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Original Communications.

CLINICAL EXPERIENCE WITH OCCIPITO-POSTERIOR LABORS.*

BY KENNEDY C. McILWRAITH, M.B. (TOR.), F.O.S. (EDIN.),
Associate in Obstetrics, University of Toronto.

MR. PRESIDENT AND GENTLEMEN,—I wish to bring to your notice this evening the history of some occipito-posterior labors. I shall refer first to a labor which I conducted on September 25th, 1900. The whole duration of this labor was ten hours. The pains were strong and progress reasonably rapid. The position was O.D.P. When the head reached the perineum I gave a little chloroform, and the child was born face to pubis without difficulty and without laceration of the perineum.

Again, on the 9th of August, 1902, I confined a woman whose labor began with rupture of the membranes, advanced rapidly, and was over in five hours, the occiput rotating to the front without assistance. One sees, then, that there are some cases of occipito-posterior position which do not call for interference, and the difficulty lies in recognizing these early. My practice is, as long as the labor pains are of normal character, progress rapid and pelvis roomy, let it alone.

In August, 1899, I confined a young woman who had been about twenty-four hours in labor. The head was pretty low down and I put on the forceps and delivered, after a hard pull. Result: a dead baby, a severe laceration and a protracted convalescence. Not long afterwards I gave an anesthetic for a fellow practitioner in a similar condition. The result was the same. These two cases may serve to illustrate how this

*Read at the January meeting of the Toronto Clinical Society.

method—the one advocated by Robert Barnes and followed at the Rotunda—will often fail. I would add that if this method is followed, ordinary forceps with a shallow pelvic curve or with no pelvic curve at all, are better than axis-traction forceps; for with the latter the head is apt to rotate forceps and all, and then the sharp pelvic curve becomes a disadvantage. Again the straight forceps gives a better grasp of the head when the occiput is posterior.

On August 2nd, 1904, I was asked to see a woman in consultation, who had been a long time in labor. The position was L.O.P. and had not been recognized. The vagina was dry and its tissues swollen. Forceps were applied with difficulty by one of the physicians in attendance, who exerted almost his utmost strength for about fifteen minutes, without advancing the head at all. I then introduced my right hand, freed the head from the brim by pushing it up, grasped the anterior shoulder within the uterus and rotated the back and then the occiput to the front. Keeping my fingers at the side of the head to maintain the position I slipped one blade of the forceps along the hand. The second blade was easily applied and delivery quite easy. There was a complete laceration.

On May 16th, 1904, I was asked to assist a physician at a case of delayed labor. He applied axis-traction forceps and made strong traction without advancing the head. I then made an examination and found the occiput to the left rear. I corrected this as in the previous case and delivered easily.

On September 30th, 1904, I saw another woman who had been in pretty severe labor for fifty-six hours. The uterus was so tightly contracted about the body of the child as to show its outline through the abdominal wall. Rotation in this case was difficult and extraction easy. There was an offensive odor to the discharge at the time of labor, and gonococci were found in it. Ten days later this woman died of septicemia.

In another which I saw on November 16th, 1904, the forceps had slipped several times and there was considerable laceration. The skull of the infant was fractured and there was large effusion of blood beneath the scalp, simulating hydrocephalus. Delivery was easy in this case also after rotation.

I could multiply instances, but it is not necessary, and I shall content myself with giving the history of one case in which I practiced early interference, manual rotation and extraction with forceps.

I diagnosed the position O.D.P. by abdominal palpation a week before labor set in. Labor began with the escape of the waters, and the pains rapidly became very severe and the intervals short. At the end of five hours the os was less than a shilling in size, but the cervix was taken up. I dilated under

full anesthesia, rotated the shoulders by one hand in the uterus and delivered without laceration at all.

The difficulties which arise in connection with this condition are:

1. *Diagnosis.*—This should be made early in labor by means of abdominal palpation. When the back is to the right, one always suspects that the occiput may be posterior. When the fetal heart can be heard at all, its point of maximum intensity is usually far out in the flank. When the head, however, gets low down in the pelvis, the fetal heart sounds are usually heard most distinctly over *chest* of the child, *e.g.*, in R.O.P. the heart sounds are heard best to the *left* of the middle line of the abdomen, and above the middle line of Poupart's ligament. In making a vaginal examination do not trust to the sutures. They are often obscured by a large caput. Feel for an ear, and its lobe will give the direction of the occiput. The anterior ear is often more easily reached than the posterior.

2. *Dry labor*, whether from oligohydramnios or from early rupture of the membranes, is a very frequent accompaniment of these labors, as was pointed out two years ago by Prof. Adam Wright. This complication generally prolongs labor and increases the danger of laceration and septicemia, besides rendering rotation more difficult.

3. *Rotation by hand.*—The development of this manœuvre has been by three stages. First, the finger alone was introduced into the vagina and the occiput rotated to the front by pressure with the finger up behind the posterior ear. I am convinced that this could only be successful in cases which would soon have righted themselves unaided. Emboldened by the success of antiseptic precautions, the next generation passed its whole hand into the vagina, grasped the head and rotated it, rotating the shoulders by a hand on the abdomen. I have found this method uncertain because you cannot be sure of rotating the shoulders in this way; also the firm grasp of the head necessary depresses the bones of the skull.

Lastly, there is this method of rotating by grasping the shoulder within the uterus and rotating the body. The head is then easily turned as the hand is withdrawn. This method I have found uniformly satisfactory. In R.O.P. the right hand pushes the posterior shoulder outwards and backwards; in L.O.P. the right hand pushes the anterior shoulder inwards and to the front. I always use the right hand because it is the one which is to guide the first blade of the forceps. If you use the left hand and then withdraw it to insert the left blade, the head rotates back.

4. *Pressure on head* by forceps is directly proportionate to the amount of force necessary to deliver. One of the com-

monest causes rendering force necessary is insufficient dilatation of the os; therefore, when you dilate, be sure to dilate thoroughly.

5. *Maintain flexion* while rotating.

In conclusion, let me point out the advantage of early interference, manual rotation by the shoulder and forceps delivery. The cases I have cited illustrate the danger of letting things go on, or of trying to deliver without altering the position. By this method we avoid these dangers; labor is greatly shortened, and pain prevented. Lacerations are less likely to occur, and when they do occur, heal more readily because the tissues are not injured by long-continued pressure.

TREATMENT OF CONSUMPTIVES AT HOME—ADVANCED CASES IN PRACTICE.

By EDWARD PLAYTER, M.D., Toronto.

The professional pendulum is now swinging back to rational medicine in the treatment of consumption. Hence we have articles, pamphlets and even books, on the "Home Treatment."

Some of the best authorities now contend that the "Open Air at Home" treatment for a considerable proportion of cases, of the more intelligent patients, who will carry out implicitly and persistently their physician's instructions, and this in the fullest detail, will get on better, often much better, at home than in a sanatorium with a herd of sick strangers.

On sanatorium treatment, in the *British Medical Journal* a few months ago (February 27th, 1904), Doctor Edward Dean Marriot, writes: "The aggregating of the infective sick in permanent hospitals has been shown to be as useless as a preventative measure as it is injurious to the individual segregated. It is no wonder, therefore, that the experience of the system of 'curing' consumptives in smitten herds has led to a reaction. It is a curious commentary on the manner in which the popular imagination has been inflamed by the booming of German statistics that the system is now deprecated in that country. In France it is ridiculed. In this country (England), adverse commentary must be made with bated breath. The Austrian Tuberculosis Commission recently declared that persons in whom the disease had been dormant and whose prospects of prolonged life were good, died with startling rapidity after entering Sanatoria. No fact is better established than that the mortality from consumption in England was reduced fifty per cent.,

by general sanitary improvements, in the three or four decades just previous to the Sanatorium craze."

Some advanced cases, with great emaciation and prostration, having come under my care and eventually recovered, being now, years after, practically as well as ever, I feel constrained, in the interests of the profession and the public, to draw attention to two of them, as an example of what we can sometimes accomplish, and to preface the notes of the cases with some remarks on treatment in general.

Being firmly convinced that the immediate cause of tuberculosis is an auto-intoxication, in a pre-tubercular stage, from deficiency or want of oxygen in the system, produced by imperfect, shallow breathing, commonly of already overbreathed air from imperfect ventilation of rooms or other apartments, I am as firmly convinced that there is no other specific for the morbid condition than abundance of "outdoor" oxygen—pure, crisp, zero oxygen (the colder the air, the more oxygen, bulk for bulk, and the greater its expansion in the more or less collapsed pulmonary air cells).

Remarkable it is that there is such a vast difference in the range of expansion in the lungs of the average of so-termed "healthy" persons. I had occasion to examine the chests of nearly one hundred students attending the Ottawa College. In some young men with large chests the range from forced expiration to forced inspiration was less than two inches, while in others, with much smaller chests, the range was over four inches.

Oxygen, then, is the only specific—*the* only anti-intoxicant—with sufficient suitable nutritious food, to build up and revitalize the blood and with it the entire organism.

Except in the very earliest, the pre-bacillary, stage, when the patient is still able to be active out doors, ordinary respiration is not sufficient to successfully combat the disease. The patient must be taught to breathe deeply, get in more oxygen, and increase the respiratory capacity. Statistics show that all consumptives, in the earliest stage, have proportionately a small respiratory capacity.

Never in one instance have I found lung gymnastics, for increasing respiratory capacity, increase the tendency to hemorrhages. Of course great caution is necessary at first. And by this means the capacity can be much more safely increased than by ascending elevated mountains. On the contrary, the pure air tones up the lung tissues and tends to the prevention of hemorrhages, and the denser air more than that which is rarified.

To increase the supply of oxygen in the blood, then, is of the first importance, and absolutely essential to recovery, as I need

hardly write. But it is not enough, especially when any part of the lung has lost its respiratory condition, to simply require the patient to live an out-door life, and continue to breathe as in the past. More than ordinary respiration must be enjoined and persisted in. The respiration in the past has not been sufficient, or there would not be a tuberculous condition, nor a pre-tuberculous one; hence, an increase is absolutely essential, or there can be no, or but little, continuous or permanent improvement. It may be that, to the weakened tissue of the air-cell walls from the shallow breathing of an inactive, perhaps indoor life, is added an immediate or exciting cause, such as a "cold" or measles, added to the already weakened tissue and the auto-intoxication. All the same, and the more essential, free laving and exercise of the tissue of the air cells with pure air, by deep breathing for many months, indeed ever after, for toning up the tissue and getting into the blood abundance of the antitoxine—oxygen is absolutely indispensable to recovery.

It must ever be remembered, however, that the greatest caution is demanded in the practice of such gymnastic exercises, especially in the beginning, with only slow movements of the arms. With such caution there is no, or the minimum of, danger. And in any case, in it is the patient's only chance.

The nutrition of the patient, the diet, is of the next importance. A consumptive should not have a mouthful more food than can be digested, and, *assimilated*—made blood of. Hence, this part of the treatment requires care and study to find out just what, and how much, each individual patient can so utilize.

Stuffing, as we know, has been found to be a serious mistake, and has had its day. Any excess of what is assimilated will but increase the auto-intoxication, tend to diarrhea and emesis. With excess, some patients may fatten, fatten as bovines do, but with a steady increase of tubercular deposit. It is better, firmer, muscle and nerve tissue that is needed, not burdensome fat. And the strength may increase, indeed commonly does, without appreciable increase in weight. Not very long ago, this so, thought "good indication" of "fattening" was rationally discussed in the *British Medical Journal*.

In nearly all advanced cases, however, something more than the ordinary food—beef, eggs, milk, etc., is required. I have found the greatest benefit from "Sanguis Boum," a preparation consisting chiefly of ox blood and Malaga wine. It is highly nutritious, the patients like it, and it is the least expensive of the nutriment medicines; and hence can be prescribed and taken in liberal quantities.

The amount of exercise permissible demands a good deal of consideration. When the pulse rate is persistently over one

hundred, very little should be allowed. The patient should then, lie or sit in the open air and sunshine, and keep up the deep breathing, as constantly as possible.

The skin, ever in deep sympathy with the mucous membrane of the lungs, and as, in a measure, a respiratory organ, demands attention. When, as often is needed in advanced cases, nightly inunctions, as of cod-liver oil, with, perhaps, creosote, for purposes of nutrition and anti-intoxication, are employed, then a morning wash is most essential, followed by a cool, tonic "rub down."

My special medicaments are few in number. Inunctions of the sulphus or iodous combinations or compounds, especially over the diseased lung, well rubbed in, I think useful, often. Direct injections of such, or of the various oils, diluted, into the lungs, per larynx and trachea, I have practiced with, considerably, in very far advanced cases, with apparently decided benefit. And I have found so simple a remedy as a drop or two of oil Sylvestris on a grain of sugar, taken just before a meal, prevent the necessity of leaving the table for a paroxysm of coughing, and perhaps emesis.

But the cough can only be safely, and it always can be allayed, and also night-sweats and fever abated and eventually overcome, by pure, cool or cold fresh air, night and day, out doors and in. For allaying temporarily an irritating cough, I commonly use a soothing inhalent—menthol, camphor, dissolved in ol. eucalyptus or other of the more soothing essential oils. If the expectoration be tenacious, a little ammonia or potash may be added; if copious, an astringent inhalent. I use only the simple, old style inhaler: an open-mouthed bottle with two glass tubes, one for the admission of air, the other with a small mouthpiece to hold between the lips when inhaling.

And diarrhea and emesis can only be effectually prevented by a judicious, well adapted diet.

With these details little need be said on the special "Cases in Practice."

One of the worst cases, perhaps the worst, the farthest "gone," apparently most hopeless, I have had, was that of one Grace E. M—. The facts concerning this case, nearly all came out under oath in the County Court of York, a year ago last November, and are hence public property. They were largely published in the *Evening Telegram* and other papers. Miss M—. of Gladstone, near London, became tuberculous after measles; was treated many months by physicians near home and in London, with, nevertheless, gradual failure in health. She then tried to get into the Sanitarium at Gravenhurst; but being so "far gone," as she stated, the medical examiner in Toronto would not "pass" her for admission there; but advised

her to go to that village and receive treatment at the Sanitarium, which she did. Some weeks after, the medical superintendent of that institution, Miss M— stated, wrote to her father that "he had better take her home as nothing more could be done for her" improvement. A clerk in the Dominion Bank in Toronto, holidaying in Muskoka, became interested in her, sent her one of my books on consumption, and induced her to consult me, in October, 1898. On reaching my rooms, on Carlton Street, in a coupé from the station, she was much exhausted and short of breath. I found great emaciation and prostration; the entire left lung a mass of breaking down tubercular matter, with two cavities of medium size. The right lung was in a very fair condition, with only a few rales in the upper lobe. I could not, then, give her any hope of recovery; privately, to her friend, quite the reverse. I suggested, however, that if she chose to remain a few days in Toronto, I would again examine her and give her a more definite, decided opinion. Good quarters were at once secured for her on Wilton Crescent. After a rest of two days, I informed her that if she would carry out strictly my instructions,—be a "good patient," there was a possible chance for improvement. She was unusually anxious to get well, the faint hope dispelled some of her despair, and of course she promised to do everything I would tell her to do. And I never attended a "better" patient.

She was twenty-one years of age, small of stature, and the only child of healthy, well-to-do parentage.

Her room was small, but a sliding damper was made in a stovepipe which passed through it, to carry off breathed air, and the window was kept more or less open, night and day, with bed between the damper and window.

It should be stated at this point, that I have been in the habit of placing patients, when I could, in a three-windowed "bay" (we had five of these in the Moore Park house), the bed-head pushed into the "bay," as far as it would go, with every window open, sometimes wide, sometimes but very little, even in windy weather, night and day, in every month in the year. And never, in a single instance, with anything but benefit: the patient, I need hardly add, well wrapped and warm.

Miss M —— was well rubbed all over, from shoulders to calves, for an hour every night before going to sleep, with a mixture of cod-liver oil and creosote, by her good landlady, for many months; well washed with tepid water and soap in the morning; and then the left side of the chest, from sternum to spine, well rubbed with strong iodine ointment. She had long been obliged to frequently leave the table soon after commencing a meal, and suffer from a paroxysm of coughing, and not infrequently to vomit the little she had eaten. After trying

several remedies in vain, the trouble soon yielded entirely to two drops of oil Sylvestris just before each meal.

During the severely cold weather, objections were made to having the window much open, on account of cooling other parts of the house. I had then made for her two very light valves in a mouth and nose piece such as dentists sometimes use, one valve opening inwardly, in inspiration. To this was attached one end of an air-tight, ½-inch tube of block tin, with a piece of the best rubber tubing; the other end passing out under the window sash to the outer cold air. With this she would lie for hours and breathe the outer air through the tube, and sometimes sleep so breathing; expiring into the room through the other valve, which opened outwardly. She practiced the lung gymnastics well; the breathing and chest expansion improved; the stomach, unburdened and undisturbed by anything but plain food, including Sanguis Boum—no oil, no creosote, digestion and strength improved also, and in a few weeks she was able to walk up to the Gardens, where on fine days she would sit for hours, well wrapped.

Cough and expectoration became gradually less, the lungs cleared up, cavities healed, with some flattening of the chest, and the natural respiratory murmur gradually took the place of the universal rales. In the next following August, she went home a comparatively well woman. Since that time she has spent two winter sessions at a Washington, D.C., school of drama, studying for the stage; and in Toronto, at the court, above mentioned, four years later, was as well, practically, and vigorous, as she ever was.

Wm. H. H——, of Toronto, had been a clerk in the Ottawa Bank here for several years. Owing to profuse pulmonary hemorrhages, with usual symptoms of progressive tuberculosis, he was obliged to give up his position. He went to Muskoka, and was treated by several physicians, for months, with no improvement, but on the contrary, gradual progress of the disease. He came under my care in the autumn of 1902. No natural respiratory murmur could then be heard in the left lung, but universal rales, with marked dullness; the right was practically free from tubercular deposit, though the cog-wheel respiration was manifest. He was considerably emaciated, but could walk from his home in the west end of the city, down grade, to the centre, taking a car for returning; respirations, thirty per minute, without very marked shortness of breath or labored breathing; pulse persistently over one hundred; with a good deal of cough and expectoration. The hemorrhages had continued at intervals and were at times very profuse. Appetite and digestion fair. He had taken habitually considerable out-door exercise, in the form of quietly walking.

He was treated in accordance with the principles set forth above, residing at home with his father. The exercise was restricted, and he sat or lay constantly out of doors or at largely open windows; chest and lung expansion, commenced with the utmost care, with slow action of the arms, but persistent; strong iodine ointment freely rubbed in with much friction, over the diseased side every night; inhalations, chiefly of menthol, with the simple inhaler; half grain opium pills, one or two every hour, were prescribed, with absolute rest, on indications of hemorrhage; liberal diet, with thorough mastication; Sanguis Boum; and the morning bath. This course was steadily persisted in, with gradual improvement; the opium pills were but rarely needed, the bleedings becoming less frequent and less copious. The cough remained the most persistent symptom.

Last spring he articled under surveyors, and has been doing his share of the out-door work on surveys, practically well, ever since. The lung tissue has not yet entirely recovered its tone, respiratory murmur being somewhat weak, but will doubtless soon be restored to about its natural condition.

Selected Articles.

THE CIRCUMSTANCES AND TREATMENT OF MOVABLE KIDNEY.

By SIR FREDERICK TREVES, Bart., K.C.V.O., C.B., LL.D.,
Sergeant Surgeon to H.M. the King.

Conspicuous among the maladies of modern times is the curious condition known as movable kidney. The early pathologists were aware of the various congenital anomalies of position to which the kidney is liable, but the movable kidney appears to have escaped their notice.

It does indeed still escape notice on the post-mortem table, its undue mobility practically ceasing with the patient's life. At the autopsy the organ is found in place, and there may be nothing to suggest that it had ever left its normal position. Moreover, it is not always possible to determine after death if a kidney had been clinically movable during life, except perhaps in cases in which the mobility has been extreme.

Ebstein* mentions that in 3,658 autopsies performed in the Charité at Berlin a movable kidney was found in 5 instances only, showing the proportion of the affection to be apparently 1 in 732.

On the other hand, Glénard asserts that among females no less than 22 per cent. of all adults have movable kidneys.

The discrepancy between these two quite precise statements is not a little astonishing, and serves to illustrate the differing views in which the movable kidney presents itself to the notice of the maker of post-mortems on the one hand, and the clinical diagnostician on the other.

While the silence of earlier writers on morbid anatomy is intelligible, and the results of modern pathological records are to be explained, it is difficult to understand how the movable kidney came to elude so long the notice of the clinical observer.

The displaced or displaceable organ is as a rule singularly easy to detect, and indeed is apt to thrust itself incontinently into notice. It has been more than once discovered by the introspective patient, who has been much terrified by the apparition and by the diablerie of its movements.

Yet in spite of this it seems to have escaped the cunning and watchful fingers of the man of medicine until quite recent times.

It could hardly have been included with the phantom tumors of bygone days, for the accounts of the phantom,

* Ziemssen's *Cyclopedia of Medicine*. London. 1877.

though always vague, leave little doubt but that it owed its being most usually to a contracted section of the rectus muscle or to a laboring intestine distended with gas or feces.

It is strange that to Dr. Bright, the shrewd physician, there should not have appeared this common phenomenon, for he makes no mention of it in his very exhaustive and elaborate "Clinical Memoirs on Abdominal Tumors."

The majority of the cases upon which Bright based his memoirs fall between the years 1828 and 1839.

The first sound clinical description of movable kidney appears to have been given by Pierre Rayer, whose work (*Traité des Maladies des Reins*) was published in Paris in 1839.

It can scarcely be assumed that the movable kidney is to be ranked among the many inventions of the ever-active 19th century, or that it is one of the teeming products of the productive Victorian era.

The condition has been referred to by some modern writers as a stigma of degeneration, but such stigmata are not of abrupt appearance, and yet previous to the commencement of the last century no detailed mention of the movable kidney is, I believe, to be found.

Ebstein, who appears to have dipped into the history of the matter, states that "observations" on movable kidney were made by Mesua and Johannes Riolan, two writers who flourished in the 16th century, but he ascribes the real clinical appreciation of the condition to Pierre Rayer. Some account of the movable kidney as it is at present regarded may now be given.

The Anatomy of Movable Kidney.—The kidneys are deeply placed at the back of the abdominal cavity. If the body were transparent it would be seen that these organs are to a great extent covered in front of the cartilages of the seventh, eighth, ninth and tenth ribs, that the upper end of the left kidney reaches to the height of the ensiform cartilage, and the right nearly to that level. According to Quain the left kidney is 1½ inches, and the right 1 inch, above the position of the umbilicus, or the summit of the iliac crest. The organ on the left side is frequently altogether above the infracostal plane. The upper end of the kidney lies upon the diaphragm.

The organs are somewhat lower in women and in children than in the adult male. In childhood the kidneys are relatively larger than in the adult, and before the tenth year are surrounded by very little fat.

The kidneys lie in recesses on either side of the spinal column, and are invested by that extension of the subperitoneal tissue which is known as the perirenal fascia. The organs themselves are immediately surrounded by a considerable quantity of fat, in which, indeed, they are buried.

The kidneys are maintained in position by the fascia and fat which surround them, by the general pressure of the abdominal viscera—the important intra-abdominal pressure—and to a minor degree by the vessels which are proper to the organ. Much support is also derived from the configuration of the lumbar recesses in which they are lodged.

The peritoneum, which passes over the ventral surface of the kidney, has little effect in holding the gland in place. The serous membrane is itself readily rendered mobile, and it has but an indifferent hold upon the fascia and fat in which the kidney is lodged.

There are in this fascia certain strands of condensed tissue which pass from the structures forming the posterior abdominal wall to the fibrous capsule of the kidney. These appear to me to take a prominent part in the fixation of the organ. They vary in consistence, are often tough, and are then encountered by the finger in clearing the kidney from the surrounding tissues in the operation of nephrectomy. It may be said, however, that Wolkow and Delitzin are of opinion that these bands have little or no effect in supporting the organ.

The normal kidney moves on respiration. This is a point insisted upon by most writers. Those who are specially impressed by the mobility of the gland allude to the passage of the kidney up and down when exposed through an incision in the loin. Kidneys so exposed are—it is to be hoped—seldom normal, and the posture of the patient during operation as well as the respiration under anesthesia is also not normal. Dentu states that the range of the up-and-down movement of the normal kidney during natural breathing is from 3 to 5 cm.

This I cannot think is accurate. It many times falls to the lot of the surgeon to have to examine the kidneys during an abdominal operation, and many times the organs so palpated are normal. The occasion is not suited for the making of physiological observations, but the impression such examinations have left on my mind is this—that the movement of the left kidney on inspiration is often not to be appreciated, while that of the right is slight and always much less than the respiratory movement of the liver. A range of movement of 3 to 5 cm. I have never witnessed in normal organs.

Etiology of Movable Kidney.—The etiology of movable kidney is obscure, and little is known of the precise tissue-changes which lead to the prolapse of the organ This can be said, that it is infinitely more common in women than in men, that it is more frequently met with on the right side, and that most of the cases fall between the ages of 25 and 50, or are at least first discovered between those periods.

Glénard states that out of 148 cases which came under his

notice, 131 were in females and 17 in males. In 126 instances the lesion was on the right side, in 3 only was it on the left, while in 19 examples both kidneys were movable.

Legry states that 87 per cent. of the cases are in women and Dentu considers that from 85 to 90 per cent. of the instances are on the right side. One writer is so far impressed with the frequency of movable kidney in women as to assert that 22 per cent. of all adult females present this condition.

There is no doubt but that a movable kidney is quite uncommon among men. I have never been called upon to seriously treat this condition in a man, and while operations upon movable kidney are only too common, such records as I have encountered are almost silent as to operations upon men.

A displaceable kidney on the right side in a male subject is now and then met with, but such a condition on the left side is, in my experience, exceedingly rare. The diagnosis of a left movable kidney in a man is not so uncommon, but the tumor has not always realized the diagnosis and has usually proved to be some such thing as a fecal mass in the colon or a sarcoma of the omentum.

A large proportion of the women who are the subjects of movable kidney are individuals of feeble muscular development, of lax tissues, with flabby abdominal walls, and with possibly a tendency to general enteroptosis; on the other hand, a movable kidney is by no means to be discovered in all cases of pendulous abdomen.

The trouble is more common in those who have had many children than in those who are childless, and quite a striking proportion of the subjects have become more or less rapidly thin. There is no doubt but that the rapid loss of intra-abdominal fat is a common and immediate cause of loose kidney. Sometimes the diminution in weight has come without apparent reason, while in other instances it has followed upon some exhausting illness.

The mere loss of the perirenal fat will not, however, produce a movable kidney. This state of the organ is by no means of necessity a feature of emaciation. On the other hand, a movable kidney may be met with—although rarely—in the corpulent, and every surgeon will testify that the wandering organ when exposed by operation is not always found to be deprived of its fatty envelope. Now and then the investment of fat has appeared to me to be normal, although there can be no doubt but that in the majority of the examples of movable kidney the amount of the perirenal fat is diminished.

There is evidence to support the view that undue mobility of the kidney may be produced by injury. Such a sequence of

events is uncommon, but I have met with instances that I think are beyond question.

Long-continued horse exercise, and especially hunting, have been accredited with the production of movable kidney, but here it would seem probable that the jolting has drawn attention to the condition rather than produced it.

Examples of movable kidney have been met with in quite young women and even in children, and there is much probability that certain cases are congenital. In this connection it may be said that the meso-nephron would appear to be a pure myth. It has been described, and the description has been faithfully repeated. The structure does not, however, seem to have been seen by the human eye, and indeed the meso-nephron has for long occupied the position of an anatomical Mrs. Harris.

There is no evidence that tight-lacing plays any part in the production of the condition now under notice. Although the deformity effected by tight-lacing is no longer popular, yet writers still claim for the practice the merit of original sin, and ascribe to it many disorders which are of obscure etiology.

The Examination of a Movable Kidney.—A normal kidney cannot be discovered by palpation in the living subject. The only exception to this statement may be provided by the subjects of extreme emaciation and by thin children, especially when they are examined in the erect position.

In searching for a movable kidney the patient lies upon the back, the surgeon sits upon one side of the couch facing the patient. It may be assumed that the examination is being made upon the right side. In such case the surgeon's left hand supports the loin from behind, the fingers occupying the space between the last ribs and the iliac crest. The palm of the right hand is placed firmly upon the anterior abdominal wall just below the ribs. The fingers point upwards and outwards. Associated with these fingers of the right hand is the left thumb. The patient is made to take a deep inspiration, and the kidney, if movable, is felt to descend between the left fingers spread out behind and the left thumb and right hand on guard in front. A little pressure between the hands and the organ is held, while a little more pressure during expiration and it will slip away again under the ribs.

Glénard describes the steps of the examination under three graphic headings; the lying in wait, the capture, the escape.

This examination must be supplemented by an investigation of the renal area when the patient lies upon the sound side. In this attitude, if the shoulders be well raised and a deep inspiration be taken, the kidney may be felt to have tumbled towards the median line or to move on respiration between the two watching hands. An exceptionally movable kidney may

be entirely overlooked if it happen to be absent from the renal region when that district is being examined. I remember an instance in which one surgeon said that the kidney was the most movable he had ever encountered, while another surgeon maintained that the organ did not move at all.

A further examination of the district should also be made when the subject is standing erect.

The inferior border of the organ is well defined, but the upper extremity will be masked more or less completely.

Degrees of Movable Kidney.—Glénard bases four degrees of movable kidney upon the results of the method of examination just detailed:

1st degree. The kidney just descends on inspiration. Its lower end can be felt, but not held.

2nd degree. The kidney can be held between the fingers but its upper extremity is not to be defined.

3rd degree. The tissues above the upper end of the kidney can be compressed, and some definition of the upper end be made.

4th degree. The kidney is floating and can be felt during expiration by mere palpation. The "floating kidney" is unaffected by respiration. It is most often found in the region of the navel, or may extend well into the iliac fossa.

From the clinical observation of movable kidneys of different degree it would appear that the organ at first descends vertically, becoming more and more anterior as its attachments are the more loosened. The upper end inclines outwards and the lower end inclines in. Indeed so marked is this rotation that the movable kidney of the fourth degree tends to become almost transverse in position.

It appears to me also that the thick outer border of the gland moves more and more towards the front wall of the abdomen until it becomes nearly anterior. The feature is noticeable when the organ is exposed by operation in the loin. Indeed, when the patient is lying upon the sound side so much may the kidney be rotated on its vertical axis that the operator in opening the lumbar region may come first upon the posterior surface of the organ.

The movable kidney is usually normal. Owing to the thickness and variable rigidity of the anterior abdominal parietes, the movable kidney usually appears to be larger than normal.

As time goes on the floating kidney returns less and less readily to its proper place in the loin. Moreover a displaced kidney may become fixed by adhesions in an abnormal position

The movable kidney may become the seat of hydronephrosis

This is no doubt due to repeated kinking or acute bending or torsion of the ureter, whereby the escape of urine is more or less abruptly hindered. Such occurrences are marked by those acute symptoms which are generally ascribed to "torsion of the kidney" or "strangulation of the kidney."

Hydronephrosis may, however, occur in cases in which there have been no such acute symptoms of twisting or kinking of the ureter. On the other hand, the occurrence of acute attacks, presumably due to the condition just named, is by no means of necessity followed by hydronephrosis In certain cases it would appear that there is an abiding narrowing of the ureter —owing, as some assert, to the fixing of the bent ureter by adhesions—and, as a result, a chronic condition of hydronephrosis.

The fact that a kidney has become movable does not thereby exempt it from such diseases as befall the undisplaced kidney, and the movable gland has been found to be the seat of calculus, of tuberculous disease, and of a malignant growth.

I think that some legitimate doubt may attach to the statement that in examples of movable or floating kidney the pulsations of the renal artery have been felt.

Diagnosis of Movable Kidney.—Without entering into the complex question of differential diagnosis it may be pointed out that the most common conditions which have led to confusion in association with movable kidney are Reidel's lobe, a distended gall-bladder, and a fecal mass in the colon. It is somewhat disconcerting to reflect that all these conditions may coexist with a movable kidney on the right side.

As a matter of experience I may say that when a doubt has existed as to whether a certain swelling is a movable kidney or a distended gall-bladder, it has more often proved to be the latter than the former.

Symptoms of Movable Kidney.—The symptoms ascribed to movable kidney are legion, and include manifestations which vary from mere peevishness of temper to agonizing renal pain. There is no definite relation between the degree of mobility of the gland and the clinical phenomena associated therewith. A patient may have a kidney running wild in the abdomen and be at the same time free of any discomfort or of any trouble that can be called a symptom.

On the other hand, the very first evidence of a movable kidney may be associated with an acute "torsion" attack.

In the clinical history of movable kidney these attacks stand alone. They are usually sudden and intense, and are attended with acute renal pain, vomiting, abdominal tenderness, and a varying degree of collapse. Some are less abrupt, or may even be gradual in their mode of onset and moderate in their mani-

festations. Some are relieved by posture. Some pass off abruptly, and others slowly. A temporary hydronephrosis may attend the attack, or it may not.

Apart from these intense and alarming disturbances the symptoms ascribed by various writers to movable kidney may be said to include all those manifold ills which make up the melancholy history of the "enjoyers of poor health." There is scarcely an "abdominal symptom" which has not been placed to the credit of a floating kidney. Yet all classical symptoms of this disorder may be present, and the kidneys be found to be firmly fixed in position.

As to what constitutes the classical symptoms of this disorder it is probable that they would be tabulated somewhat as follows. A sense of dragging in the abdomen, a dragging from the loin, attended with an undefinable discomfort and feeling of weakness. This discomfort may pass into actual pain, which pain may follow the lines accredited to renal pain, or may radiate down the thighs and legs and across the back. There may be some undue frequency of micturition, but this is uncommon. Added to this would be certain evidences of abdominal disturbance, such as dyspepsia, flatulence, and constipation. The symptoms are increased by movements, and especially by jolting, and the patient is disposed to walk and stand as little as possible. The relief when in the recumbent position is usually complete.

Over and above such manifestations as these come that congeries of troubles which belong to what is known as "neurasthenia." Here we find a mysterious exhaustion, a terrorising palpitation, vertigo, irritability of temper, instability of purpose, neuralgias of more or less intense types, insomnia, and other symptoms, most of which are described in language of great intensity and vividness by the patient.

Not a few of the subjects of this trouble may be described as presenting an assertive peevishness and a whining type of melancholy which their friends describe as "trying." From the very precise account which Dickens has given of the mental attitude of Mrs. Gummings it may be safe to assume that she had a movable kidney.

Among the less common effects of movable kidney may be mentioned, dilatation of the stomach, intestinal obstruction and jaundice. I have reported two cases in which the movable kidney reproduced with extraordinary exactness the phenomena of hepatic colic followed by jaundice. In both instances the condition was revealed by operation.*

Treatment of Movable Kidney.--The literature of this subject

* *Lancet*, January 6, 1900.

has, I think, rather encouraged the belief that the only treatment of movable kidney is by operation. The operation of fixing the kidney in position by suturing has certainly been very extensively employed and possibly with some little lack of discrimination. The risk of the procedure is very slight, and possibly the mortality of the operation at the present moment does not exceed 1 per cent. Dentu has collected three hundred and seventy-four examples of nephrorrhaphy with seven deaths, but in only four out of this number could the death be ascribed to the operation. Keen, in a collection of one hundred and thirty-four cases, finds the mortality to be 2·9 per cent.

An operation, however, is neither justifiable nor commendable on the sole ground that it is attended with small risk. I have come to believe the nephrorrhaphy is by no means a routine measure in the treatment of movable kidney; that it is, indeed, not demanded in the great majority of the cases, and that, with one exception, it is to be regarded as the last, and not as the first, resource.

The operation is not always successful. The methods of performing it are legion, but there is no procedure which can claim to be infallible or to be exempt from occasional failure. By the earlier methods of operating failure was common. My experience leads me to believe that by all methods a lack of success is more common than is supposed or allowed. In dealing with a series of reported cases it must be remembered that it is only natural that in such records the successful case should find a place which is often denied to the case that fails.

Keen, in reviewing a series of 116 cases at a period of not less than three months after the operation, considered that 57·8 per cent. only were cured, 12.9 per cent. were improved, while in 19·8 per cent. the operation had failed.

Apart from the mere failure to maintain the organ in place, the operation has been followed in certain instances by considerable neuralgia, sometimes in the renal region and sometimes extending down the back and outer side of the thigh and leg. As in stone of the kidney so far after nephrorrhaphy, pain of a severe character has, on occasion, been experienced in the heel or in the sole of the foot.

The operation, I venture to think, is imperative in cases in which there have been "torsion symptoms," and the sooner it is carried out in such instances the better. In cases in which the symptoms of movable kidney are those of the ordinary type and in which all measures of treatment—short of operation—have failed, nephrorrhaphy may be considered; but I am under the impression that the instances of this kind in which the operation will be necessary will be exceedingly few. I venture

to think that a time is not far distant when suturing of the kidney will become one of the rare operations of surgery.

The treatment that appears to commend itself in the management of a case of movable kidney, causing symptoms (short of those of "torsion"), is the following: Treatment by rest in the recumbent position, with careful feeding, precise attention to the digestive organs, and general massage.

The so-called "rest cure" carried out for a month has not caused the movable kidney to cease to move, but it has rid the patient of her symptoms. In a quite large proportion of cases neurasthenia is the major element in the train of troubles complained of, and the treatment of this condition alone has sufficed to cause the movable kidney to be forgotten. In such instances the mobility of the kidney is probably the least important factor, although it is the only apparent or palpable one. A lady who is worn out by the unceasing turmoil of a London season, and who ascribes her many symptoms to a movable kidney, will often lose all her troubles after sufficient rest. The same may be said of the lady who hunts four days a week, and of the many women generally who "do too much."

While rest is not a panacea for all examples of movable kidney, it is at least an admirable preliminary to any more detailed treatment of the condition.

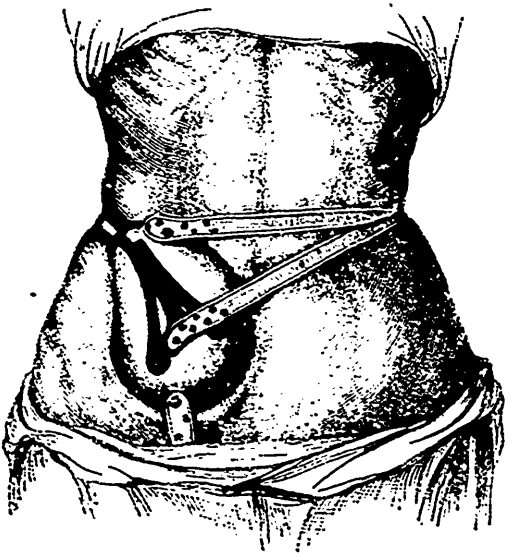
In 1895—at a time when, in common with other surgeons, I regarded nephrorrhaphy as the only remedy for movable kidney—I was consulted by a lady whose objection to this or any other operation was such that that method of treatment was not discussible. I had already found that the many belts, pads and supports designed for movable kidney were either utterly useless or at least quite unreliable. Now and then one would meet with a case of movable kidney in association with a very pendulous abdomen and some general enteroptosis, in which a belt proved to be of value or gave satisfactory relief. In the case of the lady in question I found that the kidney, which was very mobile, could be kept in place by the hand in all positions of the body and even during such movements as are involved in violent coughing, etc.

I asked Mr. Ernst to endeavor to make a truss, upon a pattern I suggested, which would reproduce the pressure of the fingers. One instrument after another was made, but they all failed. Fortunately neither the patient's patience nor Mr. Ernst's ingenuity were readily exhausted, and in due course was produced the instrument shown in the woodcut.

The instrument consists of a thin, carefully padded, metal plate which exercises pressure upon the abdominal wall by means of two springs.

The pressure concerns the lower and inner margins of the plate, so that the kidney is forced upwards and outwards. It

must of necessity be applied when the patient is lying down. It requires very careful fitting and adjustment, and it is useless to recommend the appliance to any patient who is not prepared to devote at least three or four sittings to the precise adjustment of the support. The instrument is light—weighing about six ounces—and is perfectly comfortable after it has been worn for a few days. Of its efficiency I can speak very definitely, for since 1895 I have abandoned the operation of nephrorrhaphy except in the following examples—cases in which there were torsion symptoms; some cases in which the patient would be residing in the tropics, many hospital cases in which the patient had to work for her living and could neither indulge in a long-sustained rest nor properly manage a truss requiring some delicacy in its adjustment.



Since 1895 Mr. Ernst informs me that he has made more than 300 of these trusses for patients in private practice. In 95 per cent. of the cases the truss has proved absolutely efficient; the kidney has been kept in place and the distress that had existed has entirely vanished.

With the truss on the patient has been able to take active exercise, to ride and in an occasional instance, to hunt.

It is needless to say that a truss will not cure neurasthenia. That condition must be dealt with by other measures. All that the truss claims to do is to keep a movable kidney from moving, and that—it may be pointed out—is all that the operation claims to do. In a large proportion of cases the truss can be given up at the end of 18 months or two years.

THE SURGICAL TREATMENT OF FACIAL PARALYSIS.

By FRANCIS MUNCH, M.D.,
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Long regarded as an affection amenable exclusively to medical treatment, facial paralysis during the last few years has, little by little, fallen into the hands of the surgeon. We hasten to add, however, that it is not claimed that surgical intervention can usefully be invoked in all cases of facial paralysis. It is not proposed to add one more to the list of affections taken from the domain of medicine in favor of more drastic methods. The surgeon merely places the resources of his art at the disposal of patients whose affection has hitherto been regarded as incurable, their treatment having proved refractory to all means at present at the disposal of medical therapeutics. The surgeon thus merely completes the work of the physician, and his intervention, far from taking the place of medical treatment, commences where that ends; in other words, it merely enlarges the domain, and widens the horizon, of curative therapeutics.

The operation proposed in view of the treatment of facial paralysis consists in establishing anastomosis of the paralyzed facial nerve and a neighboring cranial nerve. The first recorded operation of the kind was performed by Dr. J. L. Faure, on the suggestion of Dr. Furet, in 1898, but it had already been performed by Mr. Ballance in England in 1895. In any event, Faure's proposal found little favor in France, for out of twenty-two observations which I have been cabled to bring together only one is credited to a French surgeon. In most of these cases the intervention comprised a spino-facial anastomosis; the peripheral end of the facial nerve, divided at its point of exit from the stylo-mastoid orifice, was joined in one way or another with the external branch from this nerve to the trapezius. In seven cases the anastomosis was between the facial and the hypoglossal nerve. The glosso-pharyngeal nerve has also been recommended as an alternative by Schaffer, of Edinburgh, but although the latter operation presents certain advantages from the functional point of view, its execution is so complicated that few surgeons are ever likely to avail themselves thereof.

The first question we have to ask ourselves is whether the proposed operation is rational. Is the facial graft legitimate in the light of our present physiological knowledge, and is it likely to obtain the object in view? In the light of current physiological views we may assume that section of a motor nerve is followed by loss of excitability on the part of the peripheral

end, which undergoes what is known as Wallerian degeneration. About thirty days after section of the nerve all that remains is the white matter of Schwann studded with nodules embedded in dried protoplasm. The changes bear on the entirety of the distal segment. The central part, on the contrary, remains intact. The extremity of the axis cylinder becomes slightly swollen, constituting a sort of "zone of growth," which subsequently extends by development of the axis cylinder. If the ends of the divided nerve have been brought together after division the axis cylinder granulates until it reaches the peripheral end, insinuates itself in the old Schwann's layer, and thus nervous continuity is restored.

It would seem, therefore, that anastomosis of the central end of an undamaged nerve with the peripheral end of the paralyzed facial nerve, followed by its regeneration, is a perfectly admissible fact from a histo-physiological point of view, at any rate in principle. We must not overlook the fact, however, that in facial paralysis of the third degree. that is to say, the very cases which are reputed to be medically incurable and therefore fall into the surgical domain, can only be identified as such after the lapse of a variable length of time. Whatever the delay, it must necessarily be of considerable duration, and in virtue of the principles enunciated above we must obviously abandon the hope of inducing the "zone of growth" of the central nerve to develop a connection with the fibrous remains which is all that is left of the peripheral part of the facial nerve. For this reason we are unable to attach much importance to the researches undertaken by Manasse and Barago-Clarella in experimental spino-facial anastomosis. In these experiments indeed, the anastomosis was invariably effected immediately after section of the nerves, and they teach us little with regard to the point under consideration, viz., whether in a grave and therefore ancient case of facial paralysis, we have any chance of obtaining nervous regeneration. These researches, moreover, add nothing to the knowledge already obtained by experiments long since carried out by Philipeaux and Vulpian on the crossed suture of the hypoglossal and lingual, etc., investigations which conclusively settled the point under discussion without leaving the slightest doubt as to the reality of the fact, *per se*, or on the possibility of the functional restoration after similar nervous conjunctions.

The histological researches carried out by Stewart at the suggestion of Mr. Ballance, present, from the point of view of spino-facial anastomosis, a vastly greater importance. On the strength of a series of histological researches, both experimental and clinical, these authors were led to conclude, in opposition to the generally received view, that the axis cylinder

is in nowise derived from a cellular body situated in the neuraxis or in the spinal ganglia. There is no question of prolongations derived from medullary neuroblasts insinuating themselves in the tissues to reach their muscular or cutaneous termination. According to Messrs. Ballance and Stewart, the axis cylinder is constituted by the fusion of an infinite number of segments. Each of these segments is built up of special cells, which play their part in the structure of the nerve sheaths, the nucleus whereof is attached to Schwann's sheath. In the interior of cells, Messrs. Ballance and Stewart have witnessed the appearance, some time after division of a nerve, of various elements which subsequently provide, some of them myosine, some of them a segment of axis cylinder. When the peripheral end of the nerve is not united to the segment that has remained in connection with its trophic centre, these changes soon ceased to take place—there is no "maturation." But if union be brought about, the fragments of axis cylinder become fused together and penetrate and traverse the sutures restoring connection with the central end.

It will be seen that this process differs greatly from the classical procedure. The peripheral segment plays an active, indeed a predominating, *rôle* in the regeneration of the nerve; moreover, the nerve cell, *per se*, no longer occupies the all-important position in the process of repair formerly attributed to it. The axis cylinder is relegated to the simple position of an offshoot of the nerve cell, being made up of the fusion of numerous segments, derived each from a different and non-central cell.

However this may be, the most important conclusion to be drawn from the researches of the English observers is, that the peripheral segment of a nerve, even though it has undergone complete degeneration, after months or even years, although it has become reduced to a mere fibrous cord, preserves nevertheless, Schwann's nuclei, which remain capable of renewed activity and enable the damaged nerve to become once again a conductor of nervous energy, provided it be linked up with the central segment of another nerve. It follows that the vitality of the nerve is not the point to be considered, since it is assured; it is, indeed, the state of the muscle that should occupy our attention, for upon its contractility will depend, in great measure, the result of our intervention. Obviously, if the contractility of the muscle is lost no nerve suture can be of service; in short, in discussing the propriety of an intervention it is to the muscle rather than to the nerve that we must look.

Most operators now adopt Faure's suggestion to make use of the spinal nerve for the purpose of suture with the degenerated facial nerve. It is important to divide the facial as close as

possible to the stylo-mastoid foramen in order to bring as long a segment of degenerated nerve within the sphere of influence as possible. The simplest plan in regard to the spinal nerve is to make use of the branch to the trapezius, which can easily be isolated at the spot where it enters the body of the muscle through which it has to pass. Some surgeons practise the anastomosis end-to-end, others lateral anastomosis, as, for instance, in the method adopted by Ballance, who splits the sheath of the spinal nerve by a small incision, into which he inserts the end of the facial. This procedure has the advantage of avoiding the paralysis of the mastoid and trapezius, and experience does not show any subsequent dragging thereon. Dr. Faure selected the spinal nerve in preference to the hypoglossus and glosso-pharyngeal, on the ground that it necessitated less manipulation. It must, however, be borne in mind that the destruction of the spinal nerve necessarily entails atrophy of the shoulder muscles with consequent paralysis. Moreover, the spino-facial anastomosis, when successful in restoring contractility of the facial muscles, determines synergical contractions in the shoulder, so that voluntary or involuntary contraction of the shoulder muscles is associated with corresponding contraction on that side of the face. Now the contraction of the facial muscles is, so to speak, the representation of the mental state, and it is obvious that under these circumstances any accidental movement of the shoulder muscles may give the face an expression quite out of keeping with the then mental state of the subject.

This drawback has led certain surgeons to prefer the hypoglossal in spite of the fact that its greater depth renders the operation much more difficult; moreover, the nerve is much smaller. A point in favor of the choice of the hypoglossal is that its cortical centre is much nearer that of the facial than that of the spinal; moreover, the medullary protuberances of the facial and hypoglossus are linked up by the posterior longitudinal tract. It follows that the re-education of the facial muscles, if this be possible, ought to take place much more readily with the hypoglossal than with the facial. Opinions differ as to the advantage attending this special method. Korte, for instance, considers the hemilingual atrophy and dysphagia which have been noted to be much more troublesome than the atrophy of the shoulder; but Bernhardt and Ballance both appear disposed to prefer the hypoglossus in future.

In estimating the value of surgical intervention in the treatment of facial paralysis from the twenty-two cases so far recorded, we must, in fairness, eliminate the "negative cases," that is to say, cases in which the operation is still too recent, and those in which, for special reasons, there was no justifica-

tion for believing the subjects to be capable of improvement. In most of the other cases the lesion was of comparatively recent onset, rarely exceeding from six to ten weeks. Gluck and Alexander, however, had cases of five years' standing. It is possible, however, that the length of the interval between the division of the facial nerve and its anastomosis exerts some influence on the ultimate result, since the best effects were obtained in cases where the division and the anastomosis were performed at one sitting.

The previous duration of the lesion, on the contrary, does not seem to affect the greater or less rapidity of restoration of function, and in this respect the most marked differences have been observed. Side by side with a case reported by Cushing, in which the first symptoms of improvement were noted thirteen days after the operation, or with one by Kennedy, in which movements of the upper eyelid were seen seven days after, there are others, the more numerous, in which months elapsed before the slightest indication of returning muscular power was observed. Speaking generally, it may be stated that we must not expect any marked improvement under six months. The age of the patient does not appear to have much bearing in regard to the return of functional activity.

In the cases in which grafting of facial nerve has been undertaken hitherto, the paralysis was invariably of peripheral origin. In the majority the nerve was accidentally divided in the course of an operation for aural caries; in others, as the result of a wound by firearms, or in association with fracture of the skull. In only one instance (Taylor's case) was the operation performed for paralysis *à frigore*, and not once for paralysis of obstetrical origin. Judging from the published cases, therefore, the indications for surgical intervention are tolerably limited.

To form a trustworthy opinion of the value of this intervention we must have before us a clear conception of its possibilities, and of what may reasonably be expected of it. Treatment of a paralysed facial nerve means attempting to restore to the muscles of the face a motility in every respect comparable with that of the pre-paralytic period. The object in view is the *restitutio ad integrum*, and it is only when this is possible that we are entitled to discuss "the cure of facial paralysis." This being so, we may state forthwith that in cases which have resisted medical treatment, even surgical measures may prove ineffectual so far as concerns complete integral restoration of function. The anastomosis of nerves cannot possibly replace matters in the *status quo ante*. It can only be palliative; in fact, as Dr. Faure puts it, it can only aim at "correcting, in the state of repose, facial asymmetry and restoring tonicity to the

paralysed muscles"—so that it is in reality a "cosmetic operation."

The disappearance of the facial asymmetry is therefore the principal—indeed, the only—benefit likely to accrue from the surgical treatment of facial paralysis. This result has been obtained, more or less, in a number of cases, though it is impossible beforehand to forecast with any degree of certainty to what extent the asymmetry will be corrected. It is only fair to add that, even taking things at their best, we are not justified in talking of "complete cure" of facial paralysis in these cases, as is so often done by enthusiastic partisans of surgical intervention. In the more successful cases—by no means in all—the facial asymmetry is modified with the muscles at rest. But it is only with the muscles at rest; for, after as before the operation, the play of the facial muscles is limited to one side of the face, the other half, corresponding to the anastomosis, remaining motionless. The only movements obtainable in this half of the face—after spino-facial anastomosis—are associated movements of the shoulder and face muscles. When the patient wishes to contract the facial muscles he has to raise the shoulder, so that the facial muscles no longer contract spontaneously in response to emotions, and, therefore, no longer reflect the mental state. In the twenty-two observations only one patient developed movements of the labial commissure in laughing. Even in this instance various interpretations are possible. We know, for example, that according to some anatomists the fibres governing the labial commissures have their deep origin in the hypoglossal nucleus. On the other hand, the association of movements between the shoulder and the face so that the facial muscles contract whenever the shoulder is raised, entails manifest drawbacks. The control which some patients seek to impose by grasping the motionless limb with the other hand is at best very imperfect.

We cannot disguise from ourselves that this is a very serious inconvenience. It remains to be seen how far it is possible to check this association of movements by systematic re-education. So far it has not been found practicable to suppress it to any tangible degree.

To sum up, grafting the facial nerve on to a neighboring nerve, may be the means of restoring a certain degree of tonus to the facial muscles, and thus in some measure remedy the asymmetry; but it cannot restore spontaneous movement to the facial muscles while, on the other hand, it often entails inconveniences not devoid of gravity. Moreover, the atrophy of the muscles previously under the control of the anastomosed nerve, which is inseparable from the procedure, is an unquestionable evil. Although in some cases the atrophy of the

trapezius or semilingual atrophy does not determine grave constitutional embarrassment, in others the results have been disastrous.

These various considerations explain, perhaps, why this operation, seductively ingenious though it be, has so far attracted comparatively few partisans; indeed, we may well ask ourselves whether it is not likely to be abandoned as falling short of its object, the inconveniences determined by facial paralysis being, after all, less serious than those caused by the operation undertaken for the relief of the former. However this may be, should this procedure acquire a position in practical surgery, it would appear preferable, judging from the observations at our disposal, to select the hypoglossal-facial graft, thus avoiding the more serious troubles resulting from the spino-facial graft.—*Medical Press and Circular.*

Progress of Medical Science.

MEDICINE.

IN CHARGE OF W. H. B. AIKINS, H. J. HAMILTON, C. J. COPP AND F. A. CLARKSON.

"Galloping" Typhoid Fever. By Doctors H. ROGER and M. SALOMON.

The doctors relate the histories of two cases, occurring in the Hospital of the Porte d'Aubervilliers. The former was that of a young woman, eighteen years old, who was taken suddenly ill with the usual early typhoid symptoms. On the second day, the rose spots were abundant and were soon followed by ecchymoses. She died on the eleventh day. The second case was that of a woman of twenty-three, who was in the hospital with her sick child. On the 4th of December, 1903, she began to show typhoid symptoms; on the 6th December the spots appeared, and on the 11th December she succumbed. At the autopsy of the latter, the local condition was not that which one usually finds at the end of the first week—an infiltration of Peyer's patches. Ulceration had already begun, and in the cecum the ulcers were confluent. In fact, it was the condition usually found in the third week.

In other similar cases, recorded in literature, we find many of the features of the two cases here mentioned. From the onset the progress is rapid. The nervous system is profoundly affected, prostration is extreme; delirium, loss of consciousness, incontinence of urine and feces complete the picture. Albuminuria is the rule. The early appearance of the rose spots and their rapid extension are specially characteristic of the two cases here recorded. The rule that the typhoid eruption appears at the end of the first week is not absolute. Curschmann says he has seen the spots on the second day. Some have seen hundreds of spots (Murchison). The face is never invaded by the eruption, or only once in seventy-three cases, according to Baümler. From the statistics of Leipzig and Hamburg, Curschmann found that about 3 per cent. died from the sixth to the tenth day.

There are two groups of cases which develop rapidly and prove fatal in a week or ten days. In the first group we find only a simple infiltration of Peyer's patches. The intestinal lesions are what we usually find at this stage. Death is due to a general intoxication. Such are the cases recorded by Trousseau, Murchison, Guizot and Curschmann. In the second

group it is not the intoxication of the system which characterizes the process; it is the rapidity of the local morbid changes. The process which usually occupies eight days, is here completed in forty-eight hours. The eruption appears early. The rapid march of the symptoms corresponds with the rapid development of the local changes. At the autopsy we find, on the eighth day, deep ulceration (Louis, Hoeffel, Forget). Murchison found intestinal perforation on the ninth day: Peacock on the eighth day.

May we suggest a possible explanation of the difference between these two classes of cases? The poisons of the typhoid bacillus are of two kinds. The former are diffused in the organism and give rise to general reaction; the latter, adhering to the pathogenic agent, exert a destructive action at those points where the microbe is multiplying. When the former process is more marked, the organism will succumb to the general intoxication, the local changes being typical. When the destructive materials are particularly active or abundant, the symptoms, both local and general, are hastened and the typhoid fever is "galloping."—Translated from *La Presse Medicale*, by HARLEY SMITH.

Pathogenesis and Treatment of Chronic Articular Rheumatism.
By Doctors C. PARHON and J. PAPINIAN.

The doctors relate a case of obstinate rheumatism and eczema in a man forty-seven years old, who in 1898 entered the hospital Pantélimon, receiving the iodine treatment and then bicarbonate of soda, both internally and in baths. He obtained some relief; but in 1902 began to suffer as before. Certain symptoms, such as constant sensation of cold, dryness of skin, absence of perspiration, suggested the possibility of thyroid insufficiency. Moreover, the good results obtained by Lancereaux, Paulesco, Hertoghe and Viala in administering thyroid in chronic rheumatic cases, induced the authors to try it here. The results were excellent.

Lancereaux and Paulesco believe that certain cases at least of chronic rheumatism are due to a change in the nervous system, and that the thyroid treatment furnishes that which is necessary to the maintenance of the normal condition of this system. Viala has obtained, with the thyroid treatment of these cases, an acceleration of the circulation, increase of the secretions, greater elimination of the organic waste matter, a lessening of the joint pains.

Disturbances in the functions of the ductless glands must play an important part in the pathogenesis of chronic rheumatism. The lessening of the thyroid secretion would create conditions specially favorable to the appearance of this dis-

ease. Ovarian insufficiency seems to act similarly in certain cases (Ord, Claisse). Changes in the action of the thyroid or ovaries may affect the assimilation of calcium, for our own experiments, like those of Sénator and Moraczewski, show that the thyroid gland intervenes actively in the assimilation of that element, whilst the ovary, antagonist of the former gland, favors the *disassimilation* of calcium. If, however, in most of their actions upon the changes in the body, these two glands have an opposite influence, it seems, on the other hand, to result from our observations that, as far as urea is concerned, both glands favor its formation or elimination. The quantity of urea eliminated in the urine is diminished both in thyroid and in ovarian insufficiency, and the administration of preparations of either of the glands increases perceptibly that elimination. May it be that diminution of urea eliminated is also a condition favorable for the development of chronic rheumatism?—Translated from *La Presse Medicale*, by HARLEY SMITH.

Tests for Albumin.

The delicate reagent of Spiegler, as modified by Jolles, is not nearly so well known as it should be. The test fluid consists of 10 grams corrosive sublimate, 20 grams succinic acid, 20 grams sodium chlorid and 500 c.c. distilled water. To 5 c.c. filtered urine is added 1 c.c. dilute acetic acid, and this mixture is, by means of a pipette, gently and gradually passed down the side of an obliquely held test-tube containing 4 or 5 c.c. of Spiegler's reagent, so that the acidified urine forms a layer on the surface of the reagent without mixing with it; if albumin be present, a sharp white ring appears immediately, and the precipitate will not disappear on warming.

There has been much demand among physicians for a safe and practical test for albumin in the urine, applicable at the bedside, or, at any rate, at the patient's home. For this purpose there is nothing better than the sulfosalicylic-acid reaction; the physician may carry in his pocket or medical case a small phial of dry crystals of this acid. To apply the test one simply drops a few crystals of the acid into a little fresh acid urine and shakes; if albumin be present, a precipitate will be formed or the urine will become turbid; even if only a trace exits, the urine will gradually become opalescent. This reaction, though very simple, is delicate enough; if the test yield a negative result the urine may be assumed to be free from albumin; if a positive result be obtained, the urine contains albumin, and a specimen should be taken to the physician's office laboratory and examined according to the outline given above.—*Journal A. M. A.*

Antitoxin in Diphtheritic Paralysis.

The rule is that the more severe the local manifestations of diphtheria the more extensive and lasting the subsequent paralysis. This is subject to marked exceptions; sometimes slight local involvement is followed by severe general paralysis. It has been stated that cases in which antitoxin is used have a larger proportion of paralyses than those in which it is not used. This is based on the observation that since antitoxin has been used the number of cases of diphtheritic paralysis has increased. This is readily explained by the lessened mortality. A larger number of the severe cases live to develop paralysis. A number of writers have reported improvement in cases of paralysis where antitoxin was used weeks after the local signs of the disorder had disappeared.—*Medicine.*

OBSTETRICS AND GYNECOLOGY.

IN CHARGE OF ADAM H. WRIGHT, K. C. McILWRAITH, FRED. FENTON AND HELEN MacMURCHY.

Pyelitis in Pregnancy.

Cragin asserts that pyelitis, as a complication of pregnancy, is not so infrequent as has been supposed. He has seen ten cases of the affection in the past four years. The condition seems to depend on two factors: (1) Compression of a ureter by the pregnant uterus, and (2) infection of the urinary tract above the point of compression. The right kidney is most frequently involved. The symptoms are: Pain in the lumbar region; a rather sharp rise of temperature, not infrequently accompanied by rigors; irritability of the bladder; if the right side is involved the kidney can usually be made out enlarged and tender: the urine is acid, at first containing only a trace of albumin and perhaps a few casts, later pus cells, renal epithelium, and bacteria. The condition usually clears up without difficulty under appropriate treatment.—*N. Y. Med. Jour.*

Analgesia in Obstetrics.

T. Steinbuechel (*Brit. Gyn. Journal*, March, 1904) recommends the use of morphine and scopolamine hypodermically in doses of 0.01 gramme of the former and from 0.0003 to 0.0004 gramme of the latter—that is to say, 0.15 of a grain of morphine and from 0.0045 to .0006 of a grain of scopolamine. By this treatment he declares that the pain and suffering of the woman is much lessened, though her consciousness is not affected nor uterine activity diminished.

The Etiology of Ischuria in Retroflexion of the Gravid Uterus.

In discussing this subject Dr. Charles B. Reid summarizes as follows (*American Journal of Obstetrics*):

1. Retention of urine in retroflexio-version is not due to direct compression of the urethra, or neck of the bladder, whereby the lumen is mechanically closed.

2. It must be regarded as a form of "pressure paralysis" due to interference with the nerves supplying the bladder in some part of their course.

3. Compression of the principal motor nerve (pelvic nerve) is the most common source of retention. The part most subject to pressure is the pelvic ganglion lying near the great cervical ganglion ot the uterus, although the nerve may be affected in any part of its course, either near its distribution to the bladder, or close to the sacral exit of the component fibres.

4. Compression of the sensory nerves, either in the course of the nerve, or peripherally (in the bladder) may also *rarely* produce retention.

5. Both afferent and efferent filaments may be affected simultaneously in a given case of retention, but the order is usually consecutive.

6. Pathological conditions of the pelvis and abdomen which irritate the sensory fibres of the bladder produce the so-called "irritable bladder."

7. Retention of urine post partum and after laparotomy for tumors is due to diminished intra-abdominal pressure, weakness of the abdominal muscles from over distention and the dorsal decubitus.

Missed Abortion.

Orthmann (*Zentralbl. f. Gynäk.*, Nov. 5, 1904) observed this condition in a woman aged 27, subject to mitral incompetence, who had already aborted twice. At the end of October, 1902, she came once more under treatment, and stated that she had not menstruated for five months. The uterus reached to the level of the umbilicus; the parts of the fetus could not be defined nor had the mother felt any movements. There was a little show four weeks later. At the beginning of January, 1903, the condition of the patient seemed unchanged, and towards the end of March a mummified fetus was expelled: it measured hardly 2¼ in., but had reached about the third month of development. There was very little liquor amnii. The fundus still lay midway between the umbilicus and pubes. After application of the tampon to the cervix, powerful contractions set in, and the placenta was expelled entire; it appeared as a cast of the uterine cavity 4 in. in length, 3 in. broad, and 2

in. thick. The placental tissues displayed extensive retrogressive changes; numerous minute white patches were detected, and they each showed central softenings so that they were becoming cystic. These changes had originated in degenerated villi.—*Brit. Med. Jour.*

Dysmenorrhea.

During the past year perhaps even more than the usual amount of attention has been devoted to this subject. It was the first subject discussed at the seventeenth annual meeting of the American Association of Obstetricians and Gynecologists held at St. Louis, September 13-16th, 1904. A paper was presented by Dr. Sellman, of Baltimore, on "Operative Treatment for Painful Menstruation in Young Virgins," and a discussion followed in which it appeared that some of the members were much inclined to more conservative methods and the avoidance of surgery. Dr. J. G. Brown, of St. Louis, remarked that his experience was that unless there was a palpable pathological condition present, it was better to leave these cases alone. Another physician spoke of an undeveloped condition of the uterus as a frequent cause.

Few physicians are sufficiently aware of the great influence which unsuitable clothing, late hours, constipation, nervous strain, and neurasthenic habits generally exercise over their condition. If girls and young women were allowed and encouraged to live sensibly, there would be fewer operations required for dysmenorrhea.

Medical Gynecology.

Some signs have appeared recently of reviving interest in gynecology. Neglect of diagnostic work and half-hearted efforts at proper local treatment result in many troubles both to the patient and the physician. It is always the most skilful and successful surgeons who are anxious to let those cases alone in which an operation is neither absolutely indicated nor likely to benefit the patient.

Sterilization of the Hands.

J. Rupert Collins, M.D., B.Ch. (*Brit. Med. Jour.*, June 11th, 1904), after a careful bacteriological inquiry into the sterilization of the hands, arrives at the following conclusions:

1. The nail brush used should be boiled before use, or better still, kept always in an antiseptic solution.
2. Vigorous scrubbing is required for at least five minutes.
3. The water should be as hot as can be comfortably borne.
4. Chemical antiseptics of efficient strength should be used for cleansing the skin, and it is preferable that they should be used in the primary washing as well as in the final soaking.

OPHTHALMOLOGY AND OTOLOGY.

IN CHARGE OF J. T. DUNCAN, M.B., M.D.C.M.

Hot and Cold Water in Eye Diseases.

Nance states in the *Medical Standard*:

1. Heat and cold are best applied to the eye by moist pads. They are more efficacious when applied in this manner than by means of the coil or bladder, in that their action is more penetrating, and their effect is more germicidal.

2. The application of heat is indicated in degenerative corneal processes—interstitial and phlyctenular keratitis, corneal ulcers, pannus, infected corneal wounds, hyphemia, hypopyon, suppurative panophthalmitis, in iritis and cyclitis, in muscular spasm, and in contusion and ecchymosis of the eyelids ("black-eye") to hasten absorption of extravasated blood.

3. The application should be of the highest temperature the patient can endure, viz., 110° to 115° F.

4. They should be employed for a period of fifteen minutes, and repeated at intervals of two or three hours, for many hours.

5. Cold is indicated in hyperemia and inflammation of the conjunctiva. In purulent conjunctivitis it is the remedy *par excellence*. In traumatisms, especially those of the iris and lens, and in the early treatment of contusion of the lids, its employment is of value.

6. In purulent conjunctivitis iced applications may be continuously used for many hours so long as the cornea remains unimpaired, in which instance they are positively contraindicated.

7. Hot applications greatly assist the rapid absorption of various medicaments employed in ophthalmic practice, and when used for this purpose should immediately precede the instillation of such solutions.

Hot Water Directly Applied to the Cornea.

A method easy of application, and one followed by no accident, has been advocated in *Annales d'Oculistique* by Manolesco, of Bucarest. He has used direct applications of hot water in cases of deep infiltration of the cornea, especially in parenchymatous keratitis. After instillation of cocaine, the lids are separated, and water of a temperature between 70 and 80 degrees is dropped upon the cornea by a pipette. The treatment is given twice daily, and lasts from five to ten minutes. The temperature of the lower cul-de-sac is raised 1 degree, the

pericorneal injection increases, and any existing pannus becomes more pronounced, but this condition disappears in about five hours. The treatment hastens the absorption of the infiltrates, and shortens the course of the disease.

The Significance of a Discharge from the Ear.

Dr. Edward B. Dench (*Medical Examiner and Practitioner*) finds that out of 9,000 autopsies in Guy's Hospital (1869 to 1888) 57 cases were due to aural suppuration, or one case in every 158 autopsies.

During 21 years at the Vienna General Hospital there were 40,073 autopsies: of these, 232 were due to aural suppuration, or one case in 173.

In eight years in the New York Eye and Ear Infirmary there were 64,858 autopsies; out of these cases 4,836 had suffered from acute purulent middle ear inflammation, and 14,847 from chronic purulent inflammation. The author concludes:

"The findings at the time of operation on these cases show almost invariably that while the disease has been considered dormant, and while it has given rise to no symptoms, it has steadily progressed, the erosion of bone has continued until either the dura is exposed in the middle or posterior cranial fossa, or until actual infection of the brain substance itself has occurred. Even after the intracranial structures are involved, no serious symptoms may follow, until an acute process is suddenly grafted upon the chronic one; then symptoms of intracranial involvement rapidly supervene, and at this time it often happens that surgical interference, although promptly instituted, comes too late to save the life of the patient."

Convergent Strabismus.

Dr. Wendell Reber (*New York Medical Journal* and *Philadelphia Medical Journal*) has been making a study of these cases and says:

1. Esotropia (turning of the eye inwards) is most likely to manifest itself before the third year.
2. Heredity certainly is one of the causes of strabismus.
3. The degree of deviation will be frequently about 30°.
4. Present-day evidence is against the theory of congenital amblyopia (poor vision).
5. The degree of poor vision increases with the length of time elapsing between the appearance of the squint and the time of treatment. (In other words, the longer the squint goes untreated, the greater the amount of amblyopia.)
6. Improvement may be expected in the amblyopic eye in 50 to 60 per cent. by proper glasses, after the seventh year.

7. If taken before the fifth year, there seems no reason why squint should not be cured by non-operative means in 70 per cent. of cases. This percentage will, in all probability, be increased to eighty per cent. in the next ten years.

8. The results of non-operative treatment in children, if adhered to with any persistence, are infinitely better than any "scissors" statistics thus far offered.

Dr. Reber closes his paper with a quotation from an article by Dr. Edward Jackson in the *Journal of the American Medical Association* for October 26, 1901: "The accurate correction of ametropia being the most important single measure in the treatment of squint, and this being most effective in the earliest stage, it follows that no one who cannot measure refraction objectively, no one who cannot apply skiascopy with sufficient accuracy to obtain by it the data for prescribing lenses, is competent to treat strabismus. This sounds like an extreme statement. Judging by old standards of attainment and old methods it is unduly so. But the experience of the last five years has established a new standard of success in the treatment of convergent strabismus in children, to be attained only by a method of which the foundation is the accurate correction of the refraction, and that at an age when the patient can give no assistance as to its measurement. In view of this, the milder statement simply falls short of the truth."

Editorials.

A RESIDENCE FOR MEN IN THE UNIVERSITY OF TORONTO.

The abolition of the residence of the University of Toronto a few years ago was considered a calamity by a large proportion of its graduates. One of the University's friends in Ottawa has recently handed over to the trustees the sum of $15,000, for the purpose of helping to establish a new residence for men.

Prof. G. M. Wrong, in a recent communication to "The Varsity," has made some valuable suggestions on the subject. He thinks that not less than $250,000 will be required to make a beginning that will be really felt, while four or five times this sum will be necessary to solve the problem completely. He points to the success of those who worked for the Convocation Hall, and considers that the erection of a residence should be the next task to which all graduates should turn. In considering the question of buildings, he says, the admirable Oxford system cannot be applied here in its entirety, and that we must work out our own system. It might be expedient to found a Men's Residence Association similar to that of the Women's Association, which would start with Mr. Whitney's gift as an incentive and effort. He finally asks, "What could the students do? They could show a resolute determination to help this plan, and let nothing else interfere with it. Let me say again, a residence for men is our most pressing need. We have dreamed about it long enough. It is time to do something. I am assured by business men that the money is not insuperable if those connected with the University are united for this one great improvement."

THE URIC-ACID FETISH.

One of the chief objects in living is to have our idols shattered. Most of us have practiced long enough to have seen the "liver theory" totter and fall. Formerly when the condition of the patient was obscure, it was the fashion to say, "Your

liver is out of order," and prescribe calomel or other intestinal antiseptic, under the impression they were acting as cholagogues. When physiology proved this to be entirely mythical, we straightway hugged another delusion. Men like Haig had iridescent visions of needle-shaped crystals of uric acid circulating in the blood stream, thrusting their tiny javelins into kidney cell or gastric gland, and producing a train of symptoms which they profoundly designated "uric-acid diathesis." And now for some years these sonorous words have played the part of the adverb when we were learning to parse, or as Woods Hutchinson said at the American Medical Association last year, "Uric acid has been the same sort of convenient saver-of-thought to us as therapeutists that the devil was to the older theologians."

But scientific thinkers have never felt satisfied with this explanation which did not explain, and the last few years have brought forward evidence which will send the uric-acid theory down the stream of time.

First and foremost, it was found that even in gout, the disease *par excellence* to demonstrate the soundness of this theory, uric acid was not found in excess in the blood stream, nor was there any change in the alkalinity of the blood. These two facts are attested by the leading chemists of the world to-day, and so the great corner-stone of this delusion must crumble to dust. A great deal of evidence of like kind has also accumulated. For instance, a large proportion of cases of gout (30 per cent.) arise from lead poisoning; still others from fermented liquor which contains no nitrogen in the molecule, and cannot therefore be a forerunner of uric acid; while some of the severest cases are the so-called "poor man's gout," in which the patient has taken neither alcohol nor meat in excess.

Furthermore, uric acid is often present in large quantities without causing the slightest symptoms, as in the uric-acid infarcts in the kidney of the new-born. In leukemia, phosphorus-poisoning and acute yellow atrophy, we find large quantities of uric acid in both the urine and the tissues, while the urine of any febrile condition in the early stage is almost identical with that of gout.

It would appear, then, that we have been mistaking results

for causes, and that uric acid was no more the exciting factor of gout than were Heberden's nodes the cause of rheumatoid arthritis. We must now look upon gout as a form of chronic intoxication attended by a disturbance of the normal production of bone, and closely related, in this respect, to rickets and arthritis deformans. Only in this way can we give a rational explanation to the many empirical remedies which have, for generations, exerted a deterring influence upon the disease.

CANADIAN MEDICAL PROTECTIVE ASSOCIATION.

We desire to remind our readers that the annual subscription ($2.50) to the Medical Protective Association for the year 1905 is now due.

The experience of the officers of the Association during the last three years has shown them that issuing an annual appeal broadcast through the mails has not been successful in securing a large membership.

They are endeavoring now to bring the claims of the Association before members of the profession in a personal way. They feel assured that many physicians would willingly join the Association if solicited by personal friends.

It is hoped that all present members of the Association will assist by personally canvassing their friends.

It is also hoped that local medical societies in different parts of the Dominion will take the matter up in a regular systematic way, and urge the profession to assist in making this Association a large and strong one.

The Executive will make strong efforts to increase the membership this year.

CANADIAN MEDICAL ASSOCIATION.

The thirty-eighth annual meeting of the Canadian Medical Association will be held in Halifax, August 22-25 inclusive, 1905, under the presidency of Dr. John Stewart.

At a recent meeting of the Nova Scotia Medical Society, held in Halifax, it was decided that the Provincial Association of

Nova Scotia should act as hosts and entertainers of the Canadian Medical Association.

The local Committee of Arrangements has commenced work and is arranging the programme. The address on Surgery will be delivered by Mr. Francis Caird, of Edinburgh. The address on Gynecology will be delivered by Dr. Howard A. Kelly, of Baltimore. Subject—"Cystitis in Women." The address in Ophthalmology will be delivered by Dr. J. W. Sterling, of Montreal. It is expected that Dr. A. J. McCosh, of New York, and some other distinguished physicians from the United States will deliver addresses.

The General Secretary is now in communication with the transportation companies in regard to rates, and an effort will be made to have the transportation extended to Sydney, with return *via* Portland, Boston, or New York. Those intending to present papers or make demonstrations are requested to communicate with the General Secretary, Dr. George Elliott, 203 Beverley Street, Toronto.

TORONTO GENERAL HOSPITAL.

The following statistics show the continued increase in patients at the General Hospital since 1876:

1876	total	810
1878	"	973
1883	"	2249
1888	"	2977
1893	"	2779
1898	"	3211
1904	"	3811

In the last 28 years 67,036 patients were admitted, and there were 3,906 births, making a grand total of 70,932, or an average yearly number of 2,260 new patients. The house staff has been increased from two final year men to fourteen graduates, and is now probably the best and most efficient hospital house staff in either Canada or the United States. Over 225 graduates are numbered on the list of house-surgeons, only eight of whom are known to have died, a remarkably small mortality considering the exposure to disease in our profession.

The appointment of two official anesthetists was made last

October and is found to be most satisfactory, Drs. Duncan Anderson and S. Johnson having been selected for this work. Also two registrars, one medical and one surgical, were appointed at the same time, namely, Drs. Goldwin Howland and F. Marlow.

A new card system has been inaugurated, and the method of taking the history of patients is in the opinion of those competent to judge superior to that of any other hospital on this continent.

Dr. O'Reilly's life-work has indeed grown, and it must be gratifying to him to see the growth of the Toronto General Hospital and its increased usefulness during the years of his astute guidance.

ONTARIO MEDICAL ASSOCIATION.

The next annual meeting of the Ontario Medical Association will be held in Toronto, June 6, 7, 8 next, under the presidency of Dr. William Burt, of Paris. The Committee on Papers and Business is composed of Dr. A. Primrose, Chairman, and Doctors Powell, Ross, Macdonald, Baines, Rudolf, Thistle, R. A. Pyne, Clarence Starr, MacCallum, Ellis, Beemer and Price Brown.

We understand that a considerable number of papers are promised, and the committee is in a position to announce that Dr. Albert Ochner, of Chicago, Ill., will present a paper on surgery. The Committee of Arrangements is composed of Dr. Cameron, Chairman, and Doctors Reeve, Wright, Peters, Temple, Wagner, Scadding, Machell, Sheard, W. P. Caven, McPhedran, Parsons, Riordan, P. L. Scott, Goldie, G. B. Smith and Hamilton. Physicians who are willing to present papers are requested to communicate with the Secretary, Dr. Charles P. Lusk, 99 Bloor Street West, Toronto.

Dr. Burt, President of the Association, has sent his warmest New Year's greetings to all the members, requesting them to give every assistance in promoting the welfare of the Association.

OF INTEREST TO HOSPITALS.

IERZINO *v.* TORONTO GENERAL HOSPITAL.

A case was decided by Judge Winchester, the senior Judge of the County of York, a few days since, which is of peculiar interest to hospitals.

The action was brought by the plaintiff to recover from the Toronto General Hospital the sum of $160, which the plaintiff claimed had been taken from him by the defendant, its servants or agents. The facts in connection with the case appear sufficiently in the text of the judgment.

Mr. R. W. Eyre appeared as counsel for the plaintiff, and Mr. H. D. Gamble, solicitor for the Toronto General Hospital, appeared as counsel for the defendant.

Mr. Gamble contended for the defendant,—

That the defendant could not be made liable as bailee, for, if this was a bailment, the defendant was a gratuitous bailee, and that to make it liable gross negligence on its part must be shown, whereas, upon the evidence, no negligence whatever had been proved.

In answer to the charge that the money had been stolen by one of the servants of the defendant, he submitted that the defendant could only be made liable where the tort of the servant was within the scope of the employment, and referred to Cheshire *v.* Bailey, 21 T. L. R., 130, where the law is very clearly set forth.

He further submitted that the defendant could not be made liable by any analogy to inn-keepers, the law with relation to inn-keepers being peculiar, inn-keepers being one of the exceptions to the rule that bailees are not insurers of the goods in their custody. Among other cases, he referred to Cayle's case, 1 Sm. L. C., 11 Ed., page 119, which is the leading case on this subject.

He also submitted that boarding-house keepers not being responsible for the loss of their lodgers' property, and the defendant being in a very much stronger position than boarding-house keepers, inasmuch as the institution was a charitable one, making no profit whatever from the inmate, could not be held liable. He also referred to Holder *v.* Soulby, 8 C. B., N. S., 254.

The motion was dismissed.

The evidence on behalf of the plaintiff is to the effect that the plaintiff, being seriously injured in the head and body, was taken to the Emergency Hospital belonging to the defendant, and while there, $160 wrapped up in a handkerchief, and tied around his leg below the knee, was taken from the plaintiff by a ward tender in the defendant's service, and that he has not received

any part of the money since. The ward tender was arrested on a charge of the theft of this money, and a handkerchief was found in his possession, which the plaintiff stated was the one in which the money was wrapped. On the hearing of the charge of theft the ward tender was acquitted.

The evidence on behalf of the defendant contradicted that given by the plaintiff so far as to the place and manner of his undressing, and would indicate that there was no money taken from him either by the ward tender or any one else. Had the ward tender been called, and explained how he came into possession of the handkerchief claimed by the plaintiff, and showed that he did not receive any money in it, there would have been no necessity of reserving judgment in the case; but this was not done, although it was shown that the man was available.

In considering the evidence one cannot overlook the fact that the plaintiff during the whole time he was in the Emergency Hospital—a period of seven days—never once referred to this money; and although he received $4 money in a purse that was handed by him to one of the nurses when he entered the Emergency, and which was handed to him when leaving it, he did not refer to or ask for the $160 he now claims to have been taken from him.

The defendant is sued as being responsible for the actions of its servant, it being claimed that he took the money. The limits of liability of a master for torts of a servant are set out in Clerk and Lindsell on Torts, page 69, as follows: "Where the relationship of master and servant exists the employer is liable for all torts committed by the party employed, provided, first, they were within what is usually termed the scope of the employment; and, secondly, were either unintentional, that is to say, amounted to mere acts of negligence, or if intentional were intended to be done in the interest and for the benefit of the employer."

It is clear that if the money in question were taken by the ward tender as claimed, the taking was not done within the scope of his employment as set forth in the above limits.

The case of Holder *v.* Soulby, 8 C. B., N. S., 254, decided that the law imposes no obligation upon a lodging-house keeper to take care of the goods of his lodger, and, therefore, the lodging-house keeper was not responsible for the loss where the property of a lodger, who was about to quit, had been stolen by a stranger, who in the lodger's absence, was permitted by the occupier of the house to enter the rooms for the purpose of viewing them.

The defendant herein is not brought within the cases applicable to innkeepers, nor is it a bailee for hire, as the plaintiff paid nothing for the services rendered to him, nor was he

charged anything. In the Amer. and Eng. Encyc. of Law, 2nd Ed., it is stated that a public hospital or asylum is liable for the tort or negligence of an officer or servant, only when such corporation has been guilty of negligence in selecting such officer or servant. When the corporation has exercised due and reasonable care in the original selection of the offending officer or servant, it is not liable for his subsequent act, unless prior to the occurrence of such act knowledge of the unfitness and incapacity of such officer or servant was communicated to and fully brought home to the corporation. The evidence herein showed that the defendant in hiring the ward tender was not negligent, and that no complaint was made against him until the present case.

Not only upon the evidence, but also upon law, I am of opinion the plaintiff fails to prove his claim against the defendant.

The action will be dismissed with costs.

THE CONVOCATION HALL.

BY R. A. REEVE, M.D.

The foundation-stone of the new Convocation Hall for the University of Toronto was laid on last Commencement Day (June 10). No more appropriate text in connection with the ceremonies could be found than the hitherto unpublished address delivered on that occasion by Dr. R. A. Reeve, the President of the Alumni Association. Dr. Reeve's words were as follows:

"Your Honor, Mr. Chancellor, Mr. Vice-Chancellor, Mr. President, Ladies and Gentlemen, and Fellow Alumni,—This is a glad day for those in whose case the 'hope deferred which maketh the heart sick' gives place to the joy of realisation with the goal in sight. Faith in the Alumni and friends of the University, at times sorely tried but never lost, to-day has its reward; and resting on this corner-stone it can easily see the copestone rising to its place.

"Upon the organisation of the Alumni Association four years ago it was felt that, in order to promote its vitality and growth, there should be work requiring effort, and some definite object aimed at. One project which met with favor was the scheme to secure a Convocation Hall for our Alma Mater, which had been without one since the disastrous fire of 1890.

"At first it was thought it would be a happy blending of fine sentiment and wise utility to base its claim to special sympathy on the ground of being a distinctively Memorial Hall, com-

memorating the patriotism of Alumni and Canadians generally who had fallen at Ridgeway and in South Africa; but this view not carry.

"It was not until later, when the Faculties had pledged themselves in a goodly sum, that the project gave hopeful promise of success. It was felt that the effort would afford almost a crucial test of the loyalty of the Alumni and of the good-will of friends of the University. That such confidence was not misplaced is shown by the fact that the sum of about $52,000 has been subscribed. Of this amount about $19,000 have been given by friends, upwards of $27,000 by graduates and—a most gratifying fact—upwards of $5,000 by undergraduates in attendance. It is a most pleasing duty to acknowledge again and place on record the timely and generous aid of the Government in the gift of $50,000 to duplicate the sum raised by the Alumni and by friends of the University. There can be little doubt that those who have a life interest in this academic enterprise will be the more likely to keep up an interest for life in their Alma Mater.

"Every great university should have a large Hall to hold the many hundreds of her students—a place where they can rally, and mingle, and see and hear one another. Not to have this is to lose an important means of promoting that *esprit de corps* which should prevail in every seat of learning, and which is at once a fine feature of the best college life, and a distinct factor in the best training of youth. In the large auditorium now assured, a budding Burke, Pitt, Macaulay or Gladstone, of high ideal and lofty aim, and as yet guileless, may have chance to win his first spurs before his sympathetic yet critical peers.

"Here in this trysting-place of mind and mind, the play of fancy, the weight of argument, the force of appeal will do their part as truly as university or college contests, as do the quick eye, the strong arm, the fleet limb on the campus or in the gymnasium hard by. There can be no doubt that this Hall will one day have a token of regard from the Royal Alumnus of 1860, who now graces the throne; and that as years roll by, wall and window, portrait and tablet will bear silent yet eloquent witness to the name and fame, the worth and work of one and another of the sons and daughters of our Alma Mater. And thus despite the contingeny of another Ridgeway or Paardeberg (which God forbid should be repeated!) this Hall will in time become a splendid object-lesson, pointing a moral of high order to the flower of the youth of our country who flock to its greatest seat of learning.

"It has long been felt that there is a certain loss of dignity, if not of prestige, in having to seek quite unacademic quarters for Convocation. There is a natural feeling that it enhances,

in a sense, the honor if not the value attached to a degree when it is conferred in the presence of great numbers, and in a hall that is historic or destined to become so. Moreover, it is proper that the patrons of the University and its many friends, whom no institution can afford to ignore, should have ready access to great events and important functions.

"Having this large Assembly Hall, the University and the Alumni Association will be able to invite distinguished men in the various walks of life to give addresses, lectures, sermons, etc., assured of audiences in an academic setting worthy of the occasion. These will, of course, have a distinct value educationally to the great student body, and prove of exceptional interest and importance. Functions of a social and other character, which tend to lighten and brighten the students' life, will also have special facilities in the Hall, whose various uses need not further be dilated upon."

An Explanation.

Mr. Editor,—In this connection a brief statement to the subscribers seems in order: The Convocation Committee have had no light task. The problem was to get the most suitable auditorium, to hold 2,000, and on the best site, without wasting money. As to the chamber itself, the aim was to secure the best results as to acoustics and ventilation, lighting and heating, ingress and egress. Much thought was given to the plans, and those by the University architects, Messrs. Darling and Pearson, were approved, with the auditorium of amphitheatrical form enabling the largest number to see and hear properly. The choice of the best available site—at the south-west limits of the University campus—was easier than securing it proved to be. Most of the ground required was held by the Dominion as part of the Observatory property. The Trustees, whose countenance and aid were, of course, necessary, offered another eligible site for a new observatory, which at any rate was required. The transfer was practically agreed upon, but was barred for a year or more partly owing to a misunderstanding which excited the hostility of the city and the Board of Trade. A solution was finally reached, and cordial assent given; and the Trustees in this way secured ample space for the Convocation Hall (and the new Physics Building). As one hundred thousand dollars had been promised ere the site was secured, the decision to proceed at once with the building naturally followed: and the corner-stone was duly laid. At that time it was thought the cost would exceed but little the amount raised. This not proving to be the case, new plans were drawn and were modified from time to time, to reduce the expense, always having in mind a Hall which would be a credit to our

Alma Mater. Such a one the Committee believe the architects have given us, after the model of the Sorbonne theatre known to architects the world over. An earnest effort is being made to meet the extra cost, and further subscriptions may be called for. Indeed, the trustees would be justified in taking the balance required out of the Endowment Fund, temporarily at least. At any rate, the immediate erection of the Hall seems assured. To Sir William Mulock the special thanks of the Alumni are due for his kind offices as a member of the Dominion Cabinet. To the General Secretary of the Alumni Association we owe a great debt of gratitude for his indefatigable efforts in securing subscriptions and in organizing the movement.—R. A. REEVE.

—*University of Toronto Monthly.*

Toronto University—The Professor and his Salary in the Faculty of Medicine.

The highest salaries are paid to Drs. A. Primrose and J. J. McKenzie, amounting to $2,000 each; and the following is a list of some of the others: I. H. Cameron, $910.25, F. Le M. Grasett, $949.65; G. A. Peters, $910.25; L. Teskey, $949.65; A. McPhedran, $910.25; J. L. Davidson, $949.65; C. Sheard, $949.65; J. A. Temple, $949.65: A. H. Wright, $910.25; W. Oldright, $910.25; J. F. W. Ross, $606.70; J. M. MacCallum, $856.70; H. B. Anderson, $633.10; N. A. Powell, $633.10: R. A. Reeve, $364.02; G. R. McDonagh, $364.02: W. H. Ellis, $303.91; G. S. Ryerson, $253.24; G. H. Burnham, $242.68.

Associate professors—G. A. Bingham, $633.10: A. M. Baines, $633.10; J. T. Fotheringham, $633.10; W. P. Caven, $606.70; H. W. Aikins, $606.70; H. A. Bruce, $485.40: Dr. J. G. Wishart, $303.84; F. N. G. Starr, $364.10; J. A. Amyot, $364.10; W. B. Thistle, $364.10; R. D. Rudolf, $364.10: A. R. Gordon, $364.10; R. J. Dwyer, $364.10: C. L. Starr, $364.10: H. T. Macheil $254.87: W. T. Stuart, $500.00.—*The News.*

The fifth meeting of the International Society of Obstetrics and Gynecology will be held in St. Petersburg, September 11th to 18th, 1905.

The appointment of Dr. G. L. Milne, Dominion medical inspector and immigration agent for the port of Victoria, as a justice of the peace has been gazetted. This will enable Dr. Milne to prosecute his duties on incoming vessels much more expeditiously than heretofore.

Personals.

Dr. Walter Wright, of Toronto, went to California, Jan. 9th.

Dr. W. J. McCollum, of Toronto, has moved from 168 Jarvis Street to 94 Shuter Street.

Dr. Edward Fahey, a graduate of Queen's, was married Jan. 12th, to Miss Joyce, of Rochester.

Dr. Chas. Richard Charteris, of Chatham, has been appointed Associate Coroner for the County of Kent.

Doctors Jno. McCollum, Arthur Wright and John Cochrane sailed from New York for England, Jan. 14th.

Dr. J. W. Bruce Smith, Inspector of Hospitals, formerly of Brockville, is now living at 412 Markham Street.

Dr. Donald McEachren, of Linwood, has been appointed Associate Coroner for the County of Waterloo.

Dr. Jno. H. Knight, of Wallaceburg, has also been appointed an Associate Coroner for the County of Kent.

Dr. Sylvester, of Toronto, went to New York, Jan. 19th, and expected to remain in that city about two weeks.

Dr. Jas. F. W. Ross, of Toronto, went to California, Jan. 29th. He expects to return to Toronto and resume practice about April first.

Dr. Geo. McDonagh, of Toronto, sailed from New York, Jan. 26th, for the Mediterranean. He expects to return to Toronto in March.

Dr. W. H. B. Aikins, of Toronto, will sail from New York, Feb. 18th, for Italy. After spending a few days at Naples, Genoa and Venice he will go on to Vienna, where he expects to remain two months.

Selections.

Chronic Posterior Urethritis—Treatment.

In all cases of chronic posterior urethritis, not only is the mucous and the submucous tissue of the prostatic urethra involved, but in addition rectal examination generally shows an enlarged, tender prostate gland, due to follicular inflammation and consequent general hyperplasia.

Aside from recurrent urethral discharge, the most prominent symptoms are those of sexual neurasthenia, and more or less constant irritability of the bladder. Frequent and imperative urination, with constant pain at the end of the penis, pain and fulness in the perineum, slight vesical tenesmus, sexual debility, as shown by imperfect erections, premature ejaculation, and prostatorrhea, together form a chain of symptoms which, following upon a recent attack of gonorrhea, point unmistakably to the existence of a chronic inflammation in the deep urethra.

Those cases in which vesical irritability is the most prominent symptom Christian (*Therapeutic Review*) treats by irrigation of the deep urethra with solutions of either potassium permanganate 1:8000, increasing the strength to 1:4000, or nitrate of silver 1:8000, increasing to 1:4000. This irrigation is followed by instillation into the deep urethra of about ten drops of a one-per-cent. solution of nitrate of silver. Irrigation is performed by the introduction into the deep urethra of a soft-rubber catheter to which is attached the nozzle of a fountain syringe. About eight ounces of the irrigating fluid is allowed to pass into the bladder, when the catheter is slowly withdrawn, the solution passing through it and irrigating the prostatic urethra as it is withdrawn. After removal of the instrument the patient expels that portion of the irrigating solution which entered the bladder, thereby bringing still more of the medicated solution in contact with the mucous membrane of the pars prostatica.

This treatment, followed by deep injections of nitrate of silver, should be repeated every four days. The strength of the silver solution used in the deep injection should be gradually increased from one per cent. to two, three, four, five, and as high as ten per cent.

A most valuable and necessary adjunct is systematic massage of the prostate gland, not oftener than once a week. To be most effective the prostate should be stripped when the bladder is filled with the silver or permanganate solution. Immediate evacuation washes out the secretion expressed from the gland.

Some cases even with this are intractable. When no improvement occurs under the above treatment, all forms of

local treatment should be discontinued, and tonics, of which the best are nitromuriatic acid and strychnine, should be administered.—*Therapeutic Gazette.*

The Effect of Alcohol and Alcoholic Fluids upon the Excretion of Uric Acid in Man.

To the *American Journal of Physiology*, Beebe contributes the result of an original research on this subject.

After a consideration of his experiments, it hardly seems possible to doubt that alcohol, even in what is considered by the most conservative as a moderate amount, causes an increase in the excretion of uric acid. And this effect is seen almost immediately after taking the alcohol.

The following points indicate that the effect is due to a toxic effect on the liver, thereby interfering with oxidation of the uric acid derived from its precursors in the food:

1. Alcohol taken without food causes no increase.
2. There was a smaller increase in excretion in one experiment in which the diet contained much less purin than it did in another experiment.
3. The maximum increase occurs at the same time after a meal as it does when purin food but no alcohol is taken.
4. The purin bases are affected to the same degree as the uric acid.
5. Alcohol is rapidly absorbed and passes at once to the liver, the organ which has most to do with the metabolism of proteid cleavage products.

There is no evidence that the alcohol has merely hastened the excretion of urates normally present in the blood; the increased excretion means that a larger quantity has been in circulation, and although it is classed by Von Noorden among the substances easily excreted, still most physiologists would consider the presence in the blood of this larger quantity as undesirable. Certainly in pathological conditions it might be harmful.

If we accept the origin of the increased quantity of uric acid to be in the impaired oxidative powers of the liver, the results of these experiments will have greater significance than can be attributed to uric acid alone. For the impaired function would affect other processes which are normally accomplished by that organ, and the possibilities for entrance into the general circulation of toxic substances, of intestinal putrefaction, for instance, would be increased. The liver performs a large number of oxidations and syntheses designed to keep toxic substances from reaching the body tissues, and if alcohol in the moderate quantity which caused the increase in uric acid

excretion, impairs its power in this respect, the prevalent ideas regarding the harmlessness of moderate drinking need revision.

Alcohol is a food in the sense that when used in small quantities the energy from its oxidation may be used for some of the body needs; but since, at the same time, it interferes with the normal activities of a most important organ, its food value may be overbalanced by its toxic effect. Salt water may be used in the steamboiler, and the steam from its evaporation may transmit the energy of the fuel to the revolving wheels, but its corrosive action on the steel forbids it use, like alcohol, except in emergencies.—*Therapeutic Gazette.*

The Use of Oxygen in Association with the Administration of Chloroform and Ether.

The proposition that oxygen should be administered with chloroform and ether for the purpose of preventing accidents during the maintenance of their effects, and for the purpose of preventing untoward sequelæ, was received by the profession, about fifteen years ago, with considerable enthusiasm. For a time surgical instrument makers busied themselves with the manufacture of special inhalers whereby the patient would receive the vapor of ether or chloroform mixed with oxygen gas, and in not a few instances these inhalers were so devised that the patient was for the time being forced to exist under the mixture of ether vapor and oxygen gas, having been deprived by a tight-fitting inhaler of all atmospheric air. In most of these necessarily complicated forms of apparatus the oxygen gas was supplied through a tube, which first passed through the anesthetic. It was therefore impossible for the anesthetizer to increase or decrease the anesthetic vapor without at the same time increasing or decreasing the oxygen gas. This was a serious disadvantage, and as we have pointed out on several occasions, the proper way to employ oxygen gas, with either of these anesthetics, is to have the gas delivered through a tube which can be passed under the ether cone and chloroform inhaler, and through which oxygen gas may be supplied in varying quantities without changing the amount of anesthetic which the patient is taking into the lungs.

The object of this editorial note is to reiterate our belief in the value of oxygen in conjunction with surgical anesthesia, to impress upon our readers the disadvantage of employing a complicated inhaler when the simplest form of inhaler can be used to better advantage, and to call attention to an interesting experimental research which is published in the *Medical Record* of November 19th, 1904, by Dr. James Gwathmey, in which he proved by experiments upon animals that chloroform with

oxygen gas is more than twice as safe as chloroform and air, and he believes safer than any other anesthetic with air; or, to express it otherwise, he believes that if oxygen is used with chloroform it becomes as safe as ether. More important still, he concludes that oxygen decreases the danger of anesthetics, as regards life, without decreasing their anesthetic value.—*Therapeutic Gazette.*

Treatment of Lupus by the Non-Specialist.

Dreuw announces that he has worked out a simple, inexpensive technic which is proving an effectual cure for lupus and can be applied by any practitioner. It consists in first freezing the lupus patch with ethyl chlorid and then rubbing into it crude hydrochloric acid saturated with free chlorin. He has thus treated 25 patients and the results, he thinks, justify the statement that any practitioner can now successfully treat lupus. He rubs the acid into the patch with a cotton-wound toothpick. In contact with tuberculous or lupous tissue, it induces immediately such an immigration of leucocytes that it is almost impossible to detect the tuberculous or lupous character of the tissue afterward. This immigration is much more extensive than has been observed hitherto under any circumstances. Even long-established cases of lupus yield to this treatment, and in three patients treated more than a year ago there has been no tendency to recurrence. The treatment is equally effectual for tuberculous abscesses and fistulas, applied under narcosis. Phototherapy was not used in any of his cases, but he thinks that a combination of the two methods might be advisable.—*Journal A. M. A.*

Triumph of an Internal Disinfectant in Phthisis and Other Severe Infectious Diseases.

Dr. Konrad Küster is "privy councillor of the public health" (Geh. Sanitätsrath) at Berlin. In this article he does not hesitate to proclaim that a remedy has been found which promptly and energetically destroys bacilli while, even taken internally in large doses, it has no injurious action on the human organism. The remedy in question is a meta-iodo-ortho-oxy-chinolin-ana-sulphonic acid combination manufactured by the German chemists under the name of loretin and offered as a substitute for iodoform. Physicians were weary of new drugs and paid little attention to the announcements of Professor Claus, of Freiburg in regard to the surprising bactericidal powers of the proposed substitute for iodoform. A Freiburg layman, however, saw some of these notices and tested the drug on himself, taking as much as 75 grains at a time without ill results. He gave it to advanced consumptives, and after a

few months their friends were amazed at the improvement. The results in scarlet fever and diphtheria were equally striking and the layman published a pamphlet on the subject, which attracted no attention. He then presented his data to medical circles, where he finally obtained a hearing. Küster was one of those who have been testing the drug extensively, and he waxes enthusiastic over its efficacy in infectious diseases, even the severest. The drug is eliminated apparently unmodified by the intestines, kidneys, lungs and mucosæ, thus following the bacilli into their favorite haunts. He is thoroughly convinced that in "griserin"—as the drug has been renamed—a remedy has been found which will place internal medicine—hitherto the Cinderella—on a par with triumphant surgery. He adds: "It will then be more of a joy than ever to be a physician, as we can be certain to cure the severest illnesses by careful individualizing use of this remedy. This will cut the ground away from under the feet of charlatans who flourish mainly on account of the limitations of our art in the past." The Birkenweder sanatorium has set aside an entire department, in charge of Küster, for patients taking the new remedy. He describes his experiences with it in detail, all bacterial affections apparently going down like card houses before it. The favorable results in cancerous affections suggest a bacterial origin. Diabetes alone, and possibly articular rheumatism, proved rebellious.—*Journal A. M. A.*

Lymphangioma Cavernosum with Chylorrhea.

At the Gesellschaft, Paul Albrecht demonstrated a case of lymphangioma cavernosum with chylorrhea. The swelling had commenced some six years ago over the right femur, extending into the groin. The surface was white and soft, and over the surface of the greatest prominence were large vesicles averaging about the size of a pea, which emitted a clear fluid. If the patient took fatty food fleshy warts appeared on the surface, in the centre of which yellow coloring matter was observed. Tests with sesami oleum and alkanna root failed to demonstrate its chylous nature, but the presence of sugar, fat, and albumen gave undeniable proof of its presence. Within the last two weeks a similar swelling has commenced in the left groin. Neumann reminded the members of a similar case that he had exhibited to them two years ago. In that case he administered different coloring matters by the mouth, which acted on the lymph, giving a similar hue one and a half hours after. Albrecht's case differs in this respect, as he seems to have failed to obtain this coloring in the lymph. In my own case it may be remembered that Eiselberg extirpated the white swelling, and found the entering lymphatic vessels as large as goose

quills. Franck said he had a young man some time ago who came to him with prominent lymphatic varicose ducts in the right leg, extending from the foot to the groin. Where the varix was present, when opened it was found to contain a small quantity of milky fluid. Eiselberg said that he had now seen two cases of lymphangioma with a considerable discharge of milky fluid. The therapy of this disease does not seem to meet with much success, but the earliest and most reasonable to recommend is the Paquelin treatment.

Weinlechner briefly recounted the history of a case that came under his own observation in the form of a large cyst which extended from the arm-pit to the pelvic bones.

Riehl next entered into the pathology of the disease and described the origin of the morbid changes as a malformation, probably hereditary, in the position of the lymphatic vessels, or in other words a lymphatic nevus, which commences at first in a small area, and extends along the endothelium increasing the lymphatic vessel until a cyst is finally produced.

The history of the case before us admits of this interpretation: commencing six years ago it gradually increased, and invaded the neighboring structures, until the whole leg was involved with cystic formation of chylous matter. The chylorrhea in this case is more prominently demonstrated by the inguinal lymphatic vessels of the left side of the pelvis becoming involved from the same anomaly in the anatomy as existed in the right side. Albrecht pointed out the difficulty of accepting the theory of a lymphatic nevus by repeating the patient's history, that the cystic tumor in the left inguinal region was only discovered a few weeks ago, and that the skin covering the cyst was found to be in a normal condition.—*Vienna Correspondent, Medical Press and Circular.*

Venereal Warts.

Resorcin is recommended by Rohrer as superseding all other local applications:

℞ Resorcini ..... gr. xv.
Liq. petrolati ..... ℥j.
M. Fiat unguentum.

Sig.: To be applied locally after thoroughly cleansing the parts.

The following combination is quoted as being a very valuable caustic:

℞ Plumbi oxidi ..... gr. ij.
Potassii hydrastis ..... gr. xx.
Aquæ ..... q. s. ad ℥j.

M. Sig.: Shake well and apply, by means of a brush, to the lesion. One or two applications are sufficient.—*Journal of the American Medical Association.*

Miscellaneous.

The Heart in Typhoid.

The profound typhoid disorders of the heart are dependent on parenchymatous degeneration of the myocardium as well as upon a true myocarditis. The different forms of parenchymatous degeneration are due to the interstitial inflammatory process and also to the obliterating endarteritis of the smallest arterial branches of the myocardium.

The above conditions may be well developed about the third week of the disease with the accompanying dilatation which produces an insufficiency of the valves, hence giving the characteristic murmurs, provided there has been some over-exertion on part of the patient. Although in typhoid as in rheumatism many have a sclerosis of the valves, due probably to the infection, it is more commonly due to dilatation depending on the myocarditis. Typhoid patients with the myocarditis which corresponds with the degeneration of the voluntary muscles of the body if allowed to exert themselves too violently, often causes collapse and death from acute dilatation. This is generally considered as a fact, and in acute rheumatism the patient is generally warned against over-exertion for some time after the acute stage is over, especially if there is any suspicion of involvement of the valves of the heart.

In the convalescence of typhoid the patient should also be equally warned, because this constant over-exertion will eventually produce a permanent dilatation and, therefore, as complete incompetency of the valves as the sclerosis of the valves which is seen so commonly as the result of acute articular rheumatism.—*Charlotte Medical Journal.*

Medicine as a Preliminary Training.

According to Sir Conan Doyle, there is nothing so useful, as a preliminary training, as a course in medicine. There was a time, says he, when a young man who was going to do anything in the world, was passed mechanically through the bar. I believe the time will come when the similar young man will be passed through medicine, because I know no other means by which he could get to the fundamental and absolute facts of life. The mere fact that in his training a man has to undergo so searching an ordeal in the most critical years of his life, and pays such enormous attention to detail, is in itself evidence that he receives a splendid training. I have always said that to a man who has mastered Gray's Anatomy, life has no future terrors. If our young army officers had five years' study in the same sense that the young medical man has five years' study we should become the terror of Europe.—*Merck's Archives.*

Value of Stypticin.—Dr. Martin Freund (*Therapeutische Monatshefte.*

Stypticin is, as should be well known by this time, the hydrochlorate of cotarnin, a base prepared from the opium alkaloid narcotin. It is closely allied to hydrastinin hydrochlorate, the hemostatic properties of which are so generally known. The author shows that the hemostatic properties of stypticin reside in its base, cotarnin, and the acid with which the cotarnin is united is of no importance—just as the anodyn and hypnotic properties of the morphin salts reside in the morphin and not in the sulphate, hydrochlorate, acetate, etc.

Dr. Freund thus summarizes the indications of stypticin:

1. It is useful in hemorrhages of the menopause.
2. In hemorrhages from subinvolution of the uterus, provided the subinvolution be not due to fetal or placental débris.
3. In reflex (secondary) hemorrhages—that is, hemorrhages caused by diseases of the adnexa of parametrium, without any involvement of the uterus.
4. In congestive menorrhagia of young girls, without a pathological basis.
5. In myomata.
6. In hemorrhages during gestation, stypticin being devoid of oxytocic properties.

Stypticin has proved useful also in hemoptysis and intestinal and vesical hemorrhage. The usually effective single dose is two tablets of ¾ grn. each, which dose may be repeated four to five times a day. Almost ten years' experience has shown that the drug, even in large doses, is devoid of bad by-effects.—*The Post-Graduate.*

Books a Medium of Tuberculous Infection.

During the past year a number of clerks employed in a Berlin library contracted tuberculosis. This led to having an examination made of a number of books in the library. Thirty-seven volumes of popular fiction which had been in use from three to six years, and which showed signs of much wear, were selected. Steeping the corners of the leaves and the most soiled parts of the paper for twenty-four hours in normal salt solution and rubbing the bindings with the same, the washings were centrifuged, but they failed on examination to reveal the bacillus of tuberculosis. Fifty guinea-pigs were then injected with the water under proper precautions, and when at the end of three and a half months the forty-three surviving were killed, fifteen, or 35 per cent., were found to have tubercle in various organs. Similar experiments with sixty other volumes that had been for from six months to two years only in use, but being of a different class of literature were in less request

and were in a more clean condition, gave when similarly treated wholly negative results. This matter of dirty library books is one that health boards cannot afford to neglect, for doubtless many a case of tuberculosis might be prevented by the timely disinfection of such books by the use of formaldehyde.—*Medical Age.*

Head Nurses.

The personality of the head nurses of a hospital, their ideals of life and character and work, will determine to a great extent the atmosphere of the wards and the quality of the work. As the head nurses are, we may reasonably expect pupil nurses to be. If the head nurse is lacking in dignity, with a flippant, careless manner, unduly free in her intercourse with physicians and people, disloyal to hospital authorities and interests, harsh or mechanical in her bearing toward the patients, it is not to be wondered at if the same spirit finds expression in the daily work of the nurses whom she directs Example is ever more powerful than precept, and personality—that indefinable something, which gives peculiar color and tone to the individual, and stamps his work as peculiarly his own—that is the thing that will tell in the lives of the nurses. A beautiful building, costly furnishings, expensive equipment, a carefully arranged course of study, skilful lectures—these are all desirable, and some of them valuable aids in the training of nurses, but the combined influence of all these is small, compared with the character, the inner life, of the head nurses of a hospital.—*The National Hospital Record.*

A Novel Method of Treating Drunkenness.

Drunkenness, which has of late years developed to an alarming extent in Norway, has caused the authorities of that country to try an original method of curing drunkards of their vice. A foreign exchange gives a brief outline of the method pursued, which is as follows: The drunkard is carefully locked up in a room from which all communication is cut off. He is given for food bread which is soaked in port wine. At first the individual eats his bread with pleasure. A few days suffice to make him thoroughly disgusted with it, and after about eight days of this form of diet he is allowed other food. The disgust acquired by this procedure is as a rule lasting. The very simplicity of this method will commend it as worthy of a trial.—*Medical Age.*

A Fort Worth druggist is in receipt of a curt and haughty note, in an angular feminine hand: "I do not want vasioline but glisserine. Is that plain enough? I persoom you can spell.—*Texas Medical Gazette.*