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## Original Communications.

*Address delivered before the Canada Medical Association, at St. John, New Brunswick, August 6th, 1873, BY J. A. GRANT, M.D., M.P., president.*

GENTLEMEN OF THE CANADA MEDICAL ASSOCIATION.—Exactly eight years have elapsed since the first organization of this Association. Our meetings up to the present have been in the provinces of Quebec and Ontario, but on no previous occasion have we assembled under more auspicious circumstances, welcomed as we are to so favourable a position as the City of St. John, the chief commercial centre of the Province of New Brunswick. From the wide spread character of our New Dominion, we could not expect the presence of many from the distant parts at these meetings; still, on every occasion, this Province, as well as Nova Scotia, was ably represented, and it is a recognized fact, that to the activity, energy and ability of the gentlemen from the Maritime Provinces, who previously filled the Presidential chair, this Association owes in a great measure its present degree of usefulness. Thus we observe that in medical science as well as in diplomatic affairs, these Provinces have taken no small part in the prosperity of the whole Dominion.

It was with no assumed feelings of humility that I expressed at our previous meeting, at Montreal, my lively sense of the responsibility of the duties that devolved upon me, performed with such marked distinction by my worthy predecessors. I trust that my efforts, however inadequate, will not flag in the accomplishment of what is right and best for that noble profession in which we should be, in the strict sense in the inspired words, "members one of another." We have a common estate in the science of medicine. We have a good work before us, and we do well to acknowledge our unity, and activity, in promoting, by these annual meetings, a oneness of feeling in the profession of the Dominion, and the advocacy of medical science in its most progressive form; side by side with the high-toned and intellectual members of the American Medical Association, alike interested in the advancement of medical science on this continent. Relying on the spirit which prompted you to confer on me the highest honour within the gift of the medical profession of this Dominion, I shall endeavour to discharge the duty as your presiding officer, in this position of trust and responsibility. Knowing, as I do, the great value of time in our short sessions, and how much work is expected to be accomplished, I shall confine

my remarks more especially to the appropriate subjects of the occasion. At our previous meetings much time was occupied in the discussion of a Dominion Medical Act, an able draft of which was presented by Dr. R. P. HOWARD of Montreal. After a lengthy debate, the conclusion arrived at was that this measure should rest *pro tem*. That the Medical Profession of the Dominion should be united by an Act in the Commons, is a point warmly and zealously advocated by many of the ablest members of our profession. By the Confederation Act, unfortunately all matters pertaining to education, as well as to public health, do not come within the jurisdiction of the Dominion Government, and consequently are strictly matters of local legislation. It is much to be regretted: still, by the consent of the Local Governments, much may yet be accomplished, towards bringing about those radical changes, so necessary in order to simplify, in the widest and most comprehensive sense, subjects both educational and sanitary.

In the Province of Ontario, for the first time in this country, the three bodies Allopathic, Eclectic and Homœopathic—sat in one council and deliberated upon medical affairs. This union was considered somewhat unique by many staunch old conservatives in the profession. However, when the fact became known that during those nine years, not a single homœopathist or eclectic passed as such in Ontario, the reason of the union can readily be comprehended. A uniform standard of medical education was established, written and oral examinations demanded from each student, and being compulsory, was the means of directing in the proper channel many who might otherwise have found an easier entrance into the medical profession. Recently the chief of the Homœopathic body has seen fit to withdraw from the Council of Ontario, and we anticipate that extra medical legislation may arise, in order to gratify those who considered their professional claims somewhat ignored. I merely mention the facts, in order that the profession in these provinces may apprehend the nature of that union so heterogeneous and characteristic. The great aim and object of this Association is to cultivate and advance medical knowledge, to elevate the standard of medical education; to promote the best interests of the profession, and to direct public opinion, as to the duties and requirements of medical men; to encourage a fraternity of feeling in the profession in the most comprehensive sense. With these objects in view, on the present occasion our Addresses will be delivered; one on Surgery, by Dr. HINGSTON, of Montreal; one on Medicine, by

Professor HOWARD, of McGill University; and one on Obstetrics, by Dr. HOLDEN, of Toronto, and one on Hygiene by Dr. BOTSFORD, of St. John. In addition, a Gold Medal is offered for the best Essay on Zymotic diseases. We anticipate a lively discussion on many points of interest, which will doubtless arise out of those papers. We look forward to a greater degree of activity in future in the Association, as general medical topics will occupy the deliberations of all interested in work, such as must tend to advance the best interests of our profession in this country.

The subject of medical education is a topic which at every meeting of this Association, has received well-merited consideration. Although somewhat worn, it is of such vital importance that it cannot be too frequently discussed, more especially when we observe the present manifest disposition of the rising generation to rush through a course of collegiate study, and enter into the practice of the medical profession, devoid of that literary training, so requisite in order to develop those powers of thought and observation so necessary, particularly when matters of life and death are concerned.

"A profession that does not equal the age of its educational machinery, that is unable or unwilling to represent its modes of thought and its forward tendencies in its demands from those who seek admission into its ranks, ceases to be a profession; because it loses its claims to a scientific character."

Great changes are yearly taking place in the progress of human thought and human industry, and in each department of science, only those methods are recognized, which rest on an educational basis. A defective preliminary education, is the first and undoubtedly the great error in the present system of medical education. There should be one standard of preliminary education exacted in all the Provinces, from those who desire to enter the medical profession. A greater degree of uniformity now exists, than prior to our discussions on this subject. So long as there is a diversity of interest in matters educational, diffculty will attend the bringing about of that uniformity which would be arrived at by a Dominion Medical Act. Important changes are usually slow in their development, yet we look forward to the time when we shall have one chief educational centre, so guiding and directing the medical profession of this entire Dominion, as to build up an enlightened opinion, such as the members of this Association have at heart. While recognizing the progress of medical education in each Province, and the marked ability of those active in imparting a sound medical training, we

must await the spontaneous action of all, alike interested, to extend the principles of confederation we now enjoy, so as to unite us as a profession, strengthen our position as a body, and thus increase our sphere of usefulness.

There is a point to which I would now desire to call the attention of this Association, viz., the advisability of having thoroughly trained female nurses. In private as well as hospital practice we constantly experience a great want in this respect. In each of the large cities having extensive hospital accommodation, some system might be inaugurated by which those desirous of becoming skilled nurses might avail themselves of the facilities offered, and in course of time, supply a deficiency now generally felt in the practice of the profession. Such skilled nurses to obtain certificates of qualification and fitness for the position of honour and trust. Every town and city in the Dominion would gladly encourage the employment of such talent, and in that sphere woman would occupy her true position, as the administerer of the prescribed medicines, capable as she is of those soothing, delicate and kindly attentions so necessary at the sick bedside, and so cheering and gratifying to the patient. Miss NIGHTINGALE has thus fully expressed her ideas:

"I think the Anglo-Saxon would be very sorry to turn woman out of his own house, or out of civil hospitals, hotels, institutions of all kinds, and substitute men-housekeepers and men-matrons. The contrast between even naval hospitals, where there are female nurses, and military hospitals, where there are none, is most striking in point of order and cleanliness."

In points of sanitary domestic economy, woman carries off the palm, and, by her tidiness and cleanliness, establishes a degree of order seldom seen without her. The cheering look, the tender hand, the watchful eye, and the innate powers of observation, are such, that many little necessaries for the sick patient are carefully thought of, that might escape the sterner powers of the skilled and educated physician.

The Sisters of Charity, who officiate as nurses in the Catholic hospitals of the Dominion, have, by their skill, dexterity and general neatness, earned a well-deserved reputation. Why should not the Protestant Institutions of Canada have a sisterhood alike charitable and philanthropic?

The subject of medical evidence in courts of law is one possessing no ordinary degree of interest. The value of such evidence in questions involving the causes of death, by unknown means has been long

recognized as having attained, with the various achievements of science, a remarkable degree of accuracy.

The position of the scientific expert is one of great importance. His deductions are based on a SOUND KNOWLEDGE of human structure; of the laws which regulate the organic functions; of the chemical laboratory in the system, possessing an action and reaction peculiarly its own; and of the disturbing forces, which induce death, under extraordinary circumstances. The courts of law at home and abroad consider such testimony of great value, and upon it frequently hinge matters of life or death. In carrying out such investigations both a thoroughly scientific knowledge and a perfectly disinterested mind are necessary. The great aim and object in view is to bring to the surface the principles of truth and honour, no matter how trying the attendant circumstances. Medical men should bear in remembrance the responsible and dignified position they are called upon to fill in medical enquiry. It is not upholding the status of our profession to find its members become partisans in courts of law. Cases of malpractice are not fortunately of frequent occurrence and when such do arise the professional man should never be found occupying an unenviable position, as the instigator of enquiry for purely selfish and personal motives. The whole profession suffers by disregard to ordinary professional courtesies. In courts of law our opinions wield a recognized power and influence, and it is gratifying to observe that in the various medical schools, the subject of medical jurisprudence is receiving well deserved consideration. Through the various medical Societies any professional irregularities in the law courts should be reported and, by this Association a power exercised, that would be productive of the most beneficial results. Regularities as well as irregularities should be noted by those interested in the welfare of the medical profession. In Canada we are yearly enlarging and increasing our medical periodicals, which give evidence of improvement by the abundance, variety and general excellence of the various contributions and selections. How is our Canadian Medical literature to be supported? This is a question which must strike forcibly the most ordinary observer. In the larger cities as well as the rural districts there are those who from their position, experience and knowledge of matters medical, could do much towards building up in this country such an expression of opinion as would tend materially to strengthen and consolidate the very best interests of our profession. It is generally acknowledged that there are more medical

journals than receive remunerative support, and that much labour, zeal and self-sacrifice are necessary on the part of both editors and publishers in order to promote the vitality of this form of medical literature. Such efforts are worthy of the highest commendation, for by means of local medical journals, many facts are brought to light, which otherwise might have passed, unrecorded. In Canada, as in Great Britain, hospital reports are yearly acquiring a greater degree of importance, and our medical students are being stimulated thus towards the cultivation of one of the most necessary branches of study, viz., to observe rightly and report intelligently. The country as well as the city practitioner should contribute regularly to our journals. The city with its extensive hospitals, large libraries, well-organized medical societies, has very great advantages; and yet it has been remarked by an able writer in favour of the country medical man, that "*original thought is usually best cultivated in comparative solitude.*" A high degree of excellence in medical journalism can scarcely be expected in so new a field of enquiry, and considering the efforts put forth to fan into vitality such able journals as the *London Lancet* and *London Medical Times and Gazette*, *Edinburgh Medical Journal*, and others of like celebrity, we should not be discouraged. In the recording of medical facts, it is prudent and right that such should be communicated plainly, avoiding, as far as possible, newly-coined words and abstruse phraseology, which in no way whatever will be acceptable to the plain, *common sense* practitioner. It is common sense which is most required at the sick bedside; it is this sense after all which achieves the greatest degree of success, educated, enlightened, and elaborated through the various scientific achievements and astounding discoveries, of this age of progress. Every physician in regular practice in city and country should not only take one or more medical Journals, but contribute as well. A large and lucrative practice, a high and influential position, are not alone sufficient to perpetuate a worthy name and reputation. These are perishable and will die out, when well-timed and well recorded facts, will last and establish true and genuine worth. ZIMMERMAN remarked "*that the greatest medical writers of any age were the best physicians.*" Those who communicate their views should rather be encouraged than decried. It is quite unnecessary to urge upon those who read the best medical journals, the importance of such publications. It is high time that those who fancy they can learn nothing from medical journals, should retire and leave the field to those more willing in every respect to

keep pace with the progress of medical science in its various departments. Let us then as an Association encourage and uphold our journals and contribute in every possible way towards building up and sustaining so worthy and so requisite a branch of literature.

In conclusion, I would merely advert briefly to the subject of Sanitary Science, identified as it is with national progress, and surrounded at present with more than an ordinary degree of interest. We are daily in possession of telegraphic news as to the prevalence in the Southern States of a much dreaded disease. Under such circumstances, I cannot permit this opportunity to pass without calling upon all interested to bring about, in every possible way, such sanitary measures as will tend to lessen the spread of cholera, should we be so unfortunate as to have a visitation of that disease. In the absence of danger, sanitary measures are frequently lost sight of, and even a moderate expenditure is a sufficient cause for the delay observed in carrying into operation the necessary precautions. While there is no occasion for alarm, there is a necessity for action on the part of health authorities. Mr. SIMON, the Medical Officer of the Privy Council of England, says:

"The dangers which particularly have to be guarded against, as favouring the spread of cholera contagion, are particularly two: first, and above all, there is danger of water supplies, which are in any degree tainted by house refuse or other like kinds of filth, as where there is overflow, leakage or filtration, from sewers, house drains, cesspools, fowl ditches, or the like, into streams, springs, wells or reservoirs, from which the supply of water is drawn, or into the soil of which the wells are situate,—a danger which may exist on a small scale at the pump of a private house, or on a large scale, in the source of supply of public waterworks; and, secondly, there is the danger of breathing air which is foul with effluvia from the same sorts of impurity."

Filth percolating into well water is a very fertile source of disease. The report of Dr. BALLARD, of Islington, concerning the propagation of enteric fever, by milk polluted with enteric fever poison, through leakage into the well which supplied the cattle with water, is conclusive evidence as to the occasional origin of so trying a disease.

The subject of sanitary legislation is one of vast importance inasmuch as by preventable diseases, thousands of lives are lost which might be saved annually. We require fresh air, pure water and clean food; this brought about, even in a moderate degree, would confer an inestimable blessing on society at large. So strongly impressed are the members of

the American Medical Association, on this subject, that at their last meeting, at St. Louis, in June, a strong resolution was passed recommending the establishment of a "National Sanitary Bureau," with relation to the general Government at Washington, similar to the Bureau of Agriculture. It is quite evident, considerable new life must be thrown into this subject, and should sanitary regulations be thoroughly and systematically carried out, by skilled operatives, the advantage which would accrue to this Dominion would be beyond computation. An enlightened opinion would thus be built up, through the exercise of which, we might possibly effect such sanitary changes, as would be most conducive to the best interests of the general public.

Gentlemen of the Canada Medical Association,—We have assembled here for very important purposes, the eyes of the community at large are upon us; watching, cheering and guiding us along, in the performance of duty. At best we have only a few short years before us, and in the multiplicity and diversity of work, a single life can accomplish but little. Let that little be well done, keeping steadily before us the remarkable and striking aphorism of Hippocrates, which has been paraphrased by one of our greatest lyrics;—

"Art is long and time is fleeting;  
And our hearts, thought stout and brave,  
Still like muffled drums are beating  
Funeral marches to the grave."

#### A CASE OF MYELOID TUMOR OF THE METATARSAL BONE OF GREAT TOE.

By EDWARD H. TRENBOLME, M.D., B.C., and Professor of Midwifery and Diseases of Women and Children, University of Bishop's College.

The patient in this case is of spare habits, and delicate state of health, about 45 years of age. Four years ago a horse stepped on the foot, bruising it in the vicinity of the metatarsal pharyngeal articulation. After the acute inflammatory symptoms had subsided, a chronic condition of irritability of the joint supervened, accompanied by a more or less persistent pain for two years, when I was consulted in May, 1871. At that time the trouble seemed to be limited to the joint alone. The cartilage of the metatarsal portion of the joint was gone, and the crepitation of the bony surface well marked. Believing the disease to be limited, as just stated, and being unable to work without intense suffering, I advised excision of the joint, which was objected to. The man returned to his farm near Ottawa, and I heard nothing more of the case till I was called to see him at the house of his brother in this city, on 15th June last. On examination the whole of the metatarsal bone of the great toe was found to be enlarged, thought to be about one and a half

inches in diameter. There was much pain on pressure, and distinct egg shell crackling, shewing that there was an osseous shell covering the tumor. Removal of the tumor was at once recommended, and to this the patient made no objection, as he was unable to work, and the pain was becoming more and more severe. Drs. Fenwick, Rogers and Kennedy saw the case with me, and kindly assisted by them, on 18th June, I removed the whole metatarsal bone of great toe, disarticulating it at the tarso-metatarsal articulation. The incision through the skin was made over the upper part of the growth between the great and second toes, around lower part of toe and thence along upper part of outer border of foot to the articulation. By this means the integument or tissues of the sole of the foot were preserved. The operation was performed without difficulty, two ligatures were applied to arrest hæmorrhage, and the parts closed by metallic sutures. The wound healed up by granulation, and the man returned to his home on 12th July.

On examining the growth after its removal, it was found to be limited to the metatarsal bone, the whole medullary portion of which was filled with that grayish shining substance with blotches of blood color; the granulations were soft and easily broken down; the whole osseous envelope was enlarged, as already described, and the bony structure not much thicker than an egg shell.

The tumor is to be seen among other preparations in the museum of Bishop's College.

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### Correspondence.

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*To the Editor of the Canada Medical Record.*

Marbleton, Quebec,  
August 27, 1873.

DEAR SIR,—In the July number of the *Record*, I saw an article recommending the use of sulphate of quinine in whooping cough. Soon after I had a case, and determined to test its efficiency. It has even exceeded my anticipations. I have had quite a number of cases since, and have used the quinine treatment alone, and in every case have found it to cut short the disease within a week. I therefore ask you to kindly insert in the *Record* my experience of the new method of treating a disease which has hitherto proved most intractable to the remedies usually employed. I use it in solution, from five grains to eight grains to an ounce of water, dissolved by means of a little dilute acid.

In conclusion I would say that the *Record* is

worth fully ten times its price to me in my practice. I could not do without it.

Yours, etc.,

F. CHARLES LAWRENCE, C.M., M.D.

*To the Editor of the Canada Medical Record.*

DEAR SIR,—We hear men talking every day of the dignity of the medical profession and of the importance of upholding it, of what should guide medical men in their conduct to one another, and of sundry other things about which they know very little and practice still less. Their rule is, don't do as I do, but do as I tell you. When the status of the profession on this continent is compared with that in Europe, we are forced to confess there is a wide difference, and all the advantage is on the other side of the Atlantic. There must be reasons for this, as the profession has the same liberties here as there. We are afraid we have not to go far for those causes, in fact, they are in the profession itself. The profession, and particularly that portion in the Dominion, may be likened to a large family and the public its dying parent, whose property will soon be divided. The members of this large family, with their respective desires and ambitions to be satisfied, are striving and straining every nerve to undermine and undervalue the pretensions of each other, so as to gain the car of this rich parent. They hesitate at nothing; it does not matter whether truth is to be distorted and their own self-respect lost; the means are nothing, so long as their end is accomplished. They will meet in daily intercourse, present all the appearances of polished gentlemen as far as exterior goes, will even meet amicably together for the discussion of scientific subjects, but alas, when the common parent is interviewed, how different. If it should happen that one in this family, who by his honesty and abilities succeeds a little better than the others in propitiating the goodwill of this parent, what follows? The others still carry on the same intrigues against each other, but they combine as well against the fortunate brother, and perhaps are more successful if they can combine religious and national feeling. Occasionally we may hear one telling some of the younger brothers to be upright, to keep steadily before them the good of the parent and the dignity of the family, and to do unto others as they would be done by; but how soon forgotten, and too frequently even by the teacher. The profession has partly to thank itself if it does not take the same standing here as in Europe. There is too much undermining of each other, and it very rarely hap-

pens that the one who does so makes anything by it, except loss of respect in the one who listens to him. How is it, that it is only in the medical profession jealousies of each other's success exist, and the motto of live and let live is forgotten. Want of education may be one of the causes, but some of the most eminent men of Europe have had only slim educations. Then, again, we have a large class who do not advance in their studies, and who remain where graduating day placed them. These men fall behind, both in knowledge and practice, and, as a natural result, will not hesitate to charge less than the intrinsic value of their services so long as they cut out a confrere. We have known some medical men take \$2.50 for an accouchment, because another charged \$5.00. Practices such as these do not help the profession any. We have known a professor, a person that every one supposed was possessed of every quality of a gentleman, disparage a brother professor to the students, simply because their opinions did not agree as to the justifiability of performing an operation upon a patient in whom disease was far advanced. When this is done in public, can it aid in maintaining the dignity of the profession?

I am, etc.,

GRUMBLER.

Montreal, August, 1873.

TO THE EDITOR OF THE CANADA MEDICAL RECORD.

DEAR DOCTOR,—I have heard that *certain* individuals have questioned the accuracy of a statement that appeared in the columns of the *Medical Record*, in an obituary notice of my late uncle, Dr. Robert Nelson, of New York and Staten Island. The article stated that he had operated for stone *sixty-five* times during his residence in this country. The operations and their number were cited by Dr. Hingston, in an able paper on "Lithotomy and Lithotripsy," read before the Canadian Medical Association, and afterwards published in the *Record*.

Dr. Nelson operated during his long residence in Canada *sixty-nine* times, his last operation shortly before his death was his *eighty-first*, when three calculi were removed—two by the lateral operation: a foreign body still being felt, he introduced his finger into the rectum, and there felt the third stone, which had worked its way partly through the rectal parieties; a bistourie was introduced per rectum, the stone freed and removed. The patient recovered. The mortality attending his operations was exceedingly small.

Should any of the unbelieving "Thomases" be about to visit New York, now or at any time, it will afford me pleasure to furnish them with a letter of introduction to my cousin, Dr. Eugene Nelson, of No. 257, Fourth Avenue, where they can see the cabinet, and examine the collection.

Trusting that you will pardon this long letter, believe me to remain,

Yours very sincerely,

WOLFRED NELSON, C.M., M.D.

1, St. James' Place,  
199 Canning Street,  
City.

## Progress of Medical Science.

### INFANTILE CONVULSIONS.

By H. CRIPPS LAWRENCE, L.R.C.P., Lond.

Surgeon to the Westbourne Dispensary; late Res. Med. Off. Queen Charlotte's Lying-in Hospital.

Convulsions in infancy occur very frequently, and the rate of mortality therefrom is very high (73.3 per cent),\* in relation to death arising from diseases of the nervous system, during the first year of life. In the following communication it is proposed to treat of infantile convulsions and eclampsia infantum with reference to (a) clinical symptoms, (b) pathology, (c) treatment.

#### (a) Clinical Symptoms:—

All observers agree in referring to convulsions as symptoms of some disease or disorder arising elsewhere than where the convulsive effects are manifested, and all seek for a causation, centric or eccentric, to explain these phenomena as manifested through the nervous system.

An ordinary infantile convulsion consists of three stages; the first is, *a period of tonic*ity, evidenced by stiffness and hardness of the muscles, "without shock," as Trousseau puts it, "an index of the gradual, but yet rapid shortening of their muscular fibres."

Then ensues "*a clonic stage*," wherein occur alternate contractions and relaxations of the muscles, independent of the will, which can neither suspend, moderate or excite them."

Thirdly, as a sequence of the seizure, but intimately associated with it, is "*a period of collapse, stupor, or coma*."

Eclampsia is an expression for a more severe form of convulsions than such as attack infants of ordinary physique: similar to the eclamptic fit of the puerperal state, and attacking the more robust, as a consequence probably of the cerebral hyperemia of an active form.

Some regard the eclamptic fit as synonymous with the epileptic fit. Although, however, the same essential factors may occur in each, justifying the

\* West, "Diseases of Infancy and Childhood." Fifth edition, pp. 33, 34.

adoption of Trousseau's statement, that if we look at the convulsive character alone of the two affections, "symptomatic or idiopathic epilepsy is only recurring eclampsia, and eclampsia is merely accidental or transitory epilepsy," yet if we look beyond this and study the matter with clinical care, we shall find the following symptoms of the eclamptic fit will aid the differential diagnosis between such an attack and epileptic seizure.

1. There is absence of foaming at the mouth.  
2. The recurrence of the attack is irregular and frequent.

3. The eclamptic state rarely passes off so soon as an epileptic one, and never terminates by a critical sleep, as in epilepsy."

4. Some add its uniform connection with evident signs of fulness of blood, or acute disease in the brain.

The following differences in the symptoms of active and passive cerebral hyperemia and those of cerebral anemia will be best briefly contrasted if placed side by side:

Active Cerebral Hy.*	Passive Cerebral Hy.	Cerebral Anemia.
Fontanelle . . . . .	Tense . . . . .	Tense . . . . . Depressed.
Scalp and Face	Hot and flushed.	Tumid dark Pale, shrunken Livid.
Irides . . . . .	Contracted . . . . .	Dilated . . . . . Dilated.
Pulse . . . . .	Quick, full, hard.	Slow, irregu- Almost imper- lar, oppressed ceptible even in the carotids.
Bowels . . . . .	Constipated . . . . .	Constipated Relaxed.

There is a clinical symptom which I have often observed, and which is, I believe, pathognomic of convulsions due to cerebral causes, viz:—either an irregularity between the pupils in size, one being dilated, the other contracted; or frequent oscillations of the iris, which are not influenced by alterations in the intensity of light.

In discussing now the predisposing and exciting causes of infantile convulsions it should be mentioned at the outset that the etiology is obscure, the mode of ingress and prognostic import of them are various, and the periodicity is uncertain.

*Hereditary Disposition.* Dr. Duclos of Tours has recorded a remarkable instance. A woman, aged thirty-four, was one of eleven children, six of whom died of convulsions, and she herself had eclamptic fits up to seven years of age. This woman had ten children; of these all had convulsions; six died, five in the first two years and one aged three years. The youngest of all was seen when six months old. At the age of three months she had her first fit, which lasted ten minutes: the mother believed the fit was caused by her suckling the infant when she herself was in a passion, as the convulsions ensued the next day. Death took place three months afterwards from cerebro-meningitis.

Among predisposing and exciting causes may be mentioned eclampsia in the mother during labor, insufficient feeding, large losses of blood, profuse diarrhoea, mental emotion, extremes of temperature.

*Local Irritants as Exciting Causes.*—From Trousseau I requote the following as most instructive and interesting cases:

Dr. Blache treated a case of recurring convulsions

\* Hyperemia.

in an infant after all remedies, including a warm bath, had failed; but on removing the infant's cap a piece of thread was found attached to a needle, which latter had penetrated the brain. Upon withdrawal of the needle the convulsions ceased immediately, but hydrocephalus set in shortly afterwards and proved fatal. Professor Soubeiran's son died of convulsions, for which no cause could be ascertained during life, but at the post-mortem examination a needle was found transfixing the liver.

Underwood in his "Diseases of Children," records a case of convulsions in an infant which proved fatal, and after death a pin was found penetrating the anterior fontanelle.

Dr. Sayre, of Philadelphia, has written a pamphlet on the effects of congenital phimosis and adherent prepuce in producing partial paralysis and reflex irritation in children. I now look for this possible source of irritation in cases of infantile convulsion, and I have not unfrequently found it to co-exist.

Trousseau calls attention to the danger of severely sinapising and blistering infants, and thus practically impresses the caution: "How often have I seen medical men use fresh blisters against evils which they had themselves caused, forgetting the nervous symptoms which so frequently accompany burn of the first degree."

*Symphathetic Forms of Infantile Convulsions* may be induced by constitutional diseases, which, when latent, may act as predisposing cause of the convulsions, or if such diseases are in active progress they may prove an exciting cause of the same.

The rickety diathesis illustrates this form. Dr. S. Gee, in the third volume of St. Bartholomew's Hospital Reports, contributes a paper on "Convulsions in Children." Out of sixty-one eclamptic infants and children, fifty-six were found by him to be rickety. Though the convulsions and rickets may be but "secondary results of that state of general malnutrition of which the rickets is the most obvious and indisputable evidence," their concurrence and association together at the same time in the same infant is most significant and important.

There is a clinical observation closely connected with this subject of diathesis. Infants predisposed by diathesis, such as the rickety, may have convulsive attacks with distinct intermissions, and the return of the convulsions may be induced by the access of some acute or subacute inflammation, as bronchitis or pneumonia; nay more, the convulsions may be kept up by the inflammatory attack. In such a case attention has to be paid especially to the acute or subacute malady.

Andral has pointed out that there are peculiar idiosyncrasies which render the milk of a nurse well digested by some children, not by others. He relates that "a woman nursed her own child without any ill effect, but another child to whom she gave the breast was seized with convulsions, and a third likewise."

*Sudden Ingress* of infantile convulsions is regarded by Niemeyer as the only form of the disease which corresponds to "chill" in older persons as



premonitory of one of the exanthemata or of some inflammatory disorder. Recently I saw a female infant three months who was attacked a week after vaccination with severe convulsions, which ushered in an attack of congestion of the lungs. Curiously enough, the vesicles did not rise till the tenth day, but then very fully. As an illustration of the prognostic value of "sudden ingress" at an older age, in the autumn of 1870 I saw a little girl, aged three years, a patient of my friend Dr. George Dale, of Bayswater. The illness was ushered in by sudden convulsions of severe eclamptic form, sensorial disturbance, rapid pulse; these symptoms led us to prognosticate one of the exanthemata, probably scarlatina, which appeared the next day. The child recovered.

*Single fatal convulsions* have a forensic import and interest. When such a convulsion attacks an infant at the breast, death often ensues while the infant is in bed beside the mother, who, having perchance fed the babe a few hours previously, unexpectedly finds that it has died. Such infants are considered to have been overlaid. In the *British Medical Journal* of March 12th, 1870, I published two cases to prove that in neither case was the infant overlaid, but that organic disease caused death in them; and to advocate the necessity of necropsies in all cases of sudden death in infants.

A paroxysm consisting of a single fit is rare: recurrence is much more frequent, either in an intermittent or continuous form, or assuming a "partial" variety of convulsion.

A rare form of "*spastic or tonic contraction*" occasionally occurs, chiefly affecting the extremities, more nearly allied to spasm than convulsion, into which however it may merge. Dr. Copland associates this form with intestinal irritation, dentition, or worms, in young nervous or irritable children. The spastic muscular action continues for several hours or days, then ceases to return, or recurs at short intervals. The intellectual faculties, the general sensibility, and the muscles of the trunk are not affected, the pulse and the natural functions are not materially disturbed.

Dr. George Dale mentioned to me a case in which he found spastic action of the muscles of the arm and forearm during dentition. Moderate lancing of the gums gave no relief, but upon making a deeper incision, the "spastic" action ceased gradually, but permanently.

(b) *Pathology* :—

Hitherto pathology has not thrown much light upon the proximate causation of infantile convulsions and eclampsia infantum.

Morgagni wrote: "The cause of convulsions, which consist in an invisible change that has occurred in the brain and nerves, cannot be detected by our senses after death; its effects alone are seen, and these vary according to the violence and duration of the convulsions." Subsequently, the teachings of Trousseau confirm the insufficiency of our knowledge respecting the "organic pathological condition in consequence of which convulsions arise." The researches of Dr. Hughlings Jackson

and Dr. Ferrier are tending to elucidate the obscurity at present surrounding the subject.

In several necropsies made by myself on the bodies of infants who died of convulsions, frequent evidence of inflammation of the cerebral meninges, as well as of the brain substance, giving rise to diversity in its color and consistence have been noted. One portion of the intra-cranial contents was universally affected, which may throw some light upon the proximate causation of infantile convulsions—a pathological alteration in the condition of one or both plexus choroides. The alteration assume one of two forms—either a general hyperemia active or passive, or a localized congestion chiefly affecting the posterior end; and in some cases a general edematous infiltration of the greater part of the plexus. It would be too much in our present state of knowledge to apply to this occurrence the doctrine of "post hoc ergo propter hoc:" yet that a relation may be found between such conditions of the plexus choroides, and other alterations in the nerve centres, of which they are in the vicinity, and the convulsions which co-exist, is not unreasonable to suppose. In this communication I rather draw attention to the condition than seek to illustrate its associations.

(c) *Treatment* :

*Active Cerebral Hyperemia* inducing congestion of the brain, requires that during the fit all circular constrictions around the neck and chest must be removed. This applies equally to all forms of convulsion. The body may be immersed in a warm bath, to which some mustard, previously made into a paste with water, may be added, meanwhile a gentle douche of cold water should be poured over the head and face. When violent carpo-pedal contractions co-exist, a sinapism should be applied along the spine, and sinapisms to the soles of the feet, as rubefacients.

Ice-bags and bladders should never be ordered unless under medical supervision. Cathartics should be used freely. If the fits recur frequently, or laryngeal spasm supervenes, chloroform inhalation is indicated. Niemeyer advocates, in robust children, an enema of one part vinegar and three parts water, and if cold compresses applied to the head do not relieve, leeches should be applied behind the ears or to the temple. Dr. West recommends that the leeches be applied to the vertex in sufficient numbers to produce the effect of the loss of a certain amount of blood at once, and in any case upon removal of the leeches the bleeding must be immediately stanchied, and not left to continue *ad libitum* into cloths or poultices.

*Passive Cerebral Hyperemia* requires, if associated with marked lividity of the face and distension of the jugular veins, the abstraction of a moderate quantity of blood; carefully watched and guided by the effects produced. Cathartics are indispensable. Stimulant mustard baths should be used, and cold water sprinkled over the face and chest to excite respiratory action quietly. Slapping the nates would probably increase the screaming, and so do more harm than good. In extreme cases, insuf-

flation of ammonia and artificial respiration with the head raised are advisable, also the application of tepid, or for a time even warm clothes to the vertex. For the condition of asphyxia, Trousseau recommends chloroform inhalation.

*Cerebral Anemia.*—Regular suckling at the breast alone should be advocated, or if this be impracticable the infant should be fed with definite quantities of milk, frequently given by spoon or feather. Brandy, if required, should be given in quantities of five drops in a tablespoonful of milk every hour or two hours. It is in this form that suckling from a bottle is injudicious, as the fruitless attempts increase the exhaustion. Warm or tepid cloths must be applied to the vertex. Niemeyer recommends as a stimulant an enema of valerian or camomile tea; or an assafetida (10 or 20 grains to 4 ounces) clyster.

*External Irritants* must be sought for, and when found immediately removed:

*Eccentric Internal Irritants*, dependent upon some province of the nervous system, whence the morbid irritation which acts upon the medulla oblongata proceeds, will upon enquiry determine the administration of an emetic, a laxative, an anthelmintic, or an antacid. If the mother's milk disagrees it must be discontinued.

In cases of convulsion coinciding with the *rickety diathesis*, Dr. S. Gee recommends the bromide of potassium or ammonium (four grains to an infant aged one year, thrice daily) during the actual presence of the convulsions, and for about a week after; and when the fits have been absent for about a week or two, he advised cod liver oil and iron wine, continuing the sedative salt or not, according to circumstances.

*Hydrate of Chloral.*—There appears to be a special tolerance of this remedy. To infants under three months I generally give a grain with a grain of bromide of potassium, if rickets co-exist, every four or six hours. To older infants, between nine and eighteen months, much larger doses of the chloral have been given. A little boy, when eighteen months, had as much as fifteen grains within three hours, commencing with about six grains, and when twenty months old, a repetition of a like quantity with marked benefit to a like condition. He suffered from severe epileptiform convulsions resulting from acute cerebral hyperemia, coincident with the eruption of the molar teeth. Previous to the chloral he had had a mustard bath, sinapisms to the feet and ankles, calomel gr. j on the tongue, and two leeches to the temple. In the first attack the symptoms did not subside until after several doses of the chloral had been given, the effects being watched. A like continuance of the chloral alone sufficed to check the convulsions on the second occasion.

The question of prophylaxis and after-treatment in the intervals between the convulsions require attention to the ordinary rules of medical and surgical treatment, and are not noticed in this communication, which refers to the "essential" convulsions of infants.

## OF THE THERAPEUTICAL USES OF GALVANISM.

By DR. SAMUEL WILKS, F.R.S., Physician to Guy's Hospital.

It must be generally admitted that the therapeutic uses of galvanism have received a fresh impulse since the introduction of the continuous current into practice. Until a few years ago the only method in use, except frictional electricity, was that of faradization. This was sometimes beneficial, but as often quite valueless, so that galvanism was either indiscriminately recommended in all forms of paralysis, or was systematically neglected. A very different feeling, however, prevails at the present time, for we are beginning to discern in what cases faradization is useful, and in what cases it fails; more particularly has it been noticed that it is in those very cases where faradization has been useless that the continuous battery current has been so fruitful of results. We some years ago introduced into our electrifying room a large battery in which any number of cells up to 100 could be combined, and with this instrument we have witnessed a success in many cases which scarcely could have been anticipated. We have a large number of patients daily being operated upon, and two or three attendants constantly employed either in the room or in the wards. It has not yet been satisfactorily determined why one form of galvanism should fail to stimulate a muscle and be useless as a remedy, whilst another form excites it to contraction and is curative. This may be dependent upon the condition of the muscle or of the nerve which supplies it, or the centre whence the nerve springs; at the present time the facts themselves are not sufficiently established, but when they are so we shall be able to use them as a means of diagnosis. All I shall attempt to do here will be to state some of the facts we have observed, and thus offer a small contribution towards the material out of which some more important conclusions may be eventually framed.

In the first place, we had no sooner possessed our battery than we discovered its marked value in cases of simple paralysis of the limb. In these cases faradization often fails to produce the slightest effect, whereas the application of the continuous current immediately excites the muscles to contraction, and eventually brings about a cure. A good case of the kind I give below. Then again, in various forms of paraplegia, its good effects have been most striking. As I have before said, it is most difficult to ascertain, in various forms of paralysis, whether an organic disease of the cord exists or not, seeing that all the symptoms which attend it may occur in the case which is functional and curable, and therefore it is true that galvanism has been used in many cases and failed; but, on the other hand, we have had a variety of cases which may be included under the term paraplegia, where a complete cure has been effected by applying the current to the back. In some cases of locomotor ataxy I have witnessed perfect recovery, both in hospital and private practice; also in cases of commencing progressive muscular atrophy. In paralysis agitans I never saw much good done by faradization or any other remedy, but in a

case I mention below it appeared as if much benefit might accrue from the use of a continuous galvanic current down the spine. In no case is the effect of the continuous current to the limb so remarkable as in the atrophic paralysis from lead, two examples of which I shall presently relate. The fact has now for some time been observed that the muscles in this affection are not susceptible to the interrupted current of faradization—that a painful amount of it may be used, and yet there shall be no response on the part of the muscle. I have had several cases in the hospital which completely establish the fact. On the other hand, if the continuous battery current is used, even in a mild degree, excitation immediately occurs; that is, when the current is completed and again broken.

In the very first case on which I experimented some years ago we found in the case of a young man suffering from lead paralysis, that whereas no irritation of muscle could be displayed by the magneto-electric machine, immediate contraction took place on the application of fifteen cells of the battery an amount which produced a scarcely perceptible effect on the arm of a healthy student.

It is observed that as the cure progresses so the susceptibility to the continuous current becomes less, and that a faradization greater, until as the healthy subject, both forms cause contraction of the muscles. The case of lead is very striking, because there are kinds of paralysis in which the two forms of galvanism act in the opposite manner; thus, lying in a bed near that of our patient, who was the victim of lead poisoning was a girl suffering from old-standing spinal paraplegia; in her case the continuous current produced not the slightest effect in stimulating the muscles of the leg, whilst faradization produced strong and painful contraction of the muscles. The same occurred in a man who had long been bedridden with an incurable paraplegia. It has been thought that faradization acts directly up on the muscles to stimulate it, whilst the continuous current acts through the nerve. This has by no means been proved, but it had if it might be used as an argument that in lead poisoning it is the muscular rather than the nervous system which is affected by the metal. Such an opinion, however, is not borne out by experience, seeing that the whole cerebro-spinal centres may become atrophied in plumbism, as evidenced by epilepsy, general paralysis or dementia. The atrophy resulting from lead differs from that which is called idiopathic in this respect, that although in the two cases no difference is observable in the form of wasting, yet in the latter there is very little susceptibility to either form of galvanism. It has been suggested by Dr. Russell Reynolds that there is no essential difference between the primary and the induced current, but that the simple interruption in the one case is sufficient to account for its peculiar effect—that muscles under abnormal conditions may not be able to take cognizance of a simple current passing through them, whereas they would if it were broken. If this were so, the primary battery current, if interrupted, should produce the same effect as the ordinary induced current or faradization.

In one or two cases where the experiment was tried, the result did not verify the suggestion. Where, for instance, one pole was placed just below the elbow, and the other pole stroked down the arm, a contraction took place when it was lifted from the limb or again replaced. The current was then interrupted by a wheel, but exactly the same phenomena occurred, contraction on making and breaking contact, but none whatever as the sponge was stroked down the arm. With faradization, on the contrary, violent contraction took place. In this case, therefore, the difference between the two forms, even when both were made to intermit, seemed well marked. Further observations, however, are required before I could give a decision on this matter, either for or against the suggestion of Dr. R. Reynolds.

I have already spoken of the intractability of cases of spasm and contraction of the muscles. In many cases organic disease of the spinal cord and nerves exists, and, therefore, no result could be expected; but even in others, as in wryneck, where an immediate effect of galvanism was witnessed, no permanent good resulted from its use. Even in cases of so-called hysterical contraction of the arm I have been much disappointed at the failure of galvanism.

The effects on the muscles in the cases of spasmodic contraction is seen in the reports, in which it appears that they are more susceptible to faradization than to the continuous current.

One must not forget to mention the soothing effect of galvanism. In cases where neuralgic pains have existed, patients have expressed themselves as much relieved by its application, and have often slept better afterwards.

The public is so much impressed with the value of electric baths that I proposed to try it in a case of lead poisoning. I am aware that others have pronounced it to be valueless, which, in all probability is the case, there being no proof that the galvanic current passes anywhere but over the surface of the body. In my case the speedy success was so remarkable as to throw strong suspicion on its having had any value at all.

I give the case below with the mode of use. Usually, I believe, the plan has been to place the patient on an isolated stool in the water, with one pole in his hand, the other being attached to the bath. In the present case Mr. Sandy used a different method.

*Case 1.—Paralysis of Leg.*—George W., æt. 36, admitted into Stephen Ward June 19th, for weakness of the left leg, and left July 23rd. This man was the subject of a remarkable enlargement of the veins on the surface of the abdomen, indicating some obstruction to the vena cava. He had observed this fourteen years, but it had given him no inconvenience nor interfered with his employment.

Patient stated that in March last he was seized with very acute pains through the left hip and groin, which gradually spread down the leg; and these pains were worse at night. Went to Swansea Hospital, where knee became contracted, and he took to crutches. He was then sent up to Guy's Hospital. He was put to bed, being quite unable to walk, on ec-

count of pains and weakness in the left leg. On examination, no local cause was discoverable for the symptoms; the leg was somewhat drawn up, it was perceptibly wasted, being smaller than the other, and sensation slightly impaired. On testing the limb the muscles were found to respond to both the faradic and galvanic currents. He was then ordered the continuous current to be applied daily to front and back of thigh. After the first application he expressed himself as having much relief from the pain, and in a few days it had altogether left him. At the same time the strength returned in the muscles, so that in a few days more he could walk. The current was still applied with a daily improvement in the strength of his leg, so that on July 10th he was walking about, and on the 21st he sufficiently recovered to be able to leave the hospital convalescent and nearly well. Patient took no medicine.

*Case 2.—Paralysis agitans*—J. B., æt. 40, had been suffering for three years from the paralysis agitans. The complaint commenced in the right hand, afterwards proceeded to the left, and then to the legs, until a general tremor of the whole body took place, including the face, and affecting the speech. He had been under different kinds of treatment, but without any benefit. I wished to try the continuous galvanic current to the spine, and accordingly fifty cells (Cruikshank's) were used for ten days. After the second application the patient, who had previously had very restless nights, obtained refreshing sleep. After four or five applications he began to experience a decided benefit, saying he always felt lighter and steadier directly he had been operated upon. The duration of this improvement lengthened day by day. The patient then left for the country, and has not since been heard of.

*Case 3.—Lead paralysis*.—Mr. S., a gentleman of middle age, was brought to me, on march 11th, 1872, by Dr. Charlton of Fareham, suffering from a most severe form of lead paralysis. His whole frame was attenuated in consequence of the atrophy which his muscular system had undergone; his limbs were very much wasted, and he was proportionately enfeebled. He tottered when he walked, his hands shook, and were so weak that he with difficulty could raise them to his head or button his coat. He resembled, indeed, the condition of a man with progressive muscular atrophy, only in this case it was induced by lead and was not idiopathic.

The history which he gave of his case was as follows:—He lived in Surrey, about twenty miles from London, and had enjoyed good health until June, 1871, when his arms and hands became tremulous, so that very shortly he was obliged to use both hands to raise fluids to his mouth to prevent spilling. He was recommended a change of air and took a trip to Scotland; after being there a month he got considerably better and returned home. In a fortnight all the symptoms reappeared more severe than before. He went away again to Southsea, and there used salt-water baths, when he a second time rapidly improved, and at the end of a month returned home. Shortly afterwards, however, the old symptoms reappeared, when he was advised to consult a London physician.

He was ordered to use galvanism in the form (he stated) of magneto-electric shocks, which did not benefit him, when his doctor, suspecting lead, had his drinking water analysed and found it to be strongly impregnated by lead. He was then, of course, put on a proper course of medicine, desisted from the use of water, and he improved. He had continued the use of the galvanism. He subsequently left London and again went to Southsea.

When I saw him in March he had got into a stationary condition, and was in the state above described; his limbs wasted and with little power in them. I ordered him some small doses of iodide of potassium and quinine, and wished him to use a simple galvanic current rather than electro-magnetism. Finding there would be a difficulty in making use of this at his own house, I advised him to go to Guy's Hospital every morning, and to this he readily assented.

Mr. Sandy, the electrician, tried the effects of the continuous battery current upon him, and also the induced current, with the following results. In the right arm the extensor muscles contracted well by the application of twenty cells of the Daniell's battery. The induced current was applied, as strong as the patient could bear, with scarcely any contraction. In the left arm the muscles contracted well by fifteen cells, and with precisely the same results on the right arm, with the induced or interrupted current. In the legs twenty cells caused good contraction, but scarcely any result was obtained by the interrupted current.

He continued the use of the galvanism to the limbs daily and made visible progress.

On April 18th he had considerably more power of the limbs than he had a month previously, and, on the muscles being tested, it was found that the 'induced' current, which had been powerless before, now excited the extensor muscles of the right arm, so that the hand was raised on a level with the arm. On application of the same strength to the left arm it extended the fingers much more than the right, but the hand was not lifted to the same extent.

The patient persisted in the treatment up to July, during this period gradually improving, and in August he had quite recovered the use of his hands and was following his usual occupation.

*Case 4.—Lead paralysis*.—Margaret C., æt. 47, admitted February 29th, 1872. She has been married and has a large family. Two years ago her husband died, when she was obliged to work for her living. She gained employment in some lead mills, her business being to grind the white lead. For some months past she has been getting thin and feeble, her arms wasted, together with stiffness and pain in the shoulders. Has had slight colic.

*On admission*. She seems to be a small spare woman, anæmic and sallow, looking indeed extremely ill. She is thin, owing to a general wasting of the muscles of the whole body, more in the extremities and especially in the arms. She is too feeble to walk, and therefore obliged to keep her bed. She can scarcely raise her arms from her side, owing to the atrophy and weakness of the muscles; extensor muscles of forearm are extremely wasted, rendering the arm

quite flat, the wrists drop without there being the slightest power to raise them. Muscles of hand soft and flabby, the right arm and hand worse than the left, so that she cannot use them for feeling herself. The blue line on the gums well marked, and a distinct blue stain along the lower lip corresponding to the stained border of the gums. Slight œdema of eyelids. Ordered ten grains of iodide of potassium three times a day. Tested by galvanism. Faradization:—As much power as the patient can bear has a very slight effect upon the extensors of the thumb and not upon the other muscles. Continuous battery current:—Good and well-marked contraction of all the extensors by the twenty Daniell's cells. The continuous current ordered. Mr. Sandy finds the more efficient method to be by placing the fingers in water containing a little salt, the negative pole is placed in the water, and the positive pole gently stroked along the extensors. This causes contraction of the muscles and elevation of the wrist; when the poles are reversed the current and the effect are less.

April 17th. The continuous current has been used to the limb daily up to the present time, and the improvement has been marked though gradual. The blue line on the gums is much less. She is out of bed to-day for the first time. As the improvement has been going on, so the muscles have become susceptible to faradization, whereas they have required a larger amount of simple galvanism to affect them.

May 13th. Improved considerably; walks about. Is able to feed and dress herself. Can extend the wrist, and the arms are larger in bulk. Blue lines on gums and lips disappearing. On testing with faradization, there is marked contraction in the extensors, the hands being well lifted; this is more so in the left arm than the right, the right being always weaker and smaller.

In this case it may be remarked that besides a well-marked blue line along the edge of the lower gums there was a dark patch on the mucous membrane of the under lip, corresponding in position to that on the gums, but rather more defined and dotted. A question is always asked in the wards whether this mark on the lip is formed independently, or follows that on the gums from contact? The latter is the probable explanation.

In these cases of dropped wrist the back of the hand is often observed to be rounded, apparently from enlargement of the metacarpal bones, but due in all probability to some thickening of the theæ.

*Case 5.—Plumbism treated with electric bath.*—Wm. J., æt. 36, admitted under Dr. Wilks, July 17th, and left July 27th. He began to work at grinding lead nine months ago, and at the end of about five months commenced to feel ill, with loss of appetite, pains in his head and abdomen, and general debility. He continued at his work and daily grew worse; until a week ago, when he was obliged to desist, having pains in his limbs, sweating and inability to stand, and vomiting.

*On admission:* He was seen to be very pale and very thin, having evidently lost a great deal of flesh. Skin hot, tongue furred, marked blue lines on gums.

Constipation. Recti abdominis contracted and painful.

July 20th. Ordered an electric bath. This was made by Mr. Sandy as follows:—the bath being prepared, enough sulphuric acid was put into it to give it a slight acid taste (about  $\frac{3}{4}$  iv), the negative pole of the battery, attached to a large sheet of copper about two and a half feet square, was put upright in the bath and the patient placed in it so as not to touch the copper plate; the hand of the patient was held out of the water and in it he held the positive pole. Fifty and eighty cells were tried, but when the current was applied to the neck instead of the hand the patient could not bear more than fifty cells. On marking and breaking contact the patient felt a kind of thud through the whole of the body. A bath lined with glazed tiles was used.

The patient used the bath again on the 24th and a third time on the 25th. He said he felt very cold after it. He always had his bowels relieved immediately after it. On each occasion he felt better, and on the 27th he was so much improved that he went out.—*Guy's Hospital Reports*, vol. xviii., 1873, p. 148.

#### ON OVARALGIA.

By Dr. T. CLIFFORD ALBUTT, Physician to the Leeds General Infirmary.

If gastralgia be mistaken for dyspepsia, far more commonly is ovaralgia misunderstood. Indeed, the existence of ovaralgia, as I understand it, is by no means familiarly known to the profession.

The irritable uterus of Gooch was, and perhaps is, a phenomenon of which few medical men would be called ignorant; but I am sure that it is a very different thing to the ovaralgia of which I have seen many marked examples. I cannot say that uterine neuralgia is an ailment which has come very prominently before me, though, as all our experience is accidental, it may well be common for all that. Women, however, in my experience such as it is, complain to physicians far more often of unilateral pains and pains which are evidently periuterine, than of pains which are actually seated in the womb itself. For it is not quite accurate to give the name neuralgia to those uterine pains and irritations which accompany other disorders of that viscus. All the uneasiness and misery which result from displacements and from local diseases, such as ulcers or tumours, must of course be eliminated. Cases of irritable uterus, again, cannot be called cases of neuralgia proper, for in almost all of them there is also some menstrual disorder, or the pain attends the normal menstruation, when the necessary congestion burdens and irritates the hyper-æsthetic tissue. In this view I am supported by the valuable opinion of Dr. Handfield Jones, and he will, I think, wish with me to preserve a distinction between hyper-æsthesia and neuralgia. In my selection on gastralgia I have spoken likewise of gastric hyper-æsthesia as occasionally implicating gastralgia, but it is not gastralgia; on the contrary, I have notes of many interesting cases of pure gastric hyper-æsthesia

with which gastralgia was never associated, and which rather simulated ulcer or chronic gastritis. To turn also to the ovaries themselves, there is such a thing and a common thing too, as hyper-æsthesia of the ovaries, but this differs entirely from ovarian neuralgia, as I should describe it, in which the ovaries need not be very tender to pressure, though of course they sometimes are so continuously and often are so soon after an attack of pain. In ovaralgia there is often no disorder of function whatever, but acute aching or, it may be, agonising pain. This pain, when severe, is too often mistaken for urinary calculus, lithiasis, or even for peritonitis. This latter is a sad blunder, but I fear far from rare, if I may add my own observations to the warnings of Dr. Addison, who, says Dr. Jones, "appreciates fully the difficulty there may be in distinguishing abdominal neuralgia from peritonitis." The ovarian neuralgia to which I refer comes on either as a mere weight or burning, or as a true 'tic.' As in the case of Mrs. Mc—, it often comes in a moment and continues as an agonising paroxysm for one or several hours. The pain may dart from the ovary of one side, often thence downwards towards the perineum or upwards to the false ribs even to the arm pit, though sometimes we have to allow for a little exaggeration in descriptions of severe pain. The pain rarely occurs in both ovaries at once, though it frequently attacks them alternately. The occurrence of the pain does not seem to depend upon any well defined immediate cause, for it may occur at almost any hour of the day. Indeed, its demeanour is in every respect very like that of ordinary facial tic. There need not be and often there is no coincident local disorder of any kind, though a local cause of irritation—such as ascarides, for example—no doubt might determine an outbreak. At the same time I think sexual excitement may not unfrequently be accused of some complicity in the attack. This is a subject on which clinical questioning is almost impossible; but I have seen severe uterine neuralgia twice in newly married women, and once in a married woman who was believed by her own medical adviser to make great claims upon her husband. That the immediate cause of the attack in a predisposed person was in another instance the combined influence of cold and fatigue seems clear. As mastication again may bring on facial tic, and food may bring on gastralgia, so ovaralgia is often produced by quick walking or running. Ovarian ovaralgia will need the same general treatment as the other neuralgias; quinine and steel being more especially useful. As a palliative measure hypodermic morphia has the same marvellous value that it has in gastralgia and in every other form of nerve pain. But year after year adds to my conviction that the remedy is as dangerous as it is effectual. In a paper published some time ago in the Practitioner I drew attention to the unquestionable fact that the use of the morphia syringe tended even more surely to become a habit than the use of anodynes in other modes and forms. Those who have learnt to fly to the syringe, as a remedy from instant pain, soon discover that in it they find also a

most effectual stimulant. Delicate ladies, when under the influence of the injection, can stir about their houses, can frequent dinners and balls, can receive company at home and feel generally hungry, active and gay, to a degree before unknown to them. Hence its terrible fascination for them, a fascination which seemingly is as potent when once established as that of alcohol. Like alcohol, too, it creates the recurring need for its repetition. The dose may not be greatly increased, the sixth of a grain may not grow to more than half a grain or a grain, but the system claims it again and again, and denial seems cruel or even impossible. When the influence passes away a state of depression seems to come on,—a want, a sense that the lamp of life must be re-trimmed, and many persons have not the strength to resist this. Not only so, but this very reaction becomes the cause of a renewal of the neuralgia, so that the morphia treacherously keeps alive the very pains it pretends to relieve. A lady of great intelligence, and a great sufferer from neuralgia, told me that she discovered the temptation of morphia injections after the first half dozen operations, and she decided to bear pain rather than run the risk of becoming a slave to them. Among numberless cases of a contrary kind I may mention one of a brave lady, suffering from intense cervico-brachial neuralgia and habituated to the use of the syringe, who, in obedience to our urgent wish, broke the habit, and the pain gradually ceased to return. On the other hand a medical friend, who lives away from Leeds told me that a lady stopped him one day in the street, and begged him to give her an injection in his brougham, as her syringe was broken and her own medical man was away out of town. This lady was not at the time suffering from actual pain, and, much to her displeasure he declined to operate. Therefore I would warn my readers not under any circumstances to permit the use of morphia in this way to become periodical, or they will find the last state worse than the first. In old persons with neuralgias that are admittedly incurable the periodical use of hypodermic morphia may, as Dr. Anstie argued in a review of my paper, seem the lesser of two evils, and may not indeed be any great evil; but in younger persons it should be discontinued for two reasons, namely, 1, the regular use of it sets up a periodicity in the system which actually favours the return of pain; and, 2, during that regular use all other treatment loses much or all of its power. Case after case has come before me, of late years, in which I have seen, not only the establishment of a periodic pain in spite of all remedies, but also, in addition to this, a love of intoxication, with slow and almost imperceptible deterioration of mental stability and calm intelligence which has defied all management. Several brave persons suffering from gastralgia, hepatalgia, facial tic, ovaralgia, &c., &c., at my urgent entreaty have broken off the habit, and in these cases, without any special treatment the neuralgia has *pari passu* given way likewise, while it had previously defied even the continuous current. Therefore I feel very strongly opposed to the regular use of this

potent remedy by neuralgic persons. It should not, generally speaking, be taken out of the hands of the medical attendant, and it should be used avowedly as a palliative on special occasions only, not at regular intervals. I need scarcely say that hypodermic morphia often cures neuralgia, and to this end may well be used for a few days consecutively, or several times a week. Still, the medical man must assuredly bear in mind that, if he does not cure the ailment, he is in danger of establishing a habit both of intoxication and of the neuralgia itself. With him the responsibility must rest of drawing the line between its use as a curative means and its use as an habitual palliative and stimulant. The same difficulties which have limited my experience of the continuous galvanic current in gastralgia, apply with even more force to ovaralgia, in which complaint I have indeed never made a trial of it. Fortunately, so far as a few cases can prove, we seem to have in quinine, liberally given, an almost specific remedy. It may not act more decidedly in ovaralgia than it does in trigeminal tic, but, curiously enough, it is at least equally valuable. In iron and arsenic then, as chronic remedies, and in quinine or hypodermic morphia, as immediate remedies, we may find a tolerably sure cure.—*Liverpool and Manchester Med. Reports.*

#### TREATMENT OF ACNE.

By H. D. BULKLEY, M.D.

(*New York Medical Record.*)

An elaborate paper on Acne, read by Dr. Bulkley at the New York Academy of Medicine, and followed by an interesting discussion, contains some observations on the treatment of this troublesome affection that may interest our readers.

Dr. Bulkley, differing strongly from the local pathology of the Germans, and believing in the internal origin of the disease in the great majority of cases, relies most on constitutional remedies, together with attention to diet and exercise. Constipation has in most cases to be combated, but not by ordinary purgatives, the abuse of which has brought discredit on their employment in the treatment of acne. Attention should be paid to diet, exercise and regularity in answering the calls of nature; and, when medicine is required, most success is derived from the employment of minute doses of aloes, combined with iron, given repeatedly after meals, and gradually diminished as the required effect is produced. He also prescribes a pill containing blue pill and compound extract of colocynth, of each two and a half grains, and one quarter of a grain of ipecacuanha, giving two such on alternate nights for awhile, and following them by Kissengen water. The dyspepsia which is so often present is usually of the acid variety, and much benefited by restriction in the use of starchy and saccharine substances, and of ale, beer, and wine, as also chocolate, fried substances, pastry, and coffee and tea in excess. When a stimulant is required, whisky or brandy should be preferred to ales and wine. Exercise in the open air is

of very great importance, and neglect of it may be one reason why women are more liable to the disease than men. Dr. Bulkley has seen many cases injured by arsenic where this has been given in the early stages of acne; but he regards the remedy as serviceable later, when the eruption is drier and less inflamed, as a tonic having a special action on the skin. He has found acetate of potass serviceable in many cases, in doses of from fifteen to thirty grains, given in a considerable quantity of water between meals. It will not, however, effect a cure, tonics being afterwards required. Dilute nitric and phosphoric acids, with vegetable bitters, have also yielded good results, as also Kissengen water in pint doses before breakfast, the beneficial effects depending not upon its purgative principles, but upon its alkaline properties. Cod-liver oil, with iodide of iron, is useful in scrofulous subjects, and a mild mercurial course may be resorted to when there is suspicion of syphilis. Dr. Bulkley, although attaching by far the most importance to general means, finds that local means will hasten the cure, and the best of these is a lotion composed of sulphuret of potash and sulphate of zinc, of each a drachm to four ounces of rose water. He has used collodion in order to contract the capillaries in acne rosacea, but without any permanent effect; and he has laid open the veins in this affection with some good results. One drachm of iodide of lead to one ounce of stramonium ointment has been of use in reducing thickening in indurated acne, and citrine ointment, diluted three times, has been of service in acne rosacea. Juniper and tar soap is of value when there is not much inflammation; but bichloride of mercury has not justified the frequent use that is made of it.

Dr. Weisse, after the correction of the constipation and dyspepsia attendant upon the disease, gives a decided preference to local treatment. After a thorough trial of the internal use of arsenic, he is convinced of its inefficiency. Iron, and particularly the iodide, he has found useful in scrofulo-anæmic patients. He is able to testify to the success of Gubler's treatment by glycerine, and he has found with him that the subjects of this disease usually exclude fats of all kinds from their food. He therefore gives from half a pint to a pint of cream daily, as also almond or olive oil, and he explains the successful use of cod-liver oil by the same theory. In tropical treatment he regards as the first essential the careful emptying of the follicles of their contents, which may be done by a fine needle and well-directed pinching of the orifices. Next, inflammation should be allayed by warm water rendered milky by kneading a bag of bran in it, and used as a douche for ten or fifteen minutes two or three times a day. After trying all the applications that have been recommended, he gives the preference to those which are not irritating. Chronic papular and tubercular lesions, however, require nitrate of silver or more powerful escharotics. For the last two years Dr. Weisse has used with advantage an ointment composed of suet carefully worked up and scented, and a powder of equal parts of subnitrate of bismuth and prepared chalk. Before going to bed the patient

uses the hot bran douche, and after careful drying the suet is gently applied to the face and left on. In the morning the face is not to be washed, and is to be freely powdered with the powder by means of a puff. In ten or fifteen minutes this is to be brushed off with a very soft brush, and carries the ointment with it. The redness and burning in acne rosacea are effectually allayed by an ointment consisting of sulphur 3 ss, pulverized camphoræ gr. v, adipis 5 j, applied two or three times a day.

Dr. Peters considers acetate of potass as one of the most useful of remedies when the urine is scanty and dark-colored. In doses of from 20 to 40 grains it is a mild and efficient diuretic, not only increasing the quantity of urine, but also of its solid constituents, in a remarkable degree—acting as a depurative and eliminative remedy. The carbonate of potash, too, is an antacid, alterative, and diuretic, and in inflammatory acne ten or more grains may be given with from three to five grains of nitrate of potash a few hours after meals. Borate of soda is a refrigerant, diuretic, and emmenagogue, in doses of five to thirty grains; and Copland strongly recommends it for external use. A good lotion may also be made of Borax 3 j, alcohol 5 ss, water 5 iijss; or borax 5 ss to 5 viij water; or borax 3 ss to aq. flor aurant. and aq. rosar. ʒ 5 ss. It is especially useful in acne attended with amenorrhœa and uterine disease. When there is constipation with amenorrhœa, three or four grains made into a pill with one grain of aloes is very useful. The muriate of ammonia is very useful when there is amenorrhœa with bilious derangement—given in five or ten grain doses three times a day in water, or made into a pill with aloes. It should also be used as a lotion. In very obstinate cases of acne indurata, and rosacea, the iodide of sulphur may be given in quarter or half-grain doses, increased to one or three grains, aided by an ointment containing five, ten or even thirty grains to the ounce of cerate. The green iodide of mercury is useful, also, in the indurated variety, and especially when there is an old chronic disease of the liver. It may be given in quarter or half grain doses, combined with conium or aloes, and an ointment (five to ten grains to the ounce) may be applied. In obstinate and rebellious cases, the ammonia-chloride of mercury (five to ten grains to the ounce) is useful.

Dr. Howard says that he has used all the various local applications for acne, but had found none of great value. If evulsion can be provoked without too much irritation, the worst follicles may be emptied at the outset; and any remedy which prevents desiccation of the orifices and keeps the skin pliant is indicated. Constitutional treatment, according to the indications present, is what should be chiefly relied upon. Constipation is a very common coincident, and this is best treated by cream of tartar taken as a drink morning and evening in sufficient quantities to become slightly aperient. If there be indigestion, especially combined with acidity, the following powder may be given three times a day:—℞ Pot. bitart. et sod., 3 j; rhei pulv., gr. x; bis-muth subnitr., gr. x.; sod. bicarb., ʒ j—divide in

puly. x. Under the use of this remedy the great majority of cases get well.

Dr. Taylor is of opinion that the essential point in topical applications should be to stimulate, and that want of success is often due to lotions being too mildly applied. He has derived benefit from sulphur, and especially from a lotion formed of lac sulphur 3 ij, spt. camphor 5 ij, water 5 iv. This should be rubbed firmly into the skin and allowed to dry over night, anointing slightly with cold cream in the morning. He has also derived benefit from iodide of sulphur ointment and from lotions of bichloride of mercury, from two to five grains to the ounce. Both he and Dr. Draper, at the College clinic, have seen marked advantage from the application of caustic potash solution (twenty to forty grains to the ounce), which is freely applied to the spots and allowed to dry, being afterwards washed off by very hot water. This is done at night, and next day the face is smeared with cold cream. Although acne is a troublesome affection, there is no necessity for the amount of polypharmacy that has been expended upon this disease, as relief can be obtained from sulphur, iodine, mercury and potash. He has seen good results from mild ointments of red oxide or deuto iodide of mercury, and in many cases from mercurial plasters. He has been disappointed in the use of diachylon ointment recommended by Hebra, having found it slow and unsatisfactory. In acne of the nose the scarifications recommended by Hebra are absolutely necessary, and of great use. Not only should applications stimulate sufficiently, but they should not be changed too frequently, many failures being due to the remedies being continued for too short a time.

Dr. Caro states that he had been led by accident to discover that, while not neglecting internal remedies, obstinate cases of acne may be effectually treated by solar heat. He concentrates the sun's rays upon the part by means of a lens until the whole periphery is well burned. In a short time the skin becomes intensely red, and small vesicles full of serum begin to appear. These discharge during three or four days, when the healing commences, leading to the final cure. Cloths wrung out in cold water soothe the pain caused by the heat, and promote free secretion. If the acne is only a follicular affection of certain parts of the skin, with abnormal secretion, this blistering action of the sun is the best remedy, although the process is a painful one.

#### CARBONATE OF AMMONIA IN SCARLET FEVER.

By G. J. S. CAMDEN, Esq., Rhyl.

The following treatment of scarlet fever has come down from master to pupil through four or five generations of medical men,—to myself from a partner I joined in 1828—therefore extending over a period of nearly 150 years. I was nearly losing a patient, when my partner told me if I persisted in treating scarlet fever *secundum artem* I should lose many; He then told me what he had been taught by his master, and had used for thirty years with the great-



est success. I adopted his system, and am fully satisfied with the results. Never give emetics or aperients, nor bleed, nor use leeches, nor do anything to lower the power of life, but give ammon. carb. on the very onslaught of the disease, the earlier the better, when it will cut the disease short. I used it as follows: ℞. Ammon. carb. gr. x. vel gr. xij., aquæ 3 iv., 3 vj., vel 3 viij.—for 16 years and above. ℞. Ammon. carb. gr. viij. vel gr. x., aquæ 3 iv., 3 vj., vel 3 viij.—12 years to 16 years. ℞. Ammon. carb. gr. vj. vel gr. viij., aquæ 3 iv., 3 vj., vel 3 viij.—6 years to 12 years. ℞. Ammon. carb. gr. iv. vel gr. 3 vj., aquæ 3 ij. vel 3 iij.—4 years to 6 years. ℞. Ammon. carb. gr. ij. vel iv., aquæ 3 j. vel ij.—2 years to 4 years. Unless distilled water be used it must be cold boiled rain-water filtered, the dose to be taken every two, four, or six hours, according to the severity of the throat symptoms; the quantity of water to be regulated on the same principle. The worse the throat the stronger the dose of ammonia, the smaller quantity of water, and to be given most frequently. The choking from the ammonia is instantly relieved by a small quantity of cold water, but if done without the better. If the power of life is at a low ebb, wine or a tea spoonful of brandy, and the same of water between each dose, and beware of aperients. I have waited five or six days. The foregoing prescriptions I sent to a lady in Ireland, who had seen the effect in eleven cases in her own house. In the original treatment in cases in which the tonsils had become gangrenous, the following was used as a gargle:—℞. Rad. pyrethri ʒ iij., aquæ ʒ xvj., decoque at ʒ x. et cola; adde syrup. rheados ʒ ij.—M. Gargar. sæpe utend. My partner used it whilst with me but once; I never used it, though I had one extremely severe case with gangrenous throat, through the nurse's negligence. There were twenty two patients in the house—a school—and none died. I only used the ammonia and the brandy. In each case the child recovered. I never used leeches but once—the child being delirious—and then put on only two, and as soon as they came off stopped the bleeding. In my severe case ascites supervened, which nothing relieved. After several months in dread of paracentesis the umbilicus ulcerated, the cavity emptied, the child recovered, and grew a fine young woman. One great essential is the room kept cool and well ventilated.

Some few of my medical brethren have followed the treatment on my telling them, and were as much satisfied as myself; but most are incredulous. I never lost a dozen patients from scarlet fever in the course of twenty-five years, though I lost two in forty-eight hours in one house; but that was the abominable situation of it—the corner of a small wood into which the drainage from a large farm yard ran in close proximity.

About the year 1838 (I think) there was a letter in the *Lancet* in which the use of ammon. carb. in scarlet fever was mentioned as a new discovery by a German M.D. Since then two letters have appeared in the *Times* from Dr. C. Witt—one on December 1, 1858, the other I forget when. Of diphtheria I know nothing, but believe it to be only another

phase of scarlet fever. Of the sequelæ you have less after the ammonia treatment, having seen but little; and, should anasarca supervene, it will readily yield, as I have of late years found (with alternate doses of quinine as a tonic), to liberal doses of potass. bicarb. (Howard's) with potass. nitrat. taken in a large quantity of water. The potass. nitrat. I use is to be obtained only at powder makers'. It has been melted by heat and kept so far two or three days, so that all waters of crystallization is driven off. I mention this as I have always used it, and fancy I should not get a similar effect from any other. The sudden retrocession of the eruption I never knew to be of consequence; but the most severe and frequently fatal cases are usually those in which the eruption does not appear, and these cases are more frequent than is supposed, and are not suspected till too late. To my eye there is such a peculiar appearance of the throat it cannot be mistaken.—*Medical Times and Gazette*, Feb. 1, 1873, p. 131.

#### INFANTILE ENTERALGIA.

Dr. John Boyd, in an interesting paper (*Edin. Med. Journal*, Feb. 1873) on an affection which he terms "infantile enteralgia," remarks: "In male children especially, from two weeks to four or six months, of a lively mobile temperament, we very frequently observe them subject to attacks of abdominal pain, which come on suddenly, generally at night, commencing at a little after twelve, and continuing with slight intermissions to four or five in the morning. The little sufferer draws up its knees and tosses about in the nurse's arms; the cry varying from an agonized scream to a plaintive wail, with intervals of sobs and long-drawn breaths; but neither the pulse nor the respiration is accelerated, nor is there usually any abnormal elevation of temperature. The natural language of the malady denotes unmistakably that the bowels are the seat of the pain, though the tenderness on pressure does not seem excessive. After a time the local uneasiness appears to have produced a quasi-hysterical action on the nervous system. If the infant be old enough to be attracted by any glittering object, or a series of moderately loud noises, he may forget his woes for a time, and all at once recollect them and resume his ululations as vehemently as before; bearing on his countenance that expression of conscious ill-usage which is so generally seen in those afflicted beings of maturer age and opposite sex, of whom it has been quaintly remarked that they are so very ill because there is so very little really the matter with them. After disturbing the whole household for the best part of the night and exhausting all the curative efforts of the establishment, the young gentleman falls quietly asleep, and seems so well and fresh next day that the history of the direful nocturnal events sounds like a baseless romance when related even to sympathetic auditors. Yet such experiences constitute one of the most painful trials which the youthful primipara is called upon to undergo, although Mater-familias of fifteen or twenty years' standing sustains them in general with philosophic equanimity.

"The enteralgia referred to does not commonly depend on mere fecal accumulation. In thriving children who are not as yet subjected to the pangs of teething, the alvine evacuations are comparatively scanty so long as the maternal lacteal secretion is the sole or preponderating source of nutrition. In such cases I have invariably noticed, that so long as the abdominal suffering lasts, the urination is suspended, that a true ischuria renalis exists for the time being; and that whenever micturition occurs the crying and distress cease, presenting exactly the same termination as that of the *passio hysterica*—the copious flow of a large quantity of clear limpid fluid. Acting on this indication, I have for many years past been in the habit, whenever such attacks were brought under my care, of prescribing from eight to ten minims of spiritus etheris nitrosi in a drachm of water, to children of the age above mentioned. Generally after the administration of this draught there occurs a discharge of flatus from the superior or inferior orifice of the alimentary canal—the ether acting as a diffusible stimulant and carminative; but without exception the passage of urine in large quantity takes place within a few minutes after its imbibition, the cries cease, and the small patient sinks into a refreshing slumber. Whatever view may be taken as to the causation of the malady in question—whether it may depend on a non-secretion depending on a temporary congestion of the glomeruli of the kidney or a partial paralysis of the more elaborated and complex urinary passages of the male, or merely from the presence of flatus in the colon mechanically suspending the renal function,—the fact is well ascertained that the phenomena above depicted are extremely frequent in male infants of all classes, and every variety of social and hygienic surroundings; also, that in some instances very serious mischiefs have been the consequence of such nocturnal pervagitus."

URGENT AND PROLONGED DYSPNOEA COMING ON  
SUDDENLY AFTER LABOR.

Dr. J. J. Phillips, Ass. Obstet. Phys. to Guy's Hospital, relates (*Brit. Med. Journal*, May 3, 1873) the following interesting case of this in a married lady, æt. 36, to whom he was called Dec. 30th. She had been delivered of her fifth child at 2 P. M., after a perfectly natural labour, and continued to do well until 6 P. M., when she complained of oppression and began to gasp for breath. Dr. P. saw her at 9 P. M., when her condition was most alarming. She was sitting up in bed, supported by pillows; the dyspnoea was most urgent; respirations 48, pulse at wrist 140; "respiratory murmur could be heard over the chest in front and behind; there was no abnormal sound accompanying the heart's action, but the first sound was muffled; the legs and the forearms were quite cold; the lips were livid; the face was pallid. She endeavoured on one or two occasions to speak, but could only articulate one word at a time. The history of the case and the symptoms seemed to point unmistakably to a coagulum in the pulmonary artery; and it seemed to us

that the treatment should be directed to support the heart's action as much as possible, and this was done by repeated doses of brandy, which with some difficulty were swallowed in soda water. Five-grain doses, increased to ten grains, of carbonate of ammonia were given at short intervals, and warmth was applied to the extremities. I remained about an hour. The case seemed hopeless. At nine o'clock next morning, however, I found her much relieved. She was able to assume more nearly the horizontal posture; the extremities were warm; the breathing was much more easy, and only thirty per minute; the pulse still very small, 120 per minute; temperature in the axilla, 97° Fahr. Symptoms of improvement had commenced about four in morning. Her husband and another medical man who sat up during the night, believing that the carbonate of ammonia was doing good, had continued its use in increased doses, so that in twelve hours she had taken two hundred and ten grains of it. The stomach tolerated this large quantity in a remarkable manner. "She was a little sick two or three times." The brandy had also been continued, and she had taken a little beef-tea in the early morning. In the evening, she was in much the same condition as in the morning; frequency of pulse and respiration the same; temperature only half a degree higher (97.5° Fahr.). She still complained of pain in her chest. During the night some hours of sleep were obtained, and the next day she was more comfortable in every respect. The respiration had fallen to from twenty to twenty-five per minute; temperature, 99° Fahr.; no abnormal cardiac sound. The strictest rest was maintained. On the sixth day there were some pyrexial symptoms; and on the seventh she began to suffer from severe sickness." She however soon improved.

Dr. P. thinks that it is impossible to explain the symptoms in this case upon any other hypothesis than that of pulmonary embolism. He thinks it "probable that a loose clot which had formed in the right side of the heart was driven into the pulmonary artery, giving rise to the urgent dyspnoea which supervened so suddenly. The patient told me that throughout the day she had felt a little shortness of breath. Given that a clot found its way into the pulmonary artery, it is of course quite conjectural what changes took place in it; but it is not improbable that a loose clot might undergo such contractions as to allow the gradual re-establishment of the circulation, coincident with the slow improvement in the general symptoms. Different opinions will doubtless be entertained as to the share which the carbonate of ammonia had in relieving the symptoms, by reducing the hyperinosis of the blood which existed at the time. The large quantity of this alkali which was taken in twelve hours is specially deserving of notice. I am not aware that it has been given continuously for twelve hours in such large doses at such short intervals. Dr. Richardson, in one of his valuable contributions to the subject of thrombosis, gives reasons for administering the liquid ammonia rather than the carbonate; but when this case occurred I had not read Dr. Richardson's

remarks on this point. Another fact of interest in the case now reported, is the low temperature which continued throughout the day succeeding the most severe symptoms.

#### TREATMENT OF SCARLET FEVER.

By T. W. EGBERT, M.D.

(Transactions of the Pennsylvania State Medical Society.)

Dr. Egbert discards the idea of varieties, believing scarlet fever to be one and the same disease, in all places and under all circumstances, modified by atmospheric, hygienic, and other known and unknown influences. His treatment, from beginning to end of a recent epidemic, was uniform, simple, and he thinks novel to many practitioners; but he wishes the successful results to speak for themselves. He treated two hundred and seventy cases, with but a single death; and in that case his directions were reversed by the nurse, who applied hot instead of cold applications to the throat. From the incipency of the disease until the desquamation is perfect, he prescribes the following mixture:—℞. Acid. muriatic, f ʒij; Syr. simplicis, f ʒij; Potass. chloratis, ʒ iij; Aquæ rosæ, f ʒ iv. Mix. Sig. Half table-spoonful every two hours. The dose designated in the above prescription would be for a child six years of age, double the amount being necessary for an adult, and smaller quantities for a younger child. Where there is much restlessness and nervous irritability he administers paregoric in sufficient quantities to soothe the patient and allay those symptoms. He never found it necessary to use gargles, probangs, or the pencil to the fauces or throat. In one case—that of a male adult, aged twenty-four married; confined to his bed, with the characteristic scarlet blush making its appearance on the face and neck; general symptoms all present in an aggregate form; he prescribed ℞. Acid. muriatic, f ʒij; Syr. simplicis, f iij ʒ; Potas. chloratis, ʒ iv; Tr. opii camph. ʒj; Aquæ rosæ ʒ fiv. Mix. Sig. Table-spoonful every two, three, or four hours. As to this case, he says: "This was the principal treatment until the twelfth day, when the febrile symptoms had all subsided and desquamation well advanced; with the exception of simple tonics, continued for ten days or two weeks longer this was the entire treatment of this case, and in sixteen days from the first appearance of the blush he was at the office, attending to his ordinary business, being an oil broker. The reader can judge of the severity of this case and of the efficacy of the treatment, when I state that there were no bad sequelæ, except perfect *onychoptosis* of both hands and feet. In a few cases where there was much congestion about the fauces and throat, ulceration of the uvula and fauces, and enlargement and induration of the parotid and submaxillary glands, I found it necessary to use the ice-bag, applied snugly to throat and neck until relief was obtained, which was generally in from six to twenty-four hours, being careful not to freeze parts by continuous application too long at a time.

#### CLINICAL REMARKS ON EMPYEMA.

By SAMUEL WILKES, M.D., F.R.C.P., Senior Physician to Guy's Hospital.

In empyema the lung of the affected side becomes contracted, condensed, and unable to expand; consequently when the fluid in the pleural sac becomes absorbed, the chest walls gradually retract. On the healthy side the lung becomes the seat of a compensatory hypertrophy, just as one kidney enlarges if the action of the other be interfered with. The cure of a case is therefore very tedious, as time must be allowed for the recession of the firm and resisting chest wall. The walls must fall to the lungs, as the lungs cannot expand to the walls. It is impossible for the lung to expand when covered with a layer of lymph. Dr. Wilkes was unable to expand a lung post-mortem by means of the bellows, in a case of pleurisy of but six weeks' duration, but when he removed the layer of lymph from the visceral pleura, expansion was readily performed. If there are no signs of absorption of the pus, it is the best treatment to make an opening into the sac, and evacuate the contents. The cavity will then gradually close, partly by the formation of granulations, but chiefly by the recession of the chest walls. Care must be exercised to prevent decomposition of the matters that collect in the sac. This is best done by washing out the cavity several times daily with some carbolic acid solution or Condy's fluid.

#### ON THE TREATMENT OF CHRONIC DYSENTERY.

By STEPHEN H. WARD, M.D., F.R.C.P.

(Medical Times and Gazette.)

The first thing to be insisted upon is rest in bed, and in the recumbent position, in which the bowels are best kept quiet.

Diet stands next in importance to rest. That kind of diet should be ordered which gives least work to the alimentary canal, and which is most likely to be assimilated should the mesenteric glands be implicated, and which will send down to the large bowel a minimum amount of irritating waste material. Milk is the best form of nourishment in these cases; flour boiled with milk is a good combination; farinaceous articles of diet are also admissible. As a rule the patients do better without alcoholic stimuli; but where there is much prostration these must be given.

It is important that an even temperature should be maintained in the bed room or ward by night as well as by day. It had long been remarked that patients passing, say, twenty stools in twenty-four hours, would pass a large proportion of them in the night time. The action of the skin, which it is desirable not to check, can be evenly maintained in bed. Dr. Ward has found the application of a broad flannel roller in some cases to do good by carrying out the indication of support and local surface-warmth. During the period of convalescence, flannel next the skin, and otherwise adequate clothing, are essential.

Special remedial agents render important service

in the relief of various symptoms. An occasional dose of opium at night, where there are irritability and restlessness, may be given, not to lock up the bowels, but with a view of procuring sleep. A dose of castor oil guarded with laudanum, is often of service in bringing away scybalous fecal matter that has been retained, and caused griping and distress. For the tenesmus from which some patients suffer so much, an injection of starch and opium is the best remedy. The possibility of irritation being kept up by hemorrhoids must not be lost sight of. The severe and oft-repeated straining in the earlier stages of the disease gives rise at times to prolapsus ani, which in the more advanced stage may become a source of annoyance, and require surgical aid.

The complexion and course of chronic dysentery may be modified by the association of some special cachexia, as that of scurvy, ague, or tuberculosis. Where such exists the treatment will have to be modified. Where there are evidences of scorbutic taint, lime or lemon-juice must be given. It is here that the Bael fruit, which has enjoyed so much repute in India, will be found useful. If there be any old malarious influence at work, the symptoms will exhibit periodicity—the patients will perhaps be worse on alternate days, and then quinine will be the remedy. Where cough, hectic, etc., point to the tuberculous diathesis, cod-liver oil and tonics are indicated.

#### GLYCERINE OF BORAX IN FACIAL ERYSIPELAS.

Prof. D. M. Salazar, of the Hospital Nacional, Madrid, reports that he has cured eight cases of facial erysipelas in 48 hours by this remedy. Notwithstanding the rapidity with which the affection disappeared, there were no consecutive pathological affections. In one case, the disease had existed three days before treatment was commenced, and there was bilious vomiting, intense cephalalgia, high fever, inflammation of the entire face, and some phlyctenulæ in the vicinity of the right lower eyelid and the root of the nose. He applied the solution to the diseased parts with a brush and then covered them with a mask of raw cotton. After 24 hours all the symptoms, local and general, were notably diminished, and the next day all the phlyctenulæ had disappeared and desquamation was commencing.—*El Amfit. Anat. Espan.*, Mar., 1873.

#### CROUP.

Dr. W. W. Parker, of Richmond, Va., (*Virginia Clinical Record*), relates a case of croup in which inhalations of lime proved efficacious. The most dense vapor is not at all unpleasant, and can be borne as well as the ordinary atmosphere of a heated room.

#### RUPTURE OF THE ŒSOPHAGUS.

Dr. James S. Bailey, of Albany, N.Y., (*Phil. Med. Times*), reports the history and post-mortem appearances in a case of rupture of the œsophagus occurring near the cardiac orifice of the stomach, causing collapse and death in twenty-four hours from its occurrence. In this case the accident was prob-

ably due to a violent fit of vomiting. The lesion in a sound œsophagus is a rare one. Von Oppolzer reports having seen but one case.

#### IODIDE OF POTASSIUM IN SYPHILITIC SKIN DISEASES.

Dr. McCall Anderson (*Med. News and Library*) lays down the following rules with regard to the employment of iodide of potassium in the treatment of syphilitic skin diseases:—

1st. The longer the interval which has elapsed between the contraction of the syphilitic taint and the development of the eruption, the more confidently may we substitute it for mercury.

2d. If the patient is cachectic, it is, as a rule, to be preferred to mercury, except in recent cases of syphilis, when the mercurial vapor bath, or some such treatment, is more likely to prove successful.

3d. The more extensive the tertiary eruption, the more certain it is to yield to the iodide of potassium; although to this rule there are numerous exceptions.

4th. If there is any tendency to syphilitic disease of the nostrils or neighboring parts, iodide of potassium should be withheld, or given with great caution, for, if it produces coryza, it is very apt to aggravate the morbid condition of the parts.

5th. It should be given in full doses.

It is generally advisable to prescribe it in combination with a bitter, and, in cachectic patients, a little iron is a valuable addition, as in the subjoined prescription: Ammonio-citrate of iron, ʒ iij.; iodide of potassium, ʒ i.; syrup of ginger, ʒ vi.; comp. inf. of gentian, ʒ viij.; water to ʒ xxiv. A table spoonful in a large wine-glassful of water, thrice daily.

#### COMBINATION FOR CHRONIC DIARRHŒA.

Rayer (*Union Medicale*, No. 73) advocates the combination of cinchona, charcoal, and bismuth in the management of chronic diarrhœa in these proportions: Subnitrate of bismuth, ʒ j.; cinchona, yellow, powdered, ʒ ss.; charcoal, vegetable, ʒ i.; M. chart. xx. S. Two or three times daily during the intervals between meals.

#### THE TREATMENT OF WHOOPING COUGH.

By W. BERRY, L.R.C.P. and L.R.C.S. Edin.

(*Medical Times and Gazette*, Feb. 28.)

Mr. Berry has found dilute nitric acid, in doses of from five to fifteen minims—according to age—with simple syrup, given every three or four hours, to alleviate the cough and spasm, and apparently cut short the disease.

#### TREATMENT OF PYROSIS.

By J. BRADEN, M.R.C.S.

(*The Lancet*, Feb. 22.)

For the treatment of pyrosis, Mr. Braden recommends ten grains of subnitrate of bismuth, with five grains of the compound kino powder, suspended in thin mucilage, three times a day.

# THE CANADA MEDICAL RECORD

A Monthly Journal of Medicine and Surgery.

EDITOR:

FRANCIS W. CAMPBELL, M.A. M.D. L.E.C.P. LOND.

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MONTREAL, SEPTEMBER, 1873.

The Meeting of the Canadian Medical Association, which was held at St. John, New Brunswick, on the 8th of last month, was in every respect most satisfactory. It was the first session where all met, feeling that nothing likely to disturb its harmony, or cause acrimonious or sectional feeling, was likely to occur, and where the really legitimate work of the Association was entered upon. Although the full quota of literary food which the members were lead to anticipate was not forthcoming, owing to a circumstance which will we believe not occur again—yet there was sufficient provided to cause those who were in attendance to feel that the Association had at last adopted a programme calculated to induce the thinking and working men of the profession to attend its future meetings. The address of Dr. Botsford, of St. John, N. B., on Hygiene, we are assured, was a report embracing a vast amount of information, and shewing very great research, while the paper on *Surgery* by Dr. Hingston of Montreal, which we will publish in our next number, was one of especial value as regards Canadian Surgery. The attendance from Ontario and Quebec was small—the former Province being represented alone by Dr. Grant of Ottawa—but the profession of the maritime provinces were present in considerable numbers. Of the hospitality of the St. John profession, too much cannot be said. It was lavish in the extreme—one of the most pleasant re-unions being a lunch given at the house of Dr. Bayard—one of the leading physicians of St. John, and an earnest member of the Association. The next meeting will take place in 1874 at Niagara Falls—and the programme of papers announced as in preparation promises that in interest it will excel any former gathering. This, with the magnificent locality chosen for the meeting, will do much to attract a large number. Altogether, we think the literary start which the Association made at Montreal in 1872 was a good one, and if its members are active and energetic, we look for a prosperous career for the Canadian Medical Association.

## REPORT OF THE MEDICAL SUPERINTENDENT OF ROCKWOOD LUNATIC ASYLUM, KINGSTON, O.

We have received from Dr. Dickson, the Medical Superintendent of the Lunatic Asylum, at Rockwood, near Kingston, his report for the year 1872; it is tersely written, and really is a very able document. We confess to somewhat like amazement, at the improvements he has accomplished, and many of them certainly under great disadvantages. Besides his ability as a medical superintendent, which is admitted by all who know him, the report proves Dr. Dickson, to be equally alive to the interest of his country, as is proved in the following extract:

“Different branches of industry are not only beneficial to the patients in a hygienic point of view, but by utilising the labour of the inmates, I have been able to effect an immense saving to the country, so that by this and other means I have reduced the cost of maintenance of the patients fully thirty-three per cent., and, in addition to all this, the improvement I have effected on the property by the agency of the patients has increased its value four-fold.”

In Ontario, there seems to be the same difficulty in having the wants of lunatics attended to, that we have in the Province of Quebec. A wall commenced three years ago, and completion of which is necessary to allow the female patients to take proper exercise, has according to the report not advanced in the slightest degree for two summers, a condition of things which is but mildly expressed by the term, disgraceful. We trust that the report on this subject will have the effect that it should, and that the next summer will see the exercise ground of the female patients so protected, that all can enjoy and profit in health by it. The report also draws attention to a point which is really so important, that we feel it our duty to say a word or two upon it. It is with reference to the associating criminal lunatics with others who are not criminals, as is now done at Rockwood. Dr. Dickson says:—

“It is the universal opinion of all persons having anything to do with the management of lunatic asylums, that the criminal and non criminal classes of lunatics should never, under any circumstances, be admitted for treatment to the same building. They should never be permitted to commingle, as one vicious criminal lunatic is sufficient to contaminate a whole ward full.

The more rational the ordinary lunatics become, the more safely and easily are they managed; but with the criminal class it is totally different. The more rational they become the more dangerous they become, as they enter into plots to attack their attendants, and devote themselves to plan modes of escape, into both of which they try to inveigle other

patients into whose minds no thoughts of the kind would ever enter were they not influenced by persons of depraved habits.

The criminal is generally a man of low brutal instinct, and this trait of his character will always shew itself whether he is sane or insane, and when placed in an asylum among respectable patients, instead of being influenced by any efforts that may be employed with a view of working some reformation in his character and conduct, he only seeks to pollute others, and his intercourse with them is manifested by the mischievous and pernicious effects that follow in his trail. And besides all this, respectable patients are exposed to great danger in coming in contact with men who never in their sane moments had the most distant idea of the rights of property, or never placed any value on human life when it stood in the way of their perpetrating some gross outrage."

These observations are most important and action upon them should not be delayed. Separated they must be, and the foolishness of delay may be illustrated sooner than is dreamed of.

The average number of patients during 1872, was 361.51. During the seventeen years that the asylum has been in existence, only 28.73 of all the admissions have recovered; 23.62 per cent. died, and 46.74 per cent. of all admitted are still in the asylum. This is not a favorable record, and leads us to fear that in Ontario cases of insanity are not sent to the asylum for treatment, till all hope of benefit from treatment is passed. In the Province of Quebec, lunatics are generally sent to goal and kept there till they become permanently insane and hopeless, when they are sent to the asylum to become permanent burdens on the province. The record of the Rockwood Asylum would almost lead us to believe they followed the same plan in Ontario; we hope, however, for the credit of our own sister Province, that in this matter they show common sense. Perhaps there may be some blame for this in using the term Asylum, which leads many to think it is a place for *keeping*, not *curing* unatics. For ourselves, we prefer the term, "Hospitals for treating the insane," and think the considerable good would follow its employment.

#### FLINT'S PRACTICE OF MEDICINE.

A new edition of this standard work on Practice of Medicine has just been received by us. It contains nearly one hundred pages of additional matter principally upon diseases of the nervous system, and the entire volume has been brought up to date. As a book on Practice for constant use, there is perhaps none superior to Flint, and we very strongly recommend it to the notice of those of our readers, who may need such a work.

#### PERSONAL.

Dr. G. P. Girdwood, professor of Practical Chemistry, McGill College, has just returned from England, where he has been on a brief visit to his relatives.

J. B. Edwards, D.C.L., F.C.S., professor of Chemistry and Practical Chemistry, Bishop's College, sailed on the 30th of August, for England.

Dr. Shaw, lecturer on Chemistry in Bishop's College, has returned to Montreal, after a visit of a couple of months in England.

Dr. Trenholme, professor of Diseases of Women and Children, Bishop's University, performed ovariotomy on the 2nd of September; on the 8th, the patient was progressing favourably, not having had a bad symptom. The tumor weighed 30 lbs.

Dr. Eugene Nelson, of Fourth Avenue, New York, has been in the city, on a short visit to his relatives, *en route* for Kamouraska.

Dr. Farley, graduate of McGill College, 1873, was in the city for a few days, on his way to the London Hospitals.

#### Reports of Societies.

(Sixth Annual Meeting of the Canada Medical Association,) St. John N. B., 6th Aug., 1873.

The President, Dr. Grant, called the meeting to order at half-past 10. The following members being present, Drs. Cote, Grant, C. C. Hamilton, W. Bayard, Parker, W. S. Harding, S. L. Earle, Wickwire, Steeve, Botsford, Hingston, David, Turgeon, Bayard, Keator, Travers, Boissey, Robillard, and G. A. Hamilton.

Dr. C. C. HAMILTON, seconded by Dr. EARLE, moved,—“That Dr. David be requested to act as *pro tem* Secretary, in the absence of Dr. Peltier, general secretary.”—Carried.

The minutes of the afternoon meeting of the last Session were read and confirmed.

Dr. DAVID read an excuse from Dr. Peltier for his absence from this meeting, and Dr. Steeve read one from Dr. Marsden.

Dr. HINGSTON, seconded by Dr. BAYARD, moved an expression of regret at the cause of absence of Drs. Marsden and Peltier—the former—the illness of his wife—the latter—the death of a beloved daughter.

The following gentlemen were elected ordinary members:—Drs. W. Nelson, Christie, Vail, Daniel, J. F. Black, R. C. Thompson, Waddell, McLaren, McPherson, Burnett, P. R. More, Blanchard, Tra-

vers, R. Inches, Gove, Chas. Inches, T. J. V. Earle, Wilson, Black, Fisk, Jordan, Seymour, T. W. Smith, Gregory, G. T. Harding, Atherton, Cobourn, Simpson, McMonagle.

The President then read his address which will be found among our original communications.

Dr. BAYARD, seconded by Dr. KEATON, moved a vote of thanks to the president for his able address, and that it be published in the Transaction.—Carried unanimously.

Dr. HAMILTON read the report of the Committee on By-laws.

Dr. HINGSTON, seconded by Dr. PARKER, moved,—“That the report be received and printed in the transactions, and discussd at the next meeting.”

Dr. STEEVE would like the report to remain on the table till the afternoon Session.

After a few remarks from Dr. Harding,

Dr. HINGSTON rose to a point of order, and the President decided in favor of Dr. Hingston's motion.

No other Committee reported.

On the motion of Dr. HINGSTON, seconded by Dr. PARKER, Drs. Waddell, G. A. Hamilton and Hardy were appointed a committee to examine the treasurer's books.

Dr. STEEVES then announced the arrangements for the meeting:—to adjourn at half-past 1, to meet at half-past 3, adjourn at 6, and meeting in the evening at 8.

Dr. HINGSTON next read his paper on Surgery, on the conclusion of which,

Dr. FITCH, of Portland, delegate from the Maine Medical Association, entered and presented his credentials.

The meeting then adjourned.

#### AFTERNOON SESSION.

The President assumed the chair at  $\frac{1}{4}$  to 4 p.m.

The minutes of the morning session were read and approved.

Drs. DeVeber, Ed. Farrell, T. G. Dawson, Sheffield and Walker were elected members.

Dr. GRANT, stated he would keep his offer of a gold medal for the best essay on Zymotic diseases open for another year.

A telegram from Dr. Marsden was read.

Dr. C. C. HAMILTON, seconded by Dr. WADDELL, moved,—“That a committee be named as the nominating committee to report to-morrow,—Carried.

Dr. PARKER, seconded by Dr. C. C. HAMILTON, moved the following as the nominating committee:—

*Nova Scotia*—Drs. C. C. Hamilton, Wickwire, Farrell.

*New Brunswick*—Botsford, Waddell, Gove.

*Quebec*—Coté, Robillard, Tourgeon, Hingston, David.

*Ontario*—Hodder, McDonald, Wright, Grant, Caniff.

The Committee on credentials reported Dr. Fitch's certificates as satisfactory.

Dr. HINGSTON made a few remarks on Lithotomy vs. Lithotripsy in connection with his paper read in the morning.

Drs. Botsford, Parker, Harding, Furrell, Waddell, Keator, C. C. Hamilton, Harding, Travers and Christie made observations on Dr. Hingston's paper.

Dr. HINGSTON replied.

Being 6 o'clock the meeting then adjourned.

#### EVENING SESSION.

The President assumed the chair at 8 o'clock.

The minutes of the afternoon session were read and approved.

Drs. LeBaron Botsford, junr., St. John; John Beryman, do; Malcolm O. McDonald, Cambridge; and L. P. Tocque, Oak Point, N.B., were elected ordinary members.

Dr. C. C. HAMILTON gave notice that he will move to-morrow morning a reconsideration of the decision in the report of the Committee on the By-laws.

Dr. HINGSTON resumed his reply to the arguments on his paper.

Drs. Hamilton, Earle, Travers, Keator and Parker made a few explanations in reply.

Dr. BOTSFORD next read a paper on Hygiene.

Dr. KEATOR, seconded by Dr. E. BAYARD, moved a vote of thanks to Dr. Botsford for his able paper.—Carried unanimously.

Drs. Parker, Keator, Grant, Hamilton and Bayard made remarks on Dr. Botsford's paper, when the meeting adjourned at 11 p.m.

#### 2ND DAY.

7th August.

The President took the chair at a quarter past 10 a.m.

There were present Drs. Grant, C. C. Hamilton, Robillard, Botsford, Farrell, Black, Harding, Coté, Boissey, Tourgeon, Waddell, Thompson, Parker, Earle, G. A. Hamilton, Earle, junr., Hingston, Bayard, David and others.

The minutes of the evening session of yesterday were read and confirmed.

The nominating committee reported the following as the officers and committees for the ensuing year:

Dr. Marsden, of Quebec, as President; vice

president for Ontario, Dr. H. H. Wright, of Toronto; vice president for Quebec, Dr. Hingston, of Montreal; vice president for Nova Scotia, Dr. Jennings, of Halifax; vice president for New Brunswick, Dr. S. L. Earle, of St John; General Secretary, Dr. David, of Montreal; Treasurer, Dr. Robillard, of Montreal; Local secretary for Ontario, Dr. J. Fulton, of Toronto; local secretary for Quebec, Dr. A. G. Belleau, of Quebec; local secretary for Nova Scotia, Dr. J. F. Black, of Halifax; local secretary for New Brunswick, Dr. G. S. Keator, of St John.

*Prize Essay Committee*—Drs. David, Howard, Fenwick, Rottot and Peltier.

*Committee on Medical Education*—Drs. Grant, Howard, Bayard and Parker.

*Committee on Medical Literature*—Drs. R. S. Black, Dagenais, Larue, Fulton, Bethune, McIntosh, G. A. Hamilton, Fenwick, Oldright, Wickwire and R. H. Russel.

*Committee on Necrology*—Drs. F. W. Campbell, Caniff, W S Harding and DeWolfe.

*Committee on Publication*—Drs. David, Robillard, F W Campbell, Trenholme, Dagenais, Hingston and Peltier.

*Auditing Committee*—Drs. Peltier, Turgeon and Fenwick.

All of whom were unanimously elected.

Dr. C. C. HAMILTON, seconded by Dr. DAVID, moved,—“That the following gentlemen be requested to read papers at the next meeting on the following subjects:—

Dr. R. P. Howard, of Montreal, on Medicine.

Drs. Farrell, of Halifax, and Fenwick, of Montreal, on Surgery.

Dr. E. H. Trenholme, of Montreal, on Midwifery.

Drs. A. P. Reid, of Halifax, and Brosseau, of Montreal, on Hygiene.

Drs. Desjardin, of Montreal, and Roseburgh, of Toronto, on Ophthalmology.

Dr. Berryman, of Toronto, and Dr. G. A. Hamilton, of St John, on New Remedies.

Dr. Hingston, of Montreal, on Mercury.

The Auditing Committee reported having examined the Treasurer's books and accounts from 15th September, 1870, and found them correct.

Drs. J. Brady, Andrews, Smith, and Christie were elected ordinary members.

Dr. HAMILTON brought up his motion to reconsider the report of the Committee on By-laws, and seconded by Dr. Farrell, moved,—“That it be reconsidered this morning,” which motion was lost.

Dr. HAMILTON moved that the newly elected officers now assume their offices,—which was lost.

Dr. BAYARD exhibited to the Association a young girl who had fractured the odontoid process some three years ago—this process having passed out through the throat and mouth—exhibiting it—explaining the cure, the treatment, and showing the instrument he had invented to keep the head in situation. The thanks of the Association were offered Dr. Bayard.

Dr. BOTSFORD, seconded by Dr. TRAVERS, moved,—“That a special committee be named on vital statistics which motion was carried, and the following gentlemen named as the committee, and requested to bring the subject before the Dominion Parliament:

Drs. Grant, Tupper, Botsford, Hamilton and Rottot.

Dr. HAMILTON, seconded by Dr. HARDING, moved,—“That the thanks of this Association be tendered to the different Railroad and Steamboat Companies for having reduced the fare to the members attending this meeting.”—Carried unanimously.

It was moved by Dr. PARKER, seconded by Dr. HINGSTON,—“That our warmest thanks be tendered to the members of the Association of New Brunswick for the unbounded hospitality and kindness shown the members from a distance attending this meeting.”—Carried unanimously.

Dr. HAMILTON, seconded by Dr. HARDING, moved the thanks of the Association to the Odd Fellows for the gratuitous use of their Hall.—Carried unanimously.

On motion a gratuity was voted to the janitoress.

Thanks were unanimously passed to the retiring officers.

It was moved by Dr. BOTSFORD, seconded by Dr. C. C. HAMILTON,—“That the next meeting of the Association be held in Niagara.”

Dr. PARKER, on behalf of his confreres of Halifax, invited the Association to meet in that city, but Dr. Botsford's motion was unanimously carried.

Dr. PARKER, seconded by Dr. EARLE, moved,—“That the next meeting to be held at Niagara be held on the 1st Wednesday in August, 1874.”—Carried.

After some remarks from Dr. Parker,

It was moved by Dr. HAMILTON, seconded by Dr. BOTSFORD,—“That the sum of \$100 be given the Secretary for his services for the year.”—Carried unanimously.

Moved by Dr. BOTSFORD, seconded by Dr. BAYARD,—“That the treasurer be paid his travelling expenses.”—Carried unanimously.



On motion it was resolved that Dr. Grant, the retiring president, be authorized to name a committee of arrangements for the next meeting.

Dr. Grant being requested left the chair, and Dr Hingston called to it, when Dr. Bayard, seconded by Dr. Parker, moved a vote of thanks to Dr. Grant for his able conduct while in the chair.—Carried unanimously.

Dr. GRANT returned thanks, and the meeting adjourned.

THE MEETING WAS CONCLUDED BY AN ELEGANT LUNCHEON,

which was served up in a spacious and beautiful chamber in one of the wings of the Lunatic Asylum building was one of the most agreeable re-unions ever held in this part of Canada. It was given by the members of the Medical profession here to their visiting professional brethren from the other provinces and other guests, and was graced by a large attendance of the ladies of the party and of the city and suburbs. A special train was provided for the party at one o'clock, and for nearly an hour the company enjoyed the fine scenery of one of our most picturesque spots, listened to the strains of the band lately connected with the 62nd Battalion; joined in social chit-chat or otherwise amused themselves. At the appointed hour, there was a lively rush to the luncheon room, whose handsomely arranged and richly covered tables presented a sight which not even the most sublime philosopher or the most angelic creature of any sphere or sex could afford to despise. The party being seated, Dr. Steeves, Vice President of the New Brunswick Association, took the chair, supported on the right and left by His Honor the Lieut. Governor, Dr. Grant, M.P., Hon. Edward Willis, the Mayor, Drs. Davis and Hingston, and John Boyd, Esq. and others. Among the other guests were J. Edmond Barbeau, Montreal, the High Sheriff, besides editors of the morning and evening papers and others. Drs. Botsford, Waddell and Travers occupied the vice-chairs.

The Chairman said that as he supposed the company would rather address themselves to the "solids and liquids" before them, than be addressed at length, he had his speech printed to save trouble. There it was, pointing to the word Welcome, printed in evergreens. (Cheers.)

Grace having been said by the Rev. D. Scovil, the onset on the first-class luncheon provided was commenced, and prosecuted with vigor. It, however, successfully resisted the attack until a late hour in the afternoon.

In due time the usual loyal toasts were proposed, including those of the Queen, the Governor General, and the Lieut. Governor and his Council.

The last mentioned toast was proposed by Dr. Waddell, who remarked that the Governor was Attorney General when he was appointed superintendent, and the institution had ever been warmly supported by the Government. (Cheers.)

The Governor made one of his most telling speeches, narrating humourously the narrow escape

he had from the medical profession because he could not speak well (laughter), and from curing or killing great numbers, (laughter.) He seemed to think that imagination had a good deal to do with the effect of medicine, and gave a humorous illustration of a very harmless kind of pill, which a lady had used with the happiest results. He then branched out into a grand stirring national speech, which delighted every one, in the course of which he paid an eloquent and just tribute to the medical profession. He gave the health of Dr. Grant, President of the Canada Medical Association.

Dr. Grant, who is a fine speaker, and distinguished in many ways, spoke of the gratification he had in visiting this fine mercantile emporium, with its magnificent harbor, and social and intelligent people. He spoke of the growth of the association, and said they never had enjoyed a more cordial reception than in St. John. He hoped the Maritime Physicians would accept a return in Ottawa. (cheers.) He concluded by expressing his best wishes for St. John, and asking to hear from Dr. Botsford, [cheers].

Dr. Botsford responded, and proposed "Our Visiting Brethren," selecting Dr. Hingston as his victim, and designating him as a rather confirmed bachelor.

Dr. Hingston made a most amusing rejoinder. He said he would not make a state speech, for in that case they would know it was prepared before hand, or perhaps already sent to press like the Governor's and Dr. Grant's (great laughter). After consulting the company for some time, and declaring that he had nearly succumbed to the influence of our fair ones, he retaliated on Dr. Botsford, being wickedly prompted thereto by a slip of blue paper, (which seemed to have come up from Dr. Travers,) stating that when he glided into matrimony, he intended to follow Dr. Botsford's example in every particular. (This sally created roars of laughter, in which none joined more heartily than Dr. Botsford unless it were the ladies.)

Doctors Robillard, David (Secretary), Wickwire and Hamilton, who were called out in various ways, made speeches in the same happy strain; but the most amusing speech of the day was made, as a matter of course, by John Boyd, Esq., who was called out by Coroner Earle. It would be quite impossible to report or translate Mr. Boyd's amusing delineations of men and things, including the views which different characters had of what constituted great cities.

Various other toasts followed, and about four o'clock the party broke up, and returned by special train to St. John.

BIRTHS.

At New Lancaster, on the 2nd inst., the wife of Andrew Harkness, M.D., C.M., of a daughter.

DIED.

At Aylmer, Quebec, Sept. 1st, 1873, of typhoid fever, Charles Howard Church, aged 35 years, late Coroner for the District of Ottawa.

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