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EDITORIAL

INSANITY IN ITS LEGAL ASPECTS.

Such is the title under which Mr. Justice W. R. Riddell contributes an article to the pages of the January issue of the *Bulletin* of the Ontario Hospitals for the Insane. The article is a most timely one, and we take pleasure in offering our readers its salient features.

Mr. Justice Riddell directs attention to one who is found by a policeman and a doctor. The person is suspected of having committed a burglary, and he has sustained a broken leg. The policeman is concerned with the crime, the doctor with the injury. Each has his own special viewpoint for the case. If a clergyman came along he would be interested in the man's spiritual welfare, which would not likely appeal to either the policeman or the doctor. The presence of the broken leg would not in the least influence the course of the law as to the disposal of the case so far as the burglary is concerned.

Then attention is invited to the man who is insane. The doctor sees one who is sick and requires treatment. This aspect of the case does not concern the law or the court. It is simply, does the man's mind enable him to know the quality of his actions and distinguish any act as wrong? He may be insane, but many insane persons have made legal contracts and are responsible for crimes they may commit.

If a man makes a will and he disposes of his property in such a manner as to be reasonable, to be fair, and to the persons that one would be disposed to expect he would remember, and that there is an absence of evidence of undue influence, the will must be regarded as valid. He may be insane, but not so insane as not to know what he would wish to have done with his goods. The presence of delusions does not at all decide the matter against the legality of the will.

In a similar manner a man may commit a crime and be responsible, though at the time insane. "If a man suffers from disease of the mind to such an extent as to render him incapable of appreciating the nature

and quality of the act and of knowing that such an act was wrong, then the law says he is not to be convicted." Here the test is *capacity* of appreciating the *nature* and *quality* of the act and knowing that such an act was *wrong*. He might have delusions and be able to do this.

An example is given of a man who has the delusion that a certain person is going to take his life. He meets this person and shoots him, as he thinks, in proper self-defence. He would not be held guilty, as self-defence is justifiable, even though actuated wrongly under a delusion. But, on the other hand, it would be quite a different affair if an insane person shot one under the delusion that the latter had been slandering him. No one is permitted to kill another for such a reason. This is a fine distinction, but it is very clear.

In criminal cases "if the proved insanity is not of such a kind as is recognized by the law as an excuse, it is as though he were not insane at all." In other words, if he is capable of knowing the nature and quality of his act and that it was wrong, he must be held responsible, even though the victim of delusions. A man might have the delusion that his neck was made of glass and that it would break if he were to bend it, and, yet, be capable of knowing the nature and quality of such an act as setting fire to his neighbor's house, and that it was wrong.

Medical men are advised in the article to adhere to facts, give conversations, record acts, state clearly what was observed, and leave it to the court to determine whether the person comes within the pale of responsibility or not. Keep away from offering opinion. It should not be given simply as an opinion. If it is to have any value it must be a clear deduction from the facts of the case as revealed by a careful examination. The disease must render the person *incapable* of knowing an act to be wrong, and not that other question that he *does not* appreciate the nature and quality of his act. It is the fundamental one that he *cannot* make the distinction.

We would recommend that every doctor read thoughtfully Mr. Justice Riddell's article.

THE REVENUE AND DISEASE.

From the press of the day we learn that Canada's revenue this year will leap up to the large sum of \$136,000,000. This will be expended on the civil service, railways, canals, public buildings, and a small portion, perhaps, to the reduction of the national debt.

Time and again we have appealed to the medical profession to use its influence with the Governments of the country and the various provinces to induce them to do something substantial and prompt for the

suppression of preventable disease. The individual doctor cannot do much. It is for the Governments to come forward and advance the money needed.

It is a good enough thing to encourage immigration into the country, but it is better to save those we already have. We have pointed out on several occasions that consumption alone in lives lost and time lost through sickness costs this country not less than \$50,000,000 a year. A few millions a year expended would in course of time save all this.

THE HOSPITAL ASSOCIATION.

This association should meet with the cordial support of every hospital. As an organization it is capable of doing much good. In the past it has been the means of arousing interest in hospital work and in bringing about better methods in hospital construction and management. The meeting this year will be held in Toronto on 4th, 5th and 6th of April. The Parliament Buildings are placed at the disposal of the association. Dr. H. A. Boyce, of Kingston, is president, and will be glad to see a large attendance.

THE ONTARIO MEDICAL ASSOCIATION.

In our previous issue we condemned the make up of the officers of this association. We thought then, and think still, that they were chosen too much from one set of men.

We do not condemn the association. On the reverse, we have the highest words of praise for what this association has stood for in the past.

It meets this year on May 21, 22, and 23 in Toronto. An effort will be put forth to have the meeting more clinical and practical than in former years. This is a move in the right direction.

THE CANADIAN HEALTH ASSOCIATION.

Questions of public health are constantly commanding more and more attention. Most people have come to realize that "a stitch in time saves nine" is true of more things than mending shoes.

The annual meeting this year will take place in Toronto in September. Dr. C. A. Hodgetts is the president. Those who may attend the meeting may rest assured of a good programme. This association draws from all the provinces, and should be well supported.

HON. W. J. HANNA.

This title does not mean that we are going to write an essay on politics. No; a medical journal has no politics; it only knows things medical and scientific. It is in this aspect that we speak of Hon. W. J. Hanna.

Mr. Hanna came into the active life of the Province of Ontario in January, 1905. Since then he has held the portfolio of Provincial Secretary. Under this department comes the care of the asylums, the hospitals, the prisons, the refuges, etc. It is in the bettering of these institutions that Mr. Hanna has done his splendid work.

Year by year he has improved the legislation of the province in health matters and in the care of the insane and the sick. He has had a wide outlook over this field of the province's duty towards its citizens.

The province will have occasion to long remember with feelings of pleasure and gratitude the wise legislation that has proceeded from the fertile mind and kindly heart of Mr. Hanna.

INSANITY AS A DEFENCE FOR CRIME.

Quite recently the legal and medical professions in the United States have been once more stirred by an address by Mr. Stephen S. Gregory, president of the American Bar Association. He puts forth the plea that Guiteau, who assassinated Garfield; Prendergast, who shot Mayor Harrison of Chicago; and Czeolgoez, who took the life of McKinley, were all insane, and should have been sent for life to an asylum for the criminal insane. He contends that the execution of these men were judicial murders, where the judges and juries yielded to the clamor for the blood of these degenerates and gave it.

He sets for in his address that Guiteau had made crazed statements just prior to the shooting of Garfield; but that the argument for his insanity was brushed aside. Prendergast thought that he should be made corporation lawyer for Chicago, and that unless he were appointed the deaths due to level crossings would continue. In this frame of mind he shot Harrison. He repudiated the idea of his insanity at his trial and claimed that his act was justified by the circumstances. In the case of Czolgoez there was a typical degenerate, with anarchist delusions, and one who acted on impulse.

Mr. Gregory points out that in the trial of these three persons the American test of whether at the time of committing the crime they were capable of distinguishing right from wrong was ignored. He contends

that this capacity is not for a jury, but for a medical commission to determine. He thinks that the test should be: Is the criminal act due to the insanity or brain disease of the defendant? The capacity of distinguishing between right and wrong is not a safe test. He urges that when insanity is the defence the trial should not take place for one year.

But it might be that the introduction of these two rules would lead to more trouble than now exists. If it is impossible to always determine the criminal's capacity of distinguishing right from wrong, it might be equally impossible for a commission of medical men to agree upon the presence of insanity or brain disease at least to such a degree as to free the defendant of responsibility. Then the year's probation might work badly. Witnesses might die or their memories become cloudy as to what did happen. But more important than this would be the fact that one who commits a crime and at the same time was capable of knowing that the act was wrong, might in a year change and become quite frankly insane.

We take the position that the plea of insanity should be admitted with the utmost care. It would seem that the present condition of the law is about as good as can be secured. Bring the culprit to trial as soon as possible, while conditions are little changed, and give him the opportunity of proving his insanity to the extent that he *could not* when the crime was committed *determine the nature and quality of his act.*

In these cases there are two very difficult problems to solve: In the first, it will always be a battleground to determine "the capacity to know the nature and quality of an act." On this aspect of these cases there will be wide differences of opinion. In the second place, if all the insane are allowed freedom for responsibility, then many persons will be brought within the circle that would commit them to an asylum rather than to a prison or the gallows.

The subject is one on which no man dare be too dogmatic. The plea of insanity must not be too readily admitted as excusing the defendant. Experts might on weak evidence make out a case that would compel a jury to give the prisoner the benefit of the doubt were the establishment of insanity a legal release from responsibility. On the other hand, the capacity to know the nature and quality of an act may be misjudged, and an irresponsible person sent to prison or be executed who ought to be treated with commiseration and cared for in some institution.

The distinction that must be drawn in these cases will ever try to the utmost the best judgment of the most competent witnesses, fortified by the fullest determination to be absolutely honest. Weighing the

legal and medical aspects of these cases, we are of the opinion that the law as it now stands is in the best form to secure the safety of the really irresponsible defendant, and, at the same time, secure punishment to those who are responsible for their actions. This always presumes that witnesses will be honest; but this is a phase of the subject which the law must assume to be the case. Grant honest witnesses and the law may be accepted as calculated to meet the conditions that arise.

INTERNATIONAL CONGRESS OF MEDICINE.

The 17th International Congress of Medicine will be held in London from August 6th to 12th, 1913. This seems considerable time away, but it is well to make the date and the programme well known in advance in order that those who wish to attend the congress may be able to arrange to do so. The programme will be an excellent one and will contain 22 sections. Those who intend visiting Britain in 1913 will do well to plan the visit to suit the congress.

HOW DISCOVERIES ARE MADE.

Virchow, working on his pathological studies, gave to the world his cell doctrine. In this connection his researches on the white blood corpuscles are of special interest.

Pasteur, in his chemical laboratory, discovered that tartaric acid formed into two distinct forms of crystals, those that were skewed to the left and those to the right. He found that the yeast plant had an affinity for the one, but rejected the other. This led him to study the action of germs.

Metchnikoff carried the researches further and noted that in inflammation there was an increased amount of blood in the part. This was for the purpose of accumulating a large number of leucocytes in the affected part.

These leucocytes he found were germ destroyers. In other words, there was a marshalling up of the resisting forces against the invading forces.

Thus Virchow, the physician; Pasteur, the chemist; and Metchnikoff, the zoologist, became the complementary agency of adding to the work of the others what it lacked of a complete whole, and thus became true the words, "whose fulness of perfection in the other lies."

THE REFORMATION OF INEBRIATES.

The Ontario Society for the Reformation of Inebriates has issued an appeal for aid in this work. It will commend itself to all right thinking people. The letter refers to the remark of King George that Britain

should wake up in the matter of caring for the inebriate. So should this country.

Attention is drawn to the good work of the Ontario Government in the matter of prison reform. Its method of caring for delinquent children leads the world—the exchanging of cell life for farm life. On the Guelph farm steps are being taken for the care of feeble-minded women. So far nothing has been done for the custodial care of the inebriate.

The letter then cites the various acts and steps that have been taken by the society and its efforts with the Government and others. For years the inspector of prisons has been urging the Toronto authorities to make some provision for inebriates other than the jail. At last a farm of over 400 acres has been secured and will be fitted up as a Reformatory Farm Colony. The letter then concludes in these words:—

“May we not hope that the present session of the Ontario Legislature will not be allowed to pass without introduction, by the Government, of an adequate measure whereby efficient provision shall be made with a view to the reformation of indigent and police court inebriates throughout the entire province. We are also desirous that a substantial increase be made to the small grant now made to the Ontario Society for the Reformation of Inebriates. If you find that you can favor these suggestions we will be much gratified.”

The Society for the Reformation of Inebriates and its worthy and indefatigable secretary, Dr. A. M. Rosebrugh, deserve sympathy and assistance in the work they are engaged in. They are giving their time in aid of a class who cannot take care of themselves. We commend their cause.

TYPHOID FEVER DEATH RATE.

The provincial mortality tables for 1910 have just become available at Queen's Park. The typhoid figures for 1911 have been gathered from the various city clerks. In order to make a comparison possible the returns have been compiled on the basis of a hundred thousand population. That is, where there are five deaths in a city of 20,000 the death rate per 100,000 would appear in the table as 25. Taking the assessor's population in each year as a standard, the *Star* has compiled the following statistics for 1910 and 1911:

Municipality.	1910.	1911.
Berlin	41	0
London	4	17
Guelph	27	13
Peterboro	29	15
Hamilton	15	13
Belleville	50	19

Stratford	33	20
St. Thomas	20	20
Toronto	44	21
Woodstock	21	40
St. Catharines	23	60
Kingston	79	26
Windsor	45	27
Ottawa	28	96
Chatham	39	29
Brantford	69	33
Fort William	76	34
Niagara Falls	56	89
Port Arthur	177	83
Sarnia	106	147

These figures set forth in the most eloquent form possible the importance of local sanitation. One municipality has no deaths from typhoid fever, while another has a death rate of 177 per 100,000. The word is "wake up!" The water supply counts for so much that it should be the prime study of all cities. It has been calculated that for every case of typhoid fever there are three cases of sickness due to intestinal disorders, when the water supply is at fault. The language of these statistics appeals strongly for care and thorough-going sanitation. No city should sell typhoid fever to its people.

THE CARE OF THE CHILD.

"The child is the father of the man." Step by step we are getting onto solid ground. The knowledge of child growth and development, both bodily and mentally, is not much better understood than in the past. The terribly contagious character of bad habits is now fully recognized.

It is thus that an effort is being made to obviate the confining of children with others worse than themselves. Juvenile courts have been established and ways and means devised for the care and correction of these youthful transgressors. The results are most encouraging.

There should be special schools for the training of these cases. The parents, as a rule, cannot be entrusted with this task. In too many instances the home conditions are bad, and the parents often degenerate or drunkards.

Drink in the home, want and poverty, insanitary methods of living, evil company, all tend to give the child's mental and moral nature a skew to the left like that of some crystals. It may be very difficult or impossible to correct this, but the effort must be made.

ORIGINAL CONTRIBUTIONS

ILEOSIGMOID ANASTOMOSIS AS A THERAPEUTIC MEASURE
IN INTESTINAL AUTOTOXICOSIS.

BY ERNEST A. HALL, M.D., L.R.C.P., EDIN., VANCOUVER, B.C.

THE surgeon of to-day stands a co-worker with the great forces of evolution in human development, his special function being that of a life saver amid the carnage of the cruel, yet economical, law of the survival of the fittest. He has followed all too slowly the line of progress which nature has blazed through the centuries with the blood of those sacrificed upon the altar of race development.

“So careful of the type she seems,
So careless of the single life,
That I considering everywhere
Her secret meaning in her deeds.
I falter where I firmly trod,
And falling with my weight of cares
Upon the great world’s altar-stairs
That slope through darkness up to God.”

From the vantage ground of conquered appendiceal pathology we see the colon doomed to follow in the procession of effete organs, whose presence has so frequently been a menace to function and life. We must either adapt our environment, internal and external, to meet the demands of our ever-changing physical being, or conform that physical being anatomically and functionally to the demands of twentieth century civilization. Herbert Spencer’s classic definition of life should be committed to memory by everyone interested in medical progress. Here it is: “Life is the definite combination of heterogeneous changes, both simultaneous and successive, in correspondence with external co-existences and sequences.” Every surgeon should paste this in his hat until he assimilates it, and until it had become a basal factor in his therapeutic activities. Medicine and surgery can succeed only as they progress in harmony with the principle of continuity of life herein expressed.

It is no longer a question as to the necessity of the colon as an organ of digestion. The experience of the writer with the wider experience of not a few others whose facilities were greater, has settled the point that the removal or the sidetracking of the colon does not perceptibly diminish bodily nutrition. Neither is it a question as to the colon being fre-

quently the seat of constipation, with its almost innumerable train of ills. Autotoxication, which of late has been given such a place in disease causation, has herein its chief toxine depot, while fullness of life and length of years also find in the colon their most energetic enemy. Over the colonic curve evolution has written "mene mene tekkel upharson," and the handwriting within the abdomen is to-day interpreted in terms of colonic exclusion or extirpation—"weighed in the balances and found wanting."

Lane has successfully applied ileosigmoidostomy in the treatment of tuberculous joint disease in those who showed signs of intestinal intoxication. Mumford has found it of inestimated value in chronic arthritis. Birvine reports excellent results in neurasthenia with emaciation, while the writer reported in the *Western Medical News*, Nov., 1911, two cases of interstitial nephritis, with severe œdema and ascites, both cases given up so far as medical treatment could suggest. In each case the dropsy was speedily relieved, and one case completely recovering and giving normal urine within four weeks from the operation. I have also tried this method in a case of osteoarthritis and in a case of melancholia, in which obstinate constipation was a factor, but both too recent to report.

As to further suggestion of ileosigmoidostomy in treatment, I would suggest its application in ascites dependent upon either heart or organic liver disease. By the reduction of the volume of portal blood by the de-functioning of the colon, pressure should be relieved and the passage of blood through the liver facilitated. The relief of pressure and the diminution of the volume should be greater than that obtained by the Talma operation. Epilepsy, so often dependent upon irritation external to the brain, and upon toxæmia, should be included, also persistent neuralgias, amblyopia, anæmias, neurasthenia; in fact, that almost innumerable company of undesirable conditions, the origin of which modern investigation has given the name of intestinal autotoxæmia.

This operation is most simple, requiring less time and causing less shock than the everyday gastro-jejunosomy. The location of the junction should be from two to three inches from the valve. At this point the ileum and sigmoid lie frequently in contact. In cases of mucoscolitis, which are not infrequently present, the distal extremity of the ileum can be brought to the surface, the mucous membrane turned inwards upon a rubber tube so that irrigations of the colon could be carried out. In other cases this procedure is not necessary, the ends being turned in, or merely a silk ligature placed around the ileum and drawn sufficiently tight to occlude the lumen without cutting the bowel. The

latter method appears to give more postoperative pain, but the ultimate results are equally as good as where the bowel is severed.

There should be no mortality following this operation if the surgeon be careful to leave no conditions favoring internal hernia or obstruction. The Trendelenburg position should be used at least before the abdomen is closed, so as to make sure that the small intestines are in their place, and not in the pelvis, which should always be packed with the large bowel. The omentum should be placed over the anastomosis. No drainage is necessary if the peritoneal toilet has been satisfactory.

As to retroperistalsis, I have not yet had any cause for anxiety. Occasionally I make a lateral oblique implantation, leaving about an inch of the ileum projecting into the sigmoid in the direction of the intestinal current. This, if it survives, would act as a valve to prevent, or at least hinder to some extent the passage of fecal matter backwards. I would also suggest a partial unilateral enfolding (intussusception) of the bowel, so fixed that an increase of the enfolding could not occur. Quverain suggests that the lumen of the colon above the anastomosis be reduced by plication.

Previous to removal of the colon, or part of it, ileosigmoidostomy should receive consideration. Even in malignant cases, the drainage and removal of intestinal fermentation would decrease the intense toxaemia so frequently present, and would also improve nutrition, thus adding materially to the success of the radical operation. Another point not to be forgotten is the fact that in the secondary operation the surgeon has to deal with a functionless organ with a lessened blood supply, and with one-half the operation previously performed—the anastomosis—the patient has the double advantage of less shock and one-half the anesthetic, both factors of utmost importance in debilitated subjects. In this we are following a most valuable surgical precept, that wherever possible, to divide all complicated operations in which there is risk to life into proceedings of lesser risk.

The diarrhoea which follows these cases lasts but a few days, the sigmoid rapidly adapts itself to the new conditions, and no rectal incontinence has followed.

When, after careful elimination of other causes, when regulation of diet, massage, lavage and medical treatment have failed, when obstructions, kinks, adhesions, gall-stones and mischievous appendices have been given their desserts, and still constipation, with its hideous train, persist, we are justified in undertaking the simple, yet most promising, ileosigmoidostomy.

PROSTATECTOMY.

BY A. GROVES, M.D., FERGUS, ONT.

THERE are few diseases which cause more misery and suffering amongst men beyond middle life than enlarged prostate and the routine treatment usually followed is too often only temporizing, with a condition which is curable and which ought to be cured. When a patient presents himself having an enlarged prostate, with its results such as frequent urination, and when the catheter shows the bladder to contain residual urine after urination it is futile to attempt to cure that patient by medicinal means. The passing of catheters will give relief, but in the end the bladder becomes infected and the patient leads a life of disturbed and restless nights and miserable days. The longer the treatment is persisted in the less hope there is for the sufferer.

There is no more sense in the so-called treatment of enlarged prostate than there was in trying to cure a diseased appendix by starvation and a fountain syringe; indeed, there is much less sense, for in the case of appendicitis, while an appearance of doing something was kept up, nature sometimes cured the patient entirely, irrespective of the treatment, but nature does not often cure an enlarged prostate.

The cause of all the trouble is the enlarged prostate, and the only rational treatment of this, as of any other disease, is the removal of the cause. It would naturally be supposed that such an axiomatic truth would be universally followed out in practice, but instead of this being the case the greater number of cases are treated, if such a term be allowable, by pottering with palliatives, which leave the cause of the trouble wholly untouched. The true method of dealing with an enlarged prostate, which is giving trouble, is to remove it and the danger in doing so is not great when the operation is done as soon as the case is diagnosed. In my own work I prefer to operate supra-pubically, as there is in my judgment nothing to be gained by a perineal operation, which is accompanied by much greater loss of blood and does not give free access to the bladder. It would seem that opening the bladder from above is the rational method for the prostate enlarges towards the bladder and not towards the perineum and no important structures are injured during the operation.

In advising that patients should get the benefit of complete relief from a most distressing condition I do not hide from myself the fact that the operation is a serious one, but not more so than many operations which are advised and done without hesitation. It is a serious responsibility to advise an operation, but a much more serious one not to advise it. To temporize and delay in a case of enlarging prostate which is giving trouble, knowing that every day increases the danger, is to my mind

entirely unjustifiable. The deaths that occur after prostate operations ought to be attributed to want of operation at the proper time rather than to the operation done as a last desperate chance to save a dying man.

For the reason that the operation is too often advised only after the patient's strength is sapped and his bladder septic, the statistical argument which shows a considerable death rate is, to say the least, misleading. The marvel to me has been not that so many die but that so many recover after their long neglect. If the operation was done at the proper time the statistical argument would tell strongly in its favor.

To quote the statistics of other operators is needless, for they are to be found in more or less complete form in every system of surgery published, and their repetition would add nothing to the sum total of our knowledge, so that I shall content myself with a brief account of my own work. Out of one hundred cases three died, one of which was a case of cancer of the prostate and in this case it did not appear that death was hastened by the operation. In the second case the patient was in a greatly weakened state when he came in, and the operation was only undertaken after it had been thoroughly explained to him that the result was doubtful. There is no reason to suppose he would not have recovered if he had been operated on a few months or even weeks earlier, but during that time he was being treated on the most approved principles without avail. In the third case pneumonia came on the fourth day after operation and death followed. It does not necessarily follow that this post operative pneumonia was a result of the operation or had anything to do with it. I cannot too strongly urge on the profession the advisability of resorting to real treatment at the very beginning of these cases, and the only real treatment in this or any other disease is to remove the cause and do it at once.

SOME REMARKS ON GENERAL ANAESTHESIA.

BY W. EWART FERGUSON, M.B., TORONTO, ASSOCIATE EDITOR CANADA LANCET,
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1. INTRODUCTORY REMARKS.

PERHAPS there is no problem which concerns the medical profession as a unit more than that of anaesthesia. With the increasing amount of surgery being done to-day and the line of perfection to which it has been brought, it is only natural to look to advances and improvements in the art and science of anaesthesia.

Formerly in a great many instances anaesthetics were given by persons with but very little experience, and surgeons didn't lay sufficient value on a successfully and skilfully administered anaesthetic.

No person should attempt to conduct a person from consciousness to a state of unconsciousness with the powerful drugs that are used for the purpose without being familiar with their action and have given several under the careful supervision of a trained anaesthetist.

The subject of anaesthetics is as a rule a neglected quantity in the average medical college, and all the curricula provide for is a few lectures, with the instructions to observe the manner in which they are given in the operating room when watching or assisting at an operation. A student with such a training certainly is not a reliable anaesthetist.

Primary duty of the anaesthetist is to the patient, and he should see that the individual leaves the table in the best possible physical condition and with his resistance as little impaired as possible. In administering an anaesthetic aim to make the induction and post-anaesthetic stages as pleasant as possible.

Anaesthetics should not be begun until just before the surgeon is ready. From 5 to 10 minutes should be allowed on the average for induction. A careful induction will avoid much post-anaesthetic unpleasantness. There should be an anaesthetic room, which is quiet, so that the patient will not be terrified by the preparations being made for the operation.

The anaesthetist should not attempt to watch the surgeon with a view of following the operation in detail, his entire attention being directed towards the patient, but he should be conversant with the progress of the operation so as to be able to regulate the depth of anaesthesia. Once the anaesthetic is started the anaesthetist should see that everything is done as expeditiously as possible so as to facilitate recovery.

2. ALCOHOLISM AS A COMPLICATING FACTOR.

Patients addicted to the use of alcohol are, as a rule, bad subjects for anaesthetics and tax the utmost skill of the anaesthetist during the administration of the drug. They are excitable and consequently need a much greater amount of anaesthetic and are in a physically poorer state to stand it.

The best anaesthetic to use in alcoholics is ether or nitrous oxide and ether. Oxygen should be used to control any dangerous degree of cyanosis. Rowell and Kingsford state that under chloroform and ether the spraying of a few ccm's. of ethyl chloride on the open mask will overcome spasticity, clonic spasms, jactitations, it being often very difficult to get muscular relaxation in this type of case. Some alcoholics can't be successfully anaesthetized by any of these methods and require some means of fixation to the table.

Vomiting following the anaesthetic is much less frequently met with in alcoholics than in other individuals. Complications such as suppression of urine and pneumonia are, however, much more liable to occur. For the suppression of urine sparteine sulphate in sufficient doses is regarded as almost a specific.

A preliminary treatment with bromides of from 5 to 10 days, with the gradual withdrawal of the alcohol, is of value in these cases. With this treatment less anaesthetic is required, and there is considerably less danger of delirium tremens developing, and in all doubtful cases may be continued for a few days after the operation.

3. CHOICE OF THE ANAESTHETIC.

For obvious reasons this is a very difficult problem to discuss. It is impossible for us to depend entirely on one anaesthetic drug to suit all cases.

Every physician attempting to give anaesthetics should be familiar with at least one anaesthetic which would suit the majority of his cases, and as ether is the safest and most universally used anaesthetic to-day it is the one drug to be recommended for general use.

The safety of the patient and ease of administration are the essential points to be considered in the choice of an anaesthetic, and it is on these grounds that ether has gradually superseded chloroform as the routine general anaesthetic. Ether death rate 1-16,000, that of chloroform 1-3,000. The relative safety of any particular anaesthetic depends largely upon the condition of the patient, the skill and experience of the anaesthetist. One gets better results with ether as his experience with the drug increases.

When an operation can be performed without any anaesthetic, or with only a local one, it should be done. If a local one is required use a one to two per cent. novocaine with adrenalin, as used in the Bier clinic in Berlin.

Duration of the operation is an important point in the selection of an anaesthetic. For brief operations nitrous oxide with oxygen makes a suitable one. For operations somewhat longer in duration the nitrous oxide and oxygen may be followed with ether to advantage.

In alcoholics and in conditions of collapse ether is the best anaesthetic, the essential characteristic of ether anaesthesia being its stimulation—breathing more rapid and deeper, frequency and volume of pulse increased.

In very old, feeble people, bronchitic and recent pulmonary conditions, I prefer straight chloroform in place of ether, as post-operative pulmonary conditions are less liable to occur. Chloroform should not be given either plain or in mixtures in persons sitting up.

Many surgeons prefer a particular drug for certain operations, as in abdominal work some prefer chloroform to ether.

Pregnancy, as a rule, has but little bearing on anaesthesia. Such women are of a nervous, excitable temperament, with the result that chloroform gives better results than ether, and with it there is less tendency to post-anaesthetic vomiting. Avoid anaesthetics after the eighth month if possible.

An anaesthetic which has gained considerable popularity of late for general work is that of nitrous oxide with oxygen. Its successful administration, however, requires the skill of a thoroughly trained anaesthetist, as it is the most difficult to administer.

The after effects of chloroform on the blood and internal organs, especially the liver and kidneys, are much more severe than in the case of ether, whilst nitrous oxide and oxygen leaves the least ill effects on the system.

Repeated anaesthetizations without intervals of some length should be avoided.

4. MORPHINE, ATROPINE, SCOPOLAMINE AND STRYCHNINE IN ANAESTHESIA.

Persons more or less narcotized with morphine and atropine or scopolamine are much more easy to handle, their nerves are quieted and they require much less anaesthetic, and in prolonged operations such drugs are of great benefit, giving the maximum amount of analgesia with minimum amount of danger.

Morphine on the central nervous system has a mixed action of stimulation and depression of which the depressive action dominates. This depressive action affects the power of will and attention more than the motor areas. Morphine has but little direct action on circulation, though action of heart may be slightly quickened at first. Respirations are slower, although they may be deeper at first and under large doses may become very weak and irregular. Secretion of carbonic acid lessened during the depressive stage. Morphine is excreted largely by the digestive tract.

Atropine, according to Cushny, acts as a stimulant to the central nervous system and paralyzes the terminations of a number of nerves, notably those that supply involuntary muscle, secretory glands and heart. Dilatation of pupil with atropine due to paralyzation of the terminations of the motor nerve in the circular muscle of the iris. Atropine usually undergoes complete oxidation in the tissues, and is secreted in the urine. Atropine causes a marked rise of temperature.

Scopolamine (hyoscine hydrobromide) resembles atropine in its peripheral action, but is more powerful. On the central nervous system it produces a great desire for sleep, which may last from 4 to 7 hours.

Scopolamine, unlike atropine, does not stimulate the respiratory and vasomotor centres.

Strychnine given before operation and during the course of the operation is considered by many to be of value in obviating or lessening post-anaesthetic shock.

Hypodermic doses most generally used:—

Morphine, gr. 1-6 to 1-4, with atropine, 1-150 gr.

Scopolamine, gr. 1-100, plain or with morphia, gr. 1-6.

Strychnine, gr. 1-30.

These drugs are best given from twenty minutes to half an hour before operation. Morphine and scopolamine are contraindicated in young children, weak subjects, comatose cases, and in those people with drug idiosyncrasies, whilst atropine is in exophthalmic goitre and tachycardia.

5. PREPARATION OF PATIENT.

When possible patient should be sent to hospital two to three days before the operation to rest up both mentally and physically, besides having his diet carefully regulated. The anaesthetist is thus given a chance to go over and examine his case at a suitable time before the operation. Silk points out that auscultation immediately previous to an operation is of little real value, the patient being excited and nervous, with rapid heart action and heart conditions which would be easily diagnosed otherwise go unrecognized.

If operation is in the morning purge the night before with calomel, magnesium sulphate or Seidlitz powder, and follow early in the morning with a plain or soap suds enema. Active purging should be discouraged. The stomach should be empty before commencing the anaesthetic and this is one reason why the morning is such a good time to operate. If operation is later on in the day no food should be given for at least five hours previous to it, although where there is a feeling of faintness or exhaustion a cupful of broth may be given two to three hours before the operation and will do good.

Start anaesthetic on anaesthetic or operating table. This is preferable to commencing it while patient is in bed. Instruct your patient as to breathing, lying still, etc. Endeavor to gain the person's confidence and at the same time size up your patient if you have not had a previous chance to do so, and, finally, see that there is nothing obstructing his breathing.

6. THE ADMINISTRATION OF THE ANAESTHETIC.

The amount of anaesthetic required for any particular operation depends largely upon the constitutional condition of the individual. Thus the anaemic, feeble, and those suffering from profound shock re-

quire much less anaesthetic than the robust or alcoholic.

Ether and chloroform produce anaesthesia by an action on the central nervous system much similar to that of alcohol, causing a progressive paresis from the highest nerve centres of the brain to the spinal cord or reflex centres, the spinal cord being affected before the medullary centres, which are the last to be affected.

The closed method of administering ether and chloroform is now much less used than formerly. The open method, whilst it induces the required depth of anaesthesia at the same time regulates the strength of the vapor. The strength of ether vapor should not exceed 10 per cent. and chloroform 2 per cent. Open method permits free, open breathing and does not partially asphyxiate the patient. With this latter method post-anaesthetic headache, stupor and vomiting are less common.

In giving either by the drop method don't douche the drug on at intervals, but give a regular uniform supply on the mask.

If chloroform is the anaesthetic decided upon a sufficient amount of it should be given or else you will have tonic spasms, retching, vomiting, holding breath, etc. Once you obtain a softly snoring breathing maintain it; avoid tranquil and surtorous breathing.

Ether gives as a rule a larger pupil than chloroform. Dilated pupil, plus conjunctival reflex, give more anaesthetic, whilst with a dilated pupil and no reflex give less anaesthetic. Don't pass from ether to chloroform without a good corneal reflex.

In giving ethyl chloride as a preliminary to ether or in conjunction with it in alcoholics always do so with the open mask. It is a much more powerful drug than either ether or chloroform.

In the open method of administering ether take a wire mask, covering it with from four to six thicknesses of gauze, cover eyes with a pad of absorbent cotton wrung out in sterile water. The head should be covered with a cap made out of a towel. Commence the anaesthetic with the mask four to five inches above mouth and nose. Instruct patient to breath properly, and as he becomes used to the drug gradually lower the mask and at the same time increase the flow of ether. Soon consciousness slips into unconsciousness, and the breathing then becomes regular and free. During the induction should there be coughing, holding of breath, temporarily ease the amount or omit the anaesthetic. Usual time for induction from five to ten minutes.

During the progress of the operation only give sufficient drug to keep patient in required depth of anaesthesia. In giving ether give as much air and as little drug as possible. In alcoholics and nervous individuals it will be necessary to give more ether and less air, as this type

of person is very difficult to anaesthetize.

As to the merits of anaesthetic mixtures such as C.E. or A.C.E. there is a wide divergence of opinion, but it is safe to say their use is, if anything, on the decrease and wisely so. In anaesthetics you are dealing with dangerous drugs and giving mixtures where one drug more or less masks the symptoms of the other is dangerous practice.

Nitrous oxide and oxygen produces a light anaesthesia and amongst some anaesthetists has become very popular. With it there is early loss of consciousness, with quick return when it is stopped. There is little or no post-anaesthetic nausea or vomiting. Crile has successfully given nitrous oxide with oxygen in over two thousand cases. It is contra-indicated in alcoholics and in cases with a hypertension pulse. This "gas" anaesthesia is best administered with a Hewitt or Teter apparatus. There should be a steady flow under low tension of both the nitrous oxide and oxygen. Great cautiousness and skill are required in giving this gas mixture, as alarming symptoms may appear, with but little warning. In many cases this gas anaesthesia, followed by ether, makes an ideal anaesthetic. The oxygen is used to control the asphyxial complications.

7. POST-ANAESTHETIC TREATMENT.

Immediately after completion of the operation return patient to the ward or recovery room, which should be quiet, not too bright, and with plenty of fresh air, the fresh air being a very important point in quick recovery. Hewitt recommends, when conditions permit, placing the patient back to bed on his right side, with a pillow at his back. In this position tongue falls to side of mouth, there is free access of air to the lungs and noisy breathing usually ceases; mucus and saliva are not swallowed, and any vomited material may be expelled without any interference with the breathing. The patient should be carefully watched until he recovers consciousness.

The drop method of administering ether and chloroform, plus our increased knowledge and practical experience with these drugs, has greatly lessened the frequency and severity of post-anaesthetic nausea and vomiting.

As Halperin in a recent issue of the *Medical Records* points out, ether and chloroform may cause vomiting in more than one way: first, by directly disturbing the vomiting centre; secondly, by elimination of the drug into the stomach; thirdly, by producing a condition of acidosis; and, fourthly, perhaps by disturbing the organs which are concerned in the maintenance of balance as semi-circular canals, whereby a condition not unlike sea sickness is produced.

Amongst the secondary or indirect causes of vomiting the following may be mentioned:

1. Faulty induction, as crowding the anaesthetic, struggling during initial stages, etc.
2. Swallowing of excess of mucus, which very often is laden with the drug.
3. Food in stomach.
4. Disease of stomach.

To alleviate post-anaesthetic vomiting Hewitt recommends giving the patient a tumblerful of hot water, to which soda bicarb. $\mathfrak{z}\text{i}$ has been added. This alkaline mixture tends to check acid intoxication and relieves thirst.

Atropine given before the operation by checking the flow of mucus and saliva tends to overcome the after nausea and vomiting. In persistent cases try eucaïne hydrochlor. ($\mathfrak{m}\mathfrak{v}$ of 5 per cent. sol.). Mackenrodt soaks a towel in vinegar (cider preferred) and places it so that the patient inhales the fumes.

In cases of acetonemia give strychn., gr. 1-30 per hypo. or sp. amm. aromat. $\mathfrak{z}\text{i}$ per os., sips of warm alkaline drinks and enemata of pot bicarb. saturated solution.

Oppose post-anaesthetic washing out of stomach. The patient will be suffering enough without adding any more to his discomfort.

Following the operation avoid giving patient opium or any of its alkaloids per mouth, and unless urgent signs of shock or collapse develop avoid giving stimulants as whiskey, sal volatile, etc.

In post-anaesthetic shock Dudley Buxton recommends strychnine per hypo., with oxygen inhalations, which he claims are of great value. In severe shock transfusions of normal saline solution plain or with adrenalin so as to make a solution 1-20,000 is of service.

WATER DRINKING AND DRINKING WATER*

BY DR. KUHNER, OF EISENACH, DOCTOR OF PHYSIOLOGY.

THE question as to the use of drinking water at meals is still in dispute. To-day still many doctors think in accordance with the teachings of the Salernitan School that the juices of the stomach may become too diluted and lose their virtues, so that digestion is impeded.

That is an error. Since the ferments have been studied and found to be of enormous strength, especially so with the diastases, the assumption appears to me to be untenable that water drinking during meals could hinder the process of digestion. Also the free hydrochloric acid contained in the juices of the stomach might be diluted to a far greater extent than is effected through drinking water at meals without the digestion suffering in the least. The effect of ferments in the stomach

* Translated extract from the *Balneologische Zeitung* of the 20th January, 1912, No. 2.

is rapidly produced even by solutions, which are only weakly acidulated. Moreover, the Russian investigator—Palow—found that immediately after a complete and thorough washing out of the stomach with much water the degree of acidity is completely unaltered. Finally, Ruzika, by exact experiments on himself, showed that half a litre of water drunk during the mid-day meal did not hinder the nourishment derived from nutritive substances at all. On the contrary, if one reduces the fluidity of the food too greatly there is no complete contact between the ferments and the hydrochloric acid on the one hand and the food on the other, and the dissolution by the pepton is seriously delayed. Then, again, if we kept a dry diet too long, the effect on the albumenoids is left incomplete. The individual suffers seriously from loss of nourishment, fat and muscles are greatly reduced and the person rapidly grows thinner.

The quality of the drinking water is no less important than the quantity. What are the requirements which one should lay down for the quality of the water? In the first place by bacteriological examination it must be ascertained that the water is free from pathogenic microbes. Water which is impure, and which contains the germs of typhoid, cholera, or other infectious diseases may not be drunk without something being done, even the coli bacteria, which are present in the drinking water of many places in large quantities are not above suspicion. Fortunately, consumers are able, by boiling for 40 minutes, to sterilize any water sufficiently to make it potable. Any drinking water should be rejected which contains more than 100 germs in a cubic centimetre.

Other surface waters, too, are very frequently tainted. The growing over-population of Germany and its manufacturing industries work in this direction, especially the flushing drainage system, without filtering beds, is greatly responsible for the pollution of the rivers. It is very regrettable that so many parishes allow the solids to simply pass into the river instead of by a rational system employing same for agricultural purposes. In his treatise on "The necessity for keeping German waters clean," Bonne complains as to this: "The Germans," he says, "have a high degree of culture, but at the same time stand on the lowest step of uncivilization. Whilst they have dirigible airships and light and heat and motive power from electricity along with the telegraph and telephone, they still allow the whole of their waste to run into their rivers and lakes, instead of using it to cultivate their heaths and stretches of sand. Fish die in the poisoned water. But human beings wash in and drink it, although, even diluted and filtered several times, it still contains impurities of human origin and often was the cause of great epidemics of disease."

This jeremiad is not without reason. How far are we from the hygienic principles of the Persians, of whom Herodotus tells that they revered the rivers and would not allow people to wash their hands in them or any impurities to be thrown into them. To-day we smile at such devout simpleness, but we cease to do so when from our polluted rivers vengeful plagues arise, as in 1892 the cholera from the waters of the Elbe at Hamburg, and 1901 typhoid at Glesenkirchen from the River Ruhr. The first act of the tragedy is always impurification, the second the disease, for it is in the dirt that bacteria flourish. What is so-called the self-purification of the rivers is only apparent, and is no real cleansing, it is a hypothesis to deprecate sins against hygiene, and it calms our scruples. In reality the impurities which are conducted into the rivers are only hidden, they go out of sight, but they have not lost their power for harm. The apparent self-cleansing of a river chiefly means that far down the stream away from the place where the impurities have entered, and after much mud has sunk to the bottom of the river, and especially after this river has taken up the waters of many tributaries, which may still be clean, the water of the river becomes purer again. But there can really be no talk of any actual self-cleansing of a river.

REMARKS ON CHRONIC HÆMOLYTIC AND PANCREATIC JAUNDICE (SELECTED).

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THE following brief sketch gives an outline of our present knowledge about two forms of jaundice which have become prominent in recent years.

CHRONIC HAEMOLYTIC JAUNDICE.

With the progress of time it sometimes happens that the current opinion of one period, after becoming discredited, if not forgotten, subsequently regains general acceptance. This swing of the pendulum is seen in the views held, during the lifetime of middle-aged members of our profession, on the mechanism of jaundice. Thirty years ago jaundice was divided into obstructive (due to gross changes in the bile ducts) and non-obstructive (with no obvious cause). Various explanations were current to explain non-obstructive jaundice, such as suppression of the bile secretion by the liver, and the formation of bile in the blood or elsewhere from effete blood-pigment; this was therefore called hæmatogenous, in contradistinction to obstructive or hepatogenous jaundice. The experimental investigations of Minkowski and Naunyn on geese (1886) and others showed that bile was manufactured only in the liver, and that jaundice could not occur when that organ was removed from

the circulation. Stadelmann (1881-3) and, later, W. Hunter, proved that the jaundice caused by toluylenediamine was really due to inflammation and obstruction by viscid bile of the small intrahepatic ducts, and it was concluded, partly from microscopic examination and partly from analogy, that the jaundice seen in various infective and toxic conditions—such as septicæmia, pneumonia, acute yellow atrophy, hæmoglobinuria, snake-bite, and poisoning by drugs—in which no obstruction was visible, was also caused by intrahepatic cholangitis. Or, as Hunter summed up in "Allbutt's System of Medicine" (1897, IV., 81): "Instead, then, of the two varieties of jaundice formerly described—one hepatogenous or obstructive, the other hæmatogenous or non-obstructive—it is necessary now to recognize one class only. All jaundice is hepatogenous, the result of absorption of bile formed and excreted by the liver." The cases in which no gross obstruction was forthcoming were spoken of as toxæmic or hæmohepatogenous. The view expressed by Hunter is that generally accepted at the present time, though, as will be shown later, the pendulum is beginning to swing back to the hæmatogenous origin as regards certain cases. Before going on to this question it may be mentioned that at different dates Frerichs, Liebermeister, Szubinski, Minkowski, Pick, and others suggested that in certain conditions, such as toxæmia, disturbance of the metabolism of the liver cells may lead to secretion of bile directly into the blood-vessels or lymphatics of the liver instead of into the bile capillaries (diffusion or acathetic jaundice, jaundice from parapneumonia, paracholia). This hypothesis, which is obviously difficult or impossible to prove, was framed to explain cases of non-obstructive or toxæmic jaundice. The channel by which bile when dammed up in the liver reaches the circulation was shown by Saunders (1803), Fleischl (1874), and Vaughan Harley (1892), to be the lymphatics, ligature of the thoracic duct preventing the jaundice which would naturally follow ligature of the common bile duct. More recent experimental work has thrown doubt on this generally accepted view, and it has been shown that a fistula of the thoracic duct does not prevent the occurrence of jaundice (Wertheimer and Lapage, Mendel and Underhill, Whipple and King).

To return to the possible hæmatogenous origin of jaundice, which has been brought up again by the recognition of a special form of chronic jaundice variously labelled as acholuric, hæmolytic with splenomegaly, familial splenomegalic cholæmia. The condition is often hereditary, familial, or may be congenital and lifelong and remarkably free from symptoms. The main exception to the last statement is that some cases have attacks of colic, which appear to be connected with small pigment calculi in the gall-bladder, as these were found in five out of

six necropsies on congenital cases (Guizzetti). These calculi, however, could not have anything to do with the jaundice, as they were confined to the gall-bladders, and should be regarded as a complication. This chronic hæmolytic jaundice may also be acquired, and is then accompanied by very considerable anæmia and less jaundice than in the congenital, hereditary, and familial forms. The spleen is nearly always enlarged, and as the jaundice, never very deep, often varies and may even almost disappear for a time, the mild cases show clinical transitions between chronic splenic anæmia and hypertrophic biliary (Hanot's) cirrhosis, especially that variety in which the spleen is enlarged before the liver (metasplenomegalic biliary cirrhosis); and the acquired cases may resemble pernicious anæmia with splenic enlargement. The urine contains urobilin, but is free from bile pigment (acholuria); hence, in former times, when bile in the urine was considered proof that discoloration of the skin was due to jaundice, these cases were spoken of as "urobilin" jaundice. In 1885 Murchison gave an account of a family, a later generation of which was shown in 1909 to have this condition, as shown by recent blood tests (Hutchison and Panton). Wilson (1890, 1893) reported a family in this country with one necropsy, and Minkowski (1900) entered with considerable detail into the subject, and recorded a necropsy in which there was no evidence of biliary obstruction. The condition did not, however, attract much attention, and the tendency was probably, if I may judge from my own attitude, to regard the jaundice as due to obstruction of the minute bile ducts in the liver. The work that really separated this from other forms of jaundice was Chauffard's discovery (1907-8) that the red blood corpuscles of such patients are fragile when exposed to hypotonic solutions of common salt, are smaller than normal, and show basophil granulations, whereas in obstructive jaundice the red blood corpuscles are more resistant to hypotonic saline solutions, and are larger than normal. These characters have been so generally confirmed that they may be regarded as diagnostic, but observations as to the presence or absence of fragility of the red blood corpuscles in the rare disease hypertrophic biliary (Hanot's) cirrhosis are necessary before the relation between it and chronic hæmolytic jaundice can be settled. An attempt to explain these cases on the lines of inflammatory obstruction in the small intrahepatic bile ducts fails from the absence of any microscopic changes in the ducts; and the suggestion that the bile is so viscid that it blocks the ducts cannot stand against the observation that in a patient on whom cholecystotomy had been performed for suspected gall-stone large quantities of normal and strikingly fluid bile were discharged. The cause of the abnormal fragility of the red blood corpuscles is unknown, but it has been thought to be due either to inadequacy of the

mon bile duct and so imitate malignant disease of the head of the pancreas; in fact, it is highly probable that some of the cases formerly red bone-marrow or to a poison produced by some inborn error of metabolism. It would be interesting to have some information about the resistance to hypotonic saline solutions of the red blood corpuscles in the common or so-called physiological jaundice of newly-born infants; for at birth there is an increased number of red blood corpuscles followed by a correspondingly increased hæmolysis. However brought about, this fragility of the red blood corpuscles provides an excess of hæmoglobin, and from this bilirubin is formed, it is now supposed, in the circulation. In a recent review of the subject, Thayer and Morris have collected evidence to show that bile pigment may be found in old hæmorrhages, and on these grounds it is argued that hæmolytic jaundice is really hæmatogenous in origin. It has been suggested that hæmoglobin is transformed into bilirubin by a tryptic ferment in the presence of a carbo-hydrate, such as glycogen, or dextrose; and that, though these conditions are usually provided by the liver, the change may be carried out in the tissues. The hæmolysis, which is the essential factor in the jaundice, is not caused by a hæmolysin, but is due either simply to the fragility of the corpuscles or to the activity of the spleen (Minkowski, Banti). There does not appear to be convincing proof that the hæmolysis is mainly due to the spleen; if there was, it is obvious that splenectomy would be the proper treatment. At present there is not sufficient evidence as to the effect of splenectomy on hæmolytic jaundice, and in the hereditary, familial, and congenital cases, which hardly suffer at all from the jaundice, it would not be justifiable; but in the acquired form, in which the patient is often really ill, cures have been reported after splenectomy (Micheli, Banti). Simple drainage of the gall-bladder, which would be reasonable on the supposition that there was infection of the biliary system, has been seldom tried; in one case in which it was carried out jaundice returned after the fistula was closed. With regard to medical treatment, in the congenital, hereditary, and familial cases, there is usually little or nothing calling for relief. In acquired cases in which anæmia may be advanced iron does good, whilst arsenic has been shown to be useless. Possibly some means may be discovered by which the fragility of the red blood corpuscles can be obviated.

PANCREATIC JAUNDICE.

The pancreas now plays a much more important part in the production of obstructive jaundice than was recognised ten years ago, mainly as the result of Mayo Robson's advocacy. Chronic pancreatitis, except in connection with grave diabetes, attracted little or no attention until it was shown that it might be cicatricial contraction compress the com-

mon bile duct and so imitate malignant disease of the head of the pancreas; in fact, it is highly probable that some of the cases described as "scirrhus" of the pancreas were inflammatory rather than carcinomatous. It is true that chronic pancreatitis does not always act in this way; the reason why it causes jaundice in some cases and not in others is that the anatomical relations of the head of the pancreas and the common bile duct are not always the same; in 62 per cent. of bodies the common bile duct is completely embedded in the head of the pancreas and so would be compressed, whereas in the remaining 38 per cent. the duct lies behind in a deep groove (Helly) and would not suffer. In jaundice due to chronic pancreatitis the clinical picture may resemble that of malignant disease obstructing the bile ducts, and in such cases Cammidge's tests are of great value in the differential diagnosis. These tests, namely, examination of the urine for the "pancreatic reaction" and analysis of the faeces, especially with regard to the total quantity of fat and the relative percentages of the saponified and unsaponified fat, are complicated, and with their inventor's growing experience have undergone considerable change and extension. They have been adversely criticized, and there can be little doubt that they are more successful in their inventor's hands than in those of his critics. They require time and practice, and, generally speaking, should be carried out by an expert, and are hardly adapted for ordinary clinical work. But in my experience they may establish a diagnosis when ordinary clinical methods are inconclusive.

Chronic pancreatitis may be initiated in various ways, but is usually due to a calculus in the lower end of the common bile duct. The indurated head of the pancreas may be easily mistaken for carcinoma in the course of an operation planned for the removal of a gall-stone, but abandoned under this misconception. Fortunately in some such incomplete operations manipulation of the parts appears to have extruded the calculus into the duodenum, and so to have, unintentionally, so to speak, brought about a cure. It appears that chronic pancreatitis initiated by a stone in the common duct may persist and advance after the calculus has been passed. The surgical treatment of chronic pancreatitis consists in thorough drainage of the bile ducts by means of cholecystotomy or cholecystenterostomy. This procedure has also been advocated by Mayo Robson (1910) in order to prevent the late sequel of the disease, namely, diabetes. Removal is of course the proper means of dealing with calculi in the common duct; but in patients who are not fit for operation or decline it, two methods of medical treatment are worth a trial: (a) Urotropin, which has been shown by Crowe to be excreted into the biliary system, may be combined with sodium salicylate, which increases the flow of bile; in this way the gall-bladder and

ducts can be flushed and disinfected. (b) A vaccine of a micro-organism obtained from the patient's stools and proved to be agglutinated by his blood serum may be given. I have employed these means with relief, but they cannot be regarded as curative or in the same light as operation.

Under the heading of *catarrhal jaundice* more than one condition is probably included. This title is most suitably applied to cases with vomiting and diarrhoea, in which jaundice follows painlessly and lasts for a few weeks. But in practice, even though the manifestations of gastro-intestinal catarrh are absent, it is often employed to describe cases of mild jaundice for which no cause is obvious; and it is also given to mild cases of epidemic jaundice which are more conveniently classified as infective. The usual explanation of catarrhal jaundice is that inflammation of the mucous membrane of the duodenum spreads into the cavity of the biliary papilla or ampulla of Vater, and that the swollen mucous membrane, aided by a plug of mucus, causes obstruction. This has often been doubted, especially as opportunities for observing the actual morbid changes are rare. In a case fatal from accident on the eighth day of the disease Eppinger (1909) found hyperplasia of the lymphoid tissues in the mucous membrane of the common bile duct where it passes through the walls of the duodenum. He compared this lymphoid tissue to the tonsil and suggested that its function is to protect the duct against infection from the intestine, and drew an analogy between catarrhal jaundice and tonsillitis. According to Mayo Robson (1904), prolonged catarrhal jaundice is pancreatic in origin, and is due to pressure exerted on the terminal part of the common bile duct by the head of the pancreas, which is enlarged from catarrhal inflammation. This was shown to exist in fifteen cases of prolonged catarrhal jaundice in which the abdomen was opened; further, a positive "pancreatic reaction" in the urine was found in forty-two out of fifty-three cases (or 79 per cent.) of catarrhal jaundice (Cammidge, 1910). Whilst it is not clear why jaundice is so extremely rare in cases of severe acute pancreatitis such as give rise to the symptoms now sometimes described by the phrase "the acute abdomen," there seems to be good evidence that some cases of so-called catarrhal jaundice are pancreatic in origin.

Jaundice may, of course, be due to other diseases of the pancreas, such as carcinoma, pancreatic and peripancreatic cysts, large calculi in Wirsung's duct compressing the termination of the common bile duct, hydatid cysts arising in the head of the gland, or gummatous disease. These, except the first two, are extremely rare. Two clinical features, though far from constantly present, have been specially correlated by Mayo Robson with jaundice of pancreatic origin: they are pruritus and hæmorrhages.—*Universal Medical Record.*

CURRENT MEDICAL LITERATURE

MEDICINE

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IDIOPATHIC PLEURISY AND PULMONARY TUBERCULOSIS.

The frequency with which pulmonary tuberculosis follows an attack of idiopathic pleurisy has been so variably estimated by different authorities that, while some companies accept a candidate for insurance as a first-class life after an attack of idiopathic pleurisy, others reject this class of candidate altogether. A laborious investigation, carried out in Sweden by H. Allard and H. Köster (*Hygeia*, October, 1911), brings out several points of interest which are of special value, as the observations represent many years of work on a large amount of material. Allard's series deals with 200 cases of idiopathic pleurisy treated in Gothenburg from 1881 to 1893, their subsequent fate being investigated in 1910. Köster's series deals with 371 cases of idiopathic pleurisy and 62 cases of specific pleurisy treated from 1894 to 1908 and reported on in 1910. An analysis was also made of the frequency of idiopathic pleurisy in the histories of 2,123 cases of pulmonary tuberculosis. The two series were compiled on the same principles independently of each other. In the first series, representing 180 cases of serous and 20 cases of dry pleurisy, it was found that sixteen to twenty-eight years later 87 patients were alive and well, 28 were tuberculous, 61 had died of tuberculosis, and 24 had died of other diseases. In the second series, representing 334 cases of serous and 37 cases of dry pleurisy, it was found that two to sixteen years later 164 patients were alive and well, 118 were tuberculous, 62 had died of tuberculosis, and 27 had died of other diseases. In 650 cases there was a history of idiopathic pleurisy among the 2,123 cases of pulmonary tuberculosis which were investigated. Taking the two series together, the writers find that idiopathic serous pleurisy is followed sooner or later by pulmonary tuberculosis in 47.7 per cent., and that even in the case of idiopathic dry pleurisy this percentage is as high as 42. The prognosis after idiopathic pleurisy is, however, much brighter in early than in middle life, and, while the subsequent incidence of tuberculosis is only 30 per cent. when the pleurisy has occurred between the ages of six and ten years, it is as high as 60.4 per cent. when the pleurisy has occurred between the ages of 31 and 35 years. Even at the high age of 66 to 70 years idiopathic pleurisy

is followed by tuberculosis in 40 per cent. of all cases. Tuberculosis following idiopathic pleurisy is usually more acute and is oftener fatal in the adult than in the child. In the majority of cases (85 per cent.) tuberculosis flares up within five years of the pleurisy; but up to the age of 15 the development of tuberculosis is slower, and it flares up more often than before a lapse of five years. Curiously enough, neither series contains a single case of dry pleurisy in childhood. The occurrence of tuberculosis subsequent to pleurisy due to other infectious diseases was found to be most rare, and the writers therefore conclude that in such cases the patient's is a first-class life, whereas for five years after idiopathic pleurisy he is unassurable, and even after this period his chances of developing tuberculosis are considerable. Their findings are, therefore, in opposition to those of Pollock and Chisholm (*Medical Handbook of Life Assurance*, 1889), who write: ". . . But, after the convalescence from such attacks, the life is assurable. A contracted side from the absorption of a former effusion, with slight dulness and lessened or distant breath sounds at the base, need not invalidate the life."—*B. M. J.*, Feb. 10.

ASCITIC AUTOTHERAPY.

Galup (*Journ. de méd. et chir. prat.*, Art. 23447, November 25th, 1911) makes some observations on the treatment of ascites by autoserotherapy, a form of treatment first introduced by Gilbert, of Geneva, for cases of pleuritic effusion. The results of the treatment hitherto have been very variable; in cases due to alcoholic cirrhosis the successes have been few, though in tuberculous ascites the results have been far more encouraging. Seeing the uncertainty of the results, Sicard and Galup determined to try large intravenous injections, following the idea of Castaigne, who has advocated large injections into the cellular tissue. A woman suffering from cirrhosis, who had been tapped fifteen times at intervals of twenty days, and who had undergone without benefit all kinds of treatment, including subcutaneous autotherapy, was given intravenous injections of successively 300, 200, 150, and 500 c.cm. at intervals of three days. Similar series of injections were made at intervals, till in the course of four months she had had 5 litres 300 of ascitic fluid introduced into her circulation, with the result that her strength returned, her general condition was improved, and the formation of fluid was arrested. In another case cited the results were far less favorable. There are two methods of applying autotherapy in cases of ascites:—
(1) *The method of small subcutaneous injections*: The abdominal cavity

is tapped and from 3 to 10 c.cm. of fluid are withdrawn by means of a glass syringe; then, after making sure that the fluid is not purulent, the needle is withdrawn as far as the cellular tissue and the fluid is re-injected under the skin. (2) *The method of large subcutaneous or intravenous injections*: By this method the fluid may either be aspirated afresh for each inoculation, or it may be stored in aseptic and hermetically sealed vessels, each containing enough for one dose; by this latter means the patient is spared the discomfort of a number of abdominal punctures; but there is the disadvantage that the stored fluid becomes in some way altered, and sometimes gives rise to considerable febrile reaction. The injection of freshly aspirated fluid is free from this objection, and by the use of novocain the discomfort is reduced to a minimum. The dose is from 200 to 500 c.cm. Whichever method is employed injections must be made at intervals of from two to seven days, and it is important to combine the treatment with a milk or chloride free diet. Autotherapy has been used in all varieties of ascites, and the only absolute contraindication to its use is purulence of the fluid. The method of small subcutaneous injections may always be tried first; it generally fails in cases due to cirrhosis, but, on the other, hand, it is the only method admissible in tuberculous ascites. Large intravenous injections may succeed in cases due to cirrhosis after small subcutaneous injections have failed, but such injections must on no account be used in tuberculous cases for fear of setting up a general infection.—*B. M. J.*, Feb. 3.

GOUTY ALBUMINURIA.

Rathery (*Journ. des prat.*, October 28th, 1911) discusses this subject. He does not include under this heading cases of chronic nephritis with arterial hypertension, but a less known group of cases which suffer from gouty albuminuria properly so called. The patients are for the most part young people, who have only had one or two attacks of gout. The urine is diminished in quantity, high in color, rich in salts, uric acid, and urates, and contains a large quantity of albumen. But the condition is intermittent and cyclic, being most marked at ten or eleven in the morning and three to four in the afternoon. There is no arterial hypertension in these cases, nor ventricular hypertrophy. Often enough there is no hypotension. The liver is usually found to be hypertrophied, and is tender on pressure. Renal permeability appears to be little affected. Certain authors, while admitting the existence of the condition, affirm that there is a renal lesion, although of a specific type, and insufficient to damage the renal epithelium seriously. According to this

theory very small sections of the kidney tissue are affected. In the author's opinion it is an argument against this theory that in such patients uraemic symptoms are never noted. It is further stated that the nephritis is caused by the passage of uric acid through the kidneys. But albuminuria is not seen in all gouty persons, and uricaemia is a constant factor. So, too, the type of nephritis referred to, if dependent solely upon uricaemia, ought to be always present. It is not shown that uric acid is toxic for the kidney, or that its presence necessarily determines a renal lesion. In other words, according to the author, it is not proved that this type of gouty albuminuria results from a renal lesion of any kind. Grandmaison supports the view that there is no alteration of the kidney in these cases. According to him the albuminuria arises from hepatic insufficiency. The liver does not completely fulfil its function with regard to albuminous material introduced into the alimentary canal, and allows these, in the form of peptones, to pass into the circulation, and the lowered arterial pressure in these cases favors dialyzation. The author does not agree with this theory in its entirety, but admits that it contains an element of truth as regards the rôle played by the liver. In the gouty albuminuric of the type under discussion, the fault is neither purely renal nor hepatic, but contains an element of both. The hepatic error may arise from hypofunction or hyperfunction of that organ. In the former case the liver ceases to play its defensive rôle with regard to intestinal poisons, and these circulating in the blood cause albuminuria; in the latter case there is too great destruction of red cells, setting at liberty an excessive quantity of globulin which is eliminated by the kidneys. The condition is not serious and is largely influenced by the state of the digestive organs. Treatment must be directed to these organs in the first place.—*B. M. J.*, Jan. 27.

VACCINATION FOR TYPHOID FEVER.

Typhoid vaccination, at first a voluntary measure in the U. S., has since July 1, 1911, been made compulsory for all officers and enlisted men below the age of forty-five years and who have not had an authenticated case of typhoid fever.

The immunization of the army has proceeded rapidly until, at the present time, somewhat over 60,000 men have completed the necessary three inoculations. Among this entire number, and covering a period of nearly three years, but twelve cases of typhoid have developed and no death has occurred. One man at the Guantanamo naval station died five days after the first inoculation from a case of walking typhoid. This

is the only one on whom the inoculation has been begun. The record of the maneuver division in camp at San Antonio, Texas, during the past summer has been most instructive. An army division having an average strength of 12,800 men, all inoculated, occupied the same camp for four months, from March to July, and in this command but one case of typhoid developed. This was a mild case in a hospital corps man who had not completed the inoculations necessary for protection. There were forty-nine cases of typhoid, with nineteen deaths, in the City of San Antonio for the same four months. During the same period that this camp existed at San Antonio, between three and four thousand men were in camp at Galveston, Texas, and in this command no case of typhoid occurred, while the City of Galveston furnished 192 cases of the disease during the existence of the camp. The city and the camp had the same water, milk and food supply, the only difference being that the camp had been protected by inoculation.

About 3,000 men were scattered along the Mexican border mostly in small camps, many of them in localities where typhoid was present, yet of this command only one man contracted typhoid, which ended in recovery. In a recent number of *The Journal of the American Medical Association*, Captain Phelan of the medical corps of the army contrasts the record of these camps with those of the concentration camps of the Spanish-American war, and says that it is inconceivable that, with such conditions, the practical abolition of typhoid could have been effected without the use of inoculations.—*Pacific Medical Journal*, March, 1912.

RHEUMATIC CARDITIS.

Quoting Osler, W. Lintz, Brooklyn (*Journal A. M. A.*, March 2), says that rheumatic carditis is a disease that in the young is the most serious single infection, responsible for almost as many deaths as all the exanthematous affections of childhood together. It is responsible also for most of the heart disease of adults. By rheumatic carditis is understood the successful invasion of the heart and the various pathologic changes brought about in that organ by the causal agent of rheumatism, which he believes is the diplococcus of Triboulet and Poynton and Paine, which he has been able to isolate in some of his patients. The pathology is absolutely characteristic; the valvular lesions are caused by the dissemination of the microorganisms through the blood in the coronary arteries and not by their lodging on the valves in the nitro-cardiac blood-stream. The cardiac apex murmur, even early in the disease, is never functional, but is due to a loss of tonicity in the myocar-

dial mitral sphincter and consequent dilatation of the mitral orifice. The general cardiac dilatation, the most serious derangement in the disease, is due to the selective action of this particular toxin on the cardiac muscle. Derangement of the pulse and temperature ratio is of diagnostic importance, and he has observed a rise of temperature to be accompanied by a feeling of well-being, especially in the more subacute and chronic cases. The simple and malignant endocardites represent only different degrees of one and the same process. While the salicylates are of value in the treatment of the general rheumatic infection, Lintz has little faith in their effectiveness in serious involvement of the heart. His experience with vaccines has not been sufficient to warrant any definite conclusions. Rest is the rational therapy. In other words, we are helpless against this most serious condition.

ACNE.

Milk of sulphur, 1 dr.

Talc powder, $\frac{1}{2}$ dr.

Glycerin, 2 oz.

Tr. of quillaia, 2 dr.

Rose water, 6 oz.

Applied at night after the face is washed in hot water and soap. In the morning, after a similar washing, the following powder is applied:—

Milk of sulphur, $\frac{1}{2}$ dr.

Carbonate of magnesia, 3 oz.

EPISTAXIS.

Gelatine, 1 dr.

Salicylic acid, 10 gr.

Boiling water, 6 oz.

To be used in plugging the nose.—*Medical Press*, Feb. 28.

SURGERY

UNDER THE CHARGE OF A. H. PERFECT, M.B., SURGEON TO THE TORONTO WESTERN HOSPITAL.

ALCOHOL INJECTION OF THE GASSERIAN GANGLION.

Harris (*Lancet*, 27 Jan.) has employed alcohol injections in the treatment of trifacial neuralgia for several years and has treated some ninety cases during that time with greater or less relief in all but three cases. In the majority the relief was of at least one year duration. He is emphatic in the view that total absence of relief implies that the nerve

was not injected, for strong alcohol injected into any nerve trunk destroys the fibres almost instantly. The procedure he now describes is an advance upon his former one in that he seeks not only to destroy a single or at most two divisions of the nerve, but to destroy the ganglion itself. He reserves decision as to whether it is advisable to destroy the ganglion in those cases in which the neuralgia does not affect the lower division of the nerve, for this would mean permanent loss of sensation over the corresponding side of the tongue; in other cases, however, and particularly in the severe and intractable ones, he advises the destruction of the ganglion. This he accomplishes by passing the needle through the foramen ovale under a local or general anesthetic. He chooses a point on, or slightly below a line joining the ala nasi with the incisor notch; when the teeth are in position this line usually corresponds to the lower border of the sigmoid notch on the lower jaw. He then directs the needle fairly well upward until the lips of the foramen ovale are felt with its point. This is then entered and at once the nerve is injected at this point with 1.5 c.c. of ninety per cent. alcohol. If no general anesthetic is given he precedes this by an injection of six or seven minims of two per cent. eucaïne to make the alcoholic injection practically painless. If the nerve has been successfully injected there will develop at once deep anesthesia of the lower lip and chin. He then passes the needle through the foramen, without using force. There is considerable resistance to the injection if the point of the needle is within the nerve tissue. Then one to 1.5 c.c. more of the alcohol is to be injected directly into the ganglion, a few drops at a time, at intervals of not less than two minutes, testing, meanwhile, the sensation of the cheek and forehead with a blunt pin. When neither the point nor the head of the pin is any longer perceived, it is probable that sufficient has been injected and the needle can be slowly withdrawn. Even after this the anesthesia will probably fade in an hour or so, and by the next day tactile sensation may be fair on the forehead and below the eye, with a normal conjunctival reflex. If this is the case there need be no fear of the development of keratitis. There is a subsequent recovery of the motor powers of the jaw muscles, and this is explained by the fact that the motor branch of the fifth nerve has no connection with the Gasserian ganglion. The results of this operation are as good if not even better than those from the complete resection of the ganglion, and the danger is nil as compared to the dangers of that procedure.—*New York Med. Jour.*

THE MAKER OF MODERN SURGERY.

There have been few funerals in Westminster Abbey so impressive as that of Lord Lister, and it is probable that no professor of the art of healing has ever been buried with such signal marks of honor. Those who gathered in that shrine of the illustrious dead included not only representatives of every branch of his own profession and the chief scientific bodies throughout the world, but of crowned heads and of the Governments of nearly every civilized country. It may be doubted whether Lister himself would have cared for the pomp of his obsequies, but it was a spontaneous tribute of respect to a man whose work for the welfare of humanity had made his name a household word far beyond the narrow boundaries of the scientific world in which he lived and toiled. He did not seek for fame, but for truth. The fame that came to him he accepted rather, we imagine, as a public testimony to the value of his work than as a personal compliment. So it was of the honors that were showered upon him. They all set the seal of official recognition upon his achievement and as such they were probably welcome. But for mere titles and decorations in themselves no man ever cared less. To him his work was its own reward exceeding great.

Of the simple dignity of his life, his courtesy, consideration, and kindness to all without regard to social importance, it is needless to speak. Traces of his Quaker origin may be found in his dislike of controversy; like Darwin he left his disciples to do battle against his opponents. Serene and unmoved by the scoffs of ignorance, he continued his work, unshaken in his pursuit of the aim he had set before him. It has been said that genius is naturally self-assertive; this was not so in the case of Lister. "His soul was like a star and dwelt apart." In his work his most marked characteristic was the inexhaustible patience that he brought to the solution of every problem with which he was confronted. He would carry out a series of researches extending over many years, and he thought no detail in the work beneath his notice. Nothing would satisfy him but the fullest demonstration of principles and the utmost attainable perfection in their application. His *Collected Papers* are a record of gropings through the darkness of traditional error and the pitfalls of fallacy that lie about the feet of the investigator. He was ever ready to abandon a method which had proved disappointing, and to begin anew the slow work of research. Of his conscientiousness we ourselves have often had inconvenient proof in his drastic revision of proofs; he would not allow anything to see the light before it had been made to express his meaning with the most meticulous accuracy.

Greater even than Lister's genius was his humanity. In his enthusiasm for the cause he had at heart he never forgot the individual

sufferer, and innumerable stories are told of his kindness of heart. Of his gentleness to his assistants—a quality none too common among great surgeons—we need only mention one instance, which was related to us by the person concerned. At a critical stage in an operation the house-surgeon was guilty of a slight remissness which might have caused disaster. Lister only looked at him with an expression of mild reproach, and said in a low voice: "Oh, Smith!" (that was not his name). The man, who has long been dead, told us that this reproof sank deep into his heart, and made of him a better man as well as a more careful surgeon.

When Napoleon heard the name of any one for the first time, he used to ask: "*Qu'est ce qu'il a fait?*" If any one were to ask this question with regard to Lister, the answer would be that he has been the means of saving more lives than Napoleon's ambition destroyed. And his beneficence will go on producing even greater and more far-reaching results, whilst Napoleon's activity has left little or no enduring mark on the world. The name of Lister denotes an era; the history of surgery is divided into two parts—before Lister and after Lister. This single fact indicates the greatness of his achievement.

Of the opponents who, doubtless with honest conviction, decried his work, many lived to be converted by the irresistible logic of facts; the others are forgotten. Lister was not the first to use a form of antiseptic treatment in cases of compound fracture. Percivall Pott says: "The Baron Van Swieten, writing as many others have done—that is, theoretically, on surgery—advises us in the case of very bad compound fractures, which may most probably require amputation, to defer operation until we have tried the force of antiseptic fomentation, and applications of like kind, for two or three days; and this opinion and advice he builds, in some measure, on a remarkable case of La Motte, in a seemingly desperate case of a man's leg smashed by the wheel of a heavy carriage." How little Pott approved of this suggestion may be gathered from his comment on this case: "That La Motte's patient escaped I make no doubt, because he has said so; but the surgeon showed much more rashness in attempting to save such a limb than he would have done in the amputation of it; the operation would have been the more justifiable practice."

Nor was Lister the first to use carbolic acid as a surgical application. Moreover, he at first insisted on an elaborate ritual, which further experience showed him to be as unnecessary as it was clumsy and irksome to the surgeon. But though changes in details were made as knowledge grew, the principles enunciated by Lister remained unaltered. Aseptic surgery is a natural and logical development of the anti-

septic system. They are not, as some ill-informed or prejudiced critics contend, two different things, but the outcome of the continuous evolution of a great conception. That Lister found the clue to the nature of the process of healing for which he was looking in Pasteur's discoveries as to micro-organisms does not in the least diminish his originality; these discoveries had been before the world for years, but no one had seen their possible application to surgery. When he learnt of the work of Semmelweis, Lister at once acknowledged the merits of that ill-fated reformer as a pioneer in the same path of discovery that led himself to such great results.

What he accomplished is perhaps best shown by the fact that so late as the mid-seventies Sir John Erichsen, one of his teachers, said in a public address that operative surgery had at that time reached finality. There were, he said, regions in the human body into which the surgeon's knife could never penetrate—the brain, the chest, and the abdomen. All these secret chambers of the house of life have long since been brought within the province of surgery, and this enormous advance of the healing art has been made possible by the work of Lister. And that work will continue to make practicable further extensions to a degree we can only dimly surmise. Vast as is the range of modern surgery, it may be said with Dante Gabriel Rossetti, that "Leagues beyond these leagues there is more sea."—*Brit. Med. Jour.*

APPENDICITIS, PURGATION, PERFORATION, PERITONITIS.

The best result in acute appendicitis can be obtained only by operating immediately after the onset of the disease, before any purgative medicine has been given and before peritonitis has occurred. To quote Moynihan: "Perforation means purgation in the appendix kinked and bad, both food and drink will worry him and aperients drive him mad." Practically if not actually all the patients with perforative appendicitis seen by the writer have been purged, have received calomel, salts, castor oil, or some other aperient. The writer considers it practically criminal to administer a purgative in an "acute abdomen" until the cause is determined; but one drug that he knows of can be of use, namely, morphine, and this should not be given until the diagnosis is made. After the diagnosis, morphine is permissible while preparing for operation or in the enforced absence of operation. The more common causes of acute abdomen, exclusive of the traumatic conditions, such as ruptured liver, spleen, kidney, bladder, etc., are acute appendicitis, acute cholecystitis, perforated duodenal and gastric ulcer, acute intestinal obstruction, acute pancreatitis, mesenteric thrombosis, twisted pedicle

of an ovarian tumor or pedunculated fibroid, a ruptured extra-uterine sac, and acute pyosalpinx. Can any of these conditions be improved by a purge? Are they not all made worse by a purge? Again, are not all these conditions amenable to surgery alone?

All patients with chronically diseased appendices should be subjected to operation immediately the diagnosis is made, provided there are no constitutional contraindications. Such patients, with few exceptions, if not operated upon, suffer from chronic indigestion, dyspepsia, chronic intestinal stasis, neurasthenia, etc., and sooner or later have an acute attack. The only valid contraindications are severe pulmonary disease, an uncompensated heart lesion, and in general those lowered states of vitality the results of constitutional disease, which would render inadvisable any operative intervention. The responsibility for delay in operation in the case of chronic appendicitis should be assumed by the patient, to whom a clear statement of the hazards of this condition should be given by the medical or surgical attendant. Under no circumstances should he be permitted to believe that any form of medical treatment can prevent an attack, or cure it if it occurs.

The only exception to the uniform rule of early operation is in a minority of cases of unusually severe appendicitis complicated by diffusing peritonitis. The discussion among surgeons of this class of cases has led to many misapprehensions, false quotations, and misstatements. It must be understood that these cases are the exception and not the rule, that the point at issue is merely the advisability of deferring operation and not its abandonment; that the delay is not for an indefinite season, but until the best moment for operation; that the responsibility for the decision should rest not with the medical attendant, but with the surgeon who has seen, and is constantly seeing many cases of acute appendicitis, and finally that the delay is due, not to any change of heart regarding the proper treatment of appendicitis, but to the existence of an overshadowing condition, namely, diffusing peritonitis which has gained an independent footing. These cases are not exceptions to the rule requiring operative treatment. In a sense, they are due to error in not bringing operative treatment to bear sufficiently early. By a judicious conservatism the patients must be restored to a condition in which operation can be done with its usual success.

The cases of acute appendicitis, as a rule, that should not be operated on immediately are those with diffusing peritonitis, usually, but not necessarily, of more than forty-eight hours' duration. The latter, in my experience, if rigidly treated by anatomical and physiological rest, proctoclysis, absolutely nothing by mouth, with lavage if necessary, the sitting position, and cold to the abdomen in the shape of the ice bag or the

ice coil, with few exceptions, end in recovery from the spreading peritonitis, cause the mischief in the neighborhood of the appendix to become localized, and allow of operation, which should then be done immediately.

The localization of a peritonitis in the presence of a definitely located appendix does not contraindicate immediate operation, with the exception of cases in which the appendix is centrally located; here, it may be the part of wisdom to wait until the inflammatory peritoneal process has become entirely localized. In abscess formation the peritoneal cavity should not be opened as a preliminary step to evacuation of the abscess; this practice is dangerous and can only invite disaster in a percentage of cases that otherwise would terminate favorably if the pus had been evacuated by opening directly into the abscess cavity. The appendix should not necessarily be removed in every case of appendicular abscess; in nearly all cases, however, this is readily accomplished without exposing the patient to any increased risk.

In conclusion, it must be insisted that the qualifications of the principle of immediate operation in acute appendicitis, which experience has shown to be necessary, must not be construed into any retreat from the position that appendicitis in all its forms is a surgical disease; that the physician should never treat it alone; and that the surgeon should decide not only as to the form, but also as to the time for treatment.—John B. Deaver, in *New York Medical Journal*.

ETIOLOGY OF APPENDICITIS.

Robertson (*Surg. Gyn. and Obst.*) says a close and careful investigation of the subject has led him to a positive conclusion as to the exact etiology of the disease. He then describes in detail the minute anatomy of the appendix and gives as the reason for the infrequency of the disease in women as compared with men, which is in a proportion of two women to three men, being due to the occasional small branches of the ovarian artery which traverses the appendiculo-ovarian ligament. He sums up his paper with the following conclusions. From the foregoing study the following conclusions may be definitely drawn:

1. The muscles of the colon and appendix are an entity.
2. Muscular contraction in the colon and cecum, whether of the circular fibres or of the longitudinal bands, must be associated with a simultaneous contraction of the muscular walls of the appendix.
3. This contraction is induced by nerve stimulation, the stimulant being presented by the various tabulated predisposing factors as enunciated by many observers, all of which can be accounted for in this one general cause.

4. While the normal muscular contraction and relaxation of the appendix act only to support circulation, when spasmodic in nature it overdoes the matter and produces vascular disturbances.

5. Owing to the peculiar anatomic structure of the appendix, all that tissue within the circular muscle fibres, being spongy in nature, becomes during the abnormal contraction a veritable dam in which the blood is retained until released by the subsidence of the spasm.

6. According to the intensity of the spasm will depend the degree of mucous membrane varicosity and edema, and thus will be determined the varying degrees of inflammatory action.

7. If the spasm be of the mildest degree only, then appendicular colic will result; if of the maximum intensity, gangrene will follow.

8. It may, therefore, be concluded that atrophy, degeneration, hyperemia, congestion, hyperplasia of connective tissue and thrombus formation occur *before*, and not *after*, bacterial invasion of the walls of the appendix.—*American Medicine*, Feb., 1912.

BALSAM OF PERU AND WOUNDS.

Josef Malanuk (*Wien. med. Woch.*, No. 46, 1911) describes the effect of balsam of Peru on the treatment of wounds as seen by him in 150 cases at the Stanislaw Military Hospital. In many of the cases the injuries were extensive and the wounds already infected when they came under treatment. In a case of complicated fracture of the humerus an area of 4 sq. cm. of bone was exposed and the soft parts lacerated. A majority of the cases of cellulitis treated were in the initial stage. Cases of whitlow, whether superficial or deep, were first widely opened and then treated with balsam. In all cases the wound was first mechanically cleaned and treated with hydrogen peroxide. It was next covered with a pad of gauze and tincture of iodine applied to the surrounding skin. After this the wound was filled to the point of overflowing with balsam. In no case was there any unpleasant side-effect due to the absorption of balsam. Fomentations were not made use of in this treatment, but Bier's congestion was freely employed. The bandage was not changed for at least two days and often remained in position for five days; the author arrived at the conclusion that too early change of the bandage only injured the granulating surface. On removal of the bandage a thick yellowish secretion, without odor, and intimately mixed with balsam, was always present. There was a thin shining film over the surface of the wound and under it the new granulations. No signs of inflammatory reaction were found at the edges of the wounds. Fever,

when present, quickly disappeared. The length of treatment of cases of whitlow was definitely shorter than when the treatment was on different lines. In recent cases granulations were evident on the first change of bandage, though in cases of longer standing the course was slower. The author believes that balsam, because of its lipoidal and toxin binding properties, is especially suited for dirty wounds from which it is feared that tetanus may result. He finds balsam of Peru to be bactericidal and at the same time non-irritating to the tissues; it forms a covering layer and is protective against secondary infection; it provides for the speedy expulsion of dead bacteria and of necrotic fatty tissue; through positive chemotaxis it increases the protective power of the organism, and as a lipoidal substance it has antitetanic properties.—*British Medical Journal*.

REVIEW OF OPERATIONS FOR GASTRIC AND DUODENAL ULCER.

Mitchell (*Annals of Surgery*) presents a careful review of 110 recent operations for gastric and duodenal ulcer personally performed. He has never failed to find a well-defined ulcer where typical night pain was complained of. Pain radiating to the back he considers of special value, and in his experience has usually been associated with an ulcer on the lesser curvature or posterior surface of the stomach. He has found dull, gnawing pain two or three hours after a meal due to a number of smooth stones in the gall bladder and not to duodenal ulcer. Tenderness he regards as a danger signal and operation should not be neglected if it is severe or persistent. Examination of the feces for blood is considered of little practical value to the general practitioner. The analysis of stomach contents has been done in nearly all his cases, but although the information obtained has not been so helpful as he had anticipated, he still believes it should be performed. He also believes that the stomach should be washed out every night while under medical treatment and does not consider hematemesis a contra-indication. Hematemesis should be treated by medical measures, and in his experience horse serum is superior to all others. Gastro-enterostomy should be accompanied by excision or infolding of the ulcer and closure of the pylorus by a running sphincter suture. Fluids by mouth are permitted after six hours. Immediate mortality should be under 2 per cent. and permanent cure about 90 per cent.—*Boston Medical and Surgical Journal*.

GYNÆCOLOGY

UNDER THE CHARGE OF S. M. HAY, M.D., C.M., GYNAECOLOGIST TO THE TORONTO WESTERN HOSPITAL.

HEPATOPEXY.

A. Werelius, Chicago (*Journal A. M. A.*, March 2), describes the condition of hepatoptosis and its treatment, also reporting a case. It may be congenital or acquired, the former being accredited to absence of suspensory ligaments and other defects of the natural supports. Heavy lifting, pendulous abdomen, gall-bladder disease and pregnancy are mentioned as factors of the acquired condition. The disease is much more frequent in the female and very few cases occur in nulliparæ. There have been partial prolapses reported, from local hypertrophy of a single lobe in some cases, which the author thinks should be considered as rather distinct from the condition here described. Thus far he has found only thirty-six cases reported as operated on, and only four of these in this country, including his own. These are tabulated and analyzed. The main points of his paper are summarized as follows: "In the thirty-six cases (including my own) operated on there were two males. The average age of the patients was 38 years. There were twenty-eight cases of total and thirty-eight of partial hepatoptosis. In the partial hepatoptosis the diagnosis was made correctly in twenty-three cases. The condition was once diagnosed as tumor of the gall-bladder, six times as right nephroptosis, and an uncertain diagnosis was made in eight cases. In the total prolapses a correct diagnosis was made in thirteen cases. Incorrect diagnosis of echinococcus cyst was made in four cases, one of tuberculous typhilitis, one of omental tumor, of right nephroptosis in three, kidney tumor in one and an uncertain diagnosis was made in five cases. The incisions used were lumbo-abdominal in five cases, transverse in twenty-two, through the outer border of the right rectus in nineteen, in the median line in five, through middle of right rectus in one, not given in ten and special laparectomy incision in four cases. Catgut was used in eighteen cases, silk in thirty, kangaroo tendon and silver wire in one each. In the rest either the liver was not sutured or kind of suture was not mentioned. Round ligament was sutured six times, gall-bladder twelve times, scarification was done five times and tamponade was used in twenty-three cases. Liver was sutured to abdominal wall in forty-eight cases, to costal arch in six, to peritoneum in one, to xiphoid appendix in one and in the rest the organ was not sutured or else not men-

tioned. Operative findings, outside of the liver prolapse, were right nephroptosis in eight cases, general enteroptosis in seven (but must surely have been more); gall-stones were found in five cases and gangrenous cholecystitis once. At least 85 per cent. of the total prolapses were in multiparæ."

CYSTS OF THE OMENTUM.

Charles N. Dowd (*Ann. of Surg.*, November, 1911) narrates a case which came under his observation and was successfully operated upon. His patient, a young man of 26, had for four months been aware of a movable mass in the abdomen, the origin of which he traced to a sudden acute illness about a year before, when he felt something "snap." This mass was found to be a cyst, the size of an orange, covered with peritoneum, filled with pale-colored clear fluid. The pedicle was composed of omentum twisted on itself many times. The cyst wall was formed of peritoneum, fibrous tissue, and an inner layer of coagulated fibrin. The author suggests that this cyst was originally an omental haematoma, and points out that the conversion of blood into clear limpid fluid with no trace of blood except the presence of modified blood pigment in the capsule is no uncommon finding in the brain, thyroid gland, and scalp. The torsion of the omentum with consequent oedema and transudation of the watery elements of the serum into the cyst cavity may also play a part in formation of fluid contents. The symptoms of torsion of the omentum simulate those of strangulated hernia and acute appendicitis. A usual classification of mesenteric cysts is into (1) embryonic cysts, (2) cystic malignant disease, (3) echinococcus cysts; and the author thinks it may be used as well in classifying omental cysts. But many of the latter are reported as containing blood pigment, so that the possibility of these being originally haematomata requires to be kept in mind. A tabulated list of all the known cases of omental cyst, exclusive of those due to the echinococcus and to malignant disease, has been prepared by Charles E. Farr, and is included in the paper.—*British Medical Journal*.

THE TREATMENT OF PUERPERAL SEPTICÆMIA BY BACTERIAL VACCINES.

G. T. Western, M.A., M.D., Senior Assistant, Inoculation Department, London Hospital, states that this paper was based on a series of

100 cases of puerperal sepsis which had been investigated in the bacteriological laboratory of the London Hospital, 56 of which had been treated by vaccines.

After discussing the diagnosis of a "septicæmia" from the clinical and the bacteriological point of view, he expressed the opinion that we have included in the clinical term "puerperal fever" two different conditions.

1. A localized bacterial infection in the genital tract which is associated with more or less toxæmia.

2. A local infection in the genital tract from which bacteria are being carried into the blood stream continuously or discontinuously.

These latter cases constitute the true septicæmias, but he considered that there was no absolutely definite dividing line between the groups.

Tables giving details of the cases under discussion were in the hands of Fellows; he therefore proceeded to discuss the contents of these tables column by column.

1. *Nature of Labor*.—He pointed out that there did not appear to be an excess of primiparæ affected; also that there was a very large percentage of cases in which the third stage of labor had been incomplete or abnormal.

2. *Day of Onset*.—In 62 per cent. the onset occurred on the second or third day.

3. *Rigors*.—No absolute prognostic significance can be attached to the presence or absence of rigors alone. It is probable, however, that a rigor is indicative of bacteria being thrown into the blood stream.

4. *Blood Cultures*.—These had been taken in 96 cases, and had given positive results in 40 per cent. He suggested that this percentage might be higher if the time of taking cultures was chosen with due regard to the temperature curve. Of the 39 positive results, 36 grew streptococci, two grew staphylococcus aureus and one a Gram-negative coccus.

5. *Uterus Cultures*.—These were taken by a method similar to one which has been used by Menge and Krönig. A glass tube, with a rubber diaphragm at the top, is used as a shield through which a Pasteur pipette is passed into the uterus.

These cultures were taken in 43 cases. In 76 per cent. a streptococcus was grown in pure culture. These results were compared with those obtained by Foulerton and Bonney (*Trans. Obstet. Soc. Lond.*, 1906, vol. xlvii., p. 11) and by Lea and Sidebotham (*Proc. Roy. Soc. Med., Obstet. Section*, 1909, vol. ii., p. 127), and concluded that the difference in the results obtained by different workers was due to differences in the *technique* employed. He considered the *technique* of the

former good, but failed to see how trustworthy results could be obtained by the methods employed by the latter.

6. *Vaccines.*—He strongly advocated the use of autogenous vaccines in all cases in preference to "stock" vaccines, and pointed out that if a pure culture could be obtained from the uterus, much time could be saved, as an autogenous vaccine could be ready within 24 hours.

7. *Other Treatment.*—This included clearing out the uterus, opening abscesses, etc., and antistreptococcus serum. From this latter he had not observed any marked benefit.

8. *Results.*—After discussing the difficulty of obtaining a parallel series of control cases free from bias in either direction, he showed that the mortality amongst notified cases of puerperal septic diseases is about 58 per cent.

In the series of cases under discussion the mortality amongst 56 cases treated by vaccines was 32 per cent., while that amongst 44 cases in which no vaccines had been given was 55 per cent. Taking those cases only where there was definite bacteriological evidence of a blood infection, the mortality amongst those treated was 52 per cent., while that amongst untreated cases was 87.5 per cent.

CONCLUSIONS.

1. The mortality amongst those cases of puerperal septicaemia in which there is definite bacteriological evidence of bacteria in the blood stream is from 85 to 95 per cent.

2. This mortality may by inoculation with autogenous vaccines be reduced to about 55 per cent.

3. The mortality amongst notified cases of puerperal fever is about 60 per cent.

4. This mortality may by inoculation with appropriate vaccines be reduced to about 30 per cent.

5. In cases of puerperal sepsis, if it is decided to explore the uterine cavity, the opportunity of obtaining a culture at the same time should not be lost.

6. In the treatment of puerperal sepsis "stock" vaccines give inferior results, and should only be used when an autogenous vaccine cannot be obtained.—*Medical Press.*

PERSONAL AND NEWS ITEMS

ONTARIO.

There was a fire in St. Joseph's Hospital, Guelph, recently. The prompt action of the fire brigade and the Sisters of Charity prevented its spread, and consequently the damage was slight. The hospital was filled with smoke and some alarm existed among the inmates.

Dr. G. Sterling Ryerson, founder of the Canadian Red Cross Society, has been appointed representative of the Canadian Government at the Ninth International Red Cross Conference to be held at Washington from May 7th to 17th.

Kingston doctors are planning to increase their fees from 25 to 50 per cent. The Medical Society has the matter in charge. The reason given for the increase is that while the cost of living has greatly advanced there has been no advance in medical fees during the past 20 or 25 years.

Dr. A. B. Mesurier, of the staff of the Children's Hospital, Toronto, has passed the examination for the position of house surgeon of Bellevue Hospital, New York. Dr. R. A. Jamieson, of Toronto, came second. Both will join the Bellevue staff.

Dr. Cummings, of 3 Queen's Park, Toronto, met with a severe accident on 27th February. He was riding in a coupé, which was struck by the motor car of Dr. W. J. McCollum. There was ice on the wind shield of the car, and this was responsible for the accident. Dr. Cummings sustained a severe cut on the head.

With the dispute between Dr. Struthers and the Toronto teachers there need be nothing said. The fact remains that the ventilation is not good in many of the schools. This does not mean that the teachers are at fault. The system is thoroughly out-of-date in some of the schools.

A deputation from the Public schools of Toronto waited on Hon. W. J. Hanna to once more press the claims of the feeble-minded children in the schools. It was contended that the Board of Education could not properly care for these children. Mr. Hanna admitted that something should be done for the education of these defectives.

Dr. P. V. Helliwell, recently house surgeon at the Western Hospital, has been appointed ship surgeon on a liner which sails between St. John and London. He will continue until next fall, when he leaves for Honan, China, as a medical missionary under the Canadian Anglican Church.

The Toronto General Hospital has issued its annual report for the year ending September, 1911. It contains much interesting tabular matter. The work done in this hospital is a credit to it.

The smallpox hospital on Porter's Island, Ottawa, is to cost about \$30,000.

A hospital is to be erected in Lambton County, with a capacity for fifteen persons suffering from some incurable disease.

A committee is at work to raise \$15,000 for a public hospital in Tillsonburg.

The City of St. Thomas approved of a by-law for the expenditure of \$10,000 on an isolation hospital.

The Ontario Government will secure a building for the housing of the feeble-minded who have been placed in the Toronto Jail.

The Hospital for the Insane, London, admitted from 1st January, 1908, to 6th June, 1910, 500 patients, of whom 251 were males and 233 females, and 16 a second time. 233 were discharged as cured or improved; 8 were discharged unimproved; 67 died; 5 escaped; 4 were transferred; 5 were deported, and 162 remained in the institution.

Dr. Arthur Jukes Johnson, of Toronto, was ill for some time with a severe attack of influenza. His friends are glad to see him around again.

Dr. E. H. Young, of the Rockwood Asylum, has been made assistant superintendent, succeeding Dr. W. C. Barber, who resigned. Dr. Young has had a lengthy and thorough training in the asylum work of the province.

While Dr. Gordon W. Little, of Windsor, was attending a patient with diphtheria he contracted the disease in a severe form and was very ill.

Drs. Forster and Clare, of the Toronto Asylum, visited the jail a short time ago. They ordered 12 of the inmates to be removed to the asylum and 4 to be sent to the Hospital for Epileptics at Woodstock.

The new wing to St. Michael's Hospital, Toronto, was opened on 19th March. It contains 11 public wards, 28 semi-private, and 16 private wards.

There is to be a hospital for sick children in Hamilton. Miss Lewis has collected so far \$12,500. The Board of Control will look for a suitable site. Miss Lewis said that she would hand over the money as soon as the plans had been approved of. The hospital is to cost \$25,000.

The Toronto Jewish Benevolent Society has given \$50 to the Consumptive Sanitarium at Weston and a similar amount to the Free Sanitarium at Muskoka. These sums are in aid of Jewish consumptives.

Mrs. McLean, wife of Dr. P. D. McLean, ex-M.P., of Woodbridge, died a few days ago of cerebral haemorrhage.

It is rumored that the authorities of the House of Providence may buy the old General Hospital, on Gerrard Street, Toronto.

The Hospital for Sick Children receives \$1,200 from the estate of the late D. C. McDonald.

On the 22nd March 14 cases of smallpox were under quarantine in St. Clair, across the river from Courtwright, and there was great fear in the latter place.

There is some talk of establishing a Charities Commission for Toronto to regulate the payment of money and the persons who should receive it.

The bill for Queen's University has been amended so as to leave the religious test out of it.

Dr. Forbes Godfrey has introduced a bill to regulate marriage, the main feature to restrict the union of defectives and moral degenerates.

At her home, in Grimsby, on March 23, 1912, Rhoda Bryant Packard, widow of L. L. Palmer, M.D.

QUEBEC.

The Douglas Research Scholarship of McGill University of the value of \$1,000, tenable for one year, but may be continued for another year, is offered to those who wish to conduct some line of research. Applicants should apply to Prof. J. G. Adami, stating their standing, the school from which they graduated, and the line of research which they desire to undertake.

It was decided at the recent meeting of the Royal Victoria Hospital to erect an addition to furnish some 16 private wards to meet the demand for this class of accommodation.

At the annual meeting of the Sherbrooke Medical Society the following were elected as its officers: Dr. E. J. Williams, President; Dr. F. Bertrand, Vice-President; Dr. F. A. Gadbois, Secretary-Treasurer; Drs. Austin, Camirand, Mackay and Lidoux, Council.

The Jews of Montreal intend to keep open their sanatorium for consumptives at Ste. Agathe, and are raising funds for this purpose.

Dr. E. Asselin has been appointed assistant to Dr. Coyle in the Bureau of Health for Montreal.

The Western Hospital, of Montreal, treated 1,360 interne patients, with a death rate of 3.09. There were given 11,520 consultations to outdoor patients.

The Board of Management of the Protestant Hospital for the Insane, at Verdun, Que., is asking the Government the physicians of the institution be placed on the same level as others in the civil service of like rank in the matter of their pensions.

The deaths in Montreal for 1911 were as follows: Total number, 9,974; males, 5,110; females, 4,864; children under five, 5,355; measles caused 74, scarlet fever 76, diphtheria 33, typhoid fever 124, phthisis 736.

Dr. Beaudry, chief inspector of the Quebec Provincial Board of Health, is authority for the statement that there are 75,000 cases of smallpox in the province.

WESTERN PROVINCES.

In the latest issue of the *Western Medical News* we learn that an attempt is to be made to secure special legislation in Saskatchewan to enable a person to appear for examination, and that another may be permitted to practise without passing the examinations called for by the Medical Act. Everything of this sort should be resisted. The *Western Medical News* has taken the proper stand on these applications.

The College of Physicians and Surgeons of Saskatchewan brought action against one W. Ehman for practising without a license. It was not shown to the satisfaction of the magistrate that he had accepted a fee and the case was dismissed.

Dr. W. A. Draken, a recent graduate of McGill Medical College, has been appointed house surgeon at Regina Hospital at a salary of \$1,200 a year.

The following have passed the examinations of the College of Physicians and Surgeons of Saskatchewan: D. W. Allan, A. P. E. Nelles, G. M. Gregoire, M. R. Bow, J. B. Swanston, E. R. Graham, W. F. Gavin, G. O. Wood, F. W. Wallace, D. Swaney, W. O. Stevenson, C. E. Stafford, A. E. Ross, D. Regg, S. B. McMillan, J. O. N. Leepien, G. Longo, A. F. Lepper, R. A. Hodgson, M. F. Hayes, F. J. Glover, A. Fettes, F. R. Elliott, W. A. Deakin, H. A. Culhan, J. F. Creighton, F. A. F. Corbett, C. H. Christie, M. A. Carmichael, J. E. Bloomer, W. C. Bliss, V. E. Block, C. W. Bishop, and E. B. Alport.

There is to be erected in Calgary a new Isolation Hospital. The site has not yet been definitely agreed upon.

Vancouver, B.C., is to have a new hospital, called the St. Paul's. It is to cost about \$250,000. It will accommodate about 300 patients and 60 nurses. The Sisters of Charity of Providence have the work in hand.

The Vancouver Medical Society elected the following officers: President, Dr. W. B. McKechnie; Vice-President, Dr. W. F. Coy; Secretary-Treasurer, Dr. J. W. McIntosh; Auditor, Dr. W. L. Coulthard.

Dr. Warren P. Morrill has accepted the superintendency of the Winnipeg General Hospital. It has now 350 beds.

FROM ABROAD.

On 1st January, 1910, there were 130,553 persons in England and Wales of unsound mind, while on 1st January, 1911, there were 133,157. This shows considerable increase. There were 10,616 private patients, 118,901 pauper cases, and 1,036 criminal insane.

The *British Medical Journal* for 10th of February, 1912, gives the formula of Wilson's Patent Ringworm Cure as containing ferrous sulphate, 33.7 parts, and acetic acid, 11.9 parts.

Levadite, Gordon, and Daunlesco have shown that the virus obtained from cases of acute poliomyelitis is able to impart the disease to monkeys. This goes to confirm work already done along the same line in other countries.

Professor Latham is about to retire from his posts in Cambridge. He has long been physician to Addenbrookes Hospital and Downing Professor of Medicine. There will be some fitting testimonial conferred upon him.

Many will feel real sorrow at the death of Sir Henry Butlin. He was an eminent surgeon and investigator. He contributed much to surgical literature. He was an active worker in the interests of the British Medical Association, and took a very keen interest in the Imperial Cancer Research work. He was in his 67th year. He was one of the most esteemed of the British profession, "whose life was gentle."

The medical inspection of school children is one of many hygienic measures which Japan has successfully adopted from the more advanced occidental nations. It began in 1891 with the appointment of Dr. M. Mishima to investigate health conditions in schools. His researches were further elaborated by an imperial commission, and in 1900 the annual inspection of all school children was instituted. Data of these inspections are preserved in a central office at Tokio. In 1909 there were in Japan 21,700 schools, with 6,200,000 pupils and 11,750 inspecting physicians. Statistics seem to indicate a notable improvement in the physical standards of Japanese school children during the past twenty years.

It is reported that in view of the continued disturbances at the anatomy lectures of M. Nicholas at the School of Medicine in Paris, M. Guist'hau, the new Minister of Public Instruction, has decided that the Faculty of Medicine shall be closed to students of the first and second years for a period of six months.

Dr. Ira S. Wile has assumed the editorial management of the *Medical Review of Reviews*, a position which we know he will fill with distinguished ability, and for his success in which he has our most cordial good wishes.

Quite recently eighteen names were removed from the Transvaal Medical Register because the parties did not reply to the statutory letter of enquiry as to their location and standing. Other places could stand a similar use of the broom.

The death of Sir William Henry Allchin removes a distinguished member of the medical profession. He was a noted graduate of London University. He did his clinical work in connection with Westminster Hospital. He was physician-extraordinary to the King. Dr. Allchin was a frequent contributor to medical literature.

Of those who took such a deep interest in bacteriology in its early days, four of its pioneers have gone: Pasteur, Koch, Lister, and, last, Hausen. Hausen's work on leprosy made him famous. He discovered the bacillus of this disease in 1872. At the time of the Second International Congress of Leprosy many honors were conferred upon him. He was one of Norway's great sons.

The Government of Victoria, Australia, has agreed to give £2,500 a year to the Alfred Hospital and the Women's Hospital to aid in the treatment and prevention of syphilis. Each institution is to set aside a ward of 25 beds for this purpose.

The fight of the medical profession against the British National Insurance Act still goes on. It looks as if the medical men of the country had made up their minds to decline to have anything to do with the carrying out of the terms of the Act. Should this be the case the Act will be like a ship without sailors. There is no doubt that the medical men have not been fairly treated by the Government.

In the *Johns Hopkins Hospital Bulletin* for March there is a very interesting article on the life and work of the late Dr. Samuel D. Gross, of Philadelphia. It is well worthy of careful study. Here one has an example of the humble country lad becoming one of the world's best surgeons.

Franz Von Winkel, M.D., died of diabetes in Munich last December. He was a most industrious worker in his chosen field of obstetrics. He came under the influence and teaching of Dr. Edward Martin, of Berlin. He taught obstetrics in Rostock, Dresden, and Munich, following Prof. Von Hecker.

The *Edinburgh Medical Journal* for February pays fitting tribute to three great men who made modern surgery a possibility, namely, Semmelweis, Pasteur, and Lister. These were the geniuses that cleared away the underbrush and let the daylight into the forest.

A fund is being raised to secure a portrait of Sir William Turner to be the property of the University of Edinburgh, for which he has done so much during the long period of sixty years.

The Seventeenth International Congress on Medicine will meet this year on August 6th to 12th in London. Dr. Herringham, 13 Hinde Street west, is the secretary. The fee for membership is \$5.

The *Australasian Medical Gazette* is now issued weekly. We congratulate this journal. It is one of our esteemed exchanges, full of good matter. It has done much to uphold the cause of medical education and the honor of the medical profession.

The Government of Sydney, Australia, has increased the endowment to the university by an additional grant of £23,000 for the purpose of endowing three new professorships.

The Government of Australia has appointed Sir Charles K. MacKellar to visit Britain, Europe and America, and to enquire into and report upon the best methods of caring for delinquent and neglected children.

Alfred Harry Young, F.R.C.S., emeritus professor of anatomy, Victoria University, Manchester, died on 22nd February, in his 60th year.

It is reported that Mr. Edgar Jones, M.R.C.S., of Great Burstead, Essex, England, recently celebrated the supposed 103rd anniversary of his birth. He was for many years a practicing surgeon in his native town. It is seldom that a member of our profession attains so great longevity.

In a circular recently issued by the Tennessee State Board of Health, it is announced that during the year 1911 over 7,500 cases were examined by the board for uncinariasis, of whom 3,335 proved to have the disease. Of 1,038 of these cases examined during the last three months of the year, 948 were treated and cured.

Recent work done on Brill's disease has shown that it is the same as the typhus fever of Mexico. In 1910 there were 255 cases of the disease observed at the Mount Sinai Hospital, New York. Dr. Nathan E. Brill was led to his investigations by finding a type of continued fever that did not yield the vidal reaction.

Yakima County, Washington, some time ago appointed a competent medical health officer, with power to act in the interests of the people. The result is that typhoid fever has almost entirely disappeared. This is a wise way to spend some of the funds of a community.

An effort is now being made in the United States to secure a common licensing system for the country. The advantages are so many that it is amazing that the medical profession of that country have not found a solution already. But it is not so easy. It is to be hoped that the scheme now on foot may succeed.

There is some reason for thinking that the Commonwealth of Aus-

tralia will adopt a system of national supervision of health matters. It is proposed to have a Minister of Health and a permanent staff under him. The country is to be divided into districts under the charge of competent persons. Should this system be inaugurated, Australia will have taken a good step onwards.

From the *Transvaal Medical Journal* we gather that the medical men in South Africa are struggling with much the same problems as in Canada. There is a tendency to raise the standard, and an effort to keep the profession as free from irregular practitioners as possible. It is a task to keep in check those who wish to practise without a qualification, or to use that qualification in an improper manner.

The Bombay Legislative Council has taken a step onward by enacting that those who wish to practise medicine must conform to certain standards of education and training. The Act lays down the qualifications, the machinery for regulating practice, and creates a disciplinary body.

Cremation is steadily gaining in favor in Britain. In 1911 there were 1,023 cremations, as against 840 for 1910. The cause is supported by many distinguished persons. The claims put forth are those of its sanitary advantages and cheapness.

The Royal College of Physicians of London, at the quarterly meeting on Thursday last, made the following appointments:—Sir James F. Goodhart to be Harveian Orator, Dr. D. Bridge Lees to be Bradshaw Lecturer, Dr. F. A. Bainbridge to the Milroy Lectureship, Dr. H. G. Adamson to the Goulstonian Lectureship, Dr. Percy Kidd to the Lumleian Lectureship, Sir Ronald Ross to the Oliver-Sharpey Lectureship, and Dr. L. S. Dudgeon to the Croonian Lectureship.

A School of Medicine has been opened at Mukden. It is under a Japanese-Chinese control. The teaching is free and is given in the two languages. There is accommodation for 100 students.

Dr. Harvey W. Wiley, the Pure Food Expert of the United States, has resigned. He claims that the department did not uphold him in the administration of the law.

The January issue of the *Antiseptic*, published in Madras, makes an appeal for medical colleges for women as the best way of securing the needed supply of women doctors. The women in India will not attend mixed colleges.

In harmony with the policy of publishing "Symposium Numbers" at intervals on timely subjects, the editors of the *Interstate Medical Journal* outlined a number on "Diseases of the Digestive Tract" for March, 1912. The "Symposium Numbers" of the *Interstate* (e.g., "Special Syphilis Number," January, 1911, and "Special Heart Num-

ber," June 1911), were notable contributions to medical literature which command the attention of progressive physicians wherever the English language is read.

John W. Wainwright has purchased the two medical journals, *The American Practitioner and News*, of Louisville, Ky., and *The New England Medical Monthly*, of Boston, Mass., and will combine these two journals into one, giving the new title of *The American Practitioner*, incorporating, etc., and issue from New York City monthly, the first appearing March, 1912.

Our readers will be interested to know that Prof. Dr. Carl von Noorden, of Vienna, has accepted the invitation of the New York Post-Graduate Medical School and Hospital for a series of lectures on problems of metabolism for October, 1912.

The new university at Frankfort on the Main will be opened in the spring of 1914. It will not receive Government aid, as private funds will be forthcoming.

It has been discovered by Dr. Paton, of the India Medical Service, that Kala-azar is transmitted by two varieties of bugs. This is one more step onward and a large credit mark to experimental work.

Dr. Stephen Smith celebrated his 89th birthday recently. He is actively engaged in connection with the New York State Board of Charities. He founded the first training school of nurses in the United States. When this was done the nurses in the hospitals were secured from those women who had been convicted to jail for drunkenness.

The announcement has been made by the principal of McGill University that plans have now been completed for the utilization of the land recently given to the institution by Sir William Macdonald. It is proposed to erect a gigantic gymnasium, swimming bath, a new grand stand to accommodate 8,000 people and new dormitories, and to try out a new soccer football grounds. The whole scheme is expected to cost in the neighborhood of \$250,000.

The estimates for the Health Department of Toronto are \$222,000, an increase of \$69,000 over last year.

News comes that in the Pasteur Institute in Paris an orang outang has been successfully inoculated with scarlet fever by the blood of a child ill with the disease. The blood was inserted beneath the orang's skin.

Dr. H. A. Christian has resigned his position as dean of Harvard Medical School. He has held the position for four years, with marked acceptance to all parties. He takes up the new work of organizing the Peter Bent Brigham Hospital in Boston.

The resignation, through the age retirement rule, of Dr. James

J. Putnam, professor of diseases of the nervous system, and of Dr. Edward H. Bradford, professor of orthopedic surgery, both of the Harvard Medical School, is officially announced, as well as their appointment to the rank of Emeritus professors.

The University of Pennsylvania, at its exercises on 22nd February, conferred the honorary degree of doctor of laws on Dr. W. J. Mayo, of Rochester, Minn.

Dr. Karl Steiniger has been elected the first Mayor of the new and larger Berlin. It is now the third city in the world for size.

OBITUARY

J. D. THORBURN, M.D.

Dr. Thorburn, of Toronto, died in Guelph on 26th March of appendicitis. He was operated on, but steadily sank. He had practised in Toronto as a specialist on diseases of the nose, throat and lungs. He was connected with some of the hospitals of Toronto, and the medical director of the North American Life Insurance Company. He was married to a daughter of Sir William Meredith, who, with three children, survive him. Mrs. Dr. B. L. Riordan and Mrs. James Langmuir are sisters. To these we extend our sincere sympathy. Dr. Thorburn had a pleasant smile and a kind word for all.

JOHN ELKINGTON, M.D.

Dr. Elkington died at Pleona, in Frontenac County, March 25th. He was a surgeon in the Crimean War, and was attached to the same hospital that Florence Nightingale did her great work in. He was a native of Birmingham, England, and was in his 80th year at the time of his death.

THOMAS E. SCHOLFIELD, M.D.

After an illness of over two months the death occurred on 29th February, at his residence, 52 Avenue Road, of Dr. Thomas E. Scholfield, a retired physician. Dr. Scholfield was stricken with paralysis last December, and was confined to his bed until death. He came to

Canada with his parents over 75 years ago, and spent his youth in Toronto, where he obtained his primary education. He took his medical degree at McGill University, graduating in 1854. Dr. Scholfield took up his residence at Bond's Head after graduation, and practised there until a few years ago, when he retired and took up his residence in Toronto with his daughter, Mrs. St. Claire. Mrs. Scholfield died many years ago. The funeral took place on Saturday, and the interment was at Thornhill.

J. W. WRIGHT, M.D.

Dr. J. W. Wright, M.A., one of Picton's most prominent men, a practising physician for 30 odd years, widely known, died 29th February, aged about 58 years. He had been ill since the Friday preceding his death, which was caused by pneumonia. The late Dr. Wright was high up in Masonry. He was presiding preceptor of St. George Preceptory, Knights Templar, and a Past District Deputy Grand Master of Prince Edward Lodge, No. 13, A.F. and A.M. He was an able physician and a scholarly man, a graduate of McGill. He was Medical Health Officer for many years. He came of one of the pioneer families of that historic county. He is survived by his widow and one daughter, Mary, who has been attending Westbourne School, Toronto. The funeral Sunday afternoon was under Masonic direction. A number of prominent out-of-town Masons were present.

L. L. PALMER, M.D.

Dr. Palmer died at Grimsby on 15th March, 1912. He was in his 71st year. For many years he practised in Toronto as a specialist in eye, ear, nose and throat work. He was at one time connected with the Toronto Western Hospital, but more recently with Grace Hospital. He had long held the position of surgeon to the Queen's Own Rifles. Some years ago he had a severe illness from blood poisoning in his hand. Two years ago he retired to Grimsby. The cause of death was paralysis. His late widow died a week ago.

EDWIN FISHER CAMPBELL, JR., M.D.

Dr. Campbell was born in Michigan in 1883. He came to Canada when only six months old with his parents. He was a graduate of Syracuse. He died of typhoid fever.

J. J. LANE, M.D.

Dr. Lane graduated in 1886 from Queen's University. He was a native of Williamsburg, Dundas County, Ontario.

R. A. H. MACKEEN, M.D.

Dr. Mackeen, of Glace Bay, N.S., died in January. He was in his 55th year, and was one of the best known physicians in the Maritime Provinces. He was a man of superior character and loved by all who knew him.

WALTER WELLS, M.D.

Dr. Walter Wells, aged 79, a well known physician, died at his home in Waterloo on 11th March, 1912.

R. P. BOUCHER, M.D.

Dr. R. P. Boucher died at his residence, 196 Brock Street, Peterboro, on 16th March, aged 64 years. Dr. Boucher was one of the oldest and most skilful physicians and one of the oldest residents of the city. He has lived here for 55 years and had practised his profession 40 years. He had filled many positions of usefulness. He was a member of the Board of Education for several terms, president of the local Medical Association, and under the last Government a member of the Provincial Board of Health. He was the first president of the Peterboro Club and interested in athletics. He was president of the Peterboro Curling and Lawn Bowling Clubs, past master of Corinthian Lodge, A. F. and A. M., and ex-warden of St. John's Anglican Church. He is survived by a widow and five children.

J. B. MENZIES, M.D., C.M.

Dr. J. B. Menzies, of Lachute, Que., lost his life during a blizzard under peculiarly sad circumstances. About four p.m. 18th March, he was called to visit a patient at Harmington, 25 miles distant. After driving fifteen miles his horse became utterly exhausted, and he and his man took refuge in a farm house. After a brief rest they determined to push forward on foot, but after covering two miles Dr. Menzies collapsed. His man wrapped his overcoat around him and hurried back for help, but on returning found him dead. Over-exhaustion had

brought on an attack of heart failure. Dr. Menzies had practised in that district for twenty-five years. He was a graduate of McGill. His widow, one son, and one daughter survive. The funeral took place at Almonte, his home town.

J. C. CAMERON, C.M.

Dr. James Chalmers Cameron, of McGill University, who died suddenly in Montreal 16th March, was a son of Rev. J. T. Cameron, of Niagara Falls, and was born at Lundy's Lane in 1852. He attended Upper Canada College, and in 1874 took his degree in medicine at McGill, afterwards studying in Dublin and Germany. He was supervisor over the Montreal Maternity Home, and was well known in literary and musical circles. He had been a member of the Masonic Order for 38 years, and was an officer of the provincial Grand Lodge and was to have been master of the lodge at McGill to be dedicated this month. W. A. Cameron, of Toronto, is a brother of the deceased.

BOOK REVIEWS

NERVOUS AND MENTAL DISEASES.

Nervous and Mental Diseases, by Archibald Church, M.D., Professor of Nervous and Mental Diseases and Medical Jurisprudence in Northwestern University Medical School, Chicago; and Frederick Peterson, M.D., Professor of Psychiatry, Columbia University. Seventh edition, revised. Octavo volume of 932 pages, with 338 illustrations. Philadelphia and London: W. B. Saunders Company, 1911. Cloth, \$5.00 net; Half Morocco, \$6.50 net. Toronto: Sole Canadian Agents, J. F. Hartz & Co.

This is now a well-known work on nervous and mental diseases. The authors have done their best to keep this volume up to date on all subjects coming within its scope. Edition after edition has been called for, until the seventh is now before us. The authors have made good use of recent researches on neurology and the reviews of former editions to enable them to give their readers the latest and the best. The first portion of the book is devoted to nervous diseases, and occupies 671 pages. The second portion is assigned to mental diseases, and takes up 232 pages. The classification is simple and scientific. There is a section devoted to the examination of the patient. The next part takes up diseases of cerebral meninges and cranial nerves. This is followed by one on diseases of the brain proper. Then we have diseases of the

spinal meninges and nerves. Next come diseases of the cord proper. Diseases of nervous system of a known anatomical basis are fully discussed. There is a good deal of attention paid to diseases of the nervous system without known anatomical basis. The last section is on symptomatic disorders. Mental diseases are studied on a clinical basis. The authors go into definitions and etiology. The general symptomatology is taken up. The methods of examination receive proper consideration. A very important section is the one devoted to general treatment. Manic depressive insanity is then discussed fully. This is a very important group of cases and is given full consideration. Dementia praecox comes next, and is handled with much thoroughness. The authors then deal with senile dementia and senile psychoses. Paralytic dementia has given to it a very ably written chapter. Paranoia, one of the most remarkable of the forms of insanity, is set forth in clear terms. The neuro-psychoses and idiocy are each given their share of attention. It is a pleasure to note with what clearness the symptoms of the nervous and mental diseases to which man is heir are stated. One of the most difficult questions in connection with nervous diseases is that of making a correct diagnosis. This work is a valuable aid in this matter. It is interesting and instructive to watch how the picture of paranoia, for example, is built up. After a careful study of these pages, one should not find much trouble in singling out this form from others. What is said of this disease can be said of the others. There are 343 illustrations to assist in making the text clear. These have been chosen with much care, and are very helpful in the way of elucidating the written matter. The publishers have put forth every effort to make the book attractive to the eye and pleasant reading. The paper and binding are good, and the type very clear. We need hardly say that we have much pleasure in recommending this work to our readers. Very few medical practitioners shall ever require more than can be found within these covers.

PRACTICAL TREATMENT.

VOLUME III.

A Handbook of Practical Treatment. In three volumes. By 82 eminent specialists. Edited by John H. Musser, M.D., Professor of Clinical Medicine, University of Pennsylvania, and A. O. J. Kelly, M.D., late Assistant Professor of Medicine, University of Pennsylvania. Volume III.: Octavo of 1,095 pages, illustrated. Philadelphia and London: W. B. Saunders Company, 1912. Per volume: Cloth, \$6.00 net; Half Morocco, \$7.50 net. Toronto: Sole Canadian Agents, J. F. Hartz & Co.

We welcome the appearance of the third volume of this valuable work on Practical Treatment. The previous two volumes have appeared

without undue delay, and thus the whole work is quite recent. There are thirty-eight contributors to this volume. The selection of writers has been made with care, so as to secure the co-operation of those best qualified in each department. First there are the constitutional diseases. Then come diseases of the respiratory system. This is followed up by diseases of the digestive system, the urinary system, the nervous system, the muscles, and the mind. In these various articles there are those on the surgical as well as the medical treatment of disease. A careful review of the contents of this volume makes it clear that it is a worthy companion to the two that have already been given to the profession. Each disease is treated in a scientific and practical manner. Though the volume is a large one, there is no reduplication of work, no prolixity in the handling of any topic. The editors and publishers are entitled to the fullest measure of praise for their efforts in bringing out such a work. These volumes are a storehouse of valuable information.

MEDICAL INSPECTION OF SCHOOLS.

Health and Medical Inspection of School Children, by Walter S. Carnell, M.D., Director of Medical Inspection of Public Schools, Philadelphia; Lecturer on Child Hygiene, University of Pennsylvania; Director of Division of Medical Research, New Jersey Training School for the Feeble-minded, etc. Illustrated with 200 half-tone and live engravings, many of them original. Philadelphia: F. A. Davis Company, Publishers, 1912. Price, \$3.00.

The author tells us that this book is based upon the results obtained from the examination of 35,000 children. The author discusses medical inspection, hygiene, defects and diseases. Medical inspection of Public schools is a somewhat new application of the science of the healing art, and we are glad to notice that those who have the opportunities placed in their way for making examinations and acquiring practical knowledge are giving it to the medical profession and the public. This is a distribution that will work for good in the way of prevention and cure by the early detection of disease. One feature of these inspections is that inspectors vary very much in the percentage of cases reported as having physical defect or disease. One inspector may find twice as many suffering from anaemia as will another inspector, and the same with other diseases; and this, too, in the same school, where a special examiner checked over the work of another. This only goes to show that in many conditions there is no possible standard to start from. It is impossible for any two to agree upon what might be regarded as the degree of anaemia requiring to be reported. Some might regard this as an inherent defect in the whole system; but we do not share this view. A

study of some of the figures reveals some interesting facts. In schools with well-to-do children there was found 22 per cent. with eye strain. In schools with poor children there was 30 per cent., and in schools with Russian Jews there was 25 per cent. This goes to show that the average amount of eye strain is fairly constant for all classes. The suggestions thrown out on hygiene are most useful. This book should be in the hands of everyone who has to inspect school children, whether doctor or nurse. We can most heartily recommend it to all who are engaged in any way in looking after the health of children. The book is profusely illustrated. The paper, typography and binding are excellent.

OPERATIVE OBSTETRICS.

Operative Obstetrics, including the Surgery of the Newborn, by Edward P. Davis, M.D., Professor of Obstetrics, Jefferson Medical College, Philadelphia. Octavo volume of 483 pages, with 264 illustrations. Philadelphia and London: W. B. Saunders Company, 1911. Cloth, \$5.50 net. J. F. Hartz & Co., Toronto, Sole Canadian Agents.

The author states that "the recent development of obstetric surgery has reached a point where it seemed that a concise statement of methods of operating in obstetrics at the present time might be of service to the profession." This is the basis for taking up the subject of operative obstetrics. First, there is the anatomy of the parts concerned, usepsis, hæmorrhage, anaesthesia, technic, etc. A section is then devoted to the surgery of pregnancy. There is one to the surgery of labor. This is followed by a section on the surgery of the puerperal period. The book closes with the surgery of the new-born. The illustrations are numerous, 264 in all, and are very clear and effective. Dr. Davis is an experienced practitioner, teacher, and writer. He has something to say, and he knows well how to say it. There is gathered into this volume of medium size the best methods of dealing with those difficult cases of labor that call for surgical intervention. We don't think this could have been more skilfully handled than has been done in this volume. This work should meet with a very wide sale, as its merits must command respect and approval.

SURGICAL AND MEDICAL PHYSIOLOGY.

The New Physiology in Surgical and General Practice, by A. Rendle Short, M.D., B.S., B.Sc., Lond., F.R.C.S., Eng., Hon. Surgical Registrar, British Royal Infirmary; Senior Demonstrator of Physiology, University of Bristol. Toronto: the Macmillan Company of Canada, Limited, 1912. Price, \$1.25 net.

This is a book in which the principles of physiology are made use of as aids to treatment. This author has done his work well, and is en-

titled to congratulations. Some of the most recent and valuable views on treatment are to be found in this small volume. It is full of useful suggestions, and might be called a multum in parvo. It is just the sort of book one could carry with him and literally memorize its contents.

DISEASES OF THE SKIN AND THE ERUPTIVE FEVERS.

Diseases of the Skin and the Eruptive Fevers, by Jay Frank Schamberg, M.D., Professor of Dermatology and Infectious Eruptive Diseases in the Philadelphia Polyclinic and College for Graduates in Medicine. Second edition, revised. Octavo of 573 pages, 235 illustrations. Philadelphia and London: W. B. Saunders Company, 1911. Cloth, \$3.00 net. J. F. Hartz & Co., Toronto, Sole Canadian Agents.

The first 380 pages are devoted to the diseases of the skin. The remainder of the book, 138 pages, is taken up with the eruptive fevers. The author is a careful observer and a clear writer, and gives to his readers a very readable and valuable book. The clinical description of the diseases is brief and satisfactory. The treatment is laid down in plain terms and is trustworthy. The illustrations are numerous and good. Upon the whole it is a most attractive book, and is specially adapted for the use of the general practitioner.

ORAL DISEASES AND MALFORMATIONS.

The Surgery of Oral Diseases and Malformations, Their Diagnosis and Treatment, by George Van Ingen Brown, D.D.S., M.D., C.M., Oral Surgeon to St. Mary's Hospital and the Children's Free Hospital, Milwaukee; Professor of Oral Surgery, Southern Dental College, Atlanta, Georgia; Member of the American Medical Association; Member of the National Dental Association; Chairman of the Section on Oral Surgery of the Fourth International Dental Congress, etc. Illustrated with 359 engravings and 21 plates. Lea & Febiger, Philadelphia and New York, 1912.

In the formation of the scheme of this book and the preparation of the material for it the author had two main objects in view: a book that would be a useful guide for those who might have to teach the subject and a suitable text-book for students and practitioners. Both of these objects the writer has accomplished in a very thorough manner. This is a very important section of medicine and surgery. There are many diseases and surgical affections that call for treatment. The best methods of dealing with these is set forth in lucid form in this book. Messrs. Lea and Febiger have spared no pains to make the volume worthy of the reputation of their well-known house. This work will fill a useful position in the library of both the physician and the surgeon.

THE SEMICIRCULAR CANALS.

On the Physiology of the Semicircular Canals and Their Relation to Sea Sickness, by Joseph Byrne, A.M., M.D., LL.B. New York: J. T. Dougherty. London: H. K. Lewis. 1912.

The author, with much care, discusses the anatomy and physiology of the semicircular canals, and their relationship to sea sickness. He basis his conclusion on clinical and experimental evidence. The book is a highly scientific and valuable contribution to medical progress. Though the work is of a scientific character it is by no means uninteresting reading. This work should receive much attention from those engaged on the physiology and diseases of the ear.

MR. TUBBY ON DEFORMITIES.

Deformities, including Diseases of the Bones and Joints. A Text-book of Orthopedic Surgery, by A. H. Tubby, M.S., Lond., F.R.C.S., Eng., Surgeon to and in charge of the Orthopedic Department, Westminster Hospital, and Lecturer on Clinical and Orthopedic Surgery in the Medical School, Surgeon to the Royal National Orthopedic Hospital, Consulting Surgeon to the Evelina Hospital for Sick Children, to Christ's Hospital and the Sevenoaks Hospital for Hip Disease, Corresponding Member American Orthopedic Association. Second edition. Illustrated by 70 plates and over 1,000 figures, of which nearly 400 are original, and by notes of 54 cases. In two volumes. Macmillan & Co., Ltd., St. Martin's Street, London. Price, 45s net.

The evolution of books is one of the most fascinating of studies.

It is wonderful, indeed, to see how they grow and change. This is specially true of the two volumes before us. The material has greatly increased, the illustrations have been recast to a very great extent, and the text has been almost rewritten. All this for the better. This is one of the most complete and perfect works, not only on orthopedic surgery, but on any subject in the whole range of medical or surgical subjects. Mr. Tubby has been before the medical world for many years as one of its very best examples of a specialist. He has been an ardent student of his work, a keen observer of disease, and one who uses both for the treatment of suffering in a most scientific and practical way. All this we find in these two volumes. To the specialist these volumes are indispensable, and for the general practitioner they are most valuable, as there are so many cases of this class that he can and should handle himself. In the hands of Mr. Tubby these volumes will undergo change and improvement, though it would seem to the reader impossible to see how this could be done. In these volumes we find that the drawing, the photograph, and the skiagraph have been used freely in illustrating their pages. These illustrations are among the finest to be found in any

work on surgery with which we are acquainted. The publishers have chosen a specially good quality of paper, which adds much to the pleasure of reading. The binding is artistic, with gilt tops. We would like to see a copy of this work in the possession of everyone who has anything to do with the class of cases the author discusses. One must have a work of reference on such an important branch of surgery, and we take it this is the one to follow.

LOCOMOTOR ATAXIA.

A Surgical Treatment of Locomotor Ataxia, by L. N. Denslow, M.D., Fellow New York Academy of Medicine; Late Physician, Diseases of the Skin (out-patients), Bellevue Hospital, New York; Late Professor, Genito-Urinary Surgery and Venereal Diseases, St. Paul Medical College, Minnesota, London. Bailliere, Tindall & Cox, 8 Henrietta Street, Covent Garden, 1912. Price, 3s 6d net.

The author takes the position that syphilis is a *causa causans* of locomotor ataxia; but he goes a step further and contends that there is in the majority of cases some source of irritation that keeps up disturbing reflexes. This irritation in most cases will be found in the urethra. He cites a series of cases from his practice where the treatment of a stricture or some diseased condition of the urethra greatly relieved or cured the ataxic condition. He gives cogent reasons for accepting this view. The book is a most interesting one, and we recommend its perusal by our readers. The cases he reports would seem to carry with them the weight of authority. The book is a neat little volume, and reflects credit upon the well-known house from which it issues.

PROGRESSIVE MEDICINE.

A Quarterly Digest of Advances, Discoveries, and Improvements in the Medical and Surgical Sciences. Edited by H. A. Hare, M.D., and L. F. Appleman. March 1st, 1912. Lea & Febiger, Philadelphia and New York. Price, \$6 per annum.

This number contains Surgery of the Head and Neck, by Dr. C. H. Frazier; Infectious Diseases, by Dr. John Ruhräh; Diseases of Children, by F. M. Crandall; Rhinology and Laryngology, by Dr. D. B. Kyle, and Otology, by Dr. A. B. Duel. These articles are all specially well written and contain reliable information. These quarterly volumes can be recommended as up to date in every way.

A MANUAL OF SURGICAL TREATMENT.

A Manual of Surgical Treatment, by Sir W. Watson Cheyne, Bart., C.B., D.Sc., LL.D., F.R.C.S., F.R.S., Hon. Surgeon in Ordinary to H. M. the King; Senior Surgeon to King's College Hospital, and F. F. Burghard, M.S. (Lond.), F.R.C.S., Surgeon to King's College Hospital, and Senior Surgeon to the Children's Hospital, Paddington Green, London. New (2nd) edition. Thoroughly revised and largely rewritten. In five volumes, containing about 3,000 pages, and illustrated with about 900 engravings. Price, cloth, \$6.00 net per volume. Lea & Febiger, Publishers, Philadelphia and New York, 1912.

This work will enrich every surgeon's library and increase his efficiency by supplying him with far fuller details of operations than is possible in general books or systems of surgery. The time and attention of readers are spared by the fact that the authors have presented only the procedures that in their vast experience have proved best, and they have thus been able to cover the whole field of surgical treatment in full detail, including the steps of operations. In writing these volumes the authors have endeavored to put themselves in the place of their readers, choosing the operation best suited to each case, and then presenting everything a surgeon might need to know, including the after treatment. Their work was warmly appreciated in its original issue, and this new edition, thoroughly revised in text, and with no less than 900 engravings, will receive an equally wide welcome. It is some years since the first edition of this work appeared. During these years surgery has made great strides onwards. The authors have kept themselves well abreast of these advances, and have now given the medical profession the benefit of their long experience and extensive study. This work when completed will be a magnum opus, and do great credit to British surgery. This volume is one of much merit, and we shall look forward for the others with expectation.

FILARIASIS AND ELEPHANTIASIS.

This report comes from the London School of Tropical Medicine. It was prepared by P. H. Bahr, M.A., M.B., B.C., D.T.M.H. Cantab., M.R.C.S., Eng., L.R.C.P., Lond. There are a number of colored plates and monochrome plates. The publishers are Messrs. Witherby & Co., 326 High Holborn, W.C. The work done in connection with this report was carried on in Fiji. These researches trace the cause of filariasis to several varieties of the mosquito, as *sugomyia* and *culex fatigans*. Elephantiasis is due to the person having been infected by the filaria. This is done through the proboscis of the mosquito.

SAUNDERS' CATALOGUE.

This splendid list of medical books can be had from the publishers, Philadelphia, for the asking. It is well illustrated, and gives a good description of each book. It will prove a decided aid to those who may think of purchasing medical books.

 MISCELLANEOUS MEDICAL NEWS

THE SECRET DIVISION OF FEES.

At a stated meeting of the New York Academy of Medicine, held on October 5, 1911, the following resolution, adopted by the Council on May 24, 1911, was read, and it was unanimously voted that this resolution be endorsed by the Academy:

Resolved, That the secret division of a fee, or fees, with any person, or persons, who may be instrumental in influencing a patient, or patients, to apply for operative care or professional advice, is unworthy of any member of the medical profession.

Resolved, That if such a division of fee is made by a member of the New York Academy of Medicine it should be counted as a sufficient ground for the expulsion of the member.

Resolved, That the Council considers it its duty to investigate charges against members made on the basis of such division of fee, and on receipt of proof of offense the Council may either permit the resignation of the person or expel him from the Academy.

Signed,

WILLIAM M. POLK, M.D., President.

JOHN H. HUDDLESTON, M.D., Recording Secretary.

 MEDICAL COLLEGES OF THE WORLD.

Canada	8
Great Britain & Ireland	34
United States	120
The Rest of the World	158
	<hr/>
Total	320

In the United States in 1910-11 there were 19,786 students in all medical schools and colleges, the smallest number since 1900. Of this number 680 were women, of whom 159 graduated. The total number of graduates in the United States in 1911 was 4,273—the smallest number in ten years. The percentage of total graduates is 21.6 per cent.

In Canada we have eight regular medical colleges, in two of which the teaching is in French. In the United States thirteen medical schools suspended or merged into others during the year. Of the 120 now in existence 101 are regular, 12 homeopathic and 7 eclectic.

TUBERCULOSIS AND SANITARY ADMINISTRATION.

An example showing how tuberculosis responds to sanitary administration is found in the report of the Medical Health Officer of Melbourne, Australia, where for the past two decades there has been a remarkable decrease in the mortality from this disease.

For the five-year period, 1891-1895, the tuberculosis death-rate of Melbourne (population 100,000) was 2.7 per 1,000 of living inhabitants. For the period 1906-1910 this rate was reduced to 1.3 per 1,000. Dr. Jamieson, the health officer, calls attention in his report to the causes that have contributed to bring about this notable decrease in the consumption death-rate. He says that only in part is it due to the crusade which during recent years has been waged against all forms of tuberculosis, for the reason that the improvement noted antedates the crusade. He is of the opinion that higher standards of living, including improvement in housing facilities, must be given much credit. He then calls attention to the fact that during the past twenty years over 3,500 dwellings in Melbourne have been condemned as unfit for human habitation. All such buildings, it is pointed out, were thoroughly cleaned, rendered dry and sanitary and material structural defects affecting sanitary conditions remedied.—*Bulletin Chicago School of Sanitary Instruction*, October 28.

VITALITY OF BACTERIA.

The extraordinary vitality of bacteria is illustrated by a series of experiments undertaken by Prof. Busson, of which the German scientific review *Microcosmos* gives an account.

Seven years ago Prof. Busson transferred a culture of bacteria

coli to a glass tube filled with chemically pure water, which is a germicide, as it affords no nourishment for the microbes. Yet that didn't kill the bacteria. In the period stated they had prospered and increased.

The explanation given is that as soon as the water became tinged, however slightly, with alkali detached from the inner wall of the test tube it lost its germicidal properties, and those bacteria that had succumbed at first provided food for the survivors.

A striking experiment was that made with bacteria of cattle disease, which 17 years ago was preserved, baked and dried on silk threads. They were supposed to be quite dead, but after they were transferred to a slab of gelatine it was found that after this long period of inactivity they soon took nourishment and were as virulently poisonous as ever.

DR. J. W. DANIEL, EX-M.P., CALLED TO THE SENATE.

To replace Hon. Josiah Wood, appointed Lieut.-Governor of New Brunswick, Dr. John W. Daniel, ex-M.P. for St. John, N.B., has been called to the Senate.

The new Senator was born at St. Stephen, N.B., in 1845, and entered the House at a bye-election for St. John City in 1904. At the general election that year he was returned, and also in 1908. In the September elections he ran for the city and county constituency of St. John and was returned, but resigned shortly afterwards to provide a seat for New Brunswick's Cabinet Minister, Hon. Mr. Hazen.

AN ACT TO AMEND THE MEDICAL PROFESSION ACT.

[Assented to December 20, 1911.]

HIS Majesty by and with the advice and consent of the Legislative Assembly of the Province of Alberta enacts as follows:

1. Section 33 of *The Medical Profession Act*, being chapter 28 of the Statutes of Alberta, 1906, is hereby amended by striking out all the words in the said section after the word "contained" in the sixth line thereof to and including the word "Alberta" in the ninth line thereof and by striking out all the words in the said section after the word "practice" in the thirteenth line thereof to and including the word "except" in the fourteenth line thereof.

2. Section 35 of the said Act is hereby repealed and the following substituted therefor:

“35. The council shall admit upon the register any person who shall produce a certificate from the registrar of the University of Alberta that the person to whom such certificate is issued is duly qualified to practise medicine, surgery, midwifery, osteopathy or homeopathy, as the case may be, and the registrar of the council shall issue to such person the necessary license to practise on payment by such person of the registration fee hereinafter provided.

“(2) The examination of candidates for admission to practise medicine, surgery, midwifery, osteopathy or homeopathy in the Province of Alberta shall be under the control of the University of Alberta, the examiners for this purpose being appointed by the senate of the university.

A. P. M.—IXTH CONGRESS.

The ninth annual congress of the Association Internationale de Perfectionnement Scientifique (A.P.M.), under the high patronage of the French Government, will take place from the 3rd to the 31st August, 1912, in the Balkans, in Turkey, and in Greece.

For further particulars write, enclosing international answerstamp, 2½d, to the President, Head Office A. P. M., 12 Rue Francois-Millet, Paris XVI., or apply on Wednesday and Saturday from 3 to 4 p.m., the General Secretary, Dr. Ghislain Houzel.

Lord Strathcona has offered to donate \$25,000 to a hospital in the southern portion of Edmonton, which formerly was called Strathcona. A request was made for assistance, with the above result.

INTERNATIONAL MEDICAL CONGRESS.

Recent communications from London, England, indicate that the XVIIIth International Congress of Medicine to be held there in August, 1913, is to be of great scientific and Imperial importance. We have mentioned before that it was the intention of the president to give representation of the profession in the Overseas Dominions on the committees of the Congress and the various sections.

We are now in a position to state that the president, desiring to pay

the Canadian profession a compliment, has allotted two places on the British Executive and six places on the British Organizing Committee. In addition, Canadians have been selected as vice-presidents of several of the more important sections, as well as placed on the councils of the various sections; altogether over fifty members of the profession in Canada will be thus officially associated with the Congress. There is no doubt that it is owing to the sympathetic attitude of the president, Sir Thomas Barlow; the honorary secretary, Dr. W. P. Herringham, and the president of the section in medicine, Sir Wm. Osler, that such representation has been given to Canada.

The Canadian National Committee is composed of the deans of five medical faculties, namely, Dr. C. K. Clarke, dean of the medical faculty, University of Toronto; Dr. J. C. Connell, dean of the medical faculty, Queen's University; Dr. H. H. Chown, dean of the medical faculty, Manitoba University; Dr. E. P. Lachapelle, dean of the medical faculty, Laval University; Dr. F. J. Shepherd, dean of the medical faculty, McGill University, and three who have held office in the Canadian Medical Association, Dr. George Armstrong, Montreal, and Drs. A. McPhedran and W. H. B. Aikins, Toronto.

THE NEW DISPENSARY OF THE MEDICO-CHIRURGICAL COLLEGE AND HOSPITAL OF PHILADELPHIA.

This issue of *The Bulletin* gives considerable space to a block plan of the whole institution and floor plans of the remodeled college buildings and of the new dispensary, in the belief that most of its readers will be interested in an illustration of the recent growth and improvement that is of so much moment to both college and hospital. As the changes in the old college hall were described in the last issue, an account of the new dispensary, which will undoubtedly be one of the best, if not the best, structure of its kind in the city, is now in order.

Located on Cherry Street, immediately opposite the hospital, the building has a frontage of 59 feet and a depth of 144 feet; but the rear half has an additional width of 20 feet to the east, thus giving a total floor space of 10,000 square feet, or an increase by more than two-thirds over the former dispensary area. The structure is one storey in height and the front, which is of brick and colonial in design, is dignified in appearance. A wide doorway, flanked by two pillars, opens into a vestibule with marble steps and pavement, and thence through inner swinging doors to the broad corridor, which extends to the waiting-room at the further end of the building. As will be noted by reference to the

plans, the pharmacy, which also serves the hospital, is just to the left of the entrance, and the rooms for diseases of the eye and for ophthalmoscopic work are directly opposite on the right. Back of the pharmacy is a small alcove for the registrar's desk and records, and then, in order, the rooms for diseases of the ear, nose and throat, for the two surgical dispensaries and for one of those for general medicine, and flanking the waiting-room on the east, three rooms to be used jointly for skin and genito-urinary diseases. Next to the eye dispensary we have, in similar order, those devoted to children's diseases, orthopedics, the other for general medicine, neurology and gynecology.

The waiting-room at the rear of the building is spacious and well lighted by means of a large octagonal skylight immediately over the fountain and by large south windows. The fountain, which is a gift to the hospital from the J. L. Mott Company, of New York, rises from a circular basin eight feet in diameter and is of handsome design. Surrounded by growing plants and with gold fish playing in the basin below, it adds much to the attractiveness of the waiting-room and of the dispensary in general. Surrounding the fountain are plain but comfortable benches for the waiting patients; a sanitary drinking fountain that obviates the use of a common cup is at one side; and toilet rooms with sanitary fixtures, and that can be flushed by hose from top to bottom, flank the waiting-room on the west, as does the room for the janitor and pharmacy supplies. In passing, it may be said that the waiting-room is also intended for the use of ambulant patients from the wards of the hospital at such hours in the morning and afternoon as the dispensary is not in use by out-patients.

A unique feature of the building is that almost all of the rooms are lighted by skylights from above, thus ensuring privacy, an abundance of illumination, and freedom from any interference in this latter respect by neighboring party walls or fences. Another feature is that there is no basement, but that all gas, water and steam pipes, electric wires, etc., are carried in an attic space overhead where they are freely accessible at all times. This space also serves to protect the rooms below from excessive summer heat and to facilitate ventilation, which is provided for both by swinging transoms in the box skylights and by register openings into the space mentioned, the latter having special ventilators to the roof. By this means the ventilation and heat regulation of each room is separately and satisfactorily controlled by the individual in charge. All radiators are suspended from the wall to facilitate floor cleaning, and provision is made for the maintenance of sanitary conditions throughout.

The floors are of cement on a concrete foundation, of a pleasing

reddish tint, and with a six-inch sanitary base or coping to protect the walls. The ceilings are 12 feet in height, irrespective of the skylight wells, and are, like the walls, finished in hard white plaster. Each room is supplied with suitable porcelain wash-basins, sterilizers where needed, and other requisite furniture. With the exception of the front doors, which are of handsome quartered oak, the millwork of doors, closets, waiting benches, etc., is of chestnut of extra quality. The benches are of comfortable design and have been specially made not only for the waiting-room, but for several of the dispensary rooms, where they are built in and fitted to the various spaces. All in all, the plans and construction of the building leave little to be desired and make it a model as a commodious, modern and convenient dispensary. Credit for their care and co-operation in attending to the many details in securing this successful result should be given to the architect, Mr. Ralph E. White, and to Jacob Myers & Sons, builder. (Note.)

THE NATIONAL INSURANCE ACT.

So much has been said and written lately about the British National Insurance Bill and the ill effect it will have upon medical practice and professional incomes that we reproduce a digest of the bill taken from the *London Daily Telegraph*. The opinion in England that it will be the death-blow of the average general practitioner may or may not be well founded, but it is evident on perusal that the profession will be in the hands of Friendly Societies and local Health Committees, and that the average medical man will be nothing but a contract doctor at poor remuneration. No wonder a medical union has been formed and that at least two-thirds of the doctors in England have determined to have nothing to do with the working of the Act. It is noticeable that the *Telegraph*, which is the Government organ, says nothing about the rates of pay of the doctors under the Act. Apparently it is of secondary importance.

G. STERLING RYERSON.

Under ordinary circumstances, the Act will come into operation on July 15, 1912. But should necessity arise, his Majesty in Council may postpone the unemployment scheme to not later than Oct. 12, 1912, and the health scheme not later than Jan. 1, 1913.

HEALTH INSURANCE—PERSONS INCLUDED IN THE SCHEME.

All persons over 16 years of age who are employed within the meaning of this part of the Act shall, and any persons not so employed may,

NOTE.—This is given in detail as showing what a dispensary should be.—Ed. Canada Lancet.

be insured, and thus become entitled to the benefits of health insurance and prevention of sickness.

The former, called "employed contributors," include all persons of either sex, whether British subjects or not, who are engaged in the specified employments.

The latter, called "voluntary contributors," include those who either (a) are engaged in some regular occupation and are dependent on their earnings for a livelihood, or (b) have been employed contributors for at least five years.

CONTRIBUTIONS.

The funds for providing the benefits of the scheme and the cost of administration are derived from the following compulsory contributions:

Working men	4d per week
Working women	3d per week
Employers	3d per week
The State	2d per week

The employer must first pay his own and his employe's contribution, but may afterwards deduct the amount for the wages.

Employes stop paying at the age of 70.

Voluntary contributors pay according to age at entry.

BENEFITS.

The sickness benefits are:

For men—10s per week for twenty-six weeks.

For women—7s 6d per week for twenty-six weeks.

Disablement benefit—5s per week for men and women alike.

Medical treatment and attendance.

Treatment in sanatoria or other institutions when suffering from tuberculosis.

Periodical payments when incapable of work.

Payment of 30s as maternity benefit in case of the confinement of a wife, or to any other woman who is insured.

No insured person is entitled

(a) To medical benefit during the first six months of the operation of the Act.

(b) To sickness benefit until 26 weeks after he insures, and until he has paid 26 weeks' contributions.

(c) To disablement benefit until 104 weeks after insurance, and 104 weekly contributions have been paid.

(d) To maternity benefit until 26 weeks after insurance, or 52 weeks in the case of a voluntary contributor.

No sickness, disablement or maternity benefit is paid to the inmate of a workhouse, hospital, asylum, convalescent home, infirmary, sanatorium, or similar institution.

COMMISSIONERS' POWERS AND DUTIES.

Insurance commissioners are to be appointed, with a central office in London, and such branches as the treasury think fit.

At least one commissioner must be a doctor, who has had personal experience of general practice.

Amongst the important powers of the commissioners are the following:

The inclusion of trades now exempted under Part II. of the Act, dealing with unemployment assurance.

The contributions payable by post-office contributors.

Regulations for the payment of the contributors of insured persons and of employers.

The reduction of rates of benefit where the sickness or disablement benefits exceed two-thirds of the wages.

Establishing working relations between the friendly societies and the local health committees; and between these and medical practitioners as to medical attendance, the supply of drugs, and other matters.

Approving the regulations of the health committees in regard to sanatoria.

Laying down the conditions on which friendly societies shall be "approved" and the method in which their affairs are to be conducted, including the "pooling" of small societies.

Appointment of an advisory committee.

Special orders on "contracting out" and the alteration of the terms of benefits in regard to domestic servants and other classes of employed persons; and with regard to seasonable trades.

The control of the national health fund, and the establishment of a reserve values fund.

Procedure as to inquiries in cases of excessive sickness.

Regulations "for any of the purposes for which regulations may be made under the Act, and generally for carrying out the Act." Such regulations to have the effect of law.

Settling disputes between members and societies or societies and branches, or difficulties arising with respect to the health or advisory committees.

Formulating the financial conditions applicable to Scotland, Ireland and Wales.

DEATHS FROM DIPHTHERIA.

In order to show that this general reduction of the mortality of diphtheria has been universal throughout the world, I will present a table which gives the combined statistics of deaths and death rates from diphtheria and croup (*i.e.*, laryngeal diphtheria) in New York, Brooklyn, Boston, Pittsburg, Baltimore, Philadelphia, Berlin, Cologne, Breslau, Dresden, Hamburg, Konigsberg, Munich, Vienna, London, Glasgow, Liverpool, Paris, Frankfurt, for the five years prior to the introduction of antitoxin and the ten years subsequent to its introduction:

1890.....	16,526,135	11,059	66.9
1891.....	17,689,146	12,389	70.0
1892.....	18,330,737	14,200	77.5
1893.....	18,467,970	15,726	80.4
1894.....	19,033,902	15,125	79.9
*1895.....	19,143,188	10,657	55.6
1896.....	19,489,682	9,651	49.5
1897.....	19,800,629	8,942	45.2
1898.....	20,037,918	7,170	35.7
1899.....	20,358,857	7,256	35.6
1900.....	20,764,614	6,791	32.7
1901.....	20,874,572	6,104	29.2
1902.....	21,552,398	5,630	26.1
1903.....	21,865,299	5,117	23.4
1904.....	22,532,848	4,917	21.8
1905.....	22,790,000	4,323	19.0

In other words, in these various cities, situated in various climates, in various portions of the globe, with the people living under various social and economic conditions, we have a gradual fall from 66.9 to 19.
—*New York State Journal of Medicine.*

PUBLIC HEALTH ACT REVISION.

- Provides for division of Ontario into not more than ten health districts, with provincial officers in charge of each;
- Reduces membership of local Boards of Health;
- Makes local officer of health executive officer of board;
- Provides for weekly reports to provincial board of all communicable diseases;
- Prevents dismissal of local officer, except by consent of provincial board;

Provides for annual conference of medical health officers;
 Orders provision for care of indigent sick;
 Extends provision for inspecting meat;
 Places vaccination under the control of the medical health officer.

GOOD HEALTH PROMISES.

School children all over the country might well follow the example of some boys and girls in an Alabama school, who formed a Good Health Club (*Bull. La. State Board Health*), with this membership pledge:

"I promise:

"1. To be as regular in my habits as I can, to rise at the same hour, retire at the same hour, eat my meals at the same hour each day and not to eat between meals.

"2. Never to sleep in a room without having at least one wide open window.

"3. To choose food that is nourishing and to stop eating when I have enough.

"4. To drink at least eight glasses of water each day, two before breakfast and two before dinner, two after school and two before retiring.

"5. To walk and sit with head and shoulders well up and chest expanded.

"6. To fill my lungs with fresh air before each meal.

"7. To spend as much time in the sunshine as possible each day.

"8. To avoid strong stimulants of any kind.

"9. To brush my teeth every night and morning.

"10. To bathe frequently so as to keep all the pores in my body open."—*The Medical Times*.

TEACH HYGIENE IN PUBLIC SCHOOLS.

This excerpt from the report of the Section on Preventive Medicine and Public Health of the American Medical Association last June should be committed to memory by every physician:

"The most promising soil in which to plant the seeds of hygiene is the public schools. The minds of children, being plastic and receptive, will readily accept and assimilate new truths, and these becoming a part of the composition of the child will find practical expression when adult age is reached. It sometimes seems to be a waste of time to try to secure

the action of adults in the matter of practical application of well-known hygienic truths. They, in considering the matter, remember they have survived, and then draw wholesale conclusions to the effect that the truths and arguments presented in regard to disease prevention are all bosh.

“The advice given by President David Starr Jordan is certainly sound: ‘If ever you wish to go in for philanthropy, if ever you wish to be of any use in the world, do something for little children.’ And, further, ‘If the great army of philanthropists ever exterminate sin and pestilence, ever work out our race’s salvation, it will be because a little child has led them.’”

Miss Agnes Morris, State organizer of school improvement leagues in Louisiana, and one of Dr. Dowling’s principal assistants, made over 400 talks last year, relative to teaching hygiene in the public schools. She inaugurated medical inspection in many schools, had a morning exercise set aside once a week for the purpose of instructing children in personal hygiene and brought about the observance of Public Health Day, an unusual accomplishment for one woman.—*The Medical Times*.

DEATHS OF PHYSICIANS IN 1911.

During 1911 there were reported the deaths of 2,145 physicians in the United States and the Dominion of Canada, remarks the *Journal of the American Medical Association* for January 6, 1912. Reckoning on a conservative estimate of 140,000 physicians, this is equivalent to an annual death rate of 15.32 per 1,000. For the nine previous years the death rates were as follows: 1910, 16.96; 1909, 16.26; 1908, 17.39; 1907, 16.01; 1906, 17.2; 1905, 16.36; 1904, 17.14; 1903, 13.73, and 1902, 14.74. The average annual mortality for the period from 1902 to 1911 inclusive was therefore 16.11 per 1,000. The age at death varied from 23 to 99, with an average of 59 years, 10 months, and 5 days. The general average age since 1904 is 59 years, 7 months, and 3 days. The number of years of practice varied from one to 76, the average being 32 years, 10 months, and 9 days. The general average for the past eight years is 31 years, 5 months, and 23 days. The chief death causes in the order named were cerebral hemorrhage, “heart disease,” senility, pneumonia, external causes, and nephritis.

A CAMPAIGN AGAINST CHRISTIAN SCIENCE.

The taking up of a campaign against Christian Science by a London newspaper, the *Express*, encourages one to hope that the proprie-

tors of the public press may be induced to enquire more particularly into the nature of the wares which are advertised so freely in their columns. One of the objects of the "League to oppose Christian Science" is formally declared to be "to enlighten the British public regarding the true nature of this pseudo-science, which, under the cloak of religion, preys on hysteria and ignorant credulity." This is a sound crusade, and the only wonder is that anything of the kind should be wanted in an enlightened community at the beginning of the twentieth century. The second avowed object is of a highly practical nature—to wit, "to make the paid healers responsible for the deaths which take place under their wretched ministrations." In other words, to set in motion the machinery of police and of criminal law administration, which hitherto have been mainly conspicuous by their absence.

MEDICAL PREPARATIONS, ETC.

CRITICAL REVIEW OF THE ACTION OF FIBROLYSIN ON CICATRICIAL TISSUE.

Dr. Felix Mendel, who introduced fibrolysin (the double salt of thiosinamine and sodium salicylate), reviews in *Merck's Archives* for January, 1912, the article by Dr. Sidorenko, in which the latter reported unfavorably upon this product. (*Deutsche Zeitschrift f. Chirurgie*, 110, Nos. 1-3.)

Sidorenko stated that "fibrolysin shows no therapeutic effect upon cicatricial tissue, and that his opinion is the result of clinical and experimental investigation, and the critical analysis of the material of other authors."

Mendel reviews this conclusion critically. He first shows why the experimental study of Sidorenko, because of the methods used, must be regarded as a failure.

Then he divides the cases in which fibrolysin has been reported to be effective into three groups:

(1) Those that might have healed spontaneously, such as softening of scars, adhesions, etc.;

(2) Those that would probably have been improved as a result of mechanical treatment alone, but which are only cured if the hitherto useless therapy is augmented by fibrolysin injections—cases such as ankyloses and adhesions; and

(3) Conditions which are cured by fibrolysin despite the fact that according to our previous clinical experience they never heal spontaneously and are never improved or corrected by other methods of treatment, except surgical interference (Dupuytren's contraction, keloids, myositis ossificans, etc.).

"It is just in this class of cases," Mendel concludes, "that a large number of well-authenticated cures are reported by private physicians, clinics, and large hospitals. There cannot be the slightest doubt as to the reliability of these reports. Even if we grant that there may be some doubt as to the action of fibrolysin in the first two groups of affections, the results obtained in the last group of hitherto incurable diseases give absolutely positive proof that fibrolysin is a drug exerting a specific action upon the scar tissue."

A FINE LINE OF STERILIZED SOLUTIONS.

Hermetically sealed glass ampoules containing sterilized solutions of important drugs for hypodermic use have assumed a commanding place in medicine in a comparatively short period of time. Two or three years ago, seeing the tendency in this direction, Parke, Davis & Co. brought out a modest line of something like a half-dozen formulas, notable among them being solutions of adrenalin, codrenin, and cacodylate of sodium. From this small beginning the line has expanded until now the company announces a total of about twenty distinct formulas. The full list, we understand, is now appearing in display advertisements in the leading medical journals of the country. Physicians who are interested in this advance in hypodermic medication—and every physician ought to be—will do well to search out these advertisements and familiarize themselves with the comprehensive line of solutions therein offered.

Solutions provided by the glaseptic ampoule, it is obvious, have several advantages over those prepared in the ordinary manner. They are ready for immediate use; there is no necessity to wait until water can be sterilized and cooled. Accuracy of dose is ensured, each ampoule containing a definite quantity of medicament. The solutions are aseptic; they are permanent.

TREATMENT OF ECZEMA IN CHILDREN.

Galewsky, quoted in *Medizinisches Correspondenz-Blatt des württembergischen ärztlichen Landesvereins* for January 20, 1912, recom-

mends the following preparation for arresting the watery discharge in the eczema of children:

℞ Zinc oxide...	}	aa 20 grammes
Tale		
Glycerin		
Dilute alcohol	}	aa 10 grammes
Distilled water		

Moist dressings of one-quarter to one-half per cent. resorcin are also effective.

M. Ft. mistura.—*New York Med. Jour.*

LARYNGEAL COUGH.

If the cough is due to a simple irritation of the larynx Robin advises (*Bulletin général de thérapeutique*, January 15, 1912) steam inhalations medicated with eucalyptol or an atomized infusion of coca, as suggested by Renault:

I.

℞ Foliarum cocæ erythroxyton	5.00 grammes
Floris liliæ	2.00 grammes
Aquæ bullientis	100.00 cubic centimetres

M.

Infuse for twenty minutes. Three grammes of sodium carbonate and four drops of spirit of peppermint are added to the infusion, which is sprayed into the open mouth by means of an ordinary atomizer.

II.

Compresses wet with very hot water may be applied to the anterior portion of the neck.

III.

Although the amount of the medicament is very small, the following mixture will prove beneficial and may be added to the foregoing:

℞ Tincturæ aconiti radicis	guttas xx	
Tincturæ belladonnæ	}	aa guttas xv
Tincture benzoini		
Potassii bromidi	6.00 grammes	
Aquæ liliæ destillatæ	150.00 cubic centimetres	

M. Sig.: A tablespoonful on appearance of the laryngeal cough.—*New York Med. Journal.*