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Original Communications.

Introductory Lecture to the Fourth Session of the Medical Faculty of the University of Bishop's College. Delivered on the 1st October, 1874, by Richard A. KENNEDY, A.M., M.D., C.M., Professor of Anatomy.

Mr. Dean and Gentlemen,

The progressive march of time has brought us to this, the commencement of the fourth session of the Medical Faculty of our University; and as it is customary to re-open our classes with a general introductory lecture, my colleagues have deputed me to address you on this occasion. In their name I welcome you to-day. A welcome extended not alone to students, but also including those former students and kind friends who now honor us with their presence.

Three years of existence have been accorded us, with a success seldom attained by a new school, and which might be termed extraordinary. When I reflect upon the past, I feel thankful that the many difficulties which beset us in the beginning have been overcome, and that our efforts have enabled us to place this school upon a sure and sound basis, with a hopeful promise of increased usefulness in the future. The struggle from which we are emerging has not been without its beneficial effect; for it caused us to measure our strength, and spurred us on to increased effort, so that nothing might remain undone to give our students a good professional standing. Already has our existence been beneficial to the interests of the profession, and many who formerly were lukewarm or opposed to us, have become our friends and wish us prosperity. The narrow-minded and illiberal partizans of other schools predicted failure on our part, and judging us by their own standard, slandered the capabilities of our professors. Our standing to-day proves them in error, and we can claim for this school a position second to none and superior to many in the Dominion.

During the three sessions now passed, sixty-one students have attended our classes. Some of these having previously attended the classes of other Universities, required only one year with us to become qualified for examination, while others have completed, or are completing, the full term required of them. Of these sixty-one students, twenty-seven have graduated and are now practising, some in the United States, but the major part in this Province. A few have left us, their circumstances preventing them from attending and not from reasons of dissatisfaction. Indeed, it is gratifying for us to know that our students return, feeling that here they can do best, and not only do they return, but almost invariably they induce others to come also. This fact alone speaks volumes. Through the changes which have occurred in our staff, some of our graduates now occupy honorable positions in this faculty, and I trust that not one of them will ever have reason to complain of their alma mater either neglecting or ignoring their claim to consideration. Whenever it shall be our misfortune to have a vacancy, that vacancy will be filled according to the principle which we have adopted, and he that is found most able to fill the post will obtain it. In this way we hope always to maintain the efficiency of our chairs, and not merely to have them filled by favorites or those incompetent to the task. Our college is now complete in its appliances; we have a large building with light and airy lecture rooms. Our class rooms for practical anatomy and chemistry are now replete with everything requisite for the prosecution of these branches; and we have taken a step in advance of any other institution in the Dominion, by establishing a course in practical physiology. In hospital facilities we are on the same standing as the other schools; and the addition of a maternity department, in full working order, completes the requisites for graduation. I may state, in addition, that the opportunities for medical education in this city are greater than elsewhere in our country, we have the largest field of hospital, dispensary, and other practice; and I may add, without any exaggeration, that this school has advantages over other schools in its larger staff, allowing a greater division of labor, and increasing the energy brought to bear on our lectures.

I will now address my remarks more directly to those gentlemen who will be with us during the coming months. It is with no slight feeling of anxiety that we again resume our teaching, for we feel the responsibilities attached to our position, and that the welfare of others as well as your own depends upon the success of our efforts to fit you to fill your place in our profession. We will guide you in the way of your studies, let it be your duty to take advantage of our guidance. Do not let the remark of Voltaire be hereafter said of you, that "the doctors poured medicine of which they knew little, into a body of which they knew nothing." To those whom we have had the pleasure of instructing heretofore, I need not tender words of promise, you have

already experienced the solicitude we feel to thoroughly equip you for the battle of life, and to render you capable of filling honorable positions. You have got over the difficulties of freshmen, and have acquired that insight into technicalities which will enable you to appreciate and understand the lectures. Some of you have already passed one or more examinations, which, before passing, appeared to be difficult; but which, being duly prepared, you have found comparatively easy. Persevere, and the same result will follow whenever you shall present yourselves for examination. I trust that the long vacation just ended has not lessened the zeal which you have shown hitherto, but that you now return with energies recuperated to carry you onwards to the end. To those whom we now meet for the first time I would say that it is a pleasure to enroll you as students. The good report of former pupils has induced you to cast in your lot with us, and I am confident that you will not be disappointed, for in the future you will remember with satisfaction the lessons which have been taught you here.

The subject of your studies must now occupy our attention. The period of your novitiate required by this University before graduation, is four years. One of which may be under the tuition of a regular practitioner, the remainder in attendance on lectures. This is the usual custom in this country. I am aware that in some cases in this province this period has been abbreviated, and men have graduated and commenced practice who can hardly understand the rudiments of their profession. Such proceedings are disgraceful, if not criminal. The undeveloped talent of these men is wasted, they are an injury to the public who employ them, and a disgrace to the profession they have entered, tending, as they do, to lower the value of medical services. In this way the standard by which the public are guided is of such little value that we need not wonder that error should creep in, so that all sorts of pathys, like ill weeds, take root and flourish. That such is the result can be seen by observing the condition of medicine in the adjoining States. There, anyone can obtain a license or degree at very small cost either of time or mind, and the public are therefore at the mercy of every uneducated quack who is bold enough to start a theory or patent a medicine. The example of Ontario is a good one; all men are there obliged to pass a central examination on subjects which are requisite, no matter what practice may be followed, the result being the exclusion from that province of the uneducated charlatans which before swarmed over from the United States. Let a student be thoroughly grounded in the fundamental branches of medicine and there need be no fear of his adopting crude ideas or absurd doctrines. It is true that qualified practitioners sometimes change their practice; but if you will enquire closely into the reasons you will find either that they were inferior as students or else are unprincipled enough to take advantage of popular errors. For you will always find people who are ready to try every new thing which presents itself; it may be hydropathy or Swedish movement, the so-called eclecticism or homœopathy, each with such obtaining its time.

Gentlemen, the profession of medicine is one of the most honorable occupations which can be engaged in. The remnants of superstition and mystery which clung to it up to a very late period, have been gradually swept away, reason and observation assuming their place. The reproach which Bacon, in his time, threw upon it, that those who professed it did not seek for specific causes or remedies, is now taken away. We are in an age of incessant experiment, and medicine rests on a sound basis, with no limits to its expansion in the future. The brilliant discoveries of late years in physiology and pathology mark a new era in its history, and elevates it from an art into a science.

From the extensive additions thus made a greater amount of knowledge must be acquired by students than was necessary half a century ago, and subjects altogether new must now be studied ere you can be qualified to practice. The period of your studies, however, still remains the same, and is, in my opinion, altogether too short. Time is not allowed you to become properly qualified for practice, and I would like to see this period extended; but, as it is customary elsewhere to limit it as at present, we perforce must follow the custom. The present system is one of cramming, and many, I fear, leave the Universities of this country with very crude ideas in regard to medicine, these ideas often becoming oddities. To such, "a little knowledge is a dangerous thing." Still, with the short time before you, much can be accomplished if you are methodical in your studies. Have an allotted time for each branch of study, and guard yourselves from falling into irregular habits. Above all, remember the commandment: "Six days shalt thou labor, and do all thy work." Follow this closely, for it is a very erroneous practice attempting to fill up the lost time of the week by working on the seventh. It is a physiological as well as Divine law, and its neglect is

invariably followed by serious consequences. The brain absolutely requires this period of rest, or else the memory will be weakened and the system suffer deterioration.

The importance of practical anatomy, physiology, chemistry and clinics, are now fully recognized. They form an essential element in your studies, enabling you to leave College with something better to work on than mere theory. As much time is required for their exercise, the period formerly devoted to reading is now curtailed, and this is an additional reason why your studies should be continued for another year. A reform is also needed in the manner of your examinations, which should be yearly, and thus by degrees carrying you on towards the end. At present the freshman does not see the necessity of applying himself to study, his examinations are apparently so far off, that he is apt to become careless and waste precious time in idleness and frivolity, instead of learning the technicalities of his study. A few questions, taken from a multitude, cannot be a true test of a student's ability; if he is familiar with them he gets through, but if unexpected, though he may be generally well read, how bitter the disappointment. A graduated system of examinations must increase the amount of facts to be remembered, and enable the student to have a better understanding of the different theories which present themselves. The public would derive greater benefit and the individual would feel himself better qualified to cope with disease. I have often, when lecturing, been struck with the absurdity of the present system of expecting a mixed class of freshmen and seniors equally to understand the subject on hand. To the former, the greater portion of the lecture might as well have been delivered in sanscrit; to the latter, who, having become familiar with its technicalities, it brought to memory previous dissections and explained much to them that was obscure.

By your presence here I infer that you must have acquired the elements of a good education, the necessity of which is as important in the medical profession as in any other. There is one subject, however, which is not included in your preliminary examination, which rightfully belongs to it. I refer to botany and zoology. Placed among your medical studies it occupies the time which should be devoted to more important matter. I believe with Professor Huxley, "that any one who adds to medical education one iota or tittle beyond what is absolutely required is guilty of a very grave offence." And botany and zoology are additions which could well be left out of a regular course of medical study, being remnants of a by-gone age. Many devote more attention to these subjects during their first year than to the other and more essential branches which they are supposed to be also studying, so that valuable time is lost in preparing a subject which never afterwards receives any attention.

Do not think that I wish to deprecate the importance of these or any other scientific branches of study; if properly understood, they give the individual a broader stand-point. The object of your attendance here is not to become botanists or zoologists or even apothecaries, but to become physicians and surgeons; and, therefore, all studies, apart from those which pertain to that end, should be set aside

Of the various subjects which will occupy your attention I will first mention that which I have the honor to teach. I place it first, not because it is my department or from a wish to give it undue prominence, but from the fact that it is the very foundation of your studies. Upon it is erected the science of medicine, and it is the chief corner-stone of surgery.

The poet has said that "the proper study of mankind is man;" among the many aspects which that study presents none is superior than the examination of that wonderful and complex structure which was called into existence by the breath of the Almighty, and which was the crowning development of the great plan of animal creation. The importance of the subject in relation to your other studies cannot be overrated: for, it is impossible for you to become skillful or confident surgeons without having an intimate knowledge of the parts upon which you operate, nor can you, as physicians, expect to make a correct diagnosis of disease unless you thoroughly understand the arrangement of each organ. In disorders of the nervous system is this more especially the case. I place the subject before you in as strong a light as possible, and I have one very good reason for doing so. You will have opportunities hereafter of forming a more extended acquaintance with the other branches of your curriculum; but not with this, unless you can attend a dissecting room, so that here alone can you hope to become familiar with the anatomy of the human body. Prize this opportunity of making practical dissections, reading or lectures are only guides, and will not give you that just appreciation of the subject which is required. It not only makes you familiar with the appearance of each structure, but it also makes you at home with the knife, so that you gradually acquire

that manual dexterity and delicacy of touch requisite to the surgeon. The systematic detail of anatomy, as given in lectures, is very dry work, but this dryness will be very much lessened by an early and close attendance in the dissecting-room. I have observed that the majority of students neglect their opportunities and avoid dissecting as much as possible—their endeavor being to get through the required number of extremities as quickly as they can, without paying due regard to the object. Some students make excellent bone cleaners but poor dissectors. Possibly they would dssect better if they had to do it by stealth, as in the olden time, when the bodies of animals were often substituted for that of man. We live in a day of enlightenment, the wise provisions of our laws enable you freely to investigate and follow up your enquiries without fear of popular vengeance. Though prejudice still exists it is as nothing to the horror which once prevailed at the idea of interfering with the dead. Looking back at the history of anatomy we find that the first dissections were made at the school of Alexandria, three hundred years before Christ. Herophilus first inaugurated practical anatomy, and by his zeal and courage broke the bonds of superstition and bigotry which surrounded him, and by overcoming the natural repugnance of the dead, became one of the great benefactors of mankind. We still retain some of the names which he gave, and among which is the duodenum and calamus scriptorius. We must not, however, suppose that nothing was known of the human structure before he dissected. The skeleton in all ages must have attracted attention. Students were drawn to that school a century before his time for the purpose of studying the bones and here is another example for you to follow. For if they found it necessary to study the skeleton in that age of imperfect anatomical knowledge, how much more necessary is it for you to do so. You do not require to go long distances for the purpose, each of you can obtain for himself the material for such study, and I trust that the statement of an eminent lecturer in England, will never be said of any one of you. In speaking of the examinations, he said "that many students were rejected because they could not tell a clavicle from a first rib, and though they might guess at a femur could not tell to which side it belonged.

In ages subsequent to the one I have mentioned, as the Roman Empire declined, and the Saracen power was developed; anatomical investigations ceased, for the Koran pronounces him defiled who touches a corpse. The knowledge which had been acquired was too precious to be lost, and it was handed down from physician to physician through subsequent periods until it reached the beginning of the fourteenth century. The dawn of science and education, which succeeded the mediæval night of bigotry and superstition had also its effect on anatomy, by throwing light upon the imperfections of anatomical lore, No doubt the surreptitious researches of physicians suggested the necessity of revision, and induced the Papal Government to authorise dissection. Italy thus became the fountain head of anatomical knowledge out of which sprang a long list of anatomists whose names are imperishably connected with the structures of the body. For instance we speak of the tubes of Eustachius, and those Fallopius; the lobe of Spigelius; the glands of Meibormius; the bridge of Varolius; the valve of Vieusens, and the nerve of Vidius, Names so often repeated during your professional studies as to become as familiar as household words. The history of anatomy has been progressive, previous investigations cleared the way for the grand discoveries of Harvey, and enabled Hunter to immortalize his name. From general we have, in our time, advanced into minute anatomy. Microscopic observers have made discoveries which could never have been surmised by the worthies I have mentioned, and still the search continues. In the future, the hidden processes of our bodies will be laid bare to the persistent efforts of patient workers in this laboratory of nature. This brings me to the subject of physiology. As anatomy exhibits the body already formed, and each part fitted to perform its function; this will show you how that formation occurs; the use, growth, and minute structure of each part. It enables you to follow out that wonderful development which, from a mere spot, culminates in the perfect man. You will learn the change which food undergoes after its reception into the stomach; the manner of its absorption into the blood; its appropriation by the tissues; and, lastly, its elimination and excretion. You will understand how the body is sustained by the orderly succession and slow growth of cells, the study of which, in health, is essential, if you desire to form a proper idea of the rapid growth and irregular succession of cells in disease. Supplemental to the ordinary lectures in this branch the Faculty have instituted a series in practical physiology, of which I advise you all to take advantage. At present, attendance upon them is optional; but, apart from the benefit to be derived as a study, they are

extremely interesting to a non-scientific observer. This branch has been kindly undertaken by the Professor of Pathology, Dr. Wilkins. This gentleman has imported, at great expense, the requisite instruments, which, I believe, are not to be found elsewhere in the Dominion. It is but right to state that the establishment of these lectures is entirely due to the energy and enterprise of that gentleman.

Passing onwards to the closely allied subjects of chemistry and materia medica, the thought suggests itself that here also there is room for improvement. I do not imply any reflection upon those gentlemen who so ably fill their chairs, for I know that none could better expound those requirements which it is thought necessary at present to demand of the student; but I consider that much might remain undone, and those parts which relate to the druggist be left to the latter, and others included in the preliminary education.

Chemistry, as a science, probably first originated about the year 721, in the laboratories at Bagdad, which were erected for the purpose of preparing medicines. Its evolution, however, has been gradual. Passing on to the labors of the alchymists of the middle ages, who discovered many important chemical compounds, as well as many of the most valuable medicinal agents. This was not their professed object; the hypothetical elixir vitæ or philosopher's stone was the magnet which drew them on, so that from beginning to end, their discoveries were the result of chance. Still, by the familiarity engendered with many natural substances and the insight into their composition, these labors paved the way for the grander discoveries of later days. In 1760, alchemy received its death-blow and chemistry became a science. The discovery of the use of the balance, by Lavoisier, being the birth of the embryo which was nourished in darkness. Since then how rapid has been its growth, and what wonderful substances have been discovered by such patient investigators as Dalton, Gay Lussac, Berzelius, and after them many others, among whom Faraday is not the least. It is chiefly in organic chemistry that discoveries have mostly occurred, and our materia medica has been greatly enriched thereby. Chloroform, chloral hydrat, and other remedies of the same class are among the products thus produced. If you reflect for a moment, the fact may appear astonishing, that nearly all these new remedies act directly on the nervous system, either as anæsthetics, anodynes, or sedatives. They are discovered, as it were, because in this age of steam men live faster and waste more nervous energy than did their forefathers, and therefore required such special remedies. Chemistry, in presenting us with anæsthetics, conferred the best gift that medical science has yet received. Sir W. Ferguson observes: "I see nothing which has transpired in the present century, which, in magnitude or importance, can compare in our annals with anæsthesia; and, in my mind, it ranks in value to mankind scarcely less than the results of the labors of Harvey and of Jenner." In materia medica vague ideas still exist as to the action of many remedies, powers diametrically opposite being often ascribed to the same remedy with the same dose; and though great advances have been made during the past few years, much still remains to be discovered. Every year marks the advent of some new drug, which either enjoys an ephemeral existence or takes its place among established remedies. The bromides, chloral, carbolic acid, are instances of the latter. Drugs are the instruments by which you combat disease, and it is not in being acquainted with a vast array of these that will bring you success, but the thorough knowledge of those you do use. How drugs are obtained or compounded is of little importance to you, the pharmacopœa provides for that; but avoid forming multifarious recipes and incompatible mixtures, which alike indicate ignorance of therapeutics and the art of prescribing.

I have thus passed in review the four subjects which are called primary, a just appreciation and knowledge of which will enable you to understand those other branches which are denominated final. In the first lies the foundation of your studies; in the second, the practice of your lives, and of which you must ever remain students. The tripartite division into medicine, surgery and obstetrics, is merely arbitrary, and the tendency of the present time is to combine them in practice; though there are those with a peculiar bias of mind, which leads them to follow one of these more closely than the others. This combination is but rational, seeing that it is impossible to mark the dividing line between them, a knowledge of each being necessary for the proper application of treatment to disease. Monks are no longer physicians, barbers surgeons, or old women obstetricians. The developments in pathology have connected them, and shown how intimate is their relation. This latter subject explains how new and abnormal structures are substituted for normal tissues; how an organ becomes diseased and the manner of its restoration to health again, if it be restored; so that before you can have a clear idea

of disease you must thoroughly understand the condition in health. Physiological changes take place slowly, pathological more generally rapid with a tendency to early decay. The researches made in this line has cleared up much that was formerly obscure in disease, and has placed medicine upon a scientific basis. By freely examining the dead we are enabled to foretell the history of the living, and thus mark the course of disease, foresee probable emergencies, and observe the effect of treatment. For instance, in Bright's disease of the kidney we are aware of the secondary lesions which are apt to occur in the lungs, heart, brain, &c., and, by anticipation, can adopt a scientific mode of treatment which will aid the "vis medicatrix naturæ" in prolonging the life of the individual. Medicine, in this way, becomes emancipated from empiricism, and a better understanding of the object of our remedies and their mode of action is obtained. All this is modern, but the practice of medicine is ancient. In the earliest periods of human existence medicine must have been more or less instinctive in its character; but, so far as history relates, it had become artificial, diseases being ascribed to supernatural causes and their cure forming part of religious superstition. Medicine thus became a mystery, such as we have it among the savage tribes of this continent at the present time. Amulets, necromancy, and the belief in omens, have each held their reign over the minds of men, and even to this day among ourselves we find many who still believe in supernatural agencies. Medicine thus cradled in mystery, has gradually been emancipated from such thraldom, and though not perfect, the gradual accumulation of truths is preparing it for a high standard in the future. Probably you will often be perplexed by the present diversities of thought and practice; but such differences must always exist until the truth is established, and are necessary for the exercise of that freedom of thought which keeps us from being the slaves of routine. The differences in the treatment adopted by physicians are often of less importance than they seem, for there are more ways than one of curing a disease, and each may prove equally successful. Fifty years ago, bleeding, purging, and salivation, was the routine. To-day that treatment is discountenanced and has but few followers. Homœopathy has done this much for mankind, for, by letting diseases run their course, it has brought about the discovery that in many acute cases the natural tendency is towards recovery. At the present day heroic measures are seldom resorted to, the rule being to watch the tendency of the disease and by gentler means assist nature in a cure. The fact that the treatment of disease has undergone change does not prove that our predecessors were in the wrong; there may be cycles in disease calling for different treatment as time rolls on. The constitution of man, under the varying phases of our civilization, may undergo a change, requiring a change in our remedies. All, however, is not changed; we retain many valuable practices derived from the ancients. Possibly the greatest modern change is in the treatment of fevers. For instance, in scarlatina, the mode some twenty or thirty years ago, was to keep the patient as hot as possible, with the idea of favoring elimmation by the skin, even cool drinks being forbidden, and if any one had suggested the cold douche or wet-pack he would likely have been scouted as a murderer. Now these latter means are used as a valuable auxiliary in reducing the temperature, and when judiciously applied have the effect of increasing instead of diminishing the eruption.

In Surgery also changes have occurred in our ideas: cavities are now freely opened and organs manipulated or removed, which would a few years ago be supposed to ensure death, and cures are obtained which formerly were thought to be without the reach of human skill. Whether the non-success of former times was due to the entrance of atmospheric germs into these cavities is a question we cannot answer, for their existence is not yet fully proved. Probably there are such germs, for since the antiseptic properties of carbolic acid have become available a lower rate of mortality has been obtained in operations. This with the more common use of stitches favoring an early and perfect union in incisions of considerable length, have increased the chances of success. From the short experience I have had in surgical operations I am inclined to give a very high ranking to carbolic acid, and coupling it with chloroform believe that we have now the very best means of obtaining success. The conservative surgery of the present day is also worthy of remark. The preservation of useful members by the removal of diseased parts and the treatment of distortions by the division of tendons, mark an advance in the art of surgery.

Plastic operations where, by the transplanting of skin, deformities are improved, is also another. The delicate operations in ophthalmia again display the skill attained and the perfection of the instruments employed.

Lithotomy in many cases has been superseded by

lithotrity, which latter is generally considered to be a modern innovation; but curiously enough, it is recorded of Ammonius who flourished somewhere about two hundred years before Christ, "that he invented and used an instrument for crushing stones in the bladder." But to detail all the brilliant results of surgery would occupy too much time. Probably it is the brilliancy of these great operations attract the mind of the student to the exclusion of these operations in minor surgery which are most commonly met with, and which constitute the bulk of surgery. As much skill and judgment is required in these minor details as is required to perform a great operation, the success of which is often depending upon the careful attention to minutiæ as to the operation itself. The operation may be successful, but the patient may die from some minor neglect and thus bring discredit upon the whole proceeding.

In obstetrics we have an instance of an art rescued from degradation by the advance of civilization. At one time it was regarded by the profession as being beneath the dignity of man to have anything to do with it. But as valuable lives often depended upon the skill of the accoucher the public demanded that something better than old wives experience should be furnished. The removal of the sentimental prejudice against men attending confinements cleared the way for the efforts which have been made to give this art its proper position, and among its followers we have the names of individuals, such as Sir J. T. Simpson, who have been prominent in discovery and who have done much for medical science. The advocates of female medical education base their claims for the entrance of women into the profession chiefly on this branch, and bring as proof the fact that in all centuries and among all classes women have been the obstetric attendants. This has been the case for the reason that man considered it beneath his dignity, and especially from the fact that in all uncivilized races the life of a woman bears but little value. This practice of employing women would be apt to continue as civilization advanced, because it would take time to force people to see the necessity of change. It was not till the superior civilization of the Romans that men were first employed, and the greater the civilization the more men will you find as accouchers. Not only are the lives of women of more value but from their modes of living, greater difficulties occur, while among savages labour is an easy process, and therefore the employment of old women midwives is going out of fashion. Any old wife who has had five or six children thinks she is capable of taking charge of a case, and after a normal attendance upon lectures, the matter of which, being above her comprehension, she cannot understand, is furnished with a license to practice. I am not opposed to the employment of women in these cases, there are many among the poor, who cannot afford to pay a nurse as well as a doctor; but less ignorance should be seen than at present, so that difficulties would be early detected and a doctor obtained, for the skilled accoucher observes and is able to rectify dangerous conditions at an early stage. If we could tabulate the experience of physicians we would, I have no doubt, find that their most difficult cases have come to them through the hands of a midwife. Your success in life will largely depend upon the manner in which you conduct this department, especially in country practice; you will have to pass before a self-constituted board of matrons. Many a man has commenced a successful career by the verdict thus given and many have met with disappointment. Till within a very late period the diseases peculiar to women were almost unknown, but so much has lately been added to our knowledge of them, that you will find yourselves called upon to attend a large number of such cases almost daily. Of the remaining portion of your studies a few words may suffice. Medical Jurisprudence is often followed as a specialty as it seldom falls to the lot of the general practitioner to be engaged in cases which require an expert's decision. Excepting at inquests you will seldom be required to give an opinion involving the life of a fellow being. On the other hand, Hygiene will require much of your attention. "Prevention is better than cure," and as many diseases are preventable, and the public are now aware of the fact, you will often be called upon to advise measures to stamp out epidemic and other disorders. The apathy which clings to the public mind on this subject is something astonishing, and were it not for the persistant efforts of sanitarians backed by the occasional outbreak of disease in exalted personages, as in the case of the Prince of Wales, nothing whatever would be done to correct such evils. In communities like the one in which we live, evils are perpetuated which could be remedied. Indeed it is remarkable to note the objections and difficulties which are placed in the way of sanitary measures. For instance willful ignorance has in this city set itself to combat the benefits of vaccination, and has adopted disreputable means to gain a hearing; but it is altogether too late for to disprove the value of

what time has shown to be one of the greatest discoveries of our age. It will therefore be your duty to correct such abuses, and to use your influence in preventing those epidemic disorders which so often decimate our population.

At the risk of being tedious, I have thus mentioned each portion of your studies. I trust, however, that my remarks may not be altogether without benefit to you, as it is my wish to impress the fact of your having entered upon a very serious profession, but one which will reflect honor upon you, if you will follow it in the spirit of gentlemen; working with honesty and integrity of purpose, and doing unto others as you would be done by. In this way you will be an honor to the profession, gain the esteem of your fellow men, and be useful in the world. In conclusion I would earnestly recommend you to be regular in attendance upon lectures, and to make yourselves practically acquainted with the use of the diagnostic instruments, such as the stethescope, laryngoscope, the microscope and clinical thermometer, as well as the other instruments which are requisite for the intelligent practice of the profession. By so doing you will be able to commence your career with a sense of self-reliance which will gain a position of independence if not wealth. Such are your opportunities and your duties; do not forget that, though life may be short, you have a place to fill as an atom in the body of mankind; fill it well, and, when life's eventful journey shall be near its close, you will have the pleasing consciousness of having been a good and faithful servant to the Master who placed you here; and, afterwards, of witnessing the rise of a glorious Sun when the day breaks and the shadows fly away.

Case of Intussusception. Under the care of J. T. Finnie, M.D., C.M., L.R.C.S. Edin. Recovery.

Early on the morning of Sunday July 12th, I was called to see the child of Mr. R——, of Ann Street, a fine healthy looking lad four years old. Up to a late hour of the night previous the child appeared to be quite well, but towards morning complained of a pain in his belly, which gradually increased in severity accompanied with a desire to go to stool. Nothing, however, was passed but a small quantity of watery fluid slightly tinged with blood. The parents becoming alarmed sent for me to go at once and see their child. On arriving I found the patient as described, suffering from a pain in the lower portion of the abdomen, the seat of great st tenderness being about the right side of the umbilicus. No vomiting was present at this time, beyond what resulted from the administration of a dose of castor oil, given previous to my visit, it having been rejected almost immediately after being swallowed. I strongly suspected invagination but as symptoms so far were not urgent, I merely gave a small dose of opium $\frac{1}{4}$ of a grain, with instructions to repeat the same in two hours if pain continued. At eight o'clock the same morning I saw the little patient again, vomiting had now set in, and the desire to go to stool more frequent, the dejection being nothing but blood. By external examination, I could find no tumor or enlargement; neither by passing my finger up the rectum, could I detect anything to aid the diagnosis.

Being satisfied from the symptoms, that invagination did exist, I by means of an ordinary enema syringe injected a large quantity of water into the bowel, but with no satisfactory result. I left with the intention of procuring a pair of bellows and try inflation. After considerable trouble I succeeded in procuring the latter, through the kindness of my friend Dr. Rodger, who accompanied me. We endeavoured by means of *inflation* to affect a cure, but with no better result. As everything seemed to have failed so far and the child becoming worse, I despaired of success.

Dr. Rodger suggested that a large syringe or stomach pump be used, with a long nosle. After some hours further delay I succeeded in getting such an instrument. I inserted the gum elastic tube or nosle its full length, fifteen or eighteen inches into the bowel (per rectum), and after throwing about a quart of fluid into the intestines, suddenly something gave way, with a slight explosive noise. I was satisfied that the invagination was then reduced, and that the diagnosis was correct.

The patient was properly placed in bed and immediately fell into a deep sound sleep, not waking for hours. Once or twice during the night he got up to stool, the motions being fluid, greenish in colour and very offensive. From this time the patient improved rapidly, the pulse (which I omitted to mention before) was, while the trouble lasted very rapid, being 135 to 140, and temperature 103° Two days after the occurrence the child was wo and walking about the house. No cause could be assigned for it. The child had not eaten anything out of the usual diet, neither had he been out of the house the whole day. In cases where the invagination is very high up, as in this case, I would lose no time in resorting to this procedure, if the tube of a stomach pump could be obtained, as I am

satisfied that no other known means would have answered as well.

Paper read before the Canada Medical Association at Niagara on the 6th August, 1874, by JOHN MULLIN, M.D., *Hamilton, Ont.*

DUPLICITAS MONSTROSA.

The mother of this monster was 21 years of age and has generally enjoyed good health, the only illness of moment since childhood having been an attack of confluent small-pox in April 68, from which she made a good recovery, without medical treatment. Married about two years, in Feb. 73 was delivered of a healthy well formed male child, since has enjoyed good health.

The last pregnancy has not presented any peculiar features, the labour pains began early in the day. having been preceded by irregular pains thro' the night and day previous. In my absence she was visited by Dr. Woolverton who found the os well dilated and the bag of waters low in the pelvis, after the waters escaped, the head presenting in the 1st. position, descended slowly, and at length was delivered, the body failed for a short time to follow, and it was found on passing the finger to the axilla that some peculiarity existed, it being very difficult to reach the axilla; after a short time the shoulders were delivered, and some force had to be used to deliver the remaining part. It was found that the difficulty arose from the presence of a second head which in delivery was bent upon the thorax and abdomen. The head first born was very livid, a slight effort to breathe was made after the delivery of the second head.

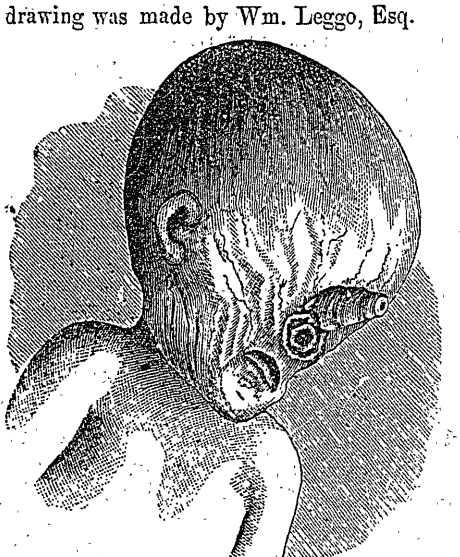
The drawing was made by Wm. Leggs, Esq., and conveys a fair idea of the appearance of the monster. A short time only was allowed for the examination and the following notes were taken :—The child is below the average size of the fœtus at full term. On exposing the sternum it was found composed of two sternums the manubria of which are separated above by the coalescence of the upper ribs; each sternum has the articulation for two clavicles, proceeding downward the two bones are united and consolidated together. The outer clavicle of each thorax was normal in position and form, as were the corresponding scalpulœ and arms, the inner clavicles were thrown upwards and backwards to meet their scalpulae. These clavicles, as well as the corresponding arms, were smaller than the outer ones. The adjoining scalpulae which are here presented were united at the lower part of the anterior borders. The outer ribs of each thorax were normal; the upper

five inner ribs of each proceeded from the spines upwards and forwards to the corresponding sternum, and near their sternal end formed a cartilaginous ridge. The sixth inner rib was short and united to the same rib of the other chest; the remaining inner ribs were very rudimentary, and consolidated forming a bony ridge between the lower dorsal spines.

The spinal columns were widely separated above, below they approached and became one by the coalescence of the pelvic bones, the vertebral canals however were distinct. The left-spinal cord was exposed, the nerves proceeding outwards were normal, those passing inwards smaller, especially towards the lower part of the cord, where they were quite rudimentary. The crania were not opened. The common sternum having been removed immediately underneath were the pericardia, quite distinct, by a partition formed by the serous lining of the two sacs. Each heart occupied nearly a normal position. The left heart was larger, and better developed than the right, the only peculiarity being a common opening for the venal cavæ into the auricle, and the foramen ovale was large, the valves were normal. The right heart was imperfectly developed, the only septum between the auricles being a small free band of muscular tissue about 1-16th of an inch wide, the two

ventricles were not separated by a septum, and all the valves imperfectly formed. On tracing the course of the aortae the right, much the smaller, was found to empty into the left opposite the upper lumbar vertebræ, the blood having been propelled through the lower extremities, chiefly by the force of the left heart. There were four lungs, the two inner ones separated in front by the hearts, in apposition in the posterior part of chest, the pleural membranes intervening; the inner lungs were on a higher level than the outer ones on account of the obliquity of the chest, they did not contain air. The diaphragms were united in the median line; the abdominal cavity single; the liver of large size entruding from side to side, there were two gall bladders separated by a considerable space in which was found a single falciform ligament. Two stomachs, one spleen near the left stomach, one large pancreas, one urinary bladder. Two small intestines united with each stomach; that to the right about two feet in length, the left about nine feet, these then united forming the remainder of the small intestnes, two feet in length, there was a single large intestine. The testicles were found in the abdominal cavity.

With Dr. Malloch's consent I bring before you another case of monstrosity—a cyclops—illustrating deficiency in development. Mrs. U., Primiparæ, middle-aged, was delivered on the 22nd of January, 1873, by the forceps, of a female fœtus, from which this drawing was made by Wm. Leggo, Esq.



The fœtus had evidently been dead some days. The cranial sutures were widely separated, and, on removing the skull-cap, a quantity of serous fluid, which had filled the ventricles and compressed the rain substance against the cranial walls, escaped. It was ascertained that the olfactory nerves, which passed through the cribriform plate, to the proboscis like member, were present; the optic nerves were represented by one small nerve, which pierced the skull opposite the central single eye, situated immediately below the proboscis. The nerves posterior to the fifth appeared normal. The body was kept, but during an absence of some months the preserving fluid evaporated and the specimen was spoiled.

On the 22nd of May, 1874, Mrs. U. was delivered of a healthy well-formed male child. Four weeks before her last confinement she was attended by Dr. Malloch, for a strangulated umbilical hernia, which was reduced by the taxis. For one year she has had an incarcerated umbilical hernia. The parents have not had syphilis. Mrs. U. has corneal opacity of both eyes, the result of phlictinular ophthalmia in childhood.

Address upon Midwifery, read 5th August, 1874 *before the Canada Medical Association.* By E. H. TRENHOLME, M.D., Professor of Midwifery University of Bishop's College, Physician to the Women's Hospital, Montreal, Attending Physician to Montreal Dispensary, &c.

The subject of the Uterine Decidua that I have ventured to bring before you upon the present occasion, is one that has occupied but little attention until within the last two or three years.

I feel some confidence and pleasure in this undertaking, inasmuch as I had the honor of giving to the profession the first paper upon the uterine decidna with regard to some of the phenomena met with at the bedside of the lying-in woman. However, it is not upon the plea of novelty that I ask your favorable consideration, but rather trust to secure your approval by presenting sound theories, and establishing facts, that will tend toward greater success in the practice of midwifery.

The external envelope of the fœtus, the only one supplied by the mother, is the altered mucus membrane of the uterine cavity. This membrane is glandular; but without entering upon the details of its physiological anatomy, it is found to contain, according to the late researches of Dr. G. Leopold, a rich supply of lymphatic glands.

It is well to bear in mind that the decidua is composed of the mucus membrane of the cavity of the uterus alone, and that at labor it is cast off, being severed from the mucus membrane of the neck which remains in situ. As to the changes occurring

previous to detachment, at menstruation and during gestation, Kundrat and Englemann have stated that "if we examine the process of menstruation, we will find that the cellular elements surrounding the tubular glands undergo rapid proliferation, especially those layers which are nearest to the cavity of the uterus, while the glands themselves participate in this activity, becoming thereby larger, and thrown into wavy folds, in order to accommodate themselves to this increased length. If there is no necessity for further development, a process of fatty degeneration commences in the most superficial layers, where the growth was most rapid, including the interglandular tissue, the epithelium of the glands and the bloodvessels—which may possibly be caused by the fact that this extreme activity of growth may have cut off, by the compression of the bloodvessels, the source of nutrition. The walls of the capillaries now rupture, and the menstrual hemorrhage is established, while the superficial layer of the mucus membrane is gradually cast off with the discharge.

But if fecundation has occurred, this retrograde process does not take place, but, on the contrary, excited by the stimulus of the growing ovum, the inner two-thirds of the mucus membrane now participate in the process, many of the cells in the interglandular substance become larger, and send out prolongations, while their nuclei undergo repeated division.

The orifices of the glands are separated from each other, while their calibre is narrowed by the advancing growth." The mucus membrane gradually loses its peculiarities of structure, and finally appears a transparent homogeneous membrane at term. The ovular and uterine dicidna coalesce after the fifteenth week. At birth it has been observed that the uterine decidua hangs in shreds upon the ovular decidna. Virchow notes a case where the membranes after birth "were found to contain hypertrophed decidnal elements, but also muscular fibre-cells; and he further remarks the case, in this respect, remains unique." I have no fault to find with Virchow's facts as to the actual presence of muscular fibre-cells attached to the decidna, inasmuch as I have time and again recognized the same condition under the microscope, and if that illustrious pathologist had deigned to read the paper, (I have already mentioned,) presented to the Obstetrical Society of London, in July, 1872, he would have found that the case related by him is by no means a unique one. The same author would have found that the character of labor that occurred in the case he records is precisely the same as a case noted by myself, given in illustration of the views then advanced.

But to return to the mucus membrane during gestation, it is self-evident that there is a sufficient contact with the muscular surface to preserve its vitality. Also that pathological changes supervene with the progress of gestation and finally detach it about the end of the ninth month, or 275th day. At this period the changes just mentioned cause the decidua, with its contents, to act as a foreign body inducing reflex action of the organ, and this ends in expulsion of the fœtus and after-birth. Thus we have a satisfactory answer to the question, "why labor supervenes at the end of the ninth month.'

This view, taught to my class four years ago, is now accepted by several writers on the subject, and will be, ere long, acknowledged by all teachers of midwifery. Dr. Karl Schroeder accepts and enunciates the views advanced by myself as just stated, and says, "that as pregnancy advances a fatty degeneration of the decidna takes place (which reaches its climax at the end of the tenth lunar month,) whereby the organic connection between the ovum and the uterus gradually becomes solved, and the ovum acts as a foreign body and irritates the terminal fibres of the motor nerve of the uterus, the sympathetic when this irritation has reached a certain degree, a corresponding reflex action, in the form of a contraction of the uterine muscular fibres, takes place, which contraction is repeated as soon as the requisite sum of irritation is again obtained; and this rotation continues, each successive contraction being intensified by the separation of the ovum, from the uterine wall, and therefore stronger and more rapid, unti the expulsion of the ovum takes place."

Abortion, like parturition, must be due to reflex action of the uterus, excited by the pathological condition of its contents. Admitting the correct; ness of this view, we must seek out the causes that endanger the life and development of the embryo, and not unfrequently jeopardize the life of the mother also. These pathologicel changes are, in my opinion, chidfly due to a diseased condition of the mucus membrane prior to conception. From this condition of things as a starting point, I think we can trace a large amount of uterine disorders, such as hyperplasia of the body and the neck, abrasions and ulcerations of the os and cervical canal, with their accompanying phenomena. I am aware that, on the other hand, it may be argued that many of the conditions of the uterus, as mentioned, may be regarded as the result rather than the cause of abor-

tion. Both views may be correct, and are alike worthy of careful consideration in dealing with abortions and in treating uterine diseases.

Apart from pathological conditions of either the uterus or the decidua, we may have the detachment or death of that membrane, with its consequent phenomena, as a result of direct violence, mediate or immediate, applied to the part. Such violence may cause rupture of a bloodvessel and effusion of blood; or general damage of the vessels resulting in stagnation of the blood supplied to the part, and consequent fibroid or fatty degeneration. Whatever the cause, when once vital union is destroyed, we have inevitable reflex action induced, which ends in the extrusion of the uterine contents. This result is what we naturally expect in the early stages of gestation, as up to the tenth or twelfth week the chorion and decidua are more or less intimately united and therefore generally expelled together.

At a later period the villi of the chorion atrophy except at the part involved in the formation of the placenta. The connection between the decidna and chorion is feeble, and we may expect the amnios (in some cases at least) to escape with its contents, without necessarily carrying the decidua with it. So far as I know, there is no reason why the amnios should not separate from the decidua, as well as the decidua itself from the muscular surface of the uterus. A case of this kind is recorded in the British *Journal of Obstetrics*, (American supplement, 1874,) as having occurred in Philadelphia, where "the decidua and placenta were left behind after the escape of the ovum and its clear membrane." Whether such an event is common or not is a point to be settled by further observation and research. It may be that the uterine and epichorial decidua in some cases are separated by fluid, the latter escapes with the ovum, while the former remains in situ. In practice the danger arises from the retention of the after-birth in those cases where strong vascular connection exists, the patent orifices of parts that have been detached permitting alarming hemorrhage. In some caces of retained decidua and placenta, their union with the uterus is so perfect that they are preserved from decomposition and retained for weeks and months. These exceptional cases, however, are not to be our guide in treating them, our duty is to entirely evacuate the uterine contents, as anything short of attaining this result leaves our patient exposed to danger. *With regard to premature delivery*, it is clear that the ordinary pathological changes that result in setting up uterine contraction at the end of the ninth month, are in these cases precipitated by some peculiarity of constitution, or diseased condition of the uterus or decidua. One prominent feature of these cases strongly favors this view, viz., that the safety of the mother and child also, is greater, just in proportion to the length of time that intervenes between its occurrence and the normal period of gestation. This lessened danger is due to the comparatively advanced changes (already mentioned) having taken place, whereby lesser violence, than in the early stages, is exerted upon the decidua to effect its separation and expulsion. In both classes of cases, however, the difficulty of detaching the after-birth should lead us to delay, as much as possible, the dilitation of the os, in order that the work of separation may be more perfectly accomplished by the uterine contractions. This view of such cases would also teach us, to aid by manipulation, over the uterus, the final uterine spasm which completes the expulsion of the fœtus or ovum. In ordinary labor, which will be referred to hereafter, this course will also be of much service in bringing it to a satisfactory close.

With regard to *prolonged gestation* we have a simple and satisfactory explanation, when we once recognize the separation of the decidua as *the exciting* cause of labor. In these cases there is simply a delayed maturation or fatty degeneration of the decidua. Among the lower mammalia the period of gestation varies very much within the bounds of perfect health, and there is no difficulty in accounting for such cases upon the hypothesis just advanced.

The same theory that accounts for prolonged gestation, also accounts for its occurrence within a lesser than normal period. Perhaps temperament has something to do in hastening or retarding the ordinary pathological changes.

Important and practical as the views expressed are, in both abortion and premature labor, yet it is chiefly as relating to labor at term that they are most interesting. Not only do we perceive the operations of nature in originating uterine contractions with their consequent results, but we have also placed before us a sufficient cause for many of the distressing and dangerous phenomena met with in the lying-in chamber.

In the decidual adhesions referred to, we see the cause of those imperfect muscular contractions which I have spoken of at some length, in the paper already referred to, which recently Dr. Athill similarly describes as "strong and quick; they do not gradually culminate in a strong pain and subside again,

but they are sharp, quick, and cease almost suddenly; and the intervals between the pains are long in proportion to the length of the pains." Again, "the short inert pains which prognosticate hemorrhage," call for the treatment urged by myself two years ago, viz., rupture of the membranes. This is usually enough without recourse to other aids, medicinal or mechanical, as it suffices to induce regular muscular effort by allowing the ovum to become elongated and the organ space for contraction. When adhesions are present they inflict lacerations of the muscular tissue at the points of union, and thus cause nerve irritation with rapid reflex action; and this quickened action expends its force to a greater or lesser degree locally, ere the whole organ has time to participate in one common effort. Hence, there is a lack of expulsive power, and painful and retarded labor. Time forbids going into the consideration of much that suggest themselves in connection with this subject; but there is one point I wish to bring before you. When the adhesions exist—as they most generally do—at the lower third of the cavity or around the internal os, we have a condition of things that is an effectual bar to powerful uterine effort, as well as to any progress towards expulsion. Even if the spasms are regular and strong, they must fail, inasmuch as the adhesions act in a mechanical way and effectually prevent dilitation of the os; while at the same time, the pains are expended without object on account of the mutual antagonism of the contractile forces. Failure must follow, inasmuch as there is the absence of the one essential condition of success, viz., a concentration of the expulsive powers of the organ toward the outlet. Such cases are always troublesome to the accoucheur, and tedious and distressing to the patient. There can be but little doubt many hours and days of sorrow could be averted by a knowledge of the conditions present and a timely proffer of the required aid. Fortunately, the difficulty, in most instances, is within reach, and the finger of the attendant is able to effect the desired detachment of the membranes from the uterine surface. When once this is done the liquor amni rushes downward and the bag of waters after filling the os, is driven forward like a wedge by the concentrated, and now powerfully expulsive, uterine effort, because such effort is directed toward the outlet.

The rapidity with which labor is accomplished after the correction of such irregularities is truly marvellous, and most satisfactory to both accoucheur and patient.

I am aware that, in some cases, the attachment of the decidua is beyond the reach of the finger. When this is the case, two methods of treatment are open to us. First, we can use the uterine sound—as a digital prolongation—and separate the adherent surfaces to almost any extent; or, second, we can resort to rupture of the membranes, and allow the fœtus to glide over the decidua, inasmuch as the latter fails to glide over the uterine surface as it does in normal labor.

Much more might be said, but I will draw your attention to but one point more, viz., the great advantage, with regard to both safety and time, that follows the rapid and complete delivery of the after-birth. These results, so much to be desiderated, can generally be accomplished by aiding the last labor-pain, that expels the child, by pressing quite firmly over the uterus with the left hand at the precise moment that the organ is contracting By this means our object is thoroughly accomplished. If it fails at for the moment, we should wait a little, and then repeat our efforts with the next uterine contraction, which, when gently and skilfully applied, seldom fails to be crowned with success. When it is desired to aid the uterus in expelling the after-birth, be careful not to twist or make strong traction upon the membranes; if you do, the result will be their laceration and partial removal. Besides this, frequently a sack of blood is left behind, which must be a source of great danger. I have no doubt that many cases of puerperal peritonitis and metritis are induced by such means; also the presence of such a foreign body will favor hemorrhage by dilating the organ Even the retention of the adherent membranes alone are not free from danger, as all will readily admit.

In conclusion, I would urge upon my fellow practitioners to cultivate an acquaintance with the diseases of women. No subject presents more inviting interest' nor offers a fairer and fresher field for exploration and scientific enjoyment.

Progress of Medical Science.

ON THE ECZEMATOUS ERUPTIONS, AND ECZEMATOUS ASTHMA OF CHILDHOOD.*

By Wm. Stephenson, M.D., F.R.C.S., Edin., Physician to the Edinburgh Royal Hospital for Sick Children.

Whatever may apparently be gained in accuracy of classification by the general adoption of the more recent views of dermatologists regarding eczema, I fear we are in danger of losing much in the broader

* Read before the Medico-Chirurgical Society of Edinburgh, July 1st, 1874.

clinical aspects of the subject. That eczema proper, at one time or other of its course, may be papular, vesicular, pustular, or scaly is a clearly proved fact; and the widening of our conceptions from the narrow limits of vesicles to the broader basis which comprehends the manifold characters of the affection, and the recognition of a unity in these interchanging features, is a great advance. But to strain the idea of unity so as to sweep into this vortex of classification all the affections which may come under eczema used as a generic term, and to discard the older nomenclature, is to introduce error and confusion, which can only retard the progress of this branch of medicine.

This is specially felt in studying the subject in reference to children. Recent writers, under the influence of Hebra and his followers, now regard as mere varieties of eczema, what ought still to be held as distinct affections, and are thereby losing the more definite and practical views of the older writers, who speak of scald head or porrigo larvalis, of eczema and of impetigo. Each of these terms has become associated with distinct clinical affections, and conveys an idea to the mind not limited to mere external characters.

For the sake of this definite idea I prefer to retain the old names, however inaccurate they may now be. The opinions which determined their assumption are now immaterial, so long as we can convey a definite idea thereby; and this is the case when we speak of porrigo, of eczema, and of impetigo. But to say that a child has eczema capitis, may mean either porrigo or eczema proper; or to speak of eczema pustulosum conveys only the appearance of the affection at the time, we know not whether it may be eczema proper or impetigo.

Viewing these affections in their broad clinical aspect, and leaving out of consideration all reference to the complicating question of vesicles and pustules, there will be found sufficient differences to warrant us in regarding them as clinically distinct affections.

They bear a most important relation to age or development. Each of them is connected with a distinct period of childhood. It is this dependence upon development which distinguishes the eczema of childhood from that of the adult. Under its influence we see its character modified according to the age of the child: we find it obstinate under treatment at the earlier stage, and amenable or undergoing a spontaneous cure as the period peculiar to it draws to a close. Porrigo is much more limited in its duration, while impetigo belongs to a later period of development than the other two.

Porrigo and eczema frequently affect several members of a family, but not indiscriminately; the two I have never seen in the same family. That the tendency to one or other form is due to inherited peculiarities cannot be doubted. Although Hebra is sceptical of an inherited nature, his arguments are entirely against hereditary transmission, which is quite a distinct thing.

For purposes of prognosis and treatment, and for truth sake, I hold that the "scald head," the "porrigo larvalis" of Bateman, and the "achore" of Alibert, is essentially a distinct affection and is not to be confounded with eczema. It is limited to the period of dentition and the cutting of each tooth will be found to influence the eruption to a greater extent than in eczema. At the end of that process it shows a marked tendency to spontaneous and rapid cure; the cases where further prolonged being due to deteriorated health or want of attention. It attacks the head and face, but the skin of the rest of the body retains the soft and elastic characters of health. There is a greater tendency than in eczema at this age to the secretion of pus and the formation of the variety called eczema impetiginodes.

Impetigo is, as I have already said, an affection of a later period of childhood, belonging properly to the period of the second dentition, but to be met with from the third year upwards. The pustular elements predominate, the crusts have quite a different character from those of porrigo or eczema, and there is wanting the profuseness of discharge peculiar to them. Children, moreover, who have never had any affection of the skin are as liable to it as those who have.

Children are liable to a simple form of eczema, limited in extent, and amenable to treatment; to such affections the following remarks are not intended to apply. Such cases are more allied to the affection as it occurs in adults than the forms of which I am treating.

Eczema infantilis proper, is an affection which runs throughout childhood, from the earliest months of infancy to near puberty. It frequently, and in severe cases generally manifests itself as early as the second or third month. It shows a preference to attack the head and face, but the rest of the body is rarely left free from evidence of one or other of its manifold forms. Even in those children who suffer from the head affection in its mildest type, and where there may be a difficulty in determining between it and porrigo, the skin generally is liable to become dry and rough, and subject to prurigo or sealy eruptions in different parts of the body. In these respects it contrasts markedly with porrigo. In the severer forms the influence of age is very marked. Until some time after the end of the first dentition, the secreting element predominates, but the influence of dentition upon it is less marked than in porrigo. In the third year the head generally gets well, and the tendency in the rest of the body is to become scaly or papular, although cases are to be met with where the vesicular character is retained till a later period.

The sixth year I believe may be taken as the natural limit of this constitutional form of eczema. In cases that have continued to this time a decided spontaneous tendency to a comparatively healthy condition of the skin may be observed, or the affection proves much more amenable to treatment at that age. There is abundant evidence to show that the sixth year marks a developmental period which influences many other affections. After this time should the skin still manifest an unhealthy action it is generally

limited to the limbs. I have met with cases where children, who have suffered from eczema in infancy, have continued to be liable up to puberty to scaly and ecthymatous eruptions of the legs, and especially of the inner surface of the thighs.

Regarding this to be the natural history of constitutional infantile eczema, we have in its dependence upon development a ready and satisfactory explanation of its varying phenomena, and the recognition of this relationship is of importance as regards both prognosis and treatment. In the estimation of the results of our remedies it must be kept prominently in view. While acknowledging the spontaneous tendency to improvement as age advances, a counter fact has been impressed on my mind, especially in dispensary practice, and that is that nothing tends more to aggravate the affection and prolong its existence than leaving the disease to itself without proper local treatment. This fact of itself will explain many cases where the character of the eruption has outlived, so to speak, the natural course I have sketched above.

It has generally been observed by writers that children subject to general eczema are very liable to other derangements, and specially of the respiratory and alimentary tracts. Rilliet and Barthez remark: "It is in cases of very extensive eczema that we see, alternating with the diminution or aggravation of the eruptions, tracheo-bronchial or gastro intestinal catarrhal affections."

There is, however, a complication which, from its close connexion with the skin affection and its marked features, deserves special notice, and may be termed eczematous asthma.

Caillaut* mentions a case, but does not otherwise refer to the disease. "In one of the wards of the Hospital for Sick Children," he says, "there is at present under the care of Dr. Sée, a little boy six years of age, suffering from a dartrous affection of the face: every time the eruption disappears the patient is seized with a violent attack of asthma."

Dr. West, in the last edition of his work on the Diseases of Children (1874, p. 341), says: "In other instances the asthma has succeeded to extensive eczema, and so marked is the connexion between the two conditions that I have never known eczema to be very extensive and very long continued without a marked liability to asthma being associated with it. It cannot, however, be said that the two conditions always alternate, the asthma being worse when the cutaneous affection is better; but the radical cure of the eczema is usually followed, though often not till the lapse of three or four years, by the cessation of the liability to asthma.

In the *Edinburgh Medical Journal* for April, 1874, Dr. K. N. Macdonald records "a case of extensive chronic eczema of the face and extremities of seven years' standing in a child, complicated with spasmodic asthma, cured by pitch, soft soap, zinc and iodide of potassium."

While mentioning this case in connexion with the asthma, I would refer to a few of the details recorded as illustrating some of the points already noted regarding eczema. The affection began when the child was six weeks old. The face and head got well when about three years, but the rest of the body continued to be affected to a severe degree. The attacks of asthma began after hooping-cough, when about three. The condition of the child when Dr. Macdonald first saw him must have been pitiful indeed. The case is an excellent illustration of the effect of leaving the disease to itself in aggravating and prolonging its existence, and also of the success which accompanies proper treatment when employed at an age when the disease naturally shows a tendency towards recovery.

I have myself met with two well-marked instances of the affection. The first I saw only in consultation at a period when, it may be said, both the eczema and the chest affection had passed off. The boy at the time was six years of age, tall and well nourished. The eruption first appeared when three months old. From the description received it had been a well-marked case of general eczema. The skin, when I saw him, was dry and rough, but otherwise healthy. The character of the tracheo-bronchial affection is indicated by the mother's report of the opinions of various medical men who have seen him. "Some said it was bronchitis, others false croup, while others did not seem to know what to make of it." So sensitive at one time was the respiratory tract, that passing from one room to another without a respirator was sufficient to induce an attack. There was no relation between the improvement or aggravation of the skin affection and the chest. The improvement in the latter had gradually followed the natural disappearance of the former.

The second case is also a boy, now five and a half years old. The eczema appeared first on the cheek, at two months, spread over the head, and afterwards extended to the whole body. The face and scalp recovered by the end of the third year, and since that time a gradual improvement has been going on in the body. The eruption of each tooth was not accompanied by an aggravation of the disease. The skin of the body at present is healthy, but liable to become dry. The legs, however, are never free from a mixed character of scaly, papular, and at times ecthymatous eruption. There is always, however, a marked improvement when he has been kept in bed a few days by an attack of the chest affection.

The first bronchio-asthmatic attack occurred at two years and five months. It came on suddenly, and was so severe that the medical attendant waited upon him the whole night. They hardly expected him to survive, yet the next day he was sitting up in bed playing with a pet chicken. Since that time till within the last year the attacks have been very frequent, and of varying duration, seldom a fortnight passing without some degree of the affection. I saw him in one severe attack. It presented all the characters of bronchitic asthma, the lungs being filled with mucus râles and loud rhonchus, with severe spasmodic dyspnea.

* "Diseases of the Skin in Children." Translated by R. H. Blake. London, 1863.

When he came under my care the first point to to which I directed my attention was to determine the nature of the exciting cause of the attack. There was no indication of any metastatic relation between the skin and the chest. It had been observed that after laughing much the respiration became audibly wheezy. He was only allowed out of doors on fine days, but if the wind was in any way strong, he was liable to a difficulty of breathing at night. As, however, attacks often occurred without any apparent exciting cause, I directed a careful watch to be made regarding his food, with the result that he was always best when kept strictly on a simple milk diet. During the last six months, while attention has been paid to this point, he has only had two severe attacks, and in both instances an indiscretion in food could be assigned as the cause; and during this time he has been allowed to run out of doors with a freedom they formerly did not dare allow.

He had, under the care of the late Dr. Carmichael, been treated with all the regular remedies for the skin affection including arsenic, and his mother had bestowed the greatest attention in carrying out the treatment, but she cannot say that anything had any marked effect. Finding that there was a constant sibilant rhonchus in the chest, I prescribed two grains of iodide of potass. with one drop of tr. cantharides three times a day, and potash or Vichy water ad libitum. Under this treatment, with the regulation of the diet, he has had only two attacks in six months, and is evidently steadily improving. While believing that this treatment has not been without effect, I still keep in view that the age of the child is that when the greatest success may be looked for from the natural developmental tendency towards recovery. —*Obstetrical Journal.*

PROLAPSE OF THE UMBILICAL CORD.

In an article on this subject (*Amer. Jour. Obstet.*' Nov., 1873; Feb. and Aug, 1874), Dr. Engelmann' of St. Louis, gives his conclusions as to the cause and treatment of this dystocia as drawn from a careful examination of a large number of cases (365) occurring either in the Royal Lying in Hospital of the University of Berlin, or in the out-door department of that institution. Of these cases, 160 were observed very carefully from the beginning to the end, and pelvic measurements made. The frequency of prolapse was found to be 1 in 18 cases of labor. In this country, the frequency would be much less, since here diseases tending to produce a deformity of the pelvis do not abound as in Germany, where these observations were made. A prolapse of the funis rarely complicates vertex presentations, but is frequently found with false presentations, as the result however, not of the fœtal position, but of the pelvico ef ormity, which tends to produce both the abnormal position and the prolapse. Breech presentations are rarely complicated with prolapse, tranverse and shoulder presentations are much more commonly, and foot presentations oftener than any other. The position of the placenta near to the os favors the prolapse of the cord. The unusual length of the cord is probably favorable to the occurrence of prolapse, but cannot be ranked among the causes. The premature rupture of the membranes at an early period of labor is one of the most common causes which tend to favor a prolapse. The chief and primary causes, however, are due to the maternal parts. While a flabby condition of the uterus and a general weakening of its muscular power, as the result of too frequent childl earing, may tend to produce a prolapse, still the chief cause is undoubtedly to be found in a contraction of the pelvis. The flattened pelvis is the most common pelvic malformation found in these cases. Prolapse is somewhat more frequent among multiparæ than among primiparæ. It is rare that the cord prolapses *after* the rupture of the membranes; ordinarily, the accident occurs at the time of the rupture, although, occasionally, the cord may be felt presenting just within the still unbroken membranes. The prolapse usually occurs at the sacroiliac fussa, less frequently in the acetabular region. Very rarely is it found to pass down in any region occupied by the occiput, or directly behind the symphysis pubis. The danger to the child comes, of course, from the pressure to which the cord is subjected during the labor, a pressure which is greater in head presentations than when any other part of the child presents. A careful *post-mortem* examination of children, whose death has been caused *inter-partum* by compression of the prolapsed cord, shows no change which could be called pathognomonic. The death is the result of asphyxia, which may occur from many other causes. The prognosis in these cases is most favorable when the feet present. Next come tranverse and shoulder presentations, although these are far more dangerous than the first mentioned class of cases, and most dangerous of all are vertex presentations. The prognosis in breech-presentations is at least equally favorable with that offered by tranverse and shoulder presentations. In a primipara, the prognosis is much less favorable than in a multipara. The life of the mother is, of course not affected by the prolapse of the cord. It is possible, however, for a serious hæmorrhage to follow the premature loosening of the placenta in those cases where the cord is drawn over the head.

As regards treatment, many cases will occur in which it will not be desirable to leave the progress of the case to nature, nor will it be necessary to perform an operation. In these cases, attention must be given to the position of the mother during labor. She should lie on the side opposite that in which the funis has prolapsed. In cases where the prolapse has taken place in one or the other of the sacroiliac fossæ, the simply placing the mother on her hands and knees may be all that is necessary for the self-adjustment of the cord. Oftentimes, however, this postural treatment is more an adjuvant to other methods of treatment than a method on which we should place our sole reliance. Version offers the best chance for the child, and should be adopted in preference to either reposition or delivery by forceps. Chloroform has proved a valuable adjuvant in any

attempt to effect a reposition of the cord, and should be given so as to cause a complete relaxation of the muscular fibres. Reposition of the cord should be confined, with a few exceptions, to cases of prolapse occurring with a head presentation.—*Medical and Surgical Journal.*

THE AUTOMATIC MAN.

Under this appellation is given, in the *Gazette Hebdomadaire* of July 17, a curious case which has come under the observation of Dr. Mesnet, of the St. Antoine Hospital. A young man during the late war, had a portion of the left parietal bone, about eight centimetres in extent, carried away by a ball. Hemiplegia of the right side was the result, but this gradually disappeared. For sometime past he has been subject to attacks, lasting from twenty-four to forty-eight hours, attended by very extraordinary phenomena. During these, he seems to act like an automaton, walking continually, incessantly moving his jaw (*machonnant*), knitting his brow, and appearing absolutely insensible to all that surrounds him. Not uttering a word, he walks straight forward, and when he meets with an obstacle stops short, explores it with his hand, and tries to pass on one side of it. Surrounded by a circle of persons, he stops at each and endeavors to pass by the intervals formed by their joined hands, then turns back, comes in contact with the next person and resumes his round. All this time he never manifests the slightest consciousness, just as if he were in a state of somnambulism. He is absolutely insensible to pain, so that pins may be thrust through the cheeks or into the fingers, or very powerful electric shocks may be administered without the slightest sensibility being manifested. What, however, is very remarkable is, that by bringing him into relation with certain objects we are enabled to determine in him the entire series of acts which are correlated with the sensation thus aroused. Thus, if a pen be placed in his hand, he seeks for ink and paper and writes a letter in good hand, in which he speaks very sensibly about matters that concern him. If a leaf of cigarette paper is placed in his hand, he feels in his pocket for the tobacco, rolls up the cigarette very adroitly, and having found his match box lights it. If the match be extinguished just as it reaches the cigarette, he finds another, and that several times till he is allowed to light his cigarette. If, at the moment when the match is extinguished another already lighted is presented to him in its place, it is impossible to induce him to light his cigarette by the substituted match. He allows his moustache to become burned without offering any resistance, but will not employ the light thus presented to him.

Among the various experiments devised by Dr Mesnet, there is one which is particularly curious. The young man is a singer at concerts by profession, and if gloves be placed in his hands he immediately puts them on, and searches for paper. When a roll of this resembling music in form is given him, he places himself in the proper position and begins to sing. It would seem, in fact, that tactile sensation induced in him becomes the point of departure, and as if of escape of a series of acts correlated to their initial sensation—acts which he accomplishes automatically, without letting them deviate from their habitual and regular succession. Lastly, it is noted that, while in this singular condition, the patient steals all that comes within his grasp. If he touches any person, he feels for his watch pocket, and invariably detaches the watch and puts it in his own pocket, from whence it may be removed without his making the slightest opposition. The crisis once over, he has no recollection whatever of what he has been doing, and becomes again perfectly reasonable.

The questions that such a case must give rise to for the reflection of the physician and physiologist are striking. How, indeed, is such a fact to be characterized? And what idea is to be formed concerning the modifications of the functions of the nervous system which it exhibits? A no less interest must be felt by the medical legist, for evidently during these crises such an individual must be absolutely irresponsible. But, how under similar circumstances, are the facts to be ascertained.

What preceded is a mere sketch of some of the features of this curious case. Dr. Mesnet, armed with all the resourses derived from a consummate experience in the study of mental diseases, has had for some time under consideration, and will immediately publish a memoir upon the subject.—*Medical Times and Gazette*, July 25, 1874.

ON LACERATIONS OF THE PERINEUM.

Dr. Wm. Goodell, in the *Phil. Med. and Surg. Reporter* for February 21st, 1874, says: The immediate closure of the rent in lacerations of the perineum ought by this time to be fully recognized by the profession as a very important means for the prevention of future mischief to the reproductive organs. As I have elsewhere shown (*Transactions of the State Med. Society of Penn. for* 1873), and here take the liberty of repeating, the loss of every fibre of muscle in the perineum entails a corresponding loss of power in the floor of the pelvis, and a consequent impairment of support to the reproductive organs. The sustaining power of the vaginal column depends upon the integrity of its perineal abutments. It is the tonicity of the vaginal walls, and the pelvic connections of the womb, that mainly keep it in place. These, in a case of a torn perineum, may not at once yield, but will sooner or later; for air gains access to the womb, irritating and congesting it to such a degree that it ultimately prolapses from an acquired hypertrophy. Unless, therefore, the rent is simply cutaneous, or very slight indeed, it should not be left to nature. Further, it is far more rational to take advantage of the necessary confinement in bed after delivery, and to close the wound at once, while its surface is raw, and the maternal soft parts are comparatively numb and insensible, than to postpone the operation to a time when the woman shall be nursing, when the cicatrized flaps shall demand

quite a formidable operation for their denudation, and when a special confinement in bed for two weeks or more will be needed.

My own method is, immediately after the delivery of the placenta, to pass deeply two or more wire sutures, securing each one by merely twisting its ends together. In bad rents, the first stitch is entered not quite half an inch below the lower angle of the wound, and about an inch from its margin. When the sphincter ani is torn, the cutaneous points of entrance and of exit of the first needle should then be nearly on a level with the lower margin of the anal orifice, and the suture should pass around the whole wound. This purses up the tissues from below upward, and secures complete coaptation. Enough opium must be given daily to keep the bowels quiet for a week.

In severe lacerations the woman's knees must be kept bound together for a week, and her urine drawn off for three or four days. On the third or fourth day, but not earlier, lest the process of immediate union should be interrupted, vaginal injections of weak so utions of carbolic acid, or of the permanganate of potassa, are made twice in the twenty-four hours. These soothe the parts, and correct the bad odor of the di-charges. Without reference to any special time, the sutures are removed as fast as they become loose, usually from the seventh to the ninth day. On the eighth or tenth day a seidlitz powder, or one dessert spoonful of castor oil, is given every four hours until an inclination to go to stool is urgent; then an injection is given in order to liquify the contents of the lower bowel. This method of uniting the parts, both in the immediate and in the secondary operation, after the cicatrized surfaces are denuded, I can warmly recommend, as I cannot recall but one case, and that a very unruly one of puerperal mania, in which there was failure in obtaining a very good union. It ought, however, to be stated, that in secondary operations superficial sutures should be placed between the deep ones, and that the latter should be clamped with perforated shot. In order, also, to pare each side of the rent with unerring uniformity after freshening the surface of one side, its exact print in blood can be got on the other by pressing the nates together for an instant. A very troublesome symptom in these cases is flatus. If it does not yield to valerian, a gum catheter should be very carefully passed up into the rectum.

Many lacerations are, in my opinion, owing to the very common mistake of making so firm a pressure upon the perineum as to prevent it from undergoing an equable dilation. The portion thus compressed cannot take its share of the general tension, and the strain is thrown on the fourchette. Further, the pressure of the hand, by obstructing the free circulation of blood, impairs the vitality of the perineum. Bruised and benumbed, it is no longer a living tissue, capable of responding intelligently, so to speak, to the requirements of the occasion—when to repel, when to solicit, the advance of the head—and this nice point nature can very generally determine far better than the physician. Again, the word "*support*," as applied to the perineum, is a misnomer. No "support," in the ordinary acceptation of the word, is afforded to the perineum by direct pressure. If such a method ever accomplishes any good, it is by retarding the advance of the head; in other words, by *supporting* the head through the interposed perineum, and not by supporting the perineum itself. Why not, then, support the head by pressure directly applied to it, instead of through a medium which requires perfect freedom from all restraint in order to undergo the requisite and inevitable amount of dilation? Finally a majority of the advocates of "support" contend that it is most needed at the very moment of expulsion. But the woman, in the agony of the final throes, is very likely to jerk herself away from the hand of the accoucheur. Of course, then, the perineum, being abruptly released from counter-pressure, is the more liable to yield to a strain suddenly sustained, for which its fibres are unprepared. Obstetric teachers recognize this danger, and in vivid language caution the student against it.

Although I believe that in a vast majority of labors the perineum does best when let alone, yet cases do undoubtedly arise which demand an intelligent assistance; nor can the line of demarkation be always drawn between natural and morbid conditions. Whenever the head in an occipito-anterior position is too much flexed, the vertix bears on the perineal center, threatening perforation; whenever, in an occipito-posterior position, the head is too little flexed, the forceps are urgently needed. For cases of extreme rigidity, or of an under-sized vulval opening, ether will be found a potent remedy. Apart from a direct and retarding pressure upon the presenting part itself, the only manual aid that I permit myself to render is as follows: Insert one or two fingers of the hand into the rectum, the woman lying indifferently on her side or on her back, and hook up and pull forward the sphincter ani toward the pubes. The thumb of the same hand is then to be placed upon the foetal head, scrupulously avoiding all contact with the fourchette. For this method I claim the following advantages; (*a*) By pulling up the sphincter ani towards the pubes not only is nature imitated, which always dilates the anal orifice, but the perineum is brought forward without direct pressure, and its dilation is diffused over its entire surface, causing a corresponding relaxation of the strain on the posterior commissure, in the line of its raphe. In addition, its muscular fibres are crowded up to, and consequently strengthen, the line of greatest tension; just as a prudent general hurries up reinforcements to the point of attack. (*b*) The same force which dilates the sphincter ani compels the occiput to hug the pubes, and favors extension, especially if the fingers in the rectum are hooked over the prominences of the foetal face, or over the chin. (*c*) This aid is not liable to sudden interruption from the movements of the woman. (*d*) The thumb of this hand, together, if necessary, with the fingers of the free hand, can, by direct pressure upon the presenting part, restrain its too rapid advance, without exciting that reflex uterine action which is so frequently evoked by the irritation of

contact with the perineum. (e) The circulation of the blood remains free; the nerves are not benumbed by a double pressure, and the perineum, therefore, continues in its natural condition, that of a living, elastic and sentient tissue. This method I have more fully described in an essay published in the *American Journal of the Medical Sciences*, Jan. 1871, p. 75. To it I beg leave to refer those of my readers who are interested in the subject of the management of the perineum during labor.

Misdirected traction on the aftercoming head, viz., too much in a downward direction as the head is about to emerge, is very commonly followed by a very bad rent of the perineum. Even in head-presentations, requiring apparently but slight traction, the use of the forceps will often occasion a slight tear in the vagina, which the passage of the shoulders prolongs into the perineum. From too hurried a delivery, or from faulty traction, I have seen so many bad lacerations following the use of this instrument, even in practiced hands, that I cannot withhold the opinion that, in the majority of cases, nature can accomplish the final delivery of the head through the soft parts much better than the physician. In the essay previously adverted to, I use the following language, which the riper experience of three years more has not induced me to change: "Delivery by the forceps, even in skilful hands, will often produce laceration: for the head is liable to be brought down too quickly on the unprepared soft parts, and it becomes a very nice point indeed to determine the exact moment when delivery may be ended with impunity. The cautious physician is liable to be caught, as it were, on the center." He sees the perineum stretched out to a perilous thinness, and the fourchette almost cracking under the strain. In doubt whether the moment has arrived to raise the forceps-handles and turn out the head, or to depress them, and thus restrain its advance, he wavers, and in a twinkling the fibres part. On the other hand, the impatient physician is tempted to turn out the head before the parts are sufficiently dilated. Finally, what is still more frequent, at the last moment the physician's courage fails him, and he depresses the forceps-handles just as the head has begun to emerge; a course equally fatal to the integrity of the perineum." My advice, therefore, that, other things being equal, as soon as the perineum is well dilated, the forceps should, as a rule, be removed, unless the blades are so firmly imbedded in the child's tissues that their withdrawal requires a force which might hasten the delivery of the head. This practice, if not so brilliant, will, I believe in the long run be found much safer.

At the risk of becoming prosy on this subject, I wish to add my convictions that, through sentiments of delicacy, many lacerations of the perineum escape the notice of the physician. After the delivery of the placenta, he should, therefore, make it a rule to introduce the index-finger into the rectum, and the thumb into the vagina. By bringing them together he can estimate the thickness of the intervening tissue, and thus determine whether any extensive laceration has taken place. If a rent be discovered, he should decently inspect the parts. By daylight, this examination can usually be made without the knowledge of the patient. When candle-light is needed, he will be compelled either to make some excuse, or boldly explain his object.

STRICTURE OF THE URETHRA BY THE ELECTRICAL TREATMENT.

By A. J. Steele, M.D., St. Louis.

The attention of the profession has been of late especially called, and very justly, to a comparatively new method of treating strictures of the urethra, namely, by the use of galvanism. The ease of the application the slight inconvenience to the patient, and the rapidity and permanence of the cure, make it really deserving of a prominent place among the surgical advances of the day. As my own experience corroborates the favorable reports that have been made in regard to it, I cheerfully add testimony in its favor.

The form of electricity used is that of the continuous current, and tension is sought rather than quantity, so that many small cups are demanded rather than a few large ones. I have usually found that from ten to fourteen pairs of the zinc-carbon elements have generated sufficient electricity for the purpose.

The negative electrode is a metallic point pressed gently against the stricture; the positive electrode a moist sponge placed anywhere upon the surface of the body, though I have believed the action to be more energetic when it has been placed near the negative pole, as to the iliac region or thigh, rather than remotely, as to the leg or palm of the hand.

A metallic oval tip, connected to a wire passing through a gum catheter, is the form of bougie recommended, and which I have used, but I now prefer the ordinary conical steel bougie. A set, including all sizes, makes the convenience of application greater, and being silver or nickel-plated prevents oxidation.

The instrument is insulated to within an inch of the point by the application of a coating of collodion; Squibbs' flexible, I find well adapted for the purpose.* A *sene-fine* affords an eligible method of connecting the wire to the handle—not coated—of the bougie.

Two factors enter into the thoroughness and rapidity with which a cure can be effected, viz., the electro-motive force used, and the character of the structure to be acted upon. The softer, the more moist and vascular the stricture, the more readily will it be decomposed and absorbed; whereas extremely hard tissue will demand increased time and greater tensoin, and possibly, also, increased quantity. Though in regard to the latter I am prepared to believe that mistakes have been made, and failures recorded, from its injudicious use. Quantity gives a calorific effect, with rapid destruction of tissue, as in the case of the galvanic cautery, the scar resulting therefrom would be highly prejudicial in the instance of a stricture. It is rather the electrolytic action that is desirable, whereby the organic structure is disintegrated, decomposed. The negative pole attracts hydrogen, and gives an alkaline re-action when acting upon moist

* Ether will dissolve it off when desired.

animal tissues, chemically decomposing—dissolving the part, and doubtless, too, by its stimulant action, inducing absorption.

The situation and character of the stricture having been accurately determined, a bougie, prepared as above, and of a few sizes greater in caliber then the stricture, is introduced down to the obstruction and connected by its free end to the negative wire. The sponge, moistened with salt water, placed externally on the skin—the thigh or iliac region being convenient—is attached to the positive wire. It is best to commence with a single pair, and gradually increase the number of cups, as thereby the parts are more tolerant—a low power gradually benumbing, a high power unpleasantly shocking. If the sponge is shifted without being removed from the surface, the pricking or burning sensation ordinarily experienced will be lessened. The sensations of the patient will, to some extent, determine how high a power may be used; from ten to fourteen pairs, as before remarked, may be all-sufficient, if the battery is working well. The character of the stricture, also, necessarily enters into this question. A few moments' gentle pressure and the instrument is found to pass gradually on. Once well entered, the bougie is retained *in situ*, the action being continued for a few moments longer. The current may now be gradually diminished, and the wire disconnected, the instrument retained, and, if gentle force will accomplish it, pushed on into the bladder, If not interdicted by local inflammation, the operation may be repeated in a week or fortnight's time, followed up by the careful and judicious use of bougies. In some cases one application is sufficient; in others several seances are required, depending on the character of the stricture.

Results have been most satisfactory. Strictures, accompanied with incontinence of urine, gluty discharge, irritability of bladder, painful micturition, etc., being entirely removed and rapidly cured.

Danger in this operation is reduced to a shadow, if too great quantity and too prolonged application are avoided. Care, also, in the after use of bougies is to be regarded.

While there is much of merit in the old ways let us not be too chary in trying the new—*St. Louis Med. and Surg. Journal.*

A NEW SIGN OF PREGNANCY.

In the *Annales de Gynœcologie*, March 15, 1874, M. le Prof. Pajot describes a new sign of pregnancy, which he calls "le choc fœtal," or the fœtal impulse. The sensation it conveys to the hand of the person making the examination is similar to that conveyed by ballottement; but it differs from ballottement in being produced by an active and spontaneous movement on the part of the fœtus. It is available before the other certain signs, and is therefore most valuable in cases of doubtful pregnancy at the third or fourth month. Of course it is not always to to be felt, and this may entail on the patient the unpleasantness of several examinations.

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PHYSICIANS AND DRUGGISTS.

Some time ago the profession were accused by a one-sided correspondence in the daily press, of blackmailing the public.

The druggists who were outside the pale of medical patronage naturally were opposed to the percentage given on prescriptions as tending to lessen their own business. Without entering into the question of its being either right or wrong, we consider that the druggists themselves are to be blamed for the existence of such a system. We would say however, that in no case is the public subject to blackmail on the part of physicians; but rather the other way, for druggists charge the same for a mixture on which no percentage is paid, as for one on which it is. Now the relations of the Medical profession to druggists are somewhat peculiar, each have duties to the public and to each other which should be more sharply defined so as to permit of no encroachment from either.

Physicians have no right to require their patients to buy drugs at any other store than that which they are accustomed to deal at; provided the family chemist is honest in his dealings and furnishes pure drugs, nor has he the right to interfere except upon stronger grounds than personal preference, or decry the medicines furnished unless he believes them to be of inferior quality. So much for the physician; but what shall be said of the druggist? So far as our experience of them extends, and it is somewhat extensive, many of them are unmitigated quacks, who injure the general standing of their fraternity, bring upon the whole body the distrust of the Medical profession, and cause the latter to deal with but one whom they can trust and send their patients to. Many physicians decidedly will not permit their prescriptions to go to certain druggists, for they have found by experience that their patients generally received with their mixtures additional advice as to its virtue in their case or the possibility of something else being better. In one instance where a grain of quinine had been prescribed every four hours, the

dispensing clerk officiously informed the parties that one dose was sufficient for 24 hours. Now it is the business of the druggists to prepare and compound drugs, to know their general properties and doses but here they must stop. The physician should write his prescription plainly and also the directions for use, and should an extraordinary dose be ordered, he should state plainly that it is so intended. The druggist should dispense it precisely as directed, without any comment or not put it up at all. Of course if there should be an obvious mistake the prescription should be returned for correction. It is a well known fact that but few druggists are sufficiently honest to carry out this simple duty. This is said advisedly, for numerous instances have occurred to prove the fact. Cheaper medicines are substituted for those ordered or if a drug should not be in stock another one is used instead, without the sanction of the prescriber, because the dispenser thinks it will do as well. We once wrote a prescription, among the ingredients of which was a certain extract, then newly ordered in the Pharmacopœa, and which we had doubts of its being in the city. That prescription was put up by a druggist and we called the same day and asked for the extract but found they had none. To test the matter, that same prescription was taken to more than half a dozen chemists with a like result; one chemist alone had the honesty to say that it was impossible to obtain in the city one of the substances, and requested that the prescription be taken back to see if another drug would answer. Again in some cases entire prescriptions have been changed and something which the druggist thought better substituted, accident alone calling attention to the fact. Patients are aware that this does occur, and many prefer that the physician would dispense the medicine. We have been shown within the past few days, a mixture which ought to have been a repetition of one previously taken, but which was so markedly different that the patient could not help observing it. There is another practice common to druggists, which is probably the meanest of all, and that is the habit of passing themselves off as Doctors, giving advice and prescribing medicine. Surely medical education is cheap enough and the opportunities for its study are available to all. Such practices are tantamount to an acknowledgment that they have not sufficient brains to become physicians and therefore ape the doctor. Even if the medicine is simple, and according to their opinion cannot do harm, is no excuse; for how can they know whether harm will ensue, when they cannot know what is the matter with the patient. Many of them go farther than this, for we lately assisted in operating in an aggravated case of paraphymosis which had been treated by one of these self constituted doctors, who expected to remove the strangulation by means of a lotion and encouraged the man to persevere in its use, though the apparent danger of losing the glans was so great as to induce the patient to seek other advice. One other point deserves some attention, and that is the high price charged by druggists for medicines. People of humble means find their druggists expenses equal to, if not more, than the physicians bill, The enormous profits on some things is unreasonable. For instance, a patient who was leaving the city, was given a prescription containing Zinci sulph. and tr lavandule co., for which he was charged 50 cents; some time after he wrote to say that he had learnt a dodge. Being acquainted with Latin, he asked for the ingredients separately and in English, the result being as he stated that he had paid exactly 40 cents for eight ounces of water. There is a manifest absurdity in having to pay as much to the dispenser of a prescription as to him who writes it, thus making no distinction between two different services. But this is not all, the druggist receives his pay at once the doctor not for months and often not at all. We might enlarge upon these abuses, but having said sufficient to expose these evils, trust that the pharmaceutists in our midst who are working for the elevation and education of druggists will turn their attention upon these matters and correct them. We are decidedly in favor of pharmacists managing their own affairs, and hope they will obtain such powers that will enable them to examine and control those engaged in their business. It is also time that the farce of medical boards examining apothecaries for license should cease, and that properly qualified Colleges of Pharmacy should exist. The duty of such Colleges is to produce a class of educated men who will be able to manufacture and inspect drugs for themselves, and the drug store will become a laboratory for scientific research instead of being a place for the retail of fancy goods and patent medicines. By defining the duties of the pharmacist and excluding those who are not qualified to dispense, a great boon will be obtained by the medical profession. Less uncertainty will exist as to the action of drugs. The physician and druggist each should work for one end. The first to prove the therapeutic value of drugs, the other to prepare them of such uniform quality and purity as to render observations reliable. We believe it to be the duty as well as the interest of the pro-

fession to leave such matters to the control of pharmaceutists and thus get rid of the onerous task of dispensing their own medicines, whilst at the same time the druggist should not charge more than what is right for the dispensing, or feel pulses over the counter, but leave the difficult duty of prescribing to those who are specially educated for it.

One other practice should also be condemned. It is impossible to combine the duties of both properly, and yet we have in our midst men who practice as physicians and at the same time superintend drug stores. Such hybrid combinations are injurious to both parties, and we trust before long stringent means will be used to prevent them.

ANTI-VACCINATION.

As we stated in our last issue, the anti-vaccinators, headed by Dr. Coderre, had discovered another supposed case of inoculation of disease by vaccination, and that photographs were being pulished. These latter have since been exposed on our street corners, and were of such a character as to lead to the belief that they were taken after death, though the child is at present living and in good health.

To prove whether this child had received any injury a public meeting of physicians was called, at which there were present a large number of medical gentlemen, some of them being well-known influential members of the profession. We regret that all the profession were not invited, many not knowing of the meeting, as there would have been a larger majority in favor of the resolutions adopted. The anti-vaccinators were in full force, and certainly did not represent many of any ability. The meeting was held in the Jacques Cartier School, on the 15th of September. Dr. Hingston presiding.

The Chairman stated the objects of the meeting, as represented in the circular addressed to each member of the Faculty, which were to consider and pronounce judgment in the case of the child (Labelle), of which use had been made by Dr. Coderre to prejudice the public against vaccination.

After considerable discussion, in which several physicians who had seen the child took part, the Chairman ordered the child to be brought before the meeting. This being done, and all present having availed themselves of the opportunity thus afforded them of satisfying themselves as to the aforesaid phenomena on the body of the child, it was proposed by Dr. G. W. Campbell, seconded by Dr. Rottot:

That, after having carefully examined the arm of the child Labelle, vaccinated by Dr. Larocque in June last, we are of opinion that from the appearance which the arm now presents, there has been no extensive destruction of tissue, nor any evidence of any injurious virus having been introduced into the system of the child; and that the scar presents the ordinary appearance of healthy vaccination.

The motion was carried by a majority of 40 against 18.

The following resolution was then proposed by Dr. Fenwick, seconded by Dr. E. Robillard:

That, in the opinion of this meeting, the action of certain medical gentlemen in publicly circulating photographs to represent alleged injurious effects of vaccination, is strictly unprofessional and highly censurable, as calculated to mislead the public, and is adverse to the interest of science.

The vote on this resolution was identical with the former one, with the exception of the addition of Dr. Gariepy, who had voted for the amendment, and Dr. Bell, who had come into the room in the interval.

Several gentlemen addressed the meeting, but the main gist of their observations is embodied in the resolutions which have been recorded.

After a vote of thanks to the Chairman for the exemplary manner in which he presided, the meeting came to a close.

One of the photographs exhibited was an highly colored imaginary sketch of the appearance of a supposed transverse section of the arm. It was also elicited that a tight bandage had been applied, which, with the cachectic condition of the child, had induced extensive suppurative action.

One is not surprised to find anti-vaccinators among the ignorant, who do not understand anything of the matter, and therefore ascribe scrofulous eruptions to the introduction of vaccine, nor can we blame them for acting up to the conviction. In one case which came under notice, a mechanic, who had been fined several times in England, and once here, was so opposed to vaccination that he preferred imprisonment rather than have it done; but, on having a thorough explanation of its benefits, he had his six children at once vaccinated. Now, it is just such men as these anti-vaccinators who cause this

difficulty, and who, being blinded by their own conceit, are either ignorant of, or else shut their eyes to the mass of recorded evidence, in order to enjoy a brief notoriety. Argument is of no use, for they are not open to reason, and we regret that a different course was not pursued to stop their folly. As the vaccinator in this case was an health officer and performed the vaccination in behalf of the city, it was the duty of the Board of Health to institute an inquiry, and on proof that no ill was done the child, to prosecute these parties by law. No other way will stop them from trumping up case after case to the great detriment of public health.

In the meantime we would recommend these anti-vaccinators to emigrate to the Western Coast of India, where they will find congenial companions in the Koragars, who worship a very hideous deity called Mari Amma, or the Goddess of Small Pox.

IMPERIAL HONORS.

A writer in the "Canada Medical and Surgical Journal" makes the suggestion, that the Honor of Knighthood should be conferred upon Dr. Geo. W. Campbell. No one is better entitled or more worthy of such dignity. That such is the general opinion of the profession there is no doubt, and judging by the fact that the suggestion has been readily mentioned by the public press, we infer that the public also coincide with us. No name connected with the medical profession is more widely known or respected throughout the length and breadth of the Dominion and it is therefore superfluous for us to add anything to what has been said. Titles are but sparingly bestowed upon members of the profession and generally the recipients of such favors are more or less connected with the Royal Court. Statesmen and Generals receive honors, their work being of such a nature as to command public attention, while that of the physician or surgeon is done quietly, though their services to mankind are probably greater. We do not think that in this case the title would add anything to the esteem in which Dr. Campbell is held, but as a mark of approbation for a lifetime of usefulness, it would be an encouragement for others to follow his example. We therefore with others wou'd be glad to see the suggestion carried out.

The introductory lecture at McGill was delivered by Prof. McCallum, on the 1st of October, at 3 o'clock in the afternoon. We regret being unable to obtain a report of the lecture in time for publication.

Dr. Brosseau delivered the introductory lecture at L'Ecole de Médicine et de Chirurgie on behalf of the Medical Faculty of the University of Victoria, on Thursday October 1st, at 3 p. m.

A new journal called the Archives of Dermatology will be issued on the 1st of October and continued quarterly thereafter. It is to be devoted principally to skin and syphiletic diseases but will also contain a digest of the current literature. The work is of American origin and is edited by Dr. L. Duncan Buckley of New York.

We have received the seventh annual announcement of the Montreal College of Pharmacy. The session was opened on the 1st of October, and will continue till the end of March. The lecture room is situated at No 628 Lagauchetière street, and the lectures commence at 8.30 p.m., so as to enable drug clerks and others to attend. Dr. Kollmyer lectures on Materia Medica and Dr. Shaw on Chemistry; each giving two lectures a week. We wish the College every success, and trust that their efforts to raise the standard of chemists and druggists will meet with the desired reward.

PERSONAL.

The announcement is made that Prof. Rokitansky, of the University of Vienna, whose name is so intimately connected with Pathology, is about to resign his chair, and it is probable that Prof. Recklinghausen, of Strasburgh, will succeed him.

Dr. J. W. Whiteford, of Belleville, (M.D. McGill, 1873), has successfully passed the examinations at Edinburgh, and obtained the L.R.C.P. Edin., and L.R.C.S. Edin.

Dr. William Macdonald, (M.D. Bishop's College, 1873), has returned to Montreal after a absence of three months. Dr. M. has been travelling in Europe, spending some time in London, Eng., and has had a very pleasant trip.

Dr. DeWolf, of Halifax, was in the city for several days during the past month.

It is rumored that attempts are being made to establish a Homœopathic school of Medicine in Montreal, but the difficulty of obtaining properly qualified Professors from among the few Homœopaths in the city prevents its formation.

A new dispensary has been opened in Fullum street by the nuns. It is stated that the medical men in the neighborhood do not regard it with favor.

Dr. John Caulfield, a graduate of Detroit College, but formerly a student of McGill College, is now in practice at East Saginaw. Some of his old classmates will feel interested to hear that he is meeting with success.

Dr. O. C. Edwards, (M.D. McGill, 1873), has commenced practice in this city, and has opened an office in St. Antoine street.

Dr. Tabb, late of Montreal, has entered into partnership with Dr. Gilbert, of Sherbrooke.

The *Medical Times and Gazette* states that the patient on whom Prof. Bilroth performed extirpation of the Larynx for Cancer, with success on the 31st of December last, has since died at his home in Bohemia, the disease having returned.

There are 182 doctors of medicine in the city of Montreal and environs. Of these 165 reside in the city proper. All are not in practice, however; some act as insurance agents; others conduct apothecary shops or are in some mercantile business. Among them there are Specialists, Electricians and Homœopaths. A few have retired from general practice and now act as consulting physicians. About 150 are in general practice, being about 1 in a 1000 of population, which does not, however, represent the division of practice. Some of the best known having such a large connection that they refuse to attend new patients, while others are doing comparatively but little business.

REVIEWS.

Ligation of Arteries. By DR. L. H. FARABEUF, *Aide d'Anatomie à la Faculté, Paris. Translated by Dr. Jackson, of Domville, Kentucky. Philadelphia, J. P. Lippincott & Co.; Montreal, Dawson, Brothers.*

This is an operative manual designed to aid the student and young practitioner in understanding all the steps necessary to ligate an artery. It explains much that is left obscure in the ordinary text books, and also gives a description of torsion and compressson. In reading this excellent treatise the impression is left that it should be in the hands of every student while in the dissecting room, so that he may become familiar with the difficulties of ligating each artery. Such operations are generally urgent, and are, therefore, dreaded by most practitioners; but a careful perusal of this work, and following its details upon the dead, will give that confidence necessary for operating on the living. We, therefore, recommend it to our readers as being practical throughout, and one which will show them how to operate.

The following works have been received from the publishers, and shall receive an early notice:

The Complete Hand-book of Obstetric Surgery; or, Short Rules of Practice in every Emergency. By Charles Clay, M.D., late Senior Surgeon and Lecturer on Midwifery, St. Mary's Hospital, Manchester, England. 8vo. pp. 328.—Philadelphia, Lindsay and Blakiston, 1874.

Surgical Emergencies, together with the Emergencer's Attendant, on Parturition and the Treatment of Poisoning. By W. Paul Swain, with eighty-two illustrations. 8vo. pp. 189. Philadelphia, Lindsay and Blakiston, 1874.

Materia Medica, for the use of Students. By John B. Biddell, M.D., Professor of Materia Medica, Jefferson Medical College. —— —— Sixth edition, revised and enlarged. 8vo. pp. 435. Philadelphia, Lindsay & Blakiston, 1874.

A Practical Treatise on the Diseases of Women. By T. Gavelin Thomas, M.D., Professor of Obstetrics Col.: Physician and Surgeon, New York, &c., &c. Fourth edition, pp. 801. Philadelphia, Henry C. Lea, 1874.

BIRTHS.

At Bury, Compton, on the 17th September, the wife of Dr. James McNeece, of a daughter.

MARRIAGES.

At Ste. Marthe, Wednesday, the 9th instant, by the Rev. Mr. S. Blyth, Mr. J. L. Telesphore Valiquette, of Montreal, to Miss Marie Antoinette Denise Le Pailleur, eldest daughter of Alexander L. Le Pailleur, Esq., M.D.

At St. Vincent Church, Montreal, the 23rd inst, by Rev. Mr. L. M. Lavallée, Mr. J. Charles Duckett, second son of Wm. Duckett Esq. of Coteau Landing, to Mary Jane Angel, Mount, eldest daughter of J. W. Mount, Esq., M.D., all of this city.

On Tuesday the 29th inst. at St. George's Church, by the Very Rev. the Dean of Montreal, assisted by the Rev. James Carmichael, B.A., Thomas, eldest son of the late John Firth, Esq., of Holt House, Abbeydale, Sheffield, England, to Alice E., second daughter of R. T. Godfrey. Esq., M.D., of Montreal.

On the 8th of October, at the residence of the bride's step-father, Fred. Muller, M.D., by the Rev. Dr. J. Cordner, assisted by the Rev. E. F. Hayward, Edward J Ermatinger, Esq., son of the late Col. E.W. Ermatinger, to Mary J. Alger, daughter of the late Cyrus Alger, jun., of Boston, Mass.