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Original Communications.

CONSTANT GALVANIC CURRENT IN GYNECOLOGY.

RESUME OF A PAPER READ BY DR. APOSTOLI BEFORE THE INTERNATIONAL MEDICAL CONGRESS AT BERLIN, AUGUST, 1890.

[Communicated specially to the CANADA MEDICAL RECORD. Translated by Dr. Lapthorn Smith.]

First. The constant galvanic current finds its principal specialty in gynecology, in endoinetritis and fibroids. Sovereign against troubles of the circulation and pain (amenorrhœa, dismenorrhœa and metronhagia) it is a valuable assistant for arresting the progress of benign tumors and for helping to absorb peri-uterine exudations; it exercises a very beneficial resolvent action in many peri-uterine phlegmasias and in certain cases of catarrhal salpingo ovaritis; but it is insufficient and even injurious in large doses, especially if the intrauterine pole is negative, for suppurating inflammation of the appendages. Its varying intolerance, which increases with the inflammatory condition of the appendages, should serve as a variable means of diagnosis, pointing towards the existence, and explaining the nature of collections of fluid, either bloody or purulent, about the uterus, which may be unsuspected or only sus-

pected, and should serve to hasten in such cases, a surgical operation, which may have been put off or refused.

Second. The effects of the constant galvanic current are polar and intra-polar.

The intra-polar trophic and dynamic effect, which increases in proportion to the square of the intensity, is superadded to the polar action. The latter utilizes each pole for a different purpose. Apostoli discovered the heating effect, afterwards developed by the passage of the current (which increases the interstitial circulation), and finally the antiseptic action of the positive pole, of which Apostoli and La Guerriere have each just recently made an experimental demonstration:

Third. High galvanic applications employed in a varying manner, from 50 milliamperes in strength, according to the tolerance of the patients, and the varying clinical indications form the fundamental base of Apostoli's method, and find their justification.

- (a). First, by utilizing circulatory drainage, which is the direct consequence of the calorific action due to the resistance offered to the passage of the current, and which is in proportion to the square of the intensity.
- (b) In the antiseptic or microbe-killing action which increases with the intensity.
- (c) In the rapidity and efficacy of the

effects which it produces, and which are in proportion to the square of the electrical energy, according to the analogous formula for the measurement of the energy of other natural forces.

- (d) In the more easy generalization of the method in rebellious cases (hard and sub-peritoneal fibroids, fungus endometritis etc.,) and for young women.
- (e) In the avoidance of relapses, which, other things being equal, will be so much the less to be feared, as we have made the applications more intense.

Fourth. If the vaginal application of the galvanic current (which is the method invented by M. Caron for fibroids, only applied since by A. Martin, Onimus, Charpentier, Mundeé, etc.,) does give any results, they are very much less than those following intra-uterine applications, which should always be the method of choice.

- (a) Because it utilizes to the greatest extent the maximum of the current and of its energy.
- (b) Because it utilizes the anti-septic action of the positive pole which is altogether local, and which is extinguished in the intra-polar circuit and at the level of the negative pole.
- (c) Because it brings into action the derivative and caustic effect of the intrauterine application, treating thus at one stroke, either mere metritis or endometritis, which is so often the complication both of fibroids and peri-uterine inflammation, and assuring in this manner a more rapid, more complete and more permanent cure, because it allows better than vaginal application, of diminishing pain and of rendering high doses more bearable, and because it ensures a greater efficiency in rendering possible an increase of the intensity applied—the bloody flow which it brings on.

Fifth. Vaginal galvano punctures made a few millimetres in depth (two to five) by means of a filiform trocar made of gold, and insulated all of its extent except the point,

form, sometimes, a very valuable part of the intra-uterine therapeutics created by Apostoli:

(a) In better localizing the galvanic action, and (b) in rendering more efficient in certain cases the application of small or medium doses.

Sixth. The harmlessness of his intra-uterine therapeutics is proved, first by the parallel harmlessness of the chemical or bloody methods of intra-uterine curetting, and especially by the figures collected throughout the world and by his own experience from July, 1882, to July, 1890, he has made 11,499 galvanic applications, divided as follows:—8,177 positive intra-uterine galvano cauterizations, 2,486 negative intrauterine galvano cauterizations, 222 positive vaginal galvano punctures, 614 negative vaginal galvano punctures. He has treated 912 patients, composed of 581 fibroids, 133 simple endometritis, 248 cases of endometritis complicated with peri-uterine inflammation, which may be divided as follows: at the clinic-313 fibroids, 70 simple endometritis, 163 endometritis complicated with peri-uterine inflammation. At his office or in the city: 218 fibroids, 63 simple endometritis, 35 complicated endometritis. has had three deaths due to operative mistakes (two galvano punctures, of which one was for a subperitoneal fibroid, and the other for salpingo ovaritis, and the third, a galvano cauterization of an ovarian cyst, which was mistaken for a fibroid.) He has seen thirty cases of pregnancy following the intra-uterine applications of galvanism.

A FURTHER COMMUNICATION ON A CURE FOR TUBERCULOSIS.*

By Professor Robert Koch, M.D., of Berlin.

In an address delivered before the International Medical Congress I mentioned a remedy which conferred on the animals experimented upon an immunity against innoculation with the tubercle bacillus, and

^{*} Translated from the original article published in the Deutsche medicinische Wochenschrift, November 14th, 1890.

which arrested tuberculous disease. tigations have now been carried out on human patients, and these form the subject of the following observations. originally my intention to complete the research, and especially to gain sufficient experience regarding the application of the remedy in practice, and its production on a large scale before publishing anything on the subject; but in spite of all precautions, so many accounts have reached the public, and in such an exaggerated and distorted form, that it seems imperative, in order to prevent false impressions, to give at once a review of the position of the subject at the present stage of the inquiry. It is true that this review can, under these circumstances, be only brief, and must leave open many important questions.

The investigations have been carried on under my direction by Dr. A Libbertz and Stabsarzt Dr. E. Pfuhl, and are still in progress. Patients were placed at my disposal by Professor Brieger, from his polyclinic; Dr. W. Levy, from his private surgical clinic; Geheimrath Drs. Fantzel and Oberstabsarzt Kohler, from the Charite Hospital; and Geheimrath v. Bergmann, from the surgical clinic of the University. I wish to express my thanks to these gentlemen.

As regards the origin and the preparation of the remedy, I am unable to make any statement, as my research is not yet concluded. I reserve this for a future communication.*

The remedy is a brownish, transparent liquid, which does not require special care to prevent decomposition. For use, this fluid must be more or less diluted, and the dilutions are liable to undergo decomposition if prepared with distilled water. As bacterial growths soon develop in them

they become turbid, and are then unfit for use. To prevent this, the diluted liquid must be sterilized by heat and preserved under a cotton-wool stopper, or, more conveniently, prepared with a one half per cent. solution of phenol.

It would seem, however, that the effect is weakened both by frequent heating and by mixture with phenol solution, and I have therefore always made use of a freshlyprepared solution. Introduced into the stomach the remedy has no effect. In order to obtain a reliable effect it must be injected subcutaneously, and for this purpose we have exclusively used the small syringe suggested by me for bacteriological work. It is furnished with a small India-rubber ball and has no piston. This syringe can easily be kept aseptic by the use of absolute alcohol, and to this we attribute the fact that not a single abscess has been observed in the course of more than a thousand subcutaneous injections.

The place chosen for the injection, after several trials of other places, was the skin of the back between the shoulder-blades and the lumbar region, because here the injection led to the least local reactiongenerally none at all, and was almost painless. As regards the effect of the remedy on the human patient, it was clear from the beginning of the research that in one very important particular the human being reacts to the remedy differently from the animal generally used in experiments, namely, the guinea-pig. A new proof for the experimenter of the all-important law that experiment on animals is not conclusive for the human patient proved extraordinarily more sensitive than the guinea-pig. As regards the effect of the remedy, a healthy guinea-pig will bear a subcutaneous injection of 2 cubic centimetres, and even more, of the liquid without being sensibly affected; but in the case of a full-grown healthy man 0.25 cubic centimetre suffices to produce an intense effect. Calculated by the body-weight, one-fifteen-thousandth

^{*} Doctors wishing to make investigations with the remedy at present, can obtain it from Dr. A. Libbertz, Lueneburger Strasse, 28, Berlin, N. W., who has undertaken the preparation of the remedy with my own and Dr. Pfuhl's cooperation, but I must remark that the quantity prepared at present is but small, and that larger quantities will not be obtainable for some weeks.

part of the quantity which has no appreciable effect on the guinea-pig acts powerfully on the human being.

The symptoms arising from an injection of 0.25 cubic centimetre I have observed after an injection made in my owr upper arm. They were briefly as follows: three to four hours after the injection there came on pain in the limbs, fatigue, inclination to cough, difficulty of breathing, which speedily increased in the fifth hour, and were unsually violent. A chill followed, which lasted almost an hour. At the same time there were nausea, vomiting, and a rise of body temperature to 39.6° C.

After twelve hours all these symptoms abated, the temperature fell, and on the next day it was normal. A feeling of fatigue and pain in the limbs continued for a few days, and for exactly the same period of time the site of injection remained slightly painful and red. The smallest quantity of the remedy which will affect the healthy human being is about 0.01 cubic centimetre, equal to 1 cubic centimetre of the one-hundredth dilution. been proved by numerous experiments, when this dose is used reaction in most people shows itself only by slight pains in the limbs and transient fatigue. A few showed a rise of temperature to about 38° C.

Although the effect of the remedy in equal doses is very different in animals and in human beings, if calculated by body weight, in some other respects, there is much similarity in the symptoms produced, the most important of these resemblances being the specific action of the remedy on the tuberculous process, the varieties of which I will not here describe. make no further reference to its effects on animals, but I will at once turn to its extraordinary action on tuberculosis in human beings. The healthy human being reacts either not at all, or scarcely at all, as we have seen, when 0.01 cubic centimetre is used. The same holds good with regard to patients suffering from diseases other than

tuberculosis, as repeated experiments have proved; but the case is very different when the disease is tuberculosis. A dose of 0.01 cubic centimetre injected subcutaneously into tuberculous patients causes a severe general reaction as well as a local one.

I gave children aged from two to six years one-tenth of this dose, that is to say. 0.001 cubic centimetre—very delicate children only 0.0005 cubic centimetre-and obtained powerful, but in no way dangerous, reaction. The general reaction consists in an attack of fever, which usually begins with rigors, and raises the temperature above 39°, often up to 40°, and even 41° C. This is accompanied by pain in the limbs, coughing, great fatigue, and often sickness and vomiting. In several cases a slight icteroid discoloration was observed, and occasionally an eruption like measles on the chest and neck. The attack usually begins four to five hours, after the injection, and lasts from twelve to fifteen hours. casionally it begins later and then runs its course with less intensity.

The patients are very little affected by the attack, and as soon as it is over feel comparatively well, generally better than The local reaction can be best before. observed in cases in which the tuberculous affection is visible; for instance, in case of lupus, changes take place which show the specific anti-tuberculous action of the remedy to a most surprising degree. hours after an injection into the skin of the back—that is, in a spot far removed from the diseased area on the face or elsewhere the lupus begins to swell and to redden, and this it does generally before the initial rigor. During the fever the swelling and redness increase, and may finally reach a high degree, so that the lupus-tissue becomes brownish and necrotic in places where the growth was sharply defined. We sometimes found a much swollen and brownish spot surrounded by a whitish edge almost one centimetre wide, which again was surround. ed by a broad band of bright red.

After the subsidence of the fever the swelling of the lupus-tissue gradually decreases and disappears in about two or three days. The lupus-spots themselves are then covered by a soft deposit, which filters outward and dries in the air. The growth then changes to a crust, which falls off after two or three weeks, and which-sometimes after only one injection-leaves a clean, red cicatrix behind. Generally, however, several injections are required for the complete removal of the lupus-tissue; but of this, more later on. I must mention as a point of special importance that the changes described are exactly confined to the parts of the skin affected with lupus. smallest nodules and those most deeply hidden in the lupus-tissue go through the process and become visible in consequence of the swelling and change of color, whilst the tissue itself in which the lupus-changes have entirely ceased remains unchanged. The observation of a lupus-case treated by the remedy is so instructive, and is necessarily so convincing, that those who wish to make a trial of the remedy should, if possible, begin with a case of lupus.

The specific action of the remedy in these cases is less striking, but is as perceptible to eye and touch as are the local reactions in cases of tuberculosis of the glands, bones joints, etc. In these cases swelling, increased sensibility, and redness of the superficial The reaction of the parts are observed. internal organs, especially of thelungs, is not at once apparent, unless the increased cough and expectoration of consumptive patients after the first injections be considered as pointing to a local reaction in these cases. The general reaction is dominant; nevertheless, we are justified in assuming that here, too, changes take place similar to those seen in lupus-cases. The symptoms of reaction above described occurred, without exception, in all cases in which a tuberculous process was present in the organism after the use of 0.01 cubic centimetre, and

remedy will, therefore, in the future, form an indispensable aid to diagnosis.

By its aid we shall be able to diagnose doubtful cases of phthisis; for instance, cases in which it is impossible to obtain certainty as to the nature of the disease by the discovery of bacilli or elastic fibres in the sputum or by physical examination. Affections of the glands, latent tuberculosis of bone doubtful cases of tuberculosis of the skin, and similar cases will be easily and with certainty recognized. In cases of tuberculosis of the lungs or joints which have been apparently cured we shall be able to make sure whether the disease has really finished its course, and whether there be still some diseased spots from which it might again arise as a flame from a spark hidden by ashes.

Of greater importance, however, than its diagnostic use, is the therapeutic effect of the remedy. In the description of the changes which a subcutaneous injection of the remedy produces in portions of the skin affected by lupus, I mentioned that after the subsidence of the swelling and decrease of the redness the lupus-tissue does not return to its original condition, but that it is destroyed to a great or less extent and disappears. Observation shows that in some parts this result is brought about by the diseased tissue becoming necrotic, even after but one sufficiently large injection, and at a later stage it is thrown off as a dead mass. In other parts a disappearance or, as it were, a necrosis of the tissue, seems to occur, and in such case the injection must be repeated to complete the cure.

The general reaction is dominant; nevertheless, we are justified in assuming that here, too, changes take place similar to those seen in lupus-cases. The symptoms of reaction above described occurred, without exception, in all cases in which a tuberculous process was present in the organism after the use of 0.01 cubic centimetre, and I think I am justified in saying that the

circulation, and, evidently, in connection therewith, deeply-seated changes in its nutrition which cause the tissue to die more or less quickly and deeply, according to the extent of the action of the remedy. To recapitulate, the remedy does not kill the tubercle bacilli but the tuberculous tissue, and this gives us clearly and definitely the limit that bounds the action of the remedy.

It can influence living tuberculous tissue only and has no effect on dead tissue; as, for instance, necrotic cheesy masses, necrotic bones, etc., nor has it any effect on tissues made necrotic by the remedy itself. such masses of dead tissue living tubercle bacilli may possibly still be present, and are either thrown off with the necrossed tissue, or may possibly enter the neighboring and still living tissue under certain circumstances of the therapeutic activity. If the remedy is to be rendered as fruitful as possible this peculiarity in its mode of action must be carefully observed. At first the living tuberculous tissue must be caused to undergo necrosis, and then everything must be done to remove the dead tissue as soon as possible, as, for instance, by surgical interference.

Where this is not possible, and where the organism is unassisted in throwing off the tissue slowly, the endangered living tissue must be protected from fresh incursions of the parasites by continuous applications of the remedy. The fact that the remedy makes tuberculous tissue necrotic and acts only on the living tissue, helps to explain another peculiar characteristic thereof, namely, that it can be given in rapidly increasing doses. At first sight, this phenomenon would seem to point to the establishment of tolerance, but since it is found that the dose can, in the course of about three weeks, be increased to five hundred times the original amount, tolerance can no longer be accepted as an explanation. As we know of nothing analogous to such a rapid and complete adaptation to an extremly active remedy, the phenomenon must

rather be explained in this way, that in the beginning of the treatment there is a good deal of tuberculous living tissue, and that consequently a small amount of the active principle suffices to cause a strong reaction, but by each injection a certain amount of the tissue capable of reacting disappears, and then larger doses are necessary to produce the same amount of reaction as before.

Within limits, a certain degree of habituation may be perceived as soon as the tuberculous patient has been treated with increasing doses, for so soon as the point is reached at which reaction is as feeble as that of a non-tuberculous patient, then it may be assumed that all tuberculous tissue is destroyed. Then the treatment will only have to be continued by slowly-increasing doses and with interruption in order that the patient may be protected from fresh infections while bacilli are still present in the organism, and whether this conception and the inference that follows from it be correct, the future must show. They were conclusive, as far as I am concerned, in determining the mode of treatment by the remedy which in our investigations was practised in the following manner. To begin with the simplest case—lupus.

In nearly every one of these cases I injected the full dose of 0.01 cubic centimetre from the first. I then allowed the reaction to come to an end, and then, after a week or two, again injected 0.01 cubic centimetre, continuing in the same way until the reaction became weaker and weaker, and then ceased. In two cases of facial lupus the lupus-spots were thus brought to complete cicatrization by three or four injections; the other lupus-cases improved in proportion to the duration of treatment.

All these patients had been sufferers for many years, having been previously treated unsuccessfully by various therapeutic methods. Glandular, bone, and joint tuberculosis was similarly treated, large doses at long intervals being made use of. The result was the same as in the lupus-cases—

namely, a speedy cure in recent and slight cases, slow improvement in severe cases.

The circumstances were somewhat different in phthisical patients, who constituted the largest number of our patients. Patients with decided pulmonary tuberculosis are much more sensitive to the remedy than those with surgical tuberculous affections.

We were obliged to diminish the dose for the phthisical patients, and found that they almost all reacted strongly to 0.002 cubic centimetre, and even to 0.001 cubic centi-From this first small dose it was possible to rise more or less quickly to the amount that is well borne by other patients. Our course was generally as follows: an injection of 0.001 cubic centimetre was first given to the phthisical patient, and from this a rise of temperature followed, the same dose being repeated once a day until no reaction could be observed. We then increased the dose to 0.002 cubic centimetre, until this was borne without reaction, and so on, increasing by 0.001, or at most 0.002 to 0.005 cubic centimetre.

This mild course seemed to be imperative in cases in which there was great debility. By this mode of treatment the patient can be brought to tolerate large doses of the remedy with scarcely a rise of temperature. But patients of greater strength were treated from the first partly with larger doses and partly with frequently repeated doses. Here it seemed that the beneficial results were more quickly obtained. The action of the remedy in cases of phthisis generally showed itself as follows: Cough and expectoration were generally increased a little after the first injection, then grew less and less, and in the most favorable cases entirely disappeared. The expectoration also lost its purulent character, and became mucous. As a rule, the number of bacilli decreased only when the expectoration began to present a mucous appearance. They then entirely disappeared, but were again observed occasionally until expectoration

night-sweats ceased, the patients' appearance improved, and they increased in weight within from four to six weeks.

Patients under treatment for the first stage of phthisis were freed from every symptom of disease and might be pronounced cured; patients with cavities not yet too highly developed improved considerably and were almost cured, and only in those whose lungs contained many large cavities could no improvement be proved. Objectively, even in these cases the expectoration decreased and the subjective condition improved. These experiences lead me to suppose that phthisis in the beginning can be cured with certainty by this remedy. This statement requires limitation in so far as at present no conclusive experiences can possibly be brought forward to prove whether the cure is lasting.

Relapses naturally may occur, but it can be assumed that they may be cured as easily and quickly as the first attack. other hand, it seems possible that, as in other infectious diseases, patients once cured may retain their immunity; but this, too, for the present, must remain an open ques-In part, this may be assumed for other cases, when not too far advanced; but patients with large cavities, who suffer from complications caused, for instance, by the incursion of other pus-forming microorganisms into the cavities or by incurable pathological changes in other organs will probably obtain lasting benefit from the remedy in only exceptional cases. Even such patients, however, were benefited for a time. This seems to prove that in their cases, too, the original tuberculous disease is influenced by the remedy in the same manner as in the other cases, but that we are unable to remove the necrotic masses of tissue with the secondary suppurative process.

only when the expectoration began to present a mucous appearance. They then entirely disappeared, but were again observed occasionally until expectoration completely ceased. Simultaneously the

tion for empyæma), or with other curative methods, and here I would earnestly warn people against conventional and indiscriminate application of the remedy in all cases of tuberculosis. The treatment will probably be quite simple in cases in which the beginning of phthisis and simple surgical cases are concerned, but in all other forms of tuberculosis medical art must have full sway by careful individualization and making use of all other auxiliary methods to assist the action of the remedy.

In many cases the decided impression was created that the careful nursing bestowed on the patient had a considerable influence on the result of the treatment, and I am in favor of applying the remedy in proper sanataria as opposed to treatment at home and in the out-patient room. far the methods of treatment already recognized as curative, such as mountain climate, fresh-air treatment, special diet, etc., may be profitably combined with the new treatment cannot yet be definitely stated, but I believe that these theraceutic methods will also be highly advantageous - when combined with the new treatment. In many cases, especially in the convalescent stage, as regards tuberculosis of the brain and larynx and miliary tuberculosis, we had too little material at our disposal to gain proper experience.

The most important point to be observed in the new treatment is its early application. The proper subjects for treatment are patients in the initial stage of phthisis, for in them the curative action can be most fully shown, and for this reason, too, it cannot be too seriously pointed out that practitioners must in the future be more then ever alive to the importance of diagnosing phthisis in as early a stage as possible. Up to the present time the proof of tubercle bacilli in the sputum was considered more as an interesting point of secondary importance, which, though it made diagnosis more certain, could not help the patient in any

way, and which, in consequence, was often neglected.

This I have lately repeatedly had occasion to observe in numerous cases of phthisis, which had generally gone through the hands of several doctors without any examination of the sputum having been made. In the future this must be changed. A doctor who shall neglect to diagnose phthisis in its earliest stage by all methods at his command, especially by examining the sputum, will be guilty of the most serious neglect of his patient, whose life may depend upon the early application of the specific treatment. In consequence, in doubtful cases, medical practitioners must make sure of the presence or absence of tuberculosis, and then only will the new therapeutic method become a blessing to suffering humanity, when all cases of tuberculosis are treated in their earliest stage, and we no longer meet with neglected serious cases forming an inextinguisable source of fresh infections. Finally, I would remark, that I have purposely omitted statistical accounts and descriptions of individual cases, because the medical men who furnished us with patients for our investigations have themselves decided to publish the description of their cases, and I wished my account to be as objective as possible, leaving to them all that is purely personal.—Medical News.

TREATMENT OF COLD ABSCESS AND OF TUBERCULOUS ABSCESS ABOUT JOINTS.

Dr. Burns injects iodoform in solvion of olive oil in preference to ether or glycerine. He believes this treatment to be beneficial beyond doubt, having cured ten cases of spinal abscess, some of them containing from 1 to 2 litres of pus. Treatment takes from 8 weeks to 4 months before the cavity contracts. Some of his cases have been under observation for 4 years, without return of the disease. He believes that the iodoform causes the bacilli in the walls of the abscess to disappear and thus checks the cell proliferation, allowing a fibrous contraction—Annals d'Orthopédie

Society Proceedings.

MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.

First Regular Meeting on Friday, October 3rd.

DR. FRANCIS J. SHEPHERD, PRESIDENT, IN THE CHAIR.

Present:—Drs. Molson, Proudfoot, Alloway, Wesley Mills, Harry Bell, James Bell, Hutcheson (Cote St. Antoine), George Brown, Reed, DeCow, Blackader, A. D. MacDonald, McCarthy, Schmidt, Birkett, Jack, Hamilton, Smith, Armstrong, Evans, England, Lapthorn Smith, James Stewart, J. A. McDonald, Rodger, W. Gardner, Roddick, Ruttan, Alex. Gardner, Wyatt Johnson.

Dr. Johnson exhibited a well marked specimen of carcinoma of the stomach, with specimens also of the liver which was infiltrated with the The man had been addicted to drink for many years. Dr. Molson gave a history of the case from the time he came under his care until his death. He said that the case had not been diagnosed during life. The symptoms were loss of appetite, weakness, which had lasted for nine months. About four months ago he began vomiting after eating, and the vomiting relieved the pain. There was no dilatation of the stomach. Towards the last, the cachectic appearance became marked. When he came to the hospital, the most pronounced symptom was diarrhea, for which he was treated with aromatic sulphuric acid and opium, which only relieved it for the time. Bi-carbonate of soda was then tried, which was also ineffectual. The vomiting was entirely relieved by small doses of cocaine.

Epithelioma of the tongue was then exhibited by Dr. Bell, who had removed it from a man 64 years of age, who had been sent into the hospital from the country by Dr. MacDonald, who said that the man had been ill for nine months, but the patient himself thought his illness only dated a few weeks back. It was in a horrible condition, probably owing to his having been in the hands of quacks who had possibly employed caustics. The tongue was removed as far as its base, on the 22nd of August, by Symes' method, which consists in sawing through the symphysis of the jaw and removing the whole floor of the mouth and the glands lying therein. A drainage tube was in-serted. No food was given by the mouth, being fed by enema. After that he tried to swallow, but was unable to do so, and he was therefore fed by stomach tube. For five weeks after the operation he seemed very well, his only complaint being that he was always hungry. After that, he began to get weak. 48

days after the operation he died. At the post mortem, one of the lungs was found to be gangrenous at its apex. Dr. Bell was unable to say what was the cause of his death, and the gangrene of the lung, if it had happened immediately after the operation, he would have put it down to the inspiration of discharges, but as it had only come on after handing over the feeding to the charge of the nurses or under nurses, he thought it was due to allowing the food to get into the bronchial tubes. Dr. Mills thought it worth while to inquire whether the gangrene was not rather due to some injury of the pneumogastric norve, which is known to be a common factor of gangrene of the lungs. Dr. Johnson thought the man died of septicæmia, and that he was in a more septic condition than his appearance led his attendants to suspect. Dr. Shepherd thought that this operation was the most successful he had ever seen, and was surprised to hear that the patient had died. He was much pleased with the operation, and was astonished to find how easily hemorrhage was controlled by picking up the arteries as they were cut. He was in the habit of employing another method, namely, tying the lingual arteries, and then removing the tongue. mentioned a case of his own in which a man had died with gangrene of the lung after removal of the tongue, but he thought it was due to erysipelas which had developed.

Dr. Bell also related a case of, and showed specimens from a man who had a stricture of the urethra which had been relieved many times by dilatation. After a time he had neglected it and began to have pus in his urine and febrile symptoms. Thinking it possible he might have stone in the kidneys, Dr. Bell cut down upon it, and explored it, but could find nothing. He died a week later, and at the post mortem the source of the pus was found to be an abscess in the wall of the bladder.

Dr. Shepherd related a similar case of a man upon whom he had performed rapid dilatation, and who had returned a month later in a septic condition. As he was in a very bad state, he decided to leave him alone, and he died in two weeks.

Dr. Johnson then showed specimen of fibroid heart

Dr. W. Gardner then showed a specimen and read a report on a case of ruptured tubal foctation, in which he had successfully removed the ruptured tube. Dr. Gurd had sent for him two weeks ago to see a lady 26 years of age, more than eight years married, with three living children at full time, the last of which was two and a half years of age, in whom Dr. Gurd believed there was extra uterine fectation. She last menstruated on June 20th. She felt sure that she was pregnant, because she was in the habit of vomiting every day during the first month, which she did in this case. Two weeks

ago while driving over a rough road, she was taken with sudden pain and vomiting and fainted. She recovered from this, but a few days later was taken with another attack. examining her, a large mass was found completely filling up the pelvis and pushing the uterus forward against the symphysis pubis. There was also constant but slight bleeding from the uterus. He saw her a week later when the mass was considerably increased; so an operation having been decided upon, the abdomen was opened, and the omentum was found adhered to the parietes. The large mass was found to consist of blood clot, when the left tube was discovered very much enlarged and ruptured. Although there was a distinct chorion there was no feetus which he expected to find. This was, however, probably absorbed. showed specimen of a complete cast of the uterus, which was a decidua vera which came from a lady who had missed two periods, and who, while out walking, was seized with pain and vomiting, exactly the same as in the previous case. On examination a mass was found which was probably an extra-uterine feetation, which will probably require operation.

Dr. Johnson exhibited microscopic sections

of the chorian

Dr. L. Smith congratulated Dr. Gurd upor having made the diagnosis, and Dr. Gardner upon so promptly taking action and saving this patient's life. He thought it wonderful to think that this condition had been recognized and remedied, when so many women have died without even the cause of their death being known. He would like to see this case reported and brought to the notice of every practitioner throughout the country, so that they might have such a possibility in their mind, which was a great step towards recogniz ing it. This was proved by the fact that when this case was diagnosed it was by doctors in cities who had opportunities of hearing about them. He had no doubt that many women die every year from rupture of a tube without the cause of death ever being suspected. For his work on this subject alone, Lawson Tait had earned the gratitude of the profession and humanity.

Dr. Molson showed a patient with anchylosis of the spine and read a history of the case. Dr. Roddick and Dr. Rodger, who knew something of the circumstances of the patient, he having been in the penitentiary, thought it was a case of malingering. Dr. Smith thought as the man had had rheumatism, that it might really be a case of chronic rheumatic arthritis of the vertebral joints. Dr. G. Brown had seen a case of anchylosis of all the joints, following rheumatism. Dr. Shepherd thought it strange that only the vertebral articulations should be affected. Dr. Birkett drew attention to the point that the muscles of the back were fairly

well developed instead of being atrophied, as they would be if never used.

Dr. Armstrong, the retiring president, then read the annual address, in which he called attention to the large amount and high character of the work done during the past year. There had been nineteen meetings held, at which the average attendance was 261; the largest attendance being 42 out of a total membership of There were four new members elected as against four new members last year. There had been no deaths in the ranks. He then classified the papers and pathological specimens under headings of surgery, medicine, gynecology, &c., giving each of the readers of papers, and exhibitors of specimens credit for their work. The financial condition was good, and steps have been taken to make the rooms still more attractive.

A vote of thanks was proposed by Drs. Roddick and Rodger.

After the proposition of Dr. F. E. Thomson for membership, the meeting adjourned.

Stated Meeting, October 24th, 1890.

F. J. SHEPHERD, M. D., PRESIDENT, IN THE CHAIR.

Diffuse Cancer of the Stomach.—Dr. Johnston, who exhibited this specimen, made the

following remarks:-

"The stomach is extremely small, its length, from fundus to pylorus being only four inches. The wall is greatly thickened, measuring fiveeights of an inch in most places. It is firm and hard, with somewhat translucent appearance on section. All its coats are greatly thickened, and the stomach is converted into a narrow tube with firm, inelastic walls which do not collapse. Internally, an ulcer is seen just below the orifice of the esophagus; its edges are slightly raised. A few other small superficial ulcers are seen along the greater curvature. Pyloric ring firm and rigid; admits the little finger. About the stomach firm fibrous adhesions exist binding it to the omentum, and there is some fibrous thickening between the stomach and pancreas. There is a single, small, firm, white nodule, size of a pea, in the upper surface of the right lobe of the liver. There is no enlargement of the epigistric or portal glands. The microscope shows great proliferation of the deeper cells of the mucosa. The muscular coat is uniformly infiltrated with solid masses of small epithelial cells, which fill all the lymph vessels between the muscle bundles. Many of these cells have undergone colloid change. The nodule in the liver has the typical appearance of a scirrhus, the cells being very scanty. This form occurs in about ten per cent. of all cases of gastric cancer. Many of the cases described as gastric cirrhosis are really cancerous."

Dr. Molson stated that the patient, a woman 58 years of age, had been admitted to the hospital in June last, complaining of weakness and loss of appetite. Her illness had commenced four months previously, with vomiting and pain in the epigastrium. There was considerable emaciation and a somewhat cathectic appearance. The abdominal parietes were lax and shrunken. There was no tenderness nor distention of stomach, and no tumor could be felt. Patient became comatose, and died three and a half months from the date of her admission.

Epithelioma of the Tongue .- (From a case operated on by Dr. Bell.)-Dr. Johnston, who showed the specimen, said: The specimen shows the condition after complete amputation of the The stump is seen just in front of the epiglottis; it presents a number of small follicular ulcers, and a small sinus exists where a ligature has remained; but there is no return of the growth or deep ulceration. On the floor of the mouth another small ligature is seen. There is no appearance of secondary cancer in the neighboring parts. The inferior maxilla, which had been sawn through at the time of the operation, had not united, and each end was covered by granulations. There was gangrene of the lungs: a large cavity occupied nearly the entire left upper lobe posteriorly; it was lined with a firm, well-marked granulation membrane in most places. A smaller cavity, the size of an apple, was found in the same lobe. A number of small areas of pneumonia were found throughout both lungs, and in several of these the vessels were found thrombosed and the centres gangrenous. Nothing was found to The bronchial tubes explain this condition. were free from foreign bodies. No cancerous thrombi were found in the vessels.

From the same patient the heart was exhi-This showed a decided dilatation and hypertrophy of the left auricle; marked thickening in one of the segments of the mitral valve apparently producing moderate stenosis when the valves were in position, though, after opening, the circumference of the orifice was normal. At the apex there was a large fibrous area in the heart-wall involving the papillary muscles. The larger coronary arteries were very atheromatous their walls thickened and calcified. There was slight atheroma of the aorta. The wall of the left ventricle was thick; the muscle somewhat brown. The lungs were free from brown pigmentation or dilatation of the capil-

Dr. Jas. Bell narrated the history of this case. The patient was a man, aged 64, who presented very extensive infiltration and ulceration of the anterior half of the tongue and the floor of the mouth. History of two months standing, but from other and more reliable

seven months, and that the patient been treated with caustic applications. In the operation performed upon this patient, Dr. Bell had selected Syme's method of sawing through the inferior maxilla at its symphysis. The tongue and floor of the mouth were removed, and, besides, some glands which were infiltrated. The opposite sides of the bone were then brought together with strong silk, and the incision in the lower lip sutured with catgut. The patient was fed by nutrient enemata for fortyeight hours following the operation, when milk was introduced into the stomach by the esophageal tube. On the fifth day, beef tea and eggs were added; but owing to the patient's inability to swallow, the tube had to be used whenever food was administered. He had not a bad symptom, and did remarkably well for four weeks; he then began to grow weak and cough occasionally. Signs of disease in the lungs were now manifest at the apices, both in front and behind. patient gradually got worst and died on the forty-eighth day after the operation. Dr. Bell thought that the origin of the gangrene of the lungs might be ascribed to the entrance of food into the air-passages, either from the ineffectual efforts to make the patient swallow or else when using the esophageal tube which had been entrusted to the nurse.

Dr. Shepherd was present at the operation. He generally performed excision of the tongue after ligature of both linguals, but remarked that Syme's method, adopted by Dr. Bell in this case, proved very successful By the division of the lower jaw the whole of the diseased part was removed with great facility. As to the cause of the gangrene of the lungs, he could not say whether it were due to the insufflation of food or not. A patient from whom he had excised the tongue developed gangrene of the lungs three weeks after the operation, but in this case there was ervsipelas.

Dr. Mills, in referring to the probable cause of the gangrene of the lungs, remarked that after experimental operation in the lower animals, in which the vagi nerves had been cut, the animals died of pneumonia produced by insufflation of food. He suggested that the inflammation might be of purely nervous origin, and put forward the view of the possibility, of its being produced by some degeneration of the fibres of the vagus.

Suppurative Pyelo-Nephritis.—Dr. Shepherd related the following case: -A man, aged 33, of intemperate habits, had gonorrhea fourteen years ago, and shortly afterwards had difficulty in micturition, the stream gradually diminishing in size; he had suppression of urine in 1878, and had to be aspirated. He felt better for a year, when, owing to his intemperate habits, he again experienced difficulty in micturition, and from 1882 to 1884 he was sources it was found that the trouble had existed unable to fully empty his bladder. External

urethrotomy was performed in Glasgow in 1886, and for two years following he was free from the complaint. He applied to the out-door department of the General Hospital on the 28th of June, suffering from retention. It being impossible to pass a catheter, he was aspirated above the pubes. Dr. Shepherd afterwards succeeded in passing a small catgut bougie and then introduced sounds to number 7. days later sounds up to number 12 were passed. Patient afterwards felt better and was able to pass his urine quite freely, and left the hospital on July 4th. Three weeks afterwards he was re-admitted, complaining of frequency of micturition and pain in the right lumbar region, with passage of blood. The severity of the pain over the right kidney increased, extending along the course of the ureter and into the right The urine, which varied from 48 to 80 ounces in the twenty-four hours, was of a dark-brownish color, containing a considerable amount of pus and blood cells. The patient gradually sank, and died August 12th. perature never reached above 102°, and for six days previous to his death was subnormal.

Dr. Johnston, who exhibited the specimen, remarked that it showed a stricture just anterior to the bulbous urethra. There was no induration in the wall of the urethra. The kidneys showed slight dilatation of the pelves and calices. About the right kidney there was a large mass of dense fibrous tissue closely adherent to the capsule.

Ruptured Tubal Pregnancy. - Dr. Win. Gardner showed this specimen from a case in which he had opened the abdomen a week previously. Dr. Gurd, in whose practice the case occured, had correctly diagnosed the con-The patient, aged 26, married eight years, the mother of three full-grown children, the last over two years. Since then she had pelvic symptoms. She menstruated last on 20th June, and began to vomit a few days later, as in all her previous pregnancies, and was convinced that she was again pregnant. This continued until the 21st of September, when, during a rough drive, she was suddenly seized with intense abdominal pain accompanied by vomiting and a bloody discharge from the vagina. On getting home she fainted. pain was relieved in a few hours by full doses of morphia, and she got up in a day or two; but soon had recurrence of pain of the same character and intensity, which compelled her to lie in bed on her back. She was first seen by Dr. Gardner a week before operation; she looked blanched and anxious. The abdomen was somewhat distended in lower part by a fixed, tender mass. The uterus lay behind the pubes, pressed forward by a tender, elastic mass, fixing the roci if the vagina and filling the pelvis. A week later the symptoms and physical signs had all increased. She was operated upon on the 17th of October. On getting through the three years ago, with pain in the back of the

adherent omentum a mass of blood-clot was disclosed; this was scraped out and found to contain some decolorized blood. The right Fallopian tube was expanded to a mass of the size of a large hen's egg. This was tied and removed, the cavity washed out, and a large glass drainage tube carried to the floor of Douglas pouch. When put to bed, patient was very weak, with a pulse of 160, but rallied promptly, and is making an easy recovery.

Dr. Johnston, who had examined the specimen, submitted the following report: The specimen is about the size of an egg, and consists chiefly of firm, elastic, fibrinous material, which resembles partially decolorized and organizing blood-clot. It seems to contain numerous vessels. On placing it in water, a delicate fringe of minute villi covers nearly its whole surface. These show, under the microscope. the branched and clubbed appearance characteristic of chorionic villi: At one point a thick, flat, muscular band is attached to the mass, and appears to be part of the greatly thickened and dilated Fallopian tube. On section the innersurface appears to be for the most part a mixture of old and recent blood-clot and vascular tissue. Situated near the surface, at the end farthest from the attached bit of Fallopian tube, is a flattened cystic space the size of a pigeon's egg, lined with a delicate greyish-white, smooth membrane, evidently the amnion. At one point on this small, flattened projection is seen, apparently, the remains of the umbilical cord. No traces of the fœtus could be seen.

Dr. Gurd wished to remark that the patient had suffered from uncontrollable vomiting in her previous pregnancies, and in the present instance the vomiting had been very severe up to the time of the operation.

Lapthorn Smith congratulated Drs. Gardner and Gurd on the successful issue of this case. He said that in some of these cases of ruptured extra-uterine pregnancy the fœtus had been found in very unusual situations in the abdominal cavity.

Decidual Membrane. - Dr. Wm. Gardner exhibited a very interesting specimen of the decidual membrane which formed a perfect and complete cast of the cavity of the uterus. The patient had borne one child. She was comparatively well up to last week, when she was suddenly seized with vomiting and fainting. On examination, Dr. Gardner found physical signs somewhat similar to the case above mentioned. A week later the patient was seized with severe pain and the membrane expelled. He believed it to be without doubt a case of ectopic gestation. The patient was still under observation:

Anchylosis of the Spine. Dr. Molson brought hefore the Society a man, aged 30, apparently the subject of anthylosis of the spine. This was said to have begun suddenly

neck. The patient had had rheumatism eight years ago. There was no history of venereal disease, and nothing in the lamily history. On examination, the patient appeared fairly well nourished. There seemed to be some tenderness over the dorsal region. In all movements the spine appeared apparently fixed, but rotation and nodding movements of the head were retained to some extent.

Dr. Roddick believed the case to be one of malingering; as there was nothing in the personal history to produce such extreme anchylosis. He believed that under an anæsthetic motion would reappear in the now apparently

rigid spine.

Di Rodger agreed with Dr. Roddick, and considered these symptoms to be feigned.

Dr. G. A. Brown had met with a case hospital with anchylosis of spine, knee and hip The patient had been the subject gonorrhæal rheumatism.

Dr. James Bell thought that the case was one of real anchylosis, but would like to have a

closer examination of the case. Dr. Mills had noticed cases of spinal anchy-

losis in the lower animals.

Dr. DeCow would suggest the use of the actual cautery as a means to the diagnosis in this case.

Dr. Molson stated that the petient had been under close observation, but that he had never betrayed any signs of movement of the spine.

Dr. Birkett found the muscles too well developed for a patient the subject of a general

anchylosis of long standing.

Dr. Shepherd had examined the patient; he found no caries; muscles were in state of tension. He thought it was a case of malingering; the idea of which possibly originated in some slight rheumatic affection. He had seen cases of rheumatoid arthritis in which all the joints were involved. He noticed that there was movement of the axis and atlas, which seemed peculiar, considering that all the rest, of the spine appeared anchylosed.

THE PRESIDENT'S ADDRESS.

Dr. G. E. Armstrong, the retiring president, then read the following address:

Mr. President and Gentlemen,—In following

a time-honored custom of reviewing the work done by our Society during the past year, I wish to take the opportunity of thanking one and all for the courtesy shown to the chair during that period, and for the promptness with which you have come forward with pathological specimens, papers, and cases in practice. I have tried to do my best to make the meetings interesting and instructive, and I only hope that none are more conscious than the speaker of my shortcomings. The past year has been one of the Society's best. We have had 19 meetings terest, and Dr. Stewart exhibited a case of

as compared with 16 the year before, and the average attendance has also increased, being 26.4-25.5 being the average for the year before. The largest number at any one meeting was 42, and the smallest number 17. the year 1888-89 four new members joined the Society, and during the year 1889-90 eleven new members joined. Our total membership at the beginning of the year was 83, and at the close of the year 94. Death has not entered to claim any of our number during the year.

In looking over the work done during the year, its varied character is quite noticeable; subjects interesting to general practitioners and specialists also being taken up and discussed at

nearly every meeting.

Medicine. In medicine, Dr. Hutchinson related an interesting case in which delirium followed acute pneumonia, and of hysteria occuring during the course of rheumatism, presenting considerable difficulty in diagnosis. We had an interesting paper from Dr. McCarthy on the distribution of lesions in chronic phthisis. Dr. R. L. MacDonnell brought before the Society the results of his experience in one hundred cases of typhoid fever, of which he had carefully kept notes. This paper excited a very interesting discussion on many of the points worked out. Dr. MacDonnell also showed to the Society a case of Hodgkin's disease. Dr. Campbell, a case of pneumonia, in which symptoms were entirely objective. A paper on aneurysm of the arch of the aorta was read by Dr. MacDonnell and Dr. Major together. Dr. Major read an interesting paper on the use of hydrogen peroxide in diphtheria, speaking favorably of its action. At the same meeting Dr. Major read notes of two cases of deflection of nasal septum and their treatment.

Surgery.—In surgery, a paper on a case of appendicitis by Drs. Shepherd and MacDonnell, in which an operation saved the patient's life. Dr. Praeger of Nanaimo sent a paper on cholecystectomy, which was read by Dr. Shepherd. Dr. Bell exhibited a case of multiple fibroma of skin, and nævus with sarcoma of popliteal space. Dr. Roddick, an interesting case of fragilitas ossium and an interesting review of the subject. Dr. Bell, a case of talipes equino varus, upon which he had operated with good result two cases, one of genu valgum and one of genu varus, after operation, in which the result was very satisfactory, photographs of their condition before operation being also shown.

Midwifery.—In midwifery Dr. G. T. Ross presented a paper on missed abortion, which gave rise to a good deal of discussion. And a paper of more than ordinary interest from Drs. Cameron and Gardner on a case of labor obstructed by a large fibroid.

Neurology: -In neurology; Dr. Blackader read a paper on Friedrich's ataxia, of much inheimstrophy of the tongue, with left-sided facial paralysis and polyuria.

Skin Diseases .- Dr. Foley submitted a paper on the influence of clothing on diseases of the

Therapeutics.—Dr. Stewart, a paper detailing his experience in the use of exalgine in a large number of cases.

Gynæcology. —In gynæcology, Dr. Trenholme read a paper on hysterectomy for fibroid tumor of the uterus, relating nine cases which he had operated upon; and Dr. Gardner a paper on abdominal section in tubercular disease of peritoneum and uterine appendages, relating several cases of unusual interest. Dr. Alloway presented a paper upon twenty cases of Alexander's operation for retroversion, speaking favorably of the results obtained. Dr. Smith read a paper on five cases of laparotomy, drawing attention to several practical points connected with the details of the operation.

Ophthalmology. — Dr. Buller presented a patient from whom he had removed a tumor of the orbit which had surrounded the optic nerve.

I regret that the younger members of the Society have not taken a greater part in the discussion of these papers, and I think that they, as well as the Society, are the losers. One cannot begin to young to learn to express one's thoughts clearly and concisely. It would add much to the interest of our meetings if the younger members of the profession-would come forward and take an active part in the Society's

One of the most interesting and instructive sections of our work is the pathological, and it is a matter of mutual congratulation that there has been at nearly every meeting such an abundant supply of pathological specimens, abundant in quantity and variety. The Society is especially, and very greatly, indebted to Dr. Johnston for the attention that he has given to this department of our work, and for the able and clear demonstration of the specimens that have been exhibited. Among others we have had before us for examination a great number of fibroid growths, each one accompanied by a complete history. Dr. Gardner has shown several uterine fibroids successfully removed by him, also a fibro-cyst of uterus, an interstitial fibro-myoma of uterus, a myo-sarcoma of uterus, as well as a small multilocular cyst of evary and a cyst of the broad ligaments not involving the ovary, also a papilloma of ovary and specimen of extra-uterine fœtation with history. Dr. Shepherd, a fibro-cyst of ovary, which presented considerable difficulties in its removal, followed, fortunately, by a happy result. Dr. Trenholme, a parovarian retro-peritoneal cyst. Dr. Smith showed a fibro-cyst of uterus. Dr. Alloway, a large cystoma weighing 40 lbs, a blood cyst of ovary and a pyosalpinx, also a specimen of

ovary was shown by Dr. Armstroug. A number of vesical calculi have been exhibited. One by Dr. Bell, removed from a patient the subject of diabetes mellitus; a large vesical calculus weighing over five ounces, by Dr. Hingston, which he had removed by lateral lithotomy; one of pure cystine, removed by Dr. Roddick; and one by Dr. Gurd. A large gall-stone, which had given rise to symptoms of intestinal obstruction, was shown by Dr. Bell. Dr. Mills exhibited a triple phosphate calculus removed from urethra of a dog. Dr. Major showed to the Society a fine specimen of rhinolith which he had removed. Dr. Hutchinson, a piece of eggshell with an interesting history, tendencing to show that it had passed through the larynx of a young child, remaining in a bronchus for a few days, when it was coughed up. Dr. Johnston showed for Dr. Brown a tympanum, in which the roof had been perforated by chronic suppurative otitis media. Dr. Buller exhibited a tumor removed from the orbit which had been perforated by the optic nerve. Dr. Foley showed specimens from a case of trichorexis nodosa. Dr. Mills exhibited a very interesting instance of hermaphrodism in a pig. ample of necrosis of femur was shown by Dr. Hingston. A perforated appendix with fæcal concretion, removed by Dr. Shepherd, was shown and history given; another perforated appendix with fæcal concretion by Dr. Arm-Dr. Johnston showed two cases of elephantiasis of breast, one of them was sent by Dr. Gooding of Barbadoes. Dr. R. L. Mac-Donnell, an example of aneurism of descending aorta. A specimen of aneurism of thoracic aorta was shown by Dr. Johnston. Dr. Johnson also showed a specimen of embolism of abdominal aorta, as well as a specimen of thrombosis of left ventricle of heart, and another specimen of ruptured heart was shown by Dr. Johnston, and one of myocarditis by Dr. Hutchinson. Dr. Roddick exhibited tuberculous glands of neck; he removed thirty of these from one patient. Dr. Bell showed the urinary organs from a patient upon whom he had performed internal urethiotomy, the patient subsequently dying of tuberculous disease of the kidneys, also an example of sarcoma of foot, which Dr. Bell removed by a Syme. Dr. Springle showed the photograph of a child in whom there existed left-sided facial paralysis and hemiatrophy of the tongue, thought to be due to injury inflicted by forceps during delivery. Two stomachs perforated by ulcers were shown, one by Dr. DeCow and one by Dr. Armstrong. In addition, Dr. Johnston exhibited, among many others, intra capsular fracture of femur, fracture of left os. innominatum through acetabulum, with dislocation at sacro-illiac synchondrosis and dislocation at symphysis pubis, fatty heart, a heart infiltrated with adipose tissue, a case of intestinal obstruction in epithelioma of cervix. Another blood cyst of la child, of laceration of urethra, gunshot wound

of brain, lymphatic cystoma of broad ligament. Dr. Gurd presented a specimen of missed abortion, which was referred to a special committee for examination and report. Dr. England showed a retained abortion with a very complete history, which showed that it had been retained six months after probable time of death. Dr. Shipherd showed a kidney, removed post mortem, containing a calculus; five years before Dr. Shepherd had removed the other kidney for the same condition.

In conclusion, I may add that the financial condition of the Society is good, and that arrangements are completed to render our assembly room more inviting by adding a carpet, and a reading-room will be comfortably furnished where members may at any time spend an hour consulting the journals which the Society provides.

The growth of the Society, as shown not only by an increase in number of members, but the growth of individual interest, as shown by the increased average of attendance and the variety of subjects introduced for discussion, and the what to some has seemed at times to be an overstock of material, gave rise during the year to the question of the advisability of rearranging the order of work or of meeting oftener than once a fortnight.

In looking over the work done by the Society during the year, I think it will strike most of you that almost as much time has been given to pathology as to all other work together, and I think I voice the unanimous feeling of the members when I say that we don't want any less pathology. It is interesting and instructive, and, I believe, has done a very great deal to elevate the English portion of the profession in Montreal and the character of the work they de-It has made them better readers, better thinkers, and better observers. But perhaps I may be allowed to suggest that if the work becomes too great, and a subdivision is necessary, that it be made on a line that will divide the work only and not the members. If pathology, for example, was allowed to occupy the whole of one evening every member would attend, and alternate evenings could be devoted to the reading of papers, the relating of cases, and the discussion of them. I believe it to be to the advantage of all that the senior and junior membors meet together and work together. And that the specialists and psoudo-specialists and general practitioner meet together, that in their work they may be in touch and harmony.

I thank you once more for the high honor you conferred upon me in electing me a year ago your chairman, and wish you, Mr. President, great pleasure and success during your term of office.

Regular Meeting, Friday, 7th November.

DR. FRANK SHEPHERD, PRESIDENT, IN THE CHAIR.

Present:—Doctors Reed, Reddy, England Hutchison (Point St. Charles) John Gardner, Vidal, Harry Bell, Kinloch, Allan, Richard MacDonald, James Stewart, Wyatt Johnson, McCarthy, Edward Blackader, Jack, Alloway, Molson, J. A. MacDonald, Leslie Foley, Williams, Alec Gardner, McGannon (Brockville), Whyte, Springle, Felfer, O'Connor, Inksetter, F. W. Campbell, and Lapthorn Smith.

Dr. Lefebvre of Vancouver was introduced as a visitor, and invited to take a seat beside the

president.

Dr. J. M. Elder of Cote St. Antoine was then proposed by Dr Gardner, seconded by Dr. Hutcheson.

Dr. F. E. Thompson and Dr. Muirhead who where proposed at the last meeting, were

balloted for and elected.

Dr Wyatt Johnson showed a specimen of multiple syphilitic osteitis effecting the tibia and cranium. It evidently began in the form of gumma which then went on to condensation and thickening, traces of inflammatory tissue still being visible. In the cranium in some places, there was partial necrosis, while in other places, thickening; diplo being in many places converted into compact tissue. The larynx was also shown on which there were densely pigmented plaques. The intestine was also shown from the same patient, there being syphilitic ulceration; but it probably began as perityphlitis. The appendix which was laying over the brim of the pelvis on the right side, was apparently affected secondarily from inflammation spreading from the rectum instead of being as is usually the case, the original cause of the trouble. The history of the case was that the man had had syphilis (a severe attack) 5 years ago, involving the rectum, and then spreading to the appendix. The principal symptoms were tenesmus and diarrhoea, the actual condition not having been diagnosed.

Dr. H. L. Reddy then showed a specimen of perforating ulcer of the stomach occurring on the posterior surface of the lesser curvature. She had been under the care of Dr. Sugart one year ago for ulcer of the stomach, since which she had been very anæmic. She was confined. in the Western Hospital a few months ago, from which she recovered fairly. Dr. Reddy had been suddenly called a few nights ago and found her suffering from purulent peritonitis, which in spite of the saline treatment, which gave her immediate relief, resulted in a fatal termination a day or two later. He had been very much struck with the immediate relief from the frightful agony afforded by the salines. On examining the specimen, there was a good deal of scar tissue, showing that the ulcerating process had been going on and repeating itself

for a considerable time. There was also parenchymatous degeneration of the heart. Dr. Reddy also referred to another case. nurse in the hospital, who died from the same cause and very much in the same way. Lapthorn Smith spoke strongly in favor of the saline treatment for peritonitis. He felt sure that he had had several cases of commencing peritonitis, which had been saved by prompt resort to this treatment. This was especially satisfactory, as it was well known that the opium treatment was almost always fatal. Shepherd expressed the opinion that the relief from pain in the course of peritonitis, is deceptive, as it is generally the forerunner of death. He did not attribute it in this case to the saline Dr. Richard MacDonald also spoke of the absence of pain not being a reliable evidence of improvement. He had seen fatal cases of peritonitis result from appendicitis, in which, after two days of intense pain, there was a sudden lull in all the symptoms, and just when he was congratulating himself that the patient was saved, he suddenly died.

Dr. England exhibited a man with a peculiar pedunculated tumor hanging between the thighs, which was growing rapidly and causing the patient some inconvenience from its bulk. Dr. Shepherd thought it was a case of moluscum fibresa. Dr Molson reported that he had administered ether to the patient, supposed to be a case of anchlosis, whom he had exhibited at the last meeting. The result of the test being that there was complete immobility of all the vertebral articulations and the case was one therefore, genuine anchlosis.

Dr. Hutchison of Point St. Charles exhibited a sublingual or submaxillary calculus which had ulcerated through the duct and the mucous membrane of the floor of the mouth, and which he had removed. It was about the size of a bean. He thought these cases were rather rare.

Dr. Smith referred to two specimens of salivary calculus which he had removed, one about the size of a pigeon's egg from Steno's duct, with considerable difficulty, being obliged to slit up the entrance on the inside of the cheek; the other the size of a large almond, he had removed with considerable difficulty, being obliged to make an opening the whole length of the tonsil before he could drag the oval calculus out. The center of the calculus was composed of pus, resulting from an abscess, and the outside layers by accretion from the salivary fluids.

Stanley's recent Emin expedition was equipped entirely with Fairchild's Digestive Ferments in preference to any others and in the recent attack of gastritis from which Mr. Stanley suffered, he was entirely sustained upon foods previously digested with Fairchild's Extractum Pancreatis.

Progress of Science.

DIABETIC COMA AND ITS TREATMENT.

Stadelmann, as the results of clinical and experimental observation on this subject, comes to the following conclusions:

1. Diabetic coma—apart from the accidental coma due to other causes—occurs only in the case of diabetic patients whose urine contains

oxybutyric acid.

2. Almost equivalent in value with the recognition of oxibutyric acid is the determination of the amount of ammonia in the urine; while it is also far easier of performance.

3. Diabetic patients with an excretion of ammonia of more than 1.1 gramme per day, are in danger of becoming severe cases of the disease.

 Patients excreting two, four, six, and more grammes of ammonia daily, need constant watching by the physician, and are in constant

danger of passing into diabetic coma.

5. If the determination of the presence of oxybuteric acid, or the estimation of the amount of ammonia, can not be carried out, at least the chloride of iron test should be made. If this gives a positive reaction, oxybutyric acid is present in the urine, and the cases answer to the statements made in the 3rd and 4th conclusions. The converse of this is, however, not always true, for there are cases of diabetes with oxybutyric acid in the urine, and even suffering from diabetic coma, whose urine does not give the chloride of iron action.

6. These severe cases in which there is an increase of the secretion of ammonia or the presence of oxybutyric acid with the chloride of iron reaction in the urine, are only with the greatest caution, and the simultaneous exhibition of alkalies, to be put upon a strict meat diet.

7. If there is fear of the development of diabetic coma, the patients should be put upon full doses of the alkalies, though, of course, with strict oversight and with proper inter-

ruptions in the treatment.

8. If come has already developed, large intravenous injections of a solution of the carbonate of sodium and the chloride of sodium should be given as quickly as possible; the patient being carefully watched meanwhile. The injections should be stopped if threatening symptoms appear, such as irregularity or marked retardation of the pulse, convulsions, or temporary cessation of respiration. After a time they should be recommenced, and the process continued until the urine becomes alkaline.

9. Subcutaneous injections of carbonate of sodium are not to be commended, on account of the pain and deep-seated inflammation they produce.—Am. Jour. of the Med Sciences.

TREATMENT OF ACNE.

In the Revue Thérapeutique Médico-Chirurgicale, Isaacs recommends the following for acne:

R.—Camphor,
Vaseline,
Beta-naphthol,
Precipitated sulphur
Green soap,

Reach 150 grains.
Li ounce.
Li ounce.
Li ounce.
M.

Apply to the affected part for from three to fifteen minutes, according to its susceptibility. After using this lotion, use in its place, after thoroughly drying the skin:

R.—Resorcin,
Salicylic acid,
Oxide of zinc,
30 grains.

6 drachms.—M.

This is to be allowed to remain on all night, or a less time if it is too stimulating, and is itself to be followed by an emollient, such as cold cream or chalk powder.

Vaseline,

TREATMENT OF METRORRHAGIA BY ERGOTINE INJECTIONS.

When ergotine is badly tolerated by the stomach, it is recommended that it be used in the following manner in metrorrhagia:

The bowel having been first evacuated of fæcal matter and the rectum washed out, a teaspoonful of the following is to be mixed with two tablespoonfuls of hot water and injected:

R.—Ergotine, 150 grains.

Distilled water, 2½ ounces.

Glycerin, 6 drachms.

Salicylic acid, 6 grains.

Revue Gén. de Clin. et de Thérapeutique, Aug. 6, 1890.

TREATMENT OF SYPHILIS BY RECTAL INJECTIONS OF IODIDES.

According to the Revue Générale de Clinique et de Thérapeutique, the following formula may be used by the anus, whenever the stomach is disordered:

R.—Iodide of potassium, 15 grains.
Extract of belladonna, 4 grain.
4 ounces—M

The solution must be warm, and is said to be well borne and effective.

VESICULAR ECZEMA OF THE HANDS.

In the acute form of this affection Dr. Duhring recommends, as one of the best forms of treatment, a salicylic acid plaster, as the following:—

R.—Acidi salicylici,
Pulv. amyli,
Zinci oxidi,
8.00 grammes (5ij).
8.00 grammes (3ij).

Cosmolini, 16.00 grammes (3iv).—M.

This should be applied three or four times daily, the pasts being well covered with the paste, to protect the skin and exclude the air. Should this not prove decidedly beneficial in a few days, black-wash, followed by oxide of zinc ointment will be advisable. Internally, a tonic, saline, aperient mixture will probably prove of value. A drachm and a half (6 grammes) of sulphate of magnesium, and 1 grain (0.064 gramme) of sulphate of iron in a gobletful of water, to be taken a half hour before breakfast, daily, may be prescrib d for the next week or two.

In the sub-acute form a more stimulating treatment is indicated, and a calomel ointment, 20 or 30 grains (1.28 or 2.00 grammes) to the ounce (31 grammes) of oxide of zinc ointment, should be ordered. In three or four days, should no improvement take place, an ointment of resorcin, 30 grains (2 grammes), and salicylic acid, 10 grains (0.64 gramme) to the ounce (31 grammes) should be substituted, to be followed later by a tarry wash of 1 drachm (4 grammes) of the alcoholic solution of coal-tar to 8 ounces (240 cubic centimetres) of water.—The Medical News, August 30, 1890, p. 202.

CYCLING AND HERNIA.

A somewhat unnecessary amount of alarm may possibly be created on the subject of cycling by some recent correspondence, especially as a statement purports to have been made by more than one medical man that cycling predisposes to hernia. One correspondent appears to attribute all the harm to sitting too high on the If danger exist it is due rather to the machine. fact that scarcely 5 per cent. of the riders make any attempt to fit themselves to their machine. As a rule, the handles are far too low, and the seat too far back or forward. Of the comfort of sitting up with the handles in such a position as not to necessitate bending the back nearly? double, we can speak from personal experience. No one who has once got his handles high enough, his feet in the right position, and his seat at a proper angle, will ever ride his machine so as to strain his legs, bend his back, or bruise his perineum.—The British Medical Journal, August 16, 1890, p. 399.

AMYLENE HYDRATE IN EPILEPSY.

Nache agrees with Wildermuth as to the value of amylene hydrate in epilepsy, even where bromides have failed, and where the attacks are not only very frequent but severe. He uses a 10-per-cent. solution of the drug, and gives from one to two tablespoonfuls a day (from 30 to 90 grains). Nache also believes that petit mal and nocturnal epilepsy are benefited by the drug.—Medical News.

DIGITALIS IN TYPHOID FEVER.

After a great number of experiments Dr. Leidy concludes that in the healthy adult digitalis lowers the temperature 1 to $1\frac{1}{2}$ degrees, and this diminished temperature persists for one or two days. In typhoid cases digitalis diminishes the frequency of the pulse, the number of the respirations, and the temperature, these three effects being produced simultaneously.

Its use is indicated when there are symptoms of feeble heart-action, especially when it is accompanied by great adynamia. It is contraindicated when the pulse is full and bounding.

Dr. Leidy prefers the tincture in typhoid fever, and the infusion if there be any chronic cardiac trouble. Moreover, he does not hesitate, if there is gastric intolerance, to give the remedy hypodermically, and notes successful results when it is combined with cool water and quinine.—L'Union Médicale, August 7, 1890, p. 189.

AMMONIUM BROMIDE FUMES IN ASTHMA.

The value of the fumes of ammonium chloride in some varieties of bronchial and naso pharyngeal catarrh, suggested the use of the bromide salt in the same diseases complicated with spasm. The ordinary solutions of hydro-bromic acid were found to be useless, for the purpose, and a strong acid, with a specific gravity of 1.7, was substituted. This, with a solution of ammonia, gave abundant fumes. In several patients suffering from asthma, a few whiffs relieved the dyspæna at once. In some cases, when used early, the inhalations aborted the paroxysms.—Medical News, June 14, 1890.

OLIVE OIL IN GALL-STONE COLIC.

During the last few years clinical experience has been strongly in favor of the beneficial results following the use of olive oil in the treatment of gall-stones, but no adequate explanation has hitherto been offered. $\bar{\mathrm{Dr}}$. D. D. Stewart suggests an explanation which certainly is ingenious. He believes that the effect possibly results from the decomposition of oils and fats in the duodenum into their fatty acids and glycerine; and he suggests that, as glycerine in the rectum causes hyperemia, irritation, and powerful reflex peristalsis, so in the duodenum it may cause energetic reflex contraction of the gall-bladder, cystic and common bile ducts, and perhaps may lead to a copious outflow of diluted bile, which would aid in expelling the stone. He believes a free flow of pancreatic juice is necessary for the splitting up of the oil, and that the failures of the oil treatment may, perhaps, be explained by the concurrent employment of ibeliadonna or atropine, which suppresses the pancreatic secretions .- Lancet, June 4, 1890.

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MONTREAL, DECEMBER, 1890.

FEWER DRUGS.

It is one of the illusions and also one of the misfortunes of the young graduate that he leaves the university with the idea that there are some four or five thousand drugs at his command, each one of which will do exactly what it is represented to do in the pharmacopæa. He starts in practice, is called to his first case, tries one after the other of half a dozen drugs which are highly recommended, and just when he is about to try the best one, his patient is transferred to some body else, every probably to an older and more knowing practitioner, who in the course of 50 years, has rooted out 4,950 of the 5,000, keeping only a few. remedies, but each one of which he knows by long experience to be reliable. remember many instances of this in our younger days. For instance, an old gentleman under our care suffering from broachitis was getting worse and worse under a costly prescription containing all the new drugs recommended for this disease, when one of the oldest practitioners was called in consultation, and much to our surprise, ordered nitrate of potash, and as a matter of fact

cured the patient. The longer one is in practice the smaller the number of drugs he will employ, and the greater will be his success. Whenever it is possible, it is far better to depend upon a solution of the alkaloid than upon tinctures and extracts of the crude material, for the reason that one ounce of the alkaloid may represent all the way from a cwt., to a ton of the raw material, it being well known that plants gathered in different countries and at different seasons of the year vary enormously in $_{
m the}$ amount of active material they contain.

Instead of ordering tincture of nux vomica we should order liquor strychniæ; instead of tincture belladenna, we should use liquor atropiæ; instead of crude aloes, aloine; instead of opium, morphine; instead of hyoseyamus, hyoseyamine; and so on. For those who keep their own medicines, there are two ways of using these active principles; either in the form of tablet triturates from a thoroughly reliable maker, or else to purchase the alkaloid and to make alcoholic solutions of the strength of four grains to the oz. We say alcoholic solutions, because made of distilled water alone, they will not keep. It does not require that the alcohol should be pure, as between 25 and 50 per cent. of it will be sufficient to prevent the growth of bacteria; or if there is any objection to alcohol, then 25 per cent. of glycerine will do. The strength of any of these liquors is invariably 120 of a grain to the minim or one half grain to the drachm.

New drugs are constantly being introduced, and out of every one hundred brought before the notice of the profession, perhaps one becomes permanent in the pharmacopæa; but it will be better that the experiments should be made, not by the young practitioner, who can ill afford to lose his one patient because the new drug fails, but by the hospital and dispensary physician who can establish the worthlessness of the majority of them without in-

jury to his practice. Many of the new drugs, while not being worthless, are not so good as the best of their particular class, and it is unwise to lay aside a well tried and reliable remedy for one which often fails.

DR. ROBERT COSTIGAN.

We record with feelings of pain the death of Dr. Robert Costigan, which took place at Los Lunas, New Mexico, the end of October, where he had resided for a number of years. Dr. Costigan was a native of Montreal and was employed for sometime by the old drug firm of Lamplogh & Campbell, which he left to study Medicine at Bishop's College in this city. He was among the first to enter as a student of that school in its organisation in 1871, and the first graduate to receive his entire medical education within its walls He graduated from Bishop's in 1874 taking the prize for the best final examination. He had formerly taken in 1872, the Junior prize in Practical Anatomy and in 1873 the Physiology prize, for the second time. Dr. Costigan was held in high estimation by all who knew him, and his death at an early age. will be heard of with regret. His body was brought to Montreal and interred.

PERSONAL.

Dr. J. M. Jack (M. D. Bishop's 1889), has been elected Dermatologist to the Montreal Dispensary.

Dr. Lafontaine of Waterbury, Conn. (M. D. Bishop's 1884), was in Montreal the end of October, and paid a visit to his Alma Mater.

Miss Grace Ritchie and Miss Maude Abbott, both B. A. of McGill University, are attending the Medical courses of University of Birh.p's College.

Dr. J. M. Jack (M. D. Bishop's 1889), who has decided to devote himself to Dermatology, has left for Vienna, where he will devote a year in studying up his specialty.

Dr. Lefebvre of Vancouver B. C., was in Montreal the early part of November, and attended the meeting of the Medico - Chirurgical Society on the evening of the 7th.

The many friends of Dr. George Ross, Vice-Dean of the Medical Faculty of McGill University, will learn with great pleasure of his steady convalescence from his recent illness. Dr. Thorburn Jr., of Toronto, sailed from New York on the 26th November en route for Berlin re Dr. Koch. Dr. Thorburn only returned home in September after a prolonged absence in Europe.

Dr. Foley (M. D. Bishop's College 1880) who has devoted himself to Dermatology for the last five years, is surely gathering around him a numerous *clientele*. In answer to a correspondent we give his address, viz., 55 Union Avenue.

Dr. Homer E. Mitchell (M. D. Bishop's College 1878), of Stanbridge Station, was in Montreal the end of November and made a visit to his *Alma Mater*. Dr. Mitchell is now one of the leading physicians in the Eastern Townships, and has a very extensive practive.

Or. George T. Ross, Professor of Physiology in Bishop's College, Faculty of Medicine, left for Germany on the 24th November to study Dr. Koch's lymph discovery. He will represent officially his Faculty, and he carries with him letters of introduction, which will very materially assist him in his work.

Dr. McGannon of Brockville, Ont., (M. D. McGill 1887), is a member of the Medico-Chirurgical Society of Montreal, and attends its meetings with great regularity. In coming over ahundred miles for this purpose, he sets a noble example to some of our big city members, who can seldom be induced to travel a few hundred yards for the same purpose.

Dr. Thos. Bulmer (M. D. Victoria College 1877), who practised for a short time in this city after taking his degrees passed through Montreal a short time ago, en route for Victoria, British Columbia, where we learn he has opened an office. During the interval Dr. Bulmer has been in New Guinea, New Zealand, and Australia. At Victoria he was for some time Quarantine Superintendent. His health being poor he returned to England, and settled in Leeds, whence he left the past summer for Canada.

Dr. Elder (M. D. McGill 1884), has removed from Huntingdon, P. Q. to Montreal. Before he left, on the evening of the 6th November, at a public meeting, largely attended by the principle inhabitants of Huntingdon and neighborhood, he was presented with a very flattering address, substantial recognition of the estimation in which he was held, in the shape of three carvers in a handsome case, and three silver dishes. We congratulate Dr. Elder on this pleasant episode in his life, and welcome him to Montreal, where he will soon occupy, we feel sure, a distinguished position.

We regret that ill health has compelled Dr. E. H. Trenholm to relinquish practice in Montreal. He left the city the end of October with the intention of going to Los Angeles, on the way stopping over for a short time at the Sanit-

arium at Battle Creek, Michigan. It is the wish of all his friends that the change will be beneficial, though we hardly think it likely that he will ever again be able to stand the viscissitudes of our Canadian climate. During his long career here he established the reputation of being a bold, judicious and successful operator in the realm of gynecology.

BOOK NOTICES.

INDEX-CATALOGUE OF THE LIBRARY OF THE SURGEON-GENERAL'S OFFICE, United States Army. Authors and Subjects. Volume XI. Phædronus-Regent. Washington: Government Printing Office, 1890.

This wonderful work is gradually nearing completion. We see that so far 115,000 books and pamphlets and 350,000 journal articles have been indexed already. Such a costly and laborious undertaking is well worthy the richest and most industrious nation on earth, which alone could undertake it.

Text-book of Materia Medica for Nurses. Compiled by Lavinia L. Dock, graduate of Bellevue Training School for Nurses; Superintendent of Grace Memorial House. G. P. Putman's Sons. The Knickerbocker Press, 1890. For sale by Wm. Foster Brown & Co., 233 St. James Street, Montreal. Price \$1.25.

So many young ladies now are adopting the noble vocation of nursing, some such work as the book before us may become necessary in order to give the former an elementary knowledge of the drugs and the remedies which they may be called upon to administer.

May's Diseases of Women, being a concise and systematic exposition of the theory and practice of gynecology for the use of students and practitioners. Revised by Leonard T. Rau, M.D., with thirty-one illustrations on wood. 12 mo., 370 pages. Philadelphia; Lea Brothers & Co., 1890.

This is a remarkably concise but complete compilation of the subject taken from a dozen of the best treatises and journals on Diseases of Women. We have looked up several chapters and find all the author's statements to be correct. It is remarkable how much information can be got into a small work like this by condensation. We can recommend it to students and busy practitioners who wish to get at the gist of the subject without spending time which they can ill afford to hunt up what they want to know in the fearfully prolix systems of gynecology.

Bartley. Medical Chemistry. A text-book for Medical and Pharmaceutical Students. By E. H. Bartley, M.D., Associate Professor of Chemistry at the Long Island College Hospital, President American Society of Public Analysts. With over 40 Illustrations. Second Edition, enlarged. 12mo. Cloth, \$2.50. P. Blakiston, Son & Co., 1012 Walnut Street, Philadelphia.

This is a complete but handy sized text-book,

divided into four parts. Part I is devoted to Physics, the chapter on electricity being exceedingly Part II deals interesting. Part III, Inorganic try. This Theoretical Chemistry; Chemistry; Part IV, Organic Chemistry. This latter is well written, and deals fully with nearly all the most recently discovered substances, such as ptomaines and the coal tar group, such as antifebrin and phenacetin. In addition to these four parts there is an appendix containing analyses of the various fluids of the body, and a glossary or dictionary of the most used chemical terms. The printing closely covers over 400 pages, but being printed on good paper it makes easy and pleasant reading. Although we do not pretend that it is the best work we have ever seen on the subject, we can safely say that it is one of the best we have ever seen for its size and price, and it appears to be thoroughly up to date.

A COMPEND OF EQUINE ANATOMY AND PHYSIOLOGY, by Wm. R. Ballon, M. D. Professor of Equine Anatomy, and formerly Lecturer on Physio-logy, New York College of Veterinary Surgeons, &c. With 29 graphic illustrations selected from Chanocan's "Comparative Anatomy." Philadelphia, P. Blakiston, Son & Co. 1890. pp. 205. Price \$1.00

This little book forms one of the "Quiz-Compends" series, and seems to be a very good work for veterinary students, whereby they can get up their anatomical knowledge for examinations.

Essentials of Practice of Medicine, abridged in the form of Questions and Answers, prepared especially for Students of Medicine, by Henry Morris M. D., visiting Physician to St. Joseph Hospital, Fellow College of Physicians, Philadelphia, with a very complete appendix on the examination of the urine, by Laurence Wolff, M. D., demonstrator of Chemistry, Jef-Saunders, 913 Walnut St., 1890.

This is a work of over four hundred pages, convenient in size, well and clearly printed upon beautiful white paper. It is a multum in parvo, and yet in its brevity, care evidently has been taken not to sacrifice essentials. Although the book forms one of Saunders' question compends, and has therefore been prepared to assist final students in preparing for degree examinations, yet it is full enough, to justify it being of excellent service to busy practitioners. It is just such a publication as should always be at hand on the library A five minutes perusal or consulting-room table. of it at any time would refresh the memory on the essential symptoms diagnosis and treatment of any diseases. The chapter on chest diseases we regard as of great excellence. We have seldom seen so much put into such small compass and so well put together. The cost of such a book is money well The appendix on "The Examination of Urine" helps to elucidate the principals and difficult points in Urinalysis.

Essentials of Practice of Pharmacy. Arranged in the form of questions and answers. Prepared especially for pharmaceutical students. By Lucius E. Sayre, Ph. G. 179 pages, 16mo, \$1.00. Philadelphia: W. B. Saunders, 1890.

of Question Compends, and the little volume will doubtless prove to be equally as serviceable as an aid to the pharmaceutical student as its predecessors have been, each in their individual line of research. It covers a great deal of ground in small compass, and the matter is well digested and arranged and so printed as to be convenient in use and attractive to the eye. The "research questions" are a valuable feature of the book, and, properly used, will lead the student to a profitable study of the pharmacopæia. It is a very creditable little book, and is well worthy of careful per-

Wood's Medical and Surgical Monographs, consisting of Original Treatises and Reproductions, in English, of books and Monographs selected from the latest literature of foreign countries, with all illustrations, etc. Contents The Treatment of Uterine Affections by Massage; by Dr. Fugene Arendt. Cosmetics: a treatise for physicians; by Dr. Heinrich Paschkis. On affections of the stomach in diseases of the male genital organs; by Dr. Alexander Peyer. Published monthly, price. \$10.00 a year, single copies, \$1.00. November, 1890. New York; William Wood and Company 56 and 58 Lafayette Place, 1890.

A PRACTICAL TREATISE ON IMPOTENCE, STERILITY AND ALLIED DISORDERS of the Male Sexual Organs; by Samuel W. Gross, A. M., M. D., LL. D., Professor of the Principles of Surgery and Clinical Surgery in the Jefferson Medical College of Philadelphia, etc. Fourth edition, revised by F. R. Sturgis, M. D., 8vo; pp. vii.—173. Philadelphia: Lea Brothers & Co. 1890.

The rapid sale of three editions of this work and its translation and publication in foreign languages, attest its value and appreciation by the medi-cal profession. Those who have not done so already should secure a copy of this new edition, as it explains many pathological conditions that are of interest to the general practitioner. The publishers have finished the little volume in their usual excellent manner.

A TEXT-BOOK OF COMPARATIVE PRYSIOLOGY. For Students and Practitioners of Comparative (Veterinary) Medicine. By Wesley Mills, M.A., M.D., D. V. S., Professor of Physiology in the Faculty of Human Medicine and the Faculty of Comparative Medicine and Veterinary Science of McGill University, Montreal; Author of a Text-Book of Animal Physiology, etc. With 476 illustrations. Cloth, 8vo. Pp. 636. New York: D. Appleton & Co. Cincinnati: R. Clarke & Co. Price, \$3.00.

This work, following closely upon the author's large work on animal physiology, will no doubt be accorded the same favorable reception. Though this work was prepared primarily for the use of students of veterinary medicine, and veterinary practitioners, yet physicians who are engaged in healing the diseases of their fellow-men will find that the study of it will be of equal value to themselves. A great part of the work is devoted to treating physiology in general. The study of the characteristics of muscular tissue is made particu-This is one of the well-known Saunders' series larly interesting. Instructors of physiology will

do a great deal towards advancing the knowledge of their pupils by recommending to them the perusal of this volume. There are but very few works upon veterinary physiology. We believe that until quite recently students attending veterinary colleges have been under the necessity, for the most part, of studying works on human physiology to obtain their required knowledge. The work of Prof. Mills will consequently supply, in a very effectual way, one long felt want.

"OINTMENTS AND OLEATES, ESPECIALLY IN DISEASES OF THE SKIN," by John W. Shoemaker, A.M., M.D., Professor of Materia Medica, Clinical Med., etc., in the Medico-Chirurgical College of Philadelphia. Second edition, revised and enlarged. F. A. Davis, publisher. Price, \$1.50 nett.

Probably no other man in the world has given so much attention to external applications in the various diseases of the skin as Dr. Shoemaker, and the results of his studies and experience is embodied in this work. The use of the oleates in medicine has increased of late, and would probably come into more general use if physicians had ready formulas for their preparation. This, the book amply provides for. Indeed, there is scarcely a formula in the English, German or Spanish pharmacopiæ that is not to be found in it. It is invaluable as a ready reference when ointments or cleates are to be used, and is serviceable to both druggist and physician.

SAUNDERS' QUESTION COMPENDS. ESSENTIALS OF DISEASES OF THE EYE, NOSE AND THROAT. By Edward Jackson, A. M., M. D., Professor of Diseases of the Eye in the Philadelphia Polyclinic and College for Graduates in Medicine, etc., and by E. Baldwin Gleason, S.B., M.D., Surgeon in charge of the Nose, Throat and Ear Department of the Northern Dispensary of Philadelphia, etc. With 118 illustrations. Philadelphia: W. B. Saunders, 913 Walnut street. 1890.

This number of the Question Compends is fully up to the high standard of the excellent series of which it forms a very essential part. rangements does not materially differ from the others of the series its use is designed to be somewhat more extensive. Most of the compends are chiefly adapted to the use of students in reviewing and preparing for examinations. This one is applicable not only to the students' purposes, but may be appealed to with confidence and profit by the general practitioner. The manner of bringing out the points by asking questions is excellent, and gives a definiteness to the information, which renders it especially apt to remain impressed upon the mind. The chapters upon refraction are particularly plain and easily understood, and will be acceptable to those who have been deterred from studying this abstruse subject because of the mathematical problems usually attending it. The chapters on the nose and throat are also clear and concise. In fact clearness and directness characterize the little work throughout. number of illustrations (considering the size of the book) of an extremely high character are spread over its pages.

A Manual of Public Health. By A. Wyntee Blyth, M. R. C. S., L. S. A., Barrister-at-Law, Medical Officer of Health and Public Analyst for St. Marylebone. London and New York: MacMillan & Co. 1890.

This is a work which has been written for the guidance of Medical Health officers and officials under them. Section I. treats of Vital Statistics. Section II. Air Ventilation and Warming. Section III. Meteorology. Section IV. Water Supply. Section V. Drains, Sewers, Sewage Disposal. Section VI. Nuisances. Section VII. Disinfection and Disinfectants. Section VIII. Zymotic Diseases. Section IX. Isolation Hospitals. Section X, Food and Diet. Section XI. The Duties of Sanitary Officers. Section XII. Inspection of Food. We have given this work a careful perusal, and have great pleasure in testifying to the thorough and con-scientious manner in which the author has prepared his work. The articles on nuisances and on tubercle are exceedingly interesting. The whole history of the experimental study of the tubercle bacillus from the time of its discovery almost to the present day is fully recorded, and directions are given for the artificial cultivation and weakening of the plant. It throws a great deal of light upon Koch's work in this direction. Every member of Boards of Health should at once procure this book.

A TREATISE ON THE DISEASES OF INFANCY AND CHILD-HOOD. By J. Lewis Smith, M.D., Clinical Professor of Diseases of Children, Bellevue Medical College, New York, &c. Seventh edition. Thoroughly revised with fifty-one illustrations. Philadelphia: Lea Brothers & Co. 1890

This work has been so long and favorably known as a standard text-book that the task of the reviewer is a very light one. It has been so often revised that the author has been able to make it almost perfect. As he says in his preface, "since the issue of the sixth edition of this treatise in 1886, so many additional facts have come to light relating to the etiology, nature and treatment of the diseases of children, that the necessary revision has produced virtually a new book. In the amount of information presented, the work may properly be considered to have doubled in size, but this real growth has been accommodated without rendering the volume inconveinently large." paper by Dr. Joseph O'Dwyer on Intubation has been added, which is very interesting. We may add that the work covers nearly 900 pages, and has a carefully arranged index; the whole being gotten up in Lea Brothers usual first-class style.

DICTIONARY OF PRACTICAL MEDICINE, BY VARIOUS WRITERS. Edited by James Kingston Fowler, M.A., M.D. Philadelphia: P. Blakiston, Son & Co., 1012 Wainut street.

This is a work which merits more than a passing notice in our columns. On looking over the list of contributors we notice the names of many of the ablest of the younger men, the majority of them being assistant physicians and assistant surgeons at the great hospitals of London, although some of them, such as Herman, are among the senior men on the staffs. The effect of employing the new generation in its preparation has had a distinct and decided effect in the character of the work, principally evidenced by the newness and conciseness of the information given on each subject. On looking over the index which is placed at the beginning of the book we can see that hardly anything of importance pertaining to medicine has been left out. Although it covers nearly a thousand pages of pretty fine print we can hardly ex-

pect that each subject could be treated exhaustively in that space, but we think that this is out of place in a dictionary when everything should be short and to the point. There is a tone of conservatism but fairness all through it, especially on Diseases of Women by Herman, which is characteristic of English writers, and which renders it a safe book to refer to.

Saunders' Question-Compends, No. 15. Essentials of the Diseases of Children, arranged in the form of Questions and Answers; prepared especially for Students of Medicine, by William M. Powell, M.D., Physician to the Clinic for the Diseases of Children in the Hospital of the University of Pennsylvania. W. B. Saunders, 913 Walnut street, Philadelphia.

There can be no doubt that this little volume will prove highly acceptable both to the final year student as well as the young physician; for no one subject receives so little attention during the four years medical course, and yet none are of more importance to the junior practitioner, who is cast adrift from his Alma Mater with but a small amount of knowledge as to how to deal with the many diseases to which children are heir. The book is arranged in questions and answers, in this way placing before the student in a very few lines and in a concise and easily remembered manner that which in an ordinary work on Diseases of Children would require several pages of reading to give a like amount of information. We can heartly recommend this to our readers.

The Medical Bulletin Visiting List on Physician's Call Record. Arranged upon an original and convenient monthly and weekly plan for the daily recording of professional visits. Price \$1.25. F. A. Davis, Medical Publisher and Bookseller, 1231 Filbert street, Philadelphia, Pa.

Having used this visiting list for several years past we can speak most highly of its utility and labor-saving qualities, as the names of patients only require to be re-written once a month. This visiting list contains a Calendar for the last six months of 1817, all of 1891 and 1892; Table of Signs to be used in Keeping Accounts; Table of Fees; Dr. Ely's Obstetrical Table; Tables for Calculating the Number of Doses in a given B, etc., etc.; for Converting Apothecaries' Weights and Measures into Grammes; Metrical Avoirdu-Apothecaries' Weights; pois, and Number of Drops in a Fluidrachm; Graduated Doses for Children; Graduated Table for Administering Laudanum; Periods of Eruption of the Teeth; The Average Frequency of the Pulse at Different Ages in Health; Formulæ and Doses of Hypodermic Medication; Use of the Hypodermic Syringe; Formulæ and Doses of Medicines for Inhalation; Formulæ for Suppositories for the Rectum; The Use of the Thermometer in Disease: Poisons and their Antidotes; Treatment of Asphyxia; Anti-Emetic Remedies; Nasal Douches; Eye-Washes, etc., etc. It is evident to every one that this is, beyond question, the best and most convenient time and labor-saving Physician's Pocket Record Book ever published. Physicians of many years' standing and with large practices pronounce this the best list they have ever seen. It is handsomely bound in fine, strong leather, with flat, including a pocket for loose memoranda. It is compact and convenient for carrying in the pocket. Size, 4x67

inches. In three styles. No. 1, Regular size, to accommodate 70 patients daily each month for one year, \$1.25; No. 2, Large size, to accommodate 105 patients daily each month for one year, \$1.50; No. 3, In which the "Blanks for Recording Visits in" are in removable sections, \$1.75.

The Physicians Visiting List for 1891. (Fortieth Year of its Publication.) P. Blakiston & Son, publishers, 1012 Walnut Street, Philadelphia. Price \$1.00 to \$1.75 according to size.

Contents:—Almanac for 1891 and 1892. Table of Signs to be used in keeping accounts. Marshall Hall's Ready Method in Asphyxia. Poisons and Antidotes, revised for 1890. The Metric or French Decimal System of Weights and Measures. Dose Table for 1891, by Hobart Amory Hare, M.D., Demonstrater of Therapeutics, University of Pennsylvania. List of new Remedies, revised for 1891. Aids to Diagnosis and Treatment of Diseases of the Eye, Dr. L. Webster Fox, late Clinical Asst. Eye Dept., Jefferson Medical College Hospital, and G. M. Gould, M.D., Ophthalmic Surgeon to the Philadelphia Hospital; Clinical Chief Ophthalmological Dept., German hospital, Philadelphia. Diagram Showing Eruption of Milk Teeth, Dr. Louis Starr, late Prof. of Diseases of Children, University Hospital, Philadelphia; Physician to the Children's Hospital, Posological Table, Meadows. Disinfectants and Disinfecting. Examination of Urine, Dr. J. Daland, based upon Tyson's "Practical Examination of the Urine." 6th Edition. Incompatibility, Dr. S. O. L. Potter. (Taken from Dr. Putter's Handbook of Materia Medica, Pharmacy and Therapeutics, 2d Edition.) A New Complete Table for Calculating the Period of Utero-Gestation. Method for Artificial Respiration. Sylvester's Illustrated Diagram of the Chest. Blank Leaves, suitably ruled for Visiting Lists, Monthly Memoranda, Addresses of Patients and others; Addresses of Nurses, their references, &c.; Accounts asked for; Memoranda of Wants; Obstetric and Vaccination Engagements: Record of Births and deaths: Cash Account, etc.

We have used this visiting list for the last 10 years and could not do without it. It has saved us hundreds of dollars during that time. If you have not tried it, order it from your stationer at once and you will find it worth many times its cost.

The Physician's all-requisite Time and Labor-Saving Account-Book; being a Ledger and Account-Book for Physicians' Use, Meeting all the Requirements of the Law and Courts.

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" EPILEPSY, ITS PATHOLOGY AND TREATMENT," a prize

essay, by Hobart Amory Hare, M. D. F. A. Davis, Publisher, Philadelphia. Price, \$1.25. This essay received the prize of four thousand francs from the Royal Academy of Medicine, in Belgium, in 1889. It is not only a resume of the views held by the best minds of the profession, but a careful analysis of the causes which produce epilepsy. The reader cannot fail to be impressed with the author's logic, and concludes with him. that "the treatment of epilepsy in the past has been as unwise as the treatment of most other dis-His plans of treatment, while varying little as to the remedies to be employed, yet varies in this, that they are not given in any individual case, simply because they have succeeded in a former one, but that they are indicated by the peculiar phase of the disease, and the constitutional peculiarities of the patient. This work is not only unique, but will fully repay reading. Any practitioner having a single case of epilepsy under his observation should have a copy of this little volume.

A MANUAL OF AUSCULTATION AND PERCUSSION. Embracing the Physical Diagnosis of Diseases of the Lungs and Heart, and of Thoracic Aneurism. By Austin Flint, M. D., LL. D., Professor of the Principles and Practice of Medicine and of Clinical Medicine in the Bellevue Hospital Medical College, etc., etc. Fifth edition, thoroughly revised. By J. C. Wilson, M. D., Lecturer of Physical Diagnosis in the Jefferson Medical College, etc., etc. Illustrated with wood-cuts. Philadelphia: Lea Brothers & Company. 1890. Price \$1.50.

Physical diagnosis is an all-important subject, for the more skilled we are in percussion and auscultation the earlier will we be capable of discovering signs of incipient disease and hence be better able to arrest the various pathological inroads. This little volume is entitled to position as one of the classics in medicine, giving the results of the investigations of one of the best observers that ever graced our profession. The clearness and appropriateness of his style greatly enhance its value. To the student during his hospital attendance this little book should prove extremely efficacious.

PAMPHLETS RECEIVED.

Laparotomy for Intestinal Obstruction. Cornelius Kollock, A.M., M.D., Cheraw, S.C. The Treatment of the Morphine Disease. B. Mathewson, M.D. Home for Habitues, Brooklyn, N. Y.

Any of these would probably be mailed to our readers on requesting their authors to do so, and by enclosing postage stamps.

The Animal Suture, its Place in Surgery. By H. O. Marcy, A.M., M.D., L.L.D., Cambridge, Mass. This is a most interesting history of the subject, and the author moreover makes a strong plea for

The Relation of Bacteria to Practical Surgery. The Address on Surgery delivered before the Medical Society of the State of Pennsylvania, By John B. Roberts, A.M., M.D., Professor of Surgery in the Woman's Medical College, Philadelphia.

Suppurating Endothelioma. Myo-fibrous in a condition of Necrobiosis. Remarks on treatment of the Pedicle. By Mary A. Dixon Jones, M. D., Brooklyn, N. Y. The talented authoress makes a strong priority claim for the combined method of amputating the uterus by abdominal section, and afterwards removing the stump by vaginal hysterectomy, which we believe is to be the ideal method of the future.

Eight cases of Thyroid Cysts and Adenomata, treated by enucleation. By Charters J. Symonds, M. D., Lond. Assistant Surgeon to Guy's Hospital. In the concluding remarks the author says of the eight cases, six were in women and two in men. Six of the patients were thirty or under, while one was fifty-four. Several methods have been adopted in the treatment of cysts of the thyroid gland. Of the two leading plans, one is that of injecting perchloride of iron and setting up of suppuration, and maintaining drainage. This is known as Mackenzie's, upon which a recent communication has been made by Mr. Howell. This plan takes as a rule many weeks, and is often attended with severe hectic fever. Its chief merit lies in the small resulting scar. Leaving this plan to stand on its own merits, Symonds prefers one that leads to a rapid recovery in a few days.

The Insane in the Province of Quebec. By Dr. A. Vallee, Medical Superintendant of the Quebec Lunatic Asylum. The author's conclusions are as follows:-

1. Insane asylums should retain their character of hospitals for treatment and be reserved as much as possible for dangerous or curable patients; 2. As it is generally admitted that mental diseases are all the more curable according as they are recent, the legislation should make the conditions of admission as easy as possible for patients who are to be treated; 3. Labor should be organized as a means of treatment in our asylums, and workshops should be set up in them and agricultural work made more general so as to provide occupation for the able-bodied insane; 4. Imbecile and idiot children should be placed in institutions where efforts would be made to educate them and teach them trades which would enable them to earn their living; 5. Asylums for inebriates should not receive ordinary insane patients for such a commingling gives rise to serious drawbacks; The uncleanly and demented patients should be placed in refuges where they would receive the treatment they require at a lower cost than in the asylums; The medical board should be authorized to

hand over to families who are able to take care of them, certain harmless, quiet and incurable patients who are able to work under supervision; these patients to be sent back to the asylum when necessary; 8. The system of discharges on trial should be made more general for harmless patients. with provision for their being at once sent back if necessary.