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Original Communications.

A REMARKABLE CASE IN OBSTETRIC PRACTICE.

By T. A. RODGER, M.D., Chief Medical Officer Grand Trunk Railway.

Read before the Medico-Chirurgical Society, Oct. 23rd, 1883.

The case which I purpose bringing to your notice to-night is one which has recently occurred in my obstetric practice, and as it presents to my mind one or two rather unusual features I thought I should like to hear an opinion expressed upon it by the members present. Though a great deal of the work of an Obstetrician must necessarily be of a routine character, still, nevertheless, occasionally, there are to be found cases which arrest attention and relieve that monotony.

Such an one came into my hands on the tenth of October, the patient, aged 32 years, being pregnant for the fourth time. I was present at the birth of all the former children, and found nothing unusual. The history of the case, which is brief, is as follows. On the morning of the tenth of October I was requested to visit a Mrs. L., whom it was said had been ill all night with great difficulty of breathing. I found the patient in bed, half sitting, half reclining on her side, and propped up with pillows. Her countenance was somewhat anxious, face slightly livid, eyes staring, breathing

very hurried and short, and complaining of great tightness about the chest and abdomen, with a sense of suffocation.

This being my first visit to this patient at this time, and not thinking that she was pregnant, I at once examined her chest, found heart and lungs normal, but was struck with the size of the abdomen. Her feet and legs were somewhat œdematous, but no great amount of swelling at the vulva. There had been slight pains at long intervals all night, but the patient said "not like labor pains," though she thought that she ought to have been confined some time during the month of September, having, as far as she can recollect, menstruated for the last time about the beginning of the year.

The size of the abdomen being so much out of proportion to any thing I had ever witnessed before, I began questioning as to her condition for some time back.

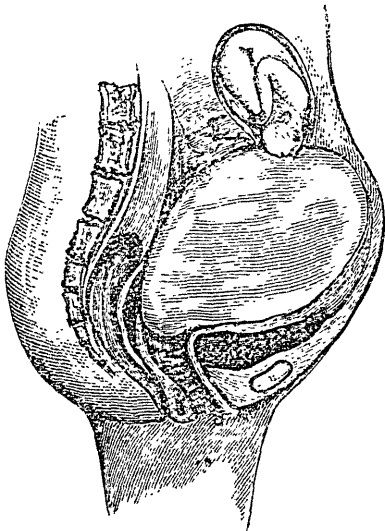
She told me that nothing out of the way was noticeable in the size of her abdomen until between the sixth and seventh month; that never at any time could she say that she felt any distinct movement of the child, such as experienced with her other children; that she had suffered considerable at different times from irritability of the stomach, in fact, had often great difficulty in retaining food. A vaginal examination revealed the os to be high up, dilated about an inch, edges tense but thin, membranes entire,

but no presentation could now be felt. Examination of the abdomen gave dullness on percussion throughout; no movement nor outline of the fœtus could be made out, and by auscultation could not get either heart sounds or placenta bruit.

Through the assistance of the friends present I changed the position of the patient to one which I thought more favorable, or which might assist me in detecting a presentation, but all without any effect whatever.

The distress of the patient being so great I felt that some measures would require to be adopted at once for relief, so I gently dilated the os until I succeeded in passing the greater portion of my four fingers within the uterus, taking care at this point not to tear the membranes, still no fœtus could be felt. Satisfying myself as to the toughness of the membrane, I passed my whole hand between the latter and the walls of the uterus and endeavored to rupture the membranes with my fingers, but failed. Without withdrawing my hand, I passed, with the left, a knitting-needle, when the rush of water was tremendous.

Continuing my search for the child, my arm acting as a plug in the vagina, I could find nothing in the uterus proper, having passed my hand all around the walls; but, at the upper end or fundus, a circular opening about the size of a silver dollar, edges somewhat thick, and unyielding to ordinary force by the fingers.



Passing my forefinger through the new opening, touched the mouth, nose and eyes of the child; then gradually succeeded in getting in a second finger when no forehead could be felt, in fact, no head.

With the gradual escape of some portion of the amniotic fluid I found that I could use more force with my fingers in dilating, due to this second uterus, if I may so call it, being brought near to my hand. Owing to the alarming condition of the patient at this point, and fearing delay might not serve any good purpose, especially if the escape of the amniotic fluid was permitted, there being a possibility of collapse, I determined at once upon version and set to work to force my hand into the interior. After considerable resistance had been overcome, both feet of the fœtus were grasped, completing the delivery of a still-born acephalic male child, weighing about six pounds. Fluid Ext. ergot was given to ensure uterine contraction, and after delay of a short time the placenta came away by gentle traction with the hand, followed by slight hæmorrhage.

The woman was not in a condition to warrant further interference, otherwise I should have liked to have passed my hand and further investigated the interior of the uterus, but feared that possibly such procedure might be attended with bad result.

This is now the 16th day since the patient was confined, and I may state that she is doing well, no bad symptoms having appeared, so far, in the case.

I have had sketched upon the blackboard now before you a rough outline showing the relative position of the cavity containing the fœtus to that of the uterus so enormously distended with amniotic fluid; and this now appears, engraved to illustrate the article.

SOME REMARKS ON DIVISION OF LABOR AND THE ETIOLOGY OF DISEASE.

By HENRY HOWARD, M.R.C.S.L., Eng., Government visiting Physician Longue Point Lunatic Asylum, Province of Quebec.

Read before the Montreal Medico-Chirurgical Society, October 26th, 1883.

MR. PRESIDENT AND GENTLEMEN,—My reasons for not having read a paper before this Society for over two years were: first, I felt that my papers were not sufficiently practical for a Medico-Chirurgical Society; secondly, I preferred to hear the views of others to giving my own, more particularly so, as being a specialist for twenty-three years, I felt the possible danger there was of running into one course of thinking, and becoming dogmatical in my views on some particular subject, to the exclusion of others; indeed

I find that one gentleman, a very "Daniel come to judgment, has broadly accused me of dogmatism, while he himself was writing in the most dogmatic style, rushing wildly against all theories, believing he was demolishing all opinions by misrepresentation, boldly assuming the position, "I have spoken, let no dog bark," sweeping out low temperature, and ophthalmoscopic observations with one stroke of his pen.

The generous and hearty call made upon me, at the suggestion of my friend, Dr. Hingston, by the President and members of the Society at our last meeting, for a paper, encouraged me to write this one, which, for want of a better name, I have given the title of: Remarks on Division of Labor and the Etiology of Disease. Gentlemen, time works wonders, or, more properly speaking, nature, even though she takes time, works wonders by her laws, and in nothing is this more remarkable than the wonderful changes she produces in public opinion by the law of evolution. Nature is all in motion, she moves, and we, as an integral part of nature, must move with her,—we cannot help ourselves, onward we must go.

I remember well the time when, in this good city of Montreal, a medical man could not adopt a more certain course to get his professional brethren in arms against him than by selecting some specialty to which he would devote his time, and whatever talents he possessed. But what have we now? We have the profession recognizing the great natural law, division of labor, so that nine out of every ten of our medical men, no matter how clever they may be as general practitioners, take up some particular specialty, and upon this specialty the profession and the public look upon them as an authority. Now this division of labor it is that accounts for the rapid strides made in medical knowledge within the last quarter of a century, and this division of labor, I am happy to say, is not confined to our profession. Its necessity has been recognized by the agricultural, the mechanical, the commercial and trading classes,—and see the wonderful effects it has produced upon one, and all of these classes, and, consequently, upon our whole social system. Division of labor has given men time to think and reason, and a social evolution has been the result. I suppose that in the present day there are to be found but few intelligent men in the medical profession who do not recognise as a fact that, for all physical phenomena there must be physical cause.

We may not yet know what is substance, and perhaps we never will. We may not be even able to define matter in the abstract, and only know matter in the concrete by their properties and qualities, and from these to learn that all the worlds are matter; that the mineral, vegetable and animal kingdoms are matter; that matter is one, only differing in degree, and not in kind; and that matter, though changeable, is indestructible. By the properties and qualities of these concretes we know that all the phenomena we take cognisance of are physical phenomena, or are known to us only through material sources. We know that life in all its degrees, from potentiality in the germ to the biotic life in man, is only known to us as a physical phenomena; even what we call death is a physical phenomena—mind, thought, desire, emotions, impulses, and will, we only know as physical phenomena. All of nature's forces, whether recognised as chemical, mechanical, or physical motion, we only know as the phenomena of matter. In fact, all we know, or can treat of, is of the natural order, and materialistic. Guided by these facts the physical scientist has learned wherever he finds physical phenomena to look for the physical cause which has produced the physical effect; and he has found that all physical phenomena are dependent for their characteristics upon the physiology of the matter from whence the phenomena proceeds. Take the science of psychology, for an example, where we find, that all psychological phenomena is what the physiology of the mental organization makes it. If the phenomena be bad the physical organization is bad, it is either teratological or pathological, which affects its physiology; on the other hand, if the psychical phenomena be good it is because the mental organism is physiologically good, normal not abnormal,—so when we speak of a sane man we speak of a man with a normal physiological psychosis, and of an insane man we speak of a man with an abnormal physiological psychosis. Moreover we find that morphological analogies implies physiological analogies.

Now, by similar observations and the same mode of reasoning, we come to diagnose all diseases of the human frame. We find certain physical symptoms or phenomena, and we look for physical cause,—we look for abnormal physiology of parts, that is, we look for pathological defect to account for the physical symptoms or phenomena that present themselves. The pheno-

mena, then, of animal matter naturally leads us to search for physical cause, which we find in the physiology of matter. But this is not sufficient. we must also find the etiology, which renders animal tissues physiologically normal or abnormal, as the case may be; until we have accomplished this wished-for end, we cannot claim that the practice of medicine is based upon truly scientific principles. Unfortunately the science of etiology has not kept pace with physiology; yet within the last quarter of a century histologists have done wonders in their field of labor. To them we are indebted for all the knowledge we possess of etiology, whether of the vegetable or animal organisms. To the histologist are we indebted for the knowledge of what a parasitic world is this world of ours, that it is a truth, that:

"Great fleas have little fleas and other fleas to bite them,
And little fleas have other fleas, and so on ad infinitum."

We owe to the histologist the knowledge that the beginning of animal and vegetable life is the beginning of what we call death; that all that lives is like the "gourd of Jonah," having a worm at its root,—so that death or physical change is natural to all organisms; decay is matter, not in an abnormal, but normal, state. But death of organisms from disease is unnatural, and mankind seems to have recognised that fact since we have had a history of man, and felt it to be the greatest of all evils.

If we have found the pathology of vegetable and animal organisms explained by the germ theory—and to me it appears we have—for this knowledge we are indebted to the labors of the histologist. We may not have found it however, therefore we should follow the advice of Mr. Huxley, and avoid speaking "cock-surely" of all such questions. But if there is any new theory in the present day that seems to have taken firm hold of the conviction of medical men it has been the germ theory.

Strange that nearly every scientific truth should have its origin amongst those not learned in book-lore. Long before Mr. Tyndall commenced his investigations of atmospheric air, the peasants of Ireland had some undefined idea of an *atmospheric materies morbi*, evident from the fact that in times of epidemics, they used to make large bonfires to arrest the progress of the epidemic. And I find that our respected and learned friend, Dr. Workman, in his reminiscences of the cholera in Montreal, in 1832, states that cannons were

fired in all the streets (to the great benefit of the glaziers) and tar barrels were burned. Now, although we do not find any benefit to have arisen from these acts, they are a proof that, in the minds of the actors, there was, as I have said, some undefined idea of an *atmospheric materies morbi*—a germ which only required the genius of a Tyndall or a Pasteur to interpret, and nobly have these men done their work.

For the knowledge we have of the etiology of disease we are indebted to the labors of the histologist, and those diseases we do not know the etiology of—for the sake of our patients—the sooner we know it the better; but to attain to this knowledge it is actually necessary that we should be convinced of the fact that, for every phenomena we observe in nature there must be physical cause,—more particularly must we recognize this great truth when treating of the animal economy, as we find it in man, remembering that conduct, whatever it may be, is only a symptom or phenomena, having a physical cause, although our histologists may not yet be able to show us physiological or etiological cause for effect. You may say to me: suppose we know the physiology of all matter and the pathology and etiology of all diseases, what then; would we be the better able to cure disease or find a remedy for the removal of these diseases? Well, whatever chance we may have when we come to obtain this knowledge, we can do but very little without it. When that time comes, however, I believe the pharmacologist will find the remedy for the disease. I agree with that eminent physicist, Mr. Huxley, when he says: "It will, in short, become possible to introduce into the economy a molecular mechanism which, like a very cunningly-contrived torpedo, shall find its way to some particular group of living elements, and cause an explosion among them, leaving the rest untouched." No wonder that such a man would come to such a conclusion when he so ably and truly describes man,—his words are: "the body is a machine of the nature of an army, each cell is a soldier, an organ a brigade, the central nervous system head-quarters and field telegraph, the alimentary and circulating system the commissariat."

A few words on my own specialty, mania or pathological psychology, for it is pathological psychology, although we are not yet able to show, in the majority of cases, what

is the pathological defect of matter which develops the phenomena, mania, in its different degrees. But, judging from observation, I believe the time is rapidly approaching when our pathological anatomists and histologists will be able to show us the very nerve lesion which causes mania—whether that lesion be due to mechanical injury from a germ or molecule or from a chemical atom; or, if so be, that there is no actual lesion but some abnormal chemical change.

My hopes are very strong, because I see some of our very ablest young men devoting their time and talents to morphological and histological research; to these gentlemen I would say what my friend Dr. Workman once said to me, "*festina lente.*" To those histologists and morphologists, more particularly our own, who are already famous for their researches, I would say: "remember, gentlemen, how ignorant we yet are of these sciences, and indeed of all physical science, and persevere in your good work, till we have light, where there is now such darkness. Let others treat of the supernatural, our work is with nature and her laws." I have been led to make these few remarks to the Society because from my observations for many years of the insane and criminal classes of society. I feel convinced that all our thoughts, words and deeds are physical phenomena, to be accounted for by the physiology of matters, and in the words of Luvs: "That the labor of life is an incessant struggle between the acts of consciences, volition and the automatic impulses of the emotional regions of our being."

In conclusion, sir, I take this opportunity of congratulating the public at large, but more particularly the members of the medical profession, upon the new Anatomy Act. It has been, and will prove to be, a great boon to science, and the Government that granted us that boon is deserving of our deepest gratitude. Now there will be at least a possibility of learning both normal and pathological anatomy, and the public will be the gainers thereby, and in time the public will learn to be thankful. The Anatomy Bill, at least, was scientific legislation, based upon the natural law of humanity.

Society Proceedings.

MEDICAL CHIRURGICAL SOCIETY OF MONTREAL.

Meeting held Oct. 26, 1883.

Maggots in the Ear.—DR. OSLER exhibited for Drs. McLean and Duncan of Fergus Falls, Minn., five larvæ of *Muscida lucilia* which were removed, with sixteen others (all alive) from ear of a man aged 24. The patient consulted the

doctors on August 14th, with intolerable ear-ache, which had begun on the 12th. He had had scarlet fever and measles when young, and there possibly had been otorrhœa, but he had not noticed any special discharge. On examining the left ear the meatus was found alive with maggots, which had to be picked out with the ear forceps, as syringing had little or no effect. There was bleeding from the wall of the meatus, the drum was absent, and there evidently had been old middle-ear disease.

Dr. Osler remarked that many such cases were on record, but the large number of larvæ in one was remarkable. They are invariably in connection with suppurative disease of the ear.

Aneurism of Abdominal Artery and Superior Mesenteric Artery. The patient, aged 49, a printer by trade, had been brought before the clinical class in the summer session on two occasions. He presented a large aneurism in epigastric region, which projected as a prominent tumor and had considerable mobility. The only symptoms were pain in the back and loins and distress after eating. Had noticed the pulsation for a year, the tumor for only two months. Palpation revealed a curious sausage-like projection from the main tumor, freely movable, and feeling like a dilated vessel.

Death took place suddenly from rupture of the sac into the peritoneum.

Dr. Trenholme also exhibited a pair of ovaries and tubes removed about ten days ago from a patient in St. Catharines. This being his *sixth* successful case, in succession since May last. The ovaries appear to be healthy, but both tubes have been the seat of salpingitis, and are considerably diseased. The patient, æt. 28, has always had more or less suffering at menstruation. About five years ago sufferings increased, and were accompanied by general nervous depression and weakness, suffering especially in her head. About three years ago was under treatment for anteflexion and stenosis, which were relieved, but the treatment greatly intensified her head troubles and general nervous exhaustion. Since that period has been constantly an invalid, often not being able to see even her friends, or hear any conversation, remaining in her room alone; slept badly, and often had what she describes as "wave after wave of nervousness," and felt as though she was going mad. The operation was undertaken more with a view to relieve the nerve symptoms than for any pelvic suffering, and so far the patient has made a rapid recovery from the

operation, and declares she feels better than before. Dr. Osler takes the specimens to report upon at the next meeting.

Dr. TRENHOLME exhibited a small body, sausage-shaped about 3 in. long, 1 in. diameter, somewhat dense structure, and apparently having a capsule which had been passed by a patient with the following history: A man, æt. 50, hard drinker, was taken ill with severe vomiting and pains in the stomach and abdomen. Pulse quick, but no elevation of temperature. Bowels constipated, urine very high-colored and scanty. External and internal treatment failed to give entire relief, and though the bowels were freely opened by purgatives, and the pain alleviated by sedatives, yet the vomiting continued for several days, copiously and of a decidedly stercoraceous character. These severe symptoms abated, but still there was occasional vomiting, accompanied by severe colicky pains and great distension of the abdomen. About ten days from the onset of his illness, while defecating, he passed the body now exhibited.

The nature of this growth or body is not very apparent to the eye or touch, possibly an organized blood clot or an enlarged gland. Perhaps Dr. Osler, who has it in charge, will give us more definite information as to its nature at the next meeting.

Dr. HOWARD read a paper on the Division of labor which will be found under the head of original communications.

Several members spoke approvingly of the new Anatomy Act, and it was suggested that our Society should let the Government know that we would support them against the threatened serious opposition to this Act, which is now being agitated chiefly by political dodgers. Others of the members thought the less done the better, as the opposition would die a natural death.

Dr. ROGERS, (President) read a paper on a "Remarkable Case in Obstetric Practice," which will be found among our "Original Communications."

Dr. TRENHOLME remarked, with regard to Dr. Rogers' most interesting case, that the position of the opening being at the "upper part of the fundus," the possibility of tubal or utero-utubal gestation in any of its forms, was excluded. Had it been tubal or tubo-uterine, the opening would have at least not more than 4-5ths. of the distance from the os to the fundus. It was also impossible

that the opening leading from the large cavity containing the waters to that in which the foetus and placenta were, could be a pathological operation, as it was readily dilated, turning easily effected, the foetus and placenta removed and "good contraction" secured. Hence it must be simply an hour-glass contraction of a uterus containing a foetus dead for over three months and accompanied by this immense quantity of amniotic fluid. This view is still further strengthened by the fact that the uterine decidua and that of the cavity containing the child were continuous and one throughout, there being no membranes to puncture over the aperture where the face of the child presented. The case is a most interesting one and happily conducted to a successful issue.

Dr. SHEPHERD was of the opinion that it was a case of tubal pregnancy.

Dr. RODGER thought it was a case of hour-glass contraction, but yet thought there was nothing to preclude its being tubal pregnancy.

Dr. CAMPBELL mentioned a case where serious symptoms followed the taking of a three-drop dose of a 1 per cent. solution of nitroglycerine by a patient suffering from angina and advanced mitral disease. Three drops were taken instead of one, as prescribed, in the hope that more benefit would be gained. Shortly after swallowing the three drops a rash like that of scarlet fever came out, particularly on the chest. This disappeared in five or six hours. The tongue was dry, and in twenty-four hours he passed five times his usual amount of urine. The heart beat quickly, but there was no rise of temperature.

Dr. H. HOWARD said this agreed with his theory that the blood had nothing to do with rise or fall of temperature, which was alone influenced by the nervous system.

Dr. CAMPBELL also spoke of the continued success he is having with nitroglycerine in epilepsy.

Dr. CAMERON mentioned that he had three cases of *petit mal* where he was using it, so far with decided benefit in only one case.

Dr. REED brought up the matter of "Collective Investigation of Diseases," and urged the Society to follow out a plan similar to that adopted by the British Medical Association.

Several members spoke in favor of Dr. Reed's proposal, after which Dr. Hingston proposed that Drs. Reed, Osler and Cameron be named a committee to draw up the necessary questions, etc., with reference to the investigation of enteric fever. Carried unanimously.

Progress of Medical Science.

NATURE AND TREATMENT OF ASTHMA.

The majority of authors now believe that the phenomena of asthma are dependent upon spastic contraction of the muscles of the bronchial tubes. Although many other theories have had, and some still have, able supporters, yet the weight of authority favors by great odds the spasm theory, as affording the most rational explanation concerning the nature of true and uncomplicated asthma. It is not at all surprising that many vague and erroneous notions should be entertained with regard to the essential nature of asthma, since death from the disease is rare, and there being, therefore, few opportunities for post mortem examination. Even in asthmatic persons who have died from some other disease there is usually found no appreciable morbid change in the lungs, or indeed anywhere else, to account for the asthmatic phenomena.

The pathological condition of asthma, whatever it may be, must be sought for in the nervous system, for the affection is peculiarly nervous in its origin. Irritation of the vagus nerve, either at its origin or along its course, will occasion bronchial spasm. Periodic excitement of this nerve, or of some of its fibres, produced either directly, or in a reflex manner by irritation of various organs, is believed to be a common cause of asthma. According to some authors direct irritation of the vagus, or some of its branches, may sometimes be occasioned by swollen bronchial or tracheo-bronchial glands, which by occasional increased tumefaction produce paroxysms of asthma. This is thought to be the explanation of the etiology of the disease when it occurs in children after measles and whooping-cough.

Bronchial asthma occurs much more frequently through excito-motory or reflex action. Thus, irritation of the bronchial branches of the vagus nerve, giving rise to asthma, may be produced by the action of an irritant on the Schneiderian membrane, the skin, the circulatory and abdominal organs. Of such reflex nature is the asthma which is produced by the inhalation of ipecacuanha powder, the odor of dried hay, fodder, rye, pollen, and the like. So also cold water suddenly applied to the feet has been known to excite the bronchial spasm. Indeed, one of the peculiarities of asthma is that the paroxysms may be induced through the action of an irritant on remote parts. Salter speaks of a case "in which the patient could regulate his asthma entirely by the condition of his bowels. They were, as a rule, relieved every evening. If the customary relief took place, and he retired to bed with an empty rectum, he awoke the next morning well; but if he neglected to relieve his bowels, or his efforts to do so were

abortive, he was quite sure to be awake toward morning by his asthma." Copland also, has observed that the paroxysms are often preceded by constipation. The cases of hysterical asthma are of an analogous nature, the paroxysms being often preceded by well-marked symptoms of uterine displacement or irritation.

A more common illustration of the reflex nature of asthma may be found in the fact that errors of diet are often provocative of the attack, particularly in persons who are at all predisposed to the disease. Salter says: "Cases of peptic asthma, in which the attacks are caused by pneumogastric irritation, are so common that I think few cases could be found of true spasmodic asthma in which the disease is uninfluenced by the state of the digestive organs, while in a very large number it is entirely under their control. This fact is so patent and so generally recognized, that it has by many writers been made the basis of their classification of asthma: thus Dr. Bree and Dr. Young erect into a distinct species those cases that are dependent on gastric irritation. Therapeutically, the full appreciation of this fact is most important; more is to be done for our patients on the side of the stomach than in any other direction. An observant and thoughtful physician once said to me that he considered dietetic treatment the only treatment of asthma."

According to the theory of Bree, all the spasmodic muscular contractions in asthma are but efforts to get rid of irritating material present in the bronchi this irritating material being mucus, which is finally expelled, and then the paroxysms subside. But the presence of mucus must, I think, be regarded as having a *post* rather than a *propter* relation to the disease. The first appearance of moist râles and loose cough is looked upon as the harbinger of relief, and it must be remembered that the bronchial spasm subsides coincidentally with the first appearance of expectoration, instead of continuing until all the mucus has been expelled.

As to the origin of the sputum, which is often expectorated in very large quantity, I have to say that not only does clinical experience lead to the assumption that a severe congestion of the mucous membrane of the bronchi takes place during the paroxysm, but that Stork has even demonstrated the correctness of this view by tracheoscopic examination, by which he found the mucous membrane of the trachea and larger bronchi intensely congested during the attack. If this is true of the larger, it is reasonable to infer that this hyperæmia exists even to a greater degree in the smaller bronchi. This condition would evidently give rise to the catarrhal symptoms; and it cannot be wondered at that long continued and frequently recurring attacks of asthma should lead to chronic bronchial catarrh, a condition so often observed in confirmed asthmatics.

Concerning the character of the sputum, it is of a grayish-white color, generally frothy and viscid,

and contains a mixture of granular and ordinary, mucous cells, cylindrical and ciliary epithelium and sometimes pus cells and particles of blood, all united together in dense and elastic clumps. Leyden, in 1871, discovered in the sputum more or less abundant layers of fine pointed octahedra crystals, the nature of which he was not able to determine, but thought it probable that they were composed of a crystallized substance analogous to mucine. As to the relation of this symptom to asthma, Leyden has advanced the theory that these fine pointed crystals irritate the peripheral terminations of the vagus nerve, and thus through reflex action occasion bronchial spasm. But Leyden's attempts to prove this theory experimentally have not as yet succeeded. As previously stated, the essential condition in asthma is believed to be spastic contraction of the muscles of the smaller bronchial tubes. This proposition is now so generally accepted that it is, perhaps, unnecessary to set about proving it. I will, however, so far trespass upon the time of the reader as to refer to two or three clinical observations in the disease which seem to me quite sufficient to establish the theory beyond all question. First we have dyspnoea of an intense and agonizing character suddenly appearing in a person while in a state of apparently perfect health, and in a short time disappearing equally sudden, without leaving behind any marks of disease. Evidently dyspnoea of this nature points to temporary stricture somewhere in the respiratory organs; and what would more probably explain the nature of this stricture than muscular spasm?

Then, again we have, besides dyspnoea, well-marked, even shrill sibilant râles, and prolonged expiration, both of which are very prominent symptoms in asthma. Now, we know that when air is forced through hollow tubes of even calibre, no musical sound is produced, but if they are narrowed at certain points, the air in them is thrown into vibration and they become musical instruments. Likewise, the musical sounds observed in the chest in asthma are doubtless the result of narrowing of the bronchial tubes at certain points. And if these sounds appear and disappear with the paroxysm, what would better explain this circumstance than muscular contraction and relaxation of certain portions of these tubes?

Prolonged and forced expiration has been referred to as a prominent symptom in asthma; this symptom also indicates constriction of the medium sized and smaller bronchi. According to Biemer, the inspiratory force acts antagonistically to the constricted bronchial muscles, and forces the air through them in the alveoli; but despite the efforts of all the expiratory forces, the air escapes but slowly and incompletely; hence follows insufficient change of air in the lungs, and distension, which, secondarily, give rise to a sensation of want of air, and to reflex straining of the expiratory forces.

While these and other clinical facts evidently justify the belief that the phenomena of asthma

are dependent upon bronchial spasm, yet the question arises: What is the cause of the bronchial spasm? We may say truly that it is often the result of some stimulus applied to the mucous membrane of the bronchial tubes, or to some remote part operating on the bronchial muscles through the intervention of the excitatory system, but the same stimulus applied in the same way will not produce asthma were the tendency to the disease does not exist. Agents which act in this way can only be regarded as co-operative factors in the production of the paroxysm; before they can excite asthma there must be present a certain predisposition to the disease, a certain unknown something. We are therefore obliged to confess that the ultimate cause of asthma is as yet unknown. All that we can safely affirm is that the proximate condition is muscular contraction, and that the primary disease consists in some peculiar unknown neuroses. With these remarks we pass to a brief consideration of the second part of our subject.

Treatment.—The treatment of asthma, like that of all other paroxysmal diseases, must be divided into the treatment of the paroxysm, and that in the interval. The paroxysm, however, constitutes the principal feature of asthma, and it is for the amelioration of this condition that the treatment is chiefly directed.

The relief afforded to the paroxysm by the use of certain drugs, whose action is well known, furnishes, I think, convincing proof of the correctness of the spasm theory. I refer to that class of drugs known as nauseants or depressants. As soon as their peculiar effect is produced, the spasm relaxes, and the dyspnoea ceases. They act in asthma just as they do in strangulated herina, viz., by causing muscular relaxation. The drugs of this class which have been used are tobacco, tartar emetic, and ipecacuanha. The two first of these are more speedy and positive in their action, but, on account of the extreme collapse which sometimes follows their use they have, I think, not met with general favor. Ipecacuanha, however, is very manageable, and its after-effects are quite innocent. In order to be of most service it should be given in a positive dose—say twenty grains of a powder—at the very approach of the paroxysm. Salter speaks favorably of this drug, and relates a case illustrating its happy action, as follows: A youth, who had asthma from his infancy, was attacked quite regularly, once a week, being awake with the paroxysm about four or five o'clock in the morning, and it would continue for several hours before he was able to dress himself. About the middle of the forenoon the paroxysm would abate a little, but would deepen in the afternoon, and toward bedtime become so distressing that he was unable to sleep. Twenty grains of ipecacuanha powder was always sure to relieve the paroxysm within half a hour after taking it, and give him perfect freedom from the disease for one week. Salter says "it was clearly

not as an emetic that it (ippecacuanha) acted but as a depressant for the relief took place before the vomiting."

Certain other drugs known to produce muscular relaxation have been found servicable. Opium has its advocates, though I must say I have not seen any benefit follow its use. On the contrary, I think I have seen it do harm, by aggravating the very condition it was intended to relieve. We know that asthma is more prone to occur at night, during the insensibility of sleep, than during the waking hours. Salter explains this fact by supposing that sleep exalts reflex nervous action, through which circuit he thinks the phenomena of asthma are in almost every case excited. Opium he condemns, because it tends to produce lethargy and sleep, and, in this way, increases excito-motory susceptibility.

But I have found chloral hydrate, although a hypnotic, to act very favorably. It will almost always considerably diminish the severity of the paroxysm, and sometimes will cause it to disappear within a few minutes after the dose has been administered. The dose should be large, from twenty to forty grains. Biermer, Liebreich, Lebert, and some other observers, have seen very satisfactory results follow the use of this drug in asthma.

Chloroform and ether, by inhalation, have been recommended on high authority to allay the bronchial spasm. I do not see why they should not very effectually do so, yet I confess that I have never had the courage to try them. Salter says: "One of the most powerful and speediest remedies which we possess for asthma, to which I should, perhaps, give the first place of all, is chloroform." Walshe says he has seen it used in three cases, and with this result: "Total relaxation of the spasm during the continuance of insensibility, with the immediate return of dyspnoea on the restoration of consciousness," etc. The imperfect change of air in the lungs during the paroxysm, as indicated by the blueness of the surface, would certainly contra-indicate the use of chloroform, and I should therefore regard it as an unsafe remedy. The same objection would hold good against ether, though it doubtless would be much less dangerous.

Nitrite of amyl, by inhalation, is a remedy newly introduced into practice, and very favorable results have been reported from its use in the paroxysm by several observers. So far as my personal experience goes, I have tried it in only one case, and in that instance it undoubtedly aggravated the dyspnoea.

The inhalation of fumes emitted by burning saltpetre or stramonium, or by smoking the latter, has long been recognized as possessing a controlling influence over the asthmatic paroxysm. When stramonium is employed, the dried leaves are either smoked in a pipe or in the form of cigarettes. All of the so-called "asthmatic cigarettes" sold in shops doubtless owe what-

ever efficacy they may possess to datura. When saltpetre is used it is almost always in the form of nitre-paper, which is prepared, as is well known, by dipping bibulous paper into a saturated solution of nitrate of potassa. This, when dried, is burned in the apartment of the patient.

Being familiar with the remedial value of stramonium and nitre when thus used separately, it occurred to me that their efficacy might be increased by combining them. During the past few years I have been in the habit of using such a combination, with results so very satisfactory, that I feel justified in recommending the following formula as a convenient and efficient remedy for the relief of the paroxysms of uncomplicated asthma:

℞ Stramonii foliarum, ʒ x.
Potassæ nitratis, ʒ v.
Sem. fœniculi, ʒ ss.
Sacchari, ʒ ij. M.

The stramonium leaves and the fennel seeds should be ground to a powder, not very fine, and passed through a sieve, so as to get rid of the stems or coarser fragments. All the ingredients should then be rubbed together in a mortar, without producing a very fine powder. The mode of using the material is to place a small portion of the powder on a dish and ignite it with a match. It should burn slowly and somewhat irregularly, emitting fumes as it burns, which, of course, are to be inhaled. The fumes may be conducted to the mouth of the patient by means of a paper hood placed over his head.

This remedy, if not more efficacious, is certainly more agreeable to the patient and more convenient than the inhalation of the fumes of rubbing nitre-paper or the smoking of stramonium. The combustion of paper is always attended by a disagreeable odor, and the fumes, particularly if the paper is not very carefully selected, are apt to be too carbonaceous for inhalation. During an asthmatic paroxysm, when the patient is suffering from a severe dyspnoea, smoking is found to be very difficult: hence stramonium cigarettes cannot be very conveniently used. Therefore, the advantages of this remedy are, (1) that it possesses the combined value of nitre and stramonium; (2) That it is free from the disagreeable odor and irritating smoke of burning paper; and (3) That it can be used without any effort on the part of the patient.

There is no medicinal remedy known that can be depended upon to prevent the recurrence of the paroxysms. As asthmatics are generally dyspeptics, and as the paroxysms are frequently provoked by indigestion, there is perhaps no better prophylactic treatment, with the exception of change of residence, than that which is regimental. The excito-motory action being exalted by sleep, it is important to an asthmatic person that digestion should be over and the stomach empty before going to bed. With many persons, care-

lessness in this particular is sure to be followed by a nocturnal paroxysm. As the day advances, digestion becomes slower and less energetic; breakfast is therefore the meal at which the asthmatic may with safety eat most heartily, and he should take the opportunity at this meal, if at all, to gratify his palate. As a rule, however, the diet should be of the simplest and plainest kind, yet nutritious. Of course, the strictest abstention from any article of diet that is known to produce asthma should be exercised.

There is nothing that promises so much for the relief and cure of asthma as change of residence to a suitable locality. Salter says "that possibly there is no case of asthma that might not be cured if the right air could only be found." The caprice of asthma is something wonderful. A condition of atmosphere which is well adapted to one case will not always suit another. For many cases; therefore, experience alone will determine the suitable locality. There are, however, certain localities or conditions of atmosphere which seem well adapted to a very large number of cases. According to Salter, the atmosphere of London, contrary to what one would suppose, is very favorable to asthmatics. He says "that those parts of London, and other cities, that have the city character most strongly marked on them, are those that are most beneficial to asthma, that it is in the central, densest, smokiest parts, that the most striking results are seen." He cites a large number of cases showing perfect exemption from the disease by such a residence.

Sea-side air will often exercise a curative influence on asthma. It has been noticed by asthmatics who have sought a sea-side residence for relief from suffering, that a change in the direction of the wind, from a sea breeze to a land breeze, will often cause a recurrence of the paroxysm. It seems evident, therefore, that a narrow strip of land, very nearly surrounded by sea, would be well adapted as a place of resort for asthmatic sufferers. Newport is thus located, and very favorable accounts are given of the beneficial influence of the atmosphere there on asthma. Dr. Samuel Ashhurst speaks very positively of the relief he has personally experienced from autumnal catarrh, accompanied by intense asthmatic symptoms, by a temporary residence at Bench Haven, New Jersey. So decided and invariable has been the relief that he has continued to resort to that place annually for more than twenty years.

Just the opposite condition of atmosphere, *i. e.*, an atmosphere greatly rarefied, such as is found in high elevations, is known to exert a most wonderful influence over asthma. Dr. Denison, who has studied very carefully the relation of the climate of Colorado to pulmonary diseases, says that in the treatment of this troublesome malady he knows of no remedy that can compare with the light air of this inland region. So fully convinced is Dr. Denison of the beneficial influence of this atmos-

phere that he adds, "almost without exception, uncomplicated cases of asthma may gain decided relief or a permanent cure in Colorado." He further remarks: "Generally speaking, the relief is marked as the base of the mountains is reached, and often after crossing the Missouri River. If all the results were written, hundreds of the present residents of Colorado could be cited who had asthma months or years before coming here, who had exhausted all the other known means of relief in vain, but who have now been nearly or quite free from asthmatic symptoms since becoming residents of Colorado." By way of illustration, Dr. Denison mentions two or three very striking instances, an account of which may be found in the Transactions of the American Medical Association of 1876.—W. M. Welch, M.D., in *The Medical Bulletin*.

TREATMENT OF EPILEPSY.

By ROBERT SAUNDBY, M.D., Edin.

Success in the treatment of epilepsy depends, first of all, on accuracy in diagnosis. The maladies likely to be confounded with true epilepsy are: 1. *In young children.* Convulsions from digestive disturbance, teething (?), worms, the exanthemata, tubercular meningitis, &c. 2. *In boys and girls and young adults of both sexes.* Hysteria. 3. *In adult women.* Hysteria. 4. *In adults of both sexes, but more usually in males.* Uræmia and convulsions from alcoholic or lead poisoning. 5. *At any period of life.* Convulsions may occur as the result of morbid growths in the brain, and where these do not reveal themselves by the ordinary signs of cerebral tumor (headache, vomiting, double optic neuritis) a correct diagnosis may be impossible.

In very young children I think we should be cautious in diagnosing true epilepsy, but I am deeply impressed with the importance of the view expressed by Sir William Jenner, that convulsions in young children are frequently a cause of chronic epilepsy, by setting up an epileptic habit in the nervous system. Hysteria is a very frequent source of difficulty in diagnosis, especially when we have no opportunity of observing the fits. We may be aided by the absence of tongue-biting or injury from falling, and by the presence in the patient of hemianalgesia and amblyopia. In the hysterical fit, opisthotonos is, according to Charcot, always very marked and characteristic. Such fits are also usually of longer duration, and followed by outbursts of laughing or crying. It is, too, in hysterical fits that the patient struggles violently with those who endeavor to hold her, using often her teeth and nails. Uræmic fits can only be accurately diagnosed by discovering the presence of chronic Bright's disease (albumen and casts in the urine, high-tension pulse, cardiac hypertrophy, retinal hæmorrhages, &c.). Albuminuria is not uncommon in true epilepsy, probably from the anæmic and

dyspeptic condition of these patients. Generally speaking, it is necessary to exclude uræmia in all cases of epilepsy showing itself for the first time in an adult. Alcohol and lead and, in France, absinthe, sometimes give rise to epileptiform attacks, but a knowledge of these facts is sufficient to enable us to exclude this source of error.

Treatment: The bromide salts are by far the most powerful and efficient means we possess of arresting the convulsions of epilepsy.

Dr. A. Hughes Bennett gives [*Med. Abs.*, pp. 68, 119, 1881] as the result of his statistical inquiries, that the bromides checked the fits in 12.1 per cent., diminished them in 83.3 per cent., while in 2.3 the treatment had no apparent effect, and in 2.3 the number of attacks was augmented during treatment. That is, in 95 per cent. of the cases these drugs proved themselves of value.

Pharmacologists teach that the bromides diminish reflex action and stimulate the vasomotor nerves, but in our ignorance of the pathology of epilepsy it is useless to speculate on the mode in which they arrest the fits. The salts in common use are the bromides potassium, sodium, and ammonium. Bromide camphor is very insoluble, and therefore difficult to administer. I have thought it useful in hysteria. Bromide lithium is recommended by Dr. Weir Mitchell, but it is expensive. Bromide of potassium is the most popular in this country. In America the sodium salt is said to be preferred. Brown-Séguard recommends the administration of all three in combination.

The drug may be administered either in one large dose at bed-time, with a tonic during the day, or the dose may be taken in divided portions, two or three times in the day. I prefer the latter plan for the following reasons: 1. The same quantity of a drug generally acts more powerfully when given in divided portions than all at once. 2. The influence of the drug is kept up throughout the day. 3. Large single doses are more likely to cause depression and bromism.

As our object should be to control the fits with a minimum dose, I am in the habit of beginning with ten grains of brom. pot. three times a day. In many cases this is sufficient. I invariably add to it ten minims tincture digitalis to counteract any depressing tendency. At the same time I order some laxative to be used occasionally, and enjoin attention to the state of the bowels, as constipation acts frequently as a predisposing cause of epileptic attacks, even when the patient is under the influence of the bromide. In general, I recommend abstinence from alcohol, and, so long as the patient's appetite is good and the general state of nutrition is fair, alcohol is more likely to do harm than good. The diet should be rather meagre than liberal, especially in animal food; and the tendency to over-eat themselves, often displayed by epileptics, should be carefully checked. If the fits do not cease under this treatment, I raise the dose of bromide, first by another ten grains of bromide of potassium,

then by ten of sodium, and, finally, by ten of ammonium. The most useful adjunct to the bromides is oxide zinc. A pill containing three to five grains of this, combined with one-sixth of a grain extract of Indian hemp, should be tried with each dose of the mixture when the bromides seem to be failing.

I have sometimes substituted tincture belladonna for digitalis in obstinate cases, with, as I have thought, benefit. As a rule, with only a small number of exceptions, this treatment is satisfactory; for, even where it does not do all we wish, the patient is worse when he leaves it off.

In those unfortunate cases in which the bromides seem powerless, Dr. Gowers recommends borax in scruple doses, combined with one or two minims of liquor arsenicalis. Dr. Stewart Lockie has reported a case treated successfully with this remedy after bromides had failed. Dr. Law [*Med. Abs.*, p. 265, 82] has recommended sodium nitrite, and Dr. Ralfe has reported in favor of this drug; five cases which had not benefited from the bromides having improved under its use. In the following cases, all of them rebellious to ordinary treatment, I give the results of my use of these remedies.

CASE 1. D. F., æt 27, had been taking bromides under my care for three years; at one time he went for five months without a fit; latterly the fits have returned in spite of the medicine, and during the last week he has had three. Sept. 27, 1881, ordered: ℞. Sodæ biber. gr. xv. Aquæ, ℥ j. t. d. s. In the following fortnight had three fits, and dose was increased to a scruple. In the next eleven weeks had nine fits. Was then ordered a pill containing five grains oxide zinc with each dose of the medicine. In the following four weeks had five fits, when cannabis indica, one-sixth of a grain, was substituted for the zinc, and afterwards increased to one fourth grain. Took these medicines for nine weeks, during which time he had 13 fits. Then ordered a scruple bromide potassium, and ten minims tinct. digitalis, which he has continued to take, having occasional fits, and every now and then a bad outburst, but, on the whole, his condition has lately been favorable as to fits.

CASE 2. R. G., æt. 21, been under care for 18 months, taking bromides with little benefit; has never been long without a fit, and has lately had several every week. Oct. 4, 1881. Had had five fits in the last fortnight. Ordered: ℞. sodæ biber. gr. xv. Liq. arsenicalis, Mii. Aquæ, ℥ j. t. d. s. In the following week he had seven fits, and borax was increased to a scruple. Next week had four fits, and after that one about every day for a week, when was ordered: ℞. Sodæ bromidi, ʒ j. Tr. digitalis, Mx. Aquam ad ℥ j. t. d. s. Took this six weeks, having 12 fits in that time. Bromide then increased ten grains, and in the following week had two fits. Ordered a five-grain zinc pill in addition. Had two fits the next fortnight, but the zinc made him vomit, so had to be reduced to two grains, and he got 25 grains brom. pot. instead of

the half-drachm brom. sod. In the following fortnight had 13 fits; cannabis indicæ gr. 1-6 was added to the pills. In the next fortnight had six fits; zinc was raised again to five grains, and he went for a fortnight without a fit. Towards the end of the following fortnight he had seven or eight fits in a few days, then he went a month with only two fits in one day. Went on pretty well from April, 1882, to Oct., when he had 15 fits in three weeks. Ordered: \mathcal{R} . Sodii nitritis, \mathcal{D} j. Aquæ, \mathfrak{z} j. t. d. s. In the following week had nine fits; and dose was raised to half a drachm. That week had three or four fits, so the medicine was continued, but the next time he came he said he had had 15 fits in the week, and felt sick and giddy after each dose of the medicine. Was therefore ordered: \mathcal{R} . Pot. brom. gr. xxv. Tr. digitalis. Mx. Aquam ad \mathfrak{z} j. t. d. s.; \mathcal{R} . Zinci oxidi, gr. iii. Extr. cann. ind. gr. 1-6. Ft. pil. t. d. s.; and in the following month no fits occurred.

CASE 3. A. K., æt. 32, took the bromides and zinc without benefit for two months: had three or four fits daily. Ordered: \mathcal{R} . Sodæ bibor. \mathcal{D} j. Liq. arsen. Mii. Aq. ad \mathfrak{z} j. t. d. s. Had eight fits in the next four weeks, and then went three weeks without a fit. A large carbuncle formed on his buttock, and he had nine fits in a fortnight. The carbuncle healed well under Mr. Furneaux Jordan's iodine treatment, and in the next month he had eight fits. An ill-marked psoriasis broke out on his legs, presumably due to the borax; borax was stopped, and bromides substituted. The rash got well, but the fits became worse, and the borax was resumed without good result: had ten fits the first fortnight, six the second, two the third, and six the fourth. Was then ordered scruple doses sodium nitrite, and in the following week had four slight fits, but had been taking half-doses of his medicine by mistake; in the next week had three bad fits and resumed the bromides. In the following week had seven fits, and was ordered to have a seton put in the back of his neck. In the next week he had five slight fits.

CASE 4. M. R., female, æt. 24, had been taking bromides with zinc and cannabis indica pills for nine months, without cessation of fits, about one a fortnight. Ordered: \mathcal{R} . Sodæ bibor. gr. xv. Liq. arsen. Miii. Aquam ad \mathfrak{z} j. t. d. s. After this she was free from fits for four weeks, when she had three in one day. The dose was increased to a scruple, and she has gone eight weeks without a fit.

CASE 5. A. J. S., æt. 16, was under treatment by bromides for six months, having about a fit a week, but in the last week has had 12 fits. Ordered: \mathcal{R} . Sodæ bibor. \mathcal{D} j. Liq. arsen. Mii. Aq. ad \mathfrak{z} j t. d. s. Went after this for nine weeks without a fit, when he had one in bed. Then relapsed, but was ordered his medicine every four hours, when the fits stopped entirely. The ends of his fingers desquamated while taking the medicine.

CASE 6. G. C., æt. 16, had been taking bromides for ten months with no benefit. Was ordered

scruple doses of borax three times a day. He had been having about one fit a fortnight. In the following fortnight he was not so well, having two bad fits, and in the next fortnight he had several fits, and was so ill that he had to go to bed. Ordered: \mathcal{R} . Sodii brom. \mathcal{D} j. Tr. belladonnæ, Mx. Aquam ad \mathfrak{z} j. t. d. s. In the next fortnight he had two fits; a five-grain oxide zinc pill was added. In the next fortnight had no fits, and in the next only one: brom pot. was substituted for the sodium salt, and he had no fits in the next fortnight. After this he had bad attacks now and then, but sometimes went for a fortnight without fits. His prescription was, a drachm bromide sodium at bed-time, and half an ounce inf. cinchonæ three times a day. For a little time seemed better, but the fits returned as badly as ever. Ordered: \mathcal{R} . Sodii nitrit. Pot. bromidi \mathcal{z} a \mathcal{D} j. Tr. digitalis, Mx. Aquam ad \mathfrak{z} j. t. d. s. Since taking this has gone eight weeks with only nine fits, and thinks himself better.

CASE 7. H. B., female, æt. 21, has been attending as an out-patient for years, taking bromines without benefit, having fits every day or two. \mathcal{R} . Sodæ biboratis, \mathcal{D} j. Aquam ad \mathfrak{z} j. t. d. s. Was better on this treatment for about five weeks, when fits returned, and she was ordered her medicine every four hours. I have no further notes of this case, and presume she ceased attending. I think there is evidence of decided benefit from the use of borax in Cases 4, 5, 7. Sodium nitrite has done good definitely in no case; doubtfully in Case 6.

Dr. Gowers speaks in favor of iron, together with specific remedies. Hughlings-Jackson and Brown-Séquard oppose this practice. I am certain that I have seen cases made worse by iron, and I think its routine administration very undesirable. Although there can be no doubt of the power possessed by the bromides to control the fits, they appear to be quite useless to stop the minor attacks of epileptic vertigo, which are often by their frequency more distressing to the patient than the graver but rarer convulsions.

I have found that caffeine and theine, which I had previously discovered to possess the power of relieving the vertigo of Bright's disease, are very useful remedies in this condition. I have also found benefit from nitro-glycerine. The following cases are illustrations:

CASE 8. John D., æt. 27, had been epileptic for seven years before coming under observation, Aug., 1881. Fits were readily stopped by ten-grain doses brom. pot. combined with digitalis, but he suffered much from vertigo. Was given theine, and dose was gradually raised to three grains three times daily, with great benefit, the vertigo ceasing entirely. In course of treatment the theine was twice discontinued, but its use had to be renewed on account of the recurrence of the old symptom. Case 9. John S., æt. 20, never had fits, but was subject to attacks of vertigo, in which he often fell down and lost consciousness for a moment. Attacks had occurred about every week for last two years.

After taking bromide and digitalis without any benefit, was ordered one grain of theine three times a day, and the attacks of vertigo ceased entirely. Case 10. A. C., male, æt. 19, got rid of his fits under the use of bromides, but remained very subject to vertigo: on adding two grains of theine to his medicine the attacks of giddiness ceased. Case 11. Lizzie T., æt. 21, obtained cessation of fits by 15 grains brom. pot. combined with two minims tincture digitalis taken three times a day, but was much troubled with frequent vertigo, which was not benefited by dieting and attention to the bowels, or by rhubarb and soda or caffeine in doses of two grains three times a day. On putting her on minim doses of nitro-glycerine three times a day, she was at once relieved. Case 12. M. S., female, æt. 19, has had fits for five years every month. Under bromides the fits were effectually controlled, but she complained much of frequent attacks of giddiness, which were not at all relieved by two-grain doses of theine. I substituted minim doses nitro-glycerine (1 o/10 solut.) which were raised afterwards to two minims, and on this treatment she remained quite free from giddiness.

The principal points to which I desire to draw attention are: 1. The value of combining bromide salts with each other and with digitalis. 2. The value of zinc and canabis indica as adjuvants to the bromide. 3. The use of borax in some cases which resist the bromides. 4. The employment of caffeine or theine and nitro-glycerine in the treatment of epileptic vertigo.—*Practitioner.*

CONVALLARIA MAJALIS IN HEART DISEASE.

Recently efforts have been made to give this remedy the place of digitalis as a diuretic and remedy for certain forms of heart disease.

It is an old remedy. Culpepper regarded it as a valuable remedy for weak memory, lost speech and apoplexy. Gerarde recommended it for gout. For long years the peasants of eastern Europe have valued it in cases of dropsy. In 1880 Drs. Troitsky and Bogojavlensky, two Russian physicians, on investigating its action, said that it was valuable in certain forms of heart disease. Prof. Botkin, of St. Petersburg, confirmed most of these results. In July, 1882, Professor Germain Sée published the results of his experiments. (*Bull. Gen. Ther., Brit. Med. Jour.*)

In 1858 Walz isolated two glucoside, which he named "convallarin" and "convallamarin." The investigation of their chemical and physiological properties by Tanret and Marne soon followed. It was found that convallarin possesses purgative properties only, while convallamarin is a heart poison, allied to digitalis, helleborin, etc. The preparations usually employed are the aqueous extract of the leaves, an aqueous extract of the flowers, and the extract of the entire plant. The last is the best for the obtaining of the full therapeutic effect.

A drop of the extract of the flowers injected under the skin of a frog arrests its heart in systole very much as digitalis and some other remedies do. Four drops of this injected into the vein of a dog caused death in ten minutes. The heart appears to be first slowed, and the respirations are quickened. Then the heart's action becomes irregular and the pulsations weak and very rapid. The blood pressure first raises and then falls. The respirations gradually diminish. The heart stops first, then the pressure falls to zero, and the respiratory movements stop. The excitability of the pneumogastric is weakened, although not abolished.

Prof. Sée reports five cases of mitral insufficiency characterized by want of rhythm, œdema of the lower extremities, dyspnœa, etc. The doses of the extract given were from seven to fifteen grains daily. In each case there was marked improvement; the heart's action becoming stronger, the breathing better, and an increase in the amount of urine passed.

A case with mitral stenosis was also benefited; so, also, several cases of aortic insufficiency.

Thus it appears that the favorable effects of this drug upon the heart and blood vessels are constant and reliable.

Favorable reports have been made as to its practical value, in cases of palpitation from exhaustion of the pneumogastrics, in simple cardiac erythema with or without hypertrophy and with or without valvular lesions, in dilatation of the heart, etc.

Some observers have failed to get any appreciable effect from this drug. But it would seem from the mass of favorable evidence adduced that they must have either had a poor article, or failed to use it in appropriate doses.—*Detroit Lancet.*

ON PERSONAL PRECAUTIONS THAT MAY BE ADOPTED BY MEDICAL MEN WHILST ATTENDING CASES OF INFECTIOUS DISEASE.

Dr. Charles Green makes these suggestions in the *Lancet*:

1. Always have the window opened before entering the patient's room or ward.
2. Never stand between the patient and the fire, but always between him and the open window.
3. If possible, change your coat before entering the room.
4. Do not go in for unnecessary auscultation or other physical examination.
5. Stay as short a time as possible in the room.
6. Never, while in the room, swallow any saliva.
7. After leaving the sick room, wash the hands with water containing an antiseptic.
8. Rinse out the mouth with diluted "toilet Sanitas" or Condy's fluid, also gargle the throat with it, and bathe the eyes, mouth and nostrils.

9. Expectorate and blow the nose immediately on leaving the sick-room.

10. Keep up the general health by good food, exercise, and temperance.

11. In addition to the above recommendations, which are all pretty generally known, I would suggest another, which is, in my opinion, the most important of all. This is to filter all the air you breathe while in the sick-room or ward through an antiseptic medium. My method is to use a McKenzie's inhaler over the nose and mouth. I carefully soak the sponge in a strong solution of carbolic acid before entering the sick-room. It is so made that all the air breathed must necessarily come through this sponge, and the expired air is emitted by a valve action at another place. I have worn this not only in the Fever Hospital wards, but in many of the typhus dens in this borough. It is to this method that I attribute the fact that although I have attended between 200 and 300 cases of typhus during the last twelve months, and seen many more, I have hitherto escaped infection myself. The only objection (which is not of much importance in a hospital) is the unsightly appearance one has with the inhaler *in situ*. This objection, is, however, a very slight one when weighed against the greatly increased safety one not only feels, but I believe actually possesses. I am not aware of this method having been mentioned previously; and this fact, and my desire to prevent a repetition of the late disastrous fatalities, must be my apology for bringing it before the profession.—*Med. and Surg. Report.*

HOW TO HOLD THE LARYNGOSCOPIC MIRROR.

Don't hold your mirror as you would a cart whip, hold it as you would a pen, and pass it over the extended tongue without hitting that sensitive organ. If you scrape the tongue with the mirror, ten to one the patient will gag. When you get it beyond the tongue, lift the uvula gently on the back of the mirror, and you will be almost sure to see the reflection of the epiglottis and more or less of the larynx. A gentle motion of the mirror toward one side or the other or forward or backward, will enlarge the field of vision correspondingly.—*The Polyclinic.*

BATHING INFANTS IN THE SEA.

At the present season a mistaken and mischievous practice is much in vogue. Daily torture is inflicted on thousands of tender and helpless infants by forcibly plunging their bodies, in spite of shrieks and struggles, into the open sea. This cruel and time-honored process may now be seen in full operation at any seaside resort. Affectionate mothers hand over their infants to stalwart and impassive bathing-women, to be plunged head foremost into the sea, under the absurd notion that the

procedure vastly benefits the little ones. Day after day, with relentless regularity, very young children and babies are borne out amid the waves and subjected to their dreaded ducking, in the firm belief that their trembling bodies, often writhing to the verge of convulsions, are thus made healthy and hardy. All experience on the subject, and the teachings of all medical authorities on sea bathing, agree in support of the two following rules—namely, that a child under two years of age ought never, under any circumstances, to be bathed in the open sea, and that no one, child or adult, can enter the sea without danger while under the influence of emotional excitement.—Under two years of age, a child's body is too weak to gain any benefit from the shock of immersion in the open sea. Its nervous and circulating forces are too feeble for the development of that vigorous reaction without which sea-bathing is either useless or hurtful. In the absence of strength for such reaction, a sea-bath tends to chill an infant's body, and predisposes to internal congestions. At any age, the shock of immersion in the sea brings risk of danger, and even of death, when the emotions are powerfully excited, and especially when the mind and body are dominated by that most depressing of human emotions—fear. Infants are not always bathed in the sea merely with the intention of making them strong. There is an old sea-side tradition that babies diligently bathed become fearless in the water when they grow up. This notion is also false. Than that infants gain courage by being plunged in the sea, it is more probable that many a nervous child has acquired a dread of bathing which no after experience could remove, because it was compelled in fear and trembling to plunge under water. If a child be sufficiently robust to develop a good reaction, if it be over two years of age, and, above all, if it be not afraid, it may be bathed in the sea with advantage. If any of these conditions be wanting, sea-bathing for children is likely to be positively injurious.—*British Medical Journal.*

ETIOLOGY OF URETHRITIS.

By J. HENRY C. SIMES, M.D.,

Professor of Genito-urinary and Venereal Diseases in the Philadelphia Polyclinic and College for Graduates in Medicine.

The line of demarkation which separates a urethritis caused by the contact of gonorrhoeal pus, and an attack due to the effect of some other irritant introduced into the urethral canal or otherwise, is so obscure and undefined that in many cases it is very difficult, or even impossible, to decide the etiology of the affection. Many writers upon this subject are willing to base their diagnosis upon the differences in the symptoms as presented by this disease when having its origin in gonorrhoeal contagion, or when from other causes. The former is said always to run a more

regular course, and is more intense in its phenomena, while the latter is more irregular, and milder in its symptoms. Yet they all admit that there are cases, and not of unfrequent occurrence, in which the cause is positively known, but still the symptoms are such as to deceive the most experienced observer. For example, a urethritis is contracted from a well-marked case of gonorrhœa; the resulting lesions may be so slight that it is not possible to differentiate the case from one due to other causes than gonorrhœal pus. It is also equally true that a urethritis having its origin from other causes than gonorrhœal contagion may occasion all the symptoms of a violent attack of gonorrhœa.

These differences in the nature and course of a urethritis are accounted for in one of several ways: either the person affected is peculiarly susceptible to the gonorrhœal contagion, or has a very sensitive mucous membrane lining the urethra; or that, for some unknown reason, he is not so susceptible, or his mucous membrane is not so sensitive; in other words, we have here, as in other diseases, an individual peculiarity, a so-called idiosyncrasy. The same reasoning, I also think, is applicable to cases of urethritis due to causes other than gonorrhœal contagion, the same irritant affecting individuals in varying degrees.

This, to many unsatisfactory, explanation of the variations in cases of urethritis, due to different causes, has led investigators to seek other etiological reasons for the affection, and has resulted in the formation of two schools, the one advocating the existence of a specific gonorrhœal virus, the other believing the disease an inflammatory process, varying in intensity, and not due to any special poison or virus, by which may originate from any irritant capable of causing inflammation.

In reading over the views of writers upon this subject, it will be found that there is much confusion and many unsettled opinions. Some are very positive as to the specific nature of the gonorrhœal contagion; others, while they acknowledge that there is great probability of gonorrhœa depending upon the action of a special contagious element, can see no clinical distinction between it and a urethritis produced by irritants of other kinds; and, finally, those who regard every urethritis, no matter how originating, as an inflammatory process, free from any specific element, and not depending upon any special cause.

Those of the first class, who believe in the existence of a special virus, which possesses the property of exciting a violent inflammation when brought in contact with certain mucous membranes, base their opinion upon certain peculiarities which characterize gonorrhœa, and which they assert cannot be accounted for upon any other ground. These peculiar properties are, according to these authors, not met with in ordinary urethritis. Thus the pus in a case of gonorrhœa is said to be much more irritating and virulent than that secreted in a case of ordinary urethritis, and a very minute quantity,

when placed in contact with the perfectly healthy mucous membrane, always causes an attack of gonorrhœa. A distinct period of incubation is also claimed for gonorrhœal urethritis. The general character of the discharge in gonorrhœa is said to be unlike that observed in ordinary urethritis. The similarity of the symptoms in all who suffer from gonorrhœa is considered favorable to the existence of a specific virus. Finally, the existence of a special micrococcus in gonorrhœal pus is the most recent view in favor of the specific nature of this malady.

Those who do not regard gonorrhœa as an affection which is caused by a specific virus, but consider it an inflammatory process differing in no way from any other inflammation, either in cause or effect, base their claim upon the analogy of the symptoms in a case of gonorrhœal and ordinary urethritis—variations in intensity are met with in both cases—upon the pathological lesions, which are common to both, and upon the want of analogy to other undoubted specific diseases.

From my own studies upon the etiology of gonorrhœa I have been led to consider this disease as simply inflammatory in nature, and not possessing any such property as specificity. The symptomatology, pathology and therapeutics of this affection are all favorable to its non-specific and inflammatory nature.

That the pus secreted in a case of gonorrhœa is possessed of peculiar properties, giving it a more irritating and virulent character, is by no means limited to this disease, since any inflammatory secretion is liable to take on such properties when the inflammatory process is subjected to more than usual irritation. The experiments of Mr. Lane may be referred to as an instance bearing upon this question. He found that by irritating the indurated chancre the inflammatory process was increased, and the secretion became more profuse and irritating, so much so that it was possible to auto-inoculate in cases where, previous to the irritation of the sore, auto-inoculation did not take place with the secretion from the sore.

Is it true, as is asserted by the advocates of the specificity of gonorrhœal pus, that an attack of gonorrhœa invariably follows when such pus is brought in contact with a perfectly healthy mucous membrane? Clinical experience does not absolutely sustain this view, and more especially is this the case in regard to females. The following observation, by Dr. J. Wm. White,* very forcibly demonstrates this point. A man suffering with a purulent urethral discharge had connection with a woman; two hours later the same woman had connection with another man who was at this time in perfect health. Forty-eight hours after the connection there was developed in the previously healthy man an attack of acute urethritis, the woman remaining free from disease,

* Holmes' System of Surgery. Packard's edition, Vol. II.

as verified by careful examinations. According to the experience of Dr. White, such cases are not uncommon.

That there is a distinct period of incubation between the time of exposure and the outbreak of the disease in gonorrhœa, can scarcely be admitted as a peculiarity of this affection; where the onset of symptoms characteristic of the lesion are so very variable in making their appearance—from a few hours to one or two weeks—the existence of a period of incubation becomes certainly very questionable. And it is further to be remembered, that this only refers to objective symptoms. It is very probable, indeed, quite possible, that there occurs from the moment of exposure a pathological change, which is not appreciated either by patient or physician. That such may be the case is in a measure shown by the occasional occurrence of cases which every now and then present themselves; there are no objective symptoms of any kind which would lead to a diagnosis of gonorrhœa, yet from the time of exposure the patient is conscious of something out of the usual order; he complains of nothing definite that may be connected with an affection of the genital organs, except that he is constantly reminded of the fact that he possesses a penis. After a variable time all the symptoms of gonorrhœa present themselves. Now, is this period between exposure and actual symptoms to be considered one of incubation? I am inclined to consider it a want of appreciation of pathological phenomena rather than an interval of non-activity of a virus. The length of the interval between exposure and evident symptoms may depend upon an idiosyncrasy of the patient, the susceptibility of the mucous membrane, or the nature of the irritant, rather than upon any specific element in the pus.

In regard to the character of the discharge in gonorrhœa differing from that occurring in a urethritis from any other cause, it may be said that this is feature depending solely upon the nature of the irritant. A urethritis, other than that due to gonorrhœal contagion, arising from the effect of any severe irritant, such as a strong solution of nitrate of silver, aqua ammonia, etc., may and does determine a secretion of pus, which possesses all the characters of the discharge during an attack of gonorrhœa.

That the similarity of symptoms in all cases of gonorrhœa favors the view of the existence of a specific virus in this disease, cannot be admitted as of any great importance, or of any value in respect to its etiology, since it is not at all uncommon to meet with cases of undoubted non-gonorrhœal urethritis in which the most experienced observer is unable to determine, from a study of their symptomatology, the nature of their etiology. Indeed, the difficulty of deciding the cause of any case of urethritis is so well recognized that all writers upon this subject, with scarcely an exception, are very careful to caution us in regard to this point, and think where there is the slightest

doubt no etiological reason should be given, or if it is, it is well not to consider it as specific in nature, but rather the result of irritation from the secretions or otherwise.

In making a comparison of the pathological lesions met with in gonorrhœal urethritis, and those found in cases due to other causes, it will be seen that the histological changes are similar in both. They are the lesions of inflammation which are found in a mucous membrane when this process is in action, viz., hyperæmia, exudation of liquor sanguinis and white blood-corpules, and cell proliferation. These phenomena are made evident by the redness, swelling, and more or less abundant formation of pus.

Finally, I have to speak of the germ theory in connection with the etiology of urethritis. The presence of a micrococcus in the gonorrhœal discharge has of late been advanced, and upon it is said to depend the specific nature of the pus. That a micrococcus exists in the gonorrhœal discharge I have verified by personal observation; but I am not willing to admit the specific nature of this organism, any more than I am inclined to consider the micrococcus found in pus other than gonorrhœal as possessing specific properties. The presence of a micrococcus in pus obtained from other sources than gonorrhœa I have also confirmed by investigation, and find it to have the same reaction with the staining fluid as that met with in gonorrhœal pus.

The specific nature of the micrococcus of gonorrhœa, I think has been refuted by the culture and inoculation experiments of Sternberg.* Among the several conclusions arrived at by this writer, he says, "Culture fluids containing these micrococci introduced into the healthy male urethra do not give rise to specific urethritis, or to any other noticeable result."

NOVEL TREATMENT OF ASTHMA.

Dr. R. B. Faulkner, of Alleghany, Pa. (*N.Y. Med. Record*) has had remarkable success in the treatment of spasmodic asthma, by applying tincture of iodine as a counter-irritant along the course of the pneumogastric nerves, from the upper part of the thyroid cartilage to near the upper border of the clavicles. The application is to be continued daily till the surface becomes irritated. Another part of his treatment is the forced inflation of the lungs by means of a Politzer bag filled with common air. At the time of a full inspiration, the nozzle connected with the bag is placed in the mouth, and the contents driven into the lungs so as to dilate the vesicles and put an end to the spasm which is the cause of the difficulty.

* *Medical News*, Jan. 20, 1883.

THE TREATMENT OF EPILEPSY.

The *Practitioner* for February, 1883, contains three articles upon the therapeutics of epilepsy that embody much that is valuable and suggestive. Dr. James Russell considers the remedies used in the treatment of this disease before the introduction of the bromides; but the results reported are far from satisfactory, — whether from iron, zinc, arsenic, strychnia, opium, cannabis Indica, belladonna, spinal ice-bag, blisters, seton, or static electricity, the verdict was almost the same, sometimes temporary improvement, usually ultimate failure.

Dr. Radcliffe continues his medical annotations concerning epilepsy, and discusses especially its treatment. Potassium bromide was introduced by Sir Charles Locock for cases of epilepsy in young women in which erotic excitability seemed to be the prominent element in the etiology. Dr. Radford subsequently extended the use of the remedy to all cases of epilepsy. Of the alkaline bromides, sodium, potassium, and ammonium, he most frequently gives the last named, as being less likely to cause eruptions upon the skin, or to stultify the patient. It also contains a larger proportion of bromine than the others. He usually gives from forty-five to sixty grains in the course of the day. His experience shows that the remedy may be continued in these doses for a long time without injuriously affecting the mind or bodily functions. With regard to large doses, he says that he has not found it necessary to go beyond one drachm a day; and with reference to the selection of appropriate cases, he remarks: What I have always found is, that the bromide dose not act kindly in cases where the memory is bad and the mental power generally enfeebled, — the mischief done, as a rule, showing itself chiefly in stultification and in disfigurement of the skin by rashes of various sorts, without any very certain change for the better on the attacks. I have indeed found that the attacks were less likely to be kept in check if the bromide was pushed to the extent of causing any stultification or much cutaneous disfigurement, and that it was never advisable to go so far as to produce 'bromidism,' which, to my mind, is an evil which is scarcely less ghastly than epilepsy itself. I am quite satisfied that harm rather than good is done by giving large doses of bromide of potassium or bromide of ammonium in ordinary cases of epilepsy where the memory is bad and the mental power generally enfeebled, and that forty-five grains in the course of the day is too large a dose; rather give too small a dose for an adult in such a case. In a word, the conclusion at which I have arrived is, that in any case the bromide has been pushed too far if it gives rise to any marked symptoms of 'bromidism,' that in cases of *le haut mal* with much mental enfeeblement this medicine is very likely to be hurtful even when only given in moderate doses, and that in the majority of cases of *le petit mal* the good to be done by it is barely appreciable."

He found great advantage in combining with the bromine salt iodide of potassium, bicarbonate of potassium, and especially chloride of ammonium. Iron is pronounced to be absolutely injurious to epileptics: arsenic, however, is often serviceable. Hypophosphite of sodium he praises particularly for its influence upon nerve-structures, and states that he does "not hesitate to say that the bromide often seems to be almost doubled in remedial value when it is given along with the hypophosphite, or that thirty grains of the bromide, along with thirty grains of the hypophosphite, given in one or two doses in the course of the twenty-four hours, will go as far in controlling the attacks as forty-five grains of the bromide given by itself. And this is no small gain, for, by diminishing the dose of the bromide the risk of stultifying and disfiguring the patient is to that degree diminished." He considers it a mistake to be too ready to associate tonics and restoratives with the bromides in the treatment of epilepsy. The restorative he prefers is a dessertspoonful of brandy, rum or whiskey given in the dose of medicine, or else a capsule containing a drop of cænanthic ether after it.

Dr. Radcliffe further insists upon the necessity of proper hygienic treatment, the reduction in nitrogenized food, such as meat and milk, and recommends a greater proportion of fatty or oily matter. Buttermilk or sour milk may be drunk freely, but not fresh milk. As regards sleep, the epileptic should not be allowed too much sleep, as it increases the tendency to convulsions. The mind should not lie idle, and systematic education of both mental and physical powers is absolutely of paramount importance.

Dr. Saundby, in a short article on the "Treatment of Epilepsy," read before the Midland Medical Society, claims that success in the treatment of this affection depends, first of all, upon accuracy in diagnosis; and he draws the distinction very clearly between symptomatic and true epilepsy.

The most powerful and efficient remedies are the bromide salts; he prefers the potassium bromide, ten grains three times a day, which in many cases he has found sufficient. He invariably adds tincture of digitalis (Mx) to counteract any depressing effect. Attention to the diet, the use of occasional laxatives, and, as a rule, abstinence from alcohol are enjoined. If the remedy should fail to control the convulsions, the dose is to be increased, first by ten grains more of potassium bromide, then by ten of sodium bromide, and finally by ten of ammonium bromide. Oxide of zinc (gr. iij-v), with extract of cannabis Indica (gr. i-6), is also added to each dose of the mixture when the bromides seem to be failing. The use of iron, especially its routine administration, is pronounced very undesirable, and he states that he has seen cases made worse by iron. Cases that are rebellious to the above treatment are sometimes greatly benefited by borax, as recommended by Dr. Gowers, either combined with arsenic or with oxide of zinc.

The attacks of *petit mal* and epileptic vertigo, according to Dr. Saundby, are greatly relieved by the use of caffeine and theine. It is in such cases that the bromides are useless. Nitro-glycerine was also used in two cases, with complete success in stopping the giddiness. Dr. Radcliffe also speaks favourably of coffee and chocolate in the dietary of epileptics, but does not approve of tea.

APOMORPHIA, A SAFE, CERTAIN, AND QUICK EMETIC.

Mr. Brown, L.R.C.P. of Bacup, writes :

It has occurred to me, in several cases, to have patients who have been obnoxious to ordinary emetics. The emetic has caused nausea and depression, but no emesis. A few weeks ago, two cases of this kind occurred in my practice. One was a man who had been drinking and eating indigestible food. Domestic emetics had been given, which had produced nausea and ineffectual attempts at vomiting. It occurred to me that apomorphia, used hypodermically, might succeed. I prepared a solution containing a grain of chloride of apomorphia, twenty minims of rectified spirit, and water to two drachms, of which I administered ten minims hypodermically which equals one-twelfth of a grain. In seven minutes it produced free and copious vomiting. There was no nausea, nor depression, nor intolerance of food. The other case was a man who was a total abstainer. Patient had loaded his stomach with a mass of indigestible food, which had caused acute pain in his stomach. He had tried domestic remedies without success. Pain was so severe, that I was called up at night. The other case having been so successful, I at once administered ten minims of the solution. In two minutes, without any previous nausea or warning, the contents of the stomach were violently ejected on the floor, the patient not having time to get a vessel to vomit into. This was repeated two or three times at short intervals, and the patient had speedy relief. In this case there was no nausea or bad after-effect.

From inquiries which I have made, I am convinced that the value of apomorphia, as a safe, certain, and quick emetic, is not appreciated, because not known. In cases of alcoholic and narcotic poisoning, it is a most valuable remedy, and, judging from my experience in one case, the emesis is delayed a few minutes. In cases of acute gastralgia, and convulsions in children due to overloaded stomach, apomorphia will prove a speedy cure. I have given one-sixth of a grain of the drug to children by the mouth without producing any effect whatever.—*British Medical Journal*.

SODIUM NITRITE FOR EPILEPSY.

At a meeting of the Royal Med. and Surg. Society, Dr. Ralfe claimed for Dr. Law, of Has-

tings (*Brit. Med. Jour.*), the credit for first recommending nitrite of sodium in the treatment of epilepsy, and for assigning his theoretical reasons therefor in the *Practitioner* (June, 1882). Sodium nitrite resembles in its action amyl and nitro-glycerin—its advantage being that its effects, while slower, are more permanent. The dose should just escape producing physiological effect. The dose should be pure. Of seventeen cases thus treated three were unimproved, one was doubtful, four received slight benefit, and nine were most decidedly improved. The author drew the following conclusions: 1. Those cases in which bromides are of marked service are not suitable for the nitrite. 2. Those cases in which the bromides do not agree well will be probably found to improve under the use of the nitrite. 3. When the bromides are losing their effect, or when there is bromism, sodium nitrite is used for a change. 4. There are a class of cases of minor convulsive attacks often occurring at night in which the nitrite is decidedly useful.—*Weekly Med. Rev.*

DR. OLIVER WENDELL HOLMES ON PHYSICAL DIAGNOSIS AND SPECIALISM.

I have often felt, when seeing hospital patients worried by hammering and long listening to their breathing, in order that the physician might map out nicely the diseased territory, the boundaries of which he could not alter, as if it was too much like the indulgence of an idle and worse than idle curiosity. A confessor may ask too many questions; it may be feared that he has sometimes suggested to innocent young creatures what they would never have thought of otherwise. I even doubt whether it is always worth while to auscult and percuss a suspected patient. Nature is not unkind in concealing the fact of organic disease for a certain time. What is the great secret of the success of every form of quackery? *Hope kept alive*. What is the too fatal gift of science? *A prognosis of despair*. "Do not probe the wound too curiously," says Samuel Sharp, the famous surgeon of the last century. I believe a wise man sometimes carefully worries out the precise organic condition of a patient's chest when a *very* wise man would let it alone, and treat the constitutional symptoms. The well-being of a patient may be endangered by the pedantic fooleries of a specialist.

ECZEMA OF THE SCALP IN INFANTS.

Dr. Lassar (*Gaz. Méd.*) employs the following formula: Salicylic acid one, tincture of benzoin two, and vaseline fifty parts. A certain quantity of this is smeared over the scalp two or three times a day, after having washed the infant's head with soap and water. To soften the crusts and facilitate the cleansing of the scalp, Dr. Lassar recommends the employment of oil containing two per cent. of salicylic acid.

ON THE TREATMENT OF WHOOPING-COUGH.

Dr. W. C. Webb thus writes in the *American Practitioner*, August, 1883:

My only design in asking the attention of the Society to the treatment of whooping-cough is to relate my experience in the use of croton-chloral in nearly two hundred cases of the disease observed during the last four years.

The lesson taught me by this experience is to the effect that croton-chloral is, with very rare exceptions, singularly well borne by children. Next, that to get the full value of the drug it must be given in decided doses—doses large enough to produce quick and marked effect. A child twelve months old will bear a grain of the medicine every four hours, day and night, or six grains in the twenty-four hours; and to get its curative effects, not less than this should be given. This during the first week. After that time the cough is usually so much relieved that the number of doses may be lessened, the drug being given say during the day only. Used in this way, that is, pushed to its full effect, I have very seldom seen a case in which the cough was not under entire control within a fortnight. And I include in this statement several excessively severe cases, complicated by convulsions and marked catarrhal difficulty.

Children from ten to twelve years old will require two grains of croton-chloral at a dose, while an adult will not often bear more than four grains repeated, as in the young child, every four hours.

The drug does not disorder the digestive organs, and by lessening the frequency and severity of the paroxysms, puts an end to troublesome hemorrhage and vomiting. Occasionally, the first few doses produce some irritation about the throat and fauces, but this soon passes off. The toxic effects of the medicine do not seem to affect the organic centres. I have more than once seen patients fall asleep under its influence while in their chairs, the respiration and movements of the heart remaining unchanged.

Croton-chloral is readily dissolved in comp. tr. cardemoms, if first the drug be thoroughly pulverized. An eligible mixture is formed by dissolving one drachm in two ounces each of tr. card. and glycerine.

I have met with several cases in which the paroxysms of cough were so severe and accompanied by such extreme gastric irritability that it was necessary to give the patient a few whiffs of chloroform before attempting to administer the croton-chloral. I have seldom found it necessary to repeat the chloroform more than two or three times. In such cases as have used the anæsthetic the very happiest effects have followed.

Of the mixture I have mentioned, one drachm of croton-chloral and two ounces each of tr. card. and glycerine, the dose is a half teaspoonful every four hours for a child two years old and under.

Croton-chloral is so expensive a medicine that I have, owing to the known efficacy of belladonna in whooping-cough, sometimes used the following recipe, and with very good results:

B. Croton-chloral,	3j.
Tr. cardam.,	3ij.
Tr. belladon.,	3ij.
Glycerin.,	3iij.
M. Dose. same as of other.	

I have sometimes combined the several bromides with the croton-chloral, but I never felt sure that they added in any degree to its efficacy. If one bromide was better than another it was the bromide of quinia. But I rely now exclusively on the croton-chloral in the management of pertussis. While I have never seen any unpleasant effects from this drug, I scarcely need add that in its exhibition a watchful care should be exercised, lest, for some reason, its toxic effects should manifest themselves.

INJECTIONS OF HOT WATER IN DELIVERY.

With reference to this subject, about which a good deal has been lately published, Dr. ROBERT BOXALL writes to the *Brit. Med. Jour.*, July 21, 1883:

The remarks of Dr. Beckingsale on the value of hot-water enemata in delivery, I can fully endorse. The stimulant effect of hot water on the uterine tissue, though slowly gaining ground, seems to be far from generally appreciated by the profession—far less than, from its efficiency, it deserves. I refer not only to rectal enemata, but also to vaginal and uterine injections. Indeed, I believe the beneficial effect of hot water is more readily obtained by injection *per vaginam* than *per rectum*. That such should be the case in rigidity of the os is evident; and unless fœces be present in the rectum, I give preference to vaginal injection, as being the more efficacious of the two. In *post partum* hæmorrhage from inertia of the uterus no remedy is more certain and speedy in its action, so much so, indeed, that it is a matter of surprise it should not be more generally adopted. The following case served, perhaps, more than any to impress upon me its superiority over the means in more general use.

After removing a morbidly adherent placenta under chloroform, the uterus failed to contract, and, while waiting for hot water, the hand was retained in the cavity of the uterus; supra-public pressure, with friction of the abdomen, slipping with a wet towel, all produced the same effect—local contraction of the uterus, answering to the surface of the abdomen affected, but nothing more. The administration of ergot, owing to the persistence of anæsthesia, was inadmissible. On injecting hot water, however, a general contraction took place, expelling the retained hand almost

immediately, and the hæmorrhage forthwith ceased.

As the objections which have been urged against uterine injection may be obviated, and all risk reduced to a minimum by a careful performance of the operation, the following details may be found useful.

First, with regard to the necessary apparatus, a Higginson's syringe (those made in one piece are the best) and uterine tube, furnish all that is required. From the obvious risk of lacerating the uterine tissues (one fatal case in which the tube found its way between a portion of retained placenta and the uterine wall having occurred to my knowledge), the leaden tube may, with advantage, be dispensed with, and a perfectly harmless substitute improvised by adding two or three more eyes to a No. 12 flexible Indian-rubber catheter. This can readily be adjusted to the nozzle of the syringe, and the whole packed in a small compass. Being firmly convinced that all manipulations within the uterus should be conducted antiseptically as a prophylactic measure, totally apart from its curative influence in cases of intra-uterine decomposition, I invariably add Condy's fluid to the water injected. This may be carried in the form of powdered crystals of permanganate of potash, and added to the water as required, the strength (insufficient to stain the finger-nail) being readily gauged by the tint of the solution. This antiseptic being inodorous, non-poisonous, readily portable, comparatively inexpensive, and losing its red tint, if slowly injected, only so long as there is decomposing matter in contact with it, is so suitable, that I need mention none other. The water should be of such temperature that the finger can be retained in it without producing pain.

The patient being brought into a good obstetric position, the trunk across the bed, with the buttocks well to the edge and the knees drawn up, the catheter and syringe being first filled with water, the tube can be readily passed in the following way: The point of the catheter should be taken between the tips of the first and second fingers of the left hand, and inserted into the vagina. Before proceeding further, the vagina should be flushed; the fingers then carried up to the os, acting as a guide to the point, the stem of the catheter, running along the cleft of the fingers and palm, is readily pushed onward into the uterus. The injection, like all other intra-uterine manipulations, should be slowly performed, and the catheter moved from time to time, to bring the fluid injected into contact with all parts of the uterine cavity. Care should be taken, by keeping the end of the syringe beneath the water, to avoid the introduction of air. A siphon arrangement, made from a length of tubing, with spring clamp to regulate the flow from an elevated vessel, has been recommended in place of the syringe; but, though it answers very well as a permanency in the wards of a lying-in-hospital, it will be found far from easy in manipulation in general practice.

THE TREATMENT OF PRURITUS VULVÆ.

Professor N. F. Tolochinoff describes *Vracheb Vedom*, the treatment he successfully adopts in endlessly varying cases of pruritus of the female external genitals. In all cases he recommends washing of the latter two or three times daily with a weak solution of bi-carbonate of soda (half a teaspoonful in a basin of water with a tablespoonful of eau de cologne). When irritation, redness and tumefaction are only moderate, powdering with oxide of zinc and starch (1 to 6), or smearing with zinc ointment (3 ij. to ʒ j. of spermaceti ointment) are sufficient. When irritation is more considerable, and erosions and exulcerations are present, he applies, in addition, 2 per cent. carbolic colution, or ½ per cent. (℞. Plumbi acetatis, ʒ j; tincture opii., ʒ iij; aquæ destill. lb. j). In cases of simple eczema there are indicated Hepra's diachylon ointment, green soap, and other similar remedies. Pubic lice are best killed by the gray mercurial ointment. When pruritus is very severe, but the changes on the external genital parts are only slight, the best results are obtained from ice-dressing, smearing with carbolized oil (1 to 1), hypodermic injections of morphine, and the internal use of bromide of sodium (ʒ j daily). In cases of diabetic pruritus, the best means is the administration of alkaline mineral waters and salicylate of soda; the latter being useful, too, in pruritus accompanying chronic cystitis. In itching from gonorrhœal urethritis, the author cauterizes the urethral walls with 10 per cent of silver solution (by means of a silver probe). In cases of pruritus from colpitis, the latter is treated by the introduction every third day, through a speculum, into the vagina, of a teaspoonful of silver solution (1 to 30), with subsequent plugging; the tampons (and solution) being left for twenty-four hours. Their removal is followed by an injection of tepid weak solutions of lead or borax. Very useful, too, is the introduction of a powder consisting of crude alum and starch (1 to 5), the powder being retained in the vagina by cotton-wool tampons. In cases of cervicitis and endometritis, itching disappears on dilatation of the cervix and an intra-uterine injection of tincture of iodine or solution of nitrate of silver. A good palliative means, in cases of pruritus from uterine and vaginal catarrh, is plugging of the vagina with hygroscopic cotton-wool (changed twice in a day), as first recommended by Dr. Gaillard Thomas.—*London Med. Record*.

UTERINE HEMOSTATICS.

By J. BRAXTON HICKS, M.D., F.R.S., Guy's Hospital, London.

As a small contribution to the practical portion of the subject of uterine hæmostatics, I venture to make a few remarks on the mechanical kinds, which we know by the name of plugs or tents. In doing so I must be understood to refer only to

those cases where the cavity of the uterus is not sufficiently large to contain blood in quantity, the loss of which from the circulation is likely to produce anything of serious detriment.

If we go back to former practice and to textbooks, we find it recommended that in case of threatened abortion with much hæmorrhage, a vaginal plug should be used. The vaginal plugs recommended are the tampon, cotton or wool, silk or cambric handkerchief, rags or sponges passed in till the vagina is filled up. An India-rubber ball also has been suggested, covered with felt or such like material. Now, even with the best management, there is much of distress to the patient in the use of the vaginal plug; and, with regard to its hemostatic effect very much uncertainty, and generally partial failure; and in the hands of the unskillful and careless there is positively no restraint of bleeding worth the mention. If at any time any good results be produced, it is rather by the reflex irritation that it causes, whereby the uterus expels its contents. It is not so very rare an occurrence that one finds, on removal of the plug, the ovum on the uppermost part of it. But, besides its palpable inefficiency, a vaginal plug, being of a porous texture, absorbs a large quantity of blood and thus conceals it from our sight; it also favours decomposition, and this, as is well known, occurs within a few hours; and thus we have a new element of danger.

Again, in many cases, when called to such a case, we have no speculum at hand; and although we may extemporize one out of card-board, book-covers, or such like material, yet, before we have thoroughly and firmly filled the vagina we must have given the patient considerable pain and distress, besides having occasion to put such pressure on the urethra as may necessitate subsequent catheterism. For these reasons, namely, the imperfection of action, pain in introduction, and danger if left in long—in other words, its general crudity, it seems to me that as a general rule the vaginal plug should, in the cases I have supposed, be discarded. And as a substitute I would urge the employment of the cervical plug as being more precise in action, as well as being capable, if we use a dilating kind, of expanding the canal for the purpose of exploration, or for the expulsion or removal of its contents.

If, then, in any case of uterine hæmorrhage where we have the conditions above alluded to, we desire, besides immediately checking the bleeding, to dilate, we can use the compressed sponge-tent; the best form of which I have found to be those made after Sir James Simpson's plan, by Duncan, Flockhart & Co., Edinburgh. These can be introduced by a long pair of forceps, and retained *in situ* by placing a piece of sponge, with tape attached, in the upper vagina. Of course, even these materials retain some secretions, etc., and tend to facilitate decomposition; but their removal and cleansing can be effected much more readily than the vaginal plug, because it requires but a

small portion. The sea-tangle tent, by reason of its slipperiness, is unreliable as a plug in hæmorrhage. If we desire, however, only to plug the cervix, we can very easily extemporize a plug from materials to be found in every house. For instance, take a stick (say a flower stick) about a foot long, and taper it at one end to about the size of an uterine sound, or larger; wind round this end, for about three inches down, strips of cambric rag, lint or sponge to the required thickness, judging from the size of the os. Strips of sponge can be readily obtained from the cup-shaped sponges of compact texture, and they can be tied on by thread, layer after layer, till the requisite conical form is obtained. The strips of the other material can be laid on similarly. After the covered end has been well greased it is passed into the canal and the stick retained *in situ*, after the manner in which we tie in a catheter; an elastic tape, if obtainable, is to be preferred.

A catheter or bougie, at the end of a long injection-tube, can be treated in the same way. If we require great precision of application, then it is best that the hand should hold the external end till the hæmorrhage has ceased. If the catheter and stilet be used, then I have found it convenient to bend the external portion backward, between the buttocks, tying the tape around the ring of the stilet—the ends of the tape being carried, as usual, to back and front of the waist-band.

These more homely adaptations I have recommended, rather than the especially made kinds, because they are often wanted at times when we can not send home for a showy sort. In any case, a cervical plug, expanding or not, is more precise, less crude and painful in application, than the vaginal, and, in my experience, nearly always successful. In all cases of abortion, where a plug is necessary, I would lay it down as a rule that the expanding tent should be employed. In case of flexion with abortion (and it is this complication which so frequently increases the hæmorrhage) it will be found that the covered stick or stemmed plug, above described, is very useful: for, if the fundus be elevated during its introduction, the uterine cavity is straightened and evacuation of the contents thereby facilitated.—*British Medical Journal*.

THE USE OF ANTIMONY IN CERTAIN SKIN DISEASES.

Mr. Malcolm Morris, F.R.C. Ed., Surgeon to the Skin Department of St. Mary's Hospital, writes:—

Considering the close chemical affinity of the three important drugs, phosphorus, arsenic, and antimony, it is somewhat surprising that little use should have been made of the last in the treatment of diseases of the skin. Of the three, arsenic is the one which has gained the greatest notoriety. It has passed alternately through the phases of

great popularity—being considered by some a specific for every form of skin-affection—and of equally undeserved disrepute. Now, however, we are forming a more rational estimate of its value; and, while acknowledging its utility in a few certain, well-defined conditions, I have thought it might prove useful to bring before this Section some of the results observed during the administration of its near ally. A certain share of attention has also been paid to phosphorus, but antimony has hardly been noticed. The probable reason for this is that antimony has been looked upon as a drug to be avoided, on account of the dangerous symptoms produced by even apparently moderate doses. But the same argument that applies to arsenic, and strychnia, and other drugs, applies with equal force to antimony—that the action depends entirely on the dose employed. We find in text-books that it has two actions, in the smaller pharmacopœical dose depressant or antiphlogistic, in the larger dose emetic. But no mention is made of its alternative action in repeated small doses. The sulphide, in combination with mercury and guaiacum, is the only preparation which has been used for this purpose.

Tartar emetic, or tartarated antimony, is the preparation I have used in these investigations, the largest dose being 1-32 of a grain, or $7\frac{1}{2}$ minims of the vinum, only half of the minimum dose of the *British Pharmacopœia*. I must mention that, in all cases in which the effect of the drug has been watched, little or no local treatment has been used.

I will state now, in as concise a manner as possible, some of the more important diseases in which I have used the drug, leaving a more complete and detailed account for another opportunity.

Eczema.—It is now several years since my colleague, Dr. Cheadle, pointed out to me the value of antimony in the treatment of the acute form of this disease. In the majority of the cases which have come under my care, its beneficial effect has been both marked and rapid. In the acute general eczema of adults, which usually commences somewhat suddenly by heat and burning on the flexor surfaces, and on other characteristic positions, and is soon followed by abundant exudation of clear fluid, and in the form known as *eczema rubrum*, I generally begin with four or five minims of the vinum antimoniale three times a day, increasing the dose gradually up to seven minims. After a few doses the exudation ceases, and the local irritation is much relieved; but, in order to prevent a relapse, it is necessary to continue the treatment until all traces of the eruption have disappeared. In acute eczema of children, the dose should be in proportion to the age of the child—half a minim or less up to six months, and one minim or less up to a year. As a rule, I have found both children and adults bear these quantities well, neither sickness nor diarrhoea being produced. In the case of aged persons, however, the dose should not exceed three or four minims to

begin with, as diarrhoea may result from the administration of a greater amount.

In the subacute forms, both of children and adults, similar doses, but continued for a longer period, are necessary. In chronic eczema, especially when localised, the use of antimony is less often successful; but even in this troublesome form it relieves the acute exacerbations, and is occasionally followed by cure when other methods of treatment have failed.

In eczema impetiginodes of children I have noticed little benefit from the drug till the scabs have been removed, and formation of pus checked by local treatment. Simple impetigo contagiosa from a local cause is not included in this category.

In the various forms of so-called lichen that occur in children, I have found antimony in the previously mentioned doses of the greatest value in relieving the irritation—a feature in which it resembles arsenic.

Erythema.—In most of the cases of erythema met with in practice the eruption disappears without any special treatment; occasionally, however, when the disease is continued by fresh outbursts, antimony is of great service in modifying the course and relieving the burning and heat. There is a condition which is not clearly described, either in special books on the skin or in those on general medicine, that I have found to be greatly benefited by antimony, whereas it is aggravated by arsenic. The attack usually commences suddenly, with heat and burning of the skin of the face, which is followed very rapidly by great swelling, that often involves the eyelids. The smarting is severe, and pain is experienced when the part is touched. Occasionally, vesicles or bullæ are formed on the swollen and inflamed skin. The patient feels ill, but there is no special rise of temperature. The disease usually runs its course in from three or four to ten, or even twenty, days. The chief feature of the disease is that it is almost certain to relapse. By some authorities this is considered to be idiopathic erysipelas—the public always call it so; by others, it is looked upon as a peculiar form of eczema, and said to be associated with gout. I have seen several cases, and am inclined to think it may be called relapsing erythema, as it has none of the dangerous qualities of genuine erysipelas. Antimony acts in this disease as in acute eczema, by shortening the attack and diminishing the severity of the symptoms. It should be continued for a considerable time after recovery, to prevent, if possible, a relapse.

Prurigo.—In this troublesome affection, frequently met with in our out-patient rooms—the relation of which to the severe form known on the Continent as Hebra's prurigo, Mr. Marrant Baker pointed out at the International Congress of 1881—antimony is of great use. Three or four minims of the vinum, continued over a long period, allays the itching to a large extent, and often prevents the relapses of eczema. In several cases, after arsenic, iron, iodide of iron, cod-liver oil, and

numberless other tonics had been tried, antimony was the only drug that produced any benefit whatever. When given in the before-mentioned doses continuously for more than a year, I have never seen sickness, diarrhoea, sweating, or debility; but, on the contrary, the appetite improves and the weight increases. I have not had the opportunity of trying the remedy in a patient older than 18½ years suffering from this disease; but in one particular case of that age, the benefit was most marked while the drug was being taken.

Sycosis.—I have given antimony in five well-marked cases of this disease; in four, it did not seem to produce any effect, either beneficial or otherwise; in the fifth, there was considerable improvement after the vinum had been taken a fortnight in seven-minim doses. It seemed to relieve the pain and burning; but, although the remedy was persevered with for over three months, the improvement was only temporary. The local treatment while the drug was being administered was olive-oil or vaseline. In none of these cases was there any bad effect; no depression, diarrhoea, sickness, or sweating.

Urticaria.—In a few cases of chronic urticaria, I have found antimony, like arsenic, of service in checking attacks, so long as the remedy was continued.

Psoriasis.—Though, in the majority of cases of psoriasis, arsenic is to be preferred to antimony, I have elsewhere called attention to the fact that, in certain persons, arsenic not only fails to relieve, but even aggravates the disease. I have, in some of these cases, tried antimony, and have noticed in a few instances that improvement took place, while in others it seemed to have no effect.

I have been obliged to condense the facts in this paper into very brief space, but two points I wish especially to lay stress on: first, that tartar emetic—in doses of $\frac{1}{2}$ to $\frac{1}{3}$ of a grain, according to age—can not only be tolerated, but seems to have a decided tonic action; secondly, that it proves useful in those acute forms of skin disease that are usually aggravated by arsenic.—*British Medical Journal.*

NOTE ON DISINFECTANTS.

Dr. W. E. Buck writes: Most practitioners must have often realised the inefficiency of disinfectants in allaying the fœtor of cancerous ulcers, an annoyance which sometimes troubles patients even more than the pain, or the thought of death. I have used the whole round of disinfectants for cancerous ulcers, but all have failed in allaying the fœtor, and keeping the ulcer clean. The disinfectants tried were carbolic acid, sanitas, terebene, resorcin, creasote, boroglyceride, chloride of zinc, charcoal, etc. After failure with these, I tried a saturated solution of hyposulphite of soda added to an equal quantity of water, and found it exceedingly efficacious. The ulcerating surface was well syringed and washed with the solution, and was then

covered with rags steeped in the solution. The granulations were kept clean, and the fœtor was well kept under. Most disinfectants seem to lose their virtue after a few days' application, but I have used this one for months in the same patient with continuous good effects. It is cleanly, has no smell, does not stain, and is very cheap.—*British Medical Journal.*

REMOVAL OF PLASTER-OF-PARIS BANDAGES.

Dr. F. H. Murdock, of Bradford, Pa., says: A very convenient way to remove a plaster-of-Paris bandage is as follows: Take a strong solution of nitric acid, and by means of a camel's-hair pencil paint a strip across the bandage at the most desirable point for division. The acid will so soften the plaster that it may be readily divided by means of an ordinary jack-knife.

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MONTREAL, NOVEMBER, 1883.

YELLOW FEVER AT PANAMA.

A private letter from Dr. Wolfred Nelson, of Panama, South America, reports the continued presence of yellow fever here. It appeared in June last, when there was a single case fatal; in July out of seventeen cases eleven died; in August there were three deaths; in September four; October one case fatal. In November, up to the date of his letter, the 21st, there had been five cases, two deaths, one convalescent. Of the remaining two, one was malignant—death certain, one a mild case. The disease had been of a very malignant type. The death rate being over 60 per centum.

The season was very irregular; instead of the usual heavy rains of tropical winter but little

rain was falling, and that fitfully alternating with great heat. November is always a very trying month in the Isthmus, it being the last month of the winter, the dry season or summer commencing in December.

Owing to the vast amount of work going on, on the canal, such as the excavating of earth, swamps, etc., an immense amount of fever-producing material is being disturbed, all of this *plus* the presence of an immense staff of canal officers, and other unacclimated people in the Isthmus, and the indescribable filthy condition of Colon, Atlantic side, leads thinking physicians to anticipate that the disease will appear in an epidemic form.

Dr. Nelson during his residence in the Isthmus has experienced the disease himself in a severe form. He has promised the RECORD a series of letters on its various types, such as the malignant, severe and mild.

He further states that Drs. Girard, Didier, and Acoullot of the Canal staff, are conducting a series of experiments, à la Pasteur, and that their researches, clinical, pathological, and experimental, will appear in due time.

MEDICAL SOCIETY OF MONTREAL.

The Society held its annual meeting on the 26th October, and elected the following officers: President, Dr. C. M. Filiatrault; 1st vice-president, Dr. N. Fafard; 2nd vice-president, Dr. J. I. Desroches; secretary-treasurer, Dr. H. E. Desrosiers; assistant secretary-treasurer, Dr. Aimé Trudel; council, Drs. A. Lamarche, A. Dagenais, J. W. Mount, G. Archambault, and L. J. V. Cleroux.

SIR ANDREW CLARK, BART.

The many friends, in Montreal and throughout Canada, of this distinguished physician, who accompanied the Princess Louise and the Marquis of Lorne to Canada in 1878, will learn with pleasure that Her Majesty has conferred on him a Baronetcy.

REVIEWS.

F. Blakistons & Son's Visiting List, for 1884, late Lindsay & Blakiston's. Philadelphia.

This, the oldest of visiting lists, has reached us in good season, and maintains its excellent reputation.

PERSONAL.

Dr. Brodie (M.D. McGill, '77), of Honolulu, Sandwich, and formerly assistant Demonstrator of Anatomy in Bishop's College Faculty of Medicine, was in Montreal early in November, on a brief visit to his friends.

J. J. E. Maher (M.D. McGill, 1883), has been appointed a District Dispensing Physician in New York.

Dr. F. J. D. Tetreault (M.D. Bishop's College, 1879), of Orange, N.J., U.S., was in Montreal, the end of November, on his bridal tour.

Dr. Jackson has become Dean of the Medical Faculty of Laval University, Quebec, in place of Dr. Jas. Sewell, deceased.

Dr. Chas. Verge takes the chair of Practice of Medicine, in Laval University, Quebec, held by the late Dr. Sewell.

Dr. P. Wells replaces Dr. Charles Verge in the chair of Materia Medica, Laval University, Quebec.

Dr. D. Brochu, replaces Dr. Wells in the chair of Hygiene, Laval University, Quebec.

Dr. F. W. Borden, of Canning, N.S., has been appointed surgeon to the 68th (King's County) Infantry.

Dr. Picault of Montreal was recently tendered a banquet by the French Societies of this city on the occasion of the 50th anniversary of his arrival in Canada from France.

OBITUARY.

THE LATE DR. E. H. TRUDEL.

We chronicle with much regret the death of Dr. Trudel, which took place in this city on the 5th of October. The deceased gentleman was born in 1820, and pursued his education at Nicolet College, entering medicine at McGill College, at which University he took the degree of M.D. in 1844. Early in the history of the Montreal School of Medicine and Surgery (Victoria College Faculty of Medicine) he became connected with it, and for years, up to the period of his death, has filled the chair of obstetrics. He was also one of the representatives of the school on the Board of Governors of the College of Physicians and Surgeons of this Province. Dr. Trudel occupied the leading position among our French Canadian *confrères*, and his death leaves a blank which cannot be readily filled.