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EXPECTORANTS.

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Read before the Ontario Medical Association.

The small amount of literature on the subject of expectorants is, I think, remarkable. If the gentlemen who have been named to take part in the discussion to follow have experienced as much difficulty in finding anything definite, practical, and scientific in connection with the subject as I have, outside the ordinary run of text books I can sympathize with them. Even the text-books, afford us but meagre information regarding the mode of action and therapeutical indications of this great and important class of remedies. Whittall dismisses them with about a dozen lines; Nothnagel and Rossbach, Bartholow, Ringer, Waring and Potter, do not discuss them at all. Wood gives a few lines, but they all simply state facts, and are unsatisfactory in not giving reasons. Fothergill deals with them more at length, but in rather a loose and discursive manner; while Lander Brunton, as in every other subject connected with pharmacology upon which he has written, is *facile princeps*, so far as the authors I have had the privilege of consulting are concerned. There is even a greater dearth in the transient current medical literature of the day. I have for some months watched closely the leading medical journals of this continent

and of Great Britain, some 200 in number, without finding a single article on the subject. Articles by the score, nay by the hundred, are to be found upon the most recondite subjects connected with medicine and surgery, articles which to, perhaps, 9 out of 10 average medical men are impractical to a degree, but not one article, I assert, have I seen on the subject of expectorants.

It is for this reason that I have thought a consideration of some of the scientific aspects of this very important branch of therapeutics will be both profitable and interesting, and I hope that the discussion which is to follow may elicit from gentlemen present, of large experience, much that may be useful to all of us. For while the vast majority of us, and especially those on the physician's side, will in all probability never be called upon to remove the uterus and its appendages, to perform a resection of the stomach, to trephine for epilepsy, or excise a portion of tuberculous lung, we all every day have to exercise a knowledge of this group of medicines; and while our successes, if we have any, in wielding the instruments in our hands may not be so apparent as those of, say, the laparotomist, the results of our failing to use our instruments—*i. e.*, our drugs, properly, may not be less lamentable than those of the unskilful use of the knife, albeit we shed no blood, in the literal sense of the term; nor do we capture any trophies in the way of tumors or ovaries, or any of the pathological specimens which so much redound to the surgeon's

art. For it may be possible that as many persons are gathered to their fathers each year by careless, routine and unscientific prescribing, as by cancer of the stomach, or even, I believe, intraligamentous cystoma.

What would be said of the surgeon who used his instruments of precision in so careless, unskilful or unscientific a manner as to actually cause the death of the patient he was pretending to heal? And yet he would not be more culpable than is the physician who, either from carelessness or ignorance, orders a routine prescription, with, say, large quantities of opium to break up the cough, for a young woman, with perhaps a latent, perhaps a recently acquired, pulmonary trouble. In the former case the fault of the medical attendant may often be easily noted; but inasmuch as the instruments of the physician, which should be, and would be, if our science were truly a science, instruments of precision, work in the dark, the fault of the prescriber is not brought to the light. And I am firmly of the opinion, moreover, that if the damage done by weak, ignorant and harmful prescribing were as patent, and were at the same time actionable at law in the same manner as is imperfect surgery, such as badly treated fractures, unreduced dislocations, etc., then we should have fewer shot-gun prescriptions, in which there is a hope that the game may be brought down by one of the many agents used as a matter of routine.

Let anyone examine a hundred or a thousand formulas for cough mixtures, which he may see, not in chemists' shops, where they are private property, but in medical journals, and he will discover most unequivocal evidence of the compounding of medicines without a proper knowledge of their actions, of gross ignorance as to the pathological conditions present, and a total disregard of them. Thus he will find side by side in the same prescription *vin. ipecac* and *ammon. carb.*; *vin. antimoniale* and *senega*, *alkalies* and *squill*; *pot. iodid.* and the *balsams*, *jaborandi* and *syrops*, and many others which I need not mention, which are, as these are, diametrically opposed to each other in their action on the bronchial mucus membrane, and should not therefore be compounded except under the most peculiar and almost unimaginable circumstances. It is not given to us to

prescribe expectorants at the present day at any rate, by inspiration, neither can we truly say of a physician that he

“By long experience may attain
To something like prophetic strain.”

Empiricism reigns, under the most favorable circumstances, over a large number of subjects in the domain of medicine, and while our knowledge of expectorants is to a considerable degree empirical, we have enough scientific data to go upon, were we careful in each case presented to us to use them, to enable us to prescribe the known remedies rationally, not only to the great benefit of our patients, but to the advancement and credit of our profession. I must ask you to allow these considerations to be my apology for bringing before your notice this subject, with which the majority of you are from experience more capable of dealing than I am.

Expectorants may be defined as remedies which facilitate the removal of secretions from the respiratory tract. This they may accomplish in several ways, of which the following are the most important:

1. By altering the nature of the secretions either in the act of their elimination, or acting systemically, in a manner not explained, making it thinner and more easy of expulsion.
2. By increasing the flow from the congested and turgid mucous membrane, through their effects upon the vessels.
3. By mechanically dislodging it in the act of vomiting.

To these may be added remedies which relieve spasm of the bronchial tubes, as in asthma; those which soothe the irritable respiratory centre; and those which act reflexly through the nerves of the mouth. These latter three classes, while hardly coming under the definition, may be regarded as true expectorants, inasmuch as they are indicated by the pathological conditions for which expectorants are used, viz., the relief of cough, the relief of dyspnoea, and the removal from the respiratory tract of certain morbid products of disease which are inimical and injurious to the economy of the system.

And as I shall not refer to the apparently mechanical action of certain substances held in the mouth in the promotion of the expulsion of bronchial secretion, I may note in passing

the well known fact, that a small piece of gum acacia, gelatine, preparation of potash, etc., or even a glass bead, a button or any other perfectly tasteless substance held in the mouth, will favor expectoration, especially when the bronchial secretion is viscid and tough. I said these agents act in an apparently mechanical manner, as is proved by the fact that a glass bead will have a similar, though not so powerful, effect, to that of a piece of sal ammoniac. No doubt they act reflexly; the impression being produced upon the terminal branches of the glosso-pharyngeal, or the lingual branch of the fifth nerve, carried to the medulla, and hence either through the branches of the vagus or through the sympathetic system to the bronchial mucous membrane, in which it may affect secretory or nutritive changes, or more probably both. As such nerve stimulation is supposed to increase the action of the cilia, thereby sweeping up the tough viscid mucus to the back of the pharynx or top of the larynx, whence it may be easily expelled, such remedies have been termed ciliary excitants.

They are constantly used in the form of compressed tablets, made by various firms of manufacturing chemists, and it is worthy of remembrance that they do not act by absorption, though sapid substances are more useful than tasteless ones, for the reason that they produce a more powerful impression upon the nerves of the tongue and mouth, and hence reflexly act more powerfully upon the cilia of the bronchial mucous membrane.

To revert to the others, which I have said do not really rank as expectorants under the definition, as time will not permit me to dwell upon the class of anti-spasmodics, such as lobelia, stramonium, opium, etc., but I may mention a few points in regard to those which soothe the irritable respiratory centre or the nerves connected with it, *i.e.*, pulmonary sedatives, such as morphia, chloral, hydrocyanic acid, hyoscyamus, etc. Of these the chief is morphia or opium. It has a double action, *viz.*, that of lessening excitability of the respiratory centre and of diminishing the bronchial secretion; in both ways, as will be readily understood, relieving the cough. I think there can be no doubt that opium in one of its preparations, most frequently the ubiquitous paregoric, is given far too frequently in

cases of respiratory troubles, as an easy means of burking the cough, if I may be allowed the expression, and letting nature do the rest; the cough being to the patient the *fons et origo malis*. This plan of treatment is surely most injudicious, and may be responsible for much of the chronic disease of the lungs we see on every hand. In many, indeed in most cases, the *vis medicatrix nature* is competent to restore the pulmonary tissue to a condition of health, in spite of the bungling attempts of man, which, intended to aid nature, really hinder her.

That opium has a decidedly useful and important rôle to play in the treatment of chest affections is certain, but it is equally certain that its routine and indiscriminate use, simply to get rid of the cough, is quite as silly and quite as harmful as is the use of Mrs. Winslow's Soothing Syrup, or any of the baby comforts that are on the market, by mothers, who, either in ignorance, or regarding their own comfort more than the welfare of their offspring, soothe the symptoms of the disease by plying these narcotics. Verily they sow the wind to reap the whirlwind.

The indications for the use of opium in pulmonary troubles are not many. I have endeavored to group the chief ones, which may be briefly stated as follows: first, in those cases in which we have to deal with fits of coughing, when the exciting cause will not admit of expulsion. Here the futile attempts at expulsion and imperfect respiration produce great exhaustion, and may require the aid of an anodyne, of which the most powerful is opium. Congestion or consolidation of the lung tissue; calcareous nodules found embedded in the lung; and aortic aneurism would be examples of such conditions. Again, there may be much cough with little or no expectoration. The lining membrane of the air tubes is irritable and "raw," there is no increased secretion, and yet the cough will be pretty continuous and very distressing, but quite useless. The congestion is great, requiring decided medication with some of the depressant expectorants, and at the same time the futile, wearing, exhausting cough, will be best allayed by opium in some of its forms. Again, when secretion has become too copious, either from the administration of the depressant expectorants or in the natural course of the disease, opium may be used, not so much to

lessen secretion or to allay the troublesome cough, for while it does tend to check the secretion, we have other and more powerful and more safe agents for this purpose in the terebinthines and balsams. Lastly, I may mention, that the persistent dry, hacking cough, so characteristic of the presence of tubercle, and where the irritation of the terminal ends of the pulmonary nerve fibrils is ever present, may be treated with morphia, to the great relief of the patient. But to be efficient the drug must be given constantly, and of course in constantly increasing doses; and so it becomes harmful by destroying the appetite, and locking up the secretions, thus producing constipation, with all its attendant train of evils. Its evil effects in such cases may be minimized by combining it with vegetable bitters, and laxatives. These are all the important indications, I think, for the use of opium in pulmonary troubles, except perhaps one to which I shall advert later. You will notice that, though important, they are very few.

The contra-indications are legion, and I need not attempt even to enumerate them much less discuss them. I might perhaps just mention a point which cannot be repeated too frequently, though no doubt familiar to all of you, and that is that when large quantities of mucus are being secreted, and especially in children, opiates should be used with exceeding care, for fear of benumbing the nerve centres or nerves connected with them, thereby increasing the danger of an accumulation of mucus in the lungs, and a consequent drowning of the patient in his own secretions. Remember that opiates do not cure, they simply alleviate, and that you are "between the devil and the deep sea" when using them. They certainly do tend to check undue secretion, but a much more excellent remedy, in cases where secretion is too profuse, is *atropine*. This agent is very efficient in arresting the secretion of the bronchial glands. It is much more powerful than opium, or indeed any or all of the stimulating expectorants. It does not prevent cough, being a stimulant to the respiratory centre, and in this respect may tend to increase cough—an objection we shall speak of later. This remedy is not perhaps as frequently prescribed along with opium as it should be, and this is the other indication for the use of opium to which I said I would advert. They

do not destroy each other's action; thus the one produces a comparative dryness of the mucous membrane, while the other diminishes the irritability of the centre for coughing. Such a combination would then be useful in cases of catarrh, emphysema, and phthisis, where there is a free secretion of mucus. If there be a cavity in the lung upon which the profuse expectoration depends, it will not be so efficacious. This remedy, atropine, is especially useful in the cough and expectoration of phthisis, owing to its almost certain effect in checking the exhausting sweating of that disease. Though this is hardly the place to discuss the etiology of the night sweats of phthisis, if you will bear with me I shall interject a theory which seems natural as to the causation of this phenomenon, connected closely, as it is, with the cough of the disease, and therefore not perhaps too far afield in a consideration of expectorants.

In a condition of health the respiratory centre responds very promptly to any undue venosity of the blood. Being stimulated by the CO_2 of the venous blood, messages are sent to the muscles of inspiration, respiration is accelerated and the blood purged of the excess of CO_2 before enough has accumulated there to stimulate the sweat centres, so that undue sweating does not obtain. But in phthisis, the respiratory centre is worn out and greatly depressed, both by the cough during the day and by the natural depression which occurs during sleep; it does not respond so readily to the stimulation of venous blood, and in consequence the amount of CO_2 in the blood, may accumulate to such an extent that the sweat centres are stimulated before the respiratory centre responds to arterialize the blood, and thus are produced the profuse sweats which, may be noted, are so depressing to the patient. Now stimulate the respiratory centre and you will have placed it in such a condition that it will be able to respond to the action of venous blood; CO_2 will not accumulate, because respiration is nearly normal, and the sweat centres, lacking the influence of the CO_2 to stimulate them, remain quiescent, and the night sweats are obviated. It will be seen that the remedies of most repute in the night sweats of phthisis are precisely those which have been shown by pharmacologists to be stimulants of the respira-

tory centre, thus upholding the theory as given above. Among such remedies may be mentioned nux vomica, strychnia, atropia, hyoscyamus, Dover's powder, ipecacuanha, picrotoxine, zinc salts, and pilocarpine. Of these the most potent and the most reliable is probably atropine, which Fothergill says may have to be pushed to $\frac{1}{2}$ of a grain, though I have seen what were to the patient and friends alarming symptoms from $\frac{1}{100}$ grain of the drug.

The one drawback to these remedies, useful as they undoubtedly are in restraining the sweating, is that they sometimes leave the respiratory centre so sensitive, that the cough next day is greatly aggravated, so that what we gain in one direction, we lose in another. This may be partially obviated by combining the antihydrotic with opium, which use of that drug, you will observe has been already mentioned as one of the few indications.

If now we divide expectorants into two great classes, viz. : 1st, depressant expectorants, or those which depress the heart, lower the blood pressure and *increase* secretion; and 2nd, stimulating expectorants, which increase the action of the heart, raise blood pressure, and *diminish* secretion, we shall have a basis for the treatment of many of the pulmonary troubles we are called upon to relieve. In the first class we shall have the preparations of antimony, ipecac, lobelia, jaborandi, apomorphine, pot. iodide and the alkalis generally. In the second we shall have the salts of ammonium, nux vomica and its preparations, senega, squill, the balsams, the turpentine and their derivatives, sulphur, saccharine substances, and the acids.

Take now the condition of the mucous membrane in the first stage of bronchitis. What is its condition? It is congested, swollen, turgid and dry; and though the circulation, whether arterial or passive, may be greatly increased in the part, secretion is not up to the normal, the mucus is scanty and tenacious, the cough is ineffectual to dislodge the viscid phlegm, and may be very exhausting. What are the indications? To give stimulating expectorants, as ammonia or senega? No, but on the contrary, we should prescribe the nauseating or depressing expectorants, as ipecac, pot. iodide or some of the antimonial preparations, till the circulation is relieved, the skin becomes moist, and the

bronchial secretion is again established. This would be rational treatment; but how often would we find given to a patient in the condition I have described a mixture containing ammon. mur., ammon. carb., squill, the everlasting paregoric, with one of the balsams and syrup? You may not agree with me that anyone would give all stimulating expectorants, as would be the case in the mixture I have supposed; but I am certain that it is often done, regardless of the stage at which the patient is seen. So that your physician, instead of using his instruments of precision to the good of the sufferer, adds fuel to the fire, burking the cough with opium, and allows nature to heal, if fortunately she is able, not only the original lesion, but the one which has been aggravated by his careless, unscientific and routine prescribing. Milner Fothergill says, "Whatever the amount of pains required to procure relief, whether by expectorants sufficient in dose and sufficiently long continued; whether they have to be aided by producing an eruption on the chest by tartar-emetic ointment, or croton oil liniment; whether even by venesection; the first stage must be got over before the stimulating expectorants are of any avail." And then he goes on to relate the case of a patient, who went from one London hospital to another, and got the routine ammonia and paregoric mixture, till he at length got relief by some sensible man, I think Fothergill himself, though his modesty did not permit him to say so, giving him some tartar emetic, ipecac and acetate of ammonia for a few days, when he says "carbonate of ammonia and senega did him great good."

The effect of the lessening of the congestion of the mucous membrane is well seen in the stopping of an irritating cough by the patient's going out into the cold air, which lessens the calibre of the engorged vessels with which it comes into contact in the function of respiration, and thus lessens the irritation, and checks the cough, which however will be renewed as soon as the warm air of a room is allowed to enter the chest. This is an anomalous thing to patients, and I have heard them express wonder that they should cough in a warm dry air, when they did not out of doors. The reason is plain, and should teach us a lesson in rational therapeutics.

Time would fail me to speak of the adjuncts which may be useful in this stage, such as poultices, vapors, inhalations, respirators, liniments, plasters, cathartics, etc.

When the first stage is past and secretion is free, then, and not till then, will your ammonia and squill and their congeners do good. And just here I would like to mention that I have found much benefit from the administration of digitalis in congestion, not only in that of cardiac origin, where it is strongly indicated, but also in that of the first stage of bronchitis. It seems to give the patient relief both by strengthening the heart and contracting the vessels of the lungs.

I have mentioned, only to condemn, the practice of suppressing the cough in all cases. Is not a cough often salutary? Is it not nature's method of throwing off some foreign or injurious substance, whether it be dust which has been inhaled; mucus which has been secreted, and is lying on the surface of the mucus membrane, leading to irritation, hidden or purulent matter lying away in a cavity? Should we always check a diarrhœa, irrespective of its cause? Is it not often salutary? Yet some incline to burking it, whether it be uræmic or bilious, or the result of irritating ingesta or undigested food. Few of us would like to admit such careless or unscientific practice, and yet the great Milner Fothergill owns up to having killed his first patient, who had Bright's disease, by foolishly, but with the best intention in the world, checking her diarrhœa. So with cough. It is, in perhaps a great majority of cases, salutary, and should not therefore be stamped out, but judiciously controlled and even sometimes sustained; and when we shall have done that, without, to any harmful extent, interfering with the other functions of the body, we shall have done our part as physicians, acting as the handmaidens of nature, stepping in where she, in her attempts at healing a breach, goes, as she often does, too far. I had intended making some notes on the reflex action of certain agents, as cold and heat, blisters, etc., applied to the surface of the body, on the pulmonic circulation; but interesting as such considerations would be, I shall be obliged, for want of time, to conclude this paper by referring briefly to the pathology of cough, and to some kinds of cough which I have not already spoken of. I do this because,

in a sense, cough lies behind and is at the root of all that is practical in our treatment of pulmonary troubles by expectorants. Cough is, as I have said, nature's method of ridding the system of some foreign body or relieving dyspnoea; or is the result of irritation of some part of the body, whether in the respiratory tract or not, which is more or less closely connected by the nervous system, with the respiratory centre, upon the undue irritation of which cough a modified form of respiration depends.

I need not recapitulate as to the cough of congestion, nor of phthisis, or pleuritis, but pass on to consider other forms. And first as to pharyngeal cough. Here there is irritation of a part where the nerves are chiefly expiratory; hence we have a cough which is loud, explosive, prolonged and barking; and inasmuch as here the digestive and respiratory tracts cross one another, it is frequently accompanied, by retching and vomiting.

This irritation of the pharyngeal tract, supplied by the glosso-pharyngeal, sometimes acts as an adjunct in the setting up of a cough, by aiding the irritation of the respiratory tract, which may not have been in itself sufficient to cause cough. Thus certain persons with an elongated uvula cough as soon as they lie on their backs because, the uvula falling back upon the pharynx or pillars of the fauces, adds its irritation to that of the respiratory passages, and their combined action is sufficient to cause cough, which, when the sufferer turns upon the side and thus lifts the uvula off the region of the glosso-pharyngeal, ceases. In this form of cough, in addition to the remedies given to allay the bronchial or other more remote irritation, mucilaginous substances, as jujubes, linseed tea, marshmallow, etc., are very useful in forming a protection to the irritable mucous membrane of the pharynx from dust, cold air, etc.

Regarding the quality of any cough, it is worthy of note that when the irritation giving rise to it is upon a part of the tract where the nerves are expiratory, then we have a loud, explosive, prolonged, barking cough, as the pharynx, larynx, trachea and large bronchi; while cough due to irritation of those parts which have nerves, chiefly inspiratory, is short and hacking, as the lungs and costal pleura.

As to stomach cough, irritation of the nerves of the stomach, the respiratory tract being healthy, will not produce cough, but if the larynx and trachea are already in an unhealthy and irritable condition, then the irritation of the stomach may be sufficient to set up a cough. Thus in certain forms of dyspepsia, accompanied at a certain period after meals, or before meals, by a cough, which is liable to be accompanied by retching or by simple regurgitation of portions of the partially digested food, the stomach is at fault, as are also the larynx and trachea. So in the morning cough of drunkards. Here, from continuous stimulation, the mucus membrane of the stomach is in a state of chronic inflammation. It pours out large quantities of mucus, which accumulates during the hours of sleep. When the individual awakes the respiratory centre is more active; the irritation of the stomach by the mucus, and its inflamed condition, added to a probable irritable condition of the respiratory tract, succeed in bringing about long convulsive fits of coughing. The toper on his way for his morning dram may be seen to lean against a post or grasp at railings to support himself during this paroxysm. He succeeds after a time in bringing up, partly by coughing, from the bronchial tubes, and partly by vomiting, from the stomach, a quantity of mucus, when he wipes his suffused and reddened eyes, and passes on relieved. Here the treatment should be mainly directed to the catarrhal condition of the stomach, which wants toning up with vegetable bitters and strychnia, as well as sedating with bismuth and soda. The interdiction of alcoholic beverages, where the trouble originates in their use, is of course necessary, with what results will depend upon how far your patient will submit to follow your injunction. Other varieties of cough, such as ear, tooth, nose, liver and spleen cough, are of interest, chiefly as showing how a stimulant may be conveyed from parts of the body not functionally connected with the respiratory tract, and being registered by the respiratory centre, produce cough. The indications for their treatment are obvious.

DR. PAVY, who recently retired from the office of Senior Physician at Guy's Hospital, has been presented with a handsome piece of silver plate, the gift of students of the hospital.

THE ETIOLOGY OF PUERPERAL FEVER AND THE METHOD OF PREVENTING THIS DREAD CONDITION.

BY J. ALGERNON TEMPLE, M.D., M.R.C.S.,

Being a portion of the Presidential Address at the Meeting of the Ontario Medical Association.

(Continued from page 299 of last issue.)

Time will not allow me to enter into the subject as fully as its importance demands, and you must pardon me if I am particularly brief.

We are all general practitioners. We all have to do with midwifery and have all experienced the anxiety caused by cases of obstetrics, especially by those complicated with puerperal fever. It is time this rather vague name was dropped, and one more definite adopted. The term "puerperal infection," as suggested by Dr. Garrigues, appears to me to be very suitable. Firstly, then, what is the nature of the febrile and inflammatory processes that frequently follow child-birth? And, secondly, are these changes due to some morbid condition generated within the woman's system, or do they come from without? If they come from within, why is not every woman similarly affected? If they come from without, what is the nature of the virus? Where does it come from, and how best can it be prevented? These are questions I have frequently put to myself, and often, indeed, have I found them difficult to answer.

Firstly, I do not believe that the so-called puerperal fever is a specific disease, peculiar to the lying-in condition, but that it is identical in every way with surgical septicæmia, or pyæmia, due to the activity and development in the system of micro-organisms, which, when introduced under favorable conditions, produce the symptoms of child-bed fever. These micro-organisms, being once in the woman's body, so overwhelm the system by their rapid development as to produce death. No pathological changes have ever been discovered in puerperal fever differing from septicæmia in general, except in situation. Different women are affected in different ways. According to Pasteur, the innocuous micrococci that live in the vagina become dangerous if they are developed in great numbers, and the different symptoms are to be explained by the different organs to which these microbes are carried. Some go to a gland, become arrested,

form an abscess and are evacuated. Some find their way into the general peritoneal cavity and from thence into the general system. Another explanation of the difference in the symptoms is the greater power of resistance of one constitution than another. That the symptoms are, in the majority of cases, due to the introduction from without of some poison is, I think, demonstrated clinically by the fact that since the introduction of antiseptics into midwifery, we have much less of puerperal fever and its fearful results. Undoubtedly the retention in the uterus of clots, pieces of membrane, or placenta, forms a starting point in many cases. But, on the other hand, look at the bruised, perhaps torn, vagina, where we have a properly prepared ground for the reception and development of these dangerous organisms, especially so in the primipara.

Bacteriologists deny to-day that the woman herself can produce the poison. The germs must be brought from without to cause putrefaction and infection. We know of the existence of microbes in the vagina of a healthy woman. They, however, do her no harm, because the vagina and cervix are protected by their epithelium, and they cannot enter into her system. But when this protective covering is destroyed, they find an entrance and may produce all the train of symptoms. If this is the case, it is our duty to prevent by every means in our power the *introduction* or development of these microbes. The altered condition of the patient's blood during pregnancy, the general plethoric condition, the increase of the colourless elements and decrease of the blood corpuscles, the increase of the leucocytes and surplus of fibrine, are strong predisposing causes to inflammatory diseases.

This poison may be brought from patients similarly affected, from decaying vegetable matter, from some of the zymotic diseases, from a dung-hill, cess-pool, sewer, or from stagnant water. Dr. Goodell has lately suggested, as a possible source of the poison, an imperfect closet, in which the patient may have sat during labor for the purpose of evacuating the bladder or bowels, and he very properly warns us against this danger. The poison may be brought to the patient by the hands or instruments of the doctor, midwife, or nurse; by a sponge or dirty soiled rag used to protect the bed. It will cling to

our fingers under the nails, and on making the necessary vaginal examinations we introduce and deposit it in the vaginal canal, from whence it becomes rapidly absorbed.

I do not believe in the air being a medium by which the poison is carried from patient to patient. I do admit that the air in a badly drained and ventilated house, or over-crowded lying-in hospital, may become the medium; but it is because of the unsanitary condition of that particular place that the air may become so loaded with the virus as to readily infect those breathing and living in it. In speaking of the air as a medium, I allude to the air outside our dwellings, and my contention is, I think, proved by the fact that of two physicians living and practising in the same locality, one may have the disease among his patients, while the other has not. The one carries the poison through the medium of his hands from patient to patient, because he fails to observe the strict rule of antiseptics. The other is scrupulously careful, and he has no cases. A living ferment, once introduced into the system, is capable of reproduction, providing the proper conditions for its development are present.

After this brief review of the nature of the disease, it remains for us to see how we can best prevent its onset and spread.

Firstly, then, before making any vaginal examination, the physician should thoroughly wash and disinfect his hands in hot water and soap, with some disinfectant in it, carefully cleaning his nails. He should also be provided with some such lubricant, as carbolized vaseline. He should have prepared a solution of perchloride of mercury, of the strength of 1 to 2,000, in which, before and after he has made an examination, he should immerse his hands, first washing them with soap and water. He is then ready for his next examination. My own plan is as follows: On entering the patient's room, and previous to examination, I thoroughly wash and cleanse my hands and nails in simple hot water and soap. I then dry them and immerse them in the perchloride solution, which I have previously prepared. I next anoint my fingers with carbolized vaseline, and make the examination. After its completion, I again wash my hands in plain hot water and soap, and again immerse them in the mercuric solution. I may say that I never

depart from this procedure when attending a case of labor. I am also particular that the nurse should be equally careful about herself. I absolutely forbid her ever to use a sponge, or a soiled piece of linen or rag. I am aware that many practitioners advise the use of an antiseptic vaginal douche before delivery. I am not in the habit of doing so. They do it for the purpose of removing those microbes which are normally found in the vaginal mucus, so as to prevent their possible entrance into the system through rents and abrasions of the vagina.

After delivery, every portion of placenta, membrane, or clots, should be entirely removed and firm uterine contraction secured. A careful inspection of the vulva for lacerations should then be made, and if any exist, even though small, they should be carefully washed with a weak perchloride solution, and brought closely together with sutures. This point in practice cannot, I think, be too rigidly insisted on; for I feel satisfied that the neglect to repair lacerations is frequently the cause of puerperal infection. By immediate stitching we secure primary union in the large majority of cases, and we seal up those open-mouthed vessels that so rapidly absorb all poison brought in contact with them. I also wash out the uterine cavity with a 1 to 5000 solution of mercury, when for any reason I have had to introduce my hand within it. The after-treatment consists in the use of disinfectant douches every four hours, for just as many days as there seems to be need for them.

I will venture the opinion, in concluding this short monograph, that the physician who scrupulously follows out antiseptic midwifery in all its details, will very rarely indeed have to contend with puerperal infection.

The summary of the whole is this: Firstly—Puerperal fever is a preventible disease in the large majority of cases. Secondly—By strict antiseptic precautions the spread of the disease may be prevented. Thirdly—I believe it to be reasonably safe to attend a fresh case of confinement even when we have a case of puerperal septicæmia under treatment, provided before going to the bedside we change all our clothing, and thoroughly wash and disinfect our hands and instruments in a solution of perchloride of mercury. Fourthly—I am of opinion that the most fre-

quent channel of infection is *through rents and abrasions* of the maternal passages, and too much attention cannot be given to secure primary union in all cases of lacerations, even when they are small.

Selections.

CHLORAL HYDRATE, ERGOT, AND NITRIC ACID IN THE TREATMENT OF WHOOPING COUGH.

BY R. STEVENSON THOMSON, M. D., C.M.B. SC.,

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The observations of which the following remarks give a short summary were undertaken about seven years ago, during my residences in the City of Glasgow Fever Hospital, with the object of ascertaining, as far as opportunity offered, the efficacy of these drugs in cutting short the duration of whooping-cough, in reducing the severity and number of the paroxysms, or in favorably modifying the course of the attack in any way whatever.

The notes were made in part by myself, and in part by trained nurses who had been associated with whooping-cough for many years, and were therefore familiar with its different aspects. The patients were kept under observation for eight or ten days without special treatment; the drug to be tried was then administered and continued for two to three weeks, and finally the medicine was stopped, and the patient passed through the last stage of his illness without any treatment of a medicinal kind. The day was divided into two parts, from eight a.m. till eight p.m., and from eight p.m. till eight a.m. Every cough was marked on a card provided for the purpose, and the medicine was given at regular intervals both day and night. When a child had several sharp paroxysms in rapid succession, these were reckoned a single cough. Lastly, as a case progressed, notes of the severity of the paroxysms were made by myself.

Sixty cases were treated with nitric acid, a method of treatment introduced by Amordi, of Montreal, Can. The preparation always used was the dilute acid of the British Pharmacopœia made up with syrup of oranges and largely diluted with water.

A dose of this mixture, corresponding to twenty minims of the dilute acid, was given every few hours to all children above two years of age for a week after the administration was begun, and thereafter every two hours till the treatment was stopped. Children between one and two years were given half this dose, and younger children a fourth. In none of these sixty cases was I able to convince myself that this agent had the very slightest effect in reducing the number of paroxysms or in shortening the ordinary course of this disease. The severity of the paroxysms was also unaffected. In nearly all the cases treated with nitric acid, as well as in those treated with hydrate of chloral and ergot, a progressive improvement was noticeable, beginning a few days after the admission and continuing till the end of the case. This no doubt was due to the fact that the hospital is situated in the country, so that the children have every advantage of fresh air and the more perfect hygienic surroundings. Improvement under these conditions is evidently the normal course of the uncomplicated disease, and this was neither advanced nor retarded by the nitric acid treatment. One point of importance observed in connection with the administration of this drug was the ruddy and healthy appearance of the children, in this forming a marked contrast to those treated with chloral or ergot.

The death-rate among the patients treated with nitric acid was high, being a fraction over twenty-three per cent. Seven per cent. of the deaths occurred among children under twelve months, while the ages of the others ranged from one year to five. The immediate cause of death among the younger children was convulsions, while the older ones were mostly carried off by catarrhal pneumonia. Of course, when complications such as these occurred they were treated on their own merits.

The use of ergot in the treatment of whooping-cough was first recommended by Dr. Hampel (*Practitioner*, vol. i. 263). This drug, in the form of the liquid extract (*British Pharmacopœia*), was administered to forty-nine children in doses of ten minims every four hours when the patient was under two years of age, and when the child was older than this in doses of twenty minims at the same intervals. Of the cases thus treated, a little over sixteen per cent.

died, two of the deaths occurring in the children under twelve months. As in the case of the nitric acid treatment, it was impossible to convince myself that the ergot had any beneficial influence on the disease; the cause, number, and severity of the paroxysms were quite uninfluenced by the medicine.

During the past twenty years chloral hydrate has been more or less extensively used in the treatment of whooping-cough, and, judging from the literature, with greater success than most other drugs which have been advocated at various times. Ninety-five children were treated with chloral hydrate, and of these sixteen per cent. died. It is of importance to note in this connection that only one child died from convulsions, a fact of consequence when we consider the number of children that die from convulsions following on whooping-cough. As in the case of the other drugs tried, chloral hydrate seemed to have no special influence on the course of the disease. The steady improvement which was noted from the first in nearly all the cases being uninfluenced as far as the number of paroxysms was concerned, yet it was easy to satisfy one's self that though the number of the attacks was not diminished, their violence was very greatly reduced, and, in addition, I am inclined to think that the tendency to convulsions was greatly diminished. The usual dose for children over two years was five grains every four hours, and half that quantity to children under two years. The children seemed to stand this pretty free and continuous exhibition of chloral very well, yet it is better to avoid it when there is a tendency to vascular depression.

To sum up: None of these drugs is a *specific* for whooping-cough. Ergot is absolutely useless. Nitric acid is of no use as a specific, but its well-known tonic action makes it a useful drug when combined with the other means usually employed to improve the health of children suffering from whooping-cough. Chloral hydrate is of considerable service in so far as it mitigates the violence of the paroxysmal cough and diminishes the tendency to convulsions, but it has no influence on the number of paroxysms, nor does it shorten the attack.—
Archives of Pediatrics.

ANTIPYRIN AND ITS INCOMPATIBLES.—Messrs. E. J. Millard and A. Campbell Stark give the following list of incompatibles as determined by their experiments:—

- Acid. carbolic., precipitated in strong solution.
 - Acid. hydrocyan. dil., yellow coloration.
 - Acid. nitric. dil., faint yellow coloration.
 - Acid. tannic., white, insoluble precipitate.
 - Alumen (ammonia), deep yellow coloration, fading and precipitating.
 - Amyl nitrite (acid), green coloration.
 - Arsen. iodid., precipitate.
 - Chloral hydras, precipitates in strong solution; no apparent action in dilute.
 - Cupri sulphas, solution turns green.
 - Decoc. cinchonæ, precipitates.
 - Ext. cinchon, liq., precipitates.
 - Ferri sulph., brownish-yellow color, deposits on standing, and solution turns red.
 - Glycerinum acidi carbolicæ, precipitates.
 - Glycerinum acidi tannici, precipitates.
 - Hydrarg. perchlor., precipitates, soluble in excess of water.
 - Inf. catechu conc., precipitates.
 - Inf. cinch. acid., “
 - Inf. rosæ acid., “
 - Inf. uvæ ursi., “
 - Liquor arsenii et hydrarg. iod., precipitates.
 - Liquor ferri perchlor., blood-red coloration.
 - Liquor ferri pernit. “ “
 - Liquor ferri persulph., “ “
 - Liquor potass. permang., reduction takes place quickly.
 - Sodii salicylas (solid), liquefies.
 - Spirit. ætheris nitrosi (acid), green coloration.
 - Syrup. ferri iodid., reddish-brown “
 - Tinct. catechu, precipitates.
 - Tinct. cinchonæ, “
 - Tinct. cinchon. co., “
 - Tinct. ferri perchlor., red coloration.
 - Tinct. gallæ, precipitates.
 - Tinct. gum. rubri (Eucalyptus kino), precipitates.
 - Tinct. hamamelidis, precipitates.
 - Tinct. iodi., precipitates, soluble in excess of water.
 - Tinct. kino, precipitates.
 - Tinct. laricis, “
 - Tinct. rhei, “
- Dilute Acids.*—With dilute acids no apparent change takes place, as with sulphuric, hydro-

chloric, nitric, and phosphoric acids, antipyrin forms soluble compounds (Gay and Fortuné).

Nitrites and Nitrous Acid.—The green coloration sometimes produced when antipyrin is mixed with spirit of nitrous ether, is due to the formation of the compound isonitroso-antipyrin, that is, antipyrin having an atom of hydrogen replaced by NO. By the action of the acids upon this body, a small quantity of cyanogen is produced, and it is stated that unpleasant symptoms have been traced to a mixture of antipyrin and spirit of nitrous ether. According to reporters, the compound itself is inert, and the cyanogen formed from it, by the acids of the stomach, is produced in too small a quantity to be dangerous. Isonitroso-antipyrin is only formed in the presence of free nitrous acid; a neutral spirit of nitrous ether may therefore be safely dispensed with antipyrin. But it should be remembered that the ethyl nitrite is itself speedily decomposed by water, with the formation of free nitrous acid. We would therefore recommend that the occasional practice of prescribing the two together should be discontinued. The same remarks apply to commercial amyl nitrite.

Tinctures.—We found that no precipitation in any case took place with tinctures if spirituous solution of antipyrin was employed, or if the salt was added to the tincture. The addition of water precipitated the antipyrin compound. In connection with the precipitation with astringent preparations, it should be borne in mind that antipyrin behaves with reagents exactly as an alkaloid, and is therefore precipitated by tannic acid and its congeners. The same observation applies to the astringent decoctions and infusions.

Chloral Hydrate.—The fact that chloral hydrate and antipyrin react with each other was pointed out some time ago. From a number of experiments we are of opinion that this compound of antipyrin and chloral is not appreciably formed unless concentrated solutions are employed. We conclude that the reaction is not complete in aqueous solutions, and does not appreciably take place if dilute solutions of the two bodies be employed. As the chloral-antipyrin is, according to Herr Reuter, physiologically inert, the question of its formation under the ordinary conditions likely to occur in pharmacy appears to us to be of some importance.

Sodium Salicylate.—The fact that sodium salicylate and antipyrin react when in powder has been several times pointed out. No reaction appears to take place in solution.—*American Druggist.*

TWO CASES OF VULVO-VAGINITIS COMPLICATED BY ARTHRITIS IN YOUNG GIRLS.—Dr. Henry Koplik, has reported the cases and reviewed recent literature bearing upon the subject. The case was in a child aged five years, who had been suffering two weeks from mucopurulent discharge from the vulva. It was found to contain gonococci. The patient complained of some uneasiness in the præcordial region, pain in the right shoulder and wrist, and three days before it had complained of pain in the right knee. On coming under observation the child was found ill-nourished, anæmic, the right shoulder very painful, no swelling nor rise of temperature. The right wrist was also painful. The knee was painful and swollen; the touch indicated a rise of temperature; there was an effusion into the joint; the patient walked with the greatest difficulty. There was a thick greenish-yellow, vulvo-vaginal discharge. Temperature 102° F. per rectum. The heart was negative. The swelling of the knee somewhat subsided under treatment and rest, the discharge continued, and the patient passed from under observation. The second case was in a child three years and a half old. Her guardian noticed a discharge from the vulva, loss of appetite, redness, swelling, and pain in the right ankle. There was no history of traumatism. Examination showed a muco-purulent discharge upon the vulva, the right ankle swollen and red, some rise in the temperature at the joint, no signs of fluid, manipulation very painful. Under treatment the redness and the pain in the joint decreased, but the discharge from the vulva remained, and later the acute affection of the joint passed off. There was some relaxation of the ligaments of the ankle-joints, but not sufficient to interfere much with function, although a reinforcing shoe was worn. The joint so far improved that one would not have believed it had been affected, but through some neglect the child got a blennorrhœa, and was sent to an eye infirmary, where he lost sight of the case.

Gonococci were found in the mucus and pus on the vulva. The author avoided as much as possible the use of the term gonorrhœal rheumatism. He believed the arthritis might complicate other severe suppuration, and cited the case of an infant at the breast. Unlike in adults, the minor joint-affections in children passed off within a reasonable time. The cases were not to be explained by the circulation of the gonococcus in the blood.—*Archives of Pediatrics.*

ANTISEPTIC SYRINGING.—By Arthur Neve, F.R.C.S. Eng. Syringing is frequently employed to diminish the septicity of a suppurating cavity or sinus. To obtain the full action of an antiseptic, it is desired to bring it into contact with every part of the wall. Hyper-distension has been frequently recommended as the only way of accomplishing this purpose. It is, indeed, a difficult task to syringe effectually a tortuous sinus with numerous pockets and branches. Yet we ought to be aware of hyper-distension. At comparatively low pressure fluid will dissect its way along the plane of muscles or under aponeuroses. In this way less pressure than is needed to reach the furthest ramifications of a sinus may open up fresh areas of healthy tissue. By careless syringing I have seen the extent of a sinus much enlarged. Above all is it likely to do damage among the recent adhesions of an operation wound. In short, if there is not provision for the fluid to escape freely at the moment of syringing, the surgeon must bear in mind the capacity of the cavity or sinus; and remember that if this is exceeded the whole force will practically be exerted against the weakest part of the wall, and that suppuration will follow along the new track opened up by forcible syringing.—*Lancet.*

A PLEA FOR THE GENERAL ADOPTION OF THE TRACTION FORCEPS.—Dr. Joseph Hoffman, Philadelphia, Pa., read a paper with this title, before the section in obstetrics and gynecology, at the recent meeting of the American Medical Association. He said: "The forceps had a strictly logical indication, not as a means of saving the physician's time or because the patient desired its use. Dilatation being

tardy or imperfect, the forceps was indicated, and was a conservative agent both for mother and child. Too often the forceps was used as a lever or tongs, and not for traction alone. In the ordinary forceps certain forces which acted through the fetal body were lost. If there was malformation of the maternal pelvis, this loss of force was exaggerated. The aim should be to imitate nature and use traction in the axis of the pelvis. When this principle was carried out there was no danger of rupturing the perinæum, as might be supposed, for the traction rods worked nearly in a parallel with the blades of the instrument. The traction forceps might be used for either high or low operations. For the former it was far superior to the ordinary instrument, especially if the pelvis was deformed or the head had the occipito-posterior position. The speaker now used the traction forceps for all cases in which instrumental (*i. e.*, forceps) delivery was indicated. The force was applied at the centre of the fenestræ, and here there was the greatest mechanical advantage."—*New York Medical Journal*.

DEATH FROM TIGHT LACING.—Happily the practice of tight-lacing, though still a fruitful source of illness, does not now occupy a foremost place among the recognized causes of death. The fact that it does not occasionally stand in this position, however, should be noted by those foolish persons whose false taste and vanity have made them the suffering devotees of a custom so injurious. It should be remembered also that, whatever may be said of the more evident effects, the indirect consequences of thus tightly girding the body cannot be exactly estimated. They cannot but be hurtful. The veriest novice in anatomy understands how by this process almost every important organ is subjected to cramping pressure, its functions interfered with, and its relations to other structures so altered as to render it, even if it were itself competent, a positive source of danger to them. Chief among the disorders thus induced are those which concern the circulation, and it is to the labouring incapacity of a heart thus imprisoned and impeded both as regards the outflow and return of blood that we must attri-

bute such disastrous consequences as occurred a few days ago in a Berlin theatre. One of the actresses, who had taken part in an evening performance, and then seemed to be perfectly well, was found next morning dead in bed. Subsequent examination of the body showed that death was due to syncope, and this was attributed to tight-lacing, which the deceased had practised to an extreme degree. As regards the persons immediately affected, the warning conveyed by this incident is obvious.—*Lancet*.

LEPROSY IN CENTRAL AFRICA.—In one of Mr. Stanley's letters he incidentally refers to a case of mutilating disease having a strong resemblance to leprosy. This was found at a point in his last journey where no white man or Arab had visited before him, so far as he could learn. The diseased person, an aged female, was alone at the time, apparently an outcast and subjected to a quarantine such as might be formed by all the rest of her tribe running away from her. Linguistic difficulties prevented Stanley from getting a satisfactory history of the case, so that the verification of his diagnosis of leprosy must be left to some future explorer of the African Lakes country. The explorations of Captain Lovett Cameron about Lake Tanganyika, nearly due south from the point visited by Stanley, as referred to above, brought out the fact that a leprous tribe was believed to exist on the shores of that lake. It is the belief of the natives that the disease may be contracted by drinking the water of the locality where the afflicted tribe abide. The other natives shun that tribe and will not intermarry with its members; the lepers themselves are forbidden to depart from their district. They are chiefly located upon a high rocky island in the north-westerly part of the lake. Captain Cameron did not himself see these people, but he was informed that the disease produced mutilations of the extremities, the greater number of its subjects having lost a part of a hand or foot, while nearly all had been deprived of the sight of one or both eyes, and it was quite a rarity, he was told, to meet with a person not suffering from blindness in some degree.—*New York Medical Journal*.

FASHIONS AND CUSTOMS OF THE DARK CONTINENT.—There is a sad monotony in our European fashions. Even the so-called changes are often fugues on a trivial theme, or thinly-disguised variations and reproductions of forgotten trivialities. Our new communications and lively interest in the gentle inhabitants of Central Africa may suggest some startling novelties. Besides the graceful extravagances of their head-dress—which, however, hardly beat those of the seventeenth and eighteenth centuries, reconstructed for the public edification a few years since by Mr. Lewis Wingfield, and which may yet live again—there are many varieties among our new African *protigés* of the way they wear their heads. The ruling families of the Munbuttu tribe flatten their skulls so as to elongate their heads. The Bari apply pressure just in front of the ears so as to heighten the head in that place. The Beli distinguish themselves by extracting the four front teeth of the lower jaw. Then there is a variety of ways of wearing a tail, which beat the Court train of the modern beauty in simplicity and perhaps in grace. The Madi wear cotton tails, which swing when they dance. Elsewhere a lady limits her costume to a twig arranged as a tail, and manages to seat herself at a court function with this appendage in a graceful and dignified manner without throwing it over her arm, and without the intervention of a chamberlain. In the matter of eating, they are catholic and omnivorous, and nothing comes amiss, from a banana—which furnishes food, and when fermented, drink—to a fat pig or a deceased wife's sister, who give little trouble there to legislators. Owing to their reticence as to their burial customs—for which dark reasons are suggested—it is difficult to pursue this branch of anthropological and osteological research. It will be seen, from the graver gleanings which we publish elsewhere, that there is much to interest the physician and the anthropologist. Dr. Emin Pasha's diary is a mine of dry but instructive reading on this subject.—(*Emin Pasha in Central Africa*) *British Medical Journal*.

RETROVERSION OF GRAVID UTERUS.—Dr. Halliday Croom (*Edin. Med. Jour.*) records an exceedingly interesting case of retroversion of

the gravid uterus which terminated fatally. The case was very difficult of diagnosis, as the following history will show. The patient was sent to the hospital under the impression that she was suffering from an ovarian tumor complicated with pregnancy. She was 43 years old, had had nine children and several miscarriages, last child 14 months ago. She had missed three menstrual periods, though during the whole time there had been every day or two a slight discharge of blood. Her abdomen began to rapidly increase before the third period. She had passed water irregularly, having sometimes incontinence and sometimes difficulty in passing. On examination an even smooth tumor reaching midway between the umbilicus and ensiform was found, moderately tender, dull on percussion, with resonance in flanks. A well-marked bruit could be heard all over.

On vaginal examination the posterior vaginal wall projected, and behind the posterior fornix was a large irregular doughy mass; the cervix could not be felt; through the anterior vaginal wall a similar boggy mass could be felt. A catheter was passed, and although the instrument passed up to the ring and was introduced three times, there was no result. Later on the same day, however, catheter being again passed, drew off 116 oz. of urine, which was ammoniacal and contained blood and pus. The tumor became slightly smaller and less tense, but otherwise remained unaltered except that the bruit was less distinct.

Dr. Croom considered that the most probable diagnosis was a pelvic tumor complicated with pregnancy and hydramnios or myxoma of chorion. The fact of the drawing off of the urine not causing the tumor to disappear, and the well-marked soufflé being against its being distended bladder, and the size of the uterus being much greater than normal at the third month, against normal pregnancy. The same night the patient became delirious and comatose, and died next day.

A *post mortem* examination was made and the parts frozen and cut, drawings of the sections being appended to the paper. The following condition of parts was found:—The uterus was gravid, retroverted, and incarcerated in the pelvis. The abdominal tumor, was the distended bladder containing urine and blood-clots.

The lower portion of the bladder was completely shut off from this upper distended portion, by compression of the bladder walls between the uterus and bony pelvis. The part compressed included the trigone, except a small part near the left ureter, which opened into the distended portion; the right ureter opening into the compressed portion. The urethra was not compressed or distorted, thus the catheter when first passed went into the empty portion and then coiled on itself. When passed the second time the previous pelvic examination, by displacing the uterus, had opened a passage between the two portions, and the instrument passed into the bladder, but probably became choked by blood-clot after some urine had come off.

An unusual point was the condition of the cervix; it was not high up, but could not be felt on vaginal examination because of its condition, being so thinned out as to be unrecognisable, thus differing markedly from the condition usually depicted in retroversion, when it is shown as solid and projecting, and by its own pressure on the urethra or bladder, giving rise to retention. There was hydronephrosis of both kidneys, but more especially of the right, whose ureter opened into the compressed portion of the bladder, the patient undoubtedly dying of uræmia.

The most instructive point about this is that it teaches us that in retention of urine from retroversion of gravid uterus the obstruction is not always in the urethra, and that the repeated passage of a catheter without any result does not negative the possibility of an abdominal tumor in these cases being a distended bladder.—*Birm. Med. Rev.*

PYRETICS.—As a contrast to the numerous antipyretics recently introduced, another new substance deserves mention, viz.: tetrahydro-beta-naphthylamine, which has been found by Filehne to possess the property of raising the temperature of the body by several degrees. It is presumed that this compound, or others of the same nature that may be discovered hereafter, will be found of practical use in therapeutics.—*American Druggist.*

THE
Canadian Practitioner

A SEMI-MONTHLY REVIEW OF THE PROGRESS
OF THE MEDICAL SCIENCES.

Contributions of various descriptions are invited. We shall be glad to receive from our friends everywhere current medical news of general interest.

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THE CANADIAN MEDICAL ASSOCIATION.

The Canadian Medical Association was organized about twenty years ago, and the first meeting was, we believe, held in Quebec. Its history is, therefore, pretty well known to many of our active practitioners. It is exceedingly important, from a national standpoint, that it should prosper. Its prosperity can scarcely be considered to have been of a very progressive character. Some of its meetings have been remarkably successful in every respect, others have met with only a limited amount of success, in numbers at least. The reasons are, of course, well known; we have a large country which can scarcely be called full at the present time. It is a long distance from Halifax to Victoria, and meetings at either end of this immense tract are apt to be rather thinly attended; one of the meetings held at Halifax was an example. The meeting last year at Banff, on the other hand, was comparatively large, very instructive, and exceedingly enjoyable; and was probably the most thoroughly representative congress of Canadian Physicians that this country has even seen. It was really a great pleasure as well as a high privilege to meet at that time such a body of practitioners gathered from all parts of our great Dominion.

The largest assemblages have generally been found in Montreal and Toronto, with Hamilton, Ottawa, and London not far behind. We hope our esteemed president of the past year, Dr. Harry Wright, of Ottawa, will gather the clans of his mountains and valleys and appear at the

next meeting in full force. We have heard good reports from that district and hope to have a full representation. Our friends in Montreal are working with a will, and are likely to contribute largely towards the success of the meeting. Hamilton contains many of the veterans of the Association, who will undoubtedly do good work as on former occasions. The cities and towns farther west contain large numbers of loyal supporters who are likely to prove their allegiance by rendering material assistance.

The twenty-third annual meeting will be held in Toronto on the 9th, 10th, and 11th of September next. The incoming president, Dr. James Ross, has already done much to assure its success. A large and influential committee of arrangements has been organized, and great efforts will be made to give our visitors a warm and brotherly welcome. We hope to see among those visitors large numbers from the far east and the far west. Much will depend on the individual efforts of members in all parts of the Dominion. We would feel much disappointed if a large proportion of our generous and hospitable friends in Winnipeg failed to put in an appearance. We might say the same respecting the physicians of Manitoba, the whole Northwest Territory, and British Columbia. Turning to the east we will remember that fair promises were made by members from the Maritime Provinces, and we sincerely trust that they will be remembered. Dr. James Bell, of Montreal, the able, indefatigable, and courteous secretary, requests members intending to present papers to notify him at as early a date as possible.

THE ONTARIO MEDICAL COUNCIL AND ITS EXAMINING BOARD.

The appointment of Dr. Oldright as an examiner in Chemistry, was one of those marvellous acts on the part of the Ontario Medical Council the reasons for which it would be difficult for any ordinary mortal to comprehend. The doctor never made any pretensions to any special knowledge on this subject. Not a solitary member of the Council had the slightest reason to suppose that he alone of the University Medical Faculty was full of chemical lore.

The Council had decided that the examinations in chemistry were to be made more practical in their character. Not one of them thought that Dr. Oldright was the best man to carry out their wishes. They were distinctly told by the representatives of the University that this was not the subject which should be given to him, and yet they voted almost to a man against those representatives who were in a position to know what they were talking about. Why, then, did they do it? No mortal of this sphere can tell.

Are the members of the Council perfectly careless and indifferent as to the fitness of the examiners for their various positions? No! We must do them justice, and say that they were exceedingly careful as a rule, and as a consequence, they have chosen, on the whole, a good Board. Unfortunately, they discovered at the last minute that the Medical Faculty of the University of Toronto had no member of its teaching staff on the Board. Then, again, they were confronted with the idiotic rule which prevents a teacher of chemistry from examining on that subject. Whether the fathers of this law feared that an examiner might have too intimate a knowledge of his subject, we know not, but there it stands as an obstacle in the way of proper appointments. The Council made choice of an examiner—Dr. Oldright—a man eminently qualified for such a position, if the right subject were assigned to him. This latter consideration, however, was altogether too insignificant for this great body to spend much time over. They were in a hurry, they had chosen their man; they had found a subject for him; they had thrown aside one of the most conscientious and capable examiners that their Board had ever contained, but then he didn't own a school or a territory; therefore, that didn't matter. The bill was full; the Council was happy.

The following day, there appeared in the daily press an intimation that the name of Dr. Oldright was substituted for that of Dr. Acheson, as examiner in Chemistry. To say that the medical world was astounded, would be putting it very mildly indeed. Some thought it was a simple insult to Dr. Oldright, whose name had been proposed for one of the final subjects; many thought it was a mistake; others, who had grown accustomed to the vagaries of the Council when it was in a hurry,

simply smiled, and said "Its the old story ; those men are not to be trusted."

Would it be too much to ask the Council to beware of those final few minutes when they have grown so weary and are in a hurry to get home? Fortunately, Dr. Oldright has solved the problem, as far as he is concerned, by promptly refusing to act. The Council can now get out of its muddle as seemeth best, when its executive gets time to consider the matter.

PUFFING EXTRAORDINARY.

From time to time we see in the Toronto Press references made to the wonderful progress of McGill Medical College, but a half column which recently appeared in one of our prominent journals beats the record. Its past and prospective history is painted in very glowing terms. Its numbers are large, but its advantages are larger. Its professors are wonders to behold and listen to. Their success is due to the fact that most of the members of the faculty devote their whole time to teaching and research, instead of only so much time and energy as could be spared from an exacting medical practice. "An unlocked-for proof" is given in an interesting story respecting the work of a certain German commission that came to this continent on a tour of inspection of our medical colleges, and, after a weary tramp, met McGill, which alone (apparently) was competent to rank with Berlin and Leipsig. This is probably an effectual, if not dignified style of advertising, but we believe McGill could afford to get along without it.

NOTES.

THE employment of unqualified assistants in England is attended with many drawbacks. A coroner now complains that the public are put to an unnecessary expense where an individual dies, having been attended by an assistant who cannot legally sign a death certificate; an inquest is, in such cases, rendered necessary. The public are further deceived in many cases, being led to think that they are getting the services of a qualified person. There is a growing objection in England to having any but qualified assistants.

WE observe in a recent number of the *Lancet*, that the General Medical Council has determined "that the course of professional study, after registration, occupy at least five years, on condition that the fifth year shall be devoted entirely to clinical work"; and by subsequent resolutions, "that all examinations, except the final examinations in medicine, surgery, and midwifery, shall be passed before the final year intended for medical work"; that "the regulations of the examining bodies, and of the schools, shall be so framed that attendance on systematic courses may be concluded at the end of the fourth year of study, so as to permit of the student devoting the fifth year to clinical work," and that "the fifth year shall be devoted to clinical work at one or more public hospitals or dispensaries, provided that of this year six months may be passed as a pupil to a registered practitioner holding a public appointment or possessing such opportunities of imparting practical knowledge as shall be satisfactory to the medical authorities." These resolutions are only recommendations to the examining boards, but the General Medical Council has the power of appealing to the Privy Council, should the curriculum laid down by our examining authority, and the examinations conducted by it, be not deemed satisfactory. We may, therefore, assume that the various examining bodies will lay down for the student's curriculum regulations embodying these resolutions, and that such regulations will come into force on January 1st, 1892, that being the date decided on by the Council as the just and proper time from which these changes in medical education and examination should take effect.

Meeting of Medical Societies.

THE ONTARIO MEDICAL ASSOCIATION.

(Continued from page 312 of last issue.)

June 11th, Evening Session.

DISCUSSION IN SURGERY.

Hon. Dr. Sullivan read a paper on

HERNIA,

in which he referred to the anatomy of the parts involved, and called attention to the fact that

the coverings of a hernia, as taught in the dissecting room, were rarely, if ever, recognizable on the operating table. He insisted on the necessity for early operation whenever strangulation was diagnosed, and condemned the practice of operating for radical cure in patients who could wear a truss, which was efficient in preventing the bowel from descending.

Dr. Grasett referred to the recent literature on the subject, more particularly to the published papers of C. B. Lockwood, on the influence of mesentery in the production of hernia; also a recent article by F. M. Caird, on the treatment of gangrenous bowel in strangulated hernia. Dr. Grasett was of opinion that when a truss can be well borne and the patient is capable of looking after it, when, too, he can afford to change them frequently when necessary, under such circumstances, it is best to let well alone, and to trust the efficacy of a truss, rather than advocate an operation for radical cure. When these factors are not present, however, in the light of the present success of the radical cure, he would recommend operation.

Dr. Waugh, London, considered that a thorough acquaintance with the anatomy of the parts was essential for the proper performance of taxis; here, anatomical knowledge is much more important than in cases in which we operate.

Dr. Andrew Smith, of New York, read a most interesting and instructive paper on

EMPHYEMA,

with the mechanical results of opening the thorax. The paper was illustrated by apparatus.

Dr. G. M. Aylsworth, Collingwood, opened a discussion in medicine by reading a paper entitled,

A PLEA FOR A MORE LIBERAL OR SCIENTIFIC SPIRIT OF INVESTIGATION ON THE PART OF THE REGULAR OR RATIONAL SCHOOL OF MEDICINE.

The author of this paper sought to defend the principles of the homœopathic practitioners, and asked for an unprejudiced investigation into the results of their treatment.

Dr. Aylsworth was followed by Dr. Ross, of Barrie, and Dr. J. H. Richardson, of Toronto. Both of these gentlemen showed conclusively

that homœopathic teaching and practice were utterly irrational, and Dr. Richardson referred to the fact that some of our greatest scientists had thoroughly investigated the subject very many years ago, and proved conclusively that homœopathy was founded on unscientific principles, and that the practice was unsound in the judgment of rational men.

June 12th, Evening Session.

SURGICAL SECTION.

Dr. Groves, of Fergus, read a paper upon

PERITYPHLITIC AND PELVIC ABSCESS.

The reader had treated seventeen cases of perityphlitic inflammation, of which thirteen went on to the formation of pus, and were operated upon; the remaining cases terminated in resolution; all recovered. The treatment advocated was perfect rest, and thorough emptying of the bowels if there seem to be impaction; opiates to relieve the pain, and locally warm applications. Should resolution not take place and pus form, then there should be as little delay as possible in operating.

Dr. Teskie endorsed the opinion expressed by the reader of the paper, that an early operation is necessitated when pus forms. This view was also held by Dr. Holmes, of Chatham, who stated that if the surgeon is in doubt, the safer plan is to operate.

Dr. Temple thinks this trouble is more common than we are led to suppose; the diagnosis, however, is not always established. Repeated attacks of inflammation in this region are often due to diseased appendix.

Dr. N. A. Powell, of Toronto, described Dr. Buck's method of operating in these cases. Two cases had been operated upon by him; one of these successfully, the other not.

Dr. J. F. W. Ross read a paper on

CASES OF EXTRA AND INTRA-PERITONEAL INFLAMMATION, WITH OR WITHOUT ABSCESS FORMATION—A PLEA FOR OPERATION.

The author advocated operation in cases in which an abscess had formed; he further considered it wise to conduct the exploratory operation in cases of a doubtful nature.

Dr. Powell, of Ottawa, thought that we are hardly justified in operating except in traumatic cases and in general cases where pus has been made out. Operations should not be conducted to search for abscesses. He related a case in which pus had developed; he advocated operation, but, it being denied, she passed pus by the bowel the next day; this, however, was exceptional, and in similar cases he would operate.

Dr. Hunter recommended early operation and thought valuable time should not be wasted in waiting for experts.

Dr. Teskie recommended operation in local inflammation, but in diffuse inflammation the parts become agglutinated, and operation is thus rendered impossible.

Dr. Temple would operate early in cases of general purperal inflammation, and in tubercular peritonitis.

Dr. Alice Pickering, of Toronto, exhibited a foetal monstrosity similar to the

SIAMESE TWINS.

There was only one placenta.

Dr. Wishart, of London, then read his paper on

ABDOMINAL NEPHRECTOMY FOR HYDRONEPHROSIS,

with a report of two operations. He referred to the difficulty in diagnosis; this is increased in cases in which there is great enlargement, where the patient, when seen for the first time, presents a tumor filling the whole abdomen. The author described two cases of advanced hydronephrosis; in both an operation was begun whilst entertaining a wrong opinion as to the nature of the condition. In these cases nephrectomy was performed through an incision in the middle line anteriorly, and both patients recovered. The difficulty of diagnosing between hydronephrosis and ovarian tumor was dwelt upon.

Dr. Trenham, Montreal, thought that aspiration for diagnostic purposes was useful in cases of accumulation of fluid within the abdomen. Urine may thus be discovered. He narrated a case where repeated aspirations, in which fluid urine was withdrawn, eventually effected a cure. He thought Dr. Wishart's success was exceptional, and it was questionable whether the operation of nephrectomy in such cases is justifiable or not.

Dr. Gunn, of Durham; stated that the difficulty in diagnosis was often cleared up by the use of the microscope in examination of the fluid.

Dr. MacDonald recommended nephrectomy as the primary operation. It is stated that nephrectomy following nephrotomy is less serious and the results, under such circumstances better.

MEDICAL SECTION.

Dr. Addison, of St. George, read a paper on the

TREATMENT OF PNEUMONIA.

The author discussed freely the uses of internal medication, and of outward applications to the chest wall. A somewhat animated discussion followed, in which a number of gentlemen took part; among others, Dr. Pringle, Toronto, suggested the use of the ice-pack in special cases, and narrated a case. He advocated also the use of hot dry linseed instead of a wet poultice.

Dr. McPhedran stated that pneumonia is a specific fever, and not a simple inflammation of the lung; there are abortive cases which recover with or without treatment. The speaker has had good results with heroic doses of digitalis; it is very necessary to aid the right ventricle, and for this digitalis is the best agent in full doses. He spoke of the hyperpyrexia, and would use the ice-bag and not internal medication.

Dr. Acheson referred to the uses of oxygen inhalations.

Dr. John Ferguson stated that two distinct types of the disease existed, the sthenic and the asthenic, requiring different forms of treatment.

Dr. A. James Johnstone then read his paper entitled,

SOME RECENT TREATMENTS IN DIABETES.

This treatment was discussed by Drs. Duncan, Bowlby, Addison, Acheson, Ferguson, and Sheard.

Dr. Bowlby referred to a case complicated with malaria, in which the patient recovered, after purgation with calomel followed by quinine.

Dr. Acheson referred to the presence of glycosuric acid being mistaken for sugar by the cupric sulphate test.

Dr. Pickard, Thamesville, read a paper on

PURPURA FLOUDROYANT.

This condition is one in which extensive hæmorrhages occur and cause rapid exhaustion of the patient. Dr. Hunter, of Toronto, related a case of a similar nature. Dr. Hamilton regarded Dr. Pickard's case as one of purpura hæmorrhagica.

Thursday afternoon.

GENERAL SESSION.

Dr. Ryerson opened the discussion in ophthalmology by reading a paper on

THE OPHTHALMOSCOPE IN RELATION TO DISEASES OF THE NERVOUS SYSTEM.

The use of the ophthalmoscope, as an aid to diagnosis, was fully dealt with.

Dr. Palmer drew attention to the great aid to diagnosis of brain disease, furnished by the retina as shown in optic neuritis. Important pathological changes may exist without any subjective symptoms; the opposite condition may also be present, as in hysterical amaurosis.

Dr. Wishart, of Toronto, emphasized the great necessity of examining the fundus in every case of suspected nervous disease; he thought every general practitioner should be able to use the ophthalmoscope almost as readily as the stethoscope. He also referred to appearances in brain diseases as evidenced by neuritis, etc.

Dr. Hubbell, of Buffalo, thought all general practitioners ought to be able to recognize optic neuritis and optic atrophy.

DISCUSSION IN OBSTETRICS.

Dr. Carson introduced the subject of

THE PREVENTION OF POST-PARTUM HÆMORRHAGE.

The subject was ably dealt with, and sound principles were advocated as worthy of observance in the lying-in room. It is the duty of all practitioners to know every detail in the treatment of this condition when it occurs, but Dr. Carson spoke only of precautionary measures which, if adhered to, would place post-partum hæmorrhage in the category of rare complications.

Dr. Powell, of Ottawa, thought that post-partum hæmorrhage may occasionally occur, no

matter how careful one may be. He limited his remarks to true post-partum hæmorrhage, *i. e.*, hæmorrhage from the placental site. We may expect it when the uterus has been over-distended, as in twins, hydramnios, etc.

Dr. Baines, Toronto, referred to the effect of tying the maternal end of the divided funis as a cause of post-partum hæmorrhage.

Dr. Temple does not believe that clotting of the blood in the vessels is a natural method of closing the vessels after detachment of the placenta. He narrated the post-mortem appearances in a case which came under his observation.

Drs. Thos. Mackenzie and Pringle also took part in the discussion.

SURGICAL SECTION.

Dr. Atherton, Toronto, read a paper on

A CASE OF HYSTERECTOMY FOR FIBRO-CYSTIC TUMOR.

The patient and the tumor were exhibited. The case was one of great difficulty, requiring a long and tedious operation. The result was eminently satisfactory.

Dr. Trenham, Montreal considered the operation to be one of the chief achievements of modern surgery. He had performed the operation five times, the first in 1876 for fibro-cystic tumor; the patient is still alive. He prefers to perform the operation in a special way, so as to bring the edges of the abdominal incision together as near as possible around the pedicle, leaving the part which is to slough off entirely outside the belly. The advantages of the method are its simplicity, the clamp can't slip, and the burrowing of pus is prevented. The buried suture was recommended.

Dr. H. Howitt, Guelph, read the

REPORT OF A CASE OF ACUTE SUPPURATION OF THE KNEE-JOINT.

The case was one in which the surgeon had cut down and thoroughly irrigated the suppurating joint cavity; after careful washing out and subsequent antiseptic treatment, the wounds healed and the joint ceased to discharge pus. The result was a complete restoration of function in the articulation.

Hon. Dr. Sullivan complimented the doctor on the success attending his operative procedure in this case.

Dr. Atherton related a case of suppuration in the knee following compound fracture of the patella; the joint recovered in ten weeks.

Dr. Strange then read a paper on

STONE IN THE FEMALE BLADDER.

He referred to three methods of operating, 1st, crushing; 2nd, cutting; 3rd, dilatation of the urethra.

In crushing, there is some difficulty in keeping fluid in the bladder, and there is not the same support for the staff of the lithotrite.

In cutting, it is simple enough to cut into the bladder from the vagina, but there is a danger of the occurrence of vesico-vaginal fistula

Dr. Strange narrated three cases of dilatation; in two of these the ages were respectively 70 and 60 years. In the former a uric acid stone of large size was removed; there was dribbling of urine for a week or two subsequently, but this ceased eventually. The method employed was to give chloroform, dilate with dressing-forceps sufficient to introduce the finger, and complete with digital dilatation.

Dr. Powell, Toronto, narrated two cases in female children; in one case there were three stones present, the aggregate weight being 241 grains. The method employed was to dilate urethra, introduce lithotrite, crush, and wash out the debris. The cases were successful.

Hon. Dr. Sullivan referred to a case where the stone was as large as the fist; it was crushed and removed as debris. The operation was tedious. The woman made an excellent recovery.

Dr. J. F. W. Ross quoted Lawson Tait with reference to the occurrence of vesico-vaginal fistula as a sequel to cutting through the vagina into the bladder. Tait, far from fearing a fistula, finds it difficult to keep the wound open for drainage.

MEDICAL SECTION.

Dr. Moorehouse, London, read a paper on

INFLUENZA.

He dealt with the complications and sequelæ of influenza. The discussion was carried on by Dr. Mitchell, Enniskillen; and Drs. Price, Brown, Ferguson, Trow and Sheard, of Toronto.

Dr. Ruttan, Napanee, exhibited a form of apparatus for enabling patients to inhale hot

air. It is simply a piece of metal gas tubing, bent at its middle into a single coil, which can be heated, and the patient inhales through one end. He has inhaled through it air at a temperature of 250° F.

Dr. Bray, of Chatham, read a paper on

TYPHOID FEVER.

Certainty of diagnosis is to be insisted upon; very little medicine is necessary; sponge freely and give the patient nothing but peptonized milk. Stimulants should be freely given if a weak heart demands it. When constipation occurs, due to paralysis of the ulcerated intestines, give no purgatives. These points were elaborated in the paper read.

Dr. Hunter, Toronto, spoke of the pathology of the disease and the indications for treatment from these considerations. The early use of the cold bath should be employed to reduce temperature.

Dr. Sheard spoke strongly in favor of alcohol as the most useful drug to have at our command in this disease.

Thursday evening.

DISCUSSION ON THERAPEUTICS.

Dr. J. L. Davidson read a paper on

EXPECTORANTS.

His paper appears at page 319 of this journal.

Dr. Spencer believes the terebinthines to be about the most useful of all expectorants; he also derives great benefit from the tar preparations in bronchitis of young children and in winter cough of old people.

Dr. Moorehouse (London) concurs in Dr. Davidson's classification and arrangement. He is a strong advocate of copaiba when there is excessive secretion.

FINAL PROCEEDINGS OF THE ASSOCIATION.

The reports of various committees were presented. The Secretary read his report, which was adopted. The Association voted \$100 to the Ontario Library Association.

A vote of thanks was moved to the retiring president, to which Dr. Temple replied.

Dr. Moorehouse, of London, was then installed in office as President of the Ontario Medical Association for the ensuing year.

Hospital Reports.

MOVABLE KIDNEY—NEPHRORRAPHY.

Under the care of I. H. Cameron, M.B., in the Toronto General Hospital.

J. S., æt. 22, single, teamster; admitted under the care of Dr. Cameron, in May, 1890, with the following history: In February, 1889, he was engaged carrying planks on his right shoulder. While tossing one of the planks from his shoulder he experienced a sensation as if he had sprained his right side. He felt at the time considerable pain in the shoulder, but more particularly in the right hypochondriac region and in the right chest. He continued his work and by night the pain had considerably increased.

Fourteen days after, the pain continuing, he consulted a doctor; up to this time he had continued his work with difficulty; after a fortnight's treatment he was no better. In April (two months after the sprain), he noticed for the first time a lump the size of a pigeon's egg in the right hypochondriac region at the seat of the former pain. The lump increased gradually in size for two months, and at the end of that period it had attained its present size, about that of a hen's egg. It has not grown any for the past eleven months, the pain has neither increased nor diminished in intensity.

The patient has always enjoyed good health, and has never had any serious illness; his parents are living and healthy; there is no history of consumption in the family.

STATE ON ADMISSION.

Local.—Patient states that he has a lump in the right side which pains him slightly and is somewhat tender on pressure; the pain radiates to the lumbar region and to the region of the right shoulder.

On inspecting the abdomen nothing abnormal is noticeable; there is no apparent swelling in affected area. On palpation, however, a lump the size of a duck's egg is felt at the outer margin of the right rectus muscle, below the ninth costal cartilage. It seems about $1\frac{1}{2}$ inches in width. Its lower margin, which is rounded, projects, on deep inspiration, 2 inches below costal margin. Its upper limit cannot be defined. Its consistence is hard, its surface smooth. It can be moved slightly from side to side, and can be forcibly depressed to a slight

extent, but cannot be placed in the loin. It descends 1 inch during deep inspiration and ascends during expiration. Patient states that it is more palpable during fasting than after a meal. Percussion note resonant over the tumour, note slightly higher pitched and flatter when it comes down during inspiration, and then the note is almost dull.

Present state of health, good; circulatory, respiratory, and nervous systems normal. The digestive system is slightly affected; his digestion was good before the accident, but now he has slight gastric derangement amounting merely to occasional gaseous eructations and sometimes water brash. Never any vomiting or nausea. He is also troubled with constipation. Urine normal.

Dr. Cameron diagnosed the case as movable kidney and proposed to cut down upon it in the loin and secure it there by suture.

Operation: 3 p.m., May 29th.—Chloroform administered; an oblique incision was made in the space between the last rib and the iliac crest, running for $3\frac{1}{2}$ inches parallel to the rib and its posterior extremity being over the outer border of the erector spinæ muscle. The superficial structures were divided and the muscles, latissimus dorsi and external oblique, were cut across throughout the entire length of the incision; the internal oblique and transversalis were to a slight extent cut and the outer edge of the quadratus lumborum was exposed, the deep layer of the lumbar aponeurosis was divided on a director. The hæmorrhage was checked by means of Spencer Well's forceps. The circum-renal fat was now exposed and the finger was introduced into the wound and the parts explored. The kidney was found abnormally mobile, it could readily be displaced forwards and upwards to a considerable extent and could be pressed towards the spine. Bimanual examination was made with one hand over the front of the abdomen and the finger of the other hand in the wound in the loin. On pressure exerted in front, the kidney distinctly came back to its place. On hooking the finger around the lower end of the kidney and pressing it firmly backwards into its normal position, the tumor could not be observed on pressure of the hand anteriorly, but became at once prominent when the kidney was pressed forward.

There seemed little doubt that the tumor correctly diagnosed was the kidney. Two silk sutures were passed through the deeper portions of the edges of the wound, the stitches were made to penetrate a portion of the muscles and the lumbar aponeurosis in the lower edge of the wound; they were then carried through the renal capsule and on through the deeper tissues of the upper edge of the wound. These sutures were tightly tied, the wound was thoroughly irrigated and the superficial portions of the wound were brought together by means of several points of suture. The superficial parts surrounding the wound were thoroughly cleansed and a Keith's dressing applied.

During the subsequent course of the case the temperature remained normal; there was no pain and the dressing applied at the operation was not removed for three weeks when the healing process had been completed. The sutures were removed and a pad was bandaged on over the abdomen anteriorly.

June 8.—There is no tumor to be felt where it had formerly been observed. There is slight tenderness on deep pressure over the kidney.

Remarks.—The condition of movable kidney is more common in females than in males. Pregnancy has a great share in its production. In men, however, injury may be the cause; thus Henry Morris states that "in many instances the immediate cause of the mobility has been of a traumatic nature, such as a blow or a kick on the loins, a jerk, or some severe or sudden concussion."* The history of traumatism in the case just narrated is worthy of note as a very possible factor in causing the condition. Disturbance in function of the stomach and large intestine are usually more marked than in the present instance; the gastric trouble has been attributed to the dragging or pressure of the kidney upon the middle portion of the duodenum.

The diagnosis from the physical signs in the case was extremely difficult; the position of the tumour led one to suspect gall-bladder. Further, cases have been reported in which a distended gall-bladder has been mistaken for a floating kidney. Thus Mr. Lawson Tait records a case of distended gall-bladder, operated on by him, which had been pronounced a floating kid-

ney by several distinguished authorities*, and the same authority is quoted by Morris in saying that out of thirteen cases in which the diagnosis of movable kidney was wrongfully made, seven were proved to be distended gall-bladder, four ovarian cystomata with long pedicles, and two were tumors of the pancreas. The shape and size of the tumor in the case under consideration pointed more to kidney than gall-bladder, and a resonant percussion note could be elicited which would have been impossible had the distended gall-bladder been the cause of the trouble.

It is noteworthy that in this case there was no drainage tube inserted in the wound, which was completely closed by suture; the antiseptic details had been thorough, and healing took place without the formation of pus, the occurrence of tension or rise of temperature. The dressing applied on the operating table was not removed for three weeks, when healing was complete.

Nephrorraphy has been attended with such successful results in the past, that the operation is to be advocated.

Clinical Notes.

HERNIA OF OVARY.

BY JAS. A. M'MAHON, M. B. TOR., ST. CATHARINES.

April 1st, 1890. I was called to see Mrs. M——. I found she had considerable peritonitis, the pain being greatest over the site of the left ovary. She did not progress as well as I expected under the administration of the morphine, and on April 4th she was worse. On questioning her further, she said that she had a lump in the left groin which, from motives of delicacy, she had not before admitted. On examination, I found a pyriform tumor situated in the left labium majus, which was hard and extremely painful. She said that it had been there for about five weeks, that it was painful at all times, and particularly when standing for any length of time or walking, but that it had become larger and more painful the last two days. She also told me that during her previous menstrual period the lump had enlarged and become excessively painful. Her bowels were regular, but there was some little pain on defecation. When the tumor was manipulated

* Surgical Diseases of the Kidney. Henry Morris, p. 30.

* Edin. Med. Journal, October, 1889, p. 514.

it caused extreme pain over the site of the left ovary, and so much so that she would not submit to it. A poultice was applied, and next day I found that her menses had come on and that the pain was much less. The tumor could now be manipulated, and on asking her to cough, a distinct impulse was felt. I tried to reduce the swelling by taxis, and in a few minutes succeeded, with immediate relief from the great pain over the ovary. The peritonitis rapidly disappeared, and in two days there was no trace of it. Here was a tumor in the left labium, hot, hard, and very painful; the diagnosis was between abscess of the vulvo-vaginal glands, an inflamed incarcerated hernia, phlegmonous inflammation of the labium majus, and pudendal hæmatocele. The history of the case (no injury or muscular efforts), duration of existence and mode of development excluded hæmatocele. From phlegmonous inflammation of the labium majus, it was easily differentiated by its distinct pyriform and limited outline, the phlegmonous inflammation being diffuse, the reducibility of the tumor proved it to be a hernia. The next thing to determine was what variety of hernia. It was non-elastic and non-resonant, at each menstrual period it became larger and more painful, the pain always being referred to the site of the left ovary. I diagnosed hernia of the left ovary, which, being imprisoned in the inguinal canal by the side of the round ligament, was subjected to great pressure when in common with the rest of the organs of generation, it became engorged with blood at the menstrual period. The interest in this case lies in its variety. The literature on the subject is very meagre, most of the authorities merely stating that the condition does exist but is very rare.

In the *Medical News and Library*, Philadelphia, Nov. 1879, the following symptoms of this condition are given: "Pain on walking, and still more at the time of defecation; sometimes pain whenever the rectum is occupied with fever, pain in the act of coition, and attacks of pain in one both groins, according to the single or double nature of the displacement. If one ovary alone descends, it is generally the left."

Personal.

DR. MCPHEDRAN, of Toronto, is spending his holidays at Prince Edward Island.

DR. THORBURN, of Toronto, started for England, July 12th. He will visit his son, Dr. Jas. D. Thorburn, at present in Birmingham.

DR. OLDRIGHT, of Toronto, was, at last reports, at Halifax. He has somewhat improved in health, though not quite up to the mark.

DR. W. B. RICHARDSON, of Donald, B.C., son of Dr. J. H. Richardson, of Toronto, has been appointed superintendent of the new hospital recently opened in Victoria, Vancouver Island.

DR. ALLEN BAINES, of Toronto, was entertained by a number of his friends at a dinner in the Island Building of the Royal Canadian Yacht Club, July 4th, on the eve of his departure for England, where he is to be married this month. Deep sympathy was expressed for the Toronto girls, but all united in expressing the kindest wishes for future happiness to Dr. Allen and the bride that is to be.

DR. T. S. COVERNTON sailed from Montreal, July 5th, for England, and rumor says he will be Dr. Baines' best man at the happy event.

Births, Marriages, and Deaths.

BIRTHS.

SWEETNAM.—On Sunday, July 6th, the wife of L. M. Sweetnam, M.D., of a daughter.

SCOTT.—At Moss Side, Rosedale, on June 28th, the wife of Dr. A. Y. Scott of a son.

RYERSON.—On the 28th June, 1890, at Newnham House, College Street, the wife of Dr. G. Sterling Ryerson of a son.

COLLEGE OF

Physicians and Surgeons

OF ONTARIO.

Medical Council Fall Examinations

SEPTEMBER, 1890,

IN TORONTO AND KINGSTON.

The written Primary and Final Examinations commence on Tuesday, the 23rd September, 1890.

By Order

R. A. PYNE, Registrar,

College Physicians and Surgeons
of Ontario, Toronto.

N.B.—Candidates' application forms may be had on application to the Registrar. The application is to be properly filled out and declaration executed, and delivered into the hands of the Registrar, accompanied by the tickets and certificates, and the Treasurer's receipt not later than the 17th of September, 1890. All candidates for Final Examination are required to present their primary tickets and certificates at the same time. Candidates for Primary who have attended a prior examination will require to pay a fee of \$10. Candidates for Final who have attended a prior examination will require to pay a fee of \$10.

The Treasurer's address is Dr. W. T. Aikins, 282 Jarvis St., Toronto.