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EDITORIAL.

MR. JUSTICE RIDDELL'S ADDRESS ON MEDICAL EVIDENCE

In our previous issue we gave in full the text of Mr. Justice Riddell's address. It will bear more than one reading.

He points out the position of the court in our modern social conditions. At one time the law of might was the one that prevailed; but public opinion gradually came with its restraining influence on people's actions. In time people found out that it was well to put many usages into the form of rules, or law; and courts were established to enforce these rules or laws.

Evidence may have to deal with facts or with opinions. Facts are for the judge or jury to determine. Evidence may be documentary or by a witness. Of witnesses, there are two classes, namely; the ordinary witness, and the skilled or expert witness.

Mr. Justice Riddell goes somewhat fully into the subject of difference of opinion. It points out in his address that these differences are found to exist among lawyers and judges, among theologians, and among scientists. He points out to what extremes these differences of opinion had led people to go on the bygone persecutions. "So many men, so many minds" is still true.

Mr. Justice Riddell very properly lays it down as "the first duty of the witness to tell the truth." When a witness is asked to tell "the truth, the whole truth, and nothing but the truth," the meaning is that this shall be done in answer to the questions submitted to him, and that he shall conceal nothing that is true, nor suggest anything that is false. There must be no *suppressio veri* or *suggestio falsi*.

The witness must not only tell the truth, but he must make the truth tell. To do this, the witness must so conduct himself as to make it appear that he is honest. He must give his evidence in plain language, and in such a manner as to give the appearance that he is not an advocate for either side. A plain, straightforward manner does much to carry weight in court.

In giving answers, Mr. Justice Riddell laid down three rules:—1. Understand thoroughly the question put before attempting to answer it; 2. Answer it as briefly and concisely as you can, consistently with the

truth without suppression of the true or suggestion of the false; 3. When you have answered the question, shut up.

The observation of these rules, simple as they seem, will avoid much trouble and aid the witness very much.

Mr. Justice Riddell dealt out some hard remarks against the talkative and jesting witness. He said that a trial in court was always a serious matter, and that there was no place in it for frivolity and flippancy. Juries, as a rule, greatly discounted the jesting witness. On the other hand, nothing impresses a judge and jury so much in a witness than a quiet and dignified manner. No lawyer can make much headway against such a witness.

Questions should be answered for the jury. The simplest question is entitled to a careful answer, as what may appear simple to judge, counsel and doctor, may not be so to the jury. It is never wise to show indignation at a question, however simple it may be. Answers should be given in plain language; and, as the court affords no place for jesting, neither does it for slang. Technical terms should be avoided as far as possible.

The medical witness should be careful of his appearance. The sloven and the fop are not likely to impress a jury. It is important also to be in a good physical condition when one goes into the witness box to undergo a severe examination. The medical witness should prepare himself by referring to notes, etc., and he should never lose his temper.

Mr. Justice Riddell referred at some length to the complaints raised about the so-called abuses of cross-examinations. There is no way of avoiding cross-examinations. It is the only way of finding out to the full, the opinions of the witness, or his knowledge upon the subject under consideration. The medical witness that tells the truth in plain language, and does not lose his temper, has nothing from any cross examination. This is the only way of checking what the witness has said in reply to the counsel who first examined him. "Some way of testing the accuracy of evidence must be provided—and no means yet discovered can compare for a moment with cross-examination."

Then the "most important matter of all is honesty." Here Mr. Justice Riddell paid a tribute to medical witnesses as a class by stating that in most instances they were honest. The medical witness who perverts the truth to alter the verdict of the court in any way is a thief. To this, there can be no exception taken. The medical witness who conceals or exaggerates knowingly, is committing a grave wrong, indeed is making himself a contemptible liar. There have been some painful examples of this form of exaggeration, or worse, wilful lying in criminal trials, especially when the defence of insanity is set up.

In speaking of the expert medical witness, Mr. Justice Riddell said that it would never do to limit the right of the prosecution or defence to call upon witnesses. The opinion of any one person, however eminent, would not satisfy all parties. The most eminent may differ. In like manner, there is the right of an appeal in law. He was equally pronounced in his opinion that it would not do to have a certain number of official experts who would give evidence in all such cases as called for expert testimony. This he held would not meet the requirements of court trials. It could be argued that every science, art and trade might ask for the same thing. The medical profession must be treated as are engineers, or surveyors or architects.

In this view of the case there can be no doubt about the soundness of Mr. Justice Riddell's opinion. We cannot imagine anything that would give rise to a more pronounced storm of objection than an attempt to take away from the citizen his right to call his own witnesses. The public could never be induced to rest satisfied with the expert opinion of a few state appointed medical experts. Our present system is not perfect, but the substitution of paid state experts for those selected by the defence with perfect freedom of choice would work chaos in our courts, and end in a complete breakdown of public confidence. "Make us rather bear those ills we have, than fly to others that we know not of." It is and ever will be beyond the wit of man to arrange our court procedure on any cast iron methods. The citizen must be allowed the fullest latitude in choosing the lines of his defence. To take this away, by arranging for him by the state, his expert medical witness, would be to strike at the very foundation of personal liberty, which has come down to us as the result of countless expenditure of blood and treasure.

The remedy is the one pointed out by Mr. Justice Riddell. Let the medical witness be honest and truthful, and do his duty, his whole duty, in the witness box, as he would do it at the bedside of the poorest of land where there is no hope of a fee, and we will soon have heard the end of the unpleasant criticisms of the expert medical witness. Remember the words of Wolsey in Henry VIII, "Corruption wins not more than honesty."

IMPERIAL CANCER RESEARCH FUND.

This organization is only eight years old. During this time it has done very much to clarify the cancer problem. If a cure has not been found, and the real cause laid bare, yet, good work has been done. Much has been done to show to what extent cancer is hereditary, and how much is due to repeated irritations and traumatisms, greatly to

the lessening of the faith in heredity and increasing the proofs of irritation as the cause.

The eighth annual report shows that the funds on hand amount to £133,046. Nearly all of this is invested in revenue-producing stocks or debentures. The amount expended during the year on research work and other expenses was £6,782. The amount added to the endowment fund was £6,000; and £1,527 was carried forward for working expenses. This shows a very healthy condition of the account. Sir Henry Morris, the well-known surgeon, is the treasurer, and Dr. E. F. Bashford is the general superintendent of research and the director of the laboratory.

The report states that 13,000 cases of cancer have been investigated. These statistics throw light upon the alleged increase of the disease, the parts most affected, and the main causes.

Much importance is attached to cancer of the tongue, as it can be detected while quite small and its method of spread watched. The statement is made that if a suspicious ulcer or nodule is removed from the tongue, it must be completely made into sections and each one examined, unless a positive section be found. One or more negative sections are of no value, unless all be examined.

The serum diagnosis so far has yielded no positive results.

Much attention has been paid to the study of cancer in mice and cattle. No less than 90 cancerous growths were obtained from one abattoir in six months. These contained the histological forms met with in man. Primary cancer of the liver and the suprarenal bodies was common. The study of these growths has thrown light on the circumscribed nature of the origin of these growths.

During the year, 166 mice bearing spontaneous tumors were examined. Of these, 139 were malignant. It has been well demonstrated that cancer in the mouse can be transplanted. The careful study of cancer in the mouse goes to show that mice born from those suffering with cancer do not show any greater tendency to become cancerous than those born from healthy mice. This would tend to rule out the view that cancer is some sort of infection. One tumor strain has now passed through 166 successive batches of mice, and is still active and growing in mice after three years. Thus there is no apparent limit to the duration of cancer when transmitted from one animal to another. In the matter of transplantation it has been found that it can be done most readily in young animals; while the old animals are more liable to the spontaneous appearance of the disease. It has been shown that there is a strong tendency for the cancer cell to retain the same characteristics as to appearance for many successive experiments. While this is true, it is possible to modify the cell owing to

its environment. Of 29 cancers of the mamma as many as 16 have shown departures from the features exhibited at the outset.

On sarcoma the report states that this form of growth does not admit of ready transplantation. Two only of the strains had succeeded. Notwithstanding this the report claims that there are strong reasons for regarding carcinoma and sarcoma as essentially similar.

As to the chemistry of cancer the report states that cancerous growths contain only three-fourths the amount of nitrogen as the same quantity of normal tissue. This aspect of the study of cancer is destined to be of the utmost value. It goes to show how a cancer may increase very much in size without an increase in the amount of food consumed by the victim of it. It can grow on a lower grade of nutrition.

With regard to spirochaetes as a cause for cancer, the report states that they have generally been found absent in cancer growths in mice, and sometimes present in normal mice. When found in a cancer they have, therefore, no etiological significance. On the subject producing immunity in mice much work has been done. So far no definite laws can be laid down; but much headway has been made on some of the characteristics of transplantation. Of 12 mice with a growing cancer only 3 yielded to a second inoculation. Of 13 healthy mice, no less than 10 responded to inoculation.

On the influence or irritation in the causation of cancer the report is very clear. It does not go the length of saying that cancer will not arise unless there be repeated irritation; but it does state that this is a very potent factor. It also suggests that there should be legislation to safeguard those engaged in certain trades from continuous irritation of certain parts of the body.

INFANTILE PARALYSIS.

This disease has attracted much attention of late. It became rather widely spread throughout Europe in 1907, and since has shown a marked tendency to increase. It has been epidemic in many parts of the United States for the past two years.

This prevalency has not been without its fortunate side. It has enabled scientists in many centres to study the disease from a wealth of material never before known, especially since accurate methods have come into vogue.

The disease can now be produced experimentally. This has marked an onward step of the utmost importance. The monkey is a good sub-

ject for the experimental study of the disease. The virus has been found to be present in the brain, the spinal cord, the mucous membrane of the nasopharynx, infected lymphatic glands, the salivary glands, in the blood, and the cerebro-spinal fluid. The disease can be caused by inoculation in the following ways: Intracerebral, subdural, intraneural, intraperitoneal, subcutaneous, through the circulation, and in the eye. The disease can also be conveyed through the nasal and respiratory mucous membrane, and by way of the digestive canal if the intestines be paralyzed by opium. Attempts to inoculate horses, calves, goats, pigs, sheep, rats, cats, mice, rabbits, chickens, dogs and guinea pigs, have not been very successful. The sheep appear to respond to some extent; but not nearly so well as the monkey. The incubation stage in monkeys is from 6 to 30 days. In the human being it is from 1 to 14 days. One attack is held to furnish immunity. There is no instance of a second attack in the same person. Monkeys can be rendered immune by a series of small injections, so that large doses do not affect them.

When the serum of a monkey that has been rendered immune by injections, or the serum of a child that has recovered, is mixed with the virus in proper proportions, the latter is rendered inert. So far a serum has not been secured from the horse, but there is some hope that one may be secured from the sheep. An immunizing serum has been obtained from the monkey, but there are evident objections to the use of it on the human being. It acts satisfactorily, however, in the case of the monkey and protects against large doses.

The incidence of the symptoms in order of frequency are: Fever, pain, tenderness, vomiting, constipation, retraction of head, diarrhoea, headache, delirium, anorexia, irritability, stupor, restlessness, nausea, convulsions, twitchings, cough, dyspnoea, sore throat, numbness, chills, weakness, coma, pain in abdomen, vertigo, coryza, and a few other quite rare symptoms. Of all the symptoms the most pronounced in the invasion stage are digestive disturbances, sweating, tenderness, and some respiratory derangements.

The disease does not appear to be very contagious. It is very rare for two cases to occur in the same family. There is some reliable evidence that one child has contracted the disease from another child. In the report of this disease in Massachusetts prepared by Dr. R. W. Lovett, the statement is made that there is evidence to support the contagion theory in 35 out of 150 cases. In seven families there were two cases, and in one family there were three cases. In another series of cases, those of Wickman, there were 627 houses with one case, 95 houses with two cases, 39 with three, 14 with four, 7 with five, and 1 with six cases.

The disease assumes several types. These are the spinal poliomyelitic form, the ascending form, the bulbar and pontine form, the cerebral or encephalic form, the ataxic form, the polyneuritic form, the meningitic form, and the abortive form.

The treatment as summed up by Drs. Bradford, Lovett, Brackett, Thorndyke, Soutter, and Osgood is briefly as follows:—

The first stage. The patient should be kept at rest. There is often fever, delirium and depression. The pain and tenderness demand rest. With regard to drugs, there are none that appear to have any value. The antipyretics and sedatives are too depressant. The internal antiseptics do not appear to be of any value, though such drugs as urotropin, cytogen, aminoform, formine, etc., may be given a trial. Nerve stimulants, such as strychnine, are objectionable. Electricity in this stage should be avoided. Outward applications, by disturbing the patient, are apt to do more harm than good by breaking in upon the needed rest. Lumbar puncture should not be resorted to with our present knowledge of the disease.

The second stage extends to the end of the first period to the time when the fever, nerve tenderness and sensitiveness disappear. This period is usually five to six weeks in duration. There may be some contraction of the limbs, and this should be corrected. The patient should be kept from unnecessary movement and carried on pillows or bed frames, if necessary. The exhaustion is corrected by proper nursing and nourishments. Tonics may now do good. The greatest care must be taken to guard against the over stretching of the paralyzed muscles, either by the action of the sound muscles, or the position in the bed. The faulty position can usually be corrected by pillows, sand bags, cradles for the bed clothing, etc. It is not, as a rule, necessary to apply splints or weights. The application of heat in the form of a moist or dry pack, or by an electric heater will sometimes relieve the tenderness of this stage. Gentle massage, if it does not cause pain, may be resorted to.

The third stage requires much attention in the matter of treatment. The two main points are the avoidance of deformity and the regaining of nerve and muscle power. The prevention of deformity is attained by the correction of faulty positions and the use of braces, etc. The training of the muscles to do what they can. The nerves and muscles call for stimulation and restorative treatment. The principal means of treatment are electricity, the different forms of heat, physical therapy, and muscle training. Nerve grafting has been tried and given very good results so far. An effort must be made to correct the deformities, prevent further ones, and support the weakened parts so that the person can get about. Operations may have to be performed on the bones or

joints. Tendon transference has not been of as much use as was hoped it would be, though at times it does good.

OLD AGE AND ITS CAUSES.

From time to time we are told what old age is, what causes it, and how to delay its approach. These theories are interesting, and claim a measure of attention. They all contain some truth and, yet, none of them contains the whole.

Cicero, who was not a physiologist nor biologist, wrote a learned essay on old age, *De Senectute*. His views are purely speculative, in so far as the causes are concerned; and beautiful enough, in so far as the observations on age itself go. He did not explain old age, as one would not expect he could.

Some three thousand years ago King David wrote that "The days of our years are three score years and ten; and if by reason of strength they be four score years, yet it is their strength, labour and sorrow; for it is soon cut off, and we fly away." Here is a statement of fact that has remained true during all these many centuries.

Many years ago Dr. Hufland wrote a very interesting book on how to attain long life. His work dealt with the means of reaching a ripe old age; but said nothing about the causes of old age and the reasons for deterioration with the lapse of years.

Sir Herman Webber has recently given us a book of a somewhat similar character, in which emphasis is laid on proper exercise, plain, wholesome food, fresh air and sunlight, regular hours of sleep, the attention to the functions of nature, and living a "life freed from public haunts" as did the duke in the Forest of Arden.

Professor Henry Drummond, about twenty years ago, gave the world a book called *Natural Law in Spiritual World*. He stated that in the spiritual world life is eternal, because the environments are perfect. From this he tried to argue that if we could only make our environments perfect, we would live on and on, as there would be nothing to cause wear and tear of our bodies. No one has so far attempted to show how we can secure this perfect environment, and so we are still growing old and dying.

Professor Elie Metschnikoff has favored us with a theory of the cause of old age and the way of obviating most of its discomforts. The colon in man becomes too large and thus gives rise to fermentation and the production of poisons. They injure the health and depress the spirits. The body wears out because of these poisons and their resultant symptoms. The remedy for all this is sour milk, as the lactic

acid bacillus will prevent this death-engendering fermentation. Well, what would farmers say to this theory, as they have been in the habit, time out of mind, of drinking sour milk, and yet they, too, obey the statement of fact of King David about the three-score years and ten, with a possible other ten years added because of strength! Professor Minot, who has also given us a theory of his own, says of the one put forth by Professor Metschnikoff, "Surely such a method of dealing with the phenomenon of old age should not have our sympathy."

Professor Charles S. Minot was not satisfied with brushing aside Professor Metschnikoff's theory, but has given us one of his own. His theory is that with growth the amount of protoplasm increases to the nuclei in our cells, and as it increases growth power diminishes. He holds that the decline in growth is the result of this increase in the protoplasm content of our cells. "Grownig old, in other words, consists primarily in an increase in the proportion of protoplasm. We thus have a cytological mark by which old age can be distinguished, and we are able to connect senescence with visible changes in cells:—We are able to say there is a histological basis or cause of old age." Such is Professor Minot's theory of old age.

Quite recently we have been favored with another theory that is to take the place of all the others. This time it comes from Professor A. Lorand, of Carlsbad. He contends that the blame must be put upon the ductless glands, such as the thyroid, the adrenals, etc., and the depurating organs, as the liver and kidneys. It is by means of these the metabolism is carried on; and, when this is properly done, old age is postponed far off into the future. This looks very much like stating an ordinary truism in a lengthy and scientific manner. It looks a good deal like the good old advice, keep your head cool, your feet warm, and your bowels regular if you wish to enjoy health and reach old age.

WESTON SANITARIUM FOR CONSUMPTIVES.

On the morning of December first, the infirmary of Toronto Free Hospital for Consumptives, located near Weston, the nurses' residence, and the help cottage were totally destroyed by fire. The loss is estimated at \$100,000, against which there is \$30,000 of insurance.

The patients were all saved and soon distributed between the sanitarium at Muskoka, the King Edward sanitarium in Toronto, and the Hospital for Incurables.

Once more we have the lesson taught that all such institutions should be fire proof. Stone, brick, mortar, and slate will not burn. Let wooden

beams give place to steel, and wooden lath to expanded metal, and there need be no fear of fires.

It is more than providential that in a number of recent fires in public institutions, there has been no loss of life. This cannot always be so. The time must come when the fire will cut off the lines of exit, and there will be serious loss of life.

We hold that there should be legislation demanding that all buildings intended for the insane, or the sick, should be of fire-proof construction. This cannot come too soon.

DR. J. A. TEMPLE HONORED.

Few men in the medical profession deserved to be honored with better claims than Dr. J. A. Temple. Dr. Temple has been a teacher of obstetrics for forty years. During these years he has passed on the best that was in him to many a generation of medical students.

On Saturday evening, at the York Club, seventy medical friends met at a banquet to pay their respects to the guest of the evening. The chair was taken by Dr. J. T. Fotheringham.

Dr. A. J. Johnson presented Dr. Temple with an address, handsomely bound in morocco, and beautifully decorated with illustrations of flowering herbs. The address was signed by the seventy who were present.

Dr. R. B. Nevitt presented the guest with a solid silver tea and coffee service.

In very feeling terms Dr. Temple expressed his thanks to his friends for their kindness and expressions of respect. He had tried to retain the good will of his colleagues and students, and now he had proof that he had been successful.

Dr. J. F. W. Ross proposed the health of the old students, which was replied to by Dr. Charles Sheard. Dr. G. Sterling Ryerson proposed the health of the lay friends. This was responded to by Mr. E. B. Osler, M.P.

POWERS OF THE ONTARIO MEDICAL COUNCIL.

Some time ago Dr. Albert W. Stinson, of Cobourg, was tried on a charge and acquitted. This did not deter the medical council from going on with an investigation into the case with the view of erasing his name from the register.

Dr. Stinson applied for an order to restrain the medical council from proceeding with a case that had already been tried. The motion came before Mr. Justice W. R. Riddell.

Mr. Riddell held that the medical council had the power to go on with the investigation. He held that a trial in a criminal court did not debar the council from taking action, as this was a civil trial.

Mr. Riddell held "that the medical council had power under the medical act to investigate a criminal offense when it was also professionally infamous misconduct." The medical council, he held, had power to proceed with an enquiry without a court conviction.

This is a very important decision, and will affect the status of the medical council very much. It clears up a phase of the Ontario Medical Act that has been in doubt. The entire medical profession will appreciate this ruling.

TORONTO ISOLATION HOSPITAL.

The investigation into this institution has been held, and we now have Judge Winchester's report. The investigation will do much good, not only in Toronto, but in other cities where such institutions exist, or may be built in future.

It might be said that the medical profession of Toronto was well aware of the fact that the conditions were not of an ideal character so far as the Isolation Hospital was concerned. It was erected many years ago, when the risk of cross infection was less considered than at the present day. Perhaps no one was more alive to this risk than Dr. Sheard, late Medical Health Officer; but his hands were tied for lack of accommodation and an ample staff of help.

The judge declares that the buildings are inadequate, and also that separate buildings are required. This all medical men will endorse. Even then there will be instances of mixed infection, as no care in the world can wholly prevent this. This is an experience of all hospitals where children are admitted.

The report states that antitoxin should be supplied free to those who cannot pay for it. It also states that the Isolation Hospital should be placed on the list of hospitals entitled to assistance from the Ontario Government towards the maintenance of indigent patients.

DEATH OF MRS. EDDY.

Mary Baker G. Eddy died at her home in the Chestnut Hill section of the city of Newton, Mass., on 3rd December, at the age of 89.

In the first place there is nothing remarkable about the age which she attained. Some people who have opposed Christian Science have reached even greater ages. Others who never heard of Christian Science have touched the century line. Some noted criminals have lived to be very old. Some who have broken almost every law of health have outdone Mrs. Eddy in the race after the number of their days.

Mary A. Morse Baker was born at Bow, N.H., on 16th July, 1821. In 1843, at the age of 22, she married George Washington Glover, who died six months later. After the death of her husband she gave birth to a son.

For some time after her husband's death she was subject to extreme nervous spells. She would go out wandering alone, especially at night. Her father would rock her to sleep as if she were a child. She declared she frequently heard voices calling for her.

In 1853 she married Daniel Patterson, a dentist. This was an unhappy marriage and ended in 1873 in divorce. In 1877 she married a third time, Mr. Eddy, who died in 1883.

She made the statement that she discovered Christian Science in 1866. She was a patient of an eccentric homœopath by the name of Dr. Quimby. She absorbed some of his rather strange views, and added to them some of her own, and some East Indian theosophy.

Christian Science is absolute nonsense. It is a system of metaphysical folly. There is no material world, according to Mrs. Eddy. There is no disease and no pain. These are all delusions of mortal mind.

The remarkable feature of Christian Science is that so many people can be led by it. There is nothing strange in Mrs. Eddy having been the victim of delusions, or wilfully dishonest for gain. But one wonders that so many others have become enamored of the system she claims to have discovered. In this system there is some East Indian philosophy, Berkley's metaphysics, and Quimbeyism, all mixed up in hopeless confusion by Mrs. Eddy.

Nothing could be grosser or more repulsive than Mormonism, and yet it grew with great rapidity. The same may be said of Mohammedanism. Almost any folly will find followers, and this proved true in the case of Christian Science. We only refer to this matter because the system claims to be a system of treatment for disease. As such it has no warrant for its existence. There is not one feature of medical science about it. It is a compilation of gross ignorance.

She died worth \$1,500,000.

THE ONTARIO MEDICAL COUNCIL.

The following are the members of the Ontario Medical Council representing the various districts:—

In division No. 1, Dr. G. R. Cruickshanks, of Windsor, takes the place of Dr. C. W. Hoare, of Walkerville, the representative in the last council. In division No. 2, Dr. A. B. Welford, of Woodstock, is now the member, as Dr. J. H. Cormack, of St. Thomas, retired. In division No. 3, Dr. J. McArthur, of London, the former member, has been again returned. In division No. 4, there was a contest between Dr. J. A. Robertson, of Stratford, the former member, and Dr. A. T. Emmerson, of Goderich, the new candidate. Dr. Emmerson was successful. In division No. 5, Dr. T. W. Vardon, of Galt, was returned again unopposed. In division No. 6, there was a triangular fight between Dr. J. Henry, of Orangeville, the former member, and Dr. Taylor, of Waubaushene, and Dr. McCollum, of Thornbury. The election went to Dr. McCollum, of Thornbury. In division No. 7, Dr. H. S. Griffin, of Hamilton, the former member, had no opposition, and is again the member. For division No. 8, Dr. W. H. Merritt, of St. Catharines, was again returned without opposition. In division No. 9, Dr. R. J. Gibson, of Sault Ste. Marie, the former member, was again returned by acclamation. In division N. 10, a new division in Northern Ontario, Dr. A. D. Stewart, of Fort William, has the honor of being the first member. In division No. 11, there was a contest between Dr. E. G. King, the former member, and Dr. J. J. Cassidy, both of Toronto. Dr. King was elected. In division No. 12, there was no contest, and J. S. Hart, of Toronto, the former member, was again the choice. In division No. 13, Dr. H. Bascom, of Uxbridge, was again returned by acclamation. In division No. 14, Dr. T. W. G. Young, of Peterborough, takes the place of Dr. S. C. Hillier, of Bowmanville, the former member, who did not offer himself for re-election. In division No. 15, the candidates were Dr. A. G. MacColl, of Belleville, the former member, and Dr. T. S. Tarncomb, of Trenton. Dr. A. E. MacColl was successful. In division No. 16, Dr. W. Spankie, of Wolfe Island, was again returned by acclamation. In division No. 17, Dr. J. Lane, of Mallorytown, the former member, is still the member. In division No. 18, Dr. M. O. Klotz, of Ottawa, remains, as before, the member.

The Homœopathic representatives are:—Dr. Adams and Hardy, from Toronto; Dr. Jarvis, of London; Dr. Wickens, of Hamilton, and Dr. Rutledge.

The new members of the council from the various districts are:—Dr. Cruickshanks, No. 1; Dr. Welford, No. 2; Dr. A. T. Emmerson, No. 4;

Dr. McCollum, No. 6; Dr. A. D. Stewart, No. 10; Dr. T. W. G. Young, No. 14; and Dr. Wickens, of Hamilton.

It is not known as yet who will represent the colleges. There is some reason to believe that there will be changes. This will be noted later.

There are enough new members in the Ontario Medical Council, along with the former members who always strove for the right, to leaven the whole, and give the profession of this province good medical government. We call upon the present council not to repeat the actions of the council that has gone down to history with a sadly impaired reputation.

We have shown that in per diem allowances, committee fees, and mileage payments, the funds of the Ontario College of Physicians and Surgeons have been depleted, in a manner that appears to us to be quite indefensible, to the extent of some \$4,000 during the past four years. Every dollar that has been taken by any member of the medical council in excess of what was properly due him, the present council should insist on being repaid to the treasury. The medical council is dealing with trust funds, and must use these according to usages of a trustee.

We wish to hear from the medical council on this matter. There must remain no stain on the parliament of the medical profession of Ontario. We have warned the council repeatedly that if it does not conduct its affairs in such a manner as to command the respect of both the medical profession and the public, it will find itself shorn of its powers, and practically abolished. This would be a disaster, but phoenix like a new order would arise from the ashes of the old. The council must not assume that the profession of Ontario cannot get along without it.

We do think that the Council should also come to some arrangement with the universities whereby these would conduct the primary examinations. The council would be relieved of much expense by this change. The council should hold the intermediate and final examinations. If the council does not show some tact in this direction, it may lose the right to hold examinations altogether, and find that these have been turned over to the universities with licensing power. This we contend would be a great misfortune. It would lead to several universities competing for popularity in the matter of granting degrees. The council might arrange to have an assessor to see that the primary examination was of a proper standard.

The eyes of the profession are now turned upon the medical council in a way that they have never been in the past. Never again will it dare convert a four-days' session into a six-days' session, draw fees

for the longer period. In the words of Shakespeare in Hamlet let us say:—

This above all: to thine own self be true,
And it must follow, as the night the day,
Thou can'st not then be false to any man.

LAVAL UNIVERSITY MEDICAL DEPARTMENT.

According to the Carnegie report, the Montreal Medical College in connection with Laval University, was established in 1878. The report states that the University connection is not intimate.

The entrance requirements are indefinite, depending upon the prospective location of the student. The medical course is one of five years.

The attendance at the time of the inspection was 217. It is stated in the report that the teaching staff consisted of eight persons.

It was further stated that the resources available for maintenance were the fees from the students, and that most of these fees were distributed among the teachers.

The laboratory facilities are poor. The chemistry is given by the University. Anatomy is limited to dissecting. A single laboratory with meagre equipment is assigned to pathology, bacteriology, and histology. There is a library and a small collection of specimens, not all labeled.

As to clinical facilities, the school has access to two hospitals, containing together 250 beds.

This report may not be absolutely correct in every detail, but it may be accepted as practically so, and for our purpose will serve as a basis for what we wish to say.

The authorities in connection with the medical college in Montreal associated with Laval University must wake up. They ought at once to realize that they are now in the 20th century, and that medical education cannot be conducted with such facilities. The French speaking students are entitled to a fair chance to acquire a proper training in the various branches of medical science.

We do not believe that this is possible with eight teachers and the accommodation set forth in the Carnegie report. We think the law should take a hand in this matter and compel this medical college to put the facilities for teaching into such a condition as will enable this college to do as well for its students as the state of modern medical education demands.

It is wrong for any medical college to open its doors for the reception of students without being able to give them the same opportunity to

acquire a sound training. We speak thus plainly in the interests of the French medical students. To most of these, McGill College is an impossibility on account of the language of the students on the one hand and the college staff on the other.

The question that the Medical Faculty of Laval Medical College in Montreal must answer is what are you going to do about this condition of affairs revealed by the Carnegie report? That something must be done there can be no doubt. The students may be long suffering, but the time will come when patience will cease to be a virtue. The students will demand that they shall have as good a chance as those studying in a college where the English language is spoken.

EHRLICH'S 606 TREATMENT OF SYPHILIS.

Within the past few months this subject has been very much in the lime light. Medical authorities of the highest standing have now given out their opinions to the effect that there is undoubted merit in this method of treatment. It is admitted by those best able to judge that a distinct advance has been made in the therapeutics of syphilis.

It would not be possible to go into the elaborate researches of Ehrlich on germs and their life habits. It may be said that after long and arduous study, he found that certain organisms can acquire great resistance to some drugs that under other circumstances would be speedily toxic. The typhoid fever bacillus, for instance, can be so cultured as to become remarkably immune to arsenic in the culture medium. Prof. Ehrlich has formulated three general laws:—

1. Some substances have no effect on the parasites in the test tube, and have no curative properties for the person.
2. Some substances readily destroy the parasites outside the body, but have action upon them in the body.
3. Some substances do not act on the parasites outside the body, but have a curative action upon them within the body.

In some manner it was found that arsenic is so changed in the body as to become toxic to the spirochaeta pallida. After much research, Prof. Ehrlich has settled upon an arsenical compound which has been named dioxy-diamido-arseno-benzol. This compound has very selective influences upon the organism of syphilis.

The dosage now practically agreed upon is 0.6 gm. for women, and 0.8 gm. for men. The drug may be given in clear solution, either acid or alkaline; or in suspension. It acts more efficiently in the clear solution, but may cause some pain. In the suspension form there is no pain.

It does not cause pain when given intravenously, and this method in competent hands has been found to be quite safe.

There are reports of over 12,000 cases treated by this drug. In this large number not a single case of damage to the eyes has as yet been reported; and in some instances a second large dose has been administered. No serious results have been noted.

The erosions, skin eruptions, sore throat, etc., disappear as if by magic. Gummata melt away and old, deep syphilitic ulcers become clean and with healthy granulations in a few days. That the cure is a permanent one, time alone can determine. The disappearance of the Wassermann reaction would lead to the opinion that the cure is an abiding one.

Those who have had the largest amount of experience urge the need for care in the technic of using the drug. It is for this reason that so much care has been taken to keep it off the market until it had been thoroughly tested.

S. J. Meltzer, writing in the *New York State Journal of Medicine*, states as follows:—

“Since the external manifestations of syphilis are the main sources of infection and since it is established beyond the shadow of a doubt that these manifestations can be made to disappear by a single injection of ‘606’ in a few weeks, it follows that by compulsory use of such injections the curse of syphilis could be greatly reduced in the near future and perhaps finally be even eradicated. Sanitarians and those who are interested in public health should take this suggestion under advisement; it is now a practical, no longer an utopian idea.

“Finally, I would say that physicians, in availing themselves in their practical work of this brilliant new remedy, should not forget that it came from theoretical laboratory studies, and again that physicians and the public should never forget that without animal experimentation the discovery and development of this blissful remedy would have been absolutely impossible.”

Henry L. Elsner, professor of medicine, in Syracuse, states in the *J. A. M. A.* for 10th December, 1910, that “The treponema, otherwise known as the spirochaeta pallida, is positively destroyed, and the living contagion of syphilis is promptly removed by the Ehrlich remedy.”

THE CARNEGIE REPORT ON MEDICAL EDUCATION.

In the publication issued by the Medical Faculty of Queen's Medical College, Kingston, just to hand there are some plain remarks regarding the statement about Queen's Medical College in the Carnegie report.

It is shown that the inspection by Mr. Flexner and Dr. Colwell occupied part of an afternoon. It is stated that no one of the faculty knew of the visit. The Dean of the Medical College heard by chance that these two gentlemen were at the college. He then joined them and accompanied them during the visit, answering such questions as were asked.

It is contended that the examination of the college and its facilities for teaching were hurried and imperfect, and that the Carnegie report, therefore, does not set forth the true facts.

We have taken some trouble to ascertain the condition of medical education in Kingston, and feel bound to state that the Carnegie report does not do justice to Queen's. The education is thorough and the opportunities for study good.

THE CANADIAN GOVERNMENT ANNUITIES.

We are inclined to think that but few members of the medical profession have given careful study to the system of furnishing annuities which has been provided by the Canadian Government. We would advise our readers to look into this matter.

These annuities hold out several advantages. In the first place they are absolutely safe. In the second place they are sold at lowest rate possible consistent with safety. In the third place they are open to all. Finally, they cannot be attacked by any creditor. They are for the person solely.

For a very small annual payment, a physician can provide an absolutely safe income for his old age. The Annuities Branch, Ottawa, will furnish all information.

SURGICAL DISEASES OF THE UMBILICUS.

Dr. T. S. Cullen, of Baltimore, stated that secondary carcinomata of the umbilical region were not rare. Autopsy had shown that the primary focus was usually in the stomach from whence the growth passed via the liver and suspensory ligament to the belly wall. In children many cases of peritonitis were evacuated through the umbilicus but this was closed in adults. In some cases where the omphalomesenteric duct remained open, round or even tape worms were evacuated at this point as might also gallstones and hydatid cysts. These abnormalities required prompt surgical interference.

ORIGINAL CONTRIBUTIONS.

AFFECTIONS OF THE TUBERCLE OF THE TIBIA.
SCHLATTER'S DISEASE.

B. E. MCKENZIE, B.A., M.D.

COMPARATIVELY infrequent reference is made in surgical literature to painful and disabling affections limited to the tubercle of the tibia, at which point the ligament of the patella is inserted. The subject is interesting and important from the clinical standpoint, because such conditions have occasionally been mistaken for a condition which is more serious than this affection is. It has been thought in some cases to indicate tubercular disease at the upper end of the tibia.

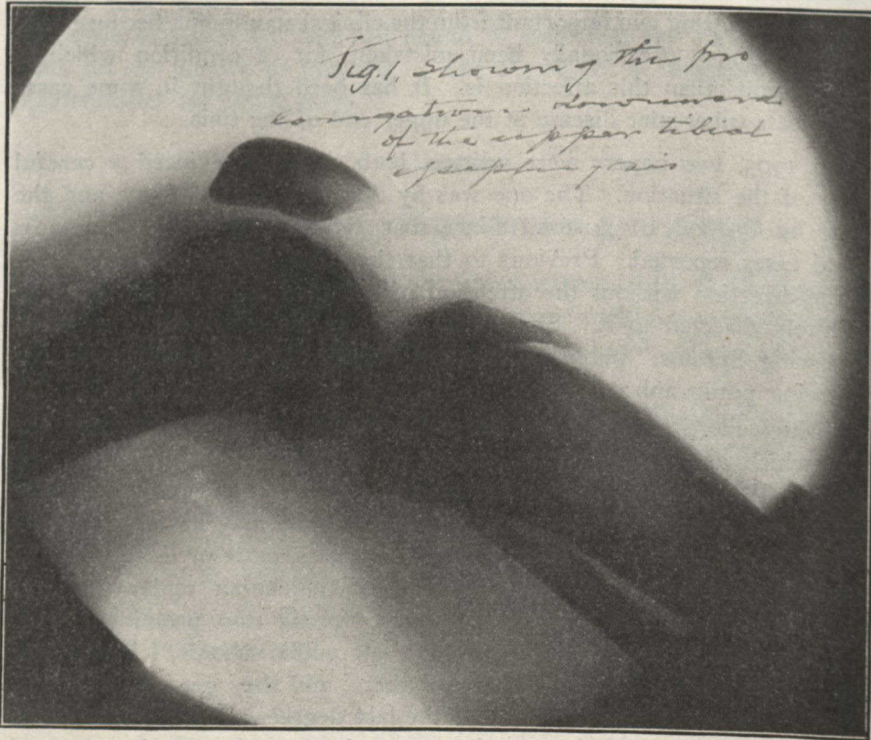
In 1903, two papers were written, both of which evinced a careful study of the situation. The one was by Schlatter, of Germany, and the other by Osgood, of Boston. Since that time there have been occasional cases reported. Previous to that time also, there were references to the affection without the attention of the profession having been so definitely directed to it. Sir James Paget in his essay on "Periostitis Following Sprains," published in 1902, referred to the matter as in the following paragraph:

"Much more common are the enlargements of the tubercle of the tibia which are often seen in young people, much given to athletic games. They complain of aching pain at and about the part, especially during and after active exercise, and the tubercle may be felt enlarged, and is often too warm. The pain often continues, more or less, for many months, and there may be enlargement of the bursa under the ligamentum patellae, and the tubercle may remain too prominent; but, common as are these cases, especially in our public schools, I have never known grave mischief ensue in any of them, and they get well of themselves. They may represent one of the last degrees of periostitis due to strain; the increase of the prominence of the bone is only just beyond that which may be deemed the normal limit for the attachment of vigorous muscles."

These cases are interesting also from an anatomical standpoint. It will be recalled that the tubercle of the tibia is developed in connection with that which forms the superior epiphysis of the tibia. Sometimes there is a separate ossific centre for this, but usually this tubercle is a tongue-like prolongation from the epiphysis which forms the superior articular end of the tibia, projecting downward and lying in front of the upper extremity of the diaphysis. (Fig. 1) It does not unite definitely with the diaphysis until about eighteen or nineteen years

of age, and previous to that time there will be a cartilaginous area between the tubercle and the diaphysis. This is shown in figure 1, which is taken with the leg lying upon its inner side, so that the x-rays were allowed to pass through the cartilaginous portion, showing a seeming space between the tubercle and the diaphysis.

The fact that the powerful quadriceps muscle receives its insertion into this tubercle, its slender tongue-like projection and its non-osseous attachment to the tibial shaft all favor injury, displacement, fracture or



evulsion as a result of forcible extension of the leg. It is also peculiarly liable to injury by direct violence.

Signs and Symptoms:

Pain is not complained of so much as tenderness. The kneeling attitude is not likely to be assumed; there is enlargement, redness and heat. Pressure even with the finger over the tubercle is not readily borne. In the more acute cases extension of the leg as in walking causes discomfort; in those less severe, ordinary walking on the level may be painless. There may be a history of some definite blow or fall, but it may have come on without any definitely recognized traumatism.

Diagnosis.—The various other conditions suggested by these enquiries are;

1. Tuberculosis of the knee or of bone in its immediate vicinity.
2. Traumatic synovitis.
3. Bursitis.
4. Chronic osteomyelitis.

1. Tuberculosis of the knee will manifest a change in the tissues which belong definitely to the articulation. The tibial tubercle is extra-articular and in any affection limited to itself the joint proper would be free from any indication of disease. The beginning of trouble affecting the tibial tubercle is likely to be much more definite and recent than the first symptoms that careful enquiry will elicit in a case of tuberculosis.

2. Traumatic synovitis of the knee will, of course, have a very definite commencement. There will not only be a definite history of injury, but the symptoms present will be characteristic of those pertaining to the joint itself, such as effusion, lessening of the depressions at the sides of the patella and of the ligamentous extension above the patella, and general fullness conforming to the outline of the synovial membrane.

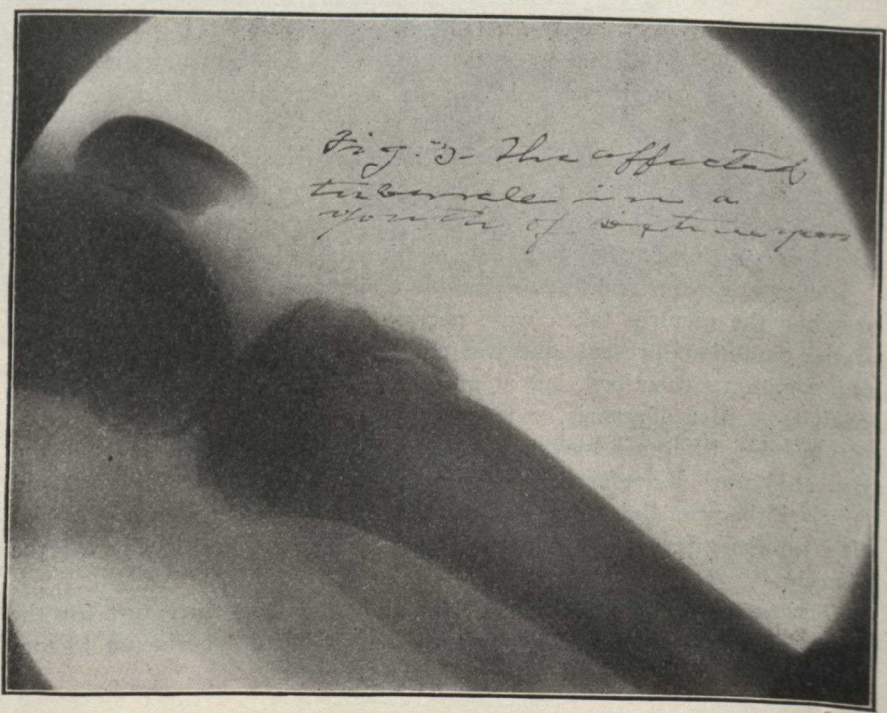
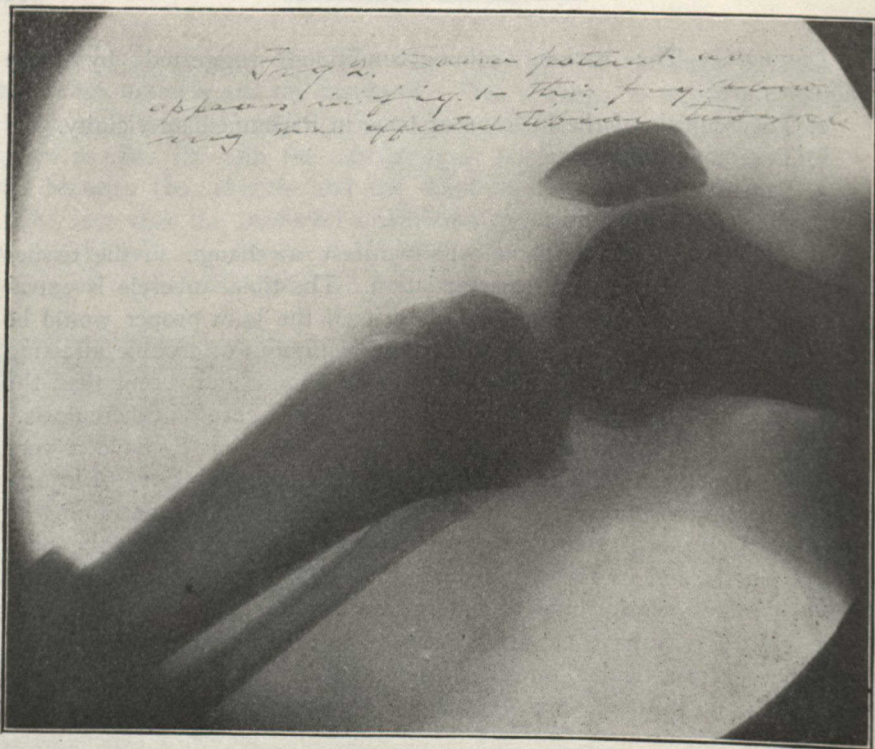
3. Injury may have caused a prepatellar bursitis. This, of course, would be extra-articular, but is so definitely located in front of the patella that no mistake should be made.

The infraligamentous bursa lying beneath the ligamentum patellae if inflamed is very likely to lead to error and it is not improbable that there is some bursitis here, even when the more important injury present is that of the tibial tubercle. If the trouble be limited to bursitis at this point, it will be manifested chiefly by bulging at either side of the ligamentum patellae.

4. A chronic osteomyelitis will have presented a much longer history and as a rule will extend quite beyond the limits of the tubercle. A radiograph should show important changes in osteomyelitis—these pertaining rather to the shaft than to the tubercle.

At a time when it was not possible to have a radiogram of the part or when the pictures taken were necessarily inferior in their portrayal of the conditions present, one was compelled to depend upon the signs and symptoms described, but at present, no attempt should be made to reach a positive diagnosis or to give advice until, by means of radiography, the difference may be observed between the sound leg, and the suspected one. By reference to figures shown in this paper (Figs. 2 and 3) it will be seen that there is a marked contrast and evidence of periostitis on the affected side, limited to the immediate locality of the tubercle.

Treatment.—The first indication doubtless, is to secure rest for the part. This may be done by enclosing the limb from perineum to toes



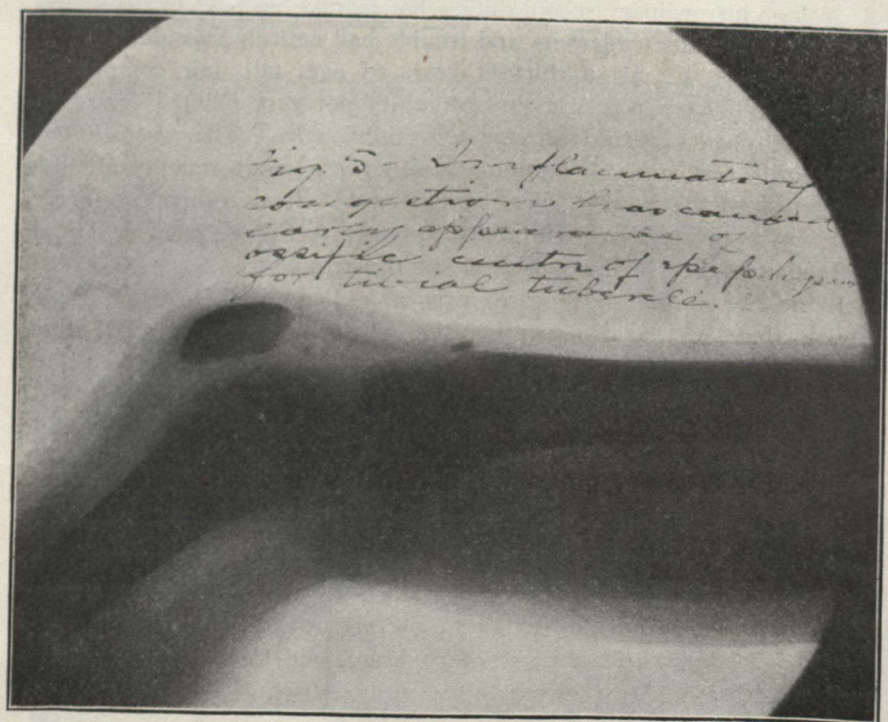
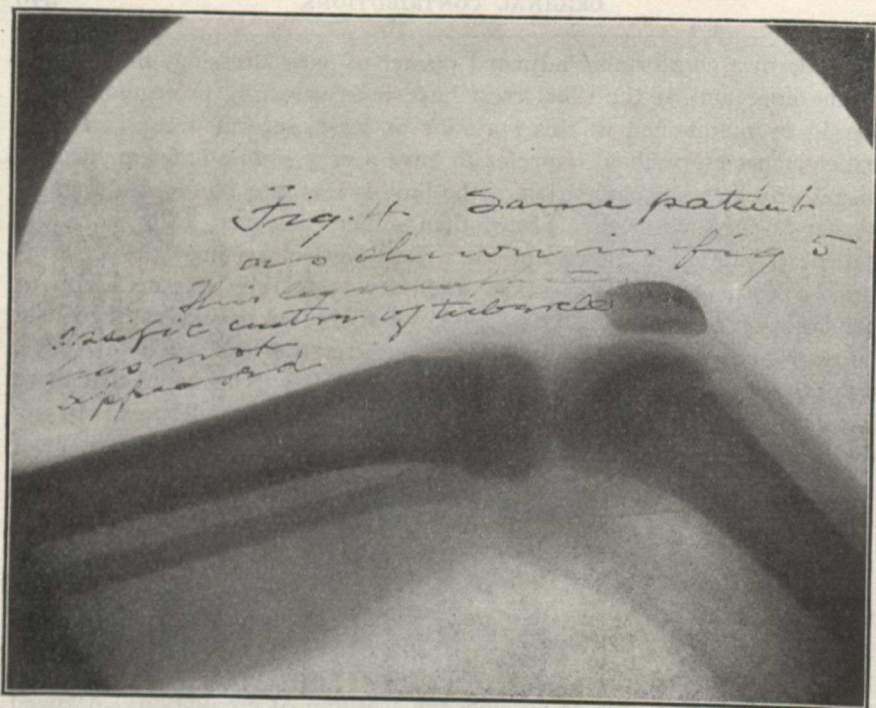
or ankle in a comfortably adjusted plaster-of-paris dressing, the vicinity of the knee and of the tibial crest have been carefully protected. Rest should be maintained in this way for at least several weeks. If the patient must move about, I prefer to have a very simple brace applied by means of which the circulation of the limb is less interfered with than by plaster-of-paris dressing. Better than either, however, is to have the patient refrain from movement for a few weeks, keeping the leg constantly in the extended position, and leaving it fully exposed without bandages or constriction of any kind. A fly-blister may advantageously be employed directly over the tubercle. After the lapse of a few days, two others may be applied, one at either side. It will be found that these favor the rapid disappearance of swelling, heat and tenderness. In my own cases, as will be seen below, a few weeks of treatment or at most two months has been sufficient to allow complete disappearance of the symptoms.

Case 1.—J. G., a stout, rugged looking boy of eleven years old, a student at Upper Canada College, a son of a physician, complained of tenderness in front of the tibia just below the knee, but gave no definite history of injury. Fly-blisters were applied as indicated above, and a light brace was applied so as to prevent flexion at the knee, at the same time restricting as little as possible the freedom of circulation. Allowed to continue his ordinary school duties, but to take no part in the sports. In a few weeks the tenderness and trouble had entirely subsided.

Case 2.—A. C., about thirteen years of age, tall, fair complexion, not rugged. There was a history of injury not very pointed or significant which had occurred some weeks previously. The suspicion of tuberculosis was aroused, but observation for a short time resulted in a diagnosis of the trouble being limited to the tibial tubercle. Treatment similar to the above with more complete rest and somewhat longer continued, resulted in the subsidence of the symptoms.

In neither of the above cases was a radiogram secured. In my opinion, there was no complete evulsion of the tubercle, nor do I think that fracture occurred.

Case 3.—B. W., thirteen years of age, a rugged, hearty boy of strikingly marked development, gives a definite history of injury while playing baseball, having collided with another boy running on the field, and having been tumbled over in a manner which does not enable him to state just how he was injured. The next day, however, there was trouble just in front of the shin below the knee. The symptoms are characteristic, and the conditions such as shown in the figure here given (fig. 2) This case having occurred quite recently, the boy is still under observation. With rest, the use of no brace, and leaving the limb free from constriction, the symptoms are rapidly subsiding.



Case 4.—W. H., ten years, a girl, now under treatment, presents some interesting features. The left tibial anterior ridge seems to have been injured several times during the last two years. A few weeks ago she was dragged over a seat at school, hurting quite severely the "left knee." She has been laid up during that time. The tibial tubercle is swollen and tender. The radiograms (fig. 4 and 5), show an interesting condition. In the former there is no tubercle seen, because the ossific centre has not yet appeared. In figure 5 the ossific centre has appeared earlier because of the congestion kept up in this part for a considerable time as there is an undoubted history of injury at the same part two years ago.

This effect of congestion in hastening development is an interesting anatomo-physiological fact. The increased blood supply has caused earlier development of the ossific centre, which in a similar condition, when there is tuberculosis at the end of a long bone in a growing child, causes, through congestion, added growth at the junction of the epiphysis with the shaft. Consequent upon this added growth, the affected limb is very commonly found longer than its fellow in the early months or years of the disease, whereas, at a later time the limb is found shorter. If the disease have been brought under control, and therefore, the congestion has ceased the relative shortening which appears at a later time, is due to the effect of early synostosis of the epiphysis with the shaft, thereby preventing the normal growth at that part.

The cases above recited will suffice to indicate the general conditions present in this affection. It is probably of more frequent occurrence than would appear from the records and from its place in surgical literature. It derives its chief importance from the fact that it is liable to be confounded with chronic disease at or near the knee joint. It is most important that a diagnosis should be made early. The affection is likely to subside within a few weeks, but it has extended in some instances over a period of six or eight months.

Some articles have appeared speaking of the condition as if there were a complete evulsion of the tubercle. In none of the cases, however, that the writer has seen, has there been a real displacement of the tubercle and in all instances, under rest, the inflammatory condition subsided and the insertion of the quadriceps femoris and its attachment to the tibia have remained normal.

The radiograms were taken at the Orthopedic Hospital by Dr. Geo. S. Young.

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MEDICAL THOUGHTS, FADS, FACTS AND FOIBLES.

By JAMES S. SPRAGUE, M.D., Perth Ontario.

FROM "The Life of Mansie Wauch, Tailor in Dalkeith, written by himself," a decidedly pleasing description of Scottish humble life, I present the following lines illustrative of the discussion between "Mansie" and his wife, "Nance," concerning what trade or profession should be recommended to their only callant, "Benjie" by name:

"Stop, stop, gudeman," cried Nance, half greeting, "that's an awfu' business;" (referring to the Ministry) "but I dare say it's ower true. But mightna we breed him a doctor? It seems they have unco profits; and, as he is sae clever, he might come to be a graduat."

"Doctor!" answered I—"keh, keh, let that flee stick i' the wa'; it's a' ye ken about it. If ye was only aware of what doctors had to do and see, between dwining weans and crying wives, ye would have thought twice before you let that out. How do you think our callant has a heart within him to look at such folks bleeding like sheep, or to sew up cutted throats with a silver needle and silk thread, as I would stitch a pair of trousers; or to trepan out pieces of cloured skulls, filling up the hole with an iron plate; and pull teeth, may be the only ones left, out of auld women's heads, and so on, to say nothing of rampaung with dark lanterns and double-tweel dreadnoughts, about gousty kirk-yards, among humlock and long nettles, the hail night over, like spunkie—shoving the dead corpses, winding-sheets and all, into corn sacks, and boiling their bones, after they have dissected all the red flesh off of them, into a big caudron, to get out the marrow to make drogs of?" If among ordinary people similar discussions in regard to the trade or profession of a hopeful son were as honestly presented, one fact is this, that our profession would not be the goal of others but the most deserving and ambitious. Fewer medical colleges and fewer graduates the nation's interests demand, and those who as statisticians tell us of the needless surplus would do great and beneficial service to the commonwealth by the advocacy of a "close season" of years and the word "Limited" for our medical faculties' outputs or alumni. To the casual observer the ludicrous excess of physicians is evident, and this condi-

tion is evidently attributable to many diverse ambitions, many of which are as vaporings, and the result is, has been and will continue to be, that which writes not *ideal* on the life work. To him aspiring to the doctorate, who not inheriting, or not encouraging, or being influenced by the highest ideals and that study designated as aretology. Medicine gives no encouraging incentives, yet, if misunderstood, it and its disciples will experience the blight, and the united efforts of zealous and ethical men will be taxed to remedy, if possible, the dishonor of an incompetent brother, who considers not his profession as a vocation, but as a means by which booty and graft can, or rather may, be secured under the guise of respectability in our profession.

The failures are in prison, under sentence, self expatriated or legally expatriated, or wisely branded by a stain that time does not erase even if in these altruistic and fraternal days.

"What is new is seldom true; what is true is seldom new," and Mansie's conclusions, although pronounced seventy years ago, are really confirmatory of those of Hippocrates who left us his memorable precepts relating to requirements for an applicant in medicine, which are defined as exquisite discernment, sound judgment, a combination of character marked mildness and firmness, sympathy for suffering, tender commiseration, love for labor, emulation to be amiable and praiseworthy, and principally a genius and adaptability for the vocation—which is before all arts, and without which "all the rest would sink in night."

This "prick the louse and jab the flea" tailor knew well what his callant had not, and never would possess these Hippocratic ideals or would be able to grapple with "*Spes hominum caecos, morbos, votumque, labores, et passim toto volitantes aethere curas,*" therefore, he recommended the barber trade, and "Benjie" became a "tonsorial artist," suitable and worthy of his ambition and talents. Medicine wants the firstlings of the best families and in it there is no room or tolerance for the shakings of the bag, or weak links in the chain, for we must learn "that which is not for the interest of the whole swarm is not for the interest of the single bee," which rulings, if not believed or not observed by our universities, will be the profound consideration, at an early date, of the wisest of our legislators, whose first duty is that relating to the health of the commonwealth, and the maintenance of the ancient piety as well as the integrity and high standards lawfully and consistently attached to our profession. No radiant lucidity of words or rigid logic should be invoked or required to define our position among men, however untaught we have been in our medical studies. We, having no ideals, learn the necessity of their keeping and worship, and frequently from the fact that "truth is truth to the end of reckoning," and we are

in no uncertain or dazzling intelligence learning and in a sense realizing that Gladstone's prescient words, "Physicians will become the future leaders of nations," are worth the notice of intelligent leaders of men, and especially the concern of those who occupy the seats of the mighty within our temples dedicated to medicine—where history is associated with countless gods and demi-gods. Master minds, and fathers; whose altruistic labors have been more successful and more demanded than those "who act as leaders of faithful souls and guides of those who travel to the skies," in dispelling the myths of superstition. From my thesaurus or index rerum medicarum or medical anthology I present the brief words of our fathers in relation to the employment and preservation of proper ideals in life and in practice. From Dr. Jacobi, of New York, who as a Father or Master Mind in Medicine, we all must grant first mention, for his voluminous writings, able addresses and brief utterances are ethical and not for the public censure, or for disgusting and ephemeral notoriety, we learn to address him as "Ave Magister," (equally as did Dr. Weir-Mitchell), while telling us in his Montreal address:

"Ideals are not for those only whose heads tower above ours, and the very soles of whose feet seem to walk over the clouds, but for all of us, who take pride in admiring great examples, and try to follow them."

"No other profession," says our Dr. Osler, "can boast of the same unbroken continuity of methods and ideals."

Dr. Geo. M. Gould, Philadelphia, whose life work confirms his statements, encourages us with these words: "Cling to the ideals of your profession being a calling, a vocation, from a source higher than the love of success, and fame and money. Cling to the idealism and purity of your youth"—

In regard to the ideal and safe medical practitioner, Dr. Weir-Mitchell tells us: "He sells that which men can neither measure nor measure, and this sets him over all other professions, save one, and far above all forms of mere business." Yet, "Happy is the man," Pasteur says, "who carries with him a God, an ideal of beauty, who obeys him, an ideal of art, an ideal of science, and an ideal of the virtues of the Gospel." Brother, if you have not one or all of these in your adypta, or on your altars; and as a doctor or citizen, it will be advisable that you adopt one or all of these ideals to encourage you in self inspection and in the preserving of professional solidarity, which our master minds attempted to establish, and of whose labors we are too often, very ungrateful beneficiaries, and unwise disciples as guardians of sacred trusts.

The ideal doctor is he who is, or strives to be: "Capax, perspicax, sagax et efficax," and with these possessions, he becomes the real philosopher and god-like.

For forty years, Brother, I have, during leisure hours, passed pleasant moments in the contribution of articles or papers of a nature similar to this unmeritorious effort, and with but one incentive, that some reader would either be benefited or be led to believe he could do better composition—which I most unreservedly endorse and wish were done; for our Canadian medical journals lack, very much, the original contributions illustrative of our researches and interests in the profession's progress and well being. Anyway, remember the words of advice given by "Mansie," the tailor, and of the ideals of the master minds.

THE TREATMENT OF ACNE VULGARIS, ACNE KELOID, ACNE ROSACEA.

By Dr. W. H. B. AIKINS, Toronto.
Consulting Physician Toronto General Hospital, Hospital for Incurables, etc., etc.

ALTHOUGH acne vulgaris is sometimes characterized by a course of extremely long duration, and may persist with more or less severity for years, in the majority of cases spontaneous involution may occur, even when no treatment is undergone. This spontaneous cure occurs as a rule when the body attains complete maturity, although in some instances the condition persists until the patient is approaching the thirtieth year.

In spite of this tendency to spontaneous cure, appropriate treatment is of great value in nearly all cases in lessening the duration of the disease, and thus reducing the amount of permanent disfigurement from the indelible scars which are apt to be left, but which in the course of time tend to be less conspicuous. In addition to scarring, there is of necessity a certain amount of cicatrix formation in severe and protracted cases, and occasionally keloid is also observed.

Before undertaking the treatment of acne, it is essential that the history of the case should be carefully studied. This should include an investigation of the habits and occupation of the patient, and above all the history of the onset of the existing cutaneous disorder. In this connection it is of paramount importance that details should be given of any previous treatment which has been carried out for it, and also if the patient has undergone treatment for any other general disease.

The importance of such an investigation is obvious, in view of the fact that in not an inconsiderable number of the cases which come under observation, the acne appears to have been artificially induced by the

continuous ingestion of drugs for long periods, as for instance, bromide of potassium, or by the local application of preparations containing tar. In such instances, the simple interruption of the injurious practice which is assumed to be responsible for the production of the cutaneous manifestations, the bathing of the affected parts in hot water, together with the application of an non-irritating ointment, may result in very marked improvement, frequently amounting to a complete cure of the condition.

In addition to the exclusion of artificial acne, each individual case should be studied from the point of view of the etiological or predisposing factors which are responsible for the production or aggravation of the condition, and also in regard to the complications present. The therapeutic measures which have been recommended from time to time may conveniently be considered under the following headings:—(1) General Treatment; (2) Local or Surgical Treatment.

1. *General Treatment.*—In addition to the surgical and local measures which are carried out, the general condition of the patient should be taken into consideration, and treatment directed towards the relief of any complications which may be present. Internal medication alone does not result in cure of the acne, but the relief of complicating conditions often exerts a favorable influence upon it.

The general health of the patient should be carefully attended to, especially in the case of young women suffering from chlorosis, who are frequently the subjects of the disease, and in whom sedentary occupations often exert an injurious influence. In such cases, pelvic disease is sometimes present, and should receive appropriate treatment. In all cases of acne, fresh air and exercise is beneficial, owing to the fact that it tends to promote the functional activity of the sebaceous glands, but excessive fatigue should always be avoided.

Of great importance to the adolescent is the question of sexual hygiene. The cold steel sound recommended many years ago by Sherwell, or the cooling sound advocated by Ultzman is to be considered where the youth is of a neurotic tendency and morbid habits, while with the opposite sex the breaking down of any clitoric adhesions and scrupulous cleanliness is necessary, even the use of the douche is essential and satisfactory treatment in certain selected cases.

Diet.—The diet should be carefully regulated, and people who are in the habit of taking an excessive amount of rich food often derive considerable benefit from a reduction in the quantity and richness of the food, more especially as regards meats and sweets. In such cases great improvement follows the adoption of a milk diet, or one consisting of fresh fish, fruit and easily digested vegetables. In all cases the exclusion

from the diet of confectionery, pastry, hot bread, cakes, sugar and fried food, together with alcohol and tobacco in every form is to be advised.

In view of the frequency with which acne is complicated by various disturbances of the digestive organs, large quantities of pure water drunk between meals are sometimes useful in promoting intestinal digestion, but as a rule it is advisable to take very little liquid with food, and iced drinks are injurious. All writers on the subject are of opinion that foods containing an excessive amount of fat as well as cheese and other indigestible articles of diet should be avoided. In individual cases, however, it is advisable to ascertain whether the mode of living and the diet play any part in the persistence or the recurrence of the acne, in order that the treatment may be regulated accordingly.

As has been previously stated, acne often occurs in individuals who are suffering from anaemia, chlorosis and other debilitating conditions, and in such cases an attempt to build up the general health by the administration of tonics is indicated. Amongst those which have been recommended are cod liver oil, strychnine, phosphorus and iron. Max Joseph and others of the Kaposi school still advocate the importance of arsenic.

Acne is also frequently observed in individuals exhibiting carious teeth, stomatitis and foetor of the breath, all of which conditions should be dealt with by suitable treatment.

The frequency with which acne is complicated by digestive disorders has been already alluded to, and it is of the utmost importance that these should be recognized and appropriately treated, owing to the fact that they play an important role in its persistence and recurrence. Dyspepsia and constipation are common, and in many cases are considerably relieved by the aperient waters, such as Vichy, Carlsbad and Hunyadi Janos water. In some cases it is advisable to employ salol or other intestinal antiseptics. If gastric disturbances are present, pepsin, nux vomica and dilute hydrochloric acid may be useful, whilst pancreatin and diastase may be administered in cases complicated by intestinal indigestion.

In cases in which dyspepsia and constipation are present, a blue pill or calomel on several successive nights, followed by a saline laxative the next morning is advisable, with the substitution of kasagra, cascara or phenolphthalein when it is necessary to continue for more than a few days.

Finally, in some of the cases in which indigestion is associated with acne, and in which the condition is further complicated by exhaustion of the nervous system, the indigestion disappears within a short time if the patient is able to obtain regular and sufficient sleep, and in addition makes a practice of taking a certain amount of rest before and after

meals. A marked improvement in the condition of the skin has also been observed coincidentally with the disappearance of the indigestion.

The results of treatment indicate that cases in which cachexia is present are especially refractory, and this also applies to those which have been inappropriately treated for a long time before coming under observation. It is obvious also that there must be considerable difficulty in obtaining satisfactory results in patients who are of necessity living under conditions which are unfavorable to the involution of the disease. This is exemplified in the case of individuals who are suffering from epilepsy, which necessitates the administration of bromide of potassium continuously for long periods.

2. *Local or Surgical Treatment.*—The chief aim of all local treatment is to facilitate the evacuation of the contents of the sebaceous glands, and the removal of all mechanical obstruction at the orifices of the ducts connected with them. This being so, it is absolutely essential that in all cases the preliminary procedure to any treatment that may subsequently be adopted, should be an endeavor to restore the normal patency of the sebaceous ducts, and thus remove a direct cause of the acne. With this object all comedones must be removed, and pustules and abscesses opened if present. It is of the utmost importance that all comedones should be removed at as early a stage as possible, in that subsequent inflammation and the formation of pustules occur only in such follicles as are connected with them. The removal of all obstruction to the exit of the contents of the sebaceous ducts is urgently indicated, in view of the extensive destruction of the tissue which often results if pustules or deep abscesses are allowed to form, and which is frequently associated with the ultimate formation of disfiguring cicatrices. The local treatment varies, according as to whether comedones, pustules or abscesses form the predominant characteristics of the clinical picture, and in all cases in which it has been definitely established that the acne has not been artificially induced, it is of primary importance that the most appropriate method should be carefully selected, and its details carried out thoroughly and systematically.

Various methods have been recommended for the removal of the comedones, and in some cases the process is facilitated by previously bathing the affected parts with hot water, and subsequently applying ointment. In very slight cases it is sometimes possible to remove them by thoroughly cleansing the skin with warm water and a suitable soap, this treatment effecting the opening of the sebaceous ducts by mechanical means.

Max Joseph states, that he has obtained satisfactory results from the use of a 2½, 5 or 10 per cent. sulphur soap. In his experience it has rendered a pale and excessively cornified skin infiltrated by comedones.

normal in color and texture, and has made old cicatrices less conspicuous, but the ideal treatment is in the use of radium which causes a rapid disappearance of the disfiguring scar tissue.

The removal of the comedones may be accomplished either (1) By pressure between the finger tips or (2) By one or other of the mechanical instruments which have been devised for the purpose.

The method first mentioned, namely, the expression of the comedone by means of pressure applied by means of the tips of the two fingers, possesses the following grave disadvantages: (1) It causes considerable pain to the patient; (2) It is disagreeable, both to the operator and the patient; (3) Unless the comedones are very few in number, it is impracticable, owing to the length of time which it occupies.

Various mechanical appliances have been devised for removing obstruction from the sebaceous ducts. The most commonly employed comedone crushers consist of metal or glass tubes, with a conical extremity and a handle, the smaller extremity having a ring attached to it. The apparatus is placed in such a manner that the comedone comes beneath this ring, and is thus squeezed out under pressure. To be recommended is the use of an instrument furnished with a scraping spoon, which has a perforation in its centre. The advantages of this instrument are that the operation is less painful to the patient, and that the apparatus is more easily kept clean. Von Zumbusch has had satisfactory results from the use of Waldheim's syringe, which is a very well made glass syringe with a tubular attachment. It withdraws the comedone by means of suction. An instrument called a massering ball has also been recommended for the removal of the comedones in chronic cases.

Bier's hyperaemic method has been employed by some observers in diseases of the skin, including severe cases of acne indurata and acne pustulosa, passive hyperaemia being induced by means of an elastic bandage or the application of suitable cupping glasses to the lesions.

In the further treatment of acne, the majority of writers are agreed that sulphur holds the first place, and it forms the essential constituent of a large proportion of the ointments which are employed. It is usually preferable and more convenient to carry out whatever treatment may be employed in the evening, as a soothing ointment may be subsequently applied, and left on the face until the following morning.

Max Joseph applies one or other of the following ointments every evening, and in the morning wipes the ointment off by means of oil, the face being subsequently washed in lukewarm water and soap.

(1) Sulfuris praecipit, 5 parts.

Adipis Suilli rec. par ad, 50 parts.

- (2) Acidi Salicyl, 1 part.
Sulfuris praecipit, 4 parts.
Vaselini flavi ad, 50 parts.
- (3) Acid salicyl, 2 parts.
Sulfuris praecipit, 8 parts.
(or colloidal sulphur) 10 parts.
Zinci oxydati }
Amyli } aa 20 parts.
Vaselini flavi, 50 parts.

The chief object which is aimed at in the application of ointments and lotions is to produce abundant shedding of the epidermis, and thereby facilitate the escape of the contents of the sebaceous glands.

For obstinate cases, Max Joseph recommends the following sulphur pastes, which are brushed on in the evening, and washed off by hot water and soap the following morning:

- (1) Sulfuris praecipit }
Glycerini } aa 5 parts.
Spirit vini rectific }
Acetic glacialis, 1 part.
- (2) Flor sulf }
Talci Venet } aa 10 parts.
Balsam Peruv }
Resorcini } aa 1 part.
Spir sapon kalin, 20 parts.
Spir vini gallici, 100 parts.

It may be advisable to apply a soothing preparation during the day, such as 10 p. c. boracic ointment or lanoline, owing to the redness of the skin which results from the treatment.

In cases in which the acne affects the back, the Vlemingz solution (Liquor Calciisulfurati) may be of service. It is applied every evening, a bath being taken after a few days. The preparation has the disadvantage of a very unpleasant smell, which often makes it necessary to abandon its use.

Resorcin probably takes the next place to sulphur in the treatment of acne. It may be substituted for sulphur in many of the above prescriptions, or combined with it in a strength varying from 2 to 10 per cent. Amongst other remedies which have been found useful are ichthyol, thiol, ammoniated mercury, mercuric chloride, protiodide and binodide of mercury, potassium sulphate, zinc sulphate and chrysarobin. Mercurials should not, however, be employed simultaneously with compounds of sulphur, owing to the fact that mercurous sulphide may be

precipitated upon the skin, and produce an appearance resembling that of comedones.

The whole of the body with the exception of the face should be bathed daily with water as cool as the patient can tolerate, the bath being followed by sponging, and friction with coarse towels or a flesh brush. Hot or Turkish baths are likely to aggravate the condition.

X-Ray Treatment.—Many writers report good results from treatment by means of the x-rays. Hyde states that in many cases he found it to be the most rapidly efficacious local treatment, resulting in the cessation of pus formation and gradual disappearance of the lesions. Good results have been reported also by Pusey and Campbell. Hyde reports exposures twice a week for three or four weeks, each seance lasting for from three to five minutes. A tube of medium quality is placed about eight inches from the surface and excited by a mild current. He, however, expressed the opinion that the method should be reserved for cases which are resistant to all other forms of treatment, and that prolonged or energetic treatment should be avoided, owing to the risk of producing subsequent atrophy of the skin.

Opsonic Method.—This has been tried in acne, but so far has not given satisfactory results, and recurrence is common after it.

Acne Keloid.—Acne of the face and back of severe type and long continuance frequently leaves small and numerous scar tissues and disfiguring keloid growths, especially where the glands have been deeply involved. But this condition must not be confounded with the true acne keloid of Kaposi (*Dermatitis Papillaris Capillitii*) or the acne keloidienne. These are acneiform lesions of the back of the neck.

In a case which I had under treatment for some time, the result was not at all satisfactory until radium was freely used. It was the case of a young man who had had an eruption of folliculitis on the nape of the neck, followed by the formation of keloid tissue, and from time to time a further increase in follicular and keloidal tissue occurred until a great portion of the back of the neck was occupied. There was considerable pain and itching. He was unable to wear a collar. The application of a plaque of radium caused a rapid reduction of the follicular and keloidal lesions.

Surgical procedures are most disappointing in the treatment of acne keloid, and the cure of this peculiarly refractory condition by so simple a method as the application of radium deserves special attention.

Acne Rosacea.—Acne Rosacea is more or less of a combination of acne and rosacea. There is a congested disturbance of the face resulting in a varying amount of permanent redness and dilatation of the blood vessels with hypertrophy of the connective tissue elements. The acne

is a secondary condition resulting from the inflammation of the sebaceous follicles.

The internal treatment will depend upon the indications existing in any given case. The local treatment, however, is of greatest importance. Any of the remedies mentioned for acne vulgaris may be employed. Applications of iodine dissolved in glycerine are still advocated by the Vienna School and painting of the surface with collodion or collodion preparations have been recommended to compress the blood vessels, but they are of little value. Scarifications have been employed, but the scarring produced by these is often objectionable. We have, however, in radium a curative agent of great value.

A gentleman about fifty years of age with an obstinate acne rosacea, some hypertrophy of the nose and much congested redness, consulted me some months ago. An apparatus of radium of one-half million activity was used both with and without the filtering with exposures of one-half hour every few days. A mild reaction took place, but the inflammatory condition soon diminished. At the end of two months there was contraction of the tissues, a disappearance of the blood vessels, and a paling of the skin to normal appearance.

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SOME OF THE AETIOLOGICAL FACTORS IN INSANITY, ALSO A FEW REMARKS ON EXPERT EVIDENCE.*

By C. K. CLARKE, M.D., Toronto.

THE gentleman who asked me to give an address on the aetiology and classification of mental diseases, was evidently something of a humorist, and must have laughed gaily in his sleeve when I consented, but I am not going to dodge the issue, even if the task is an impossible one. There is some comfort assured me, as no matter what position I assume, there is sure to be plenty of authority for it, because there is scarcely any subject in the heavens above or in the earth beneath, or in the waters under the earth, that has been torn to tatters so earnestly by enthusiasts who think they have been able to square the circle—their success being generally in inverse ratio to their experience.

I cannot conceive why you asked me to address you on this, although I had a long ago learned that on the question of insanity, knowledge is universal, and the man on the street who cannot give just as good opinions as the psychiatrist, is either above or below the average. Read the newspaper editorials when an insane man escapes the gallows, listen to sermons on the subject, or stand in the witness box while a well cram-

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med lawyer rasps your feelings with an aetiology so fantastic that you wonder where he got it, and you will realize the humility I feel when daring to say even a few words about a subject that to my mind is difficult beyond measure. The trouble is that people so often regard the manifestations of disease as the disease itself, and without attempting to deal with a problem as you would in general medicine, fly off at tangents that land them in the region of psychological speculation of the crudest kind, rather than in the realms of common sense and every day experience. Of this I shall have more to say later on. Physicians constantly say to me, if so-and-so would only get rid of his absurd ideas, he would be all right—of course he would, and in all sincerity the good doctor proceeds to apply the argument with the same chance of success that Canute had when he tried to repel the rising ocean.

Frankly I admit that there is much we have not yet learned in regard to the aetiology of mental disease, but gradually we are emerging from the fog which has surrounded the most difficult branch of general medicine.

The principal requisite in the knowledge of mental disease is an accurate definition of the separate disease processes. One must have a knowledge of the physical changes in the cerebral cortex as well as the mental symptoms associated with them. Until this is known, he cannot hope to understand the relationship between mental symptoms of disease, and the morbid processes underlying them—or indeed the causes of the entire disease process. There are still other difficulties to be encountered in obtaining that fundamental knowledge necessary for a scientific classification of mental diseases.

Sometimes it is sufficient to establish a fundamental distinction between a normal and a morbid mental state, and it is equally difficult to distinguish at times between the transition states existing between different forms of recognized types of mental disease. Kraepelin says, "the symptoms of the disease are apt to be greatly influenced and exaggerated by the morbid hereditary basis, which underlies so many forms of mental disease." "Then again, the functions of different parts of the brain differ, hence the character, intensity, and location of the morbid processes influence greatly the gradations in the form of mental disease."

I may as well frankly admit that up to the present, we are unable to classify all mental diseases on a foundation based on pathological anatomy, and in many forms there are no distinct characteristic lesions. Then again, we are always faced by the difficulty of correlating mental and physical processes.

The classification bee has been in the bonnet of most psychiatrists, and it is necessary to have some sort of a working system, even if we cannot establish an unassailable classification either on a pathological or

aetiological basis. Of course, if we were dealing with definite things, such as the toxæmias it would be plain sailing—unfortunately the problem is much more difficult, as many cases of insanity are without distinctive aetiological factors.

Now as I have already hinted—of classifications, there has been no end, and nearly every psychiatrist has felt that in order to become famous, he must produce either a new classification or a new definition of insanity. I do not know which attempt has generally been the more futile, as both are bound to be relegated to the scrap heap in short order. I have never forgotten what the late Dr. Joseph Workman said on this subject in court. He was asked by an eminent counsel to give a definition of insanity, and in reply said, "No, you do it." "What?" thundered the counsel, "do you wish to insult me?" "No," quietly replied the doctor, but I might say that you have asked me a question too difficult to answer, and I should like to know what you mean by the term "insanity." "Well," replied the legal gentleman, "if you will not answer my very simple query, I must proceed to find out from you what are the evidences of this disease you will not define, give me one of them." The old doctor, with a merry twinkle in his eye, said, "Asking silly questions."

Now I have always attempted to dodge the issue, just as Dr. Workman did, and felt that when Kraepelin came out with his sane propositions, the psychiatric world was enlightened, and the breadth of view greatly enlarged. I shall give a hurried outline of his views, and quote freely from Dieffendorf's translation of Kraepelin. "The most popular method of classifying mental diseases, has been the so-called clinical classification. The grave defect here arises from the fact that there is apt to be an over-valuation of some symptoms resulting in the accumulation in one group of all classes having in common one striking symptom. In this way, all sad and anxious emotional states came to be regarded as melancholia—all excited cases as mania, and delusional states accompanied by hallucinations as paranoia. The difficulty become apparent when a single case thus classified, during its course shows the characteristics of several groups. It is essential, as we pointed out by Kahlbaum, to distinguish between transitory mental states and the disease form itself. The scientific conception of the disease remands knowledge not only of a present state, but also the entire course of the disease." Thus we have learned to group certain cases of excitement or mania and others of melancholia, under the one heading of mania—depressive insanity, where they properly belong, as can be shown by a study of the whole course of disease. Formerly they came under different headings, such as mania, melancholia, etc.

Judging from our experience in internal medicine, it is a fair assumption that similar disease processes will produce identical symptom

pictures—identical pathological anatomy—symptomatology and aetiology, we would at once have a uniform and standard classification of mental diseases. A similar comprehensive knowledge of either of the other two fields would give not only just as uniform and standard classifications, but all of these classifications would exactly coincide. Cases of mental disease originating in the same causes must also present the same symptoms, and the same pathological findings. In accordance with this principle it follows that a clinical grouping of psychoses must be founded equally upon all three of these factors, to which should be added the experience derived from the observation of the course, outcome and treatment of the disease.

Proceeding along these lines, Kraepelin has evolved a working scheme, which he frankly admits is merely tentative, and will necessarily undergo many changes as our knowledge increases, but it is only a fair tribute to the genius of the man to say that already, as the result of his work, we are able to see things that were hopeless fog in the past.

Proceeding along these lines, mental diseases naturally fall into certain groups:—

First, we have the psychoses arising in connection with infectious diseases, those that follow on severe exhaustion, and finally those produced by intoxicating agencies.

Next are the psychoses presumed to bear some relation to the products of faulty metabolism and auto-intoxication. Kraepelin puts thyrogenous insanity alone under this heading, but hints that dementia praecox, and G.P.I. will eventually be found in this group. One can see the connection very easily in the G.P.I. instance. It is not so clear when D.P. is considered, although the astounding changes which occur when metabolism is suddenly disturbed in catatonia, make it evident that there is a great field of investigation. It is a case where a Scotch verdict alone is possible.

The next group comprises the organic dementias—syphilitic lesions, head injuries, cerebral embolism, etc.

Next follow the involutinal insanities, such as involutinal melancholia-senile dementia and the presenile states.

The next group comprises manic-depressive insanity in which a morbid constitutional basis occupies a prominent position.

The epileptic group is not a satisfactory one, as doubtless it does not represent a clinical unity. I am more and more convinced of this, and there is much confusion regarding the subject.

Finally the restricted mental development cases are classified. Of these Kraepelin says, "We are not yet in a position to distinguish accurately between restricted development and diseases of the brain, and furthermore the mark of congenial weakness predominates to such a

marked degree in the clinical pictures, that any distinction between both of these groups which are so intimately related from an aetiological stand point hardly commends itself. Indeed we might go even a step further and consider these forms of defective development as a state of mental weakness, which were produced by profound mental disease in the earliest stage of development." He frankly admits that it is impossible at present to create a system of psychiatry that will include all cases, and adds that while this may prove somewhat disquieting to the student—to the investigator it means a frank acknowledgment of real conditions, and an honest effort to establish accurate and fundamental knowledge from our clinical experience.

So much for classification, now to come to some of the factors at work in the causation of insanity.

Possibly it would be well to say something, not too much, on the part which heredity occupies in the evolution of insanity. Unfortunately we have played so loosely with the term "heredity" in the past, that we have in a sense overestimated its relation in some respects, and underestimated it in others. Our statistics are worse than valueless, because they do not tell the truth, and have not been based on scientific observation, which demands the truth, the whole truth and nothing but the truth.

Those of us who have passed most of our lives among the insane have no false conceptions regarding the role of heredity in giving a soil, where suitable environment and other conditions will produce some of the well defined mental diseases, but we are by no means certain in regard to the manner in which they are brought about. My knowledge of family histories in Ontario is far too large for my peace of mind, and I cannot shut my eyes to the fact that certain strains, will produce defective and insane, just as regularly as other strains will reproduce the strong minded and capable. The point I wish to bring out though, is, that not for some years shall we be in a position to speak intelligently of the part heredity plays in the actual production of mental disease. We clearly understand its importance in providing constitutional states, and I do not suppose anyone will contend that this is not the case. Under our new clinical methods of investigation we shall gradually accumulate a mass of facts, which when correlated will throw a flood of light on this very difficult question, and shall generalize far less than at present. When we begin to generalize on the subject of insanity and heredity, we are at once in troubled waters, in fact I long ago learned that it is not safe to do so. If we could bring forward the standard man it would be plain sailing—unfortunately it is always the individual who has to be considered, especially in cases where there is no well defined pathological basis. In other words, the psychological side is so important that we must arrive at conclusions by a careful and painstaking method of

individual study. To illustrate, if we take two persons of different strains and let them be brought up under exactly the same environment, subject to the same influences and training, yet when they arrive at maturity they may have little in common, each, in all probability, will display variations resulting in distinct differences of character. No one believes more strongly in the morbid constitutional basis of many mental diseases, particularly dementia praecox, than myself. The point I wish to make clear is that we should endeavor to study the subject of heredity in a scientific manner, rather than to generalize loosely.

We hear much of auto-toxis and infectious deliria, but nothing very satisfactory has ever been done to clear the atmosphere of the haze surrounding the exact conditions existing here. The mental symptoms arising from toxins of the different infectious diseases cannot as yet be sufficiently differentiated to permit of their being considered as characteristic of the different diseases. The only distinguishing features are the physical symptoms. It is still a question whether the changes in the cortical neurones are due directly to the toxins produced by the micro-organisms, or to an auto-toxin developing within the body as a result of an infectious disease. If we are in doubt regarding the exact nature of auto-toxines, there is no question regarding that of such toxic substances, as alcohol, morphia, and cocaine. Here we deal with actual pathological conditions, which are now being clearly understood. There are profound changes in the cortical neurones, destruction of many cells, particularly those known as the Betz cells, in the fading and irregular amalgamation of the Nissl granules, the diminution in size, and irregularity of the nucleus, whose membrane and nucleolus may finally disappear.

Those of you who attended our weekly conferences no doubt were interested in the striking mental conditions following these pathological changes occurring in cases of Korsakoff's disease.

Now when we come to study the causation of that immense group placed under the heading of Dementia Praecox, we cannot shut our eyes to the fact that defective heredity is the predisposing factor in the vast majority of cases. These unfortunates nearly always show mental and physical stigmata from the earliest years, asymmetries and malformations of the skull, ear, palate, supernumerary toes and nipples, general physical weakness, convulsions of childhood, unnatural development, and early mental peculiarities, in other words, weakmindedness. Child birth is a common factor in the development of catatonia.

The nature of the disease process in dementia praecox is not yet known, but it is tolerable certain in cases in which dementia has been reached quickly, there is a definite disease process in the brain involving the cortical neurones. In some cases this is a temporary lesion, but in most the impairment of function is permanent and progressive.

The part heredity plays is no doubt to create a lessened power of resistance to the essential cause of the disease, whatever that may be. Of the causation of G.P.I. we cannot yet speak with absolute certainty, although we may now safely classify it as a metasyphilitic disease. The Wassermann test has enabled us to speak with the greatest positiveness regarding this. Plaut's recent investigations have placed the matter practically beyond the range of controversy, and his statement that a positive Wassermann reaction with the cerebro-spinal fluid almost invariably means a metasyphilitic disease is no doubt true. What makes this method so valuable in diagnosis, is that it is the exception to find a positive reacting fluid in cerebral or spinal syphilis, and yet in 62 consecutive cases of G.P.I. a positive reaction was obtained in all. Our own experiences, now extensive, with the Wassermann, Noguchi and Ammonium sulphate tests, as well as cell counts, have firmly convinced us of the certainty of the position regarding the role metasyphilis plays in preparing the soil for the development of G.P.I.

Arterio sclerotic insanity is not a common disease, but is well marked when found, and yet arterio sclerosis is credited with being the cause of many mental diseases with which it has little or nothing to do, particularly in some of the varieties of senile dementia.

The aetiology of the involution psychoses is a somewhat extensive subject. Briefly these disease are essentially those of the early senile period, as the majority occur between the ages of fifty and sixty.

Sixty per cent. are women, and apparently bear some relation to the menopause, although the importance of this is generally exaggerated.

Defective heredity is present in many of the cases. However, in these in particular, external influences, such as mental shock, illness and loss of friends, acute and chronic diseases, and surgical operations seem to play an important role as the exciting cause.

In senile dementia, defective heredity is common, but frequently the disease develops immediately after an injury, emotional shock, acute febrile diseases, especially influenza and bronchitis.

Of the aetiology of manic depressive insanity, in many respects the most interesting of all the varieties, as it is practically always curable, the heredity predisposition is marked in eighty per cent. The disease almost always appears independently of external causes. The nature of manic depressive insanity is still obscure. Several hypotheses have been formulated, but none is adequate. There are no known anatomical pathological lesions characteristic of this disease.

Traumatism is frequently put down as a cause of insanity, and of course plays its part in some cases, but these are so rare that some time

ago when I came to look over our records to determine the number, it was so small as to constitute a percentage not worthy of consideration. There is a common belief in the profession that traumatism plays an important role in the causation; this belief is generally brought about by the statements of friends, who always look about for any cause rather than the true one, and endeavor to establish a connection between cause and effect, that the scientific eye cannot ordinarily see. Of the immense number wounded in the head during the Franco-Prussian war, only some sixty odd persons became insane as a result of these injuries. I mention these things merely to call attention to the fact that traumatism is not a common factor in the production of mental diseases, although in the forms of history furnished us, it is so frequently mentioned. The common story is that at a certain period the patient had a fall during which his head was injured, and since that time he has never been quite the same.

Another subject of which a few words may be said with profit is, that of the connection real or supposed between gynaecological and mental diseases. I have never been able to fathom the processes of reasoning adopted by the enthusiasts who have made such sweeping claims to results in these cases, but I have seen the *results* only too frequently, and what is worse, the tragedies following senseless operations undertaken without scientific reason or justification. To put it more strongly still, I would say that these operations have, in many cases I have seen, been heartlessly cruel and not far removed from the region of charlatanry, being done on general principles only. Within a very short period even, I have seen many untoward results of unnecessary gynaecological operations, in the shape of catatonic excitement and depression. As a cure for mental disease we need not waste time in discussing this matter, what may fairly be said is this. Where gynaecological interference is necessary in the insane person to produce better physical health, then such interference is justifiable in the same way that it is with the sane. Let me sound a note of warning though—when trivial displacements or cervical lacerations of unimportant character exist in mild cases of dementia praecox, the wise surgeon will not interfere, but will be content to leave well enough alone. I am aware that very positive assertions may be made denying the soundness of the position I am taking, but gentlemen, I have had to care for so many of the so called recoveries, and have seen so many unfortunate precocious dements who have been operated on so frequently that they had nothing left in the way of generative organs, that it has been a matter of marvel as to whether the surgeons were simply operating for experience, or from some obsession that would require the most delicate psycho-analysis to understand.

I have taken up much of your time in a discussion of some general questions of interest, but before sitting down would like to say a few words on another topic that is of peculiar importance to alienists at the present moment.

A thoughtful address by Justice Riddell read at a recent meeting of the Academy of Medicine must have appealed to those who heard it as being on the whole a fair and strongly worded presentation of the subject as viewed from the standpoint of law, and what he said in regard to evidence in insanity cases was so caustic, that there could be little mistake as to its meaning; yet there are two sides to the question, and a further word may be added. I quite agree with him in regard to the unseemliness of these trials as at present conducted, but would suggest that the fault rests not with the doctors altogether, but with the law and the law makers.

The sin of partisanship, for which the doctors of medicine are properly scored—when they are guilty of it—is surely not the asset of physicians alone, and those of you who have been in the witness box must have realized that the ethical code lived up to by many legal gentlemen would make most physicians hang their heads in shame, if they followed it. Now I have taken part in a large number of criminal trials of late years, always as an untrammelled witness, being sent out by the Attorney-General's Department, instructed to have no side, but to appear for the defence if the circumstances warranted it. Very rarely indeed have alienists of experience been arrayed against each other, and when this has occurred there has been legitimate ground for a difference of opinion. The chief offenders have been those physicians, who, while honest enough in their convictions, have gone on the stand and aired prejudices and theories that were painful and startling to those whose experience really counted for something. Some of the most unpleasant recollections I have are in connection with murder trials, where men suffering from clearly defined and easily detected forms of mental disease have been pronounced sane by well meaning but badly informed physicians, whose knowledge consisted of vague and bitter theories, founded on ignorance and a mediaeval type of metaphysical speculation. I suppose the prejudice against the so-called insanity plea is to a certain extent a natural one, and we have been unconsciously influenced by proximity to the ardent republicanism of our southern neighbors.

The insanity defence dodge has been bitterly scored by the press, the pulpit and the people, but where has it been successfully attempted in Canada? True, I have read some startling things in the newspapers regarding the way in which Asylum Superintendents have stepped in between prisoners and justice, in other words have defeated the so called ends of justice; the insinuation being offered that there was a special

inducement. And yet we are all "honourable citizens" in every day life, with responsibilities that might make even a newspaper editor shudder. It is only when we go into the witness box in defence of some unfortunate, suffering from brain disease, that our criminality or veniality, call it what you will, rises to the surface.

My first experience was gained in the well remembered murder trial in Wellington county, where public opinion was worked up to a fearful pitch. Those of us who took part in the defence, Dr. Workman, Dr. Daniel Clark, Dr. R. M. Bucke, Dr. Lett and myself did so at our own expense; there were no fees, no railway fares paid to us. On the streets we were openly insulted; the atrocity of the crime had made nearly everyone blind to the pitiful truth. The trial was fought to a finish in an unusual spirit of bitterness and vindictiveness. The verdict of guilty was applauded from press and pulpit and the people generally wore a satisfied smile when they thought of the righteousness of that verdict. The press referred to us as hirelings, and some of the sermons reported would have done credit to the days of witch burning. And what were the facts? Now we all know them, and when the man who conducted the prosecution frankly says that the great error of his brilliant career was made when he secured that unrighteous verdict; surely it must make thoughtful people realize the strict truth is that the insanity dodge is practically a myth, and the hideous fact is, that many an insane man has been hanged in Canada through the errors of the Court and the prejudices of those physicians who had no real knowledge of mental disease. As I attended murder trial after murder trial in Ontario, Quebec and the United States, I became more and more horror stricken at the callousness of public opinion and the ignorance of insanity shown by the law. I fought windmills with the gallantry of a Don Quixote, and finally when the press and public went to such lengths in the Shortis and Lapointe cases, resolved never to appear again in a criminal trial unless unhindered by any restrictions imposed either by prosecution or defence. This plan has worked admirably, and I submit that since it was adopted, unseemly fights have been few. In civil cases where there is reasonable ground for a difference of opinion as to capacity, as there undoubtedly was in the recent Frazer trial, the doctors were not to blame for the system that arrayed them on different sides; they had a perfect right to their opinions, and just as great a right to express them.

Now what I would suggest is, that our system of determining the sanity or insanity of criminals is wrong in toto. Where mental disease is suspected, a prisoner should be placed under study in a Clinic, as in Germany, and after an extended observation covering several weeks, a report should be made by a competent board of trained psychiatrists, whose opinions might compare favorably with those of twelve men

whose conception of the nature of insanity is as crude as it would be of the functions of the solar plexus.

The medical profession is just as much to be trusted as law, which, without realizing it, is wedded to conceptions of mental disease not consistent with an age of progress and scientific accuracy. When law students are compelled to attend courses of lectures in Psychiatric Clinics, and Hospitals for the Insane, and come in contact with actual, rather than theoretical cases of insanity, they will develop broader ideas on the subject, and realize how utterly absurd the right and wrong test is. At some future time I may have something to say on the practical working out of the Macnaughten test in connection with the criminal insane.

ACUTELY INFLAMED JOINTS.

Dr. J. B. Murphy, of Chicago, says that all acutely inflamed joints are septic, and the term "Rheumatism" would have to go. The important question was the degree of injury done to the synovia. It was capable of resisting any degree of infection if uninjured. The treatment of acute joints lay in aspiration, and in extension and in the injection of a fluid calculated to increase the polymorphonuclear reaction about the joint. This purpose was well served by a 2 per cent. solution of 24 hour old formalin in glycerine. The constitutional treatment should be of prime necessity.

SURGICAL TREATMENT OF COMPRESSION PARAPLEGIA.

Dr. A. Primrose, of Toronto, stated that hemorrhage, the cause of compression in the dural canal, might be either extra or intradural. The symptoms came on much more suddenly than those due to congestion. Certain cases of Pott's disease that remained paraplegic after months of rest and extension should be laminectomized, as there were sometimes small localized abscesses which would respond to no treatment except evacuation. Where the pressure was so great as to cause danger of degeneration before relief could be expected from medication, as in cases of specific spines, immediate operation might be indicated. There was no possibility of restoration of the function of the severed cord, but there was some possibility of gaining some control over the bladder and rectum by splicing the lower dorsal to the sacral nerves.

CURRENT MEDICAL LITERATURE.

MEDICINE.

Under the charge of A. J. MACKENZIE, B.A., M.B., Toronto.

THE PANCREATIC REACTION.

In the *B. M. J.*, July 2nd, there is a discussion on the Pancreatic or Cammidge's reaction and its value as a diagnostic sign by Russell, of Edinburgh, and in the same number there is a long article by Cammidge himself which is interesting in its explanation of some of the objections raised by the first writer.

As a matter of fact the ground taken by the two authorities is slightly different, Russell discussing the reaction as a diagnostic sign of a disease of the pancreas and Cammidge claiming for it significance of some alteration of a pathological nature in the gland while the patient may be complaining of something else. Russell presents the evidence of 78 abdominal cases in which the test was tried; in four there was a marked positive reaction, both in amount and promptness of appearance of the crystals, one was a case of necrotic pancreatitis, the second suffered from a sloughing growth on the posterior wall of the stomach and showed no post-mortem changes in the pancreas, the third was a case of hyperchlorhydria easily relieved, the fourth was not diagnosed. In the second class were 3 cases of cirrhotic liver which gave a positive reaction, and from two of them the ascitic fluid gave a positive reaction; 2 cases of catarrhal jaundice gave a positive reaction, and 7 cases of gallstone colic gave 6 positive, and 3 negative reactions (in one the negative followed the positive). In three other tables are 55 cases with 29 positive and 20 negative, belonging to various categories of gastro-intestinal disturbances severe enough to need hospital care, but in none did the test throw any light on the cause of the trouble.

In Table G. are 5 check cases with no abnormal symptoms, one a case of arterio-sclerosis with normal pancreas post-mortem, gave 3 positive and 1 negative reaction. Seven observations on 3 of the staff gave 6 positive and 1 negative, all being apparently in excellent health at the time.

"From these results it is seen that a positive reaction may be obtained from the urine of persons in good health; that it may be obtained from the urine of persons suffering from a great variety of abdominal disorder or disease; that it may be present in other diseased conditions; that it may be present when the pancreas is not the site of any anatomical change. All this to the physician and to the pathologist definitely excludes the pancreatitis as the cause of the Cammidge reaction."

Cambridge devotes his paper to a rather labored explanation of the difficulties that are apparent on the face of the question. He calls attention to the fact that the dry pancreas contains nearly 5 times as much pentose as any other organ and suggests that the reaction is due to the destruction of substances with a glyco-nuclea-proteid content which yield a pentose in hydrolysis with acids. He says that only in the presence of some active inflammation of the pancreatic substance, either original or engrafted on some other condition, *e.g.*, cancer, do we get the reaction, and this may explain the disappearance of the reaction as in cases of diabetes. The frequency with which we find the reaction in cases of biliary trouble is explainable by the passage of infection from the ampulla of Vater. He urges that the reaction be considered merely as an aid to diagnosis and to check the findings of other clinical methods, especially the examination of the fæces for occult blood and pancreatic insufficiency.

PUBLIC HEALTH NEWS.

That there are 4,200,000 persons sick in this country at the present time; that 1,500,000 will die within the year; that 5,000,000 homes, or 25,000,000 people, a quarter of the country's population, are more or less wretched because of sickness or death; that one out of every twelve people living to-day will die from tuberculosis—these are some of the statements made by Prof. J. Pease Norton, of Yale, in the first issue of the *Popular Insurance Magazine*.

He cites these cold and bare facts, not to alarm, but to stir the public to action that will compel the federal government to protect human life against disease. He points out that the Department of Agriculture spends \$7,000,000 a year on plant health and animal health; that it saves hogs from cholera and elm trees from beetles, but does not protect human lives from disease.

Every domestic animal of the farm has a better chance to live because of the great work the Department of Agriculture has done in the past ten years at a cost of \$50,000,000, but, Dr. Norton points out, 6,000,000 of the people now living in this country will be carried off by diseases of the heart or kidneys; 8,000,000 will perish from pneumonia, and within a decade 6,000,000 babies will die before they reach the age of two years. Dr. Norton adds:

"And yet this number could probably be decreased by as much as one-half. But nothing is done.

Of all the grievous wastes of nations, death, war, disease, accidents, vice, crime, fire and bad government, by all odds the heaviest burden to the individual and to society as a whole is caused by the life wastes.

The life wastes are the measures of the suffering caused by preventable death, preventable disease and preventable accidents. In comparison with the life wastes all other wastes of nations pale into insignificance."—*Pacific Medical Journal*, Dec., 1910.

EXOPHTHALMIC GOITRE.

I believe that the status lymphaticus really underlies many cases of exophthalmic goitre. It is this condition of lymphatism which contributes so largely to the immediate risk to life from operation in exophthalmic goitre. I do not know of any case where this quickly fatal result has occurred and enlarged thymus has not been found.—HECTOR MACKENZIE in the *British Medical Journal*.

MITRAL AND AORTIC ENDOCARDITIS DURING SCARLATINA.

Nobécourt (*Journ. des prat.*, May 7th, 1910) relates the case of a little girl of 6, admitted to hospital on December 15th last suffering from scarlatina of several days' duration. Soon after her admission a double otitis manifested itself, and about a month later aortic insufficiency. Pericardial friction was also noticed very clearly for some days, but rapidly disappeared. On January 22nd the child was attacked by varicella. On examination at this time there was to be noted a systolic murmur at the apex, propagated towards the axilla, and at the base of the heart a diastolic murmur propagated along the right border of the sternum. Such lesions are not frequent accompaniments of scarlatina. The heart is often enough affected in the graver forms of scarlatina, but more especially in respect of the myocardium rather than the endocardium. Lesions of the latter or of the pericardium are much more rare. It is not sufficient to prove the presence of endocarditis in a child attacked by scarlet fever—the lesion must be due to the disease. An endocarditis already clearly marked in the early days of the illness is nearly always attributable to a prior infection. In the present case the heart was perfectly free for quite a month after the commencement of the illness, and the evolution of the lesions of the cardiac valves have thus been followed step by step. The more frequent pathological cause of the endocarditis is the streptococcus, and the rapid evolution of the lesions is one of their most interesting features—a marked contrast to the slower development of similar lesions in rheumatism. The pathological anatomy makes these differences clear. In rheumatism the endocarditis is plastic, while that occurring in the

course of scarlatina is ulcerative, and soon causes definite loss of substance. The pericarditis present is of serious moment, for in the case of scarlatina it nearly always becomes purulent. The prognosis is grave, for the double cardiac lesion in this case will never clear up.—*British Medical Journal*, 13th August.

CHRONIC NEPHRITIDES.

Heinrich Stern states that kidneys, acutely affected at one time, are thereafter possessed of a lowered degree of resistance in many, and of a diminished functional activity in some of the instances. It is very difficult, so far as positive demonstration is concerned, to establish an ætiological relationship between an existing chronic nephritis and a systemic infection that had been of a more or less transitory nature. Clinical evidence, however, prompts us to regard acute systemic infection as one of the causes of chronic renal disease. The typical renal involvement concomitant with or following an acute infectious disease is of a parenchymatous nature. About half of the chronic nephritides evolving from nephritic processes that have originated during or after an acute infectious disease, are predominatingly parenchymatous; in about twenty per cent. of the cases indurative processes follow in the wake of acute parenchymatous inflammation, or supervene in the presence of subchronic or chronic parenchymatous states; and in about thirty per cent. of the cases amyloid lesions concur with the original parenchymatous affection. The direct transformation of an acute nephritis into a chronic form has been observed in comparatively few instances only; however, the successive transition from an acute nephritic process through subacute and subchronic stages to the chronic condition can be traced clinically with more or less accuracy in a considerable number of cases.—*New York Medical Journal*, August 20.

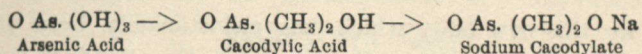
SURGERY.

Under the charge of H. A. BEATTY, M.B., M.R.C.S., Eng., and A. H. PERFECT, M.D., C.M.,
Surgeons to the Toronto Western Hospital.

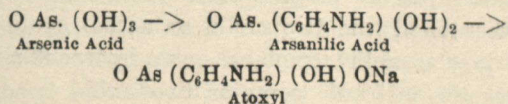
“ARSENO-BENZOL”—“606”—“ARSEN-PHENOL-AMIN.”

The intense interest shown in the new remedy, “arseno-benzol,” for the treatment of syphilis—Ehrlich and Hata’s “606”—as well as a revival of interest in the use of sodium cacodylate as shown by A. Heym, and more recently by J. B. Murphy, makes opportune a dis-

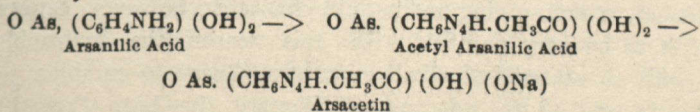
cussion of the chemical structure of "606," sodium cacodylate and of atoxyl and its acetyl derivative, arsacetin. Sodium cacodylate is the sodium salt of cacodylic or dimethyl-arsenic acid, which differs from arsenic acid by replacement of two hydroxyl groups by two methyl groups. Thus:



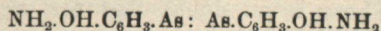
Sodium cacodylate, as described in New and Non-official Remedies, is a relatively permanent salt of arsenic acid quite soluble in water and faintly alkaline towards litmus but neutral toward phenolphthalein. Atoxyl is sodium arsanilate, the sodium salt of arsanilic acid. Arsanilic acid differs from arsenic acid in that one hydroxyl of the arsenic is replaced by an amino-benzene or amino-phenol or anilin group. Thus:



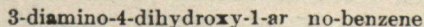
Atoxyl also is a relatively stable salt of arsenic acid quite soluble in water and practically neutral in reaction. Arsacetin or sodium acetyl arsanilate is the sodium salt of acetyl arsanilic acid, which latter differs from arsanilic acid in that one hydrogen atom of the amino group is replaced by an acetic acid residue. Thus:



The Ehrlich-Hata preparation—"606"—is but distantly related chemically to sodium cacodylate, atoxyl and arsacetin. It has recently been patented by a German firm, Meister Lucius & Brüning, which will control its manufacture and sale. Its structural formula is:



According to the patent specifications, it is obtained from nitrophenol-arsinic acid, which, on reduction, is changed to amino-phenol-arsinic acid, which, by still further reduction, yields "606," a derivative of Arseno-benzene ($\text{C}_6\text{H}_5.\text{As: As.C}_6\text{H}_5$). The formula above shows that "606" contains two atoms of tri-valent arsenic united, on the one hand with each other, and on the other hand having replaced a hydrogen atom in a benzene molecule. Each benzene molecule also contains one hydroxyl or phenol group and one amino or anilin group. The chemical constitution may be indicated by the name di-amino-hydroxy-arseno-benzene and the relative position of the several groups shown thus:



This name has been abbreviated to arseno-benzol or arseno-benzene, which, in a way, is unfortunate, in that it is the name which properly belongs to another body. As it is desirable that the shortest name truly indicative of its composition should be used in the literature, the term "arsen-phenol-amin" is recommended as an abbreviated scientific synonym for this new body which has unfortunately been introduced into medicine under the term "606." Since this product is patented, however, it may be given a catchy rather than a scientific name.

To understand the chemical properties of this body, it should be noticed that the arsenic is in the unstable tri-valent form and not in the stable penta-valent form, as in sodium cacodylate, atoxyl or arsacetin. Furthermore, it should be said that the two phenol or hydroxyl groups give the substance a weak acid character, enabling it to form weak salts with strong alkalies just as phenol forms them with sodium hydroxid, etc. On the other hand, the two anilin or amino groups give it basic properties, and just as anilin combines with hydrochloric acid to form a chlorid. Since the molecule contains two anilin groups it combines with two molecules of hydrochloric acid. These anilin groups, however, impart but weak basic properties to the molecule, and hence the chlorid, when dissolved in water, is decomposed with liberation of hydrochloric acid, so that the solution is strongly acid. "Arsen-phenol-amin" (or "606"), is very unstable and is put on the market in the form of its hydrochlorid, which, owing to its acid character, however, causes injections of it to be very painful. For this reason the hydrochlorid is treated with an amount of alkali exactly sufficient to combine with the hydrochloric acid of the salt and to liberate the base "arsen-phenol-amin" which is soluble and which is injected in the form of a suspension in water.

It is impossible at this time to determine the actual value of the drug, but certain deductions can be made from the large number of cases already reported. There is no doubt that this new remedy produces remarkable results in a surprisingly short time. In some desperate cases of syphilis a cure, temporary at least, followed a single injection; in many of these mercury and other antisyphilitics had totally failed. The question as to the permanency of the cure is not answered, and only time can answer it. But if such splendid results may be obtained by one injection, it would seem probable that the remedy would bring about a permanent cure when its action is more clearly understood, and the treatment followed out for a longer or shorter time.

Finally, physicians should remember that this new discovery is, after all, an arsenic preparation. In the past all new arsenic preparations, though at first recommended as wonderfully active and marvelously free from the toxic effects of arsenic, have in the end been found

to possess, in varying degrees, the potency for harm common to this element. It will be fortunate if this new discovery is not found to have similar drawbacks.—*J. A. M. A.*, 1 Oct.

EHRlich'S "606."

H. L. Elsner, Syracuse, N.Y. (*Journal A. M. A.*, December 10), gives an account of his experience with "606" as seen in the Wechselmann and Kraus-Citron clinics in Berlin, together with his own experience in this country, and also an account of his visit to Ehrlich last August. The latter insists on the advisability of necessity of first watching the methods of those who have largely used the remedy and are experienced in its management, before attempting to utilize it oneself. Ehrlich at present advises the intravenous method of injection and it is absolutely necessary that the preparation be neutral before injection. The method advised is that of Schreiber. Into a graduate holding 250 c.c. drop 10-20 c.c. of sterilized water. Add the required dose of "606" and mix thoroughly until there is a clear solution; add sterile or, better, normal salt solution to the 100 c.c. mark; then add *pro* 0.1 of "606," 0.7 of normal sodium hydroxid solution and mix thoroughly until the precipitate is thoroughly redissolved. If, after thorough mixture, the solution is not clear, add a few drops of the sodium hydroxid solution to produce this, and then add sufficient normal salt solution to make 200-250 c.c. The fluids to be used are all to be warm. Everything used, fluids, syringes, etc., must be sterile, and the preferable point for intramuscular injection, Elsner says, is the interscapular region. The conclusions of his paper are summed up under nineteen heads, substantially as follows: The treponema is positively destroyed and the living contagion of syphilis removed by "606." It promptly and favorably affects visible and palpable syphilitic lesions, staying the destructive and onward march of ulcerations and causing rapid healing. It also removes deep-seated gummata. It is more rapid in its effects on specific disease and is likely to prove more valuable in the treatment of internal syphilitic disorders than any other known remedy. It cannot replace cicatricial tissue. Neither does it affect favorably chronic syphilitic nervous diseases, paresis, etc., in which there is a break in the continuity of the nerve-structure, though in some cases it seems to favorably influence the continuous crises of tabes. In all cases it causes leukocytosis and the formation of antibodies. It modifies, and, in most cases, ultimately negatives the Wassermann reaction. It unquestionably floods the circulation with endotoxins resulting from the death of millions of spirochetes, and in all probability an antitoxin is developed in the blood. These facts must be considered in connection

with the treatment. In acute and threatening deposits in vital organs it may be life-saving by its prompt action. It ought not to be given to ambulatory patients, nor is it safe in the hands of careless or inexperienced individuals. The hospital is the best place for the use of the method, and patients who are injected should be kept in bed for seven days under close observation, and longer if needed. Second injections, if needed, should not be earlier than eight weeks after the first. Contraindications should be carefully considered. It should not be given when other infections than syphilis exist, however mild they may be, nor should the feeble or old or those with other than specific organic disease be injected. Congenital syphilis calls for the treatment, either directly or indirectly, through the mother. The living contagion is destroyed; hence the spread of syphilis can be prevented by its early use, a point for sanitarians. In occasional well-selected cases the use of iodides by the method of Wechselsmann will increase the efficacy of "606" when second injections are necessary. Two to three weeks should have passed after thorough mercurial treatment when this has been used before the injection of arsenobenzol. While its effects are magical, it is not yet certain that a single injection will prevent the secondary or tertiary stages in all cases. Further observation is needed as to this point. The dose is given by Elsner as 0.5 gm. for men, 0.45 gm. for women, and there is a tendency to slightly increase this dose to 0.8 and 0.6. The dose for children ought not to be higher than 0.02.

"606."

On September 20th, at the meeting of German Scientists and Physicians in Königsberg, a full-dress discussion on Ehrlich's new remedy took place. Thirty-two speakers took part in the discussion. Neisser expressed the opinion that atoxyl and the nearly-allied substances, arsacetin, soamin, and hectin, might be disregarded as antisypilitics. Instead of the pentavalent arsenic compound, Ehrlich had introduced the trivalent compounds arsenophenyl-glycin and later dioxy-diamido-arsenobenzol. The action of the latter was partly direct on the parasites and partly indirect through an antitoxic antibody. The maximum therapeutic dose had not yet been determined. One gram for an individual weighing 60 to 70 kilograms (—about 132 lbs. to 157 lbs.) had been given without ill effects. The total quantity given within a period of three weeks was 2.4 grams; 0.5 gram in 200 c.cm. of fluid might be given intravenously. He advocated an intravenous injection of 0.4 gram followed by a subcutaneous one of 0.5 gram. He put forward a tentative list of indications for the use of "606," and also pleaded for a com-

bined treatment with this drug and mercury or iodide of potassium. Lastly, he said that "606" would render the problem of diminishing the spread of syphilis easier than before. Ehrlich said that when spirochaetes did not disappear in from twenty-four to forty-eight hours after an injection of "606," either the dose was too small or the drug was not satisfactorily absorbed. Marinesco, Plaut, Scholtz, and L. Michaelis had proved that the serum of persons treated with this drug exercised a curative action on syphilitic processes, especially in newborn infants. He quoted cases of gummas of the tonsil, which prevented the act of swallowing, being so far improved within five hours of the injection that the patients had eaten solid food without pain; of an iris exudation clearing up in three hours so far that, while fingers could only be counted at a distance of one yard before the injection, the patient was able to see his own image clearly in the looking-glass at a distance of five yards, and after twenty hours was able to read small print. With regard to the toxicity of the preparation, he reported that only one death had resulted from the injection. The patient was a weakly person with tertiary syphilitic affection of the larynx. The fluid injected was acid, and death was due to shock. Other deaths had followed the application of "606," but in this group the patients were affected with severe organic affections of the central nervous system. He regarded disease of the central nervous system and of the heart and circulatory apparatus as contraindications to its use. Lastly, he expressed the belief that the future use of "606" would be with a combined intravenous and subcutaneous injection. Alt, Schreiber, Iverson, Wechselmann, and many others followed with favourable accounts of the action of the drug. Margarete Margulies gave an interesting account of experiments she had carried out on various parasites with "606." Trypanosomes became refractory to the action of the drug very soon if the doses given were too small. It was necessary, therefore, in these cases to inject large quantities. Spirilla did not become refractory to the preparation, and she found it possible to repeat the injections of small doses in order to carry out what was known as *therapia sterilisans fractionata*. Stern expressed the opinion that the results obtained were no better than those obtained by the older methods. He attributed the failures to cure to an arsenic fast character of the spirochaetes. None of the other speakers agreed with Stern in his assertion that the drug frequently failed. The general opinion appeared to be that "606" had a wonderful effect in tertiary and primary syphilis, and acted well in secondary syphilis; that it was especially active in malignant and advanced cases, in which mercury and iodides did no good; that it did not affect the eye, and did not cause any serious toxic effect on the organism; that when given in large doses in the early stages it appeared to cure in one dose, but that the permanency of the cure had yet

to be proved; lastly, that it was necessary to avoid exaggeration, since, although the drug acted with extraordinary efficacy in very many cases, it could not replace scar tissue, nor could it act equally well in all persons and in all syphilitic conditions. It may be added that the majority of the clinicians prefer Wechselmann's neutral suspension to Alt solution. Citron suggested using calcium carbonate instead of sodium hydrate, since this substance was indifferent toward the tissues.

GYNÆCOLOGY AND ABDOMINAL SURGERY.

Under the charge of S. M. HAY, M.D., C.M., Gynæcologist to the Toronto Western Hospital, and Consulting Surgeon, Toronto Orthopedic Hospital.

ACUTE PERFORATION OF THE HOLLOW VISCERA.

Byron B. Davis' summation of the symptoms of gastric perforations in *The Journal of the A. M. A.* is a mine of wealth in the field of diagnosis. He says in part:

Acute perforations of round ulcers of the stomach are practically always accompanied by serious and well-marked symptoms. First, there is usually sudden sharp intense pain in the epigastric region, so sudden and so intense that it is not a rare occurrence for the patient to fall to the floor in a faint. This very intense pain is usually short in duration, but well-marked shock is present for a variable length of time, ranging from an hour to several hours. The ordinary manifestations of shock are found, a cold clammy skin, paleness of the face and lips, restlessness, a thready pulse and a subnormal temperature.

Within a few hours tenderness over the abdomen becomes general, perhaps slightly greater over the epigastrium, and abdominal rigidity is marked and boardlike. When the rigidity is first manifest the abdomen is usually flat, but it soon becomes distended and tympanitic and vomiting is likely to occur, the typical vomitus of peritonitis. The pulse has now become fuller and more rapid and as the peritonitis progresses it becomes still more rapid and more feeble.

The symptoms given by Mayo Robson are as follows:

A sudden, sharp abdominal pain. . . . Almost immediately the expression of the face changes to one of anxiety and great distress; the extremities become cold and clammy and the face blanched; the respirations are usually shallow and quick, and the pulse rapid and almost imperceptible at the wrist; vomiting may occur. . . . As a rule the patient rallies and the initial symptoms of shock pass off to a certain extent. There

is then a great complaint of thirst which cannot be satisfied and the urine is scanty and high-colored.

The recti are rigid, the whole abdomen is boardlike, at first retracted, later distended with gas. Liver dullness usually absent. In about 90 per cent. of the cases a history of previous stomach trouble can be elicited.

His advice to the general practitioner is given thus:

Every case of typhoid fever is liable at any moment, especially during the latter part of the second and during the third week, to become a very urgent emergency surgical case by the occurrence of a perforation. It is doubtful if we have even yet fully realized the importance of perforations as a mortality factor in typhoid fever, or the number of lives that might be saved by prompt diagnosis of this calamity and timely operation. Osler several years ago stated it as his opinion that one-third of all the deaths in typhoid fever were due to perforations. When we consider that upward of 50,000 die annually of typhoid fever in the United States and that over 16,000 of these deaths may reasonably be attributed to perforations, it gives the discussion of this subject a dignity which merits the best thought and best effort of all engaged in practice.

I am convinced that every one treating a case of typhoid should have constantly before him the liability of the occurrence of perforation and that he should be on the alert to recognize it when it occurs and to act promptly should the emergency arise. The nurse should be instructed that the occurrence of sudden and unusual pain in the abdomen, especially in the right lower quadrant, is a danger-signal and calls for immediate notification of the attending physician. She should also be instructed to note the pulse and temperature of the patient at half-hourly intervals after the occurrence of the acute pain. She should also be on the alert for other manifestations of shock as pinched features, cold extremities, clammy skin, the characteristic restlessness, etc., and the physician should be informed of the results of these observations as soon as possible that he may have all the aids to diagnosis at hand. Often the subnormal temperature and other shock symptoms are very transitory and by the time the physician can reach the house they are gone. By this time it is usual for the abdominal muscles, especially over the site of perforations, to become somewhat more rigid than normally, the rigidity increasing in intensity with the advent of peritonitis.

Treatment. 1. In every acute abdominal pain the possibility of a perforation of some part of the alimentary canal should be wisely heeded.

2. In every case of perforation there is an absolute indication for immediate operation.

3. If the symptoms point rather definitely to perforation, but the diagnosis is in some doubt, exploration is safer than delay.

4. Shock is no contraindication to operation.
5. The operation should be as expeditious as possible, only what is necessary being done and artistic ideals being left to less urgent cases.

AFTER RESULTS OF ABDOMINAL OPERATIONS.

A. E. Giles (*Journal of Obstetrics and Gynecology of the British Empire*, July, 1910), studied the after results in 771 out of 1,000 abdominal operations. He found with regard to the general health 90 per cent. of the patients were better after operation than before, 6 per cent. were either worse or at least no better in many cases from causes quite independent from the operation, and a further 4 per cent. had been better, for a time, but had suffered from a relapse.

Invalidism was limited to about three months in 60 per cent. of the cases; in the remaining 40 per cent., the patient did not fully regain strength for a year or even longer. The severity of the operation did not appear to have any direct relation to the rapidity of convalescence. The memory was apparently affected in one quarter of the cases, and this was particularly evident after the long operation for uterine cancer, 64 cases out of 770 required further abdominal operations, 34 of these were required for conditions independent of the first operation, and of the remaining cases the majority resulted from incomplete operation on diseased appendages. Six were necessitated by a recurrence of uterine displacement.

The chances of pregnancy, following unilateral salpingo-ophorectomy and conservative operations on the uterus are good, as 3 per cent. of married women under 40 years among these cases became pregnant afterwards; 73 per cent. of the completed pregnancies went to full term. The chances of labor being normal after these operations are just as good as is with patients who have had no such operation. The class of cases offering the best chances for subsequent pregnancy are the cases of extra-uterine pregnancy, the cases of hysteropexy for displacement, and those of abdominal myomectomy.

Regarding the percentage of hernia, it was found that there were 3.6-10 per cent., or a total of 26 of the 711 operative cases.

The tendency to stitch abscesses and hernia is markedly greater after operation for inflammatory disease of the appendages. The tendency to stitch abscesses is diminished by modern improved methods, and particularly by the use of sterilized rubber gloves during the operation. F. J. T.—(*St. Louis Med. Rev.*, Aug., 1910).

TREATMENT OF PROLAPSUS UTERI IN OLD WOMEN BY COLUMNIZATION OF THE VAGINA.

E. Juvara (*Presse med.*, May 14, 1910) advocates in old women who have passed the menopause and who are afflicted with severe prolapsus the use of the operation devised by Le Fort. This consists of freshening a rectangular oblong portion of the anterior and posterior vaginal wall and suturing them together in such a way that the cervix is supported on a fleshy column resting on the perineum. This procedure is eminently successful, but closes the vagina except for a narrow canal on each side through which any discharge can be drained away.

THE URETERS IN ABDOMINAL PELVIC OPERATIONS.

In discussing the management of the ureters in abdominal pelvic operations, R. C. Buist (*Jour. Obst. Gyn. Brit. Emp.*, April, 1910) says that in those cases where a tumor is burrowing into the broad ligament the ureter should be looked for, and if accidentally injured should at once be treated by implantation. In cases of cancer of the cervix uteri where the parametrium is infiltrated the ureter should be divided above the infiltrated region and treated by implantation in the bladder. *Am. Jour. of Obs. and Dis. of Women and Children*, Sept., 1910.

OBSTETRICS AND DISEASES OF CHILDREN.

Under the charge of D. J. EVANS, M.D., C.M., Lecturer on Obstetrics, Medical Faculty McGill University, Montreal.

CONGENITAL PYLORIC STENOSIS.

In the Schorstein Lecture, *Brit. Med. Jour.*, Oct. 8, 1910, Dr. Robert Hutchinson dealt with the subject of congenital pyloric stenosis.

He remarks on the paucity of reports on this condition from France and Italy, though cases have been published in abundance in Germany, America and England.

It is a curious clinical fact that the condition is much more frequently met with in boys, about 80 per cent. of all cases occurring in the male sex. Again a relatively large proportion of the cases are met with in first born children. In his own experience he has been interested to note the frequency in which the children of doctors were affected, no less than six out of twenty cases seen in private were the children of medical men.

He dwells on the prominent symptom of persistent vomiting which usually makes its appearance between the second and fourth week.

He notes a peculiar tendency of the vomiting to cease for some hours with any change of food and to recur again as violently as ever. Constipation is usually present, and rapid emaciation occurs.

The physical signs while few, are characteristic. Dilatation of the stomach causing swelling in the upper portion of the abdomen is usually marked. The greater curvature reaches down to or even much below the level of the umbilicus.

Most characteristic of all the symptoms is the appearance of waves of visible peristalsis. These waves occur usually after a feed has been given. They begin at the left side, where a rounded swelling about the size of a golf ball appears below the left costal margin, and travels somewhat leisurely across the abdomen in an oblique direction downwards and to the right. It does not seem to cause any pain.

Pyloric tumor may be felt to the right of the median line, and can usually be obtained by pressing the pylorus against the right side of the vertebral column.

The author then discusses the theories, first that the thickness of the pyloric canal is to be regarded as a congenital malformation, and secondly that it is due to overwork, the consequence of a long continued spastic contraction. He thinks that the spasm theory fits the effect of the condition better than any other. He thinks at present the part of wisdom is to suspend judgment and wait for some information as to the causation of the condition.

The author has had twenty cases in private practice, seventeen of which were treated at home, and all recovered without operation. Of the three sent into hospital for treatment, two died.

Bendix reports no fewer than thirty recoveries out of thirty-two cases treated by medical measures alone.

All the author's cases exhibited the classical features of the condition in a pronounced degree.

Hospital statistics present a much more unfavourable reading. He mentions that in the Children's Hospital where medical treatment alone is conducted the mortality was 78 per cent. in a series of sixty-four cases. He thinks that this is to be explained by the fact that children suffering from this condition stand hospital life badly.

Speaking of the results yielded by operative treatment, he mentions Burghard, that eleven recoveries out of sixteen cases, a mortality of 31 per cent. Cantley reports six recoveries out of seven cases operated upon in private, but a mortality of four out of five hospital cases. He thinks that Ibrahim's estimate of 50 per cent. as the probable mortality amongst all cases submitted to operation is about correct.

The author treats these cases with small quantities of food at short intervals. He is convinced of the great value of regular washing out the stomach once or twice a day, as this treatment tends to lessen the frequency of the vomiting, and diminishes exhaustion, while it facilitates sleep.

As subsidiary measures, he believes in the value of the German plan of applying poultices to the epigastrium, and great care should be taken as in all unfed babies to maintain the body heat. In severe cases normal saline enemata, two or three ounces may be given twice or thrice daily. Drugs are of little help.

Under such treatment the vomiting usually ceases quite soon, but gain in weight may not occur for weeks or even months. After perseverance, however, improvement sets in, and often quite suddenly the child starts to gain weight.

As to whether the cure is permanent and complete, the author expresses uncertainty, but states that he has examined some of his worst cases five years after treatment, and found them to be perfectly healthy children, with no sign of gastric disorder or dilatation of the stomach.

He states with regard to operation that it should never be recommended. He says it is impossible to recognize that operation is necessary to save life. As a practical policy therefore, one is obliged either to operate on all cases in which the symptoms and signs are well marked, or upon none of them, and that the former plan would result in a much heavier mortality than the latter, he has no shadow of doubt.

COLON INFECTIONS OF THE URINARY TRACT IN CHILDREN.

Langley Porter, M.D., and E. C. Fleischner, M.D., *Archiv. of Ped.* Nov., 1810, after drawing attention to the fact that colon bacillus infection of the urinary tract in childhood is frequently overlooked, state that the diagnosis can only be reached by a cultural examination of the urine. There may be a purulent sediment in the urine, but this is not common.

The infection occurs either by ascending from the urethra; from the blood stream, or directly by contamination from the rectum to bladder, when the pelvis is inflamed.

The authors think that haemotogenous infection may follow fissure in-ano, a very common, but often overlooked condition in constipated babies.

In female infants, ascending infection frequently follows the careless cleaning process adopted by many nurses. The author's cases were all girl babies.

The symptomatology is then discussed, and the records of several cases given in detail. The cases varied from 8 months to 8 years old.

He divides the cases in the groups according to the symptomatology. In the milder cases there are practically no symptoms beyond slight malnutrition and anaemia. He thinks the first symptoms in small babies are pallor and failure to gain weight. Usually there is some slight elevation of temperature. The stools are numerous, greenish in color, and contain mucus.

In a third group of cases the symptoms are those of severe toxæmia and gastro intestinal disturbances.

In older children a typhoidal condition sometimes follows urinary infection. An interesting fact in these cases is that after the children have been ill for some weeks, the blood serum in high dilution will agglutinate typhoid bacilli.

The diagnosis may be most difficult on account of the variety of symptoms.

A series of anomalous cases is then given, illustrating the diversified symptomatology.

The prognosis for life is usually good.

The infection may last for several days to several months, or even in years in spite of any form of treatment.

Prophylactic treatment includes great cleanliness of the genitals. Large quantities of fluid and 15 grains daily of urotropin constitutes the treatment.

In the more intense persistent cases, autogenous vaccines give us our only hope.

In concluding, the authors call special attention to the importance of culturing the urine in all cases of persistent fever of obscure origin, because this simple procedure will often clear up the diagnosis of a puzzling case.

LARYNGOLOGY AND RHINOLOGY.

Under the charge of PERRY G. GOLDSMITH, M.D., C.M., Fellow of the Laryngological and Rhinological Society of Britain; Assistant Laryngologist and Rhinologist, Toronto General Hospital.

TREATMENT OF EPISTAXIS.

Bourgeois has made a practical study of the methods for stopping epistaxi and arrives at these conclusions:—When the hemorrhage is

not severe, the patient should be seated in a cool place with the head well up. He must be relieved of all clothing about the neck which may interfere with the return circulation. The hemorrhage is nearly always due to the rupture of an arteriole in the anterior part of the septum. A pledget of absorbent wool should be introduced, not into the orifice of the nostril, but into that of the nasal fossa. The wool should be wet with hot oxygenated water of twelve volumes strength, or in a 50 per cent. solution of antipyrin in hot water. By means of the ala a moderate degree of pressure is kept up by the finger upon the pledget. If there is a relapse, examination and rhinological treatment must be instituted as soon as possible after the bleeding. On the anterior part of the quadrangular cartilage are seen one or more small arterial branches in varicose condition; on their track a small brown clot points out the seat of the recent hemorrhage. Some 1-10 solution of cocaine is applied on cotton wool. The clot comes away when the wool is removed, and bleeding must be avoided as much as possible. The bleeding point is then cauterized, and afterwards all varicosities in the course of arterioles. The galvanic cautery to a dull red may be used, or a crystal of chromic acid or of silver nitrate. Chromic acid causes a yellow scab. The patient must not blow his nose, and will introduce twice a day a small quantity of boric vaseline.

In the case of serious hemorrhage, such as always relieves a general condition of high arterial tension, or results from delayed coagulation, quick and efficient anterior plugging is often necessary. It can be effected by Gariel's balloon as improved by Laurens.

The deflated balloon is covered outside with ointment:—

R Cocaine Hydrochloratis gr. ij
 Liq. Adrenalini Chloridi m. iij
 Adipis Lanae Hydrosi
 Paraffini Mollis ana dr. 1½
 Mice. Fiat unguentum.

It is then introduced along the floor of the nasal fossa by means of Lubet-Barbon's smooth bladed forceps. It is immediately inflated with pressure enough to hold it in place. At the end of twenty-four hours the air is allowed to escape, and the bag is gently withdrawn. Failing a bag, a gauze plug must be used, made up of strips 2-5 of an inch wide, and about 3 inches long, of medicated gauze (ferripyridin or iodoform) or of sterilized plain gauze. The patient is laid down with his head low, because of the condition of syncope. By help of a mirror and speculum the forceps are passed along the floor of the nasal fossa, carrying one end of a gauze strip close to the posterior nares, the other end being

left in view in the nostril. (Strips of rubber sponge may also be used.)

The forceps are withdrawn and again introduced closed, in order to spread the gauze lightly over the floor. A second strip is then spread over the first, and so on, until the last can only be packed in without the speculum above and behind. The bleeding should be stopped in about five or ten minutes. This may be determined by looking at the uvula and back of the pharynx to see if any blood trickles down. This plug must be left in place for 48 hours; a shorter time runs the risk of allowing fresh bleeding a longer, that of septic complications. To extract, the patient must be on his back without a pillow. One teaspoonful—the spoon being previously sterilized in a flame of peroxide solution containing boric acid is poured upon the outer end of the plug, which is then removed by strip by means of the forceps. As each strip is taken away, more boric oxygen water is dropped in. This method of unplugging is antiseptic, and at the same time causes neither pain or bleeding. The general treatment is in syncopal conditions, injections of camphorated oil or caffeine, hot bottles, rest in bed, and repeated drinks in small quantities at a time, of milk and water. Injections of serum are indicated for large traumatic hemorrhage, but for spontaneous bleeding these are only necessary in the event of a feeble pulse. In many cases, the pulse, in spite of the loss of blood, remains strong and hard. To increase the tension in such cases would be dangerous. Saline injections are dangerous if nephritis is present. They should only be given when the general condition is serious and the pulse small and feeble. Not more than 150 to 200 c.c. should be given at one time. (*Le Progrès Medicales.*)

TREATMENT AND PROPHYLAXIS OF TONSILLITIS.

Schonemann considers that this affection is not always harmless; the remote consequences are well known nowadays. He looks upon the tonsils as subepithelial glands, serving the nasal mucous membrane. Follicular tonsillitis, therefore represents an acute lymphadenitis, the starting point of which is an acute or chronic affection of the lymphatics of the mucous membrane. Looking upon the tonsillitis as a secondary affection he never neglects the treatment of the general condition. He promotes sweating by giving a large dose of salicylic preparation in an infusion of elder berries. As a prophylactic he recommends an installation into each nostril every day of 5 to 10 drops of a 2 per cent. solution of protargol or of a 5 per cent. solution of collargol. By such means he thinks that he shuts off the possibility of a subsequent attack of acute rheumatism, endocarditis, nephritis, or appendicitis. (*Le Progrès Medicales.*)

During the acute attack in the early stages, two methods of treatment may be adopted with considerable benefit: (1) Cupping the tonsil (Bier) by which the crypts and tonsillar fossa may be thoroughly emptied, and the attack practically aborted; or, (2) The use of strong solution of silver nitrate, grs. 50 to the oz., applied to the tonsil by laying a cotton application against the sumtis glands. It is necessary to rub it into the surface, besides this makes the remedy very objectionable to the patient. Recurring attacks are absolutely prevented by complete enucleation of the glands—simply snipping off a portion is not sufficient.

PERSONAL AND NEWS ITEMS.

ONTARIO.

The people of Port Hope are raising \$20,000 for a hospital.

Dr. Fred. C. Harrison, after spending some time in Britain, has commenced practice at 134 Bloor St. West, Toronto.

During October there were 1,226 cases of infectious diseases in Ontario, with 266 deaths.

The friends of Dr. E. E. King, of Toronto, will regret to learn of the death of his daughter, Aileen Louise, aged 17 years.

Dr. L. F. Millar and family of Rosedale, Toronto, are leaving this week for their winter home in Pasadena, Cal.

Dr. M. M. Farnham, of Coppercliff, and Dr. W. R. Patterson, of Sudbury, have been made associate coroners for the district of Nipissing.

The many friends of Dr. Frederick Winnett, of Toronto, will be pleased to learn that he has quite recovered from the attack of typhoid fever which he contracted while with the Queen's Own Rifles in England.

Dr. H. B. Elliott, of Niagara Falls, met with a serious accident on 22nd December. His horse became frightened by an engine. He sustained painful injuries about his head.

Dr. A. D. Harvey, of Orillia, who was severely wounded in the arm while hunting, is making a good recovery. Too much praise cannot be given Drs. N. A. Powell, A. Ardagh, and W. C. Gilchrist, for the attendance they gave him at the time.

During the month of November, there were reported 1,077 cases of contagious disease. Infantile paralysis and cerebro-spinal meningitis showed a distinct falling off. The deaths from contagious diseases for the month was 181.

There have been a number of points in the province of Ontario in which smallpox has appeared. The lessons of science are hard to learn.

An immense amount of expense and a good deal of suffering could be prevented by the universal adoption of vaccination.

The daily average of patients in the Toronto General Hospital for November was 352. In the out-patient department 1,129 cases were treated during the month. At the branch dispensary on Chestnut Street, 202 cases were treated.

There has been serious outbreak of smallpox in Moose Creek village, in the county of Stormont. In the early part of December, there were about 25 cases either ill or just recovering. Dr. Bell, the Provincial Health Inspector, found that scarcely a person in the village had been vaccinated.

Mr. J. L. Englehart has donated his residence and grounds of 30 acres to the town of Petrolea. This gift is a memorial to his late wife. The residence is to be fixed up and to be used as a hospital. The property is worth \$100,000. This generous gift is highly appreciated by the people of Petrolea. The name of the institution will be The Charlotte Eleanor Englehart Hospital.

Dr. O. R. Mabee, assistant pathologist to the Toronto General Hospital, announces that he will be able to treat cases of syphilis with Ehrlich's 606 about January 1st. Owing to the careful technique required in its preparation for use, and in giving the injection, it will be necessary for physicians who have cases for treatment to send them into a hospital. Previous to the inoculation a Wassermann reaction will be necessary.

The enlarged Victorian Order Hospital at North Bay was formally opened on 9th December. Hon. Frank Cochrane, Hon. W. J. Hanna, Mr. J. L. Englehart, Mr. George Gordon, M.P., and H. Morel, M.P., were among those present. The hospital was established in 1902. Since then it has been enlarged at different times. The recent improvement cost \$18,000. In all, \$25,000 has been expended upon the institution up to date. It is now one of the best equipped hospitals in the province.

QUEBEC.

Dr. E. P. Lachapelle, of Montreal, has been elected first vice-president of the Royal Edward Institute of that city.

An attempt has been made to dismiss Dr. Laberge, Medical Health Officer for Montreal, on the grounds that he is a Freemason.

The death rate from pulmonary tuberculosis for the past three years in Montreal has been 953, 945, and 845 respectively.

A new building for the Babies Hospital of Montreal is proposed at a cost of \$100,000. There is a marked lack of accommodation in the present institution.

The Quebec City Board of Health purpose asking the Dominion Government for enlarged powers to deal with vessels supposed to have persons suffering from contagious diseases.

There was a death from smallpox at St. Henri, near Montreal, a short time ago. If people would only make use of the protection vaccination can afford, there would be few cases and no deaths.

Dr. Carine Poulin, of Montreal, was arrested a short time ago on the charge of performing an illegal operation. The patient on which she was alleged to have operated was in the Homoeopathic Hospital in serious condition.

The *Montreal Medical Journal* for November, which came to hand on 7th December, gave four and a half pages to the advance notice of a medical book. The publishers should be well pleased. But what of the readers? If so much space is given to the advance notice, perhaps some arithmetician may be able to tell how much should be given to the actual review.

MARITIME PROVINCES.

Dr. Murray MacLaren, of St. John, N.B., has gone to Germany for a holiday and post-graduate work.

Dr. P. H. Bryce, Medical Officer of the Department of Interior, was in St. John lately on official business.

Dr. E. A. Kirkpatrick, president of the Maritime Medical Association, was ill for two or three months. It is learned he is improving.

Dr. A. F. Miller, head of the Provincial Sanatorium for Tuberculosis at Kentville, N.S., has accepted the position of Medical Superintendent to the Detriot Sanatorium of Consumptives.

At Bay Roberts, Newfoundland, in the Seaview Hotel, Dr. L. Pritchard, medical practitioner, was shot, but not dangerously wounded, by John Dunlop, one of the staff of the Western Cable Union Co. The men had been close friends.

WESTERN PROVINCES.

New Westminster, B.C., is proposing a hospital at a cost of \$200,000.

Dr. J. J. Thompson, late of Scotland, has been made Medical Health Officer for North Vancouver.

Dr. F. C. Bell has been appointed Medical Superintendent of the Winnipeg General Hospital.

It is proposed by the Society of the Order of Providence to erect a hospital in Battleford at a cost of \$50,000.

Dr. Geo. Prowse was elected president of the Winnipeg Medical and Surgical Society; Dr. H. P. Galloway, Vice-President, and Dr. J. A. Gunn, Secretary-Treasurer.

The Dominion Government is establishing a Quarantine Hospital at Digby Island, near Prince Rupert. It will be under the charge of Dr. H. E. Tremayne.

FROM ABROAD.

Lord Morley is putting forth an effort to have a sufficient number of native persons educated in medicine to meet the needs of the people.

Two women died recently in Brooklyn, N.Y., from the effects of headache powders, which they had procured at two separate drug stores.

Mr. James A. Patten has given \$200,000 to endow a chair of medical research at the Northwestern Medical School, Chicago.

Pulmonary phthisis is a notifiable disease in West Australia. On receipt of the report of a case, the conditions in connection therewith are investigated, and steps taken to prevent the spread of the disease.

Nine cases of sleeping disease have been reported as occurring in Nyasaland. As yet the glossina palpalis fly had not been found in that region.

A bill for the restraining of quackery has passed the Senate House in Berlin. If it passes the Reichstag and becomes law, it will do much to curtail the flagrant abuses of medical quackery so rife in Germany.

In Berlin, Germany, there is one physician for every 776 of the population. In many of the rural parts of the German Empire, the ratio is about to 2,500.

The Government of Victoria, Australia, has introduced a bill providing for the inspection of private hospitals. This is to obviate many abuses that are said to have prevailed in these hospitals.

The American Public Health Association will hold its 1911 meeting in Havana, Cuba, from December 4-9. For information, write to Dr. W. C. Woodward, Washington, D.C.

Some wealthy person, who withholds his name, has given \$1,300,000 towards the union of the hospital and the Columbia Medical College. Edward S. Harkness gives \$300,000 for the same object.

The English Radium Institute, through the generosity of Sir Ernest Cassels, has received from the Austrian Mines, 15 grains of radium for medical purposes at a cost of \$75,000.

Dr. Edward Eldredge Bloomfield, professor of materia medica in the University of Otago, New Zealand, died 15th October. He was well known in London prior to going to New Zealand.

The Transvaal Medical Council, the Natal Medical Council, the Colonial Medical Council, the Medical and Pharmacy Council, and the Transvaal Medical Society, are making every effort to raise the standard of medical education throughout the South African Union.

Medical reciprocity has been effected between Great Britain and Italy. Some thirty graduates of Italy are recognized by the medical council of Britain, and British qualifications admit their holders to practice in Italy.

Dr. Loudon Brame Edwards died at his home in Richmond, Va., in his 65th year. He was a surgeon in the confederate army, and founded in 1874 the *Virginia Medical Monthly*, of which he was editor for many years.

The editors of the *Interstate Medical Journal*, St. Louis, announce the publication of a symposium number on syphilis for January. There are a number of distinguished contributors to the journal. The Ehrlich treatment is to receive due consideration.

It is urged that ophthalmia neonatorum should be placed on the list of notifiable diseases, and that free treatment should be furnished for those who cannot pay. Already these efforts in Britain have been attended by marked benefit.

In 1904 there were in the United States, 133 sanatoriums for tuberculosis, 32 special dispensaries for its treatment, and 39 anti-tuberculosis organizations. There are now over 400 sanatoriums, 300 special dispensaries, and 450 anti-tuberculosis organizations.

An attempt was made in Western Australia at last session to remove compulsory vaccination from the statutes. It passed the Lower House, but was defeated in the Upper House. The infant mortality under one year is 78 per 1,000.

Hon. Dr. Findlay is urging that the notification of syphilis be made compulsory in New Zealand. There are objections raised, but these Dr. Findlay meets and shows that similar objections were advanced to the reporting of other infectious diseases.

The New York State Education Department has taken action to stop the operations of the "American College of Science," located in Rochester, as the said college is not chartered. It has been giving degrees in mesmerism, hypnotism, and personal magnetism.

Dr. J. F. Payne, who was the author of a well known work on pathological anatomy, died in the latter part of November, at the age of 70. He held at different times many appointments in connection with hospitals and medical examining bodies.

Sir Arthur Conan Doyle, addressing a body of London medical students, among other things said that Alexander, the Great, whose soldiers conquered India, brought ague to Greece, and thus caused the degeneracy of that noble race.

The committee investigating the spread of the plague in India, reports in part that the disease is not infectious from man to man, that

it is conveyed from the rat to the rat flea and by the latter to man. The bacillus may live in the stomach of the flea for several weeks.

The South African Medical Congress, which was held recently in Capetown, was a decided success. There was a large attendance, and excellent papers were read. The Highland Regiment was guard of honour, and His Excellency Lord and Lady Gladstone graced the gathering.

Professor Karl Pearson has made out a very strong case in favor of the position he has taken that the abuse of alcohol tends to produce marked degeneration in the next generation. In the Paris Congress of Medicine, it was shown that alcoholic heredity played a very important part in the causation of tuberculosis.

Dr. Sinclair, Inspector of Asylums for New South Wales, reports that the asylums are becoming steadily more and more crowded. There is a real increase in the numbers of the insane. He thinks something should be done to treat many of the insane in the early stage of the disease, and in many cases effect a cure.

The falling birth-rate is ever before students of the population of the leading countries. It is noted that the better classes in the United States have few children, while the lower classes have many. There is, on the whole, however, a falling. This is beginning also to occur in Germany. As wealth increases, the size of the family decreases.

Dr. Beverly Robinson, of New York, attributes dilatation of the heart to nervous states and irregular modes of life. It may also be caused by chronic endocarditis, renal disease, arteriosclerosis, heavy strain, late syphilis, alcoholism, leukaemia, chlorosis, goitre, angina pectoris, emphysema, and strong emotional disturbances.

Syphilis and gonorrhoea are becoming so prevalent in the United States that the public in many places are forming societies for the suppression of these diseases by spreading useful information regarding them. Much attention is directed to the false views of modesty that have done so much in the past to favor their spread. The California State Board of Health has placed these two diseases on reportable lists.

Dr. Ledingham, in his report to the Local Government Board of Britain deals fully with typhoid fever carriers. He states that these carriers may retain the infection by a long period, and are very dangerous if they act in the capacity of cooks or when they are engaged about dairies. The best system of disinfection should be resorted to. No treatment appears of much value in weeding them of the infection.

The *Medical Press and Circular* of 9th November, takes strong ground on the marriage of those who are too young, or are known to be degenerates. It contends that none should be granted the right to marry under 21, and that all should furnish a certificate of health

and freedom from serious taints. Criminals, lunatics, and degenerates should be refused a license.

The annual meeting of the Royal College of Surgeons, of England, was held recently. The old question of granting some representation to the members, was again raised, and again shelved. The fellows who do but little of the contributing, and are in the decided minority, do all the managing, and all the spending. There are some 15,000 members who have no voice in the say of the college.

The hand of death has removed three very distinguished members of the profession lately in the United States. Dr. Christian Archibald Herter, of the Rockefeller Institute, died of pneumonia, 5th December, in his 46th year. Dr. John C. DaCosta, of Philadelphia, was taken off on 6th December, at the age of 76. He was a noted gynaecologist in connection with Jefferson Hospital. Dr. John Cummings Munro, the eminent surgeon of Boston, died on 6th December, at the age of 52. He was descended from the famous Scotch anatomist of the same name.

BOOK REVIEWS.

SYPHILIS.

By Sir Jonathan Hutchinson, F.R.S., LL.D., F.R.C.S., Consulting Surgeon to the London Hospital and the Royal London Ophthalmic Hospital; sometime President of the Royal College of Surgeons. New and enlarged edition, with twelve colored and twenty-four black and white plates. Cassell and Company, Limited, London, New York, Toronto and Melbourne, 1909. Price, \$3.25. Toronto: D. T. McAinsh & Co.

The name of Sir Jonathan Hutchinson is so well known that it needs no introduction. It adds much to the pleasure of reviewing this work to know that it is from the pen of an esteemed teacher, whose investigations we have ever taken much pleasure in following. It is only stating a truism when we say that Sir Jonathan Hutchinson has no rival as an authority on syphilis. The author is a noted optimist in the prognosis of syphilis. Those who were properly treated when he was a young surgeon are well and with healthy grandchildren. He has seen but little of the severe nerve diseases among his own patients. The inference is that careful treatment prevents these. Sir Jonathan accepts the view that syphilis was introduced into Europe by the sailors under Columbus. "The yaws of the West Indies and syphilis are the same disease and the same parasite is found in both. "This parasite was doubtless brought into Spain by Columbus's sailors and the disease which it produced became known (much later) under the name of

'syphilis.' This quotation quite clearly sets forth the author's views as to the origin of syphilis so far as Europe is concerned. The author leans to the opinion that the spirochætæ may vary somewhat as do the varieties of men and dogs. This may account for some of the marked differences to be found in cases among different tribes. With regard to marriage the two year limit is held to be sufficient in the case of the male, as sperm contagion is not conveyed after that period when treatment has been efficient. In the case of the female much more caution is necessary, as germ infection may persist much longer, and it is necessary to insist upon more thorough observation, and a more prolonged period of treatment. The author adheres to the view that inheritance of the disease may be paternal. He does not agree with the argument based upon the size of the spirillum as compared with the sperm cell. He still refuses to admit the possibility of third-generation syphilis. With regard to tertiary symptoms it is held that the disease during the secondary period affected certain parts or tissues and so affected their vitality as to render them liable to inflammatory and degenerative changes. On the matter of treatment the author still finds the tonic doses of mercury to be a safe and certain means of treatment and will cure the case completely. Of all the forms of mercury, preference is given to small doses of grey powder in pill form. When diarrhœa occurs a little Dover's powder may be administered. One grain of each is recommended. The earlier the treatment is begun the better, as the milder the secondaries the less tertiaries. In cases of symptoms of general paralysis of the insane, the mercurial treatment ought to be made continuous, but in small doses. This book should be studied by all who wish to understand syphilis.

USUAL THERAPEUTICS FOR THE PRACTITIONER.

Clinical Therapeutics of the Faculty of Medicine of Paris. By Prof. Albert Robin, Member of the Academy of Medicine. First series: Vigot Bros., editors, 23 Placé de l'Ecole de Médecine. Paris: 1 vol. 8vo. Price, 8 francs.

The great object of the author of this book is to study vital reactions and to oppose to them an essentially functional therapeutic. He contends that a satisfactory system of treatment cannot be based upon the reigning theories in pathology. There are lectures on the different systems and organs of the body. The book is a very valuable addition to our present literature on therapeutics. It should soon be translated into English, and would in this way find many appreciative readers.

CHEMISTRY.

A Manual of Chemistry, Theoretical and Practical, Inorganic and Organic. Adapted to the requirements of students of medicine. By Arthur P. Luff, M.D., B.Sc., F.R.C.P., F.I.C., Physician to St. Mary's Hospital and Joint Lecturer on Medicine at St. Mary's Hospital Medical School; and Hugh C. H. Candy, B.A., B.Sc., F.I.C., Lecturer on Chemistry in the London Hospital Medical College. With 46 illustrations. New and enlarged edition. Cassell and Company, Limited, London, New York, Toronto and Melbourne, 1910. Price, \$2.25. Toronto: D. T. McAinsh & Co.

This is a thoroughly trustworthy text-book on Chemistry. It is well printed, on good paper, and of neat size. It will be found to be a very suitable book for the student of medicine.

INTERNAL SECRETIONS.

A Study from the Physiological and Therapeutical Standpoint. By Isaac Ott, A.M., M.D., Professor of Physiology in the Medico-Chirurgical College of Philadelphia; ex-Fellow in Biology, Johns Hopkins University; Consulting Neurologist, Norristown Asylum, Pa.; ex-President, American Neurological Association; Member of Society for Experimental Biology and Medicine. E. D. Vogel, Bookseller, Easton, Pa. Price, \$1.00.

This little volume contains three lectures, on the parathyroid, the pituitary, and the correlation of the glands with an internal secretion. It is a very readable and interesting little book. The author gathers up all that is known on the topics discussed in these lectures.

THE PREVENTION OF SEXUAL DISEASES.

By Victor G. Vecki, M.D., ex-President San Francisco German Medical Society; Member American Biological Association; American Medical Association; California State Medical Society, etc., with introduction by William J. Robinson, M.D. The Critic and Guide Company, 12 Mt. Morris Park, West, New York, 1910. Price, \$1.50.

This small volume of 130 pages is full of many valuable suggestions. The author opens with a chapter in "The Reality of the Venereal Peril." In this chapter he deals with the financial loss caused by venereal diseases. He discusses the evils that arise from ignorance, and makes the statement that there are five million syphilitics in the United States. The author contends that there is no one safe. He there takes up the venereal diseases, the non-contagious and the contagious. The contagious diseases are chancroid, gonorrhoea and syphilis. As a means of controlling the evils of these diseases, supervision is strongly urged. He contends that raiding houses only scatters the infection; and holds that it

would be far better to have houses freed from the fear of police raidings, and under supervision. This would do much to limit the spread of these diseases. Laws should be passed making it unlawful to procure a marriage license if the party has any form of contagious disease. Such a law exists in North Dakota. The persons wishing to be married must pass a bond of three medical men. Further, the state should enforce instruction on venereal diseases. The author speaks out very strongly against compulsory notification of these cases, but he holds that every physician should be an educator among his patients. A good deal is said on the methods of preventing these diseases by those who indulge in promiscuous intercourse. Cleanliness is one of these. The washing of the parts with some silver salt in solution, and for syphilis, the application of a 30 per cent. calomel ointment. The work gives out much useful information.

PROGRESSIVE MEDICINE.

A Quarterly Digest of Advances, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by H. A. Hare, M.D., and S. F. Appleman, M.D. December, 1910. Lea & Febiger, Philadelphia and New York. Per annum, \$6.

In this volume we find articles on the digestive tract by R. S. Laven-son, on diseases of the kidneys by John Rose Bradford, on surgery of the extremities, shock, etc., by Joseph C. Bloodgood, on genito-urinary diseases by W. T. Belfield, and on therapeutic referendum by H. R. M. Landis. These articles are the very best possible, and will repay the most careful study.

MEDICAL, CHAOS AND CRIME.

By Norman Barnesley, M.D. Mitchell Kennerley: London and New York, 1910. Price, \$2.00.

In this book the author makes a very vigorous attack upon many of the abuses that exist in the medical profession. The profession is noble or ignoble as it is made to serve devoting and curative ends, or to serve the ends of greed and crime. The author has a good deal to say, and he says it with much vigor, upon graft, bad ethics, quackery, the untrained surgeon, crimes against posterity, etc. There is a considerable amount of plain talk in this book. From the reading of it one would think that the medical profession in the United States is drifting rather rapidly into a state of commercialism. Should this ever come to be the rule of the day, the glory of the medical profession will have departed. Against those gynaecologists who operate upon women,

because certain operations can be done, and reasonably safe, and yield good fees, the author is specially severe. He mentions the case of a wealthy lady who had both ovaries removed for pains in her legs and pelvis. She paid \$2,000 for the operation. The real trouble was flat-foot. The book throughout contains much plain talk and must do much good. It is certainly interesting and racy reading.

INDUSTRIAL DISEASES.

Publication No. 10, American Association for Labor Legislation. First National Conference on Industrial Diseases, Chicago, June 10, 1910. New York: American Association for Labor Legislation, Metropolitan Tower, 1 Madison Ave., 1910.

This small pamphlet of 52 pages contains a good deal of very useful information upon injurious effects of certain industries. Such topics as "The Importance of Industrial Hygiene," "Phosphorous Poisoning in the Manufacture of Nutches," "Occupation Diseases," "Lead Poisoning," and "The Extent of Industrial Diseases." The information is well arranged, and is bound to do much good. The distribution of such literature is of the utmost importance, and must lead to useful legislation.

BLAKISTON'S VISITING LIST.

The Physician's Visiting List for 1911. Published by P. Blakiston's Son & Co., Philadelphia.

With the present issue The Physician's Visiting List enters upon the 60th year of its existence. Only those publications of decided merit outlive the generation with which they were born and by far the larger number disappear after a few years of struggling existence. During the life of this book medical science has made greater progress than during the preceding five hundred years. It has been seen and used by the most famous of American physicians and investigators, as well as by thousands of others whose names perhaps were never known beyond their own local scenes, but who nevertheless have done a large share toward the total sum of human happiness. It has made long journeys in the buggy or saddle bags of the country doctor. It has been at the birth alongside the death-bed of rich and poor, famous and infamous alike. Its volumes hold the life records of numberless practitioners. It is needless to say that the publishers take great pride in its stability; that they recognize in its success an appreciation of sixty years of effort on their part to provide a useful book and that they realize the help and encouragement that has been given them by the profession for whom it is intended.

THE PHYSICIAN'S POCKET ACCOUNT BOOK.

By J. J. Taylor, M.D. 212 pages. Leather. Price, \$1.00 postpaid. J. J. Taylor, Publisher, 4105 Walnut St., Philadelphia, Pa.

The especial feature of this book is a system of accounts whereby each transaction can be recorded in a moment's time in plain language, so that it is strictly legal as evidence in court without personal explanation, and so arranged that any patron's account can be ascertained on demand without any posting. There is only one entry of each transaction, and this in such a form that no posting is ever required. It saves time, labor and worry, and insures that your accounts are always up to date, so that you can send statements out every month without any delay and can inform any patron, wherever you may meet him, of the exact state of his account. The book also has some easy and practical directions for billing and collecting, some excellent business and legal hints, some valuable forms for emergency use, such as "dying declarations," "form for wills," etc., an average medical and surgical fee bill, besides miscellaneous tables, clinical directions, etc. Having a good cash account department and various clinical records—vaccinations, deaths and confinements—it forms a complete year book for the physician's pocket.

ASHHURST ON FRACTURES OF THE ELBOW.

By Astley P. C. Ashhurst, M.D., of the Medical Department, University of Pennsylvania. Imperial octavo, 183 pages, with 150 illustrations. Cloth, \$2.75 net. Lea & Febiger: Philadelphia and New York, 1910.

The skiagraph plays an important part in the illustrations in this work. The true relationships of the parts are now revealed in a way that was impossible a few years ago. This is a most valuable contribution to surgical literature.

To the author of this important monograph was recently awarded the Samuel D. Gross prize of the Philadelphia Academy of Surgery. The great surgeon who established this perpetual incentive to research stipulated that the "prize should be awarded every five years to the writer of the best original essay illustrative of some subject in surgical pathology or practical surgery." This limitation to practical subjects ensures wide interest in the resulting monographs, and the substantial amount of the prize attracts many competitors, so that the award commends the successful work in advance to the attention of the profession. Already distinguished as a surgeon, Dr. Ashhurst has chosen a frequent injury, often complicated and difficult to treat and hitherto comparatively neglected, namely, fractures of the elbow. He has thrown new light upon the diagnosis and management of this lesion, and has presented many effective illustrations.

ONTARIO BOARD OF HEALTH.

The Twenty-eighth Annual Report of the Provincial Board of Health of Ontario, 1909. Printed by order of the Legislative Assembly, Toronto.

This annual report contains much information regarding the health of the Province and the work of the Provincial Board of Health in its efforts to promote public health matters. It should be carefully read, and not, as is too often the case, thrown aside as a parliamentary publication of no value. This report is of special value.

SOME PHYSIOLOGICAL HINTS.

This is a pamphlet issued by the proprietors of the Fellow's Compound Syrup of Hypophosphites. It contains a considerable amount of useful information on absorption and elimination, incompatibility, diuretics, cathartics, symptoms of overdosage, etc.

INFANT MORTALITY.

This pamphlet is from the pen of Dr. Helen MacMurchy, and is published by the Ontario Government. It contains much information upon the subject of Infant Mortality. The author has expended much labor in collecting the data requisite to make such a report of value, and deserves praise for that labor. The total births in Ontario in 1907 were 53,584. Of these 8,041 died during the first year, or at the rate of 150 per 1,000 births. This is too high for a young and healthy province. The report points out how this death rate may be reduced.

NEW JERSEY STATE BOARD OF HEALTH.

The report for 1909 is before us. As usual this report is full of valuable statistics and useful suggestions. The death rate in 1908, among the white people was 15.23 per 1,000; but among the colored people it has 22.04. The total births for the same year were 47,405, and the number of deaths, under one year, was 5,168. This gives a rate of 109 per 1,000 births. This is very much better than in Ontario.

 OBITUARY.

WM. C. VAN BUSKIRK, M.D.

Dr. William C. VanBuskirk, the oldest physician in St. Thomas and in Western Ontario, died on 11th December, at his home there, aged 85 years. The deceased was born in New Brunswick of German parentage, and went to London, Ont., with his parents when a lad. He received his education there and finished his education as a physician by a long course in Paris, France, after which he settled at St. Thomas and practised there ever since. He was a former mayor of the city and always took a great interest in all civic improvements.

 S. MAUFETTE, M.D.

Dr. S. Maufette, of Montreal, died in the Hotel Dieu Hospital, as the result of a gunshot injury. He was in his 32nd year.

 E. H. DELLABOUGH, M.D.

Dr. Dellabough, of Hamilton, died recently at the age of 76.

 AUGUSTINE GANDIER, M.D.

Dr. Augustine Gandier, a well-known physician of Sherbrooke, Que., died 15th December, 1910. He was 44 years of age, and a son of Rev. Joseph Gandier, of Newbury, Ont., and a brother of Principal Gandier, of Knox College. He was educated at Queen's University, and had a large clientèle. He was very popular with all classes.

 MEDICAL PREPARATIONS, ETC.

INFLUENZA—PERTINENT THOUGHTS.

With each succeeding visitation of this trouble, we have found it more and more necessary to watch out for the disease in disguise, and to treat

these abnormal manifestations; consequently we have relied upon mild nerve sedatives, anodynes and heart sustainers, rather than upon any specific line of treatment. Most cases will improve by being made to rest in bed and encouraging action of skin and kidneys with possibly minute doses of blue pill or calomel. We have found much benefit from the use of antikamnia and codeine tablets in the stage of pyrexia and muscular painfulness and as a sedative to the respiratory centres. In the treatment of influenza or la grippe and its sequelae, its value is highly esteemed. In diseases of the respiratory organs following an attack of la grippe, pain and cough are the symptoms which especially call for something to relieve. This combination meets these symptoms, and in addition, controls the violent movements accompanying the cough. To administer these tablets in the above conditions, place one tablet in the mouth, allowing it to dissolve slowly, swallowing the saliva.

THE FOOD VALUE OF BOVRIL.

There have been doubts as to the food value of extract of meat, and the question has been answered in the negative by perhaps the majority of the medical profession, but the question as to whether bovril has not a right to be placed in a special class was raised by professor W. H. Thompson, at the School of Physiology, Trinity College, Dublin, and the following is the report of the experiments made during the past year and communicated to the British Association, Sheffield. (See "Times" report, Sept. 3rd.) This has created considerable interest among the medical profession.

"In order to secure a decisive test, dogs were first brought to a constant weight on dried dog biscuit mixed with known quantities of water. Bovril—from $2\frac{1}{2}$ to $7\frac{1}{2}$ grammes—was then added to the food, with the result that the weight of the animals went up as much as 50 to 100 grammes, or, in round numbers, 10 to 20 times the weight of the bovril given.

Afterwards bovril was discontinued, and the animals fell back to the original weight. Compared with the effect of hard-boiled white of egg, it was found that from 8 to 10 times as much by weight of the latter had to be given to obtain the same increase in weight, or, taking the dried organic solids in the two foods, from $2\frac{1}{2}$ to 4 times as much egg white had to be given to obtain the bovril effect.

In several of the experiments there was a retention of reserve nitrogen, and in all an increased utilisation of other foods.

It was therefore concluded that bovril had both a direct and an indirect nutritive value, the latter by causing a more complete digestion and absorption of the other food given."

Walkerville, Ont., Dec. 22, 1910.

Editor, Canada Lancet,

15 Wellington St. East, Toronto, Ont.

Dear Sir:—We ask your kind assistance in the way of disposing of a false impression which may have been created in the minds of your readers by wholly erroneous reports which have appeared in the *Montreal Star* (December 17), the *Toronto Globe*, the *Toronto Star*, and the *Toronto News* (December 15).

All four of the papers mentioned, made the picturesque announcement that we had just declared a cash dividend of 15 per cent, and that, in addition thereto, we had paid during 1910, 30 per cent. This is perfectly ridiculous. During 1910 we paid exactly the same dividend that we declared in 1909, namely, $12\frac{1}{2}$ per cent. of the par value of the stock, plus an extra dividend of $2\frac{1}{2}$ per cent. That is all there is to it. In other words, we are paying for 1910, 15 per cent., instead of $12\frac{1}{2}$ per cent. There is no "melon" in the case. Would that there were.

The purchaser of our stock at present market prices receives a return of less than 4 per cent. on his investment. Why an industrial stock—and as you know, "industrials" are by no means the pets of prospective investors—should command a selling price so much above its par value, may be explained by reasons which are perfectly familiar to those who have employed our products: modesty forbids us to recite them.

Very truly yours,

PARKE, DAVIS & CO.

Wm. M. Grant, Manager.

SURGICAL SUGGESTIONS.

Every patient for a major operation should be considered a "bleeder" and given 15 grains of calcium lactate t.i.d. for four days previous to the operation.

W. H. Hutchings, Detroit, now immunizes his patients by injecting doses of polyvalent vaccines before operating, thus precluding the possibility of an infection.

A simple appendicitis would not be allowed to become gangrenous if the blood were examined in each case to determine the presence of leucocytosis. The test is invaluable. Far better than bichloride of mercury as a germicide on the field of operation is iodine, which is much more penetrating and many times more prompt in its action.