which is, as some of our contemporaries would appear to assert, superior in construction and finish to anything else, why, then, the British manufacturer will have to take a back seat. But it is not fair to assume off-hand that such is the case, or is going to be the case. Absolute fairness and impartiality to both British and foreign manufacturers alike will be the policy of the *Cyclist*, and when we see—for we have not seen one yet—an American machine which is superior in finish, fitting and design, and better suited for the requirements of the English market than our own, we shall not hesitate to say so. As a matter of fact, in spite of the 'gush' of contemporary journals, we have as yet seen only one American make of bicycle which can in any

way be said to be at all equal in construction, apart from design, of the best English productions, and this, we have no hesitation in saying, is Messrs. Lozier's Cleveland, which, so far as we can judge, without a trial, may fairly be termed, as its makers call it, 'America's best bicycle.'"—*From New York Recorder, July 29, 1896.*

A STATUE TO PASTEUR.—M. Tony Noel has just finished a statue of Pasteur, to be placed in the market place of Alais, where the illustrious scientist made his famous researches in the diseases of silk worms. The statue is declared by the relatives and friends of M. Pasteur to be an excellent likeness, and artistically it is a very successful piece of work. Pasteur is represented erect, gazing fixedly at a sprig of mulberry covered with cocoons, which he holds in his left hand. At his feet is a young girl in a graceful attitude handing him other cocoons. Near at hand are a microscope and a box of scientific instruments.

Kate—"Are you afraid of the cholera?" Jessie—"For pity's sake, don't mention either cholera or fumigation or disinfection in my presence. Even the choir at church to-day had something to say on the subject." Kate—"What on earth do you mean?" Jessie—"Well, we had just finished disinfecting the house and were worn out, and that wretched choir got up and sang, 'and He shall purify.'"—*Ex.*

SUMMER DISTURBANCES OF CHILDREN.—In fermentative disorders of the alimentary canal in the young, middle aged or old, listerine has given most satisfactory results. In the summer diarrhœa of children, Dr. I. N. Love, of St. Louis, speaks very highly of it, given in combination with glycerine and simple syrup. A formula that I have time and again used—in fact, it has almost become routine with me of late years—is as follows:

℞ Bismuth sub. nit	.....	½ dr.
Tr. opii	.....	20 drops
Syr. ipecac }	aa...	2 drs.
Syr. rhei arom. }		
Listerine	.....	½ oz.
Mist. creta	.....	1 oz.

M. Sig. Teaspoonful as often as necessary, but not more frequently than every three or four hours. This for children about ten or twelve months old.—*Deering J. Roberts, M.D., in Southern Practitioner.*

VALUE OF GASTRO-DIAPHANY.—Meinert (*Centralbl. f. inn. Med.*) first refers to Martin and Meltzing's investigations into this subject. Kelling has examined eleven cases in the author's clinic by the diaphanoscope and also volumetrically by inflation with air after the author had determined the condition of the stomach by the usual CO_2 method. In one case the lower boundary of the stomach was found by the author to have been raised after the distension to three fingers' breadths above the umbilicus. Kelling obtained a similar result a few days later by the volumetric

method. A few days afterwards three-quarters of a litre of water was put into the stomach and the gastro-diaphanoscope used. The limits of the figures obtained were marked out on the abdominal wall. In varying positions of the lamp different pictures were obtained. In cases of gastroptosis a correct representation may be got of the lower margin of the stomach, but no information can be obtained in regard to the upper margin. The diaphanoscope can only occasionally be of use. It may facilitate the detection of tumors in the neighborhood of the spleen, also the topographical determination of palpable tumors of the stomach and parts in the neighborhood. Any attempt to determine the position, size and shape of the stomach by this means is not only unsuccessful, but may mislead.—*British Medical Journal.*

HE FELT IT.—Professor—"What's the formula for nitric acid?" Freshman (who has been experimenting without knowledge of the acid's properties)—"There's nothing formal about it, sir. It just goes on without ceremony."—*Ph. Era.*

WHEN visiting the Canadian Medical Association at Montreal, the firm of Lyman Sons & Co., the well known surgical instrument makers, invite physicians to call and see their stock of goods. They will also have an exhibition of goods at St. George's Hall, where the Association meets.

Alphabetical Index of Formulæ.

(Continued.)

TOOTHACHE *(Continued).*—

℞ Lini. aconiti (B. P.),
Chloroformi.....āā f℥iij.
Tr. capsici..... f℥j.
Tr. pyrethri,
Ol. caryophylli,
Pulv. camphoræ.....āā ℥ss.

M. Sig.: A few drops on cotton placed in the cavity.—*Mason.*

℞ Tr. iodinii..... f℥iv.
Tr. aconiti..... f℥j.

M. Sig.: Paint the gums twice daily around the painful tooth.—*Rodier.*

℞ Cocaini hydrochlor.,
Morphiæ sulphat.,
Chloral hydrat.,
Acid. carbolic.....āā gr. x.
Aq. rosæ..... f℥x.

M. Sig.: Inject with a hypodermic syringe into the gums. (For painless tooth extraction.)

TOOTHACHE (*Continued*)—

℞ Camphor. vas.,
Chloral hydrat.....āā gr. lxxv.
Cocaini hydrochlor.... gr. xv.

M. Sig.: To be introduced into the tooth-cavity.

℞ Cocaini hydrochlor.... gr. xv.
Opii..... gr. lx.
Methol ..... gr. xv.
Althææ pulv..... gr. xlv.

M. Et div. in pellets weighing one-half grain each. Sig.: Place a pellet in cavity of the aching tooth.

TRICHINOSIS.—

Dr. Ferrer has cured a case with alcohol. He began with six and increased to nine ounces daily, in sweetened water. The cure was complete in eighteen days.—*Napheys' Med. Therapeutics.*

℞ Sodii sulpho-carbolat.. gr. ii–x.
Aquæ..... ... ʃʒ ij.

M. Ft. haustus. Sig.: To be taken three or four times daily.—*Furey.*

Ergot or ergotini is suggested by *Rhode, of Berlin.*

TRISMUS NEONATORUM.

℞ Ex. gelsemii fl..... ℥viii–xvj.
Syr. simplicis ..... ʃʒ j.
Aquæ.....q. s. ad ʃʒ iv.

M. Sig.: Half teaspoonful every two to four hours.—*Bartholow.*

℞ Tr. opii..... gtt. v.
Tr. assafœtidæ ... ... ʃʒ iss.
Syr. simplicis ..... ʃʒ v.
Aquæ..... ....ad ʃʒ xv.

M. Sig.: Half teaspoonful every hour.—*Eberle.*

TRISMUS NEONATORUM (*Cont'd*).—

℞ Tr. opii..... ℥j.
Ol. ricini..... f℥ j.

M. Sig.: A teaspoonful every four hours, with a warm bath.—*Druitt.*

℞ Chloral hydrat..... gr. i–iv.
Syr. simplicis ..... f℥ j.

M. Sig. : One dose.—*Bartholow.*

TYMPANITES.—

℞ Naphthol,
Magnesii carbonat..
Carbo. lig.....āā gr. lxxv.
Ol. menthæ pip..... gtt. x.

M. Et ft. chart. No. xv. Sig.: One powder when required.—*Medical News.*

℞ Ol. terebinthinæ..... f℥ j.
Pulv. acaciæ..... q. s.
M. Et adde—
Decocti hordei..... f℥ xix.

M. Et ft. enema. Sig.: Inject into the bowel.—*Hooper.*

℞ Ol. terebinthinæ..... f℥ j.
Ol. amygdalæ express. f℥ ss.
Tr. opii..... f℥ ij.
Mucil. acaciæ..... f℥ v.
Aq. lauro-cerasi..... f℥ ss.

M. Sig.: Teaspoonful every three to six hours.—*Bartholow.*

℞ Ol. terebinthinæ,
Ol. ricini.....āā f℥ iij.
Ol. cajuputi..... ℥vj.
Magnesii calcinatæ.... ʒj.
Aq. menthæ pip..... f℥ iss.

M. Et ft. haustus. Sig.: Take at one dose.—*Joy.*

TYMPANITES (*Continued*).

℞ Pulv. capsici ..... gr. vi–xxiv.
Sacch. lact..... ʒ iss.

M. Et ft. chart. No. xii. Sig.: One powder every four hours.—*Phillips.*

ULCER.—

℞ Zinci oxidi,
Gelatin puris..... āā f ʒ j.
Glycerinæ,
Aq. destillat.,..... āā f ʒ iv.

M. Sig.: Wash the leg thoroughly with soap and water, and apply the paste in a thick layer to the parts, excepting the site of the ulcer. The ulcer is then sprinkled with iodoform, and covered with a layer of cotton and sublimate or iodoform gauze. Over this is applied tightly a double-headed wet mull-bandage, the ends crossing in front of the leg. The bandage should extend at least from the middle of the foot to the calf, and is supplemented by a second one similarly applied. The dressings are changed in from two to four or even eight days, according to the amount of discharge. (Leg ulcer.)—*Unna.*

℞ Argenti nitrat. fusæ.....q. s.

Sig.: Apply to the surface and edges, and strap with adhesive plaster. (Leg ulcer.)—*Markoe.*

℞ Calcii phosphatis..... f ʒ j.
Aquæ..... f ʒ x.

M. Sig.: Saturate compresses and apply, renewing three or four times daily. (Leg ulcers.)—*Grossich.*

ULCER *(Continued)*.—

℞ Bismuth. subnit..... ℥ ij.
Pulv. opii..... gr. iij.
M. Et ft. chart. No. xii. Sig.: One powder three times a day, followed by—

℞ Acid nitrici..... ♏ xij.
Aquæ..... f℥ xvj.
M. Sig.: Use locally. (Indolent ulcers.)—*Howe.*

℞ Cupri sulphat..... gr. vj.
Aquæ..... f℥ viij.
M. Sig.: Use locally. (Sloughing ulcer.)—*Cooper.*

℞ Argenti nitratis..... gr. v.
Tr. opii..... f℥ iss.
Aq. anisi..... ad f℥ iiss.
M. Sig.: Teaspoonful three times a day. (Gastric ulcer).—*Thompson.*

℞ Argenti oxidi,
Ex. hyoscyami..... āā gr. v.
M. Et ft. pil. No. x. Sig.: One pill three times a day. (Gastric ulcer.)—*Bartholow.*

R Creasoti..... ♏ iv.
Aquæ..... f℥ vj.
M. Sig.: Teaspoonful three or four times daily. (Gastric ulcer.)—*Niemeyer.*

℞ Liq. potass. arsenitis... f℥ ss.
Sig.: One drop, repeated as required, to relieve the pain and vomiting. (Gastric ulcer.)—*Bartholow.*

℞ Argenti nitrat..... gr. iv.
Ex. hyoscyami..... gr. x-xx.
M. Et ft. pil. No. xx. Sig.: One twenty minutes before each meal. (Gastric ulcer.)—*Hare.*

ULCER (*Continued*).—

℞ Creasoti..... ℥iv.
Tr. galbani..... f℥ij.
Aquæ..... f℥ij.

M. Sig. Use locally. (In indolent ulcers with excessive discharge.—*Neligan.*

℞ Chloral hydrat..... ℥ss–ij.
Aquæ..... f℥vj.

M. Sig.: Use as a wash. (In sluggish ulcers)—*Keyes.*

℞ Hydrarg. chlor. corros. gr. xv.
Acid. carbol..... ℥xxx.
Aquæ..... q. s. ad f℥iv.

M. Sig.: Apply on cotton daily. (Syphilitic ulcers)—*Fox.*

℞ Pulv. camphoræ,
Carbonis animal....āā ℥j.

M. Sig.: Use as a dusting powder. (In deep chronic ulcers.)—*Barbacci.*

℞ Emplast. plumbi..... ℥ij.
Ungt. hydrarg..... ℥ss.
Ol. cadini..... ℥ij.

M. Sig.: Spread on linen and apply. (Inflamed syphilitic ulcers.)—*Bumstead and Taylor.*

℞ Aluminis..... ℥ij.
Aquæ..... f℥viij.

M. Sig.: (Foul ulcers.)—*Pennypacker.*

℞ Acid. tannic..... gr. lxxv.
Hydrarg. nitrat. acid... gtt. xij.
Adipis..... ℥viiss.

M. Sig.: Apply as a dressing. (For chronic syphilitic ulcers.)—*Venot.*

℞ Zinci sulpho-carbolat.. ℥vj.
Aquæ..... f℥viij.

M. Sig.: Each portion to be used to be mixed with three parts of water. (Fetid ulcers.)—*H. Lee.*

UR.EMIA.—

℞ Acid. benzoic..... ℈ v.
Div. in chart. No. v.

Sig.: One powder in a half-tumbler-ful of water every three hours.—*Da Costa.*

℞ Pulv. scillæ,
Pulv. scamonii,
Pulv. digitalis.....āā gr. xv.

M. Et ft. pil. No. xx. Sig.: Take from four to six pills daily, for six days.—*Lancereaux.*

℞ Ol. tiglii..... gtt. v.
Ol. caryophyllæ..... gtt. ij.
Micæ panis..... q. s.

M. Et ft. pil. No. v. Sig.: One every two, three or four hours.—*Paris.*

℞ Ex. colocynth. comp... gr. xiv.
Hydrarg. chlor. mit.... gr. vj.

M. Et ft. pil. No. iv. Sig.: Take at one dose, and follow in four hours with a purge.—*Johnson.*

℞ Tr. scillæ..... f℥ ij.
Liq. ammon. acetat.... f℥ ij.
Decoct. scoparii. q. s. ad f℥ vj.

M. Sig.: Two tablespoonfuls three times a day.—*Charteris.*

℞ Acid. benzoic..... gr. xx.
Syr. tolu..... f℥ j.

M. Sig.: Take every three hours, well diluted.—*Da Costa.*

℞ Pilocarpinæ muriat .... gr. ij.
Aquæ..... f℥ ij.

M Sig.: Inject hypodermically ten minims; half the quantity for a child.—*E. R. Stone.*

URÆMIA *(Continued)*.—

℞ Ol. tiglii..... gtt. viij.
Elaterii..... gr. ss–j.
Micæ panis..... q. s.

M. Et ft. pil. No. viii. Sig.: One or two pills as a purge.—*Bartholow.*

URIC ACID DIATHESIS.—

℞ Sodii bicarbonat..... ʒ j.
Tr. calumbæ..... fʒ j.
Infus. quassiæ..... fʒ iij.

M. Sig. . Tablespoonful four times a day.—*Hazard.*

℞ Liq. potass. arsenitis... ℥v.
Potass. bicarbonat.,
Ferri et potass. tart..āā gr. v.
Infus. quassiæ..... fʒ j.

M. Sig.: Take three times daily, two hours after meals.—*Fothergill.*

℞ Acid. muriat. dil..... fʒ j.
Acid. lactici..... fʒ iij.
Syr. simp..... fʒ ss.
Aquæ..... fʒ ij.

M. Sig.: Dessertspoonful after each meal. (When excess of acid is due to indigestion.)—*Bartholow.*

℞ Lithii carbonat.,
Potass. iodid.....āā ʒ iiss.
Pulv. acaciæ..... gr. xxiij.
Ex. gentianæ..... ℈ iiiss.

M. Et ft. pil. No. c. Sig.: One pill after each meal.—*Vigier.*

℞ Sodii boratis..... ʒ iij.
Sodii bicarbonat.,
Potass. nitratis.....āā ʒ iss.

M. Et ft. chart. No. xii. Sig.: One powder in a tumblerful of water.—*Druitt.*

URIC ACID DIATHESIS (*Continued*).—

℞ Lithii benzoat..... ʒ iiss.
Ex. gentianæ..... gr. cv.
M. Et ft. pil. No. c. Sig.: One pill morning and evening.—*Vigier.*

URTICARIA.—

℞ Magnesii sulphat..... ℥ j.
Ferri sulphat..... gr. iv.
Sodii chloridi..... ʒ ss.
Acid. sulphuric. dil.... fʒ ij.
Infus. quassiæ.....ad f℥ iv.
M. Sig.: Tablespoonful in tumblerful of water before breakfast.—*Van Harlingen.*

℞ Sodii bicarbonat..... ʒ j.
Glycerinæ..... fʒ iss.
Aq. sambuci..... fʒ viss.
M. Sig.: Apply to allay the itching.—*Tilbury Fox.*

℞ Acid. carbolic..... fʒ iss.
Glycerinæ..... fʒ ij.
Alcoholis..... f℥ viij.
Aq. amygdal. amar.... f℥ viij.
M. Sig.: Use locally two or three times a day.—*Duhring.*

℞ Chloroformi..... fʒ j.
Ungt. zinci ox..... ℥ ij.
M. Sig.: Apply with hand.—*Hughes.*

℞ Ammon. carbonat..... ʒ j.
Plumbi acetat..... ʒ ij.
Aq. rosæ..... f℥ viij.
M. Sig.: Use locally.—*Aitken.*

℞ Pulv. pilocarpii,
Ex. guaiaci.....āā gr. iss.
Lithii benzoat..... gr. iij.
M. Et ft. pil. No. i. Sig.: Take from two to four each twenty-four hours.—*Hughes.*

URTICARIA *(Continued)*.—

℞ Sodii borat..... ℥ij.
Aq. lauro-cerasi..... f℥ j.
Aq. sambuci..... f℥ xj.
M. Sig.: Use locally (To allay itching.)—*Neligan.*

℞ Chloralis,
Camphoræ..... āā ℥j.
Pulv. amyli..... ℥ i-ij.
M. Sig.: Keep tightly corked in a wide-mouthed bottle. Rub in with hand.—*Bulkley.*

℞ Plumbi acetat.,
Ammon. carbonat... āā ℥j.
Tr. opii..... f℥ ss.
Aq. rosæ..... f℥ viij.
M. Sig.: Use locally.—*Hazard.*

℞ Chloroformi..... f℥j.
Glycerinæ..... f℥iv.
M. Sig.: Apply with a brush.—*Duparc.*

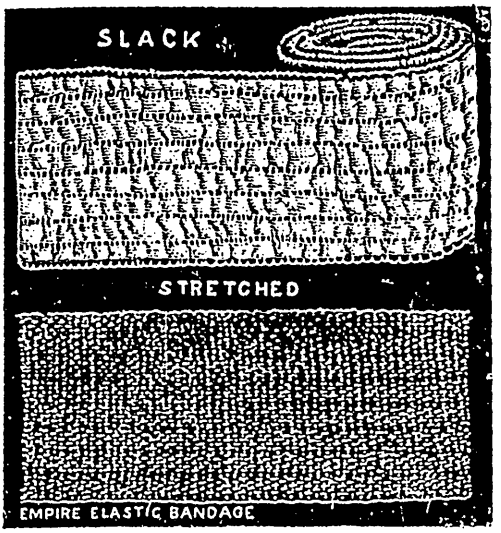
℞ Potass. cyanidi..... gr. vj.
Pulv. cocci..... gr. j.
Ungt. aq. rosæ..... ℥j.
M. Sig.: Apply locally.—*Anderson.*

℞ Potass. brom..... ℥ ss.
Aq. menthæ pip.. ... f℥ iij.
M Sig.: Dessertspoonful four times a day.—*Anderson.*

UVULA, RELAXATION OF.—

℞ Acid. tannic..... ℥ ss.
Glycerinæ..... f℥ ij.
M. Sig.: Apply with camel's-hair brush.—*Hillier.*

℞ Liq. ferri perchlor..... f℥ ij.
Aquæ..... f℥ ij.
M. Sig.: Apply with a camel's-hair brush.—*Mackenzie.*



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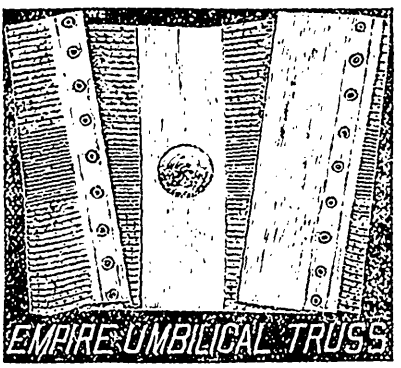

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Is made of the same material, and possesses the same merits as the Empire Elastic Bandage and Abdominal Supporters, and is pronounced by all who have seen it to be the BEST IN THE WORLD. All of our goods are sent free by mail upon receipt of price, and money refunded if not satisfactory.

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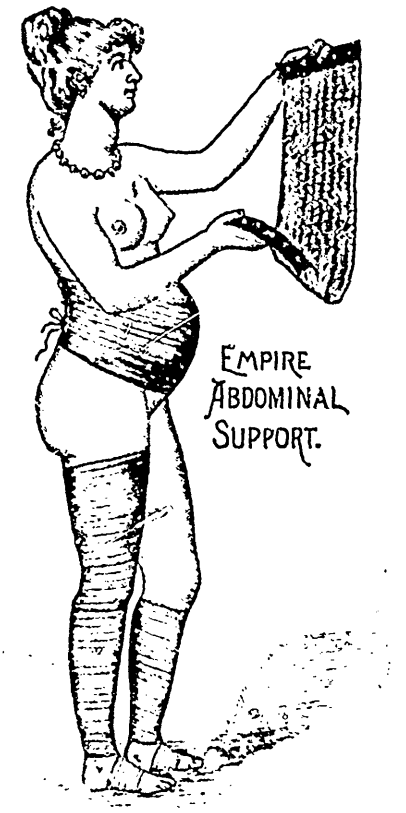

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13 Spring Street,
LOCKPORT, N.Y., U.S.A.

UVULA, RELAXATION OF *(Continued).*—

℞ Aluminis..... ℥j.
Infus. gallæ..... f℥vj.
M. Sig: Use as a gargle.—*Waring.*

℞ Trochisci acid. tannic.. No. xx.
Sig.: Take one every two or three hours.—*Aitken.*

℞ Zinci chloridi..... ℥j.
Aquæ..... f℥ij.
M. Sig.: Apply with a camel's-hair brush.—*Mackenzie.*

VAGINITIS—

℞ Acid. boracic..... ℥iis.
Glycerinæ..... f℥xxx.
M. Sig.: Three or four dessert-spoonfuls in a quart of water as a vaginal injection.—*Chéron.*

℞ Acid. tannic..... ℥j.
Morphiæ sulphat..... gr. iij.
Ol. theobromæ..... ℥v.
M. Et ft. suppos. No. x. Sig.: After freely syringing the vagina night and morning insert suppository.—*T. Gaillard Thomas.*

℞ Argent. nitrat..... ℈ij.
Aq. destillat..... f℥j.
M. Sig.: Apply on a cotton pledget within the cervical canal and over the vaginal mucous membrane.—*Emmet.*

℞ Glyceriti acid. tannic.. f℥j.
Sig.: Apply locally.—*Ringer.*

℞ Ex. hydrastis fl..... f℥iv.
Sig.: Apply to the cervix and vagina, and place a tampon smeared with vaseline between the vulvæ and in the vagina.—*Mundé.*

VARICOSE VEINS.—

℞ Ex. hamamelis fl..... f℥ ij.

Sig.: Teaspoonful three or four times a day, with compress s applied externally.—*J. V. Shoemaker.*

℞ Ergotini (aq. ext.),
Glycerinæ.....āā f℥ j.
Aq. destillat..... f℥ vij.

M. Sig.: Fifteen minims hypodermically alongside of the veins, care being taken not to puncture a vein. —*Bartholow.*

VERTIGO.—

℞ Pulv. rhei..... ℥ j.
Sodii bicarb.,
Pulv. gentian.....āā ℥ ij.
Aq. menthæ pip.,
Aq. destillat.....āā f℥ iij.

M. Sig.: Tablespoonful before each meal.—*Mann.*

℞ Potass. bitartrat..... ℥ vj.
Pulv. jalapæ..... ℥ ij.

M. Sig.: Teaspoonful in milk every two or three hours. (In plethoric cases.)—*Sweringen.*

℞ Tr. gelsemii..... f℥ j.

Sig.: Ten minims three times a day. (In aural vertigo.)—*Ringer.*

℞ Pil. hydrarg.,
Pil. rhei co.,
Ex. hyoscyami.....āā ℈ j.

M. Et ft. pil. No. xii. Sig.: Two pills occasionally at bedtime. (In plethoric cases.)—*Tanner.*

℞ Pulv. jalapæ..... gr. xij.
Hydrarg. chlor. mit.... gr. iij.
Potass. sulphat..... gr. vij.

M. Et ft. chart. No. i. Sig.: Take at bedtime. (In bilious vertigo.—*A. T. Thompson.*

VOMITING.—

℞ Liq. calcis,
Aq. cinnam.....āā f℥ iij.
M. Sig.: Tablespoonful in ice-water, to be repeated until relieved. —*Starr.*

℞ Acid. carbol..... gr. iv.
Bismuth. subnitrat..... ℥ ij.
Mucil. acaciæ..... f℥ j.
Aq. menth. pip..... f℥ iij.
M. Sig.: Tablespoonful every two to four hours.—*Bartholow.*

℞ Vini ipecac..... f℥ ss.
Sig.: One minim every half hour. —*Ringer.*

Dr. Squills—"Mr. Brown went camping last week and came home with the ague." Dr. Pills—"Indeed! What is he taking?" Dr. Squills—"The consequences."—*Ph. Era.*

PHIMOSIS AND DEFORMITY OF THE HAND.

By JULIUS MORGENSTERN, A.B., M.D.
Formerly House Physician at St. Mark's Hospital.

THERE were some interesting features about this case, which, though the treatment was simple, were sufficiently important to decide the future welfare of the patient.

A few words about the accouchement itself. Mrs. ——, aged 33, Hungarian, multipara, very stout, was confined on May 8. There was an atonic condition of the uterus, and the liquor amniæ had already drained away when I was called in attendance. The cervix was fully dilated, and the head, which presented in R. O. A., made no advance. Forceps

were necessary for extraction. The placenta was completely adherent, and manual extraction was necessary.

The babe, a large male one, was somewhat cyanosed when born, but soon recovered and cried lustily to show his fond appreciation of his entrance into this world.

The interesting features of the case were:

(1) Early the next morning I was hastily summoned. The information was given that the babe was crying too much, and he would suddenly draw up his legs and scream painfully. The babe had passed no urine. On examination of the penis, phimosis, with a somewhat elongated prepuce and with a pin-pointed opening, was found. The scrotum was reddened and moistened from the dribbling of urine, showing there was incontinence as well as retention of urine.

The prepuce was slightly raised, and held above and below by the index finger and thumb of the left hand. The dull end of a small sound was inserted with the right hand into the small preputial opening, and gradually moved from side to side so as to distend the opening. This was persisted in for a little while. Then the small sound was passed all around between glans penis and præputium to break up any existing adhesions. The sound was now removed and retraction of the prepuce performed. As the opening of the prepuce was now larger, a good deal had been accomplished. Some calcareous concretions from the urine salts that had

formed between the opening of the prepuce and the meatus urinarius were removed with the small sound.

The babe passed urine without any pain in a few hours.

Small and repeated doses of spts. nitros. aeth. were given for a few days, and a mild boric acid solution was used locally. Daily retraction of the prepuce was done, until May 17, when circumcision was performed, as the babe was from Jewish parents. Of course, circumcision relieved the babe of the troublesome portion of his prepuce.

(2) On the morning of May 9 it was seen that the babe could not raise his right hand. A deformity was noticed. The dorsal surface of the hand was twisted inward and nearly parallel to the surface of the body, and the palmar surface was directed outward. The twisting could be plainly felt at the wrist joint, so that the hand made a decided angle with the forearm. The inward twisting at the wrist joint caused some inward and downward rotation of the bones of the forearm and shoulder. The right shoulder joint was lower than the left. There was no muscular atrophy, nor loss of sensation in the whole right upper extremity. This deformity of the hand was due to the position it lay in utero.

The hand was easily rotated into its normal position at the wrist joint. It was held in this position by the mother. Absorbent cotton was placed all around the wrist joint, and two small pieces of wood from a cigar box were covered with a small strip

of bandage and were placed anteriorly, embracing also small portions of the hand and forearm. A simple bandage over the whole completed the dressing. The hand was placed in its corrected position across the chest and held there by a few diaper pins passing through the dress at the sleeve and chest. These diaper pins were removed when the babe was bathed, then reapplied.

In a week's time the dressing was removed, and all trace of deformity was absent. This treatment was simple enough, but it was done at a time when a deformity can be easily corrected. Surely this would not have been the result had the matter been delayed a few months or years.

There can be no doubt that the deformity was secondary to a pressure paralysis at birth, and by keeping the contractions corrected the danger of their becoming permanent was avoided.

HE FOLLOWED THE DOCTOR'S INSTRUCTIONS.—"Why, Doodle, what have you been doing? Your face is as red as a beet." "Doctor, you told me to keep my head cool and feet warm, didn't you?" "Yes." "Hot sir rises, don't it?" "Yes." "And cool air descends?" "Certainly." "Well, I've been standing on my head in the corner there all the afternoon."—*Chicago News.*

EXPERT TESTIMONY.—Recently a man in New York died of tuberculosis, eight months after having been struck by a cable car, which inflicted

an injury to his knee. In a suit instituted by the widow for damages, expert testimony was introduced to show that the knee became diseased in consequence of the accident, and that the base of operations thereby afforded allowed the bacilli to attack the system and establish their throne in the lungs. Though the defence produced a witness who testified there could be no connection between the injury and the death, the jury returned a verdict of $6,500 for the plaintiff. Almost a precisely parallel suit recently occurred in the city of Detroit, whereby a woman obtained damages from the municipality on the strength of testimony that her consumption was the result of a miscarriage induced by a fall upon a defective sidewalk. Strange to say, there was no difficulty in obtaining expert testimony to uphold the pleas made by the attorneys for the plaintiff, and even an expert witness for the defence was so twisted about that his testimony was affirmative rather than negative.—*Medical Age.*

Patient—"Doctor, I took that powder you prescribed, but it didn't do my cough a bit of good." Doctor—"Did you give up smoking as I directed?" Patient—"No, I didn't give up smoking." Doctor—"Ah, my friend, that explains why the powder didn't do you any good. You smoked and it is a newly invented smoke less powder."—*Texas Siftings.*