

The Canadian Journal of Medicine and Surgery

A JOURNAL PUBLISHED MONTHLY IN THE INTEREST OF
MEDICINE AND SURGERY

VOL. XI.

TORONTO, JUNE, 1902.

NO. 6.

Original Contributions.

DUNCOMBE VS. THE MUTUAL LIFE INSURANCE COMPANY OF NEW YORK.

BY ARTHUR JUKES JOHNSON, M.B., M.R.C.S.(Eng.), TORONTO.

THIS was an action brought by Mrs. Duncombe to recover the value of an insurance on the life of her husband, Dr. Trueman Duncombe for \$5,000, payment having been refused on the ground of "fraud." The facts of the case, as revealed by the evidence, were as follows:

Dr. Trueman Duncombe, a gentleman forty years of age, one of the medical examiners for the defendant company, and holding a number of insurances in the company, made an application for a \$5,000 policy on his own life, dated on the 11th day of July, 1901. On or about that day, he had been examined for the Federal Life Insurance Company by their examiner at St. Thomas. This gentleman was not the examiner for the Mutual Life Insurance Company, of New York, but as Dr. Duncombe sent in his examination to be accepted by them, after some inquiry they accepted it, although Dr. Lawrence, of St. Thomas, had examined Dr. Duncombe for them on former occasions.

In the report of the examination signed by this gentleman, and sent in to the company by Dr. Duncombe it was stated that the examination had been made on the 25th day of July that a urinalysis had been made, and that the urine so examined had been passed in the presence of the examiner. It detailed the height, weight, and measurements of deceased, and recommended him as a first-class risk. The insured also certified himself to be in good health. Upon these statements a policy was issued by the Mutual Life Insurance Company of New York, on the 7th day of August,

which the insured received on the 14th day of September, 1901. Dr. Duncombe died suddenly on October 2nd, 1901, and, although the company paid his other claims, they refused to pay this one for the reasons before mentioned. In the course of the trial it was shown, in regard to the application and medical report upon which the policy was granted, which was signed by the examiner, and dated July 25th, 1901, that on that day no medical examination had been made. As a matter of fact, the examiner had not even seen Dr. Duncombe on that day. What really occurred was that Dr. Duncombe had filled up the first part of the medical examiner's report himself, and had then sent the papers to his professional friend, who filled up the balance, trusting to his recollection of the former examination made for the Federal for his facts. This, it would seem, might have been done, had the first examination on July 11th been made for this company. The fact, however, that the answers given to the two companies varied somewhat, led to a careful cross-examination by the counsel for the defence. In the midst of this the Judge asked how extensive an analysis had been made for the Federal on July 11th. The answer was that no urinalysis had been made at any time. It was further shown that on July 27th the report of the medical examination was posted to the company by the insured, who, on the same day, had consulted Dr. D. McLarty, of St. Thomas, as to his health. Dr. McLarty found him suffering from shortness of breath, pain under his left shoulder blade, and "an increased area of cardiac dulness," and his opinion was that he was suffering from pericarditis, with considerable effusion. Rest was advised. Other evidence showed he had complained of this pain in May, and continued to complain of it until his death. Early in August he went for a few days to Waterford. Here he was examined by another medical man. On September 2nd he came to Toronto, and was examined with the X-rays at Toronto General Hospital. On the evening of his death, October 2nd, 1901, he became suddenly weak and had to be laid down. There was no evidence of convulsion, no struggling, but when seen by Drs. McLarty and Van Buskirk a few minutes after the attack came on he was unconscious, breathing heavily with suffused face, and a little froth about the lips. The pulse was weak, and disappeared shortly afterwards. Death occurred in about half an hour after the attack came on.

There was no autopsy, but when the undertaker came to prepare the body for burial he noticed a swelling, raised up about three-quarters of an inch, "to the left side of the lower part of the sternum." Raising a fold of the abdominal wall, half way between the sternum and the umbilicus, he thrust the point of a long trocar through it, passed it eight inches upward and toward the left arm-pit, and drew off one and three-quarter pints of dark red

blood, which was clear, and clotted in the bottle. As this came away the swelling disappeared.

The question, as framed by the counsel for the defence, given to the medical men who had examined deceased, was:

“Taking the facts of the history of the pain as shown, assuming it to have gone back even beyond the 27th of July, the deadness about the heart which was found by Dr. McLarty at that time, the shortness of breath, the fact that he had to wait until his heart got quiet, as his wife said, before he could even talk to her, then the sudden death, and the blood being drawn from the chest afterwards, what would you say he died of? To this they all answered: “most probably aneurism.”

In charging the jury, the learned judge explained what the duty of the jury was in these cases. It was a mistaken idea to think that the jury should say who were to succeed or fail in this action. Nor should they be told what the law was. If they were to attempt to decide the main issue, not knowing all about the law, they might make a mistake, and it could not be rectified. Their duty was to find what the “facts” of the case were, and to answer certain questions of fact according to the evidence. In reviewing the case, he drew attention to the fact, “that deceased had seen Dr. McLarty on the 27th day of July, probably after he had posted his application to New York, as it was on this day that the application completed on July 25th, had been posted. He asked the jury to say whether deceased was in good health on that day? “If not, did he know it?” He went to Waterford on a doctor’s advice, and was examined by a doctor there. “Why?” “Certainly not because he was in good health.” He was examined early in September in Toronto, on account of pain, the cause of which was not discovered. Dr. McLarty did not consider deceased fit for insurance on July 27th, and the doctor who examined him in Toronto said he would not have passed him on September 2nd or 3rd. Coming to the medical examination of deceased by the doctor who examined him, on July 11th, it was pointed out that the proceedings were at least irregular. Both the examining doctor and deceased knew what this company required, and they both concurred in signing a document that they knew was not true.

The examination was made on July 11th, and dated July 25th. This they knew was irregular.

They both knew that the urine was to be examined; they both knew that this was not done. They both knew that the answers should all be in the handwriting of the examiner. They had both disregarded this. No measurements had been made. No examination of the chest or liver had been made. No urinalysis had been made; no urine had been passed in examiner’s presence. No specimen of urine had been obtained. The examiner had never even seen any. To all of these questions answers had been given

without any foundation of fact, and both the deceased and the medical examiner knew it.

The force and effect of the medical evidence was that death was probably due to a disease of a blood vessel, and a rupture of the same, and that this diseased condition must have been of some months' standing. The following questions were given to the jury:

1. Was the insurance in question obtained by the fraud of the insured Dr. Duncombe?
2. Was the insured, Dr. Duncombe, at the time he sent in the application for such insurance, on the 27th July, 1901, in good health?
3. If not, did he then know he was not in good health?
4. Did he know that he was not in good health on the 7th day of August, 1901?
5. Did he know it on the 14th day of September, before receiving the policy?
6. And if so, was such knowledge a fact material to the contract?
7. Did he really believe at the time of sending in his application on the 27th July, 1901, that he was in good health?
8. Did he so believe on the 7th August?
9. Did he so believe on the 14th September, 1901?
10. If not, was his real belief a fact material to the contract?
11. Were the misstatements in and in connection with the Medical Officer's report in the application in question material to the contract?

In explaining these questions the jury were told that it was fraud to "know and conceal" or to make false statements about matters that were of consequence to the company; that if the applicant knows that he is not in good health, such knowledge is a fact of consequence to the insurance company, and they should know it. As to the misstatements being material to the company and the contract, they were asked to consider why the statements were required. Was it likely that the questions set down on the application were of no consequence? Are not the answers given to the questions in the application made for the very purpose of enabling the company's officers to decide whether an application should be accepted or rejected?

Questions as to "conditions" together with a large number of legal points, were carefully gone over by the counsel for the insurance company, Mr. Frank Arnoldi, K.C. From his argument it appears that, under the Ontario Insurance Act, "conditions" of a policy to be available as a protection to an insuring company, must be "material" to the contract; that term meaning that they must be of such importance as to have affected the making of the contract had the truth in respect of them been known at the time it was entered into, and this question of materiality under the Act

is to be left to the jury, but this does not apply to such misrepresentation or fraud as would vitiate the contract, irrespective of any condition imposed by the terms of the contract; that is to say, supposing the contract to be without any conditions. In this case there was no condition imposed as to the truth of the medical report by the letter of the contract, but nevertheless the misrepresentation and deception of sending in the untruthful medical report—untruthful to the knowledge of the assured, who sent it in—was a fraudulent act vitiating the contract, to which the Insurance Act does not at all apply.

His contention was, that the facts as to the misrepresentation in regard to the medical report not being disputed in the evidence at the trial, it was competent to the Judge to instruct the jury to bring in a verdict as in an ordinary action on the contract in the defendants' favor, or he might have discharged the jury, and entered judgment for the defendant on that ground alone.

The jury considered the case for some hours, and upon their returning answers to the questions given by the Judge, the Court declared that Mrs. Duncombe's action against the Mutual Life Insurance Company of New York "dismissed with costs."

THE TREATMENT OF SCIATICA.*

BY VERNON A. CHAPMAN, M.D.,
Late Surgeon Holland-American S.S. Line.

SCIATICA is a painful affection, and one of the most difficult to control. Innumerable remedies have been advocated as cures, by physicians, their great number being an indication of their inefficiency, while surgeons have not only cut down upon the nerve at some portion of its course in the thigh, seized and stretched it, but even cut down upon the spine, and excised the posterior roots of the affected nerve.

The different conditions described in the text-books as causes giving rise to this trouble are many, such as pelvic tumors, bony and visceral calculi of large size, aneurisms, accumulations of feces in the bowel, tumors along the course of the nerve outside of the pelvis, etc., all of these acting mechanically by pressure on the nerve. Then there are such causes assigned as gout, rheumatism, lumbago, hip disease, contiguous foci of suppuration, syphilis, etc., all predisposing to inflammation. The exciting cause, in most instances, is exposure.

Aside from these causes, any individual one of which can generally be readily determined when it exists, there are many obscure cases apparently arising from no predisposing cause whatever. A large majority of these cases are, I believe, caused by

* Written specially for THE CANADIAN JOURNAL OF MEDICINE AND SURGERY.

contraction—contraction of muscles, and of the nerve itself—and these contractions in many cases occur in the following manner:

Men of sedentary occupations sit all day with the legs in a state of flexion. When they walk they do so in a half-hearted manner, with knees half bent. When they go to bed for sleep they still lie with the thighs drawn up. A good healthy stretching of the legs is never attempted. What wonder, then, that the muscles of flexion become contracted, and also the great sciatic nerve itself. Its sheath adheres to it, and literally "grows to its shell." Then comes the sudden exposure—a cold current of air, a passing shower of rain, wet feet or something of the sort, and sciatica makes its appearance.

Under "treatment" there has been given some twenty-five different remedies for internal administration, and among surgical measures the following: Turkish baths, blisters, actual cautery, acupuncture, aquapunctura, galvanism, ether spray, guaiacol, deep injections of cocain, of morphia, of apomorphin, of chloroform, and solution of osmic acid, hot poultices, salicylic acid, paste, intense cold and intense heat, applied locally along the course of the nerve. Some text-books stop here for want of space. Others wind up by informing us that "nerve-stretching may be tried as a last resort."

It is to this nerve-stretching (neurectasy) that I wish to call attention. Judicious administration of internal medicine, when indicated, is always proper, and I do by no means condemn it. It is my opinion, however, and experience does but more firmly convince me, that if this "last resort" was more often chosen as the "first resort" the other numerous remedies would not need to be so frequently employed. By "nerve stretching" I do not mean the operation of cutting down upon the nerve, but the stretching of the nerve by manipulation.

If one for a moment studies the anatomy of the parts, and traces the course of the great sciatic nerve, and its relation to adjacent structures, the matter at once becomes apparent. The great sciatic nerve supplies the muscles of the back of the thigh—and those of the leg and foot. It is the largest nervous cord in the body, measuring three-quarters of an inch in breadth, and is the continuation of the lower cord of the sacral plexus. It passes out of the pelvis through the great sacro-sciatic foramen, below the pyraformis muscle. It descends between the trochanter major and the tuberosity of the ischium, along the back part of the thigh to about its lower third, where it divides into two large branches, the internal and external popliteal nerve. As the nerve descends along the back of the thigh it rests at first upon the external rotator muscles, while lower down it rests upon the adductor magnus, and is covered by the long head of the biceps.

These external rotator muscles are the gemellus, inferior and superior, obturator, externus and internus, and quadratus femoris. These muscles stretch from the pelvic bones to the femur, thus completely bridging between the ischium and great trochanter of the femur, forming a firm bed upon which the great sciatic nerve rests.

By studying the anatomy and mechanism of these parts, it can be readily seen that great force can be exerted upon the great sciatic nerve by using the leg and thigh as a lever, and the aforementioned cushion of muscles as a fulcrum. Thus by rotating the thigh inward and slightly abducting, the external rotators are put upon the stretch, also the adductor magnus muscle. Then, by firmly flexing the thigh upon the body, with leg extended and foot flexed, the great sciatic nerve is stretched over the firm spine of the ischium and the tense muscles of external rotation before described. This mode of procedure acts powerfully upon the proximal portion of the nerve, even drawing upon the spinal cord, which is the explanation of the phenomenon known as Kernig's sign in spinal meningitis.

If the seat of pain in sciatica is situated at some point along the lower course of the nerve, a different method of manipulation gives better results, as it is then the lower portion of the nerve upon which we wish to exert the most power. In this case the following method should be employed: Extend the foot upon the leg, flex the leg upon the thigh, and flex the thigh upon the pelvis. The extension of foot and flexion of leg permits the nerve to relax to its fullest extent from its distal end. As the thigh is then flexed, the relaxed nerve glides smoothly over the external rotator muscles towards its proximal end, on account of the lax condition of the lower or distal portion of the nerve. Now, when thigh is fully flexed, the nerve is clasped firmly between the external rotator muscles on one side (the thigh being slightly rotated inward) and the pyraformis and gluteus maximus muscles on the other side of the nerve. Now slowly, but firmly, extend the knee. This takes up all remaining slack of the nerve in its lower course, and at the same time the biceps and semi-tendinous muscles firmly clasp the nerve against the adductor magnus and other adjacent structures.

Now, with thigh flexed and leg extended, firmly flex the foot upon the leg. Thus the posterior tibial and plantar nerves are stretched firmly over the internal malleolus. By carefully studying the anatomy of the parts and the mechanism of the limb, the manipulations may be performed in such a manner as to exert the tension upon nearly every individual portion of the nerve at will. Owing to greater width of the pelvis, more tension may be exerted upon the great sciatic nerve in the female by these manipulations than in the male. That these manipulations do stretch the nerve

there can be no doubt. The patient will always locate the pain caused by stretching at the same spot where he located the pain of the sciatica. Almost every patient will exclaim, "That touches the spot," and upon arising after the treatment will declare that he feels much better. Usually he will walk about, stamp the feet, and speak of a burning sensation, as of "prickly heat," in the soles of the feet. This sense of warmth in the soles of the feet is more particularly noticed if the lower portion of the nerve has been given particular attention, as before described, and is doubtless due to the tension upon the distributing branches of the internal and external plantar nerves. Some patients will say, "I feel it clear to the ends of my toes."

As to the degree of force to be used in these manipulations, I will say that must be determined by the existing conditions in each case, and must be regulated by the common sense of the operator. It is said that the hamstrings have been ruptured by forcible extension of the leg, but such brute force as that is entirely uncalled for. Gentle yet firm extension or flexion is all that is required. The frequency of treatments must be determined by the surgeon according to the needs of each individual case.

In severe cases the pain aroused by the manipulations is so severe that general anesthesia must be employed for the first few treatments. The clothing should be loose about the limbs and body, so that all movements may be unimpeded, and the operator may know that all the force of his manipulations are expended upon the limb itself, and not upon binding clothing.

The strength of the great sciatic nerve itself has been variously estimated by reliable experimenters. It has broken under tensions ranging all the way from eighty-two to two hundred and eighty-eight pounds, the experiments being performed upon nerves removed from dead subjects. A nerve in the living body three-quarters of an inch wide has small chance of being broken by manipulations as above described. There is, moreover, no occasion for employment of extreme force.

In mild cases the patient himself can employ this method of nerve-stretching to a certain extent. Let him stand with feet together and legs straight. Then let him bend himself forward at the hips, keeping the legs straight, and touch the toes with the tips of the fingers of both hands simultaneously. Or let him sit upon a firm, flat surface, with legs extended before him. Then, by bending forward, keeping the knees unbent, grasp a foot by each hand and firmly flex it upon the leg. These procedures will be found quite difficult at first, but can be easily performed in a short time by perseverance, and if thus practised by the sciatica victim will ward off many attacks of his enemy.

A CASE OF CONGENITAL TOOTH.*

BY GEO. H. CARVETH, M.D., TORONTO,
Physician Toronto Western Hospital, etc.

Mrs. A., aged 33, the mother of two healthy children, was delivered of a third child in February of this year. On examination of the baby a lower central incisor tooth was discovered, much to the surprise of the mother, as this was the first child known to her to come into the world prepared to eat beefsteak.

At six weeks of age the accompanying photograph was taken, the child being strong and healthy, neither the child nor the mother finding any ill-effect from the presence of the tooth.



Through the kindness of Dr. Harry Oldright, who has seen a few of these cases, I am able to present the conclusions of Dr. J. W. Ballantyne, of Edinburgh, who has made a special study of this unusual condition. He says:

1. "Congenital teeth form a rare anomaly, but one which has long been known both to the profession and to the public.

2. "Their presence has often an ill-effect upon lactation, partly on account of the imperfect closure of the infant's mouth, and partly by the wounding of the mother's nipple; sublingual ulceration may also be a result, and infantile diarrhea and atrophy are more distant consequences. Sometimes, however, symptoms are altogether absent.

3. "Congenital teeth have probably little or no prognostic

* Read at Toronto Medical Society, April, 1912.

significance as regards the bodily or mental vigor of the infant carrying them.

4. "The teeth usually met with are lower incisors, but sometimes upper incisors may be seen, and very rarely molars of either the upper or lower jaw.

5. "They are caused by the premature occurrence of the processes which normally lead to the cutting of the milk teeth; in a few cases it would seem that the anomaly is due to a true ectopia of the dental follicle and its contained tooth.

6. "In a few instances an hereditary history has been established.

7. "As congenital teeth are usually incomplete and ill-developed, and likely to be more an inconvenience than an advantage to the infant, they are best removed soon after birth, an operation which can be easily, and except in very rare instances, safely performed."

In the discussion which followed the reading of the paper it came out that very often these teeth decay and fall out in a few months, and that when they are removed early they may or may not be succeeded by the ordinary temporary teeth.

239 College Street.

PHLEGMON AND FISTULA OF THE LOWER JAW, CONSECUTIVE TO ERUPTION OF THE WISDOM TEETH. FRACTURE OF THE BONE OR FRACTURES OF THE TEETH AND INFECTION AFTER EXTRACTION.

BY THOMAS H. MANLEY, M.D., PH.D., NEW YORK CITY,

Professor of Surgery, New York School of Clinical Medicine; Visiting Surgeon to the Harlem and Metropolitan Hospitals, New York.

Summary.

PERFORATIVE endostitis of the lower jaw is an infective lesion usually consecutive to (a) caries of the crown, (b) incomplete extraction, or (c) the late eruption of the third molar.

Infection first provokes an alveolar abscess, with widespread tumefaction and rigidity of the jaw. This may be followed by dislodgement of the imbedded fang or by alveolar necrosis.

Perforative osteitis from a dead fang occurs through the least vascular surface of the mandible, by way of the dental canal; this is followed by an abscess, ultimately degenerating into a chronic, unsightly fistula.

Surgical aid is resorted to, rather as a means of removing the blemish than because of severe pain.

Operative intervention embraces, (1st) the complete extraction of diseased fangs; (2nd) dissection away of scar tissue; (3rd)

the thorough curettage of the sinus and the closing of the breach in the soft parts in such a manner that little or no deformity will result after healing.

Drainage must be entirely from the base of the alveolus into the mouth, hence the importance of frequent cleansing of the gums with antiseptic lotions until repair is complete.—*American Medicine*, February 8th, 1902.

CASE OF TUMOR OF THE SUPERIOR MAXILLA.

BY CHAS. F. FORSHAW, LL.D., F.R.S.L.,

Doctor of Dental Surgery of the Baltimore College of Dental Surgery, and Honorary Dental Surgeon to the Bradford Orphanage for Boys, the Bradford Women's Home and Shelter, and the Bradford Deaf and Dumb Institution; Member of the Royal Dublin Society.

Miss B. D., aged 27, a lady of healthy appearance, came to me some twelve months ago to ask my advice as to what should be done with respect to a swelling on the left upper jaw, which was about the size of a pigeon's egg, and which had first made its appearance some twelve months prior to her visit to me. The tumor gave to her face an ugly symmetry. Its situation upon the jaw was eight lines from the alveolar margin. It was slightly lobulated, sessile, and caused to the finger a sense of slight pulsation. Its origin could not be directly traced to the periodontal membrane lining the alveolus in connection with any decayed teeth. In general appearance the body suggested gumma, epulis of an unusual form, or epithelioma. She had been treated with potassium iodide without benefit, and there was no history or symptoms pointing to a specific origin. There were no glandular enlargements at the angle of the jaw or about the triangles of the neck. The growth appeared to spring from the labial surface of the alveolar process. Its growth had been very rapid for the last three months, and was quite unaccompanied by any form of ulceration, nor was there any pain.

Miss D. had worn a partial upper vulcanite denture for some years, which was displaced so much as to show some of the natural teeth in both the superior and inferior maxilla, owing to her being unable to quite close the mouth on account of the protuberance of the tumor. In January of last year (1901) the patient having been prepared, chloroform was administered by means of Junkel's inhaler, Mason's gag inserted in the mouth, the cheek retracted, and everything in absolute readiness, Mr. Percy Lodge, F.R.C.S.I., with my assistance, removed the growth with one sweep of the knife. There was much hemorrhage, one or two vessels having to be picked up by catch forceps and tied. The actual cautery (the circular flat button) was now freely applied to the base of the ulcer so produced. This process was pushed so as to destroy the tissues right down to the bone, some of which was gouged away and re-

moved. The wound was plugged with iodoform gauze and the patient allowed to recover from the anesthetic, after having been under its influence less than a quarter of an hour. The total quantity of chloroform used was one drachm. In seven days the lady's face had resumed its normal appearance. She was much brighter, and had even increased in weight. We also, at the same time, excised the edge of the scar where the alveolar process adjoined the buccal mucous membrane, which had a slightly suspicious feel of rigidity, the portion removed being about three quarters of an inch by an eighth of an inch in breadth. I saw her again on the following week, and on this occasion the healed surfaces had quite a healthy appearance. There has been no return of the condition up to the present, March 21st, 1902, when I last saw her. On examination, the tissue removed in the recent state had a fibrous appearance, containing numerous vessels, some of which were of large size. It presented, microscopically, many thin-walled blood channels, lying in a stroma of small spindle-shaped cells, among which could be discerned a few of a myeloid type, certainly suggestive of mild sarcomatous malignancy.

An Electric Ambulance Launch.—The Margaret, the first electric ambulance launch ever built, and the gift of Isaac N. Seligman to St. John's Guild, was launched at Bayonne, N.J., on May 2, and made a successful trial trip. This water ambulance is to be used in transferring sick children from the Guild's floating hospitals to the Seaside Hospital at New Dorp, Staten Island, provision being made for lowering a stretcher directly from the hospital barge through the canopy of the launch.—*Bost. Med. and Surg. Jour.*

Stypticine.—The publications of the past year furnish proof of the value of stypticine as a hemostatic which is available as a means of checking, with certain prospect of success, internal and external hemorrhages. In this respect it may be placed on a level with preparations of hydrastis and secale cornutum as well as iron-chloride, and even surpasses these styptics in many respects. In gynecology the efficacy of stypticine is placed beyond doubt by the reports of C. A. Herzfeld, Max Hirsch, Alex. Schlossberger, L. Pincus, H. Langes, and H. J. Boldt, who fully confirm the indications which have been clearly defined in previous Reports. Dietrich Thyen praises the neatness and prompt action of stypticine wadding and gauze as applied to parenchymatous hemorrhage arising from an incision of an abscess in the pit of the arm. In dental surgery stypticine gauze and wadding have likewise met with increasing appreciation as hemostyptics after dental extractions, as may be gathered from the praises of Dorge, Deak, and R. Schulz.

Pharmacology and 
IN CHARGE OF
A. J. HARRINGTON, M.D., M.R.C.S.(Eng.) *Therapeutics.*

DIONIN: ETHYL-MORPHINE HYDROCHLORATE "MERCK."

DIONIN occurs as a white, bitter powder. It is soluble in about 7 parts of water, $1\frac{1}{2}$ alcohol, or 20 syrup; insoluble in ether or chloroform. It affords neutral solutions which may be advantageously employed subcutaneously. Dionin is supplied also in $\frac{1}{4}$ -grn. tablets.

DIONIN IN COUGH.

Dionin has been employed by J. Korte,¹ of Danzig, in a score or so of phthisical cases, and from the results obtained the author believes that the preparation is of unquestionable value therapeutically. It appeared to be an excellent and reliable means in the treatment of cough in the early stages of pulmonary phthisis; and it is recommended instead of codeine and morphine in all cases of this disease that are not far advanced, as well as in chronic bronchitis, pulmonary emphysema, and bronchial asthma. Not a single failure was observed. The dyspnea and cough were always relieved, the asthmatic attacks cut short, and expectoration favorably influenced. Compared with morphine, dionin is more mildly narcotic in action, has scarcely ever any noticeable effect on the digestive tract, and has no noteworthy by-effects. Compared with codeine, on the other hand, it is found to be more powerful generally, and more persistent in action; it affords better and quieter sleep, and increases expectoration considerably. As a general analgesic, dionin is not as reliable as morphine, but it may, nevertheless, be employed in chronic painful affections, either internally or subcutaneously, and as no tolerance or habit is ever established, may shield many patients from acquiring the morphine habit. Its particular sphere of action will, however, doubtless be in the treatment of coughs due to irritation, those of bronchitis of every origin and phthisical subjects, where it affords general quiet and good sleep, stimulates expectoration, and appears to exert also a beneficial influence on the night-sweats.

Dionin may be given, according to the same author, in doses of from $\frac{1}{4}$ to $\frac{1}{2}$ grn. several times daily, or in one dose of $\frac{1}{2}$ to 1 grn. in the evening, in solution, syrup or pill.

Dr. G. Schröder,² of Hohenhonnef-on-R., confirms Korte's con-

clusions as to dionin's value. He says that "dionin suspended or relieved the cough due to irritation, and induced better, frequently prolonged sleep, the patients feeling brighter and more composed. In many cases the action of dionin was decidedly more satisfactory and pronounced than that afforded by codeine in similar doses. It gave very much the same results as those we are accustomed to get from morphine in corresponding doses, without, however, exhibiting any of the unpleasant by-effects of the latter. Difficult expectoration, nausea, and tendency to constipation were observed in only isolated cases, and but once was increased perspiration observed." From the author's investigations, as well as those of others, it appears that wherever dionin is exhibited, its sedative and irritation-reducing action becomes evident. In its power to check coughing, no matter from what cause, it has shown itself to be very valuable, the reduction in the number of the coughing fits being at once noticeable. Even when large doses are administered the after-effects following morphine are always absent, and it may be given without question in the doses that codeine is ordered, because in therapeutic properties it is in many respects similar to codeine. At the same time it acts much more sharply and fully than the latter, while its administration is absolutely free from the alarming symptoms caused by the more recently introduced morphine derivatives. The pronounced sedative action of dionin nevertheless is sometimes absent when the remedy is used in insane and other very excited patients. In cough-irritation, Schröder gave the dionin dissolved (2 grains per 1 fl. dr.) in distilled water or bitter-almond water, or in a mixture of equal parts of the two; 15 to 20 drops being given several times a day, or only evenings. The 3-per-cent. solution in distilled water was also used subcutaneously, 15 min. being injected at one time.

Dr. Richard Bloch,³ of Zbowitz (Moravia), has also investigated the eligibility of dionin as a cough sedative. The results lead him to substantiate the findings of other investigators in this direction. As a cough sedative, in pediatrics particularly, the remedy appeared to be superior to all other morphine preparations.

Dr. Isenberg,⁴ of Neckermünde, reports having been induced to employ dionin in four cases of pneumonia following influenza, because of the good results obtained by others with the remedy. Dionin was found to not only lessen the cough-irritation, but also the pains in the side, in consequence of which the inspirations became deeper, and expectoration was found to be unchecked. The action of the dionin became manifest in about half an hour after administration, and continued for several hours, so that three doses of 0.015 to 0.02 gm. kept patients free from pain for almost the entire day.

The author also frequently employed dionin in diseases of the respiratory organs, such as chronic bronchitis, phthisis, etc., and almost without exception secured relief from pain and irritation.

DIONIN IN MORPHINISM.

Dionin, according to Dr. J. Heinrich,⁵ of Mülhausen (Alsace), is the most valuable of all the morphine substitutes in the treatment of the morphine habit. In fact, the author believes its power to relieve the morphine desire to be its most valuable property, and to presage a bright future for it. It is particularly useful because of its very ready solubility, and because its solutions are absolutely neutral in reaction, hence insuring painless injections. The solutions, too, are quite permanent, a 10 per cent. solution having been shown to remain clear and undecomposed for weeks, which is not the case with morphine or codeine. So far as the dose is concerned, the author finds that about one-third more is required than when morphine is given, but the exhilaration following the injection is not nearly so great as that following morphine; therefore all danger of a habit is obviated. A slight itching of the skin is usually observed a few minutes after the exhibition of the dionin, just as generally follows injection of morphine or any of its derivatives. The itching, however, disappears in at most ten minutes, even when of the most aggravated form. The good action of the dionin is ascribed to its not causing exhilaration, or conditions resembling it, and to its great solubility, in consequence of which it is rapidly absorbed and as rapidly eliminated. This latter prevents any cumulative action; and it makes little difference by what channel it is eliminated, whether by the gastric mucosa, and from here passed into the intestines and voided with the feces, or whether, as Landsberg assumes with morphine, it passes into the blood circulation gradually from the subcutaneous cellular tissue, and is decomposed by the alkalinity of the blood, or the gases in the latter, or perhaps by some ferment, so that only a part of the dionin is excreted unchanged.

The author also reports a case of morphinism. Ten grains of morphine had been taken per day. This amount was gradually, in eleven days, reduced to nothing, under the influence of dionin injections taking its place more and more, day by day; these latter being of 4 grn. daily. In three weeks more these were likewise reduced to zero, only distilled water being injected at last.

In conclusion, the author states his belief that dionin is also useful in many other cases as a valuable substitute for morphine.

Dionin is recommended by Dr. A. Fromme,⁶ of Stellingen (Hamburg), in the treatment of chronic morphinism. He has used it in a great number of cases of morphinism with the most satisfactory results. He states that in this affection it is superior to all the remedies heretofore employed, because besides its great therapeutic value it is readily soluble in water and affords painless injections. The normal dose subcutaneously is from $\frac{1}{4}$ to $\frac{1}{2}$ grn., and per os from $\frac{1}{2}$ to 1 grn. In morphinism, of course, the dose must be much greater. When the amount of morphine taken daily has been reduced to $\frac{2}{3}$ or $\frac{1}{3}$ grn., it is entirely replaced by dionin, and

the amount of this is then also gradually reduced. As soon as the unbearable symptoms, frequent during abstinence from morphine, set in, they are checked at once by a comparatively small dose of dionin; if not controlled in the early stage, a considerable larger dose of dionin will be required, and the results will not be so good. It will soon be found, too, that though at first rather large doses are necessary, yet in three or four days the injections will have to be made only two or three times daily; in most cases a dose is also required at night in order to enable the needful sleep to be obtained. In the author's cases usually a 3 per cent. solution of dionin was injected, the dose of the remedy being from $\frac{3}{4}$ to $1\frac{1}{4}$ grn., the daily amount being up to 15 grn. These relatively high doses were generally well borne; in most cases 6 to 9 grn. a day sufficed. After the complete withdrawal of morphine, care must be taken, the author states, not to make the doses of dionin too small, so as not to shake the confidence of the patient in the remedy. As a rule, the chief symptoms abate in from four to five days, their intensity and duration being reduced. One of the most important effects of a large dose of dionin is the feeling of fatigue it causes; and this is of extreme benefit because of the confidence it inspires that it will afford a good night's sleep—the frequently very obstinate insomnia and the fear of passing sleepless nights are calculated to exert a powerful retarding effect on the cure. The removal of these troubles by dionin hence can but be of material assistance in the treatment. If it is desired, however, to avoid the soporific effect, the doses of the dionin must be reduced to about $\frac{1}{2}$ grn.

As the result of his many observations, the author most warmly recommends Dionin in the treatment of morphinism by the withdrawal of the latter.

Dr. Isenberg,⁷ of Neckermünde, cites the clinical histories of five cases of morphinism in which cures were effected by means of dionin. Particular stress is laid upon the giving of fairly large doses of dionin at first in order that a strong impression may be exerted upon the patient and give confidence in the effectiveness of the remedy. In practice 5 per cent. solutions were found to be best; with stronger ones some dionin is likely to separate and clog up the hypodermic needle, and absorption is too rapid, which may occasion more or less exhilaration.

In beginning treatment, the morphine dose habitually taken by the patient is gradually daily reduced to, say $\frac{1}{2}$ grn., then dionin given in large doses, say from 5 to 15 grn., according to the case, and these doses are then gradually reduced. In conclusion, the author once more calls attention to the excellent action of dionin on the morphine hunger. A further advantage is that even in comparatively large doses it leaves no feeling of malaise.

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EUQUININE.

BY DR. M. OVERLACH, GREIZ.

IN spite of the considerable number of antipyretics now in existence, none has been found which can be used as a substitute for quinine. The efforts to find such an antipyretic have doubtless resulted in the discovery of many valuable preparations, some of which have certain effects in common with quinine, without even some of its defects; still, the fact remains that none combine the same valuable properties, or are of such universal importance as quinine. To confirm this statement it is only necessary to point out the unique position which quinine holds in the treatment of blood and lymph diseases, whether accompanied by intermittent fever or not. The question of a substitute for quinine of equal value seems, however, to have been solved in another way; a preparation of quinine has recently been manufactured which can be administered in cases where the patient would be unable to retain quinine. This new preparation is ethyl-carbonate of quinine, and has been called euquinine.

C. von Noorden (*Centralblatt für innere Medizin*, XVII., 1225) publishes his observations on the action of euquinine, which, generally speaking, agree with my own made during a year's investigation. I prescribed euquinine as an antipyretic in pneumonia, pleurisy, phthisis, influenza, typhus, erysipelas. Besides this I used it as an antineuralgic, a tonic, and an antidyscratic.

With regard to euquinine as a febrifuge, I am of opinion that its action is precisely similar to that of quinine, both in intensity and its lasting effect. Von Noorden states that 25-30 grains of euquinine as an antipyretic correspond to 15 grains of quinine, but my experience is that the antipyretic and therapeutic effects of euquinine are equal to those of quinine.

In some exceptional cases I have been obliged to increase the dose to 25 grains in order to lower the temperature about 2 degrees C., but generally 15 grains produced this effect. In a case of phthisis, 15 grains of euquinine sufficed to cause a fall of about 4 degrees C. during the night (from 40.3 to 36.5 degrees C.) without any collapse occurring; the following evening the temperature rose to 38 degrees C., and without the administration of a further dose remained at 37.5 degrees C. After that there was another rise. The dose may, in cases of fever, be increased from 15 grains to 25 or 30, in lieu of 15 grains of quinine, as suggested by von Noorden; the increased dose will render the action of the drug more assured, without producing any injurious effect.

In cases of typhus, it is advisable to use it in combination with baths, and to administer the euquinine shortly before the patient

has his evening bath. The euquinine will then begin to act when the comparatively short effect of the bath begins to subside.

The antifebrile action of euquinine, like that of quinine, only commences several hours (the question of how many I do not consider satisfactorily settled) after its administration.

In a very severe case of erysipelas euquinine failed entirely. The cause of this, I have no doubt, lay in the presence of a huge abscess in the armpit, which was opened and emptied a few days after. This is the only case of infectious fever in which I found euquinine unsuccessful.

One of the great advantages of euquinine over quinine is its almost complete tastelessness, so that there is none of that persistent bitter taste of quinine, which is so distasteful to almost all patients, and often prevents its use, though strongly indicated, specially in the case of children.

Euquinine is so slightly bitter that the patient can take it either with or without water, or also in wafers.

A second no less important advantage of euquinine lies in its leaving the stomach uninjured, whether regularly taken for long periods in small doses, or in occasional large ones. In two cases only, of female patients for whom I had prescribed 3-4 grains of euquinine to be taken twice daily for some time, I was asked to permit a reduction to one dose daily, or the reduction of the doses to one-half, as they felt a slight indisposition which they were unable to clearly define. In both these cases a state of extreme anemia had caused an unusual sensitiveness to any kind of medicine. I complied with my patients' request and reduced the dose to one-half, with the result that they were able to take the drug for many weeks without any unpleasant results, until it had wrought its beneficial effect.

I have observed euquinine also in another way cause a slight indisposition, which disappears, however, after the first few doses, but this I shall refer to again later on. Patients who have been taking quinine for a long time, should, in my opinion, be given double doses of euquinine the first few days, which should afterwards be reduced to single doses, until cure is effected.

With two doses of 1.5-3 grains of euquinine, given daily for several weeks, I had excellent success in cases where small doses of quinine had been given to improve the condition of the blood and to effect a return of the appetite, particularly so with severe neurasthenic and neuralgic complications.

A third important merit of euquinine is, it greatly reduces the cerebral symptoms that cause the so-called "quinine intoxication." The only one of these symptoms, in fact, that it does not do away with is the ringing in the ears. The latter just as often follows either small or large doses of euquinine, but it manifests itself in a very different way. With quinine the ringing in the ears in-

creases with each dose; with euquinine, however, it occurs mostly after the first only, seldom after the second, and never again. This circumstance seems to show that euquinine has no cumulative effect upon the brain, which is of considerable importance, especially in cases where frequent large doses are needed, as in malaria.

Perhaps I may mention here that, on my initiative, trials are now being made in Italy and India in malarial cases; it will, however, be midsummer before any reports can reach us.

What I particularly wish to emphasize is that the merit of these three qualities of euquinine is not confined to their allowing of the administration of larger doses. The absence of bitter taste and injurious after-effects is equally welcome where small doses have to be taken for a long period. In cases of anemia, chlorosis, or both combined, I prescribe daily doses of euquinine of 1.5-4 grains to be taken for weeks running; also in cases of diseases of the blood, which after repeated and careful blood-tests cannot be classified with any of the recognized disorders of the blood.

I am far from giving a conclusive opinion on the importance of euquinine in cases of blood diseases, my observations having by no means approached their end. What I can say is this: In several cases the use of euquinine in small doses, in the course of a few weeks, resulted in a considerable increase of the hemoglobin as well as the number of microcytes, invariably accompanied by a growing appetite, and a surprising improvement of the general state of the health.

One case I will cite as an instance—that of a stoutly-built girl of sixteen. The diagnosis stated severe anemia, with severe unilateral, cervico-occipital neuralgia. The blood was watery, thin, and of a pale red tint. The amount of hemoglobin was 36 per cent. of the normal. The red blood corpuscles numbered 3,416,000 per cubic millimetre (4,500,000 normal); the white corpuscles, 17,600 (7-10,000 normal). The proportion of white to red corpuscles was 1:194 (1:500 normal). Euquinine was taken, when the neuralgia (usually setting in about noon) became excessively bad, in a dose of 15 grains, followed by another dose of 15 grains a few hours later, and also 1.5 grains regularly twice a day, morning and evening. The 15 grain extra doses were only administered on three different days; the nerves were then sufficiently soothed by the two daily doses of 1.5 grains each, to render further doses unnecessary. After a lapse of three weeks, during which period the patient had gradually and visibly improved, the blood test result was the following: Hemoglobin, 58 per cent. of the normal amount; red corpuscles, 4,383,000 p. cubic millimetre; white corpuscles, 9,840 p. cubic millimetre; proportion of white to red, 1:446.

Considering the severity of the case, and the short space of only three weeks, these results must be termed highly satisfactory.

The general health of the patient corresponded with the improved condition of the blood. While three weeks before the girl had hardly been able to totter from one room to another, and had been a martyr every day to neuralgia, she was now able to walk about fresh and gay, and declared she felt quite well and strong.

Euquinine is by no means intended to replace quinine entirely. It is to assist, or to be substituted for quinine in cases where its bitter taste prevents its being administered, where it cannot be taken on account of gastric sensitiveness, or where it does not agree with the patient. Herein lies the eminent therapeutic value of euquinine.

CLINICAL OBSERVATIONS ON AMYLOFORM.

BY DR. A. HEDDAEUS,

Assistant to the Surgical Clinic of the University of Heidelberg.

AMYLOFORM is spoken of in an article by Bongartz, of Aix, who, after having used it during nine months at the Maria Hospital, refers to it in the highest terms of praise. When comparing it with iodoform, he lays particular stress upon its freedom from irritating qualities, and its entire innocuousness, emphasizing its power as a local disinfectant and its value in diminishing secretion. Our own experience confirms these statements in every particular. During nearly the whole of a year we employed it in cases in which iodoform would formerly have been used, as well as in other diseases, such as phlegmons, in which it had not been our practice heretofore to use such active antiseptics. The manner of application depended upon the chemical and physical properties of the powder, which is insoluble in all solvents, and therefore had to be used as a dusting powder. It could not always be satisfactorily dusted in and fixed in sterilized gauze. In cases of sinuses and wound cavities the amyloform was spread upon the wound and dusted over the gauze with a brush at the time of introduction, or else it was employed with a powder blower. In this way it could be insufflated into deep wounds, forming uniform layers over the wound surfaces, in a more effective way than is possible by any other means. In superficial wounds it was spread over the surfaces with a sterile brush.

I may now be permitted to give a few examples of various surgical diseases, which illustrate the mode of application and the mode of action of amyloform.

CASE 1.—A man eighteen years old developed a phlegmon, which rapidly involved the hand after a furuncle, which had begun in the region of the elbow. The incision showed that all of the subcutaneous tissue of the dorsal side of the forearm was in a con-

dition of necrosis and purulent inflammation. Nearly one-half of the circumference of the arm was undermined with pus that had burrowed through the tissues. The entire phlegmonous area was laid open with a long incision and a counter opening was made at one of the margins of the undermined region. The wound was washed out with sublimate and a wet dressing of acetate of alumina was applied. As the wound still looked very pultaceous on the following day, amyloform dusting was tried for the first time, and the entire necrotic surface was thickly powdered. The limb was then placed in a wet dressing. This treatment was renewed daily, the arm being also subjected to prolonged baths. In a few days the wound had become free from all gangrenous tissue, which separated in large superficial sloughs. Vigorous healthy granulations sprang up, which soon needed to be checked.

CASE 2.—A man aged twenty-nine, with caries of the elbow joint. In this case, fourteen days after resection of the elbow joint, there occurred a wound diphtheria, with high fever, necessitating a free opening in the region of the elbow. From the very first, amyloform was applied at every dressing, while the treatment with baths and wet dressings was continued. In this case also the wound rapidly became cleaner, and the formation of granulations took place very soon. The secretion of the wound, which at first had been exceedingly profuse, was unquestionably greatly lessened in consequence of the hygroscopic action of amyloform. As in the foregoing case, on removing the dressing we found the wound uniformly covered with a smooth layer of pasty starch, the removal of which revealed fine red granulations.

CASE 3.—A man twenty-eight years old, suffering from a carbuncle of the back as large as the palm of the hand. After removal of the necrotic cutaneous area and of the core, amyloform was dusted over the wound and a moist dressing was applied. Although in this case amyloform was unable to prevent the extension of the purulent process toward the periphery and in the deeper muscular layers of the back, it certainly exerted a favorable influence upon the course of the disease by promoting cleanliness and stimulating the formation of granulations.

CASE 4.—A man aged seventy, with a large varicose ulcer of the leg. A first attempt was made to transplant upon it a large flap of mucous membrane taken from the vagina of a woman who had been operated upon by colporrhaphy. This proved unsuccessful, as the flap became gangrenous. An amyloform dressing was then used, under which the ulcer rapidly became clean, after which a Thiersch's graft was done. During the subsequent treatment iodoform vaseline was used on one occasion, but gave rise to an extensive eczema. Dermatol proved inefficient, but the eczema rapidly disappeared after the application of amyloform.

CASE 5.—In this instance amyloform was employed for a long time to fill a bone cavity during open treatment of the lesion. The patient was a lad aged eighteen, suffering from chronic osteomyelitis of the tibia, in whom a large fragment of the tibial head was removed by sequestrotomy. A plastic closure was technically impossible. The purulent secretion rapidly diminished under daily dustings of amyloform; vigorous granulations sprang up in the cavity of the bone, so that filling in with iodoform starch according to Bier's method, which had at first been contemplated, and from which we had obtained good results in a case of osteomyelitis, appeared superfluous. The effect of amyloform in stimulating granulations and arresting secretions must in this case have contributed to no little extent toward the rapid filling in of the cavity. In this case we also had an opportunity of observing that amyloform is ineffective against the pyocyanus bacillus. In the course of healing a strong development of pyocyanus took place, which only could be controlled by sublimate, which acts as a specific against this bacillus.

I will briefly refer to another case which shows the importance of amyloform as an agent to promote the filling in of bones in order to obtain the closure of external wounds. The patient was a young man who, owing to a caries of the cuboid of the left foot, had been treated several times by curettage, after which an obstinate secreting fistula always remained behind. On the present occasion curettage was again performed, after which, as the small cavity in the bone, about as large as a hazel nut, appeared to be clean, and there were no foci of softening, the cavity was filled up to the margin with amyloform and the skin was closed with a few silk-worm sutures. During the first few days there was a slightly turbid secretion coming from one of the stitch-holes, after which the wound healed smoothly. It has now remained closed for about two years, and there is no evidence that any recurrence is likely to take place. We are far from attributing the result in this case to a specific influence of amyloform upon a tubercular process, but ascribe the healing to the cleansing of the bone cavity. Nevertheless, it is quite noteworthy that the powder could be used in such a manner.

In a further extensive employment of this remedy in many cases of tuberculous disease, the rapid cleansing effect of amyloform was always marked. We saw no reason to believe that it had any effect upon the tuberculous virus, and attributed this cleansing action of the remedy, which undoubtedly constitutes its chief merit, to its disinfecting power, without claiming for it any specific influence. This disinfectant power appears to be more persistent than that possessed by any of the other antiseptics. This may depend upon the fact that the formaldehyde adheres longer to the starch paste, and that the greater affinity which this starch layer manifests for the loose tissues deprived of their epidermal

coverings renders the action of the remedy more permanent upon those layers that are penetrated by pus-forming organisms.

In all cases in which amyloform was used it never produced any bad effects, such as eczema. When applied to large wound surfaces, especially when they are already somewhat cleansed, the patients at first experience a slight burning, which, however, was always so moderate that they never complained of it, but only mentioned the fact when asked. Like Bongartz, we failed ever to observe any toxic effects, although the remedy was sometimes used in very large amounts.

On the ground of our experience with it, we may highly recommend amyloform as an antiseptic which is capable of taking the place of iodoform in many cases, and, owing to its complete freedom from irritating effects, should be preferred to many of the newer antiseptics. Its chief effect is to promote the cleansing of suppurating wounds, and hence its chief field of usefulness will lie in the treatment of superficial suppurative processes.

Levulose in Tuberculosis.—Dr. Hugo Weber, of St. Johann-Saarbrücken, writes in *Medico*, Berlin, September 4th, 1901, on the "Treatment of Tuberculosis of the Lungs by Means of Carbonic Acid," and shows that all the recognized methods of handling the disease are finally dependent upon it. Besides the various nutrient and therapeutic measures which he recommends, he lays special stress upon increasing carbonic acid production by the administration of levulose, which is oxidized in the body much more completely than any sugar, and hence is well borne by diabetic patients also. He administers a heaping teaspoonful of Schering's preparation four times daily. And since levulose is a nutriment rather than a medicine, it does not matter whether it is taken before or after eating, or with the food and drink. The classical investigations of L. von Alder and Clemm (*Therapeutische Monatshefte*, August, 1901), have shown that fruit sugar, or levulose, increases the amount of gastric juice whilst diminishing its acidity; hence it is not only a most excellent nutriment, but actually aids and stimulates digestion. No wonder, he says, that he has been able to cure a whole series of cases in the initial stage of phthisis pulmonum with this medication alone. In advanced cases of tuberculosis, where cavitation had occurred, levulose or the production of carbonic acid by any ordinary means alone was not sufficient, and Weber employed hypodermic injections of chemically pure liquid paraffine, with the idea that the hydrocarbon, when absorbed by the body, would be converted into carbonic acid and water. By this combined process, levulose internally and paraffine injections, he has been enabled to cure patients in advanced stages of tuberculosis, such as are often met with in ordinary practice. Out of the fifty-two cases which were reported in the March number of the *Therapeutische Monatshefte* of this year, he has cured thirty-two; fourteen are considerably improved, and only six have died.

Selected Articles.

GASTRO-ENTERITIS IN INFANTS.

BY R. D. MOORE, M.D., CENTRAL MISSOURI.

Three melons went sailing out in the West,
Nutmeg, water and musk,—
Three little boys at evening dusk,
While nature brooded in damp suspense,
Climbed over a ten rail, eight-foot fence,
And stowed a melon beneath each vest.

Three little colics appeared that night
And tackled the cherubs three.
Oh, the groan, the pain, the misery,
The cramp, the gripe, and the inward hurt,
The fate the doctors couldn't avert—
Three undertakers at morning's light.

Yet melons go sailing everywhere ;
And women are born to weep ;
And boys will forage while farmers sleep ;
And colics come where melons go.
And so will doctors and every woe
That points the way to the golden stair.

THESE serio-comic lines, attributed to Eugene Field, contain a pathetic truth applicable to the season of discontent, hot weather, teething babes, and diarrheas.

The vast hot wave and drought of last summer, extending universally for nearly two months, carrying with it an unusual epidemic of bowel diseases, took its toll and taxed physicians generally in their endeavors to combat the disease.

It is difficult to present any new lines of thought in this direction, but even repetition has its virtues. Keeping everlastingly at it finally brings its reward.

Considering diarrhea etiologically, the first step is catarrhal inflammation, prolonged by rapid development of micro-organisms. To my mind, the various forms of diarrhea, considered separate diseases by a good many writers, are the same disease, the one being practically the continuation of the other. Thus we have the mechanical or irritative form produced by masses of food, unripe fruits, etc., in which the increased peristaltic action and secretion represent Nature's efforts to remove offending material. Secondly, this interferes with the digestive apparatus, and the dyspeptic form

follows. Thirdly, this form, associated with a low grade of catarrhal inflammation, affords an excellent field for fermentation and bacterial development. Lastly, after continued bacterial development, the formation of inflammatory lesions produces the most dangerous form of all, the dysenteric. However, it is needless to state that any variety may be acute.

In my work this summer the third form above mentioned, the bacterial diarrhea, or true gastro-enteritis, has been by far the most prevalent, and it is this disease I beg to present for your perusal.

The potent factor in the prolongation of gastro-enteric infection is the constant development and multiplication of micro-organisms. The inflammatory lesions are probably slight or superficial, the severity of the disease and the prognosis depending upon the absorption of toxins. Cholera infantum, the genuine choleraform diarrhea, is but an exaggerated type of this disease, being practically ptomaine poisoning. Thus, in treating these cases it must be remembered that they are a toxemia, producing, if not checked or modified, changes in the glandular structure of the mucosa, the disease passing into a colitis of dysentery.

From observations in my practice, mistakes in feeding during the heated term appear to be the chief cause of this condition. Between six months and one year, if the babe has not been weaned, it is permitted and encouraged to partake, in addition to the mother's milk, of the regular family diet, generally a promiscuous one, totally unfit for the weak digestive apparatus of young children. If a milk diet is exclusive, as a general rule cow's milk unmodified constitutes the chief support. The difference in chemical composition between cow's milk and breast milk not being appreciated by parents, many infants suffer from indigestion and malnutrition, thus rendering them an easy prey to an infective process. I find quite a number of parents who have some idea about the necessity of sterilization, and boil the milk. This may produce such a result, but it is open to objections. The casein is rendered coagulable by rennet, and is acted upon slowly and imperfectly by the digestive ferments, delaying digestion considerably. Certain changes take place in the sugar and fat, the former being partially converted into caramel. Contaminated milk is a potent factor in the production of infective diarrhea, for with the best care milk, a few hours after being drawn, will contain thousands of saprophytic bacteria. These probably contaminate milk during the process of milking and handling, for on a gelatin plate that had been placed under a cow for two minutes nearly two thousand colonies developed. While all of this germ life may not be pathogenic, yet it is certain that many of these micro-organisms may cause bacterial enteritis. Bacteriological research has not isolated any single form of bacteria as the specific cause of diarrhea. During the nursing period the bacteria lactis aerogenes and coli com-

E. coli are constantly present in the intestines of infants in great numbers, occupying the upper and lower tracts respectively. These are found in a healthy state, and are supposed to become pathogenic only under certain conditions, particularly the *coli communis*. In an ordinary attack of indigestion the residue in the bowels undergoes fermentation and putrefactive changes, forming splendid culture media for the propagation of bacteria, whether these are ingested with food or develop from those remaining latent in the healthy state.

The symptoms vary in intensity, according to the degree of infection, simple cases presenting about the same symptoms as an attack of intestinal indigestion. In mild cases fever is slight; there is occasional vomiting; the child becomes cross and restless, and has five to ten stools daily. As digestion is greatly interfered with the stools may contain curds of casein. It is seldom that the physician is called to attend cases at this time, parents not appreciating the danger of delay and allowing more time for the multiplication of bacteria and absorption of toxins. Usually we see the case when the stools have increased in number, are very thin, of a greenish-yellow color. There is fever, the temperature ranging from 100 to 102 degrees F. The pulse is rapid; the tongue coated, and the appetite very poor.

With strict regulation of diet and proper medicinal treatment, these cases usually subside without much apprehension, but dangers of relapse and continuation of diarrhea must be fully impressed upon parents. Many have come to my office for a prescription or medicine, stating that the baby has diarrhea, and after prescribing for what appears to be a simple trouble, I have been called a day or two later, to find the "simple case" in collapse from a true cholera infantum, with grave prognosis. The moral is to keep a string to your cases. You get discredit for the loss of the case no matter whether the child has been sick ten days or more prior to the initiation of your treatment.

Occasionally cases with mild initial symptoms do not improve under constant attention, but run the gamut from indigestion through infective catarrh to a dysentery, and finally terminate in death. Again, we are not always fortunate in encountering cases with mild symptoms. The affection may start with high temperature, 104 deg. F., a weak rapid pulse, vomiting, and general prostration, indicative of systemic infection from absorption of poisonous matters in the intestinal canal. Thirst is excessive, and vomiting easily excited. Diarrhea comes on rapidly, with pain prior to each movement. The stools may be offensive, or have a musty odor, and become very thin as the disease advances. Under appropriate dietetic and medicinal treatment instituted early, there usually appears after a day or two a reactionary period, the temperature falls, and the general symptoms denote improvement.

However, the prognosis in all infective cases must be guarded. Especially in weak, ill-nourished children or those of the so-called scrofulous diathesis, there is a great tendency to formation of inflammatory lesions in the intestinal mucosa.

In the case of infants and young children who have had slight diarrhea early in the season, prophylactic measures rigidly enforced will often prevent future attacks later in the summer. Where maternal nursing is impossible, impress upon parents the necessity of absolute cleanliness of all bottles, nipples, and utensils which come in contact with milk. Be explicit in your directions. General instructions allow too much latitude, and if rules are not obeyed with utmost care nothing is gained, and all labor put to a poor use.

Cow's milk, being most convenient and inexpensive, is the universal artificial diet, but in order to prevent malnutrition and diarrhea it must be modified and sterilized, if possible. The proteids in cow's milk in the presence of gastric ferments coagulate into firm curds, while those of woman's milk form loose flocculi. This is the reason why cow's milk, even diluted, is difficult to digest, the tendency to form curds in the stomach rendering digestion slow and imperfect. The bugbear of modification is easily overcome if the few simple rules of dilution, the addition of milk sugar, and an alkali, are followed out. I find Holt's tables very convenient and practical. In regard to sterilization, boiling being objectionable, I have had several cylindrical tin tubes, with one end closed, made by a neighboring tinsmith. These are ten inches long, and large enough to hold a milk-bottle and allow a small surrounding space. Place the bottles of modified milk in the tubes which are filled with warm water. Partially fill an ordinary tin bucket with water and boil it, remove the vessel from the fire, and place the tubes in the boiling water, covering the bucket with a lid having one or two perforations to allow the escape of steam. Let the tubes remain twenty or twenty-five minutes, depending upon the apparatus. Drain off the water and rapidly cool with cold water. This is an inexpensive model of Freeman's apparatus for sterilizing at a low temperature, 170 degrees. In milk thus treated the ordinary pathogenic bacteria are rendered inert, but the spores are not destroyed; hence milk should be prepared once daily, and in very hot weather twice a day.

I would simply mention the dangers of overfeeding and the benefits derived from proper hygienic measures relative to bathing, fresh air, care of the child's mouth, etc.

Some of my worst cases occurred not in bottle-fed babies, but in older children, the initial attack being cholera morbus from eating half-ripe fruit. After the acute symptoms subsided, the hot weather continuing, secondary attacks ensued which left the bowels

disordered, and afforded a proper medium for an infective process. Therefore I instruct the parents to seek medical advice the moment there is any indication of diarrheal disease. "A stitch in time saves nine" is appreciable here with full force.

To prevent further absorption of toxins, the bowels must be thoroughly evacuated at once. Calomel is the sheet anchor here. In mild cases one-quarter grain is administered every hour, repeated four times, and in severe cases one grain every hour for three doses, followed always by a generous dose of oleum ricini. This usually brings about rapid evacuation, after which there is generally a reactionary period, and conditions show some improvement. If it were possible to sweep out all pathogenic bacteria and render the bowel sterile with the cathartic, no further treatment would be required; but this is not the case, as the diarrhea and nervous symptoms continue with more or less severity. Hence it is necessary to select a diet which will check as far as possible further fermentation, and also to administer medicines to arrest the catarrhal discharges by their astringent action upon the intestinal mucosa, and to prevent putrefaction by their antiseptic effect upon the bacteria and spores.

In many cases food should be withheld for ten to twelve hours, or even longer in older children, with proper regard to the child's strength and general condition. Small quantities of cold sterile water or barley and albumen water, given frequently, allay the thirst. If the pulse is weak and thready, stimulants should be added. Good brandy or whisky answers nicely, but in some cases where it is rejected by the stomach strychnine is usually retained. The nitrate is more soluble than the sulphate, and is therefore preferable. After reaction a gradual return to foods containing more proteid matter may be practised, commencing with animal broths, beef juice, reliable beef preparations, somatose, etc. It is to be remembered that one child starves upon what another thrives, and it is only by careful trial of different articles of diet one can arrive at proper food.

Since the putrefactive process is the objective point we naturally turn to those drugs that act as interstitial antiseptics. Digestion in the stomach and upper intestinal tract has practically ceased while the contents of the lower tract, ileum and colon, are in a state of active decomposition. Consequently it is necessary to administer an antiseptic which will pass through the stomach and duodenum unchanged, and exert its full strength on the multiplying bacteria of the lower tracts. During the summer of 1900 I had considerable success along these lines with tannopine, treating twenty or more cases, and equally satisfactory results were observed under its use during last summer. For the information of those practitioners who are unfamiliar with this drug, I would state that

it is a chemical combination of tannic acid (87 per cent.) and hexamethylen tetramine. It is a tasteless, brownish powder insoluble in water. It passes unchanged through the stomach owing to its insolubility in acid fluids, but is split up into its components after reaching the alkaline intestinal contents. The tannin liberated exerts an astringent effect upon the congested mucous lining, decreasing the discharge and peristaltic action, while the formaldehyde acts upon the putrefactive process, thus removing the principal danger, the absorption of toxines.

In those cases where there are present considerable prostration, high fever, and thirst, I usually irrigate the colon, first with a normal saline solution (one drachm of sodium chloride to the pint) until the water is returned clear. After thorough washing I inject a pint of tannopine mixture, one drachm to one pint of water, adding enough bicarbonate of soda or limewater to make a good solution. This is injected above the sigmoid with a long rectal tube, or soft rubber catheter, and by firmly pressing the ball of the thumb against the anal opening the solution may be retained quite a while, allowing a longer time for the drug to exert its full local effect. This is especially recommended in the dysenteric form, the tannopine being actually applied to the ulcerated lining of the gut and promoting rapid healing.

The following report will outline successful treatment of cases treated last summer:

CASE 1.—A three months old girl baby, weak, puny-looking from birth. The mother, who suffered from a prolapsed uterus due to an old perineal tear, had a scanty milk supply from the birth of the child, and it soon gave out. The child was put on the barley water mixture and did well for a short time, gradually gaining in weight. This temporary growth soon ceased, and modified cow's milk, sterilized or heated to 170 degrees F., condensed milk, etc., were tried, but the child suffered with more or less diarrhea. As this became much worse I was called, and found the baby in a condition of stupor; temperature 102 degrees, poor circulation, with cool extremities. There had been ten or twelve foul-smelling stools daily, some mucus, but no blood. Considerable pain was present prior to each motion, and the buttocks were slightly excoriated.

Treatment.—All milk was discontinued, and nothing given but cold sterile water with a light egg albumen for eight or ten hours. Twenty-five drops of brandy diluted in a half-ounce of water were administered every three or four hours. Cold sponging was employed to reduce the temperature. Calomel, one-quarter grain, was given every hour, repeated four times, followed by a dose of castor oil. On the next day I found that the calomel and oil had acted thoroughly. The temperature was 100 degrees and the child appeared somewhat brighter. I irrigated the lower bowel

with normal saline solution, washing out considerable slimy debris of less offensive odor. I next injected a pint of tannopine solution, 60 grains in limewater. About one-half of this was retained for ten minutes. The following was prescribed:

| | |
|--|-----------|
| Tannopine | 1 drachm. |
| Beta-naph. bismuth | 6 grains. |
| Paregoric..... | 48 drops. |
| Syrup simple | 3 ounces. |
| M. Sig. Teaspoonful every three hours. Shake bottle. | |

The diet consisted of barley water with white of egg, whisky as a stimulant being continued every fourth hour. On the third day, temperature 99 degrees. The child was sleeping well, and appeared decidedly better. The stools were reduced to four per diem, and were of much better consistency. The medicine was continued, with liquid beef peptonoids added to the diet. Irrigation of the bowel was practised as before. On the fourth day the case was doing nicely. The stimulants were gradually discontinued. The original prescription was continued two days more, and then replaced by tannopine powders, five grains every four or five hours, with an occasional dose of calomel to keep the bowels cleaned out.

It is a hard problem to feed this child, and I have treated it for several attacks similar to the above with practically the same treatment, relying upon tannopine to disinfect and control the bowels.

CASE 2.—I was called in the night to see a boy nearly four years old with a typical cholera morbus. He was vomiting, and had had diarrhea for several hours. Small doses of calomel, and the old-time remedy, spirits of camphor, checked his vomiting, or it ceased from the stomach being finally emptied. The bowels were cleaned out with grain doses of calomel, followed by a dose of effervescent magnesium sulphate. Tannopine in 6-grain doses was then given every two or three hours, simply to control the motions and tone up the bowels. There was no infection at this time. Four days later I was called to see him again for another attack due to his eating unripe fruit, and this time the case was more difficult to control. After vomiting had ceased, and I thought the bowels were thoroughly evacuated, the diarrhea continued, five or ten stools daily, thin, watery, and acrid, and of a yellowish green in color. Evidently the acute attack had passed into an infective catarrh. The temperature rose rapidly, with a weak pulse. Vomiting easily excited; excessive thirst was present, but water was ejected by the stomach at once. Crushed ice was given to relieve the thirst, cool sponging for the fever, and a teaspoonful of brandy every fourth hour, which was tolerated fairly, being vomited but once or twice. To check vomiting the following tablet, crushed, was given every fifteen minutes for two hours:

| | |
|------------------------|-----------------------|
| Zinc sulpho-carb | 1-20 grain. |
| Salol | 1-10 grain. |
| Bismuth subnitri | $\frac{1}{2}$ grain. |
| Calomel | $\frac{1}{60}$ grain. |
| Pepsin pure | $\frac{1}{4}$ grain. |

This acted nicely, and in two or three hours the child was able to take albumen water without vomiting. The stools continuing frequent, tannopine in 8-grain doses was administered every two hours. Liquid beef preparations and animal broths comprised the nourishment. The treatment was continued for several days, gradually reducing the drugs and increasing the dietary. The case made a slow recovery. The bowels were in a weakened state from the primary attack, thus rendering them an easy prey for an infective process.

CASE 3.—Girl baby, eleven months old. The mother, believing herself to be pregnant, weaned the child in June, using diluted cow's milk as the chief diet. Early in July the child was attacked with diarrhea, the stools being offensive and of the usual greenish yellow cast, averaging ten a day. The child had lost weight, was fretful and had considerable colicky pain prior to each movement. Temperature 100; no vomiting.

Treatment.—All food withheld for ten hours, except the customary albumen water to allay thirst. Calomel was administered followed by castor oil. After an evacuation, this preparation was ordered to be given, one teaspoonful every three or four hours:

| | |
|-------------------------|----------------|
| Tannopine | 2 drachms. |
| Bismuth beta-naph | 15 grains. |
| Paregoric | 2 drachms. |
| Simple syrup | 1 oz. |
| Essence of pepsin | q.s. 3 ounces. |

Ft. Mist.

A barley-water diet was adopted until the end of the second day, when proteids were carefully resumed, commencing with a small amount of beef bouillon and then cold pressed beef juice. The latter contains nearly three per cent. proteids, taking a pound of beef to half a pint of water. The stools gradually decreased, and became almost odorless.

CASE 4.—The patient was a baby girl, nine months old, who had been fed since birth on condensed milk. The child did nicely, gaining steadily in weight until hot weather, when a little carelessness with nipples and nursing-bottles brought on an infective diarrhea. The stools became green and frequent, the buttocks being red and sore. Temperature 104 degrees; circulation poor, with great prostration; stupor, indicating considerable toxic absorption. Wishing to remove the putrefactive material from the bowel as rapidly as possible, the colon was at once irrigated with cold water.

This had the two-fold effect of removing effete material, and reducing the temperature. A large dose of castor oil was given at the same time and happily retained. After the oil had produced the effect desired, the tannopine-bismuth mixture was given every third hour, with barley water and brandy as a stimulant. There was such evidence of toxic absorption that I was afraid of inflammatory lesions forming in the mucosa of the large bowels, and so irrigated twice daily with tannopine, 60 grains, in a pint of water with enough soda bicarbonate added to make a good solution. Beef broths and liquid peptonoids constituted the diet for several days. The treatment was continued for four days before any great improvement could be noticed. The fever was always controlled with cool sponging. About the fifth day the stools decreased to three per day, and the child improved steadily from now on. It is doing well upon modified cow's milk sterilized after the manner described in the first part of this report. An occasional dose of calomel is given, and if the bowels are too loose frequent small doses of tannopine control them.

CASE 5.—This was one of the most difficult cases I ever encountered, taxing my efforts to the utmost. The child, nearly one and one-half years old, was weak and delicate, an inheritance from consumptive progenitors. It was teething, canines and anterior molars making their appearance. The gums were congested and very sore. This baby had been weaned when six months old, though previously there had been mixed feeding, as the mother's milk supply was very scanty at times. It is a mystery to me how the child passed through the first summer, its resisting powers being very feeble. The limbs were small and puny, the head rachitic, flat and large above, rapidly narrowing to small chin. When called to attend the child she was very restless, crying spasmodically and flexing the legs upon the abdomen as if in considerable pain. Temperature 103 degrees; pulse correspondingly rapid. Tongue furred to the edges; belly puffed up under the diaphragm, and somewhat tympanitic. No movement of the bowels since twenty-four hours, when she had three stools of fair consistency, but green in color. She had vomited once or twice. The diet had been promiscuous, chiefly milk. I made no attempt to diagnose the case then, but treated it symptomatically, ordering one grain each of calomel and bicarbonate of soda for three doses, followed by a large dose of oil. A rectal injection was given, and with negative results, washing out a few particles of a pasty, gray substance. Sponging with cool water was employed every half hour until the temperature declined. Plenty of cold sterile water was given, but all food withheld until the next day. Small doses of camphorated tincture of opium were administered to relieve the pain. The next morning I found the abdomen considerably re-

laxed. The patient had several stools, and appeared easier. Small particles of a substance which, after close examination, proved to be part of a half-ripe peach which she had consumed unknown to the mother, were found in the stool. The temperature had fallen after the first two motions, but this was only temporarily, the fever again reaching 102 degrees in a few hours. My first impression was that the case was an ordinary diarrhea from ingestion and irritation, but the continued high temperature warned me that an infective process was taking place in the gut. The calomel and soda tablets were continued and irrigation of the lower bowel washed out considerable mucus and debris of bad odor. Barley water, egg albumen, and animal broths were given. Many writers speak of the ease of colonic irrigation, and the necessity of pushing the rectal tube high up to obtain results. In this case at no time was I able to introduce the tube more than five inches, being careful to follow the rules and let the water flow before introduction. However, I was able to inject a quart before the water was expelled, and so I am confident it passed the sigmoid. On the third day the diagnosis of infective enteritis was confirmed. The child had passed ten stools, loose and watery and green from the calomel. The temperature, fluctuating between 99 and 102 degrees, was controlled by cold sponging. The dietary remained the same, except that thin rice gruel was added. The following was prescribed :

| | |
|--------------------------|------------|
| Tannopine | 2 drachms. |
| Beta-naph. bismuth | 40 grains. |
| Syrup simple..... | 2 ounces. |
| Liq. peptonzyme | q.s. 6 |
| Ft. Mist. | |

Sig. Two teaspoonfuls every fourth hour.

Also ten drops of paregoric and four of spirits of camphor were administered three or four times per diem, and strychnine nitrate, 1-150 grain, three times a day, as brandy was not tolerated by the stomach. This treatment was continued three days more, but with little perceptible improvement. The stools lessened in number, but were small in amount and thin. The temperature continued high and, with the appearance of blood and mucus in the stools, indicated a very grave prognosis. This condition had gone on to the formation of inflammatory lesions in the gut wall, and was now a dysentery. Much discouraged, I irrigated the lower bowel twice daily with tannopine solution, removing small quantities of slimy mucus. The mixture first prescribed seemed to nauseate and was vomited twice, but tannopine powders, five grains every third hour, sifted on a teaspoonful of water, were tolerated nicely. Stimulants continued. This treatment, with liquid beef peptonoids, managed to keep the child alive, the general condition slowly im-

proving. Blood disappeared early after the third irrigation. The temperature gradually fell and the stools, while frequent, became better in consistency. Rice and barley gruels were now well tolerated, and the tannopine powders were continued every fourth hour. The bowels were cleaned out with calomel and oil about every fifth day. At the end of the second week she was having two and occasionally three stools a day, and was slowly regaining strength and weight. Fearful of another attack during the hot season, I administered as a prophylactic, two-grain doses of tannopine three times a day, with cod-liver oil, tonics, etc. This small amount of tannopine acts favorably as an intestinal antiseptic, preventing fermentation and putrefaction. The tubular diathesis was instrumental in prolonging this case. The original treatment was practically unchanged, and finally conquered the disease in the face of most difficult conditions.

Bacterial enteritis always has a tendency to run a chronic course. Some cases continue from day to day with little or no improvement, and are exasperating enough to provoke a saint. Here is the time the practitioner makes a mistake by jumping from one drug to another, hoping to get better results. Seldom is improvement attained by such procedure. Thus, in Case 5, persistence in treatment in the face of most discouraging symptoms, finally brought about a cure. Sometimes when cases are more or less chronic, and the parents seem dissatisfied with the prospects of recovery, the same medicine administered in a different form will often restore their confidence.

Tannopine can be given in several different ways. The shake mixture combination with bismuth is my favorite method. The beta-naphthol bismuth is preferable, as it can be given in smaller doses, and has a more powerful antiseptic action than the subnitrate. Combining it with tannopine the mixture is palatable, odorless, and not only tolerated by a weak stomach, but allays nausea. However, tannopine does not cure diarrheal affections in a specific way, but acts as an astringent and antiseptic on the mucous membrane. The patulous orifices of the ducts are closed, capillary congestion reduced, and fermentation is arrested. The reduction of the congestion relieves pain to quite an extent, but in severe cases small repeated doses of paregoric will be of service, quieting a restless, fretful child, and securing the much-needed rest. The value of antiseptic agents in colonic irrigation is regarded as doubtful by some authorities, but I must emphatically assert that the good results derived from the use of tannopine in this manner are not to be questioned. Used correctly, it cleanses and disinfects the large gut. In colitis the first application of the astringent to the ulcerated mucous membrane produces good results, manifested by an early disappearance of blood and mucus from the passages.

Long to Reign Over Us



God Save the King

That brilliant spectacle, the crowning of a king—the first in many, many long years in old England—will soon be a tale that is told. The pomp and grandeur of the ages past, the splendor of to-day and the peace of a long to-morrow attend him who brings to England's Throne the personal majesty and strong characteristics we bluntly term valor, decision, fortitude and fact. From every Colony a large and representative number of loyal subjects have gone aboard the great ships, their common destination Merrie England, their dearest hope a foot-hold in a London street, vantage ground enough to view the two great processions. Talk of "Imperialism"! The Coronation time in London will speak louder than written volumes on the subject of unity with the beloved Motherland. The kingly Edward VII., the beautiful and gracious Queen Alexandra, the dawning twentieth century, its invention, affluence, educational advantages, religious and social betterment—what a prospect for all Christendom to gaze upon!

Only one shadow—the shadow of death out in South Africa: but while we write, perchance the white dove of peace is on the wing, freighted with its blessed message. May it fly in at the great ceremonial, and find a fitting nook in which to build its cot forever in the golden crown of Greater Britain's Monarch upon whose possessions the sun shall never set.

The Canadian Journal of Medicine and Surgery

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Doctors will confer a favor by sending news, reports and papers of interest from any section of the country. Individual experience and theories are also solicited. Contributors must kindly remember that all papers, reports, correspondence, etc., must be in our hands by the fifteenth of the month previous to publication. Advertisements, to insure insertion in the issue of any month, should be sent not later than the tenth of the preceding month.

VOL. XI.

TORONTO, JUNE, 1902.

NO. 6.

Editorials.

UTILITY OF ALCOHOL AND OATMEAL IN TUBERCULOSIS.

In an article published in our January number, 1902, we quoted statistics showing that Americans and Canadians do not consume as much alcohol as peoples of the same races in Europe. We also alluded to the fact demonstrated by the latest French authorities, that less alcohol is consumed per capita in Canada than in any other civilized country. In discussing the probable reasons for this abstention of Americans and Canadians from alcohol, we pointed out the influence of an abundant and cheap diet of animal

food, and claimed that working people so nourished do not require to stimulate their energies with alcohol in order to accomplish their daily tasks.

Is alcohol a food? "Alcohol," says Gley (Seventh International Congress against Alcoholism, April 3rd, 1899), "is consumed in the organism; it furnishes calories, and any substance which furnishes calories by its decomposition must be useful. A good many physiologists, notably Strassmann in 1891, have proved that from 80 to 90 per cent. of the alcohol consumed is eliminated in the form of water and carbon dioxide. While undergoing combustion in this manner, alcohol furnishes seven calories per gramme; a litre of wine would therefore furnish about 700 calories per diem, or a fourth of all the calories required by the organism. This combustion of alcohol spares to the individual the combustion of his albuminoid tissues to the extent of 6 to 7 per cent. . . . But alcohol is only a middling kind of food; it is dear, it does not give the same amount of nutriment as fat and the hydrocarbons. From the standpoint of the effect produced on nutrition, it is three times dearer than milk and eight times dearer than bread."

Looking at the use of alcohol as a food by people of unsound constitutions, such as the tubercular, it may possess peculiar advantages. Thus, Mircoli and Maragliano agree in advising the moderate use of alcohol in tuberculosis. The chief reason advanced in support of this view is that the antitoxic power of the blood serum to the germ of tuberculosis is greater in individuals who use alcohol moderately than in those who do not use it at all. Mircoli also mentions the fact that the dockmen of Genoa, who drink not less than three litres of wine per diem are not more subject to tuberculosis than men working at other occupations. In too many trades—tailoring, for instance—work has to be carried on in constrained attitudes, in a badly ventilated shop, for ten hours a day, by underfed people. Some of them are certain to be predisposed to, or already suffering from, tuberculosis, and therefore their chances of collapsing under the strain are considerable. If alcohol, taken in moderation, would enable these toilers to work and yet preserve a sufficient proportion of their too rapidly wasting physiological capital, it would be a great boon. From the standpoint of the treatment of acute suppurative lesions, something may be said in favor of this view. Surgeons know that in the treatment of compound fractures of the bones of an extremity alcohol renders

good service. When the assimilative functions are enfeebled, and will not transform solid food into chyle, alcohol supplies pabulum, and the calories necessary for the sustenance of the body. If the view advanced by Mircoli and Maragliano should receive support from other observers, the use of wines and spirits by tubercular subjects would receive an impetus quite superior to any accorded them so far.

In popular estimation, fresh meat supplies the best ration for the laborer. The Italian bread-eating navvy, when employed at the construction of the Canadian Pacific Railway, gave out after eight hours' work; his Irish or English compeers, who had a daily ration of beef, worked for ten hours. The greater staying powers of the meat-eating navvies would go to show that meat is superior to bread as a stimulating food. Meat may, however, advance in price—in fact, it has become dearer lately in America and Canada; and the advance in prices, even though it be of short duration, must give us pause. We also learn from the last annual report of the Registrar-General of Ontario, that 3,484 deaths from tuberculosis occurred in the Province during 1900. We have thus to face an advance in the price of meat and a large tuberculosis mortality. It may be opportune, therefore, to devote some consideration to the advantages of our old friend, oatmeal.

With a proportion of nitrogenous matter, which bears a favorable comparison with that of wheat, oats stand next to maize amongst cultivated cereals in the amount of fatty matter that is present. The percentage of saline matter is also high. "Oatmeal," says Dr. Cullen, "is especially the food of the people of Scotland; and was formerly that of the northern part of England—countries which have always produced as healthy and as vigorous a race of men as any in Europe."

Now, tubercular patients suffer from a demineralisation of their tissues a rapidity of physiological exchange, which makes for undue waste of the body, evidenced by phosphaturia. The use as a food of oatmeal, which is rich in phosphates, would therefore meet this indication.

Then, again, it is doubtful that any considerable percentage of the tubercular poor of Ontario will be accorded sanatorium treatment during the next two years. As our readers well know, free oxygenation of the tissues, which costs nothing, together with a liberal supply of fresh meat, which costs a good deal, are the

essential and co-operative features of the sanatorium treatment of consumption. If the State (Federal and Provincial Governments) would support sanatoria with subventions, the task of coping with tuberculosis would go bravely on. If not, then the sanatorium will be principally a club for rich patients, who can afford to pay for the luxury.

In the meantime, considerations as to the most efficient means of nourishing patients suffering from wasting diseases are always in order, and to none do they more especially appeal than to the tubercular subject, whose infirmity calls for a supply of expensive food, which his lean purse cannot afford to pay for. J. J. C.

SUDDEN DEATHS NOT TRACEABLE TO IMPORTANT PATHOLOGICAL LESIONS.

In popular estimation, sudden death, or death occurring rapidly in an individual, who, apparently at least, was a short time before in good health, may be due to murder, suicide, or the existence in the body of deceased of lesions of important organs.

Whatever the cause of sudden death may have been, or however obscure the circumstances surrounding it may be, people in general believe, that an autopsy will reveal the cause of death and, in formulating this opinion, the public mind and the medical mind are not far asunder. Certainly in the majority of instances of sudden death, an adequate explanation of the cause of the same may be expected, if a careful autopsy is made; but there are numerous exceptions. Our means of *post-mortem* investigation, it must be confessed, are still very imperfect. Is it not surprising that, although analysis enables the chemist to recover a considerable portion of the alcohol (or aldehyde derived from it) in the nervous centres, it is impossible to disclose the existence of any lesion whatever in cases of death from delirium tremens, or even in a case where an individual has died from acute intoxication within a few hours after swallowing a large quantity of alcohol?

An individual reputed to be in good health, wishes to have some hemorrhoids removed by a surgeon, and, after taking a few whiffs of chloroform, expires suddenly on the operator's table. Who can explain the deadly action of the primary effect of chloroform in such a case? The patient's death is said to have been caused by shock from chloroform, and is due to primary or laryngo-

reflex syncope. An autopsy reveals nothing. It furnishes no explanation, and leaves the surgeon more perplexed than he was before. Furthermore, although chloroform is for some patients so active a poison that it can produce sudden death after a few inhalations, we do not possess any data as to the co-efficient of susceptibility and of resistance offered by such or such a patient to these deadly vapors. In other words, an administration of chloroform to a person who has not taken it before may be looked upon as an experiment, extremely hazardous for some few persons, innocuous for others—the great majority. There are certain persons, reputed to be in good health, who cannot take even thirty drops of chloroform without incurring the risk of sudden death, and medical science cannot diagnose such causes in advance. Neither can a pathologist discover in the cadaver of a person who has expired under such circumstances, a lesion which satisfactorily accounts for sudden death from the primary shock of chloroform.

Professor Lancereaux, of Paris, recently published a paper on rapid or sudden death due to gastric disorders. He contended that sudden death, occurring in persons who are apparently in good health, is relatively frequent; but that the cause of such a death is very imperfectly understood. Deaths from embolism, from the rupture of an aneurism, or a rupture of the heart, are rare. In many cases of sudden death nothing of importance is discovered when an autopsy is made; the heart is empty, as if death had been due to a spasm.

One variety of sudden death, in Lancereaux's opinion, is of rather frequent occurrence. It supervenes during the course of a disease of the stomach. Death from this cause usually occurs during the night, towards the end of the forenoon, or the end of the afternoon. The heart is sound, the nerve centres do not appear to be affected. A case of sudden death in which the autopsy revealed such conditions was mentioned. Prior to the attack, which terminated in death, the individual referred to had had a medical consultation, after which repeated fainting fits occurred, terminating in death. The fainting fits had been preceded by disorders of the digestive organs. Lancereaux described a second case of a similar kind. He concluded that the preventive treatment of such cases would principally consist in endeavoring to ward off or cure dyspepsia.

We have been induced to mention these causes of sudden death,

which leave no marked lesions behind, because the average coroner's jury expects, after the cadaver of an individual who died suddenly and unaccountably, has been examined, that the pathologist who makes the autopsy will find a lesion capable of accounting for the catastrophe. Alcohol can kill suddenly and leave no lesion; so can chloroform. According to Lancereaux, dyspepsia, combined with intense emotion, can cause sudden death and leave no important lesion.

J. J. C.

THE CANADIAN ASSOCIATION FOR THE PREVENTION OF TUBERCULOSIS.

THIS organization held its annual convention in the Normal School building, at Ottawa, April 17th and 18th, under the presidency of Sir James Grant, who delivered the opening address. His Excellency the Governor-General, Honorary President, was present at the evening session, April 17th, and introduced Dr. Knopf, of New York, who read an excellent paper, entitled "The Mission of Societies for the Prevention of Consumption in the Anti-Tuberculosis Crusade." In the ensuing discussion, the views expressed by Dr. Knopf were endorsed, and he received a cordial vote of thanks from the Association.

Several committees were appointed, and Committee No. 1 reported on the organization and constitution for the Canadian Association and the election of officers.

Committee No. 2 reported on the relations of Governments and municipal bodies to the crusade for the prevention of tuberculosis; legislation, notification by physicians of the presence of the disease, inspection of schools and examination of children; inspection or warnings against dangerous meat, milk, etc.

Committee No. 3 reported on the availability of general hospitals, sanatoria, seaside and other resorts, the care of public conveyances (steamships, railway carriages, street cars, etc.) to prevent the spread of the disease.

Committee No. 4 reported on the collection and publication of useful information for the education of the people towards securing their co-operation with the medical profession.

The reports were discussed by both physicians and laymen in a very full and satisfactory manner. The Association decided to publish and distribute a large number of copies of Dr. Knopf's

paper, and also reprints of a paper by Dr. Richer, entitled "Tuberculosis, a Social and Medical Disease."

The officers for the ensuing year are: Honorary President, His Excellency the Right Hon. the Earl of Minto, G.C.M.G., Governor-General; President, Mr. W. C. Edwards, M.P.; Hon. Secretary, H. B. Small, M.D.; Hon. Treasurer, Mr. J. M. Courtney, C.M.G. The head office of the Association is at Ottawa, Ont.

It is to be hoped that the efforts made to establish this Association will prove to be successful, and that fresh energy will be put forth by laymen and physicians to assist the Association in accomplishing its very meritorious objects.

J. J. C.

PROPOSED CONVOCATION HALL FOR TORONTO UNIVERSITY.

DR. R. A. REEVE, President of the University of Toronto Alumni Association, has addressed the following appeal to all of the members of that body in behalf of the building of a Convocation Hall for our Provincial University:

My Dear Sir,—You are doubtless aware that our *Alma Mater* has had no Convocation Hall since the fire, and that it is in great need of a large building for convocations and various academic gatherings, including social functions, extension lectures, concerts, etc, etc. It is strongly felt by many that not to have a place where the hundreds of her students in the Faculties and different Colleges can rally and mix, and see and hear one another, deprives the University of an important means of promoting that *esprit de corps* which should prevail in every great institution, and animate the alumni in after life. A well-designed Convocation Hall holding 2,000 would give added dignity, if not prestige, to the annual events, and would permit the presence in large numbers of patrons and friends, whom no institution can afford to exclude or ignore. It would also promote various academic interests, which rely in large part on the aid of a sympathetic public. Such a building will cost \$50,000, and there is good ground to fear that, unless the requisite money be supplied by Alumni and friends, years will pass ere the finances of the University would warrant the Trustees in devoting funds to such purpose. This is the most weighty appeal yet made to the Alumni. The project is, however, quite feasible, and only needs for its success a united and loyal effort on the part of graduates, undergraduates and friends. Let us be equal to the occasion, and justify the hopes of many whose eyes are upon us, and who do not wish us to suffer by contrast. Devotion

to our *Alma Mater* should be the mainspring of our action, but the efforts of those attached to other institutions may well prove an incentive. The completion and dedication of a suitable Academic Hall would form a most fitting and gratifying feature of the celebration of the semi-centenary of our University.

The Faculties have already subscribed about \$6,000, members giving \$250, \$200, etc. The subscriptions hold if \$50,000 are promised, and they are payable in two instalments, June 1, 1902, and June 1, 1903. The Executive Committee feel that the best plan is for the graduates of the respective years in the several Faculties, and of federated and affiliated institutions, to work together. Your kind co-operation promptly given is most earnestly desired.

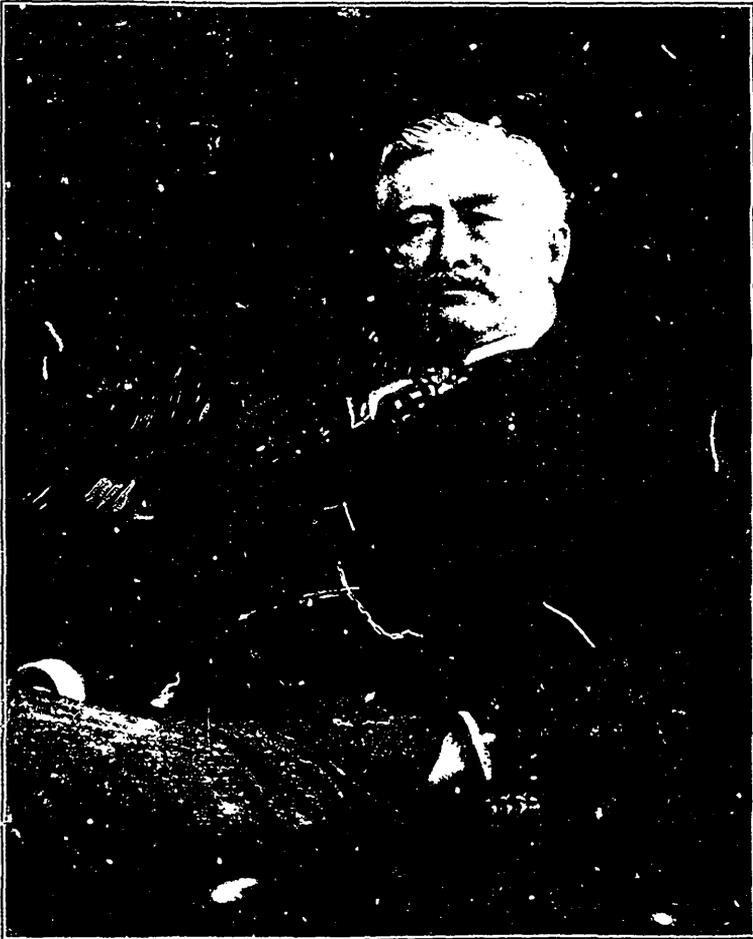
Yours sincerely,
(Signed) R. A. LITTLE, *President.*

It is, we feel, unnecessary for us to impress upon either the members of the University of Toronto Alumni Association, or the medical profession all over the Dominion, the great importance attached to this very worthy object. That a Convocation Hall would be an exceedingly valuable addition to our University goes without saying, and we earnestly trust that the matter will be taken up with such a zest and enthusiasm that it will be only a matter of weeks before its success is assured.

W. A. Y.

THE DOMINION MEDICAL COUNCIL.

WE feel sure that the profession all over our Dominion hailed with delight the news that the bill which practically brings into force Inter-Provincial Registration, and establishes that for which we have longed for years, viz., a Dominion Medical Council, passed its third reading in the House of Commons on May 7th. All honor is due our confrere, Dr. T. G. Roddick, who has fought so persistently in this direction for years past. To Dr. Roddick is due all the credit in connection with the passing of this measure. Many a man possessed of less doggedness and admirable stubbornness of character would have tired long ere this, but not so with our confrere. He started out to win, and has won the race in face of all opposition. The medical profession all over Canada will now benefit immensely by the passage of this bill, and graduates from the different provinces can soon cease to worry, and rest assured that, if circumstances demand it, they may change their address



DR. T. G. RODDICK, M.P.,

Father of the bill which practically brings into force "The Dominion Medical Council."

and perform the healing art in any province of our fair Dominion without interference.

We trust that the various provinces will at once enact for themselves the necessary legislation, so that the bill passed through the House of Commons will come into force without delay.

W. A. Y.

A FURTHER ADDITION TO OUR STAFF.

It is a source of pleasure to us to announce this month that an addition of value has been made to our staff, in the person of Dr. N. H. Beemer, of Mimico Insane Asylum. Dr. Beemer needs no introduction to the medical profession, he having for years past been prominently identified with the treatment of mental diseases, and has been looked upon as an expert among Canadian alienists. The Doctor will contribute from time to time to our pages articles upon the subject of which he has made a specialty. W. A. Y.

EDITORIAL NOTES.

Antitoxic Action of Alcohol in Tuberculosis.—Mircoli (*München. Med. Wochenschr.*, 1902, March 4th, No. 9, p. 353), working under the direction of Maragliano, of Genoa, and in the latter's laboratory, has formulated as results of his observations certain conclusions, which are directly opposed to much that has been written about the action of alcohol in the etiology of tuberculosis. According to this author, alcohol, instead of being hurtful, is positively useful to tubercular patients, and is opposed to the development of tuberculosis in persons who are as yet free from that disease. Mircoli studied the quantity of serum necessary to neutralize *in vitro* the minimum dose of Maragliano's tuberculin, which would be fatal to a guinea-pig. Maragliano's tuberculin is a watery extract made from tubercular cultures. In making comparative studies of the serum of healthy individuals with that of alcoholic subjects, Mircoli discovered that the antitoxic power of the serum of alcoholic subjects towards Maragliano's tuberculin was much higher than that of healthy individuals. Moreover, the injection of Maragliano's antitubercular serum causes an increase of the antitoxic power of the serum, an increase much more marked in alcoholic than in non-alcoholic subjects. However, the antitoxic power

of the serum is only marked in subjects who use alcohol moderately, that is to say, in those who have not yet acquired organic lesions of the central or peripheral nervous system. In support of these data, which go to show, according to Mircoli, the preventive and curative effects of alcohol in tuberculosis, he mentions the fact that the dockmen of Genoa, who drink not less than three litres of wine per diem, are not more subject to tuberculosis than men working at other occupations. As a practical conclusion, Mircoli, who in this particular is in accord with Maragliano, advises the moderate use of alcohol in the treatment of tuberculosis, in order to increase the antitoxic power of the blood in such cases.

Polymicrobial and Ordinarily Non-Suppurative Osteomyelitis.—According to Dr. Lannelongue's view, acute osteomyelitis may be produced by different microbes. It is most frequently produced by the staphylococcus, the ordinary effects being suppuration, necrosis, abscesses, or hyperostoses of the affected bones. But it may also exist in a graver form, which does not terminate in suppuration, the organism being unable to react against so powerful an intoxication. If cultures are sown with blood taken from the bone of a living subject, attacked with one of these severe forms of osteomyelitis, two, and sometimes three, associated microbes are found, viz., the staphylococcus and the streptococcus, the streptococcus and the bacterium coli. These microbial associations appear to increase the virulence of the germs, and cause an aggravated form of the disease. At the onset, osteomyelites of these forms assume the appearances of severe attacks of articular rheumatism, typhus or pyemia. The signs of an intense infection are very marked, and death rapidly supervenes. Of the nine cases observed by Dr. Lannelongue, the upper extremity of the femur was attacked in four cases, the lower end of the femur in one case, the lower end of the humerus in one case, and the bones of the cranium in three cases. He thinks that, in cases of this kind, an early and free trephining of the affected bone is the only resource. By employing this method he has obtained several successful results.

Comparative Consumption of Alcohol in Different Countries.—Triboulet and Mathieu reproduce in their work on Alcohol and Alcoholism (1901), a statistic relating to the comparative consumption of alcohol in different countries. This statistic was prepared by M. Denis, member of the Genevese Statistical Society, and published in the reports of the Congress of Bale, 1896. In

this statistic, France occupies the front rank with 13.81 litres of alcohol per capita; that is to say, alcohol derived from wine, cider, beer, cognacs, liqueurs, and bitters. Switzerland follows, with 11 litres; Belgium next, with 10.59; Italy, 10.22; Austria-Hungary and Denmark, 10.2 each; Holland follows with 6.37, and the United States, 6.07. Finally other countries, two of which were formerly much addicted to the use of alcohol, do not reach the 5 litre limit. These are Sweden, 4.39; Norway, 3.31; and last of all, Canada, with only 2.3. Dr. R. Romme, in a still more recent work, "Alcoholism and the Struggle against Alcohol in France," puts the relative consumption as follows: France, 14.19 litres; Belgium, Germany, 10.50; British Isles, 9.25; Switzerland, 8.75; Italy, 6.60; Holland, 6.25; United States, 6.10; Sweden, 4.50; Norway, 3.00; Canada, 2.00.

True Cholagogues.—The latest work of Gilbert and Carnot on the hepatic functions contains interesting data for the clinical observer, as well as the physiologist. They say that the only genuine cholagogue is bile. This action of bile results from the general law, which attributes to each secretion an exciting action upon the secretory apparatus itself. The salicylate of sodium, according to these authors, appears to have equally an undoubted action upon biliary secretion. Linossier's view is quoted, in which he says: "The salicylate of sodium accumulates in the liver, and the excess is eliminated by the bile, whence the explanation of the cholagogue action of this drug." The bicarbonate of sodium, the chlorate of potassium, the benzoate of sodium, and the benzoate of lithium, aloes, ipecac, muscarine, turpentine, are feebly cholagogue in different degrees, whether they act on the secretion or the excretion of bile. Other substances reputed to possess cholagogue properties are actually the subjects of inquiry (calomel, corrosive sublimate, sulphate of magnesium, bromide of potassium, alcohol, ether, glycerine, colombo). Other medicines, again, diminish biliary secretion (sugar of lead, iodide of potassium, atropine).

Correlation of Scientific Observation and Folklore.—Dr. d'Angerville, in a study of the peculiarities of human hands, published in *La Science Illustré*, says: "Many persons have hair on the hand. . . . Kidd, the English naturalist, has recently called attention to the fact that the hair on the back of the hand is always absent on the joint that bears the nail, is rare on the middle joint, and is always present on the first joint. . . . This hair is

evidently the remains of the fur that our pre-human ancestors possessed. . . . It is thus irregularly distributed, because the end joint is much more exposed than the others to contact and friction." Kidd's observation corresponds with a notion, which occasionally crops up from folklore. An egotist makes a mental tracing of the ancestry of a despised enemy, and if sufficiently enraged, has the courage to develop the mental picture into words. Thus, a politician of the baser sort, who had been overreached in his canvass of a certain street by the cash or cunning of a rival, shook his fist under the latter's nose and shouted: "R—— P., you're covered all over with hair. You've got hair right down to your nails."

The Hindoo Xiphopagi.—Dr. Doyen, Paris, after a careful study of the Hindoo xiphopagi reported that it was an error to describe a membrane as uniting these twins. There was no supplementary tissue uniting them. What had been improperly called a uniting membrane was only an artificial pedicle produced by the stretching of the tissues, and which increased in length with the age of the twins. The formation of these double monsters is explained by the simultaneous development in the same ovule, doubly fecundated, of two juxtaposed embryos, always of the same sex. These monsters possess a certain individuality, although their circulations communicate. Thus Radica had a temperature of 99 5-10 F., while Doodica had one of 102 2-10 F. However, methylene blue injected subcutaneously into Doodica, was eliminated from the urinary secretions of both the twins. After they had been separated by an operation, performed by Dr. Doyen, Feb. 9th, Doodica succumbed to tubercular peritonitis. Radica has gained in weight, and her health is now said to be good.

J. J. C.

PERSONALS.

DR. ECCLES, of London, Ont., married again a few weeks ago.

DR. CHARLES TEMPLE, of Spadina Avenue, started this spring to ride to hounds.

DR. GEE, of Carlton Street, has removed from Carlton Street to 214 Wellesley Street.

DR. FRANCIS OAKLEY died at his late residence, 279 Dovercourt Road, Toronto, on May 7th, aged 72 years.

DR. K. BRADSHAW, of 494 Spadina Avenue, has removed.

DR. EDGAR, Medical Superintendent Hamilton General Hospital, has resigned his position.

DR. F. LEM. GRASETT, with Mrs. Grasett, sailed to attend the Coronation festivities a few days ago.

DR. HARRY VAUX, of Bond Street, left ten days ago for merrie England, and will be away about two months.

DR. ALLEN BAINES has taken up golf as a recreation, and will, we understand, soon beat Bogie at his own game.

AMONG the medicos from Toronto who have left to attend the Coronation are Dr. F. L. Grasett and Dr. Hood.

DR. CHARLES R. DICKSON, of Toronto, attended the Convention of Railway Surgeons at St. Louis, Mo., last month.

DR. BRUCE SMITH, of Brockville Asylum, will attend the American Medical Association at Saratoga this month.

DR. WALTER McKEOWN has removed from McCaul Street to No. 7 College Street, the residence of the late Dr. James Burns.

DR. BRUCE RIORDAN and Mrs. Riordan enjoyed a ten days' outing with Mr. Fitzhugh of the Grand Trunk Railway last month. They left in Mr. Fitzhugh's private car, and went to New London, Conn., Boston, and New York.

DR. ALBERT A. MACDONALD, of Simcoe Street, has in course of erection now a very fine electric carriage with pneumatic tires. The trap will be finished shortly, and will eclipse anything in the line of automobiles in Canada. This is the second electric carriage Dr. Macdonald has had.

DR. W. A. YOUNG has been invited to attend the American Medical Association Convention at Saratoga Springs, N.Y., as a guest of the Association. The Doctor and Mrs. Young will therefore leave on the 8th inst. for Saratoga, going by way of Montreal and the White Mountains. After the meeting they will sail down the Hudson River to New York, and spend ten days at Atlantic City, N.J., before returning home.

❁ Items of Interest. ❁

The Late Sir William MacCormac.—It has been decided to place a bust of Sir William MacCormac as a memorial in the central hall of St. Thomas' Hospital, London.

A Memorial to Dr. Semmelweis.—About \$9,000 have been collected by subscription all over the world to erect a memorial to Dr. Ignaz Semmelweis, the founder of antiseptic obstetrics.

Reception to Dr. Wyeth.—On the evening of April 5th, a reception was given to Dr. John A. Wyeth, of New York, President of the American Medical Association, by the Medical Club of Philadelphia, at the Hotel Bellevue.

The One Hundredth Jag.—The *Philadelphia Medical Journal* says that it is very rare that a man survives his one hundredth jag. The maximum capacity of a man for alcohol is about two thousand gallons of whisky in fifteen years.

Attention, Physicians.—We desire to correspond with physicians who desire good locations for the practice of medicine in the United States. Full information of excellent locations given free.—INDEPENDENT BUSINESS BUREAU, Waterloo, Iowa.

Tuberculosis Non-Contagious.—Dr. S. A. Knopf, the well-known authority on tuberculosis, in addressing the New York Academy of Medicine lately, stated that tuberculosis was not contagious. A man with well-defined tuberculosis could do his work daily if proper precautions were taken and the sputum was removed and destroyed.

Wampole's Branch Office.—Henry K. Wampole and Co. have opened a branch office in Montreal, No. 20 St. Alexis Street (over the Bank of Ottawa) which will be in charge of their representative, Mr. R. E. Pineo. It is the intention to carry but a limited stock in this office, that small city orders for immediate delivery can be promptly handled.

The Association of American Physicians.—The Association of American Physicians has elected the following officers for the coming year: President, Dr. James Stewart, Montreal; Vice-President, Dr. William T. Councilman, Boston; Secretary, Dr. Henry Hun, Albany, N.Y.; Treasurer, Dr. J. P. C. Griffith, Philadelphia; Recorder, Dr. S. Solis Cohen, Philadelphia; and Councillors, Dr. Charles G. Stockton and Walter Reed.

Awarded Her Damages.—Miss Mary Hinman, of Grand Rapids, Mich., who sued Dr. Herrick for \$5,000 because he allowed medical students to witness an operation performed upon her, was recently awarded \$75 damages by a Circuit Court jury.

Jewish Hospital for Brooklyn.—A largely attended meeting was held on April 27 at Temple Israel, Brooklyn, N.Y., for the purpose of increasing the interest in the proposed Jewish Hospital in that borough. It is planned to raise at least \$100,000 with which to begin the work of building. About \$35,000 has already been subscribed, and it is expected that \$70,000 will later be raised.

Canadian Medical Association.—The next annual meeting will be held in Montreal, on the 16th, 17th, and 18th of September, 1902, under the presidency of Dr. Francis J. Shepherd, of that city. The local Secretary is Dr. C. F. Martin, 33 Durocher Street, Montreal; the General Secretary, Dr. George Elliott, 129 John Street, Toronto. Prof. Wm. Osler will deliver the Address in Medicine, and Dr. John Stewart, Halifax, N.S., the Address in Surgery. Any members of the Association or the profession in Canada contemplating contributing papers or demonstrations should send notice of their intention to either the Local or General Secretary as soon as convenient.

The Ontario Medical Association.—The Ontario Medical Association opens in a few days in the Normal School Building in this city. It is earnestly hoped that the profession will turn out *en force* and make the 1902 convention a huge success, in that way giving encouragement to the worthy president, Dr. N. A. Powell, who has worked very hard to ensure this year's attendance being the largest on record. It is expected that Dr. Roswell Park, of Buffalo, will be a guest of the Association, though it cannot be promised that he will take a very active part in the proceedings. The list of papers promised is large, and the quality of the clinical material which will be presented will be of the best. Let us all be present, now, pay the modest fee required, and in that way, if in no other, assist a worthy cause.

Prize Essay on the Dangers from Self-Drugging with Proprietary Medicines.—The Colorado State Medical Society offers a prize of \$25 for the best essay, for circulation among the laity, upon the dangers of self-drugging with proprietary medicines. The competition is open to all. Essays must be typewritten in the English language, must contain not more than 3,000 words, and must be submitted before June 15th, 1902. Each essay must be designated by a motto, and accompanied by a sealed envelope, bearing the same motto, and enclosing the name and address of the author. The essay receiving the prize will become the property of the Society for publication. Others will be returned to their authors. Essays should be sent to the Literature Committee. Dr. C. A. Graham, Sec'y, Stedman Block, Denver, Colorado.

Ants in Relation to Anthrax.—An English doctor residing in Cyprus has encountered remarkable cases of disease being transmitted in the sting of the solitary ant. In one instance a woman was stung in her sleep by one of these insects, and the wound showed active signs of anthracitic infection. It was then found that in the field adjoining her cottage there was a dead sheep, which had lain there for a week since it succumbed to that disease. Here, then, is yet another insect to be added to the growing list of those that, while not dangerous in themselves, are capable of great mischief, owing to their transmission of malignant bacilli.—*Modern Medicine*.

The Japanese in Massage Work.—The ability of the blind to perform massage successfully has been clearly demonstrated in Japan, where they are employed exclusively for this work. Their wonderful delicacy of touch has enabled them to acquire a high degree of proficiency, and therefore when massage was introduced into Russia, their employment also became general in that country. At the institute for the blind in St. Petersburg a considerable number of students are carefully instructed in the art of massage and also in the main points of physiology and anatomy. Their introduction into other European countries has thus far not been attended with success, although Germany is now making arrangements tending to their permanent employment.

Death of Dr. Moriz Kaposi.—Professor Kaposi, the distinguished dermatologist of Vienna, has departed this life. The deceased was a native of Hungary, was long and intimately associated with Hebra, whose son-in-law he became and whom he succeeded as Professor of Dermatology in the university. "While he contributed much to the literature of his specialty," says the *New York Medical Journal*, "Kaposi's greatest success was as a clinical teacher. The assured certainty of his diagnosis, the marvellous keenness of his observations, his wonderful memory, and his vast experience in his field, made his lectures vividly interesting and always instructive. He was a man of marked originality, and his death is a great loss."—*Medical Bulletin*.

Sterilize Catheters in Saturated Solution of Ammonium Sulphate.—M. W. Herman (*Brit. Med. Jour.*, June 1st, 1901) states that if silk catheters are boiled in plain water they soon become rough, cracked, and totally unfit for use. If, however, they are boiled in a saturated solution of ammonium sulphate they remain unchanged. Boiling from three to five minutes in the solution is sufficient to sterilize extremely dirty catheters, but they may be boiled for five hours and retain their polish. The only change is that they become more elastic and are therefore improved. After being removed from the solution they may be lubricated with vaselin and used immediately, without being dried, since the solution of ammonium sulphate does not irritate the mucous membrane.

Nelaton and elastic catheters may also be sterilized by boiling in the same solution.—*Medical Times.*

The American Congress of Tuberculosis.—The officers, in response to a very general and strong expression from the Western and South-Western States, Mexico, and the Central and South American Countries, have decided to postpone the session of the American Congress of Tuberculosis to the 2nd, 3rd, and 4th days of June, 1902 (the Banquet on the 3rd of June), to be held at the Hotel Majestic, New York City. This will enable our members and delegates to attend the following meetings at Saratoga Springs in June: The American Academy of Medicine, June 7th; American Association of Life Insurance Surgeons, June 9th; American Association of American Editors, June 7th; the large Meeting of the American Medical Association, June 10th to 13th. The press is requested to kindly announce this postponement.

Mississippi Valley Medical Association.—The Chairman of the Committee of Arrangements for the twenty-eighth annual meeting of the Mississippi Valley Medical Association, Dr. A. H. Cordier, has announced the dates of the next meeting in Kansas City, Mo., as October 15, 16, 17, 1902. The President, Dr. S. P. Collings, of Hot Springs, Ark., has announced the orators for the meeting, Dr. C. B. Parker, of Cleveland, O., to deliver the address in Surgery and Dr. Hugh T. Patrick, of Chicago, the address in Medicine. selections which will meet with the approval of every physician in the Mississippi Valley. A cordial invitation is extended to every physician in the United States, but especially of the Valley, to attend this meeting and take part in its proceedings. Titles of papers should be sent to the Secretary, Dr. Henry Enos Tuley, 111 W. Kentucky Street, Louisville, Ky., at as early a date as possible, to obtain a favorable place on the programme.

Was Cleopatra of Egypt a Physician?—Zervos has unearthed old documents to prove that Cleopatra was the author of several works on medical subjects. They show a thorough understanding of the theme, he remarks—rare powers of observation, and enviable conciseness of statement. Her "*De Morbis Mulierum*" includes good descriptions of "phlegmons of the uterus," displacements, etc. She observes that hemorrhoids are rare in women, but processes resembling them are frequent in the cervix. She lived at the time the Alexandria school was at the zenith of its fame, and may have taken a medical course there. It only required six months. She killed herself, according to Galen, in the most scientific manner by having the asp's poison poured into a wound in her arm. She also embalmed Antony's body with a dexterity showing great anatomical knowledge. Zervos refers also to several Latin works, dating from 1586, 1597, and 1612, which quote from her writings.—*Journal of the American Medical Association.*

Another Change in "The Canada Lancet."—Dr. H. B. Anderson, who has for some time past been Editor-in-chief of *The Canada Lancet*, has resigned all connection with that publication. The Doctor could not acquiesce in the views of the business management, and, as they did not show any wish to meet him even half way, he stepped down and out. We understand that Dr. John Ferguson, who by the way is President of the Ontario Publishing Co., the owner of *The Canada Lancet*, in addition to *The Canadian Magazine*, is to be Editor from this date. What the editorial staff will do now is the question. There are rumors in the air of a general resignation. If so, can *The Lancet* still claim its Trinity connection? In any event, let Toronto University look out, as we fear that some fur will soon start to fly.

Removal of Gunpowder Stains.—Dr. E. G. Corbett, of Hampton, Fla., writes: "On Christmas Day a boy of twelve filled a vaselin bottle with powder and exploded the same. I arrived on the scene about three hours after the accident and found the cornea and sclerotic of both eyes and the face literally blown full of powder. I removed a dozen or more flakes of powder from each cornea with a foreign spud; also removed the powder from the sclerotic. Did the operation under a four per cent. solution of cocain. After the operation I used a fifteen per cent. solution of hydrozone in the eyes. After removing the particles of glass from the face, I kept a cloth over it saturated with a fifty per cent. solution of hydrozone. At the end of two weeks I used a saturated solution of boric acid in the eyes, and painted the face twice daily with equal parts of hydrozone and glycerin. The eyes are well, and powder stains have disappeared from the face.

The Cause of Leprosy.—Dr. Jonathan Hutchinson, former President of the Royal Academy of Surgeons, who recently returned to England, after studying the causes of leprosy in South Africa, has arrived at the conclusion that the primary cause of the disease is the use, as food, of badly cured salt fish, which is sent inland from Cape Town and elsewhere on the west and south coasts and is largely consumed by the farmers and in the industrial centres. While giving this as the chief cause of the diffusion of leprosy, Dr. Hutchinson obtained conclusive evidence that leprosy, in very exceptional circumstances, may be communicated from person to person. He does not believe that it is either infectious or contagious, in the proper sense, but may be communicated by eating food contaminated by lepers' hands. Dr. Hutchinson suggests, as preventive measures, legislative control of the fish-curing establishments, the diffusion of information in regard to the danger of communication, and the establishment of isolation homes for the lepers during the stage of the disease involving a risk of contracting it.—*Phil. Med. Jour.*

Phthisiophobia.—In the eagerness to eliminate phthisis from the community, it is perhaps unavoidable that enthusiasts should occasionally err from excess of energy and stumble into the use of exaggerated forms of language and hinder progress by lack of tact and consideration for ancient prejudice. In dealing with phthisical cases it is needful that a wide-angled lens should be allowed to mental vision, and that the sociological, international, and humanitarian aspects should not be forgotten. As Mr. Malcolm Morris neatly puts it, "It is not scare but cure that is wanted." The United States Government has been badly advised in enforcing measures which cannot fail to have the effect of branding phthisis as a dangerously contagious disease. Phthisis is not to be considered a monster to be fled from, but a danger to be effectually overcome. Whilst an encouragement is to be given to every earnest and intelligent measure aiming at the prevention of the spread of tuberculosis, exaggerated statements and precipitate action will only result in havoc to the sufferers and injury to the community. Phthisiophobia is an enemy to rational progress, and must be treated as such.—*Medical Press.*

More Property for the Muskoka Cottage Sanitarium.—Thirty additional acres have been purchased by the Association to be added to the property of the Muskoka Cottage Sanitarium, and a new system of waterworks is to be installed, which will give the sanitarium an abundant supply of fresh spring water. Dr. C. D. Parfitt has been appointed physician in charge of the new Free Hospital for Consumptives that has been erected under the direction of the N.S.A., and he left for Gravenhurst on the 8th ultimo to enter at once upon the discharge of his duties. The report of the Secretary showed that patients were being received almost daily into the Free Hospital, applications coming from Toronto and many different parts of the Dominion. Accommodation has already been provided for fifty patients, and the necessary arrangements have been made to extend this to one hundred patients so soon as the call demands it. The Secretary reports that the contributions to the maintenance of the Free Hospital had reached \$7,500, but as \$30,000 a year would be required to maintain one hundred patients, further help in this direction is urgently required, though no one is being refused admission for want of needed funds.

The Association of Military Surgeons.—The eleventh annual meeting of the Association of Military Surgeons of the United States will convene in Washington, D.C., on Thursday morning, the 5th inst., 1902, and continue in session during the two following days. Every member is cordially urged to be present and participate in all the exercises, both social and literary. The social headquarters will be at the New Willard Hotel, corner 14th Street and Pennsylvania Avenue, N.W. The evenings will be given up

to pleasure, which will be amply and generously provided for by the Committee of Arrangements. It is much desired by the committee that the members of the Association be accompanied by ladies, as special arrangements will be made for their entertainment by the Ladies' Auxiliary Committee. The first session of the meeting will be held in the National Theatre, June 5th, at 10 o'clock a.m. The President of the United States is expected to attend this session. All subsequent sessions will be held in the convention hall of the New Willard Hotel, at 9 a.m. and 2 p.m. daily. There will be an exhibit of Surgical Instruments and Dressings, and all lines pertaining to Military Surgery and Medicine. Many of the leading houses of the United States will be represented at this exhibit.

Honor to a Canadian Physician.—Englishmen are not only waking up to the worth of the long-despised colonial as a soldier, but have begun to appreciate his scholarship as well. Recently Dr. H. A. Beatty, M.R.C.S., received a cable from Dr. A. H. Tubby, F.R.C.S., the distinguished London surgeon, offering him the surgical registrarship of Westminster Hospital, London. Dr. Beatty, who has recently returned home, after spending four years in post-graduate study abroad, was lately senior house surgeon of Westminster Hospital, London, and his brilliant work as assistant to eminent English surgeons, including Sir Frederick Treves, has resulted in the invitation extended to him to become junior member of the operating staff in the celebrated old hospital across the way from Westminster Abbey. Appointments even as house surgeons on the staff of Westminster Hospital are jealously sought for by the cleverest students that go out of the English universities, and the offer to Dr. Beatty comes as a distinguished honor to a graduate of Toronto University. No Canadian has ever been so highly honored before. Dr. Beatty is still on the bright side of thirty, and has had a splendid experience in the largest hospitals of London and Vienna. He is the eldest son of Mr. Henry Beatty, of 297 Simcoe Street, is well known as head of the C.P.R. steamboat department, and in navigation circles generally.

The Canadian Association for the Prevention of Tuberculosis.

—The meeting of this Association took place at Ottawa on the 17th and 18th of April, and was well attended. Dr. S. A. Knopf, of New York City, delivered the address, and received a very warm reception from all present. Among those present at the meeting from Toronto were: Drs. J. J. Cassidy, Alex. McPhedran, F. N. G. Starr, Rudolf, J. T. Fotheringham, J. A. Temple, All Baines, E. J. Barrick, and J. H. Elliott, of Gravenhurst. We regret not being able to report the meeting more fully, owing to our having to go to press for May, and be out, as usual, promptly on the first of the month. The following were the officers elected: President, W. C. Edwards, M.P., Russell; Honorary Secretary,

Dr. H. B. Small, Ottawa; Treasurer, J. M. Courtney, Ottawa; Vice-President, Dr. Thorburn; Council, Sir James Grant, Ottawa; Sir William Hingston, Montreal; Dr. La Chapelle and Dr. Richer, Montreal; Dr. P. H. Bryce and Dr. Barrick, Toronto; Dr. Fagan, Victoria, B.C.; Dr. Bell, Winnipeg; Mayor Beck, London; Dr. McNell, Charlottetown. The following were added to the Council on the nomination of the Governor-General: Hon. Sidney Fisher, M.P.; R. L. Borden, M.P.; C. B. Powell, M.P., Ottawa; Hon. Wm. Templeman, G. E. Perley, Ottawa; A. W. Fleck, Ottawa; Dr. Montizambert, Ottawa; Prof. W. J. Robertson, Ottawa.

A Signal Honor Bestowed Upon a Canadian Surgical Instrument House by the Imperial War Office.—On May 5th, the firm of Chandler & Massey Limited, of this city and Montreal, had the honor of receiving direct from the War Office, London, Eng., a most substantial order for a full line of their own surgical dressings and supplies, for use in South Africa, and also at Netley Hospital. (See half-tone of original letter, page xiv. this issue.) We understand that this firm is the first in Canada to receive an order of the kind, and they certainly should feel highly honored, if for no other reason than that. We hear that Chandler & Massey Limited have been complimented on almost every hand for the style and quality of the dressings, etc., supplied for the use of the 10th Field Hospital, which left Canada for South Africa some months ago now, several of the hospital surgeons in active service on the field having so stated to the War Office. The C. & M. Field Operating Table has also been adopted by the War Office as the best submitted for all purposes, this firm having had to compete for this practically against the world, with the result that the British Board of Examiners reported the C. & M. to be the best operating table that went to South Africa. A further evidence that Canada will not take a back seat in the manufacture of fine ligatures, gauze dressings, etc., lies in the fact that Mr. Mayo Robson, Mr. Victor Horsley, and Mr. Clinton Dent have recently placed good orders with the same firm as above referred to, thus proving that, though only "from the colonies," we can in this country do the trick.

An Indictment Against Tobacco.—The very latest that we have heard of the antisocial influences of tobacco is that the cigarette has been brought up in scientific custody, charged by Dr. Le Juge de Segrais, of Luchon, with the infliction upon its over-confiding devotees of the physiological mutilation of impotence. The prosecution has been opened in the current number of the *Archives Generales de Medecine*, and the charge has been further maintained by the corroborative testimony of Dr. Georges Petit, who conducted experiments on a number of conspicuously philoprogenitive animals, dogs, cocks, rabbits, and guinea-pigs, by the various methods of inhalation (of smoke) of gastric injections, and of rectal en-

mata. Sclerotic changes were thus induced in the testes—and ovaries—of the animals subjected to experiment. Coming from the land of dwindling population and decreasing families, such information possesses special value. It is interesting to note in this connection that in the quaint and rare work of the French explorer, Andre Thevet, who went, in 1555, to America with the object of taking part in the foundation of a French colony near the mouth of the Rio Janeiro, there is special mention made of the antiaphrodisiac properties of tobacco. In "Les Singularites de la France Antartique, autrement nomme Amerique, et de plusieurs Terres et Isles decouvertes de notre temps," a quarto dear to the heart of the bibliomaniac, and bearing date 1558, this observant traveller tells us that "the women in America forbore the taking of Tobacco, because they have been taught that it will hinder conception and bodily lust" (Parkinson's paraphrase). What physiologist, even in the twentieth century, can be sure that he has made an absolutely original discovery?—*Medical Press*.

The Ontario Medical Association.—The twenty-second annual meeting will be held in the Education Department, Toronto, on June 4th and 5th. The Committee on Papers report very satisfactory progress, as the response to the preliminary notice has been good, and the papers promised are on subjects of general interest. There is space for further communications, and the hearty co-operation of the members in contributing to the programme will greatly assist the Committee in bringing their work to a successful issue. A feature of the meeting will be a session entirely devoted to the exhibition of clinical cases, medical, surgical, skin, and diseases of children. To facilitate the bringing of patients to the meeting from places outside of Toronto, arrangements have been made with the railroads whereby such patients will enjoy the same privileges as regards reduction of fare as are extended to members of the Association. It may be well to emphasize the point that persons holding railroad certificates receive reductions on the return trip, in proportion to the number of certificates presented to the Secretary at the time of the meeting, and not to the total number of persons in attendance at the meeting. Some of the subjects to be presented for discussion are: Dry Labors, Placenta Prævia, Obstetric Emergencies, Anesthesia, Tonsillar Hypertrophies, Pneumonia, Cerebro-Spinal Meningitis, Ventr-Fixation, Anomalous forms of Smallpox, Cerebral Embolism, and others. The provisional programme will be mailed to all physicians in the Province on or about May 20th, and it is desired that those wishing to present papers, or notes of cases, or patients, or who are desirous of taking part in the discussion of any of the above-mentioned subjects, will inform the Secretary to that effect prior to that date.

The American Medical Association.—The American Medical Association opens at Saratoga Springs, New York, on the 10th

inst. This year's meeting promises to be one of the very best, if not the best, for many years past. The list of papers already promised is lengthy, and each one is scientific, and will be found interesting to many who will attend the different sections. The headquarters of the Association will be at the United States Hotel, and the Convention will hold its meetings in what is said to be one of the finest halls on the American Continent, right in the heart of the village, with a seating capacity for 5,000 persons. The general exhibit will be displayed in the Hawthorn Springs Building, within a block of the Convention Hall, under which will be found post-office, telegraph office, and bureaus of information and registration. The Committee of Arrangements have secured the support of the Saratoga Business Men's Association, who will alone make the meeting a huge success. The entertainment Committee have planned out a splendid programme, guaranteeing all who go to Saratoga an enjoyable time. The entertainments will include: (1) On Tuesday evening, June 10th, a Piazza Concert at the United States Hotel; (2) a Concert at Congress Spring Park on Wednesday forenoon; (3) Wednesday afternoon, a Carriage Drive about the village, and Reception at "Yaddo"; (4) Wednesday evening, Reception and Ball at United States Hotel; (5) Thursday morning, June 12th, Excursion to Lake George for the ladies, and (6) Thursday evening, President's Reception at the United States Hotel. Dr. Geo. F. Comstock is chairman of the Committee of Arrangements, and Dr. J. R. Swanick, chairman of the Committee on Hotels, both of whom will be glad to give all information on request. The usual arrangements have been made with all the railroads as to transportation.

The Physicians' Bills on the President's Case.—Various conflicting statements have appeared in the daily papers of Buffalo concerning the compensation of the physicians concerned in the case of President McKinley, but the following statement which was written by Mr. John G. Milburn, president of the Pan-American Exposition Company, and published in the *Buffalo News*, says that none of the reports hitherto published are correct. Mr. Milburn is quoted as saying: "There is no basis whatsoever for the statement that the bills for the services of the doctors who attended the late President were referred to Senator Hanna and myself; that any bills rendered had been revised or cut down, or that I have anything to do with the preparation of any bill to be submitted to Congress. Some time ago I was requested to confer with the doctors about their compensation. No bills have been rendered by them. We met and talked the matter over. There has been no controversy between the doctors themselves or between me and any of them. As the result of our talk certain figures were made which were agreed on all round and impressed me as very reasonable, and those figures I sent to Washington, which is the last I have heard

of the matter. It is unjust to the doctors to represent them as having rendered bills which were cut down, or as having asked for compensation which was not allowed, or as differing between themselves. I am not at liberty to give the figures which I sent to Washington. Those which are given in the *Enquirer* are not correct. That is all I can say." The figures referred to as having been given in the *Enquirer* are as follows: Dr. Matthew D. Mann, \$10,000; Dr. Herman Mynter, \$5,000; Dr. Roswell Park, \$5,000; Dr. Charles McBurney, \$2,500; Dr. Charles G. Stockton, \$1,000; Dr. N. W. Johnson, \$1,000; Dr. Janeway, \$1,000.—*N. Y. Med. Journal*.

Tannoform.—Recent communications of A. Caselli and Preiss show that tannoform is fully entitled to its good reputation as an intestinal antiseptic. The latter author, having made a series of comparative investigations on the properties of several modern substitutes for tannin available for the treatment of intestinal diseases of suckling infants, describes tannoform as an appropriate remedy in chronic and acute catarrhs of the small intestine and of the rectum, in infantile cholera and tuberculous diarrhoea, but a favorable result may only be looked for in the case of children who have passed the second month. New and important communications have been published by Strassburger and Nolda with respect to the application of tannoform in the nocturnal sweats occurring in phthisis. In view of the fact that the internal administration of anhidrotics soon gives rise to disturbances in the nutrition, which may have fatal consequences, it is most gratifying to know that tannoform is an excellent, if not the best available, means for checking this unpleasant symptom, since, correctly applied, it almost invariably produces good results, whilst in no case has it been known to fail entirely. Tannoform dusting powder (1 part tannoform, 2 parts talcum venetum) should be rubbed in, rather than dusted over. In mild cases it should be rubbed into the skin of the chest with the palm of the hand, in graver cases into the neck and back as well, so as to work the powder into excretory ducts of the sweat-glands. In the morning and before the application of the tannoform in the evening the treated parts of the skin should be rubbed with brandy, so as to render the sweat-glands susceptible for the action of the tannoform. In military hygiene remarkable facts have been elucidated by the new experiments of F. Merz, of the Swiss Army Medical Corps, with regard to the utility of tannoform as a means of preventing hyperidrosis of the feet and the consequences arising therefrom. From these experiments Merz formulates the conclusion that tannoform constitutes an excellent and completely innocuous remedy available for considerably reducing the occurrence of foot-soreness, and that a systematic application of tannoform as a prophylactic cannot fail to considerably enhance the marching capacity of an army.

The Physician's Library.

BOOK REVIEWS.

A Reference Hand-Book of the Medical Sciences, embracing the entire range of Scientific and Practical Medicine, and allied science. By various writers. A new edition, completely revised and rewritten. Edited by ALBERT H. BUCK, M.D., New York City. Volume IV., illustrated by chromo-lithographs and 859 half-tone and wood engravings. New York: William Wood & Co. 1902.

It is now some months since we had the privilege of reviewing the last volume of this excellent work, and of adding our word of praise to what has really turned out to be a medical book of more than usual worth. We find that Volume IV. of the Reference Hand-Book has not only a large list of contributors, but a list of names of men in the profession who are known to have literary merit. We find the names of such well-known Canadian writers as Dr. J. George Adami, of Montreal; Dr. G. E. Armstrong, of Montreal; Dr. A. D. Blackader, of Montreal; Dr. F. G. Finlay, of Montreal; Dr. Beaumont Small, of Ottawa, and Dr. Douglas Montgomery, now of San Francisco. The list also includes such names as Dr. S. Ashurst, N. S. Davis, Edward Curtis, A. N. Blodgett, S. W. Abbott, R. P. Bigelow, G. B. Shattuck, J. H. Pratt, A. L. Loomis, H. A. Hare, Allen Starr, J. H. Musser, and quite a number of others.

As we have already stated, the Reference Hand-Book is arranged alphabetically, and all the reader has to do is to turn up to his subjects in alphabetical order, without the least difficulty. This is one of the best points in the literary make-up of the work, and from the mere fact that it is seldom or never adopted in medical bookdom, makes it quite attractive. Volume IV. comprises from *Ergot* to *Infiltrations*.

One of the most interesting articles in the volume is one of about fifty pages in length, by Whitman, on the Foot, its anatomy and deformities. The article is well illustrated and can be best described as being, in itself, a small and modern presentation of surgery as applied to this particular portion of the lower limb.

It is well-nigh impossible to even mention the different subjects taken up in this volume alone, their name being legion, as the book

can be safely considered a complete dictionary of, practically, every medical subject whose title commences with the letters *Erg.*, or between them and *Inf.*

Plate xxx. is colored, and gives a very good representation of gangrene of the leg, followed by a gunshot wound of the femoral artery. Plate xxxi. illustrates Raynaud's disease, showing gangrene of the finger; paronychia caused by infection with bacillus pyocyaneus; digital chancre; and Tinea Circinata of the hand. In a word, it can safely be said that if the editor and publishers can keep up their record, and get out the balance of the volumes with as high literary merit as they have to date, the Reference Hand-book can not but be a success.

W. A. Y.

Contributions to Practical Medicine. By SIR JAMES SAWYER, KNT., M.D. (Lond.); F.R.C.P. (Lond.); F.R.S. (Edin.); F.S.A.; Senior Consulting Physician to the Queen's Hospital; formerly a Professor of Medicine, Professor of Materia Medica and Therapeutics, and Professor of Pathology in the Queen's College; Physician to the Birmingham and Medical Hospital for Sick Children; President of the Midland Medical Society; Vice-President of the New Sydenham Society, and President of the Clinical Board of the Central and Queen's Hospitals, etc. Third edition, revised and enlarged. Birmingham: Cornish Brothers. 1902.

Contributions to Practical Medicine is, as its name suggests, a practical treatise on the every-day questions which come up in ordinary general medical practice. It is a collection of the writer's publications in medical periodicals for the past quarter of a century, and contains the best clinical lectures and annotations. The writer has dealt with this subject in a very practical way, and the subjects chosen are those most frequently required in the practice of a general physician, such as the causes and cure of Insomnia, the cure of Gastralgia, and of Habitual Constipation, the cure of Eczema, and treatment of Hemorrhoids, and there is even a special chapter on the cause and cure of a form of Backache. Most authors deal in a general disquisition on the rarer forms of disease, and often to the neglect of the commoner diseases, which, like the poor, we have with us always in our daily practice. Such cannot be said of the writer of this practical little work of some two hundred pages, as in addition to the subjects already named, the balance of the work is made up chiefly of such practical subjects as Inspection as a Method of Physical Diagnosis in Diseases of the Lungs and Pleuræ, Accentuation of the Pulmonary Second Sound of the Heart, Floating Kidney, Clinical Observations on Intestinal Obstruction, Medicated Lozenges, Fuming Inhalations in Asthma, Ether as a Menstruum in Medication of the Skin.

E. H. A.

An Introduction to Dermatology. By NORMAN WALKER, M.D., F.R.C.P. (Ed.), Assistant Physician for Diseases of the Skin to the Royal Infirmary, Edinburgh. Second edition. Bristol: John Wright & Co., publishers. 9s. 6d. net.

A little more than two years ago we had the pleasure of reviewing this work in its first edition. The present edition contains 54 pages more than the first, and is just as readable, the author having aimed at producing a work to be noted for its simplicity, and to our way of thinking he has succeeded.

While the first edition contained only 29 full-page plates and 34 illustrations, the present edition contains 43 plates and 47 illustrations. Formerly but 13 pages were devoted to Tuberculosis of the Skin, now 20 pages are given to that subject. In this chapter, too, he relates his experience with the X-rays, and also describes Finsen's apparatus for the application of concentrated light. To both of these uses of photo-therapy he gives considerable credit.

Blasto-mycetic dermatitis is added in this edition, it having been left out of the former edition entirely.

In the matter of alopecia areata, he quickly disposes of Hutchinson's theory, and Crocker's, that the disease is unrecognized ringworm, and casts considerable doubt on Sabourand's bacillus.

As before, we commend this valuable book to both student and practitioner.

F. N. G. S.

Mosquito Brigades, and How to Organize Them. By DONALD ROSS, F.R.C.S., D.P.H., F.R.S., etc., etc.

This interesting little book is a good indication of the strides in advance made by preventive medicine, during the years since the germ theory of disease has been put upon a sound basis. Finlay, in the West, Manson, and later Ross, in the East, deserve the discoverer's reward, perhaps, in respect of the connection between mosquitoes and disease. Twenty years ago Finlay was laughed at when he said that yellow fever infection was carried by mosquitoes; to-day the disease has been practically banished from Havana, where it was endemic, by what Ross calls "mosquito brigades."

This book by Ross has been written with the special knowledge of one who has dealt practically with the mosquito question in malarious countries, but its instructions are applicable as against the insect anywhere. It is well and almost humorously written, and in such a style that "he that reads may run." Apart from the question of the relationship between mosquitoes and special forms of disease, the book cannot fail to be of use to those who, considering mosquitoes as a nuisance and annoyance, are anxious to get rid of them, and incidentally improve sanitary surroundings.

The instructions given are clear, practical and, so far as experience enables us to judge, effective. The publishers, Longmans, Green & Co., have done their part of the work in their usual high-class style.

J. J. C.

Atlas and Epitome of Otolology. By GUSTAV BRUHL, M.D., of Berlin, with the collaboration of Professor Dr. A. POLITZER, of Vienna. Edited, with additions, by S. MACCUEN SMITH, M.D., Clinical Professor of Otolology, Jefferson Medical College, Philadelphia. With 244 colored figures on 39 lithographic plates, 99 text illustrations, and 292 pages of text. Philadelphia and London: W. B. Saunders & Co. 1902. Cloth, \$3.00 net. Canadian Agents: J. A. Carveth & Co., Toronto.

The same criticism can be made of an Atlas of Otolology as we have of the others of this splendid series. It is exceedingly practical, and a book which, both to the aural as also the general practitioner, must be valuable. The colored and other plates reflect credit upon those having charge of the mechanical part of the work, each one being a source of education along its particular line. The coloring is beautifully executed, and as delicate as we have ever seen in any work, conveying to the eye at a glance as true an idea of that part of the human body as could be found in the anatomical structure itself.

Quain's Dictionary of Medicine. By various writers. Third edition, largely re-written and revised throughout. With 14 colored plates and numerous other illustrations. Edited by H. MONTAGUE MURRAY, M.D., F.R.C.P., joint Lecturer on Medicine, Charing Cross Hospital Medical School, and Physician to Out-patients, Charing Cross Hospital; Senior Physician to the Victoria Hospital for Children, Chelsea, and to the Foundling Hospital; assisted by JOHN HAROLD, M.B., B.Ch., B.A.O., Physician to St. John's and St. Elizabeth's Hospitals, and Demonstrator of Medicine at Charing Cross Medical School, and W. CECIL BOSANQUET, M.A., M.D., M.R.C.P., Physician to Out-patients, Victoria Hospital for Children, Chelsea, and Pathologist to Charing Cross Hospital; late Fellow of New College, Oxford. New York: D. Appleton & Co. Canadian Agents: The Geo. N. Morang Co., Limited, Toronto. 1902.

Quain's Dictionary of Medicine! How many physicians, practitioners of the present day, are there who cannot assert the fact with truth that they owe a good deal of their medical knowledge to what they gleaned from Quain's Dictionary of Medicine? It is as familiar to most as Gray's Anatomy, or Flint's Practice

of Medicine. To criticize this volume would be no easy matter, as we question whether the third edition could be improved upon. Dr. Murray, with his able assistants, has gone over the book thoroughly, revised it, and in every way improved it and added to its value, giving now the medical profession a dictionary of medicine which is as nearly complete as it can well be made.

Diseases of the Intestines. Their special Pathology, Diagnosis, and Treatment. With sections on Anatomy and Physiology, Microscopic and Chemical Examination of the Intestinal Contents, Secretions, Feces, and Urine; Intestinal Bacteria and Parasites; Surgery of the Intestines; Dietetics; Diseases of the Rectum, etc. By JOHN C. HEMMETER, M.D., Philos. D., Professor in the Medical Department of the University of Maryland; Consultant to the University Hospital and Director of the Clinical Laboratory; author of a treatise on Diseases of the Stomach, etc. In two vols. Vol. II., with plates and many other illustrations. Octavo, 675 pages. Philadelphia: P. Blakiston's Son & Co. 1902. Price, Vol. II., net, \$5.00. Set complete, \$10.00. Canadian Agents: Chandler & Massey Limited, Toronto and Montreal.

Volume II. comprises Appendicitis, Tuberculosis, Syphilis, actinomycosis of intestine, the occlusions, contusions, rupture, enterorrhagia, intestinal surgery, atrophy, abnormalities of form and position, thrombosis, embolism, amyloidosis, neuroses of the intestines, intestinal parasites, and diseases of the rectum. He must indeed be a critic, fortunately not frequently found in this sphere here below, who will say that Dr. John C. Hemmeter's two-volumed work on Diseases of the Intestines has much that is lacking. The work, on the other hand, certainly reflects upon the author the greatest credit, and must stand for some years to come as one of the most modern presentations of the subject, "Diseases of the Intestines."

Atlas and Epitome of Operative Surgery. By Dr. OTTO ZUCKERKANDL, *Privatdocent* in the University of Vienna. From the Second Revised and Enlarged German Edition. Edited, with additions, by J. CHALMERS DACOSTA, M.D., Professor of the Principles of Surgery and of Clinical Surgery, Jefferson Medical College, Philadelphia, etc. Second edition, thoroughly revised and greatly enlarged. With 40 colored plates, 278 text illustrations, and 410 pages of text. Philadelphia and London: W. B. Saunders & Co., 1902. Cloth, \$3.50 net. Canadian Agents: J. A. Carveth & Co., Toronto.

Dr. Zuckerkandl is well known, not only in his own country, but by many on this side of the briny, as being a recognized author-

ity on surgery. It will, therefore, not be much wonder if an atlas upon this subject, and bearing his name, receives the endorsement we fully expect it will. This atlas we consider to be nothing short of a practical text-book on surgery. Is there anything as impressive as a subject, surgical or otherwise, brought out in illustration form? Take, for instance, an amputation through the thigh at its middle third. Where it is impossible to view such an operation being actually performed, an absolutely correct plate (the different structures cut through being colored with taste) of the various steps, gives a most excellent idea of what should be done, and thereby will impress the mind almost equally as well as standing alongside of the surgeon performing the operation. Such is the effect of a well gotten up atlas on operative surgery, as this one is. It is the cheapest and best investment a student or practitioner of medicine can make.

The Practical Medicine Series of Year-Books. Comprising ten volumes on the year's progress in Medicine and Surgery. Issued monthly, under general editorial charge of GUSTAVUS P. HEAD, M.D., Professor of Laryngology and Rhinology, Chicago Post-Graduate Medical School. Vol. IV., Gynecology, edited by EMILIUS C. DUDLEY, A.M., M.D., Professor of Gynecology, Northwestern University Medical School; Gynecologist to St. Luke's and Wesley Hospitals, Chicago, with the collaboration of WILLIAM HEALY, A.B., M.D. March, 1902. Chicago: The Year-Book Publishers, 40 Dearborn Street. Price of this volume, \$1.25. Price of the series, \$7.50.

This volume consists of 112 pages, including an index. It is fully up to the high standard of the previous volumes of the series. The illustrations are numerous, and give one a very clear idea of the technique used in the various operations described. We are pleased to note the tendency to conservatism in the year's work in Pelvic Surgery. We are well pleased with this volume, and can recommend it to our friends, especially in the general profession.

W. J. W.

The Practical Medicine Series of Year-Books. Comprising ten volumes on the year's progress in Medicine and Surgery. Issued monthly under the general editorial charge of GUSTAVUS P. HEAD, M.D., Professor of Laryngology and Rhinology, Chicago Post-Graduate Medical School. Vol. V., Obstetrics, edited by REUBEN PETERSON, A.B., M.D., Instructor in Obstetrics and Gynecology in Rush Medical College. April, 1902. Chicago: The Year-Book Publishers, 40 Dearborn Street. Price of this volume, \$1.25. Price of the series, \$7.50.

The fifth volume of this series contains 226 pages and an index. The paper is good and the print clear. The work is well arranged,

and a great number of subjects treated, mostly in short form; but such subjects as Eclampsia, Extra-uterine Pregnancy, Placenta Previa, and Puerperal Infections, owing to their great practical importance, are given more extended notice. We are well pleased with this little volume, and think it fully represents the best practical work in obstetrics of the year.

W. J. W.

Lectures on the History of Physiology during the Sixteenth, Seventeenth, and Eighteenth Centuries. By SIR M. FOSTER. New York: The Macmillan Co.

This little book contains some lectures delivered before the students of an American medical college out West. The pieces are somewhat disconnected, and do not present the subject with any great degree of completeness. The book will nevertheless be interesting to students of physiology by reason of the large amount of curious information gathered together in these pages.

E. H. S.

LITERARY NOTES.

New Book on Press.—The International Journal of Surgery Co., 100 William Street, New York, announce the publication of a new book on "Regional Minor Surgery, by Geo. G. Vanschaick, M.D., Attending Surgeon to the French Hospital and to the St. Vincent de Paul Orphan Asylum, New York. It will contain about two hundred pages, and will be profusely illustrated with drawings especially made for this book. It is bound in cloth and white leaf, printed on heavy book paper, and devoted to the treatment of the surgical conditions that are met in the daily practice of every physician. This book is thoroughly practical, and presents the subject in an interesting and instructive manner. Price, \$1.50.

The Making of a Man.—We received recently a very handsome catalogue from the Geo. R. Fuller Company, of Rochester, N.Y., entitled "The Making of a Man," a title certainly appropriate for a catalogue published by an artificial limb house. It is an exceedingly handsome pamphlet, and the publishers deserve credit for getting out something beautiful typographically, and most delicately illustrated in colored half-tones. The Geo. R. Fuller Company is one of the oldest artificial limb houses in America, and judging from the attractive cuts in colors to be seen by looking through this their latest catalogue, we can almost understand that it is not such a trial after all to have to be the wearer of an artificial limb.