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THE CANADA MEDICAL RECORD.

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CONTENTS.

Original Communications.

VALEDICTORY ADDRESS.

Delivered on behalf of the
Medical Faculty of Bishop's College
to the Graduating Class of 1885,
By
A. LAPTHORN SMITH, B.A., M.D., M.R.C.S. ENG.,
Professor of Botany.

GENTLEMEN GRADUATES:—

The Faculty has this year conferred upon me the honor of addressing some farewell words on their behalf, to you, the gentlemen of the Graduating Class of 1885. I shall not detain you long, for I am well aware of your impatience to set loose your hopeful barques upon the flowing tide which is about to bear you on to fame and fortune, in that near future on which you have so often looked with dreaming, longing eyes. I am glad to have the pleasure of being the first to congratulate you on your success and to welcome you to the ranks of the profession.

In the remarks which I am about to make I would speak to you as those whom we have treated as fellow-workers rather than as pupils in the past, and who are now our colleagues and younger brethren—to whom we would, ere parting, give some kindly-meant encouragement and advice. For, owing to the somewhat limited number of the students attending this young but vigorous school, you have occupied an unique position, and had unusual advantages here. Your professors have become personally acquainted with each one of you, and your varying capacities and needs, and were thus enabled to raise you when you fell and strengthen you when you were weak. Some, alas! who began with you, have fallen out of the onward marching ranks, but this has been from no fault of their professors, who sympathize with them in their misfortune, and hold out to them the hope that another year's study will bring them up to the standard which you have attained.

Becoming, as you have, so well acquainted with your teachers and with each other, you have developed a strong *esprit de corps*, for which this school is noted, and of which we have frequent proofs, by receiving letters from former students now occuping high positions in different parts of the Globe. We have done the best we could for you, in the time at our disposal, which was all too short to impart the immense and constantly increasing mass of information, which every well-informed medical man is bound to possess. We have brought you this far, but you must continue your great unknown journey through life alone, and stand or fall on your own merits. You have passed your final examination in this College, but you have yet another and a longer one to pass, which will begin with to-day, and only end with your life—I mean the great examination before the public. But if you really have assimilated the knowledge imparted to you, and which we believe you to possess, you need have no fear as to the result.

I well remember the day, nine years ago, when I stood in a position similar to that you now occupy, and the feeling of pride and exultation I experienced, when I was welcomed by my late awe-inspiring professors as a man and a brother, and a full life-member of our noble profession. I may also tell you, in confidence, that I felt, as you

probably feel now, that I knew a great deal more than most, or at least as much as any of them. You will probably retain this opinion until you begin private practice, when you will commence to realize how much you have yet to learn, and I may add, the sooner you realize it the better, or, in the words of St. Paul, "If any man think that he knoweth anything, he knoweth nothing yet, as he ought to know."

Now that you have received your degree you belong to a profession which, if you rightly esteem the honor, entitles you to the highest position in society. The widow of one of Montreal's former most prominent medical men told me not long ago that in this country, where there is no hereditary aristocracy or nobility, the learned professions constituted the only aristocracy we had, and that among them none were more deserving of the first place than the one to which you now belong. But you must not think that this position is heaven-born, or that your degree and diploma are anything more than certificates; that you have mastered a certain amount of difficult technical knowledge. The title of M.D. which you have received to-day only confers a high position upon you, because the great majority of the honorable men who have borne it before you have raised their profession to that position by the high moral tone of their character and by their devotion to duty. And just as soon as the profession as a body ceases to be self-sacrificing in action, pure in character, honest in purpose, and noble in aspiration, it will no longer obtain or deserve the high esteem in which it is now held. There may at any time be a few black sheep in it, but they will generally be valued at their true worth, without in any way detracting from the reputation of this profession as a whole.

Each one of you is bound to do his share towards upholding its honor and integrity. Hardly anything that you can do will conduce more to this end than the strict observance of the etiquette which exists among medical men, the rules of which are embodied in the code of ethics, which is not a species of trades-unionism, as the public seem to think, founded for the purpose of protecting the business interests of the Doctors. St. Thomas was once asked for some rules of religion, when he replied in the famous sentence: "Love God and do what you will," and in like manner if you were to ask me to sum up the code of ethics I might reply: Be a gentleman to your brethen and the public and you cannot err; you will do to others as you would have others do to you. So important do I consider this sometimes misunderstood qualification of being a gentleman that it has often seemed to me that it would be alike in the interests of the profession and the public that some test or guarantee that he is one should be devised and exacted from a candidate before allowing him to begin the study of medicine. In the words of the poet:

> Who misses or who wins the prize—
> Go lose or conquer, as you can;
> But if you fail, or if you rise,
> Be each, pray God, a gentleman.

Next to that there is another desideratum, which is often lost sight of, viz., that medical men should be gentlemen of culture, either in art, science or literature. The very title of Doctor supposes that he is learned; and learned not only in his own profession, but in all the allied sciences, and certainly as a body the profession is generally acknowledged to be composed of well-informed men, many of them occupying the highest rank in the army of scientific workers. Much of their learning has been acquired after they have been passed and stamped, instead of being possessed of it when it would have been of most use to them, viz., before beginning their medical studies, as I think it should.

The University of Laval has an old-fashioned way of encouraging intending medical students to make themselves generally well-informed before beginning the study of medicine, and that is by teaching them for something like half price if they have already graduated in art, science and literature. And since I have been engaged in teaching, some five years, I can quite understand why such a difference is made; for it is just twice easier to teach phyisology, for instance, to a student who is familiar with natural philosophy than one who has had no scientific and classical education, beyond having his head crammed full of a jumble of words he hardly understands, during a few months previous to his commencing the study of medicine.

It is true you will have an opportunity of cultivating your minds during the next few years which generally have to elapse before the public have discovered your abilities. But this point brings me to some words of encouragement which at the outset of my address I promised to give you. Although, as you are probably aware, for the the first year or two you will have very little practice; you must not feel annoyed or discour-

aged at this, for it is quite natural that people should prefer those who have already attended them or their friends, and of whose reliability they have thus had some opportunity of forming an opinion rather than try some one of whom they know nothing. This however, is not an unmixed evil, for, as I have already said, you have great need of a few years of freedom from the care and anxiety of a busy doctor's life, in which to cultivate your minds. Besides this, while a student you have had no time and will have none when a busy practitioner, to enjoy social pleasures, yet in the few years between these two stages of your life you will have the leisure for, and cannot better employ a portion of it than in social intercourse. Although the medical student is proverbially gallant, yet during his few years of existence he has been thrown more in the society of his jolly, rollicking companions than in that of gentle ladies; and there is no way that I can suggest more likely to refine the manners than to frequent the society of refined women. This is all the more important as, throughout the whole of your profesional career, the ladies will be your best friends; in fact, they have it in their hands to make or mar you, and woe betide you if you incur their displeasure. And so I would recommend you to devote your evenings for the next few years to extending the circle of your lady friends.

Do not be discouraged by those who tell you that the profession is overcrowded; there is now, and always will be, room in the profession for well-educated, hard-working, self-denying men; indeed it is just where it seems most crowded that such a man has the best chance of getting on. But there is little or no room for the half-educated, or the indolent, or the self-indulgent; for them the profession *is* overcrowded, especially in the cities, and their only chance of success is to start in some country place where they will have no competition to contend with.

While holding out every encouragement to those who are beginning practice, there are a few things of which I should forewarn you, and first, if you are going to begin in a large city, you must not expect a large practice all at once. It takes time for the public to become aware of the fact that you are ready and willing to attend them, and after that it takes longer still for your turn to come around to get a chance of showing your ability. The rich have not the inclination, and the poor have not the means, to find you out, and you cannot advertise. Although this may seem hard at first, yet in the end it turns out for the best; for some of the leading medical men of Montreal to-day owe their present success to the fact that they had so few patients for the first few years that they had plenty of time to study up each case when they got one, and what they learned then they never forgot. Moreover, could we all jump into a lucrative practice at the close of our college career, the poor would have no one to attend them; and yet they are the ones who most require attention, for their poverty is often the cause of their disease. The older practitioners have not the time to attend them, and they must therefore depend upon you during the first years of your practice. To attend the poor should be considered by you as a privilege you can thus bestow thousands of dollars worth of your time when you have no money to give in charity; and besides that you will thus be enabled to make friends of those who, poor as they may be, will be better friends to you, professionally, than the rich.

You have just come from the College and Hospital where your powers of observation and other intellectual machinery have received a high polish, and what you have most to dread is intellectual rust. I therefore commend you to work; not so hard as you have been doing, but still work hard. When you cannot get much remuneration work for a little—work for nothing—work for the work's sake. I would recommend you strongly to pursue some original investigations in the vast field of scientific research—especially that part of Botany for instance which comprises the study of the least and lowest forms of life. To follow out the details of Pasteur's great discovery, and make a grand reality of what we are still compelled to call the Germ *Theory*. Reason out the existence of, search for, *find* the germs of pennmonia, puerperal, typhoid and every other fever which now we can but suspect,—*that* would be a result for which no honor could be a reward too great, for which, to purchase, a thousand lives would be too cheap a price. Where Pasteur the country lad has done so much, why should not you do, or at least attempt, some more. Many things which we now see as through a glass darkly, we shall then see face to face.

The profession you have embraced is a hard one, but you are not called upon in conscience to needlessly sacrifice your health. Indeed every year you live your experience makes your life more valuable to the public welfare. It there-

fore becomes your duty to take an early opportunity of informing your patients it is very much in the interest of all concerned, and especially of the one who pays the bill, to send for you in the day time, instead of waiting until two o'clock next morning, as so many people do. The public seem to think sometimes that their family doctor is composed of two separate beings: one the human, who works hard all day, busy and anxious; the other superhuman, a species of night ghoul, who sleeps all day and revels in being called out at night.

It will not only be your duty to take care of your own health in this and many other ways, but you are in a great measure constituted the guardians of the public health. Indeed your services in *preventing* diseases are of far greater value than in curing them after they have been contracted. Indeed I venture to say that for every life that medical science and skill has saved by cure they have saved a hundred by prevention. Do not be disappointed when you discover that for these important services you will receive no remuneration and hardly any thanks. Do not be discouraged even to find that the very people whom you are generously trying to benefit, by showing them how to avoid sickness and to do without your medical attendance, will sometimes consider you an officious busybody. Persevere in doing your duty, in spite of any rebuff, for *you* have the knowledge which they have not.

You are starting out in life, and in a few years we shall expect to hear some encouraging word of your whereabouts and welfare, for, though an ocean should roll between us, your lives will ever be of the greatest interest to us; we shall ever be proud of your success, but also ready to cheer you and sympathize with you in misfortune. Where you will start has probably been thoroughly thought over in your own minds; but I may offer you a few suggestions. If you start in the country you will necessarily be general practitioners, the backbone of the profession who have won in ages past the proud position of family friend and adviser,—nay, more, of father confessor. In that position you will acquire a large experience of men and things, and this, added to your liberal education, will make you one of the leading men of your district, whose opinion will be sought upon every conceivable subject, from the merits of the protective tariff and the demands of the Canada Pacific to the coming of cholera and the war in the Soudan; and if in the course of time the electors of your district offer you a seat in Parliament, accept it as a duty, and do your duty there as honestly and fearlessly as in the humbler, but not less noble, sphere of a country doctor's life. But if you mean to settle in some large city, such as this, I would advise you to go to Europe for a year or two first, to work up some special subject, unless you are willing always to work among the poor. For here, alas! the rich no longer enjoy the luxury their forefathers once possessed and cherished, the family doctor; and the army of specialists now occupy his place. The mother who used to unburthen to him her aching heart, heavy with family cares, and the dear children who used to run to greet his smiling face, now welcome him no more. I was told the other day of a family where five specialists were all in attendance at once, and when the family doctor who had attended the parents ever since they two were made one, and who had brought them and the children through a hundred and one diseases, asked in a voice trembling with emotion, What is to become of me? the head of the house replied, "Oh we shall keep you on to tell us which specialist to call in next, as it sometimes puzzles me." Gentlemen, specialism has done much for science, more for the profession, most for the specialists. But it is just a question whether it is not being overdone. There is just the danger that the eye may be focused so intently on one object that it can see nothing else around, as illustrated in the following incident, which was related to me some time ago. A lady called upon a doctor, not knowing that he had a specialty, and requested him to see her little girl, who was ill with some kind of fever. He frankly told her that he didn't know anything about fevers, "but," said he, "give her this powder and she is sure to have fits; and, if she does, send for me, that's my specialty." It would probably be as well for the profession and better for the public, if every doctor were a good all-round man who could call in consultation in difficult cases a brother practitioner who had devoted some extra study to that particular disease. Gentlemen, I can no longer put off, what I fain would never say, the last sad words of parting. On behalf of the Faculty whom I represent, and on my own behalf, I wish you Godspeed and all success in the noble work that lies before you. May you make this earth at least a little better for your having lived upon it. May your lives be such that you may be loved while you are here and missed when you are gone. Gentlemen, farewell.

Correspondence.

MONTREAL, March 31, 1885.

To the Editors of the MEDICAL RECORD.

Being a subscriber to and a reader of your Journal I have noticed in this month's issue of it, at page 141, the following paragraph, viz: "I wonder what a Christian M. D.—(or, for the matter of that, a Homœopathic or Hygienic M. D.) would do if called to attend a case of cholera morbus." The most of physicians, to whatever sect they belong, have some knowledge of Hygiene, but, as I am as ignorant of the method of cure of the Christian scientist alluded to as the *Wanderer* seems to be of the Homœopathic method, it will more become the duty of the Christian scientist to enlighten this *Wanderer* on this later point, in the treatment of cholera morbus.

I will venture, however, to give Wanderer some hints as to what should be done in a case of cholera morbus, homœopathically, as perhaps I may claim some little right to do, as I have tested pretty fully now both the Allopathic and Homœopathic methods of cholera treatment, and have found the latter much more efficient in relieving and curing cholera as well as other diseases.

In reply to Wanderer, then, I would say the first thing to be done in the Homœopathic treatment of cholera is to prepare himself by studying the scientific method of prescribing homœopathically. By doing so, Wanderer would learn, I think, not to pay so much attention to the mere diagnostic naming of the disease to be treated as he would do to the totality of the individual symptoms of the patients who presented themselves to him. He would thus find that these physiological indications of each case would lead him to their sources, and enable him to select the appropriate remedy for that case more successfully than he would when merely treating according to the nomenclature of the case. When the symptoms produced by the administration of large doses of medicinal matter upon a healthy person produce symptoms similar to those symptoms of a dynamic disease, we may be assured that the sources of both are the same, whether functional or organic. The principle of Homœopathy, then, is to elect a curative dose of the medicine, which, when given in pathogenetic doses to a healthy person, will produce symptoms similar to those produced by the disease to be treated. By the study of this principle, Wanderer would know what to do, not only with cholera morbus but with individual cases of all other curable diseases. Has Wanderer never heard of the Report which was made to the British House of Commons regarding the treatment of Asiatic cholera by Dr. McLouchlan, the Allopathic physician, and Medical Inspector of the General Board of Health.

The Report of Dr. McLouchlan stated that under Homœopathic treatment the deaths in Asiatic cholera were 16.4 per 100, under Allopathic treatment the deaths in Asiatic cholera were 59.2 per 100. Which treatment would Wanderer select for himself after that, if he had the misfortune to be afflicted with cholera, or which treatment would be selected by any rational man, if these statistics were proven to be true, and they have been so proven? Dr. McLouchlan avowed that he would rather be treated homœopathically after noticing the results of both kinds of treatment. If Wanderer has a disposition to study Homœopathy after this there is abundance of literature on the subject. For an Allopath to begin with there is Horner's Reasons, Hahnemahnn's Organon, Hughes' Therapeutics and Pharmacodynamics, Ranes' Special Pathology and Therapeutics, and a very recent and correct little work by L. Talzer, M.D., of Calcutta, who has had much experience of the treatment of cholera in India. These books, or any others, may be obtained through our townsman Mr. Grafton, bookseller, St. James St.

I have seen in the last number of the *Canadian Practitioner* the publication of a lecture on arsenic by our fellow-citizen, Professor James Stewart. It is very able and searching from the Professor's standpoint, and does him much credit, but there is a good deal of it illustrative of the Homœopathic cure. Now Messrs. Editors, I would just say here, why should we not be all searchers after scientific truth for its own sake? Why should we not throw aside for ever sectional antipathies? Truth, it is said, will prevail at last. Let there be liberality and freedom in expressing our individual views, so that each man while he lives may help along the right spirit of the Profession.

Yours truly,

JOHN WANLESS, M.D.

Progress of Science.

PNEUMONIA—AN INFECTIOUS DISEASE.

We extract from the *Medical Record's* report of the proceedings of the third German Congress for Internal Medicine, held at Berlin, April 21-23, 1884, the following paper, by Professor Jürgensen, of Tubingen, on *True Pneumonia: Its Etiology, Pathology, Clnicial Course* and *Therapy.* *

The author gave a history of the growth of our knowledge of croupous pneumonia, and showed how opinions as to its nature had changed, until now the belief exists that pneumonia is a general infectious disease, the lung inflammation being only symptomatic. Experimental pathology had recently given indirect confirmation of this view.

The speaker then took up the alleged exciting causes of the disease, and showed that the facts regarding these did not conflict with the infection theory. Cold has been alleged to be a cause. At one time it was even said: "Frigus unica pneumoniæ causa." Different authorities reported cold to be a cause in between two per cent. and twenty per cent. of the cases. Jürgensen had in ten years' observation found cold as a cause apparently in ten per cent., really in only 4.1 per cent. It might easily be thought that exposure will produced a catarrh rendering easy the access of the infectious organisms of pneumonia.

It is a prevalent error, says Jurgensen, that pneumonia attacks by preference the strong and full-blooded. Among a population of all ages, three-fifths of the pneumonias occur in those between one and fourteen years, while twice as many occur after forty-five as between twenty and forty-four. Dittel found that the disease occurred in those previously weakened, in eighteen per cent. Flint, of Danemark, in twenty-one per cent.; the author, in 29.3 per cent. Immermann, of Basel, recently confirmed this view.

The disease has some relation to the meteorological conditions, being increased when there is increased humidity of the soil (Keller), and when the atmospheric precipitates are above the mean. These facts might be explained by the theory of an organic poison.

Pneumonia is *a disease of dwelling-houses,* like typhoid. Jürgensen had seen pneumonia in a dwelling in Amberg. Some time later the pneumonia cocci were found in the walls of the chamber. The disease occurred in epidemics, especially affecting single houses, or prisons, asylums, etc., etc. The possibility of direct passage of the disease from one person to another cannot be denied, but the occurence is rare. Flint, of Danemark, found some relation between earlier and later cases in two-thirds of his patients.

The question of the unity or multiplicity of the pneumonia poison would soon be settled.

Clinically, the disease presents great diversity even in the same families and sick-rooms. This the author was inclined to explain by assuming a variation in the extent of the development of the infectious poison. He believed that this poison, circulating in the blood, affected with special inflammation or disturbance other organs than the lungs. He cited thirteen cases of pneumonia with acute nephritis in which the kidneys were found to contain the special cocci. He believed that these produced special disturbance of brain membranes or stomach or other organs. Their development gave rise to the irregular curve of pneumonia.

Clinically, the disease may be separated into three great groups, first, those in which the general symptoms of infection; second, those in which heart symptoms; and third, those in which the lung symptoms are prominent.

In reference to prevention, the discovery of the coccus and the knowledge that it is a house-plant is of importance.

As to treatment, the author had tried iodine as an abortant without effect. The author gave a *Caution as to antipyretics,* considering them heart-depressants. He pleaded for prophylactic therapy, was doubtful of the ultimate value of bleeding, though it might temporarily relieve the heart. Finally, he announced the following conclusions: first, true pneumonia is an infectious disease, usually but not uniformly localized in the lungs; second, exposure to cold is a rare cause. The feeble are more susceptible to it than the strong.

Herr Frankel, of Berlin, continued the discussion, and took up the subject of the

Micrococcus of Pneumonia.—This coccus is distinguished from others by its gelatinous-like capsule which may surround two or more cocci. The capsules are not always present. The cocci are stained by a mixture of gentian-violet in water. Injected into rabbits they produce no uniform effect, in mice they cause pneumonia and pleurisy. In dogs, pneumonia is sometimes produced. The author found that variations in inoculation effects depended somewhat upon the cultures, which apparently had an effect of diminishing the virulence of virus. There was also another encapsuled coccus found in the human mouth, and which was the coccus of sputum septicæmia. The author announced the following theses:

1. The coccus of pneumonia, which may be isolated by pure cultures from the human being, is inoculable in various animals. Rabbits either prove refractory or become affected with severe general disease, with special localization of the virus in the internal organs—this depending on the mode of culture.

2. Further experiments must determine upon

* Many of our readers will be reminded by this paper, of a paper on the *Relations of Certain Filth Diseases to Cold Weather,* read before the American Public Health Association, in New Orleans, 1880, by A. N. Bell, with special reference to the zymotic origin of pneumonia. It is published in full in Reports and Papers of the A. P. H. Association, Vol. VI.; and in *The Sanitarian* Vol. IX; p. 78.—Editor.

what depends the varying virulence of the coccus.

3. The capsules of the cocci, as well as the "Nagelformige" growth of the pneumonia cultures, are not constant phenomena.

4. The capsules and the "nagelcultur" characterize other micro-organisms, and it cannot be said at present that the pneumonia cocci can be distinguished from them.

Herr Friedlander, of Berlin, said that the cocci of pneumonia were found in the blood during the disease. He had recently obtained the blood by wet-cups in six cases of croupous pneumonia, every precaution being taken to keep it pure. The blood thus obtained was cultivated for cocci. In one out of the five cases these developed and showed their characteristic actions when inoculated. Friedlander thought the capsule and the growth in "nagelform" very characteristic, but not sufficient for a positive diagnosis. The whole life-history must be taken into account. This life-history appears to differ, and this may account for the various forms of pneumonia, and only one has the coccus; or in the different forms the same coccus has a different life-history. The chief efforts must now be made to follow out the different changes in the growth of the organism.

Dr. Gerhardt, of Würzburg, accepted Jürgensen's view of the infectiousness of the disease. He accepted also completely the view of the unity of the disease, and considered it a happy explanation that the various complications of meningitis, pleuritis, etc., were due to local manifestations of the virus. As to treatment, it must be expectant and symptomatic; in the anæmic and feeble, a stimulating treatment. As anti-febrile means he thought veratrine dangerous; digitalis had not achieved as much as expected; kairin acted too irregularly. The most regularly acting substance was nitre (nitrum); in severer cases, quinine: in the worst (febrile) cases, cold baths with stimulants.

Dr. Frantzel, of Berlin, argued against Jürgensen's view that pneumonia was a house disease, citing its occurrence in military hospitals, and its frequency after open-air festivals and exposures. He thought the coccus entered the blood through the lungs. He explained the hæmadogenous jaundice of pneumonia by the theory that the cocci attack the red blood-cells.

Dr. Ruhile, of Bonn, contended that the view of the infectious nature of pneumonia was not so firmly established as its advocates assumed. It is necessary still to harmonize some of the known facts as to the etiology of pneumonia with the theory of a coccus. Besides, this coccus had not been found in all cases yet.

Professor Nothnagel said that in pneumonia, as in all infectious diseases, we look for a specific, and meanwhile treat symptomatically. In the last twenty-five years alcohol had entered largely into the therapeutics of the disease. Dr. Nothnagel thought that it was often used unnecessarily and excessively. Alcohol is not indicated in ordinary cases of pneumonia, and should not be used except when specially indicated by the failure of heart power.

Dr. Rosenstein, of Leyden, thought that "though croupous pneumonia may be an infectious disease in many cases, it is not in all." He did not believe in the unity of the disease.

Dr. Baumler, of Freiburg, said that a patient, a gardener, fell one day into the fire; next day he was brought to the hospital with croupous pneumonia. What rôle the cocci played in such a case was for the future to discover. If pneumonia is an infectious disease, it might be asked whether it is at first a local infection or a general one. With reference to the localization of the alleged virus in other organs, he recalled cases of pneumonia that started off with an acute nephritis; others with a meningitis. These diseases generally ran a parallel course with the pneumonia.

PNEUMONIA.

A Clinical Lecture Delivered at the Hospital of the University of Pennsylvania.

By William Pepper, M.D., LL.D.,
Provost and Professor of Theory and Practice of Medicine in the University of Pennsylvania.
Reported by William H. Morrison, M.D.

Gentlemen—The patient now before you is convalescing from an attack of pneumonia. I showed him to you one week ago on the fourteenth day of his attack, completely apyretic. He has not come up after this attack as quickly as we should like to have seen him. His past history has not been altogether satisfactory. In the first place, we find that he is the subject of constitutional syphilis, and, in addition, he has been exposing himself. When seized with pneumonia, he was not a good state of health, and this has undoubtedly retarded convalescence; for he has been completely free from fever for ten days, with a pulse about normal and respirations not over twenty per minute; nor have the physical conditions progressed as rapidly as we desired; while the critical fall of temperature, the failure to rise, the slow pulse, the easy respiration, the tranquil face and the return of appetite, indicate that the process is practically at an end. There are still traces of infiltration along the anterior border of the right lung, showing that the elements of the tissues do not throw off all traces of the morbid action and return to the healthy state, but that the morbid condition is lingering in the epithelial lining of the alveoli. Whether or not this is dependent upon the constitutional infection which he presents is a question which has been discussed, and which we have endeavored to meet by adding iodide of potassium to the treatment, which, for the past few days, has consisted in the administration of carbonate of ammonia. The treatment of the acute stage consisted in the use of carbonate of ammonia, a moderate

amount of quinine and stimulus in moderation.

The physical signs would be of interest, if I could demonstrate them to you. There has been, throughout the course of the case, low down on the right side, an area of unusual clearness on percussion, almost tympanitic. There was pseudo-tympany like that which is constantly found over a portion of the lung when the remainder is compressed by a pleural effusion, and which we sometimes find over the upper part of the lung when the lower part has become solid. The alteration of the tension of the vesicles, and in the pressure of the inspired air, give rise to a modification of resonance closely simulating that found over a cavity. To this modification, the name pseudo-tympany has been given to distinguish it from true tympany.

I indicated to you, in this case, the unusual distribution of the pneumonia. It began at the apex, and extended through to the back and downwards, until, perhaps, three-fourths of the right lung was involved, the lower part of the lower lobe in front remaining unaffected. It began as an apex pneumonia, the posterior part next became affected, while the anterior part of the lower lobe remained intact. By far the majority of cases of pneumonia, present affection of the lower lobe, and in the majority of cases it remains limited to the lower lobe, but in a large number of cases, the disease extends from the lower to the upper lobe, and the whole lung becomes affected.

There are peculiarities about apex pneumonia to which I shall refer. It is far more common in children than in adults, and this occasionally leads to pneumonia in children being overlooked, from the failure to study the whole lung and the restriction of our attention more particularly to those points in which we are more apt to find consolidation in the adult. Not rarely little children will have true croupous pneumonia, running through its stages, and terminating just as we see it in the adult, but limited throughout to the upper portion of one lung. Let me, in this connection, impress upon you the fact that there appear to be closer cerebral sympathies with this type of pneumonia than with the common basic pneumonia, and that partly because the nervous system of the child is extremely susceptible, and partly from the reason that I have mentioned, there is apt to be developed cerebral symptoms of a marked type, so that this is known as the cerebral form of pneumonia, and these nervous symptoms are apt to still further obscure the recognition of the inflammation of the lung, and these cases are apt to be treated as cases of tubercular meningitis, or simple meningitis, and the pulmonary condition not recognized. In children with nervous symptoms, if cough or chest pain is noticed, the chest should be examined with extreme care, front and back, from top to bottom. In these cases cerebral symptoms of the most alarming character may be present and pass away as the pneumonia diminishes.

Apex pneumonia is more common in young adults than it is either in children or mature people. It is apt to occur in those disposed to phthisis. There is trouble in securing complete resolution in such cases, which are apt to run into a sub-acute form and eventually develop into phthisis.

Again, apex pneumonia is met with under the influence of constitutional disturbances; thus, when pneumonia appears as a complication of malarial fever, I have often seen it involve the apex. In typhoid fever, I have seen the inflammation involve the apex more frequently than is the case in frank, idiopathic pneumonia.

These are the three most important peculiarities of apex pneumonia: In the first place, its occurrence in a somewhat obscure form in children being associated with marked cerebral symptoms. In the second place, its disposition to be followed by phthisis, and in the third place, its existence as complication of some general specific disease.

I cannot say that syphilitic pneumonia, by which term I mean something different from pneumonia in the syphilitic, for those who have constitutional syphilis may have a frank pneumonia in the same way as one free from that taint, while, on the other hand, there is a special form of pneumonia which may be called syphilitic pneumonia, which is a syphilitic affection of the lungs with the infiltration of the tissue of the lungs with a special plasma, rich in ephithelial cells, preventing, by its large amount and by the pressure which it exerts on the alveoli, the proper circulation of the blood, and giving rise to hepatization, which is very pale, dry and friable, being made up largely of epithelial elements. I cannot say that this syphilitic pneumonia especially involves the apex. It is as likely to affect the lower as the upper lobes.

I have already stated that there is in the present case an area over which pseudo-tympany is heard on percussion. In addition to this careful percussion will develop at about the third interspace, a cracked pot sound. This is not to be attributed to a cavity, for none of the lung tissue has broken down. It is dependent on the fact that there still remains, at a considerable depth, infiltration and partial consolidation in the neighborhood of a large bronchial tube. This condition is similar to that which is present when there is a small cavity. By placing the body against a firm support, and percussing with more emphasis than usual, we communicate a shock to the air in the cavity, and express a part of it from the bronchus, giving rise to the peculiar chinking which is known as the cracked pot sound. The same thing may be produced in certain conditions of partial consolidation in the neighborhood of a large bronchial tube, particularly if the ribs are at all flexible. The presence of this sound is one of the things that disturbs me in reference to this case, for it shows

that while the morbid process has ended there is still a deep infiltration of the lung, which is probably associated with the constitutional taint. I have no doubt that by a continuance of the treatment which I have mentioned, particularly by the use of specific remedies, we shall secure the removal of this infiltration, but it is a warning to us that, although the temperature and pulse are normal, we should be careful how we allow these patients to expose themselves, until we are satisfied that the local conditions have entirely passed away.

We have all been taught, by sad experience, to be careful during the convalescence of certain specific diseases, notably typhoid fever, but I fear that we are not nearly so careful in the management of convalescence from local affections, particularly those of the chest. It is one thing for the temperature to fall to normal, the pulse to come down, and the breathing become easy, and quite an other thing for the local lesions to be entirely removed. Under such circumstances the patient, if allowed to expose himself, is in danger of a relapse. Even if a relapse does not take place, something which is worse may develop. If a slight trace of inflammatory process be overlooked and the patient be allowed to return to his ordinary occupation, it will remain and slowly take on a chronic degenerative change. The great majority of chronic troubles result from imperfectly cured local affections. This is pre-eminently true in regard to catarrhal pneumonia. It is true to a less degree as regards croupous pneumonia, and it is also true in regard to pleurisy. The criterion by which we are to judge when it is proper for the patient to rise, take exercise and expose himself, is solely the result of physical examination, showing that all trace of local disease has passed away. We cannot be governed by the general symptoms, for these may subside in a most satisfactory manner, and yet the patient be far from being entirely cured. The care which has been insisted on in the acute stage should never be relaxed until the physical examination shows that all local change has passed away, unless, after pursuing a judicious course, and keeping up this care for a reasonable time, we find that the patient, in consequence of some constitutional defect or peculiarity, is passing into a chronic stage. Under such circumstances further confinement, instead of being a benefit, would probably injure the constitution. The patient is then to be treated as one with a serious chronic disease, and although he is allowed to go about it is under a most rigid hygienic regimen.

The consideration of the treatment of pneumonia demands more time than we can devote to it to-day. This man was treated in a way in which I think that you will treat most cases of this disease. When he was admitted, the disease had passed beyond the stage where depletion would be admissable. When the case is seen early, it is often well to use quite positive depletion, even if it is only local. In this case, there was no need for cardiac sedatives, but in many instances, when the patient is seen early, you will secure admirable results in limiting the inflammation and curtailing the inflammatory process by the use of veratrum viride or aconite. In order to assist the liquefaction of the exudation and stimulate expectoration, I know of no remedy equal to the carbonate of ammonia, especially if there is considerable vital depression. I consider quinine an almost essential element of the treatment of pneumonia, not in immense doses except when there is hyperpyrexia, but in doses of from eight to sixteen grains per day, given by the mouth if the stomach is perfectly tolerant, or by the rectum if it is not so. The diet is to be nutritious and the food given in small quantities and at short intervals. We are to be governed in the use of stimulants by the same considerations which control their use in other diseases. Many cases of pneumonia do very well without stimulants, and they should not be used as a matter of routine. We should wait for the development of symptoms, and when they are used, their effect should be carefully watched to see if they are doing what we wish before we continue them or increase the dose.

THE TREATMENT OF CHOLERA.

Dr. Alexander Harkin thus writes in the *Lancet*' August 19, 1884:

The disease and its treatment naturally divide themselves into three stages: the pulmonary or diarrhœal; the stage of violent purging and, vomiting and cramps; and that of collapse.

For the diarrhœa nothing in my experience answers so well as dilute sulphuric acid, which should be administered every hour in doses of twenty to thirty drops in some agreeable menstrum, with mustard or turpentine epithems to the abdominal region and iced water when available *ad libitum*. Should the second stage supervene, it is necessary to take decisive steps, lest the third rapidly develop.

It is in the second stage that my peculiar experience becomes available. Physiologists teach that the phenomena of vomiting and purging depend altogether upon the nervous mechanism of the organs affected. According to Michael Foster, "the dilatation of the cardiac orifice is caused, in part at least, by efferent impulses descending the vagi, since, when these are cut, real vomiting with discharge of the gastritic contents is difficult through want of readiness in the dilatation. Since the vagus acts as an efferent nerve in causing the dilatation of the cardiac orifice so essential to the act of vomiting, it is difficult to eliminate the share taken by the vagus as an afferent nerve carrying up impulses from the stomach to the vomiting centre" (pages 275-6). The influence of the vagus is thus demonstrated in the act of vomiting, both as an afferent and an efferent conductor of nervous

energy. Kolman, too, quoted by Hall,* has shown that the right pneumogastric supplies the whole of the small intestines. "This is an inhibitory nerve," he says; "and Moreau and Lauder Brunton have demonstrated that the division of all the nerve going to a portion of intestine is followed by the secretion of a fluid just like rice-water stools of cholera. May not the stimulation," Hall continues," of the inhibitory vagus be followed by results much the same as if the sympathetic supplying the small intestine were paralyzed?" In accordance with these physiological views, I have latterly treated every case of English cholera in the second stage by remedies applied to the pneumogastric nerve in the cervical region. with the satisfactory result of putting an end at once to the profuse vomting and purging so characteristic of this stage. Arguing from its controlling effect in extreme cases of English cholera and cholera infantum, which our best authors say differ only in degree from the Asiatic type, I have every confidence that it will prove equally useful should the latter epidemic gain a footing in this country. There is another important indication, which will be subserved by counter-irritation over the vagus—viz.: the restoration of the cardio-inhibitory function of that nerve; thus the violent contraction of the heart will be controlled, the expansive power of its cavities restored, and the congestion of the pulmonary and arterial system put an end to. The application I have always used is the epispastic solution of the Pharmacopœia, applied freely with a brush behind the ear and on the neck as far as the angle of the lower jaw. No matter how violent the vomiting or purging I have never failed in stopping both by this application; a stimulating effect is produced at once and with it all gastric disturbances cease.

For the stage of collapse, which according to Claude Bernard, is due to great irritation and hypertrophy of the sympathetic nervous system, Dr. Hall, who has seen a large amount of cholera in India,† proposed to the Royal Medical and Chirurgical Society of London, on October 13, 1874, a plan of treatment which received the approval of the Society, as well as of Sir Joseph Fayer, who was present. He recommends the subcutaneous injection of a solution of chloral hydrate, 10 grains in 100 parts of water, in four or five different places according to the size of the syringe. If reaction does not commence in an hour, he injects again. The sedative soothes the contracted nerves and relaxes the contracted vessels; the blood is once more uniformly distributed, and consequently the pulse reappears at the wrist, the cramps and abdominal pains subside, sleep is induced, the respiration becomes regular, the discharges lessens, the face fills out, the voice becomes stronger, and the natural secretions are restored. Mr. Higginson, in his report to the Deputy Commissioner at Keri, Oude, states that he has treated nineteen cases of cholera according to Dr. Hall's method, of whom seventeen recovered, being about 89 per cent. of cures. For purpose of illustration I append a statement of two cases out of many which I have treated during last autumn.

Case 1. *English Cholera.*—Constable C——— sent for me on September 18, 1883, at 8.30 a. m. I found him in the act of vomiting, with small quick pulse, violent cramps, forcible palpitation of the heart, great debility, faintness, and coldness of the extremities. He was purged at frequent intervals and the dejections were of the rice-water character. He informed me that when on duty in the police-cells at 4 a. m. that day, he was attacked with profuse vomiting, followed in an hour by violent purging, with cramps, an attack occurring about every fifteen minutes. I did not order any medicine, but painted him at once in the hollow behind the ears down to the angle of the jaw with an epispastic solution, assuring him that he would not have any return of his symptoms. I visited him again at 10-30 a. m., and found him quite convalescent, not having any sickness or suffering, as I predicted.

Case 2. *Cholera Infantum.*—On September 24, 1883, I was summoned to see a child living in Upton street, Belfast, aged twenty months, at 11-30 p. m. I found it lying on its face across its mother's knee, with its arms and legs lying listlessly at either side; it was purging and vomiting at the same time. The child was almost pulseless, and was cold and feeble. The mother informed me that it had sickened at 6 p. m., and that it had vomited at least every quarter of an hour till the time of my arrival. She had attributed its illness to a mess of soup which it had taken the previous day. She had administered milk with lime water, without any benefit. I did not recommend any medicine, but having had the child placed on its back, I painted it with the blistering fluid behind both ears, informing the mother that from that moment both vomiting and purging would cease. Soon after the application of the remedy the child began to improve, the heat returned to the extremities, and at the end of half an hour it was fast asleep, when I left for the night. Calling at 10 a. m. the next day, I saw the child in its mother's arms, looking quite lively and well. As I foretold, both vomiting and purging had instantaneously ceased.

There is no need of multiplying examples; these two are the representatives of a great number, irrespective of cases of bilious vomiting and gastritis from alcoholism, similarly and successfully treated.

In the cases related I applied the remedy behind both ears; in several others I found the single application behind the right ear sufficient for the purpose; and this appears to me preferable to the double blister, as, from its powerful inhibitory effect upon the heart as well as upon the abdominal viscera, the modified application is perhaps the safer. In these cases of severe suffering any one can understand the satisfaction that is felt

* British Medical Journal, vol. ii, 1884, p, 600.

† Ibid, vol ii, 1874, p 254.

when he is justified in saying, "Permit me to apply this external remedy, and all your troubles will at once depart."

FLATULENCE.

Mr. T. Lauder Brunton, in the Lettsomian Lectures on disorder of digestion, delivered before the Medical Society of London(*Medical Press and Circular*), speaking of flatulence, says:

Flatulence is due to the presence of gas in the stomach and intestines, which sometimes rolls about producing borborygmi, or escapes upward and downward, producing eructations or crepitations. If the pyloric orifice be closed, the gas from the intestine will not escape into the stomach, nor gas from the stomach into the intestine; but if the pylorus be open, gas may pass freely from the stomach into the intestine, and *vice versa*. An analysis of gas from the stomach shows that it consists to a great extent of nitrogen and carbonic acid, in much the same proportion as the nitrogen and oxygen of air. It is therefore probable that most of the gas in the stomach consists simply of air which has been swallowed, but from which the oxygen has been absorbed into the blood, and has been replaced by a corresponding quantity of carbonic acid. We are very apt to forget that, although the mucous membranes in man are much specialized, so as to perform a particular function most efficiently, yet their power is not entirely limited to the one function. The diffusion of oxygen and carbonic acid just mentioned, through the walls of the stomach shows us that the gastric mucous membrane has, though to a very slight extent, a respiratory action; and it is possible that other gases may be absorbed, though to a slight extent, by the gastro-intestinal mucous membrane. Indeed, I need not say it is probable, because we know for a fact that sulphuretted hydrogen may be absorbed in this manner. Some authors consider that the gastro-intestinal mucous membrane may secrete gas in large quantities. However this may be—and I think that it does not occur very frequently—it is probable that an interference with the absorption of gases may be a not unfrequent cause of flatulence.

In patients who suffer from malaria, attacks of indigestion are sometimes preceded for two or three days by a tendency to flatulence without any other symptom. This may simply be due to disturbance of the stomach and intestines alone; but still I am inclined to think that in these cases the disorder begins in the liver, and not in the stomach; the portal circulation becoming obstructed first, and the gastric mucous membrane becoming congested secondarily. After violent exertion, such as quickly running up stairs, or trying to catch a train, one may observe that, at the same time that the heart is palpitating and the breathing becoming short and difficult, there is a great tendency to flatulence. A similar condition is also found in patients with cardiac disease, and my friend Dr. Mitchell Bruce has called my attention to the frequency with which such patients complain of "heart wind."

Another source of flatulence is the gas given off from the food in abnormal process of decomposition. The secretion of gastric juice in the stomach is deficient; the food will not be rapidly digested; the secretion, instead of being acid, is nearly neutral, or perhaps even alkaline, and fermentation may occur with evolution of gas. It is evident however, that considerable time is required to allow gas to be formed in any quantity in the stomach; and flatulence from this cause will not occur until some time after food has been taken. Gas, however, may pass into the stomach from the intestines and distend it, if the pylorus be open; and such distension may occur at any time. and is not necessarily dependent on the decomposition of food in the stomach

I am inclined to think, however, that the most frequent cause of flatulence in the stomach is excessive swallowing of air. There is little doubt that boluses of food may be swallowed without air; but some fluids, especially those of a tenacious character, such as pea-soup and saliva, appear to carry down a good deal. Moreover, it appears to me that when a small quantity of saliva is swallowed at one time it does not completely fill the pharyngeal cavity, and that air is actually swallowed along with it. This does not matter—probably it is even beneficial—if it be not carried on to too great an extent. But we can easily see that, if a person goes on swallowing air after a meal is over, or in the intervals between meals, flatulent distension of the stomach may readily be produced. The conditions which give rise to frequent swallowing of air, so far as my observation goes, are, (1) a continued flow of saliva into the mouth; (2) a sense of irritation or tickling at the back of the throat;(3) a feeling of acidity in the stomach, and (4) a feeling of weight or oppression at the epigastrium or across the chest.

IODOFORM IN THE TREATMENT OF GOITRE.

My object in these brief remarks is not to give the different modes of treatment for the various forms of bronchocele, but to detail a line of treatment in which I have met with remarkable success in the last four or five years.

The most common variety of bronchocele met with is a simple hypertrophy of the thyroid gland, either one or both lobes; and it is in these cases, whether they be acute or chronic that this treatment is especially applicable.

Case 1. A married lady, aged sixty, applied to me for the relief of a "swelling," of four years, duration, on the right side of her neck. Examination showed it to be a bronchocele involving the right wing of the thyroid gland.

Case 2 was a young lady, sixteen years old, who

had a goitre of two years' duration, involving the right wing and isthmus.

Case 3. Mrs. B., aged thirty-five, consulted me in the summer of 1882, giving the following history: About three years previous she had noticed a slight enlargement on the left side of her neck, which grew in about six months to the size of an ordinary walnut, and occasioned no serious inconvenience. It remained this size for about two years, when it began to slowly increase, and three months before I saw her began to grow very rapidly, so that by the time she came to me it extended from the median line of the neck to a point beyond the outer border of the sternocleidomastoid muscle, and projected at least two inches, occasioning so much dyspnœa as to prevent her lying down—very tender to the touch and producing considerable dysphagia. She had been advised to have an operation for its removal.

Case 4. A young lady school teacher. In this case the goitre was of recent date, having existed only about six monhs, and involved only the isthmus.

Case 5. A married lady, the mother of a large family. This goitre involved both wings of the isthmus, and was of six years' duration, during which time it had grown slowly but steadily, at times becoming exceedinglypainful; and during the last year her sleep had to be taken while sitting in an easy chair. There was considerable dysphagia.

Treatment: These cases were treated uniformly, except as regards the first. In that case the local treatment only was used; for, notwithstanding her age and manner of living, her general health was very good. This is not usually the case, for goitre is generally found in anemic subjects, especially if it be of long standing. The local application consists in applying twice a day with a camel-hair brush, over the whole extent of the swelling, a ten-per-cent solution of iodoform in collodion. In a few days after the coating begins to detach itself, the skin becomes very tender, when the application will have to be discontinued for a time. After this there is usually no more tenderness. In case 1 the treatment effected a permanent cure in two months. In the other cases I gave internally, three times a day, in addition to the local treatment mentioned, a pill containing three grains of iodoform and one grain of iron by hydrogen. This frequently, if continued for several weeks, produces slight nausea, which necessitates the discontinuance of the medicine for a day or two at a time.

The improvement as a rule, evidenced by a diminution in the size of the goitre, commences in about three weeks, and after that is steady. In case 2, the patient being very anemic, treatment was not discontinued for four months.

In case 3 the improvement was very marked. The tenderness was entirely gone by the end of the first week, and the swelling considerably diminished by the end of the third. At the end of the third month the goitre had entirely disappeared, and the treatment was discontinued.

In case 4 the goitre being very small and recent, the improvement was very rapid, the patient being discharged as entirely well at the end of the sixth week.

Case 5 was under treatment for a longer time than any of the preceding ones, being under constant medical supervision for six months; but at the end of that time was entirely free from any appearance of goitre.

These are typical cases of those we most frequently meet with, occurring both in young adult life and in old age. In none of them has there been the slightest return either of the goitre or of tenderness of the parts. The treatment, while very simple, is very effectual, and promises a very sure means of relief from an affection which seems to be rather on the increase, and certainly deserves a thorough trial in each case before resort is had to any operative procedure—*Dr. C. E. Bean, in N. W. Lancet.*

LEVIS' METALLIC SPLINTS, FOR FRACTURE OF LOWER END OF THE RADIUS.

We take the following description from an article by R. J. Levis, M.D., Surgeon to the Pennsylvania Hospital, and to the Jefferson College Hospital:

"In the usual and very characteristic fracture of the carpal end of the radius the primary line of the fracture is, with little tendency to deviation, *transverse* in direction. Associated lines of fracture are generally those of comminution of the lower fragment and are caused by the upper fragment being driven vertically into it and splitting it, usually in directions towards its articular surface. The displacement of the lower fragment is towards the dorsal aspect of the forearm its articular surface is inclined in the same direction abnormally presenting backwards and upwards.

"The mechanism of the fracture is its production by falls upon the palm of the hand, which, with the carpus, undergoes extreme extension, and the fracture is caused by an *act of leverage or transverse strain.* This direction of force has also been called *cross breaking strain.* In this fracture actual displacement of the lower fragment may not exist at all, or it may be to the extent of complete separation from contact of the broken surfaces, varying with the amount of force applied and with the retaining influence of the surrounding dense structures.

"The first essential of the treatment of fracture of the lower end of the radius is *the complete reduction of the displacement.* The action of replacement must be directed to the lower fragment itself. The reduction of the fracture can usually be thoroughly effected, under anæsthesia, by *strong extension applied to the hand, associated with*

forced flexion of the wrist, and with pressure applied directly on the dorsal surface of the lower fragment. Unless vertical splitting or comminution of the lower fragments exists, the maintaining of partial flexion of the wrist, with pressure of a pad on the dorsal surface of the fragment, will prevent return of deformity.

"With the object of retaining the apposition of the fractured surfaces by overcoming displacing forces, I have practiced for many years on the principles involved in the splint here illustrated

the application of which will not require much description.

"In the treament of fracture of the lower end of the radius it is essential that proper allowance be made for the curvature of the anterior or palmar surface of this part of the bone. This is insured in the splint which I have revised, which follows correctly the radial curvature; and the fixing of the thenar and hypothenar eminences of the hand in their moulded beds maintains the splint immovably in its correct position with reference to the radial curve. To neglect of complete primary reduction of the displacement of the lower fragment, and to inefficient restoration and retention of the normal radial curve, are due the frequent unfortunate sequences of this fracture.

"The splint is made of copper, so as to be readily conformable by bending to suit the peculiarities of size and form of forearms. The slight roughness left on back of splint from perforations is for the purpose of keeping the bandage from slipping. It is nickel-plated to prevent oxidation.

"The splint will usually fit the forearm so accurately that but little padding will be required, and a piece of woven lint, or of cotton or woolen flannel is all that is necessary for its lining. No dorsal splint is needed, but, as before referred to, a small pad will in most cases be required over the dorsal surface of the lower fragment. For retention of the splint an ordinary bandage, two inches and a half to three inches wide, is all that is necessary.

"This splint has the merits of being applicable to all cases of fracture of the lower end of the radius, and also to many other injuries involving the forearm and wrist, and, as now supplied, is very inexpensive," the price being only one dollar for each piece. The splints are made in two sizes—for adults and children—and also to fit the right or left arm. As made by Mr. J. Ellwood Lee, of Conshohocken, Pa., (whose electrotypes we have borrowed for the above illustrations) the splints are flexible perforated and nickel-plated, and are very light and indestructible.

HEADACHE, SPINAL IRRITATION AND SYMPATHETIC NERVOUS AFFECTIONS DUE TO EYE STRAIN.

A Lecture by Edwin W. Hill, M.D., Cleveland, Ohio.

GENTLEMEN: I wish to draw your attention to one of the most important questions that comes before you in your daily rounds of practice, namely, the connection between the eyes and the nervous system.

At the first glance it seems absurd to think that the eyes have anything to do with the nerves, yet the more you think upon the subject the more important it becomes. The class of nervous diseases to which I wish to draw your attention are denominated functional; I like to call them sympathetic; they include headache, neuralgia, insomnia, epilepsy, spinal irritation, St. Vitus dance, nausea, vertigo, and general failure of health, both mental and physical.

They are called functional because the irritation is of a transitory nature and due to a disturbance of the circulation of the blood in the affected parts. Physiologists tell us that the circulation of the blood is controlled by the sympathetic nervous system. Please note these facts, for they are important:

1st. Headaches, epilepsy, insomnia, etc., are functional troubles, due to disturbances of the circulation.

2d. The circulation is controlled by the sympathetic nervous system.

3d. The eye in all its movements is controlled by the sympathetic, as when the sympathetic is divided in the middle of the neck, the effect is almost instantaneous upon the eye, the pupil dilates, etc.*

Knowing the effect of division of the nerves in the neck upon the eye, is it not reasonable to say that irritation in the eye will affect the sympathetic in the neck. We know from the successful treatment of some hundreds of cases that it is a clinical fact. The chief causes of eye strain are astigmatism, hyperopia (far sight) and defective co-ordin-

* See Dalton's Physiology, pages 532-536.

ation, where there is a difference in the visual power of the eyes as well as errors of accommodation. If you wish to realize the strain of accommodation and co-ordination, hold this within three or four inches of your nose and read for five minutes when you will fully realize the nerve strain by the pain and perhaps nausea so induced. The pain will not be in the eye itself ordinarily. A remarkable fact, as given by writers upon eye strain, ( ) is, in the words of Dr. Mitchell, that while there may be no pain or sense of fatigue in the eye the strain is interpreted solely by the occipital or frontal headache. Some of the worst cases that I have treated and achieved the desired result, relief from pain and suffering, have been cases in which there was not the least sense of pain or fatigue in the eye.

The successful treatment of this class of nervous affections with the prism and cylindrical glasses requires a great deal of special study and clinical experience. It is equally true that the general practitioner is able to make a diagnosis of eye strain after his attention has been brought to the subject. (I shall be glad to send tests for astigmatism and defective vision to any one, free). It is unfortunate that the books published upon the eye contain so little upon this very important topic. Under the head of muscular asthenopia is about all that is said. Perhaps in no better way can I assist the practitioner than by giving a somewhat minute detailed history of cases treated by myself:

CASE 1.—H. S. C., æt. 14, is brought to me by his mother, who says that her boy, although naturally bright, does not get on well in his studies. After he has been in school part of a term he gets fretful, peevish and unnaturally irritable; his appetite becomes poor; and he does not sleep like a child, he is uneasy and tosses about in bed. After a little he complains that he is sick, his head aches and he feels bad. I examined the boy's eyes and found astigmatism, which I corrected with suitable cylindrical glasses which he wears at school. The mother has since told me that he was a changed boy in all respects—"he eats, sleeps and plays like a boy."

CASE 2.—Miss H. V., a self-educated and accomplished young lady, æt. 18, consulted me, complaining that she could not tell what was going to become of her. She was teaching school and the term was not quite half ended. She arose in the morning, after a night of very little sleep, and that little not of a quiet refreshing nature, but a troubled and dreamy sleep, with extreme fatigue and, as she expressed it, a feeling of dread that another day was upon her; before noon the pain in the neck and head would be severe, taking away her appetite for dinner, and what she did eat was forced. When night came the pain all along the spine would be so severe that she could scarcely bear the pressure of her clothing, and she was completely exhausted. Upon examination I found that her eyes were not alike in visual power and astigmatism in both, although of different degrees. With the proper glasses and wearing of them the pain disappeared and sleep returned.

CASE 3. Mr. L. A., æt. 48, a successful manufacturer, consulted me, and this is his history: "My brother and I commenced business years ago; I was to attend to the books and the finances; after making up the books for the month and making out the pay-roll I always had an attack of bilious sick headache, which nothing but a full night's sleep would cure, and that did not come the first night. Nothing that I could take did any good. I have tried everything.

Upon examination I found right eye normal; left eye, astigmatism 1-60. I gave him glasses. His bilious sick headache came from the continual eye strain, in making up his books, as was proven by his not having them when the strain was removed.

I will close, using the words of Dr. Jones of the Queen's University, Cork, Ireland. "How many an unfortunate might escape a world of drugging if the practitioner could recognize the effects of astigmatism in the headache, the dizziness, the inability to work, symptoms so often referred to the stomach, all corrected by suitable glasses."—*Cincinnati Lancet.*

1. Donders on the Eye, page 260.
S. Weir Mitchell, American Med. Journal, 1874.

SICK HEADACHE.

By FRANCIS F. BROWN, M.D., BOSTON, MASS.

From the Boston Med. and Surg. Jour., Oct. 25, 1884 :—Sick headache, migraine, is a neuralgia. This is not the popular impression. Sufferers from it attribute it to "biliousness." This is not only the popular belief, but it was the doctrine of the systematic works until not many years since.

That this disorder is a neurosis is evident from the behavior of the attack, its change in subseqent years into ordinary neuralgia, its local effects in some cases, and its hereditary character and connection, with other neuroses.

First. I think no one can watch closely an attack of sick headache, especially if in his own person, without seeing evidence of its neuralgic character.

To begin with, there may be up to the time of the onset not the slightest symptom of gastric or hepatic derangement. Persons subject to sick headache have usually premonitory symptoms which tell them an attack is impending, and are usually the same in the same person. Some of them are sudden noises in the head, flashes of light or globes of fire before the eyes when they are closed, black spots, an appearance like a gauze veil quivering, ability to see only half an object, sleepiness, etc. Whatever they are the patient knows very well what they mean. In a large majority of cases the whole course of the attack is passed through between sunrise and sunset or a little later. Some, however, and these are usually the hereditary and severer cases, suffer for two or

three days of extreme wretchedness before the storm blows over.

It is evident that this is something very different from the headache which is consequent upon gastric and hepatic derangement only.

Second. The neurotic character of sick headache is shown by its gradual change with the increasing age of the patient into ordinary neuralgia, preferably of the ophthalmic branch of the fifth nerve.

Third. Another fact, as given by Anstie, showing its neuralgic character, is the results which sometimes follow on the track of the fifth nerve, which is the nerve most affected, and the seat of greatest pain, namely iritis, ulceration of the cornea, blanching of the hair or eyebrow, local anæsthesia and periostitis of the frontal bone.

The four latter of these occurred in Dr. Anstie's own person: the local anæsthesia remained permanent.

Fourth. Another point showing its character is the family relations of the disease. That it is often hereditary, we all have had opportunities of observing; and the most intractable cases are among those who have had neurotic ancestors.

Sick headache is more frequent in women than in men, in those who are the subject of other neuralgias than the opposite, and in general is a disease of debility. To this latter statement there are apparent marked exceptions. Occasionally we find a subject of it who carries the appearance of robust health. My impression is that these cases usually belong to families who are subject to it or the allied neuroses.

The immediate occasion of an attack may be anything which tends to exhaust the system, especially overwork, which wearies the body while it taxes and worries the mind, and loss of sleep.

Any slight deviation from one's usual routine, like a shopping excursion, or late hours, loss of a meal, or eating at an unusual hour, will induce an attack in some persons. In typical migraine I think exhaustion or loss of sleep is the occasion of ten attacks to one where indigestion is the cause.

In treatment we aim, first to avert an impending attack; second, to put the system into such condition as to render it less liable to one.

First to avert an impending attack, the most efficient remedies are guarana and caffeine.

Thirty grains of the powder, or a teaspoonful of a good fluid extract of guarana, or three or four grains of caffeine, should be given every twenty minutes or half hour till three doses are taken, unless the symptoms sooner show signs of abating. This is a point I wish to emphasize strongly; it is the key to their successful use, namely to give full doses, and to give them in the very first threatenings of an attack.

Attention to some minor points may aid in averting an attack. When the patient has undergone any unusual fatigue or loss of sleep, anything which his own experience leads him to suspect will be followed by sick headache, I think, I feel quite sure, that a full dose of bromide of potassium, thirty to sixty grains at bed-time, will lessen his liability to it. This drug is useless, it seems to me, after the attack has begun. Under the same circumstances, if the patient is at all constipated, an aloetic laxative is serviceable.

So trifling a matter as slight constipation appears at times to turn the scale under these circumstances.

Of more importance than to repel a single assault is it to so fortify the system that none will be made. How to do it must be left to the judgment of the physician in view of the needs of each individual case. Every drain and tax and irregularity that the patient has learned by experience invites an attack must be looked after and stopped. Loss of sleep and irregular hours must be prevented.

I wish to add a few words about the use of cannabis indica. In this drug I believe we have a remedy of great value in migraine. My attention was particularly called to it by an article in the *New York Medical Record* of December 8, 1877, by Dr. Seguin, who says that in doses of one-third to one half grain of good extract, thrice daily, continued for months, not less than three, it diminishes in a marked degree one's liability to these attacks. My experience has been quite limited, but I have had a few patients whose improvement from its use, after the failure of tonic treatment alone, has been very marked.—*Quarterly Epitome.*

THE TREATMENT OF WHOOPING COUGH.

Although we have so many unsatisfactory recommendations for the treatment of this intractable disease, yet we deem it well to reproduce from the *Medical Press*, September 24, 1884, the treatment advocated by Dr. Robert J. Lee, who says:

It is to be feared that experiments in treatment will not lead to any satisfactory results. It is better not to indulge in any idea of discovering a specific for this disease. Any one who expresses a strong view on the value of some particular remedy, may reasonably be suspected of insufficient observation and experience. In practice the best plan is to divide your attention between the general and the local symptoms, or rather to treat them separately. By the local symptoms I mean the laryngeal spasm, and for this the treatment must be chiefly local. Among the local remedies there is none which gives more decided relief than the inhalation of carbolic acid, a combination such as is used in this hospital, of carbolic acid, oil of pine and tincture of benzoin. Alum is a popular remedy with honey, and this acts apparently locally. Bromide of potassium and tincture of belladonna iv. to v. grains of one with iv. to v. minims of the other, seem to diminish the laryngeal irritability for a time, but in severe cases no great benefit is derived from them. As regards the general treatment we have to consider the symp-

toms of fever, and wasting. Ipecacuanha, small doses of antimony, quinine, and cod liver oil are the chief agents which may be employed in the relief of these symptoms. The great value of change of air, particularly from London or inland to the sea, is well known, and in the latter stage of the malady is superior to any medicinal remedy.

"I will conclude these remarks with the routine treatment, if I may use such a term, which in the majority of the large number of cases I generally adopt. If the disease is in the early stage I prescribe from half a drachm to a drachm of the mistura potassi bromidi et belladonna of our pharmacopœia, with an equal quantity of mistura oxymelli scillæ, and order the application of turpentine liniment every night to thorax and back; and the inhalation, when possible, of the fumes of Stockholm tar, obtained by gently heating the tar or stirring it with a hot poker. This is an economical and effective plan of treating the spasm. In the later stage of the disease the bromide and belladonna mixture should be given only at bedtime, and during the day small doses of cod liver oil and iron will best repair the condition of wasting.

"As the mortality from whooping cough is much greater in infants under twelve months than in children above that age, it is well to protect the former as much as possible from any risk of infection."

SPECIFIC TREATMENT OF DIPHTHERIA AND CROUP.

Dr. George A. Seynn, of Monongahela City, Pa., read a paper at the last meeting of the American Medical Association (*Jour. Am. Med. Association*) upon this subject. He recommended bichloride of mercury as a specific for diphtheria and chloride of gold for croup.

The bichloride of mercury should be used in the first stage of diphtheria, and in large and frequently-repeated doses, and not after everything else has failed. The effect of large doses of this remedy in the early stage of the disease is to reduce the temperature, relieve pain in the head, back and limbs, unlock the secretions, lessen the soreness in the throat in time to relieve nausea and vomiting, restore appetite, and, most of all, to prevent the generation of the poison in the membrane, and to check the formation of the membrane, or to cause it, if formed, to speedily disappear. It is best given in solution, so that when excessive nausea is present, the dose may be gradually lessened and the time shortened, giving the stomach a chance to dispose of it, but at the same time keeping up full treatment.

The dose should be, for a child three years old, one-sixteenth to one-twelfth of a grain in a teaspoonful elixir of bismuth and pepsin every three hours, and for an adult one-twelfth to one-eighth of a grain every three hours. The remedy rarely disturbs the stomach, does not produce ptyalism, and seldom acts on the bowels. Under its use, commenced early, an ordinary case is convalescent in three days, and it rarely needs to be given longer than five days.

In croup the chloride of gold acts as a specific. It should be given in solution in distilled water. As it is very deliquescent and difficult to weigh, the druggist may dissolve the contents of a fifteen-grain bottle in fifteen drachms of distilled water, and to a child five years old, one to three drops of this may be given in water every one to three hours. In other words, the dose may be one-fiftieth to one-twentieth of a grain. It should not be administered in silver or other metal spoons, but dropped into a glass with a little water. Remarkable effects are reported.

CONSTANT CRYING IN AN INFANT.

Dr. Theophilus Parvin touched, in a recent clinical lecture, published in the *College and Clinical Record*, on this subject—one usually held to be scarcely worthy of the physician's notice, but nevertheless important. The child under examination was four months old, and had cried night and day since its birth.

As a dog hunts in dreams, so this poor child, if it ever dreamed in its sleep, dreamed of crying, of pain and discomfort. It was hard, impossible indeed, to keep it still during the examination made to ascertain if there was any diseased organ making complaint in crying. Having found that the child is not suffering with positive disease, the next question is as to its nourishment. The mother said she had plenty of milk, quite as much as she had with her first babe, which got on well. Nevertheless this babe did not seem as large and as plump as it ought to; and though the quantity of milk was ample, was its quality such as it ought to be? Putting a drop on his finger-nail held obliquely, and letting the milk run down the nail the doctor found it scarcely left a trace remain, dropping it in a tumbler of water, each drop, as it fell, caused the faintest cloudiness. Finally a clinical assistant, made an examination with the microscope, and found the number of milk globules was very small. Thus a solution of the problem was reached; the infant was crying from hunger, and from hunger it had been crying for weary months. That this solution was correct is proved by the result of feeding the baby. In a few days it became quite happy and improved in appearance. The artificial food given this infant was cow's milk diluted with an equal quantity of barley water, and a little loaf sugar added. The practice of diluting cow's milk with water for infant feeding is, Dr. P. believes, a grievous mistake. That sort of dilution has simply rendered the milk less nutritious, and made it necessary to give a larger quantity of food, and at more frequent intervals, in each way impairing the child's digestive power. In this case, not water, but barley water, was added

to the milk. So much depends upon having the barley water properly prepared that a word about this preparation is necessary:

Take an ounce of pearl barley, and wash it in cold water, then put it in a vessel containing half a pint of water, and let it be gently heated over the fire, so that the water just simmers a few minutes; now pour off this water, replace it by a pint and a half of water, and boil down to a pint, and you then have barley water.

BELLADONNA INJECTION FOR GONORRHŒA.

Some thirteen years ago an officer on board one of the vessels of the Indus Steam Flotilla consulted me for a bad gonorrhœa with intense pain on micturition, and intolerable chordee at night. The case was urgent, and I ordered an injection composed of seven ounces of water, an ounce of mucilage acacia, twenty grains extract of belladonna, and twenty grains of sulphate zinc, a teaspoonful to be injected immediately before and after micturating, and a similar amount the last thing at night; great care to be used in passing the injection fully down as far as the pain is most intense. An ointment of spermaceti and mercurial ointment, four drachms each, and ten grain extract belladonna ten grains powdered opium a paste to be smeared along the perineum and around the crura penis at night. Patient left next morning having had no chordee that night, and the pain of micturtion disappeared by using the injection. Within a week there was complete cure. From that time I have had numerous gonorrhœal cases of every type and stage, and I have used the injection in every instance, and without exception with unfailing success. Not long since a shop assistant presented himself with a bad gonorrhœa, high fever, inflamed testicle and chordee at night. With the application of the belladonna and opium ointment the chordee did not appear, and in four days after using the injection the running ceased, but after the first application the pain and running were much lessened. A suspensory bandage was worn, and with the daily use of the mercurial and belladonna and opium ointment the patient was quite well in three weeks. Patients have always stated that it is the injection, and not the ointment, which stopped the chordee. I have tried the anodyne treatment in various classes of people from the dissipated nymphs of the Eastern bazaars to the well-fed *roué* in the West; in the acute and in the chronic and gleety stages; in first attacks, and in those making one of a series; and in cases complicated with inflamed testicles and chordee; and I have no hesitation in saying that I have not witnessed anything to contraindicate it nor to mitigate its success.—John Roche, M. D., in *Medical Press.*

THE CANADA MEDICAL RECORD

A Monthly Journal of Medicine and Surgery.

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CHOLERA.

A special meeting of the Medico-Chirurgical Society was held in this City some weeks ago to consider a proposed Health Bill for the Province, and to recommend suitable precautionary measures in view of the possible advent of cholera next summer. Besides a full meeting of members, there were present Dr. Larocque City Health Officer, the President and several members of the Board of Health, and Mr. Archambault who has charge of the proposed Health Bill. After a lengthy discussion a Committee was appointed to consider the Bill, and report upon it and the Cholera question.

The Committee propose to urge upon the Quebec Government the necessity of passing at once such a comprehensive Health Bill as will secure uniformity and efficiency in working, and will not only empower municipalities to undertake sanitary reform, but will *compel* them to do so. A Provincial Health Board would be a leading feature in such a scheme.

It is also proposed to direct the attention of the Dominion Government to the necessity of passing stringent quarantine regulations and arranging for their thorough and systematic enforcement. But the best quarantine system will never prove adequate or satisfactory, as long as the medical service on board passenger ships remains inefficient and irresponsible, as at present. Steamship companies appoint their own surgeons, pay them badly, change them frequently, and give them no independent authority. If a man is honest but in-

discreet enough to find fault with existing arrangements and suggest improvements— necessary but inconvenient or expensive— he is quietly dismissed and replaced by one who is less particular. A ship's surgeon should be a *Government Health Officer*, appointed and dismissed by the Board of Trade, responsible to it for the health of the passengers and the sanitary condition of his ship, and in such matters independent of the Captain and other officers. The formation of a Merchant Medical Marine Service under Government control would greatly improve the quality of the service, and give valuable aid in preventing the spread of infectious diseases. The Government has an efficient *postal* marine service, independent of the steamship companies and their officers, why not have a Government marine *medical* service? Should not the lives of our people and the prevention of epidemic disease be matters of as much solicitude to the Government as the safe transit of our letters and papers.

This whole question has been fully discussed in Great Britain,-1882, 3-4, and has been the subject of parliamentary agitation. To Dr. J. A. Irwin, now of New York, belongs the credit of first directing public attention to the evils and abuses of the present system. The medical journals kept up the agitation, and strongly advocate reform, prominent among them being the *British Medical Journal*, *Lancet*, *Medical Press*, *Medical Times* and *Gazette*. By the non-medical press, opinions equally strong were expressed, especially by the *Daily Telegraph*, *Manchester Courier*, *Irish Times*, *Freeman's Journal*, *Liverpool Mercury*, *Nautical Gazette*, *Gaillards Journal*, and the *Graphic*. The British Medical Association took up the question, and in March, 1883, its Parliamentary Bills Committee drew up a memorial, which was laid before the President of the Board of Trade by an influential deputation accompanied by Sir Lyon Playfair and twenty other members of Parliament. The movement secured the interest and active co-operation of many eminent men, such as Sir Lyon Playfair, Sir Eardley Wilmont, Herbert Gladstone, W. E. Forster, Sir Thomas Farrar, Ernest Hart, Baron Henry de Worms, Sir Saul Samuel, Sir John Lubbock, Professor Huxley, Sir Spencer Wells, Sir William McCormack, Sir Edward Reed, and the Duke of Beaufort. The Government promised to consider the question, but its attention has been so much occupied with other matters that legislation has not yet been accomplished.

In 1883 the American Medical Association at its Cleveland meeting appointed a committee to consider the regulation of emigration by Congress. A Bill was drawn up and laid before the National House of Representatives, but has been referred back to the committee for amendment. The American medical and non-medical papers advocate reform as strongly as their English contemporaries, particularly the *N. Y. Medical Record*, *Boston Medical and Surgical Journal*, *N. York Daily Tribune*, *New York Herald*. It is everywhere conceded that reform is necessary; and if quarantine regulations are to be properly carried out. the medical examination of passengers at the port of embarkation, their treatment and supervision during the voyage, and their inspection before landing *must* be made harmonious parts of a uniform system of medical service, not independent and sometimes conflicting, as at present—

We print elsewhere the memorial of the British Medical Association, and an article from the N. *Y. Evening Telegram*, giving Dr. J. A. Irwin's views upon the precautions which should be taken against cholera.

PRECAUTIONS AGAINST CHOLERA.

I have studied that disease in India its hot-bed and watched its spread through several epidemics, and I consider it by no means unlikely that it may reach New York through the summer or fall of next year, as cholera once started on its march often retains its vitality for a couple of years. The weak point of our defence lies in the now notorious inefficiency of the medical service on board passenger ships. On each side of the ocean there is an excellent health service, but the ocean passage is virtually ignored. The united medical opinion of both countries is loud in its denunciation of this evil. Last year, at the instigation of the British Medical Association, a strong deputation, including twenty members of Parliament, urged the President of the Board of Trade in England to introduce a Bill covering that point. The Cabinet Minister promised much and did nothing. The American Medical Association some time ago drafted a Bill for the same purpose, which is now before Congress, but which, notwithstanding the able engineering of General Slocum, is likely to end in nothing. Ships' surgeons are now responsible to the owners, and I could quote a large number of instances in which an attempt on the surgeon's part to do his duty to his patients or to the public

has been followed by dismissal. For obvious reasons, the owners desire to hush up cases of infection. For equally obvious reasons ship surgeons humor this desire. Therefore at present the only protection against the introduction of diseases such as smallpox and cholera, lies in a stringent quarantine. But the period of incubation for smallpox is from seven to sixteen days, while that of cholera is not accurately determined, but is set down from a few hours to fourteen days. If it be true, as Surgeon-General Hamilton lately said that "every possible advantage is taken of the boarding officer" to conceal cases of infection, the time that the voyage has taken cannot be counted as equivalent to quarantine. That must begin when the vessel arrives, and then the requirements of health and the convenience of commerce come into conflict. A sixteen days' quarantine for every vessel arriving would be impossible. As a matter of fact, quarantine is exceedingly lax, many vessels with smallpox on board being granted pratique on the passengers being vaccinated. In the case of cholera there is an additional uncertainty on account of the difficulty of distinguishing it from cholera morbus. An experienced ship's surgeon might mistake the one for the other, and give a false report, however honest he might be; and although there are some first-class men in the service, it is well known in the profession that first-class men, as a rule, will not at present take the position of ship's surgeon and be creatures of the owners. I have myself been a ship's surgeon in two of the great transatlantic lines, and I thoroughly understand the situation. What is required is that the ship's surgeon shall be completely independent of the owners, and of the owner's paid servant, the captain. He should be responsible, as far as his medical service goes, (which means the retention of his position) only to the health authorities on either side, who are perfectly willing to pull together. To say that there would be then a conflict of authority no board ship in that case is nonsense, both theoretically and practically—theoretically because the captain's supreme authority on board ship under the law is that of a magistrate whose functions need not clash with those of a surgeon on board ship, if both were properly defined, any more than do the functions of magistrate and surgeon on land. It is in his quality of representative of the owner that the Captain does the mischief, for if the surgeon displeases him by too honestly discharging his duty, the captain reports him and has him discharged, not as a magistrate but as the owner's agent. The danger of conflict of authority is practically disproved by the experience of the British Colonial Immigration Service, in which the ship's surgeon is appointed by the Board of Trade and can not be dismissed by the owners. The position is one of dignity, and there is therefore no difficuly in getting excellent men to fill it. The positions of the surgeon and the captain in that service being clearly defined by law do not clash, and, as matter of fact, disputes of any kind are as rare between them, as between the Captain of a transport and the colonel of the regiment being transported. The effect of making the embarking, the voyage, and the disembarking all parts of one medical service is to make the whole efficient. The effect of the present lax medical supervision on board ship is to create carelessness on both sides of the ocean, for nothing disheartens a man so much as to know that, however conscientiously he may perform his duty, his work may be spoiled by the negligence or dishonesty of another.—Dr. I. A. IRWIN, in N. Y. *Evening Telegram.* Dec. 22nd, 1884.

THE MEDICAL SERVICE OF ATLANTIC STEAMSHIPS.

MEMORIAL OF THE PARLIAMENTARY BILLS COMMITTEE OF THE BRITISH MEDICAL ASSOCIATION.

To the Right Honorable Joseph Chamberlain, M.P., President of the Board of Trade:

This memorial respectfully sheweth that the medical and sanitary administration of ocean steamers, especially of those engaged in the North Atlantic emigrant trade, is often seriously defective, whereby many lives are annually sacrificed. The following reasons may be assigned:

1. The medical officers are appointed without due regard to age, health, professional qualification or character.

2. They seldom retain the position for any considerable period, and there is no organisation through which the results of their collective experience may be turned to practical account.

3. The sanitary arrangements of passenger-ships are, without exception, far from what they should be; they are very often grossly defective.

4. The medical officer is denied such independent authority in sanitary matters as is essential to his efficiency as a sanitary officer.

5. His duty with reference to these matters is uncertain, and varies upon almost every vessel. His responsibility is entirely undefined, but he knows that any interference upon his part with existing customs or arrangements would be unwelcome to his employers, and would very likely bring him into unpleasant contact with more influential officials, thereby compromising his position while on board, and the tenure of his office at the conclusion of the voyage.

6. As a consequence, sanitary precautions are not unfrequently, sometimes habitually, neglected throughout the voyage.

7. The surgeon is not allowed adequate assistance for the proper care and treatment of the sick. He has no hospital steward or sick nurse, no dispenser, and no servant; and consequently miscellaneous duties devolve upon him, which he cannot possibly perform efficiently during the frequently recurring times of general sickness, and some of which are distinctly derogatory to his position as medical officer of the ship.

8. The hospitals are generally insufficient, often ill-placed, and sometimes taken from the surgeon's control, and devoted to other purposes than the accommodation of the sick.

9. The medical officer is usually allotted quarters without regard to his health, personal comfort, or the possibility of efficiently discharging his professional duties.

10. His tenure of office is uncertain, often depending on the mere caprice of other officials.

11. His salary—never more than £10 per month, and usually on a par with that of the cook, steward, and fourth or fifth engineer—affords inadequate remuneration for competent and experienced medical services. There is no provision for retirement or superannuation; and therefore, when, after years of laborious public service the ship-surgeon loses his position from ill-health or otherwise, through no fault of his own, he finds himself without provision for the future, and, with reference to other chances of employment, in every respect worse off than when first he obtained his diploma.

Under these circumstances, it is not surprising that, as stated by a leading medical journal, "comparatively few surgeons in every way suitable" can be found in the Mercantile Marine service; or that it should have been ascertained, that the mortality among passengers is "far higher than is justified by the necessities of transit."

As a remedy for this unsatisfactory state of affairs, your memorialists respectfully propose:

1. That the Board of Trade should obtain powers to take this important branch of the public service under its own immediate direction.

2. That a regularly constituted "Marine Medica Service" should be formed; the members of which would be appointed under the direct supervision of the Board and would be responsible to it for the efficient performance of their duties.

3. That the conditions of such appointment should be reasonably stringent, in view of the serious and difficult nature of the service required.

4. That the present disabilities, with reference to unsuitable accommodation, want of assistance, and inadequate remuneration, should be amended under the direction of the Board; and that the position should be made sufficiently desirable to attract and retain the services of thoroughly competent and experienced medical men.

5. That the duties, responsibilities, status and uniform of marine medical officers should be distinctly determined, and made constant upon vessels carrying passengers under the supervision of the Board of Trade.

6. That the medical officers should have separate authority in sanitary matters, not involving the safety or general discipline of the ship.

7. That he should be assured of the full protection of the Board in the discharge of his duties, and in all cases of vexatious interference, or unfounded complaint.

8. That his tenure of office should be as permanent as other public services, and not simply from voyage to voyage, as at present.

9. That the conditions of the service should include promotion and provision for superannuation or retirement through ill-health.

10. That a junior or assistant-Surgeon should be carried by every vessel having on board more than 600 persons; and that suitable arrangements should be made for his accommodation and remuneration.

11. That the medical officers should be required to frequently inspect the inhabited portions of the vessel, and to furnish at the conclusionof each voyage a suitable report upon the hygienic conditions of the voyage, and upon all matters likely to affect the health of the passengers. [Such reports, taken collectively, would be of great value in the public service.]

BISHOP'S COLLEGE FACULTY OF MEDICINE.

ANNUAL CONVOCATION.

The fourteenth annual convocation of the Medical Faculty of Bishop's College was held in the Synod Hall, Montreal, on the 1st of April. In spite of a most disagreeable day, the rain falling in torrents, a very considerable assembly was present, a large proportion being ladies. The Hon. Chancellor Heneker occupied the chair, and conferred the degrees. Dr. F. W. Campbell, the Dean of the Faculty, read the following:

REPORT OF SESSION, 1884-5.

The number of matriculated students for the Session 1884-5 is 23, of whom 2 come from the United States, 2 from Ontario, 17 from Quebec, 2 from West Indies. Eight of our students are residents of Montreal.

The following are the results of the Examinations.

Botany.—F. H. Pickel, Frederick Taylor, John P. McLaren.

Practical Chemistry.—V. J. Groulx and F. Taylor, equal; Rollo Campbell, S. A. A. Thomas, W. E. Fairfield.

Practical Anatomy.—V. J. Groulx, R. Campbell, J. Rohlehr, W. E. Fairfield, A. P. Scott.

Anatomy.—1st Class, V. J. Groulx, W. E. Fairfield, R. Campbell.

2nd Class—A. P. Scott.

Pass.—John Rohlehr.

Physiology.—1st Class—W. E. Fairfield, A. F. Longeway, R. Campbell.

2nd.—A. E. Phelan, V. J. Groulx.

Pass—A. P. Scott, S. A. A. Thomas.

Materia Medica and Therapeutics.—1st Class—V. J. Groulx, A. F. Longeway, R. Campbell.—2nd Class.—A. E. Phelan.

Chemistry.—1st Class.—W. E. Fairfield, V. J. Groulx, A. E. Phelan, R. Campbell, S. A. A. Thomas.

Pass.—J. Rohlehr.

Hygiene.—1st Class—W. E. Fairfield, R. Campbell, V. J. Groulx.

Pass.—A. P. Scott, S. A. A. Thomas; J. Rohlehr and B. J. Ambrosse, equal.

Medical Jurisprudence.—1st Class.—A. F. Longeway.

The following gentlemen have passed their primary examination, consisting of Anatomy, Physiology, Materia Medica and Therapeutics, Chemistry, Hygiene, Practical Anatomy and Practical Chemistry:—

Albert F. Longeway, Dunham, P. Q.—1st Class honours, and "*David Scholarship*" (awarded to the student who takes the highest number of marks in the primary examination.)

Vilda J. Groulx, Belle Riviere, P. Q., 1st class honours.

Rollo Campbell, Montreal, 1st class honours.

Albert P. Scott, Montreal, 2nd class honours.

The following gentlemen have passed their final examination for the degree of C.M., M.D., consisting of Practice of Medicine, Surgery, Obstetrics and Diseases of Children, Gynecology, Pathology, Medical Jurisprudence, Clinical Medicine and Clinical Surgery:—

Frank R. England, Dunham, P.Q., 1st class honours, and "Wood Gold Medal" (awarded to the student who has attended at least two six months sessions at Bishop's College, and has obtained the highest aggregate marks in primary and final examinations).

Rev. Jabez B. Saunders, Stanstead, P.Q., Chancellor's Prize, for best final examination, the Wood Gold Medalist not being allowed to compete.

Charles E. Parent, Waterloo; *Clarence R. Gillard*, M.R.C.S., L.S.A., Jamaica, W. I. The "Robert Nelson" Gold Medal for special excellence in Surgery is awarded to F. R. England. This medal founded by Dr. C. E. Nelson of New York is awarded annually to the student standing first in a special examination in Surgery, written out and practical. No one is allowed to compete unless he has attended at least two sessions at Bishop's College, and has obtained first class honours in primary and final examinations.

In order to pass in any subject, a candidate must obtain at least 50 per cent of the maximum marks; second class honours require at least 60 per cent; first class honours, at least seventy-five per cent.

PRIZE LIST.

"Wood" Gold Medal and "Robert Nelson" Gold Medal—F. R. England.

Chancellor's Prize—Rev. J. B. Saunders.

David Scholarship—A. F. Longeway.

Practical Anatomy—V. J. Groulx.

The degrees having been conferred, Dr. J. B. Saunders delivered the valedictory on the part of the graduates and Dr. A. Lapthorn Smith addressed the graduates on the part of the Faculty.

McGILL UNIVERSITY—ANNUAL CONVOCATION.

The annual convocation of the Medical Faculty of McGill University took place on Monday afternoon, March 30, in the William Molson Hall.

The total number of students enregistered in this Faculty during the past year was 234, of whom there were: from Ontario 126; Quebec, 58; New Brunswick, 20; Nova Scotia, 11; United States, 8; P. E. Island, 3; Newfoundland, 3; West Indies, 2; British Columbia, 1; Manitoba, 1; Ireland, 1.

The following gentlemen, having fulfilled all the requirements to entitle them to the degree of M.D., C.M., from the University, had it conferred on them. In addition to the Primary subjects mentioned they have passed a satisfactory examination, both written and oral, on the following subjects:—Principles and Practice of Surgery, Theory and Practice of Medicine, Obstetrics and Diseases of Women and Children, Medical Jurisprudence, Pathology and Hygiene, and also Clinical Examinations in Medicine and Surgery conducted at the bedside in the Hospital:

Arthur, R. H., Brighton, O.; Allan, J. H. B., Montreal, Q.; Baird, T. A., Chesterfield, O.; Burrows, F. N., Drayton, O.; Cassidy, Geo. O., Goldstone, O.; Daly, Walter S., Ogdensburg, U.S.; Corson, Douglass, Woodstock, O.; Darey, J. H., Montreal, Q.; Dazé, Henri, Montreal, Q.; Doherty, W. W., Kingston, N.B.; Elder, John, Huntingdon, Q.; Eberts, D. W., Chatham, O.; Finlay, F. G., Montreal, Q.; Harkin, F. McD., Vankleek Hill, O.; Hallett, E. O. Truro, N.S.; Hurdman, H. T., Aylmer, Q.; Gustin, Smith, London, O.; Hanna, A. E., Harlem, O.; Hawkins, A. C., Halifax, N.S.; Irvine, R. T., Carp, O.; Johnson, H. D., Charlottetown, P.E.I.; Klock, W. H., Aylmer, Q.; McMeekin, J. W., St. Catharines, O.; McGannon, M. C., Prescott, O.; McCormack, N., Pembroke, O.; McDonald, H. J., Alexandria, O.; McMillan, D. L., Alexandria, O.; Powell, F. H., Ottawa, O.; Palmer, G. F., Ottawa, O.; Robertson, A. M., Brockville, O.; Shibley, J. L., Yarker, O.; Wishart, D. G., Madoc, O.; Wilson, J. A. K., Manotick, O.; Wood, Edwin Geo., Londesboro,' O.

Local and General.

Montreal has been honored by the selection of Dr. Osler to deliver the Gulstonian lecture this year. We can only regard him as transplanted to the congenial soil of the University of Pennsylvania. In his three lectures he refers continually to the Montreal General Hospital and to his colleagues there. Those who take the Philadelphia *Medical News* will find a verbatim report of this original description of malignant endocarditis.

To read the newspaper reports one would think that General Grant was on the road to recovery. We, who know the true state of the case, can distinguish between a *stay* in the progress of the disease and the improvement which precedes complete restoration to health. The local application of cocoaine has given him much relief, but the destruction of the tissues of the pharynx goes slowly on. The disease resembles the soft epithelioma which sometimes affects the æsophagus. There is not much induration and little pain. No doubt it is the absence of the latter symptom which has raised the hopes of the General's friends.

Fabrini of Palermo (*Centralblatt für die Medicinische Wissenchaften*) has given us something new. He proposes to substitute for the ordinary transfusion of blood the extraordinary *inhalation* of the same. This is how it is done: a mixture of twenty per cent of bullocks' defibrinated blood and eighty per cent. of a very dilute (¾ per cent) solution of sodia chloride is sprayed into the throat of the patient. Three ounces and a half of this mixture may be inhaled at one sitting; it does not produce coughing, does not raise the temperature nor bring about any perceptible alteration in the circulation or respiration, and auscultation shows that it is very soon absorbed.

Professor Fabrini has tried this method in several cases of oligæmia with the best results. The patients' condition improve, there was a decided increase in the relative number of the red corpuscles and in the quantity of hæmoglobin. Of course we shall be obliged to have more extended trials of this novel method of blood-making before we can pass judgment on it.

I suppose I might claim relationship with *Zadkiel* and Vennor, *et hoc genus omne.* I predicted nearly three months ago that an outbreak of small pox was at hand, and, lo ! it appeared shortly afterwards.

Strange that this city should be the objective point of this dreaded disease every few years.

Doubtless it illustrates that mysterious law which V morbilli, scarlatina, pertussis, etc., also governs the periodic visits of. I fear that, in spite of all the precautions which the authorities may take, the infection will, as usual, spread to all parts of the city, and that our Civic Hospital, so long closed, will again have a season of active usefulness.

I wish I could pass the subject over with this slight allusion, but, in spite of Dr. Hingston's letter to the *Gazette* (April 18) I am afraid that somebody is sadly to blame for the spread of the disease. Didn't Dr. Rodger inform the Hotel Dieu officials that the patient he was sending thither was the subject of variola, and that he had just been exposed to the disease? Was it not well understood that the General Hospital authorities had very properly refused to admit him, because every one knew that he was carrying small-pox about with him?

Again, how many medical men will be convinced by Dr. Hingston's statements that the epidemic now prevailing arose *sua spoten*, and had no necessary connection with the case "about whom the physicians in attendance were not unanimous?" Surely, we cannot be expected to believe that with a case of small-pox already in the hospital, to which probably sisters, servants, friends, attending physicians and others had access "before a sister and a servant had been detailed to wait upon him," other cases should be regarded as arising from unknown causes?

The imported and first case was not isolated at all, in the proper sense of the word, but nearly two weeks afterwards when a servant in a "distant" part (why *distant* part? does Dr. H. wish us to understand that variola cannot travel 300 yards in the fortnight?) of the Hospital took the disease then she is placed in a building outside of the Hotel Dieu, the health authorities are communicated with, and the disease finally infects the whole Hospital, which is, very properly, closed.

The *British Medical Journal* tells us how to make artificial cheese. Skim milk and oleo-margarine are made into an emulsion and the resulting cream (?) is added to more skim milk. Enriched in this way with fat the fluid can be made to yield a fair sample of cheese. An oleomargarine cheese (for which I would suggest the name cheesette) although it would have considerable nutritive value could not possibly have the flavor of the genuine article.

R. B. Hall, in the Cincinnati *Lancet and Clinic* (March 14) describes a laparotomy done by Dr. A. Martin of Berlin in his private Hospital. I speak of it because Martin is one of the few who now make any extensive use of the carbolic acid spray during abdominal sections. The account is too long to give here, but evidently Dr. Martin does not believe that if the object of the spray is to kill micro-organisms that are likely to infect the wound that that purpose may be accomplished by merely allowing a steamer to eject carbolized steam for an hour or so before and during an operation.

During the time of the operation and for half an hour before it is commenced the spray apparatus is kept going, so that the air in the room (a small one) is saturated with carbolized moisture. So thoroughly is this done that the water runs down the walls, and the clothing of operator and spectators feels and looks as if they had taken a bath. Dr. Martin and his assistant wear linen clothing during the operation, which is washed before it is again worn. The cloud of carbolized steam is so thick that one can see with difficulty, and it soon becomes so irritating as to cause coughing.

The preliminary precautions to be observed by the person who is invited to attend operations in his private hospital are as follows: 1. For 24 hours before coming to the hospital he must not go where there is infection. 2. He must wear freshly washed linen and clothing that has not been worn in the sick room or hospital. 3. In the operating room he must not touch instruments,

sponges or anything used at the operation. At the hour named the door of the room is locked, and nobody is expected to leave until the wound made has been dressed. Visitors are requested to remove their coats, vest and cravat, and are admitted to the room only when the patient is on the table and all arrangements are completed.

Dr. Martin has remarkable success, as the result of the strict carrying out of this plan ; but one feels like asking whether, if there were no antiseptic in the steam, or indeed if the spray were omitted altogether, similar favorable results might not ensue. I see that Emmet is opposed to the use of the carbolic spray in any shape (page 715 "Principles and Practice of Gynecology") and the proof is plain of its having poisoned patients.

The latest advices from German laboratories report no new bacilli this week. There has also been no re-christening of the cholera germ. It is now in order for some one to show that Koch, and all the members of both commissions (French and English) are in entire harmony!

I understand that there is considerable dissatisfaction in medico-military circles with the appointment of Dr. Roddick as assistant Director general of the surgical service in the North-West. No objection can be raised to Dr. Roddick in the score of ability or experience, but it is claimed that he was actually appointed over the heads of all the old surgeons in the militia who have served for varying terms, while but very recently connected with the "Prince of Wales Rifles" himself. Of the propriety of Dr. Bergin's appointment there can be no question. He has been lieutenant-colonel of the 59th Battalion since 1869, and is a man of energy and ability.

P. A. LAVER, M.D.

MONTREAL, April 19, 1885.

PERSONAL.

Dr. GRAVELEY, of Cornwall (C.M., M.D., Bishop's College, 1877), has been appointed 2nd. Surgeon to the Ambulance Corps on duty in the North-West, under the direction of Dr. Douglas, V.C. Dr. Bell, Surgeon of the 6th Fusiliers, Montreal, is 1st Surgeon of the above Ambulance Corps. Dr. England (C.M., M.D., Bishop's College 1885), left for England on the 18th by the Allan steamship "Circassian." Dr. England intends passing some time at the London Hospital.

Dr. RODDICK, of Montreal, has been appointed principal medical officer to the forces in the North-West. Dr. Roddick was appointed Surgeon to the 1st Battalion (Prince of Wales Rifles) on the 21st March, 1885.

Dr. J. G. B. HOWARD, son of Dr. R. P. Howard of Montreal, has returned from a lengthened sojourn in Europe, and has commenced practice in this city.

Dr. MACDONALD (C.M., M.D., Bishop's College) of Manchester, N.H., U. S., has received from the Pope a decoration. Dr. MacDonald, who belongs to Nicolet, served in the Papal Zouaves.

Dr. W. P. Shoemaker, of Elk City, Penn., U. S., whose letters on the New York Hospitals and Medical Schools have appeared in the last two numbers of the *Record*, is now in London, England. He has been given the position of Clinical Assistant to Sir Andrew Clark of the London Hospital. Some interesting communications from him will shortly appear in our columns.

Dr. Heartwell, of Dunnville, Ont., died suddenly on the 10th of February, at the early age of 36 years. Dr. W. H. Montague has returned to Dunnville, Ont.

Dr. O. S. Strange, of Kingston, Ont., has received the surgeoncy of the penitentiary, in place of Dr. Lavell, who has been appointed warden of the same institution.

Surgeon-Major Neilson of B Battery Canadian Artillery, who went to Egypt in medical charge of the Canadian Voyageurs, did not return with them. He remains in the Soudan, and we believe was with General Stewart's column in its terrible march across the desert.

Dr. J. W. Mount has again been elected a member of the Montreal City Council.

Dr. Turcotte of the 9th Bat. Quebec has been gazetted "Surgeon-Major" as a special case. His commission is August, 1870.

Dr. Giason of L'Islet is a warrior doctor. He has just gone through the military school at St. John, P. Q., as a lieut. of one of the Battalions in his neighborhood.