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NASAL AND POST-NASAL SYNECHIAE.*

By PRICE-BROWN, TORONTO.

The presence of synechiæ within one or other of the nasal cavities is a pathological condition so frequently met with by every rhinologist that one is almost inclined to doubt the wisdom of taking up the time of the Fellows of this Society in the discussion of such a subject. It seems to me, however, that the very facts of its frequency on the one hand, and the apparent simplicity of its management on the other, which is more apparent than real, are sufficient reasons for warranting careful attention to the subject.

During recent years many monographs, long or short, have been written upon it, among which I might mention those of Kyle, Moliné, Scheppegrell, Vanzant, Watson and White. You, no doubt, are all familiar with these and the views they express, and I will not weary you by referring to them again. But if by a brief statement of my own views upon the subject, founded upon personal observation, I can create a general discussion and induce the gentlemen present to favor us with the results of their own personal experience, it is just possible that a condition of things which is so often produced by the operating rhinologist himself, may, from our side of the question at least, be consigned to the limbo of the past, rarely again to arise as a result of the rhinologist's surgical traumatism.

*Read at the annual meeting of the American Laryngological, Rhinological, and Otological Society, Philadelphia, June 1st, 1900.

Far be it from me to express the opinion that the majority of cases are the result of our own injudicious treatment, yet undoubtedly many of them are. This may arise from unwise operations, lack of care in after treatment, or, from one cause or another, our inability to keep sufficient control over the future progress of the case. The last mentioned is a point I would like to emphasize before entering more fully into the subject.

Is it not a fact that the comparative post-operative immunity from pain in nasal cases is a condition favoring the development of these synechiæ? That is to say, the patient after intra-nasal operation experiences so much less pain than he anticipated, that he is very apt to consider, the operation once over, that the wound can take care of itself. Hence he forsakes attendance upon the rhinologist long before the parts are perfectly healed.

A synechia may be described as a bony, cartilaginous, or fibrous band, unnaturally connecting together the opposite walls of a cavity. It occurs most frequently between the middle turbinal and the septum; next between the inferior turbinal and the septum. It may also occur between the lower turbinal and inferior meatus, the middle turbinal and the external wall, or between the two lower turbinal bodies. In the naso-pharynx the synechia is usually found connecting the lip of one or other of the eustachian tubes to some part of the pharyngeal vault.

Pathologically it is almost invariably either osseous or fibrous in character. The synechia can only be cartilaginous when situated in the extreme anterior region, where the septum lies directly opposite the superior or inferior lateral cartilages; and the condition in this region is so exceedingly rare as to be practically non-existent. When osseous it usually consists of solid union between the septum and the outer wall, either of the middle turbinated with the perpendicular plate of the ethmoid or the inferior turbinated with the vomer.

Almost all other synechiæ, wherever situated, are of a fibrous character, the result of inflammatory adhesion between two abraded surfaces. When these abraded surfaces are kept constantly in contact for a considerable length of time, the capillary circulation extends from side to side, and the attraction of cohesion finally develops into permanent union, the synechia being the result.

The etiology of the formation of these false bands is a many-sided question. I think it is rarely, if ever, a true congenital condition. The predisposition may be congenital possibly, but the inflammatory action, essential to development of the synechia, is scarcely likely to occur during intra-uterine life.

The cause in all cases I believe to be, either directly or indirectly, traumatic. By directly traumatic I mean direct physi-

cal injury of one form or another, either by the surgeon's knife, saw, or cautery, or whatever other instrument he may use in operating upon his case, or from direct accidental injury to the parts themselves. By indirect traumatism I mean simple abrasion of the surfaces from forcible blowing when the swollen tissues are either almost or altogether in contact, or abrasion of the surfaces by continuity of contact, as in cases of chronic congestive hypertrophy of the middle and inferior turbinated bodies. In the latter condition the vitality and resistance of the mucosa is in some cases so materially impaired, that the soggy tissues lose their contractile tonicity, and the membrane at the part of greatest pressure becomes so thin that intercapillary circulation is readily developed.

Perhaps of surgical instruments the electro or galvano-cautery is the one of all others the use of which within the nasal passages is most likely to be followed by the development of this condition. I do not want it to be understood that I side at all with the wholesale condemnation of the electro-cautery, which is at present becoming the fashion with many rhinologists. I fear that with us, as with other men, the pendulum is allowed to swing from one extreme to the other, and we have not yet learned to run the happy mean. I believe that when used with judicious care and precision, and in properly selected cases, there is no instrument more useful in our whole armamentarium; but that does not invalidate the fact of its effect in producing nasal synechiæ.

There are two reasons for this. The first being the escharotic effect produced by the high temperature of the cautery on the wall opposite to the one operated upon. The other, the fact that cautery operations are more frequently followed by temporary edema than are those of any other instrument. Hence, when the chink is narrow, the cautery should not be used unless we can secure complete separation of the two surfaces until healing has been completed.

When operations are performed with other instruments, such as the knife, saw, scissors, chisel, etc., the mucous membrane of the opposite wall should not be injured at all, while subsequent edema of the part operated upon is less frequent, and hence the formation of synechiæ not so likely to follow.

The prolonged existence of turbinal hypertrophy is not an uncommon cause of fibroid or ligamentous synechia. I have observed this as a result in several cases of atrophy of the turbinateds, cases in which, with almost complete shrinkage of the middle turbinated body, ligamentous bridges had formed connecting the lower border with the external wall. The only reasonable conclusion seemed to be that a former hypertrophy had filled the cavity; abrasion had connected contiguous surfaces at the most

dependent and hence most congested parts, and union had become perfect before the subsequent atrophy had commenced.

Cases sometimes come under observation in which no history can be traced, and in which direct traumatism is out of the question. For instance, I have just now a vocalist who came for throat trouble but had no idea there was anything wrong in her nose. She never had nasal treatment of any kind. In the left nasal passage, two centimetres from the naris, in a wide nasal chamber a thick band had formed, connecting the anterior inferior end of the lower turbinated to the septum. Query—how did it occur? Healthy mucous membrane all round. Room enough to breathe freely through the passage independent of the synechia. My impression was that during early life the dependent end of the turbinated had pressed against a slightly bulging septum until union had occurred. And when on closer inquiry I found that she was a hemophilia, the cause became clear.

In the post-pharynx the pathology and etiology are very similar to what they are in the nasal chambers. There the synechiæ are always of a fibrous or ligamentous character, and the parts connected are one or other or both of the eustachian tubes to the upper or back part of the pharyngeal vault.

Carelessness or ineffectual removal of the adenoids may readily be a cause of eustachian synechia. When a single large central piece is removed, the ragged edges are likely to drop down on to the lips of the eustachian tubes, and if from careless handling of instruments, the bulbs have been bruised, synechiæ can readily form. We cannot be too careful in our treatment of these cases, and should do our best always to prevent accidents of this kind from occurring.

I believe, however, that in the naso-pharynx, the most frequent cause is indirect instead of direct traumatism—the very opposite of its occurrence within the nasal chambers. Perhaps in this variety there is only a single proximate cause, and that is excessive redundancy of pharyngeal tonsillar tissue. When adenoids are excessively developed, it is a well-known fact that severe colds or high febrile action, are sometimes accompanied by slight hemorrhage from the naso-pharynx. What is more natural than for the hemorrhage to arise from the spongy tissue pressing hard upon the extremities of the eustachian tubes? The abrasion once occurring, the continual pressure might eventually result in union.

Be this theory correct or not, I have on several occasions found direct ligaments binding the eustachian tube to the base of a shrunken pharyngeal tonsil, and in which no operation of any kind had previously been performed.

I might mention here one peculiar case that I saw several years ago. It occurred in a young man aged 21. He had never

received either nasal or pharyngeal treatment. Whenever he attempted to sing he said the voice sounded as if it penetrated the left ear through the throat, producing a very disagreeable sensation. On examination I found a shrunken pharyngeal tonsil tightly attached to the posterior superior lip of the left tube by a broad ligamentous band, seemingly counteracting the natural tendency to closure of the tube. The consequence was that the tube being constantly open, the sound of his own voice reached the ear through it, as well as through the external auditory canal. I removed the synechia by curette and digital operation, and the result was perfect relief from the abnormal vocal sounds.

There is one other variety of naso-pharyngeal synechia I would like to mention, and that is a perfectly symmetrical bilateral synechia extending over the vault of the pharynx from lip to lip of the eustachian tubes. I have seen several instances of this, and in two cases in which the synechia was accompanied by adenoid enlargement I removed, as I thought successfully, the entire synechia. Within a year, however, in each case I had the opportunity to examine the patient again, to find although there was no return of adenoid tissue there was complete redevelopment of the cicatricial band.

The prognosis in synechia of the nose depends almost entirely upon the attention and time that the surgeon can devote to his case. When the cavity across which the band is formed is wide, the prognosis is most favorable. When the chink is a narrow one, the cure is more difficult, and, without the greatest of care, often unsatisfactory.

In treatment there is a diversity of methods from Scheppegrell's artistic sweep, with celluloid sound and silk and wire, down to Watson's simple friction. But I will not detain you with an enumeration of these, but simply speak of the methods I have found the most useful.

In the bony synechia between the vomer and the inferior turbinated, I have found the saw to be the most useful instrument, choosing one with a strong, wide, cutting edge and narrow back, severing the part first at the turbinal side, and then sawing the chink a little wider at the other. The saw can also be used in middle turbinated osseous synechia, though its limitations are more marked. To keep the parts open I have used cotton wool tampons soaked in albolene—I like them better than gauze—or thin rubber sheeting made wide enough to completely cover the raw surface. By its own elasticity it will usually retain its position. It may readily be kept in place for three or four days or a week without removal. To keep the parts free from discharges, albolene sprays have been used two or three times a day, and the patient has been directed to lie down on the opposite side to the one operated upon to favor gravitation.

In removing fibroid synechiæ I have found the knife, scissors, or hooked nasal knife the most useful, very rarely indeed using the cautery. When there is a simple ligamentous band, it can be clipped out at each end by appropriate scissors. When the space is small, and the synechia likewise, the simple sharp hook passed through it from behind forwards will sever the parts and cause a chink.

Any hemorrhage that occurs at the time I always consider an advantage to the patient. These cases almost invariably require the insertion of tampons of one form or other. As I said before I do not like gauze, but prefer absorbent cotton soaked in one of the hydro-carbon oils, and left in situ for several days without being disturbed, except to keep the passage above and below cleansed and open. In some of these cases I have used to advantage the rubber sheeting already referred to, and found it an excellent adjunct.

With regard to the length of time that absorbent cotton can be retained without becoming offensive or producing any injurious effect, I may say that in the case I referred to in the commencement of this paper, I removed the tampon two days ago. It had been in position ten days, the passages above and below having been kept free by the daily use of albolene sprays. The parts were moulded to a proper form, the chink clearly open and the surfaces almost healed, without producing at any time the slightest distress to the patient, or offensiveness of breath.

One point here I want to emphasize, and that is, I do not use aqueous sprays at all in these cases, but hydro-carbon oils thrown through the atomizer by means of compressed air.

In removing post-nasal synechiæ between the eustachian tube and the vault, I have used the cautery blade, passed up behind the palate, with success. Usually, however, I have employed a narrow Gottstein's curette and the finger-nail. Of course tampons are not required in this region.

WHY MEDICAL MEN SHOULD BE A COURT OF JUSTICE IN CRIMINAL CASES.*

BY J. J. CAMERON, M.D., ANTIGONISH, N.S.

In this short paper, "Why Medical Men should be a Court of Justice in Criminal Cases." I cannot hope to touch all the evidence in support of making medical men the sole judges of

*Read at Annual Meeting of Nova Scotia Medical Society, July 6th and 7th, 1900.

criminal responsibility. In attempting to discuss the subject, I am aware there is much new and unexplored ground, and, consequently, some of my opinions will be oppugned. This is the first time, so far as I am aware, this subject has been brought to the notice of a medical society, and if I shall be able to demonstrate the proposition that medical men should be a court of justice in criminal cases, then will it become the duty of legislators to enact laws in conformity with scientific advancement, and to give medical men the status to which they are entitled as the authors of scientific knowledge touching crime and criminal responsibility. The above title suggested itself to me on account of being called to give evidence in criminal cases where one or the other party to the suit sustained bodily harm or injury. What impressed me, together with the fact that I generally lost a day for sixty cents, was that the crime and not the criminal was under examination. I say this without prejudice to the exponents of the law—the judges of the courts and the members of the bar. While the legal profession alone have faculties for examining a criminal act, I hold the medical alone can properly examine the criminal.

The test of criminal responsibility which our courts are bound to apply is that formulated by the judges in McNaghten's case (10 Cl. & F. 200), which may be stated thus: "The ability of the accused to distinguish right from wrong at the time of the offence." The judges practically say that, it being once established that the prisoner's mental disease did not prevent him from knowing that what he was doing was wrong, then all evidence of insanity tending to destroy his freedom of will does not displace his criminal responsibility. Now, alienists to-day repudiate such a criterion, and say the proper inquiry is, "Whether, in consequence of congenital defect or acquired disease the power of self-control is absent altogether, or is so far wanting as to render the individual irresponsible. As has again and again been shown, the unconsciousness of right and wrong is one thing, and the powerlessness, through cerebral defect or disease to do right, another. To confound them in an asylum would have the effect of transferring a considerable number of inmates thence to the treadmill or the gallows. A writer in Criminal Law XII., page 4, says: "The rule in the McNaghten case is attacked because it holds a partially insane person as responsible as if he were entirely sane, and it ignores the possibility of crime being committed under the duress of an insane delusion operating on a human mind, the integrity of which is destroyed or impaired by disease, except, perhaps, where the imaginary state of facts, if real, would excuse or justify the act done under their influence."

Although the region of criminal responsibility is largely unexplored, such men as Hodge and Tuke have thrown the light of

science over the dark field and made it possible to cultivate it. The study of responsibility presupposes a study of human nature—of man himself. It is in the nature of man to dominate the world, to plan, to calculate, and to work out his existence. It is natural for him to hope to pay homage, to love, to envy. These are common attributes implanted in him by God and nature. Each species of the lower animals has a nature implanted in it peculiar to itself. By that nature, as well as by form, size and general appearance, are we enabled to distinguish one species from another. There are certain habits, traits, or instinct in each that distinguish it from all others. Each begets its own kind, and never is a species propagated that cannot be distinguished by its antecedents. Human nature distinguishes man from all other animals. While the distinguishing element is constant and immutable, there are certain inherited physical, mental and moral differences. Some have an inherited predisposition to disease, some to degeneracy, to immorality, to crime. Thus syphilitic and insane parents are apt to beget syphilitic and insane children. "The sins of the father shall be visited upon the offspring to the third and fourth generation." Like begets like. Thus, large men beget large children, fair parents beget fair children. Thistles do not grow on thorn bushes. The poet is born, not made. So may we say, with truth, the artist, the musician, the witty and the wise are born, not made. We are all born, with different capabilities, different degrees of intelligence, differently endowed, and each with a different horizon. The poet is not made, but he, too, in common with us all, is subject to external influences and organized systems of education prepared to cultivate the mind. "A good tree cannot bring forth bad fruit, nor can a bad tree bring forth good fruit." Hence we are all the product of our antecedents. So the doctrine that all men are born equal is absurd. Surely the idiot born is not the equal of him born *mens sana in corpore sano*. Between the idiot and the normal-born there is every gradation of inequality—mentally, morally, and physically. Responsibility varies in each according to his intelligence, his capital, his power of resistance. In the Church, the State and social order the rights and duties of members are founded on the principle of absolute equality among themselves. Absolute equality does not exist, therefore the laws governing the rights and duties of members cannot be uniform and consistent for all. In the case of idiotic and insane persons, the law at present recognizes their condition, and under the law they are regarded as irresponsible. But what of the class of alleged offenders hovering between mental health and idiocy or insanity—those on the threshold of insanity, though not insane? Is it possible to refer their so-called offences to mental conditions? The object of

legitimate law is to secure to every individual his inalienable rights, not to grant him these rights nor to take them away. The habitual criminal, mentally and physically abnormal in physiognomy, in various stigmata of degeneration, in deficient reason, lack of forethought, egotism, vanity and emotional instability, has the right to escape punishment for his so-called criminal acts (provided they be the result of his abnormal condition) whether insanity exists and can be proven or not. "No physical or moral misery, no suffering, however corrupt it may be, should frighten him who has devoted himself to a knowledge of man and the sacred ministry of medicine. In that he is obliged to see all things, let him be permitted to say all things." Thus medicine undertakes to save the honor of mankind before the Court of Morality, and individuals from the judgment of their fellowman.

In the course of almost every case of idiopathic insanity, *i.e.*, insanity due to over-exertion of the brain, we have a fairly well-marked prodromal period, indicating the diseased balance between nutrition and function in the kinesthetic area. This prodromal stage—this transition stage between mental health and insanity—has not been fully investigated, and cases are described by the alienist only when fully developed. The essential feature of insanity is an abnormal response to stimuli from within or without, while neurasthenia appears to be an expression of a morbid, unhealthy reaction on the nervous centres, which preside over the functions of organic life. The changed condition of the cells of the cortex, probably combined with the toxin introduced in the blood through deranged metabolism of these cells, must naturally lead to a disturbance of the higher centres of the brain, which, unless corrected, must necessarily lead to a definite mental disease. It is claimed, and very correctly I think, that cases of neurasthenia frequently terminate in insanity; but the law does not recognize neurasthenia as an excuse or palliation, because, forsooth, neurasthenia is not insanity. In neurasthenia, one or more faculties may be affected, the remainder remaining normal. The neurasthenic may know the difference between right and wrong, and yet not have sufficient self-control to prevent him from doing wrong. He is as powerless to prevent the acts resulting from his diseased condition as he is to prevent the onset of a thunder and lightning storm. He is the creature of the forces that have made him what he is. The leopard cannot change his spots.

Section II., page 37, of the Criminal Code, says: "No person shall be convicted of an offence by reason of an act done or omitted by him when laboring under natural imbecility, or disease of the mind to such an extent as to render him incapable of appreciating the nature and quality of the act or omission, and of

knowing that such act or omission was wrong." Splitting hairs is a reproach only in so far as one is splitting the wrong hairs. Every lawyer knows how often a fine point in procedure or in law will turn the scales for his client and against the other party. In like manner, how often a fine point scientifically examined would weigh to reconstruct a legal definition that would excuse or justify an alleged criminal or condemn an imposter?

It is remarkable how, without pay or due credit, the public appropriate the discoveries of medical men, especially if the discovery makes directly for the public good. Instead of receiving recognition for the work done in pathology and psychology, members of the profession are simply subpoenaed to give evidence before a court of justice, often without pay or profit. "We teach them to swim and then they drown us." It is time, therefore, we asserted our rights to prevent the unseemly conduct witnessed every day in our law courts of pitting one medical witness against the other—witnesses who have never made a special study of diseases of the nervous system, and many of whom are "experts" only in name. As an alternate, let there be a medical court for criminal cases—one composed of educated medical experts, whose broad culture and special knowledge will make them the highest authority in the land on such questions as criminal responsibility; whose professional skill will enable them to adjudge and differentiate the motives, the capital, the power of resistance of the unfortunate criminal, and who will prescribe treatment or punishment according to the necessities of each case.

VALEDICTORY—READ AT TRINITY MEDICAL COLLEGE CONVOCATION, MAY 17, 1900.

BY FRANK C. TREBILCOCK, M.D., BOWMANVILLE.

To say "good-bye" to old friends is never a pleasant undertaking, and to-day I find it less so than usual. That "parting is such sweet sorrow" may be true in other climes and among other groups of associates, but here in our old college halls, and among my classmates of four hard but happy years, I am proving it false indeed.

Graduation day is one of trial and turning for the student. Since coming to college as freshmen we have been looking forward to this day with eyes of hope, and dreaming of all the glories we should see from the hill-top. Now as we stand here, where we expected to see pleasant slopes of light and shade, we find instead higher and steeper crags and would fain be once again wandering through the grassy valleys of student life. More than ever we

realize that new attainments bring increased responsibilities, and at times waver ere we shoulder the added load.

It is an hour for retrospection. Men differ so, individually, and it would be a dreary humdrum world did they not; classes, too, differ in sentiment, motive and congeniality and will to the end of time. However, I think that my classmates will agree with me when I say that in the years we have spent together in the pursuit of knowledge of our chosen science no untoward events have happened to break the good-will and friendship of man for man. We met as strangers, we part as friends.

What have our university days done for us? Have they fulfilled our dreams of days gone by?

These are questions we have been asking ourselves as college life drew near its close, and to-day I find them unanswered and unanswerable.

Let us take the latter first. I doubt not that every student before he enters upon his academic career builds for himself large mansions in that "mystic land of Spain," and again I doubt not that the real castles which he is able to rear during those all-interesting years are but poor apologies for the glories of those earlier fancies. Perhaps it is because a man's ideals change! Brushing up against the all-absorbing mysteries of medical science, as laid before us by our professors, one's ambitions change and the old idea of a cap-and-gown life fades before an intense interest in the work in hand.

Yet it should not be allowed to altogether go. We have no flowing cane, no Yale elms, no old Nassau, around which to group our æsthetic fancies as we leave our college halls forever; but in the very idea of four years' class-life with others, like ourselves, having the same interest and end in view—the acquiring of real knowledge and the making of real men—there is scope for all the poetic fancy of a man's nature.

Here I am led back to my first question, "What has college life done for us?"

To some extent, no doubt, it has fulfilled our expectations. It has given us knowledge which shall enable us to do successfully, I trust, the life-work we have placed before us. Rather it has opened to us the gate into that vast expanse of science which lies like an illimitable and unknown land about us. It has taught us the alphabet of the application of that knowledge; has made us appreciate the mighty truth of Tennyson's wonderful lines:

" Knowledge comes, but wisdom lingers ;
And I linger on the shore,
And the individual withers,
And the world grows more and more."

But it has done other things infinitely more than all this, if it has

been all that college life should be. Did it not, the graduate would be but an emporium of knowledge or a mere reasoning machine. I shall not soon forget a talk by Dr. Parkin in old Trinity College hall upon the real college-man. Does four years of student life leave its mark upon one? Verily, yes! There is an air about him, if he has gotten all there is in this life of study, which is indescribable but which makes itself felt wherever he may go. It is not the air of the book-worm, but a sort of gentleness of voice and manner unmixed with moroseness, but rather with the artist's appreciation of all the beauty of living, which will shed its bright rays upon all his little sphere of life. Especially should this be so with the physician. Surely his deeper knowledge of the wonderful beauty of creation, gained by careful application in months of study, ought to make him a nobler man, and I well remember how Dr. Parkin begged of us to cultivate this higher manliness—not that he loved knowledge less but manhood more.

These days have been days of friendship forming, as well as of knowledge gaining or character building.

Student days are not all bright and happy, but real loneliness is often an unbidden guest in our little studies and many a time it is a most acute infection. There is no comfort in books, the very sight of them drives one mad; then it is that he closes the page and, taking his hat from the peg, he saunters out to see the "boys." Then it is that friendships are made, and I suppose the happiest hours in all this interesting life are those we spend in each other's rooms chatting over the events of the week or playing a quiet rubber at whist; at least these are the times that are most impressed upon my memory now and I expect that in future days, when looking over my class photographs and recalling incidents about each in turn, these are what I shall longest remember.

College friendships—the words have almost a sacred meaning for the student, and I rejoice that as a class we have entered into their pleasures. Other friendships are formed as well, and here I touch upon a point which comes home to every one of us. Dr. Oliver Wendell Holmes has said :

"Every classic beach is strewn
With heart-shaped pebbles of blood-red stone."

and I dare say it's as true of Trinity as of Harvard. City people are invariably kind to the student and many a night when a young man gets into the dumps of—

"Nothing to do but work,
Nothing to eat but food,"

he finds the panacea for his illness in the luxuriance of some dimly lighted drawing-room, where he is lulled into an easier frame of

mind by the playing of certain songs which were originally without words, but which lack he is pleased to supply.

On another evening I see him with his head in his hands, the heat from his study lamp laying the foundation for to-morrow's headache, the clock hands past midnight, and I catch the muttered words :

“ Well, I like a fool sat dumfounded,
And wondered what she didn't know ;
'Twas ten when I bade her good evening,
I tho't it in season to go.”

There are Cousin Georges in Trinity as well as in Oxford, and it is not an unknown thing for a primary man to slide nervously up to a gloomy senior and ask in an awe-struck tone : “ Say, Sam, were you ever in love ? ” and if Sam be an admirer of Mark Twain and follow his advice to tell the truth when in doubt, he will answer “ Yes.” Among Trinity meds., as in the world at large, “ the course of true love never does run smooth,” and his lot is sad indeed next day who is caught by his classmates red-handed. With some show of disdain and more perversion of the truth he falters :

“ If Gord don't love her more than I,
Den all I got to say
Is that her soul's in danger sho',
And she had better pray.”

All this persecution is part and parcel of the correct training of the medical student ; “ spare the rod and spoil the child ” holds a prominent place in our code of law. Fellows learn to take the rebuffs of the world with Anglo-Saxon stolidity, and every man sooner or later comes under this rod, just as we all earlier went over our historic bar ; for, as the friend of student and soldier says :

“ Surely you have your sweetheart,
And surely I have mine ;
We toast her name in silence here,
And the girls of Auld Lang Syne.”

These are golden days I have talked of, but grey ones have come into our class life as well. During these years three men have fallen in our college ranks—teacher and students—whom we all counted as good and tried friends.

Professor Kirkland was, more than anything else, good to the boys, and every little while some new proof of his interest and kindness comes out in our confidential talks.

Morley Fallis, though not a member of our class, was counted one of our circle and was always ready to help those behind him by word or deed.

But more than any other we think of our own classmate, Duncan McPhee. In the two years spent with us before failing health demanded that he give up his college work, he proved himself a man of sterling worth ; modest, quiet, but witty as could be, he made many friends, and the news of his early death last January shed gloom over class life. Few classes escape this sadness ; the boys of 1900 realize that when Duncan McPhee fell we lost a good comrade.

Of our college and professors I shall say little. Beautiful buildings we have not, but in these old halls we have tried to do our work so well that absorbing interest therein might blind our eyes to lack of architectural beauty. The professoriate has been most kind to us and we appreciate it all, and trust that the plastic material of 1896, after four years' moulding at their hands, may, in 1900, reflect upon them credit.

In this brief epitome of class-life in Trinity Medical College I have been all along shirking the "farewell" which I am loath to say. Mentally I have taken my hat, put on my gloves, walked slowly to the gate, leaned upon it and gazed at the dying moon, sauntered back to the verandah and at last must say "good night."

Again I quote from the medical student's friend, Dr. Holmes : "All at once a conviction flashes through me that I have been in these same precise circumstances once or many times before." Such a sensation, because entirely new to me personally, I hasten to explain in the fact that to-day I am not myself only, but speak for my fifty class-mates, and doubtless it is the shades of some of their experiences which are affecting my consciousness.

"Ike Marvel," who knew college life so well, has said, "The education of the cloister offers at best only a sound starting point from which to leap into the tide"; and, realizing how true his words are, we wave our hands in affectionate farewell to our old "Alma Mater," and, wishing her all success in her work, wade bravely into the sea of life.

Special Selections

**THE SURGICAL TREATMENT OF BOTH ENLARGED
AND DISEASED TONSILS IN CHILDREN
AND IN ADULTS.***

BY CLARENCE C. RICE, M.D., NEW YORK,

Professor of Diseases of the Throat and Nose, New York Post-Graduate Medical School and Hospital;
Consulting Surgeon in Throat Diseases to the Out-Door Department, Bellevue Hospital; Visiting
Physician New York Infant Asylum; Laryngologist to the Montefiore Home.

I feel that this subject will be of interest to you because I am asked so frequently to state in what class of patients the tonsils should be excised and in what other variety of tonsillar disease it would be wiser to use either the electric or some chemical cautery. We shall endeavor to cover the ground in a very concise way, and the paper of this evening will simply be a resumé of our method of treatment both of enlarged and of diseased tonsils.

Perhaps, in the first place, it would be well to speak of enlarged tonsils. As is well known, we do not frequently see tonsils which are over-large—that is, large enough to be excised because of their interference with breathing and swallowing—except in children and in young adults, and we unqualifiedly recommend the use of the tonsillotome in this class of patients. It is just as difficult, just as painful, and just as terrifying to a child to apply the galvano-cautery as to use the guillotine, and it requires a much longer time. The only reason we can think of for using the electric-cautery to reduce the size of tonsils in children would be that the parents positively forbade the use of the knife, and even then they should be persuaded to give their consent to a tonsillectomy, because it is almost impossible to do satisfactory work with the cautery electrode in young children. With the cautery cocaine may be used, but the child rarely submits to the tediousness of this procedure, even if there is very little pain, and both the parent and the child become tired long before the tonsils are sufficiently diminished in size. In adults the largest tonsil can be removed with the cautery knife at one operation. The cautery electrode or snare are most valuable instruments in reducing the tonsils where hemorrhage is feared, and we shall enlarge upon this point later on when speaking of the treatment of adult tonsils.

*Read at Stated Meeting New York Post-Graduate Clinical Society, May 4th, 1900.

But there is not this reason for the use of the cautery in children, where there is little danger of bleeding.

It is unnecessary, perhaps, to describe the use of the tonsillotome, because you are all familiar with it. There are several points, however, which are learned by experience rather than by the text-book, to which I may allude.

The occasional failure to remove the tonsils in a proper manner is due to inefficient control of the child, poor illumination, a bungling use of either the tonsillotome or the tongue-depressor, and undue haste. Some authors state the desirability of enveloping the child in a towel or blanket, but we never have found that this was necessary. If a child be obstinate or terrified it can easily be held in the lap of the parent or assistant while the second assistant keeps its head steadily in the light reflected from the mirror. Occasionally we are obliged to grope in the dark to some extent when operating with an anesthetic, but usually both in dispensary and private practice we may have ample light, so that the back of the pharynx can be clearly seen. For a time I was in the habit of using a tonsillotome with forks which drew the tonsil out from its bed beyond the pillars of the pharynx, but discarded the use of these instruments because they are difficult to clean, get out of order easily, and are, I believe, more difficult to adjust than the simple, old-fashioned Mackenzie's modification. Tonsils should be cut even with the pillars of the pharynx, no more and no less. When the loop is not easily adjusted over the mass of enlarged tonsil it is usually because some portion of the tonsil extends downward into the lower pharynx below the surface of the tongue and below the point of vision. If the operator will raise the handle of the tonsillotome and thus carry the knife downward this difficulty will be obviated and the tonsil will slip into the circle; a shaking motion to the instrument helps to fit it accurately. The amount of pressure which should be put upon the tonsillotome depends upon the presence or absence of adhesions between the tonsil and the pillars of the pharynx. When there are adhesions it is necessary to put a little more pressure upon the loop, so that the tonsil may be excised even with the pillars. Tonsil cutting is aided rather than prevented by the gagging of the patient, because such muscular action will push the tonsil far enough into the loop, and the blade of the knife should be pushed through just at the proper second. We cannot give clearer directions as to the method of properly excising the tonsil than to say that the loop should be held directly in contact with both pillars. If this be not done the operator will fail to remove either the anterior or posterior part. As a matter of wisdom we think it better to be sure that bleeding from the first tonsil subsides before the second one is removed. It is very important not

to be in too great haste in pushing home the blade of the tonsillotome. Two or three seconds is a long time, and this period may be well employed in being sure that the uvula is not in the loop, that enough of the tonsil protrudes and that the tonsillotome is straight with both pillars of the pharynx. There are a few cases, and only a few, where adhesions render a tonsillotome with forks desirable.

It must not be forgotten that there is a large amount of contraction and retraction after tonsil-cutting, and that it is usually found that enough tissue has been removed, although there is some little protrusion beyond the pillars of the pharynx directly after the operation. Perhaps the greatest cause of retraction is furnished by the removal of post-nasal adenoids and the restoration of normal nasal breathing. I need not say to you that the presence of enlarged faucial tonsils is most frequently associated with a post nasal-space filled with naso-pharyngeal lymphoid enlargement. Mouth-breathing is much more frequently caused by post-nasal lymphoid enlargement than by large faucial tonsils. If a case presents itself in which we are allowed to do but little removal of tissue we much prefer to clear the post-nasal space than to excise the faucial tonsils, for so soon as nasal respiration is restored by the removal of post-nasal adenoids, normal air-pressure quickly shrinks, without operation, faucial tonsils which were apparently much too large and which strongly called for operative procedure. First of all, clear the post-nasal space. Do not determine that faucial tonsils are large enough to be excised simply because they seem to be large when the small patient is gagging, for any sized tonsil seems too large at this time. Whether tonsils are large enough to be excised should only be determined during a period of rest. It is wise to cut the larger of the two tonsils first, so that we may be sure of this increased space in case anything prevents the excision of the second. Do not use cocaine on tonsils when they are to be excised, because they become so shrunken that it is impossible to remove more than a small portion of them, nor is the amount of pain materially diminished by the use of cocaine, and the danger of secondary hemorrhage is much increased when the effect of the cocaine has worn away.

The question is frequently asked if there is danger of hemorrhage after tonsillotomy, and also what procedures are necessary to control it if it should occur. We cannot ignore the possibility of severe and even dangerous hemorrhage. Too many histories of such cases may be found recorded in literature. I personally have had no experience with dangerous hemorrhage, and I feel that in the case of children up to the age of sixteen years, if tonsils are excised, even with the pillars of the pharynx, the

hemorrhage which occurs will always spontaneously subside. The danger of hemorrhage would be increased if a forked tonsillotome were used and the tonsil excised below the borders of the pillars; but even then severe hemorrhage should be very rarely met with. Nearly all the instances of troublesome bleeding have occurred when the large, congested, fibrous tonsils of adults have been cut; and consequently, we may say here, that if this danger is to be avoided, tonsils of this character may be removed or reduced by the electric cautery, or by the cautery snare. I have always preferred to use a tonsil knife, which was not too sharp. We know that in cutting of all kinds the bleeding is greater if the knife be excessively sharpened. To demonstrate the fact that tonsillotomy cannot be a dangerous operation from the standpoint of hemorrhage, I might say that I once knew an operator who was in the habit of grasping the tonsil with an ordinary pair of forceps, and then removing not only the tonsil, but the major part of both pillars of the pharynx with a blunt pointed bistoury, and this in adults as well as children. Of course this was excessively bad practice; but while considerable bleeding always occurred, I never knew of a fatal case.

But what should be the procedure if dangerous hemorrhage occurs, or if hemorrhage of any degree persists? If the bleeding shows itself in an arterial spurt, one would naturally endeavor to grasp the point with forceps, and perhaps compression in this way would be sufficient, but, as a rule, the bleeding is a general one from the entire cut surface, so that perhaps the wisest course would be to immediately put pressure on the wound by means of cotton moistened with cocaine or some other styptic, or with styptic cotton. A good-sized piece can be held tightly over the bleeding surface with the first two fingers of the right hand, and counter-pressure can be made on the outside of the neck with the left hand. We should expect that pressure of this kind for a few moments would be efficient. The actual cautery is applied with great difficulty to a surface which is bleeding rapidly, because the electrode is so quickly cooled by the fluid, that it is almost impossible to form a clot. We can employ, too, a twenty-grain solution of suprarenal extract or an iron solution.

I remember very well hearing Sir Morell Mackenzie, the great English laryngologist, say that he considered his aqueous solution of gallic and tannic acid quite competent to check tonsillar hemorrhage. In cases of severe bleeding after tonsillotomy the operator will greatly need not only the best possible illumination, but also intelligent assistance from other physicians or members of the family; but, as I have said, if one would avoid troublesome hemorrhage let him confine his cutting to the large, white, flabby tonsils of children, and use the cautery when the tonsils are much congested, as they frequently are in adults.

This brings us to another part of our subject, the use of the galvano-cautery in reducing the size of tonsils. We feel that the galvano-cautery is more useful here than in any other part of either rhinological or laryngeal work, and first we recommend the electric cautery for destroying those diseased tonsils which are in a chronic condition of congestion and inflammation on account of the presence of cheesy leptothrix. Not only can the tonsils as a whole be contracted, but the enlarged crypts can be closed with the cautery point by adhesive inflammation. The galvano-cautery is most useful, too, in destroying the tonsils of those people who perennially suffer from peri-tonsillar abscess or quinsy. In these cases there are usually adhesions between the anterior pillar of the pharynx and the tonsil. These can be separated with a scalpel handle and the tonsil alone burned. If the anterior pillar itself is very large, then it, too, should be diminished in size with the electrode. A single operation should always suffice to destroy tonsil and pillar, because it is inadvisable to compel the patient to suffer from the sore throat which results from the burning more than once. Again, we recommend the use of the galvano-cautery to contract the congested tonsils in adults, even though they are not much enlarged, and when they are not prone to inflammatory attacks of any kind, simply as a means of treating a general pharyngitis which is kept alive by the presence of congestion about the tonsils and pillars. The cautery is as useful here as it is in effacing large capillaries on the posterior pharyngeal wall by cautery puncture. Not only can general congestion be diminished in this way, but the increased lateral diameter of the middle pharynx which is thus obtained will be found very useful in the treatment of pharyngitis and secondary laryngeal-catarrhs. We meant to have said that we advise the use of the cautery where the patient suffers occasionally from acute follicular tonsillitis, or from catarrhal inflammations of any grade. Where the tonsil is but little enlarged, it will be sufficient to burn a gutter through its length from above downward, but if it is broader, it will be necessary to burn over a larger extent of surface. The cautery must be used in a different manner when we treat the very large tonsils of adults which we hesitate to cut on account of the liability of hemorrhage. Here it would be a waste of time to burn over the surface of the tonsil, and a much better way is to cut through the middle of the tonsil as closely as we can to the pillars of the pharynx without scorching. A 10 per cent. solution of cocaine may be liberally employed. Either the cautery point may be inserted into the tonsil at three or four different points, the blood vessels thus destroyed, and then the enlarged tissue excised with a tonsillotome, or by a little longer process, the entire tonsil, no matter how large, may be burned through with the cautery knife.

I am confident that many operators will affirm that they do not hesitate to excise tonsils of any size or of any degree of congestion, or at any age; but, since it is true that troublesome hemorrhage can occur in excising the tonsils of adults, I myself prefer not to take the risk of injuring my patient or annoying myself.

DISCUSSION.

The CHAIRMAN said that one should always bear in mind that the normal tonsil was not visible by ordinary inspection. He did not mean to say, however, that because one could see the tonsil it should be cut out. There could be no doubt that with a diseased tonsil in the throat there were open crypts present ready to take in infections of various kinds. It was convenient to divide these cases into adults and children, particularly when considering the question of hemorrhage. The fatal cases of hemorrhage after tonsillotomy had all occurred in persons over the age of eighteen years. The danger of the operation also varied considerably with the method of operating—whether under an anesthetic by the sense of touch or without ether by inspection. It required considerable experience to operate under an anesthetic because of the fact that the operator must be guided solely by touch. He had himself been afraid of this method at first, but now he had no more fear of operating in this way than under the guidance of the eye. There should be, however, a trained assistant at hand to make pressure from the outside. Very little after-treatment is necessary after the tonsillotomy, and the same might be said with regard to adenoid operations. He much preferred to do a tonsillotomy under ether, and as adenoids were almost always associated with enlarged tonsils it was usually desirable to operate under an anesthetic and treat both conditions at once. He would not put a patient under ether simply to remove the tonsils, but he would do so in almost every instance for the purpose of removing adenoids from the vault of the pharynx. The necessity for the complete removal of adenoid growths impresses itself far more upon the aurist than upon the rhinologist or the general practitioner. The pediatricist removes adenoids, the rhinologist removes adenoids, and the aurist removes adenoids, yet he had heard a pediatricist say that he could remove the adenoids to his own satisfaction simply by the use of the finger-nail. Such a mode of operating certainly would not satisfy the rhinologist or the aurist. There were many nice theories as to the control of tonsillar hemorrhage, but some of them were as visionary as they were beautiful. Some years ago we had been told that it could be controlled most beautifully by the introduction of a sort of puckering-string suture. Theoretically this was all very well, but in a nervous, frightened and bleed-

ing patient such a method was out of the question. He had never met with a dangerous tonsillar hemorrhage in his own practice, but should he encounter one he felt confident that almost any hemorrhage could be controlled, at least temporarily, by the application of a solution of suprarenal extract. It probably would not check arterial hemorrhage, but it would control the associated oozing and give an opportunity for the operator to seize the bleeding point.

DR. BEAMAN DOUGLASS thought the treatment of enlarged and diseased tonsils might be fairly summed up in the words "cut them out." He would discuss the function and importance of the tonsil because of its bearing on the question of removal. The tonsil is certainly more important an organ than the vermiform appendix. The embryologist says that in the third month of fetal life the lymphatic glands develop, particularly those of the intestinal tract and of the stomach and mouth. In addition, elevations of epithelium make their appearance. From the third month of fetal life the tonsils develop along with the other lymphatic structures, and closely coincide in age and development with Peyer's patches in the intestinal tract. From the histological structure of the Peyer's patch and of the faucial tonsil it was reasonable to believe that they are similar. Both are in the alimentary tract and of similar structure. It was probable that the system would miss the tonsil about as much as it would miss one Peyer's patch—in other words, the most recent investigators do not give us any definite knowledge of the function of the tonsil. Some say that it prevents the entrance of food into the pharynx; others say that it lubricates the bolus of food; others maintain that the tonsils filter out bacterial products. Among singers it is a tradition that if the tonsils are removed the voice is altered. As a mucoid organ it certainly does furnish some mucus for the food about to be swallowed, but it is certainly inferior in this respect to the salivary glands. As an organ of voice it was of absolutely no consequence whatever, the voice often improving after amputation of the tonsils. As a preventive of the entrance of food into the pharynx and the regurgitation of food into the mouth the tonsil is a failure, because after its complete removal there is observed no such regurgitation. As bacterial filters he was sorry to say they had their function. Undoubtedly nine-tenths of all the cases of cervical adenitis in children are the result of the absorption of tubercle bacilli through the tonsillar tissue. The tonsils are responsible for much of the adenitis, the sepsis and the septicaemia observed in both children and adults. Cases had been reported, both in Europe and America, of empyema, gangrene of the lung and other diseases resulting from this action of the tonsils. With the exception of the

intestinal tract, the tonsils were probably the most frequent cause of tuberculosis in early life. The tubercle bacilli often lie dormant in these glands until adult life. Moreover, it could not be said that the tonsils should not be removed because of their anatomical relations—the story of hemorrhage is a bugbear, a foolish tradition which has arisen because the operators had insisted upon the use of various astringent washes rather than make use of the simple surgical principle of controlling the hemorrhage by direct pressure. With a mouse tooth forceps the bleeding point should be caught and twisted. This simple procedure would stop the worst tonsillar hemorrhage. The reader of the paper had not laid as much stress upon the effect of adhesions as he thought that part of the subject deserved. The adhesions drag the pillar of the fauces over with the tonsil and do not expose the latter, so that it can be properly excised with the tonsillotome.

DR. T. J. HARRIS congratulated the Society on having had the opportunity of listening to such a concise, eminently practical paper. For this reason it was perhaps dangerous to dissent at all from the statements there given. He truthfully believed, moreover, that Dr. Rice's judgment was the judgment of the best men doing throat work. One school in this city is represented by a man who believes in leaving the tonsil almost severely alone; whereas another insists upon removing the tonsil on the slightest provocation. Dr. Rice might be looked upon as a "middle-ground man." The speaker said that he thought there was a true hypertrophy of the tonsil which could not be justly included in the class of cases especially considered in the paper. This was the tonsil which is very much hypertrophied, but which lies low down out of easy reach, between the pillars of the fauces. These cases were not met with very frequently, and yet they require attention. Dr. O. B. Douglas had for years recommended the breaking up of the adhesions which exist between it and the anterior pillar, as a means of reducing these hypertrophies. These adhesions could be broken up by a number of manipulations with a blunt hook. Dr. Farlow, of Boston, had devised a punch with which he bites out the tonsil, and Dr. Myles had devised a special forceps for this purpose. His own practice was to take the ordinary vulsellum forceps, draw the tonsil into the median line, and cut it off with a bistoury. The method of operating seemed to him largely a matter of individual experience. Even where he used ether he endeavored, and usually succeeded, in getting a good light upon the tonsil. In operating upon a child he believed it was better to give an anesthetic, for an adenectomy is usually necessary as well. In older persons, where an anesthetic was not considered desirable, he made use of cocaine, introducing it hypodermically. He had always succeeded in this way in inducing complete anesthesia, and he had never seen any

troublesome hemorrhage from this practice. While he had not seen severe tonsillar hemorrhage he could not help feeling that it was not right to leave the impression that tonsillar hemorrhage was merely a "bugbear." In the adult, where the tonsil is rather soft, he did not hesitate to use the tonsillotome; but in older persons in whom the tonsil is fibrous, he felt that one assumed a great risk by employing this instrument. In the last few months he had been using orthoform upon the tonsil as a means of controlling the somewhat painful condition following the removal of the tonsils, and had been pleased with the results. In spite of remarks that had been made concerning the function of the tonsil he could not feel that one was justified in removing the tonsil without good cause. The tonsils were certainly responsible for the absorption of disease germs, but the number of cases reported of infection arising directly from them was comparatively small. Unless a child gave a history of repeated attacks of sore throat, or there was some involvement of the nose, it seemed perfectly safe to advise waiting for the development of the symptoms. One could conscientiously delay under these circumstances.

DR. RICE said the subject was a very large one, but happily the points which had been omitted in the paper had been covered by the remarks of the gentlemen who had discussed it. He wished to explain a little more carefully one or two points about which there seemed to be doubt. He wanted to be understood as recommending, first, the use of the electric cautery simply to diminish congestion in the tonsillar region. This was simply a part of the treatment of pharyngeal catarrh. It was customary to apply strong astringent solutions to the post wall of the pharynx to reduce congestion, and it could be readily seen that it was much more effective to destroy tonsillar blood vessels with the electric cautery. Localized congestions about the tonsils were a very potent factor in making a laryngeal catarrh chronic, and it seriously interfered with remedies applied to the laryngeal cavities alone. It was impossible to cure a laryngeal catarrh so long as the tonsillar region was enlarged and congested. Dr. Douglas had very lucidly described the function of the tonsil, and the great danger of infection through the tonsillar region; and this was an additional reason for sealing up the crypts of the tonsil with the galvano-cautery by adhesive inflammation. There were, perhaps, two reasons only why, in some instances, the tonsil should not be diminished in size. One was that in a very large pharynx where there was a tendency to dryness, a somewhat large tonsil furnished protection to the posterior wall, and kept the surface moist; that this was true was proven by the fact that when the tonsil was destroyed, dryness appeared for the first time on the posterior wall. We should be careful, too, in operating on the tonsils of singers, because if, for any reason what-

ever, their singing power was unfavorably effected, they would very surely charge it to tonsil burning. The speaker said he had never known a singer's voice to be unfavorably affected by the reduction in size of the tonsil, but work here should be done in the most conservative way. It was ridiculous to say that adenoids could be properly removed with the finger, and a thorough removal of this tissue when it exists in large quantities should not be undertaken without an anesthetic. The suggestion made by Dr. Harris about breaking up adhesions between the pillar of the pharynx and the tonsils was an excellent one. There were many tonsils which could not be properly excised unless these adhesions were first broken through. He thought one of the speakers had laid too little stress upon the difficulty of stopping severe tonsillar hemorrhage. Dangerous hemorrhage has frequently followed the excision of the congested tonsil in adults. Consequently these were the tonsils which should reasonably be treated with the cautery and not with the knife. It would undoubtedly be found that severe tonsillar hemorrhage under the most favorable conditions was difficult to control, and with poor illumination and inadequate assistance, rapid bleeding in a frightened nervous patient was an occurrence to be dreaded and avoided.—*The Post-Graduate.*

HYPNOTISM—A CLINICAL LECTURE.

BY F. X. DERCUM, M.D.,

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A great deal of unnecessary mystery attaches to the subject of hypnotism. To the minds of the laity the name suggests something weird and uncanny, and this statement may even be made of a large number of physicians. As we make a demonstration of its use and explain the principles upon which it is based, I think you will agree with me that there is nothing strange about it. The fact of hypnotism cannot be disputed. It is well known that animals, such as birds, rabbits, etc., are easily hypnotized by forcibly attracting their attention; and by drawing a line on the floor or ground in front of them they will remain in a fixed position. The fact is also true as regards human beings, the subjects capable of being hypnotized belonging to the great class of neurotics, many of the symptoms of which these people complain resembling those of hysteria.

The hypnotic state is usually divided into three stages: First, there is the stage of catalepsy, or sleep, in which there is muscular relaxation. Second, the stage of lethargy, in which the sleep is

deeper, and instead of muscular rigidity, the head or limbs of the patient remaining in whatever position they may be placed. Third, the stage of somnambulism, or stage of automatic movements.

Because I hypnotize a subject before you, I do not wish it to be understood that I am an exponent of the practice, or that I wish you to follow it in your future work. On the other hand, you should use it only under very exceptional circumstances, and then with strict regard to the rules which will be subsequently laid down. The importance of hypnotism has been greatly exaggerated, both as to its medical aspects and by the public. The lay idea regarding it is obtained largely from professional hypnotists and travelling pretenders with their more or less misleading exhibitions.

The field for the legitimate practice of hypnotism is an exceedingly limited one. I wish also to say that there may be an element of danger for the one who practises it. There is not only a suggestion to the patient, but there is also an auto-suggestion to the operator. Excessive study of hypnotism may lead to untoward results in some persons. We often meet with laymen or students who are studying hypnotism or investigating its powers. These persons should remember that there is a certain amount of danger as regards their own mental stability—a danger which arises from their own increased susceptibility to involuntary auto-suggestion.

As physicians, hypnotism interests us from two points of view : First, the explanation of its principles ; and second, the extent of its practical application. There are many theories explaining the induction of the hypnotic state, but the great bulk of them are metaphysical in character and have no practical value. The laity may be satisfied by such explanations, but they will not do for the medical man. He must have a rational, a physical, or a physiologic explanation of the subject. The explanation which I shall give is based upon the structure and workings of the nervous system itself, and thus has an anatomic and physiologic basis.

To explain hypnotism, we must first explain the physiology of natural sleep. The nerve-cell, with its processes or dendrites, makes up the unit of nervous tissue. These units, or neurones, bear various relations to each other at different times. There are some men, and I have for a long time been one of them, who think that these elements retain some of the mobility which they possess during embryonic life. Under certain conditions they change their relation to each other. Whether this change is a mechanical one or not makes but little difference, however, and does not influence the theory. They must change their physiologic relations in some way. I say this because there are some investigators who do not accept the neurone theory, and hence not the physical changes mentioned. I still think the neurone theory

of nerve-structure to be the correct one, but, as I have said, even this is not a necessary part of the explanation of sleep or hypnotism.

During the waking hours of the individual the various nerve-cells are in relation with each other, the dendrites being in contact or in physiologic relation with the collaterals or other processes of neighboring cells. In sleep, the processes are retracted and the cells of the cortex, being separated, cannot discharge any function when in this condition. Many authorities regard this as the probable explanation of sleep. In hypnotism, the sleep induced is a partial one, but it is the same intrinsically as ordinary sleep. In lethargy, or catalepsy, or somnambulism the sleep is only partial. The principle followed in the induction of hypnotism is to suggest sleep and to induce it by fatigue of some part of the body, the ordinary way in which physiological sleep comes. To do this, it is common to select some muscles that are easily fatigued, and of these the ocular muscles are perhaps the best. As a common expedient in tiring the ocular muscles, the patient is asked to look intently at some object, preferably a bright one. This object is then brought nearer and nearer to the patient's eyes, thus causing greater effort of convergence to be exerted, until the focusing becomes very difficult and fatigue of the muscles is induced. When this stage of fatigue is reached the pupils dilate and the eyes are seen to diverge instead of converging as before. If, when the patient is in this state, sleep is suggested to his mind, the latter follows very readily. With the patient in a partial sleep, and with the eyes closed, no information regarding the outside world or the operator can be obtained from the sense of sight. They hear only what the operator says and practically by the avenue of the ear alone suggestions reach the cortex. The skin and muscles may have a small part in transmitting suggestions, but it is mainly by the ears that this is possible. If, then, suggestions are made to the patient, they are accepted as they are made. All the other senses excepting hearing being shut off, the impressions on the cortex come by way of the ear, and are not corrected or contradicted by sight or the other senses. There is no readjustment of statements heard by what is seen, and, therefore, the patient believes whatever the operator suggests.

The patient whom I bring before you is a young woman who has consulted many physicians. Within the last year she has consulted the great exponents of hypnotism in London, France, Germany and Vienna. In the last place Professor Benedict induced hypnotic sleep by magnetism, a powerful horseshoe magnet being placed over the occipital region. When this young woman first came to me she complained of a pain in the shoulder. This was at first regarded as rheumatic in character, and was

treated as such, but antirheumatic remedies proved of no avail. An examination revealed the presence of numerous stigmata of hysteria. She then told of being cured of similar symptoms by hypnotism, and I tried that, with the result that the pain was relieved, and never returned again in the shoulder. But other portions of the body are affected, and symptoms appear from time to time in a continuous cycle, being relieved by hypnotic suggestion, only to re-appear after a time in other places. The patient now has headache and pain in the eyes, although the symptoms are more general than local in character.

Anything will do to attract the eyes of the patient in order to induce fatigue of the ocular muscles. I use the bright handle of an instrument, but my finger would do just as well, as sleep is readily induced in this subject. The patient is now in a condition of partial sleep, which is attended by muscular relaxation. Catalepsy and somnambulism could be easily induced and the patient made to do various automatic acts for our amusement, but I leave such tricks for the professional hypnotist, as they have no part in a medical clinic. Only this state of partial sleep is used for medical purposes, nothing being gained by catalepsy or somnambulism, although they are readily induced.

When use is made of the hypnotic state, we treat the symptoms complained of just as the physician treats symptoms in other ways. I take the patient's hand in mine, as I always do when I practise hypnotism (although it is only in exceptional cases that I have recourse to this practice), in order to reinforce the suggestion. I then say to her that when she awakens she will have no pain or headache, and that she will feel buoyant and happy. This should be repeated several times, perhaps ten or more, and should be stated as impressively as possible, and coupled with the statement that the pain will never return again.

Shall we now awaken the patient? Not yet, for there are certain precautions to be taken. The suggestion should be made that no one can hypnotize the patient unless she is willing that it should be done. This is especially necessary in patients who have been hypnotized often. This young woman was riding in a street-car at one time, and when one of the passengers stared at her she went to sleep. I made the suggestion that she could not be hypnotized unless she were willing, but she remembered the incident in the car and was still fearful. I then hypnotized her again, and said that no one but myself could hypnotize her in the future. The incident was forgotten, and sometime afterward a young French physician, who had made a study of hypnotism, was visiting the clinic. He tried repeatedly to hypnotize this patient, but failed. I then remembered what I had said, and on making a trial, sleep was readily induced. A suggestion once made may

last for a long time. Others have tried to hypnotize this patient, but have failed because my suggestion still remains, it having never been removed. The hypnotists she visited when abroad were unsuccessful. In Vienna, Professor Benedict was probably successful in inducing sleep by magnetism because the suggestion I made did not include that method of inducing the hypnotic state.

In addition to the disappearing of the symptoms, and the fact that no one can hypnotize her unless she is willing, a third suggestion should be made to the patient before she is awakened. That is, the statement that she will feel well and comfortable after she is over the sleep, and will not be tired from the fatigue induced. This is necessary, because the treatment is more or less exhausting.

How shall we awaken the patient? This can be done as from normal sleep by loud talking, clapping the hands, etc., if the sleep has been slight. If it has been a profound one the patient cannot be aroused so easily. But in either case she can be awakened by suggestion, which is the better way of doing. I will make the suggestion that this patient will awaken in one minute. Any time could be given, as five or ten minutes. It is curious how the actual time of awakening in these cases corresponds to the time suggested. The patient awakens, says she feels a little dizzy, but better than she did before. As she becomes more thoroughly roused she feels better, and, finally, after a minute or two, says she feels all right again, and that the disagreeable symptoms from which she has suffered have disappeared.

There are certain important things to remember if hypnotism is practised at all. First, there should always be present witnesses of the same sex as the patient. This is as important, or even more so, as when ether or other anesthetic is being given. A nurse, or still better, friends of the patient should be by in all instances. The reputation of a physician can readily be damaged if witnesses were not present. Second, if hypnotism is ever used, it must be for plain and obvious purposes, and in proper cases. The physician should be honest with his patients, and tell them what the process is, and that the purpose is to relieve the symptoms. Third, it should be remembered that the hypnotic state is induced by fatigue, and that if it is prolonged or carried to a profound degree, the patient may suffer severely from exhaustion. This patient is of a hystero-neurasthenic make-up, and the hypnotic state is induced with extreme facility. The state of catalepsy may be induced without suggestion, the same also being true of somnambulism. Sometimes there is diuresis after a treatment or the solids of the urine may be remarkably diminished, showing that the process has interfered in some way with tissue metabolism. Knowing this, the physician must remember, if he use hypnotism.

at all, that he is using an expedient which may be productive of harm instead of good to his patient.

Different individuals are susceptible to hypnotism in varying degrees. In some, the hypnotic state is easily induced, while in others attempts will fail entirely. A great deal depends upon the persistence of the physician. Some operators are very persistent in certain cases—for instance, trying for three or four months with one patient, and finally being successful.

And now, having discussed the theory of hypnotism and the method, and precautions to be observed in its employment, we come to the question of what practical value it is to the physician. In my experience it is of very little value, and has a very subordinate part in therapeutics. It may occasionally cause a permanent disappearance of the symptoms complained of by the patient, but more often they reappear. The pathologic cause, if present, does not disappear. If symptoms do disappear, others often come in their places, as in the subject before us. There is a certain pleasurable sensation in the hypnotic sleep for these subjects. It shuts out all of the outside world and thoughts of their troubles, and thus acts to them as a stimulant. They come back week after week, and thus the hypnotic habit is formed.

Hypnotism is practically limited in its scope to hysterical and neurasthenic patients. In others, where there is an actual pathologic lesion, suggestion can have no influence in its cure. And, further, I find I can accomplish with hysterical patients as much, and even more, by suggestion without hypnotism than with it, hence I rarely employ it. If the physician always acts with a certain reserve and dignity toward his patients he will have great power over them, especially so in the case of neurasthenic and hysterical people. They will watch every movement and look of the physician, and if he will say impressively that their headache or other symptoms will be better in a little while, the symptom is often relieved. If such patients are restless and excited, and the physician gives them a little water or starch, or other harmless substance, and tells them that they will sleep, they will often do so. This method is much preferable to the use of hypnotism. All other rational means of treatment should be first used before recourse is had to hypnotism, and then it should be used only under the precautions named and to a limited degree. Some of you may never see a case in your lives that needs hypnotic suggestion. It is not a pleasant thing for a physician to acquire the reputation of being a hypnotist. It attracts attention, because the public does not understand its principles, and to them there is something uncanny and unpleasant about it. I hope none of you will ever practise it unless under the most exceptional circumstances.—*Medical News.*

COLD BATHING IN TYPHOID FEVER.

J. C. Wilson and J. L. Salinger (*Phil. Med. Jour.*, March 3rd) give the results of ten years' experience in the treatment of enteric fever by systematic cold bathing, based on 1,904 cases collected from four hospitals in Philadelphia. The mortality in the total number was 143, or 7.5 per cent. and the authors point to the remarkable coincidence between their figures and those of F. E. Hare, of the Brisbane Hospital, Australia, published in 1898. During the ten years, from 1887 to 1896 inclusive, there were treated by this method in the Brisbane Hospital a consecutive series of 1,902 cases, with 143 deaths. From an analysis of their cases the authors have been led to the following conclusions: (1) That the treatment by systematic cold bathing does not avert or diminish the frequency of hemorrhage. (2) That the frequency of the occurrence of perforation is diminished. F. E. Hare, in 1,173 cases during the first three years of the bath treatment, also observed perforation in 35 cases, less than 3 per cent. (3) That it diminished the danger of complications, especially those relating to the respiratory and circulatory tracts. (4) That it is apparently attended by a somewhat increased frequency of relapse, though the general statistics in regard to relapses are entirely unsatisfactory. If relapses are more common in bathed cases the explanation is probably correct that, owing to the reduction in mortality, a large number of cases, which under other forms of treatment would have perished in the primary attack, survive to suffer the relapse. (5) That the treatment is attended by the occurrence of albuminuria in a large percentage of the cases. This albuminuria shows itself in two forms: (a) As a faint reaction without casts or other indications of renal disease; (b) cases in which albumen is present in considerable amounts with blood corpuscles and casts. The authors have been led to believe that both these forms of albuminuria are much more common in cases treated by cold bathing than those treated upon the expectant plan, and that the difference between the two forms is merely one of degree. Their observations, however, justify the assertion that in by far the largest proportion of the cases the albumen disappears from the urine during the course of the attack, and that at the end of convalescence the urine is entirely normal. (6) That it has no influence in increasing the danger of otitis media. In the civilian cases in the German hospital, in 1898, ten cases of otitis media occurred in 209 cases—0.05 per cent. In the series of 1899 this complication was noted in three instances in 267 cases, or 1.1 per cent. The modifications of

the method, as originally formulated by Brand, which have been gradually adopted as the result of the author's experience in the service at the German Hospital, Philadelphia, are as follows: (1) The administration of purgatives early in the attack. Calomel is used for this purpose, sometimes in fractional doses, more frequently in doses of from 3 to 5 decigrams. If necessary, this is followed in the course of several hours by a mild saline aperient. The administration of these purgatives is usually repeated once or twice in cases that come in sufficiently early, but they are never administered to those admitted to the wards after the tenth day of the attack. (2) External applications. Cold compresses or ice bags are applied to the abdomen in all cases of abdominal tenderness or spontaneous pain and in cases of hemorrhage. In some instances of tympanic distension of the abdomen turpentine stupes are applied at intervals, in addition to the external use of cold. (3) Medicines. The treatment by systematic cold bathing is a routine method, and is instituted in all suitable cases. The contra-indications are the evidences of hemorrhage, perforation or peritoneal infection. Each patient, however, is closely watched, and appropriate medicines are administered in response to special indications. Hence, the quantity of alcohol varies in different cases, and such drugs as the aromatic spirit of ammonia, or ammonium carbonate, strychnine, caffeine, the bromides, chloral, opium, and its derivatives, and hyoscin are occasionally used. Inhalations of oxygen are sometimes employed. The proportion of cases requiring any medication whatever, except the early laxatives, throughout the attack is very small, not exceeding 10 per cent. On the occurrence of defervescence diluted hydrochloric acid is given for a short time, and later, if anemia persists, some form of iron, usually Basham's mixture, or one of the proprietary preparations of the organic salts of iron. (4) The temperature at which the bath is administered. During the whole course of the attack, whenever, three hours after a bath, the temperature taken in the mouth or the axilla, as the case may be, reaches 101.4 F., the bath is repeated. (5) Continuation of the baths during convalescence. Until within the past year the baths were practically discontinued as soon as the temperature ceased to rise above the level. Every now and then, however, a patient whose temperature no longer rose to 101.4 F. requested to be bathed, saying that it made him more comfortable. In consequence of this they have adopted the rule of giving one or two plunges a day during the defervescence and a plunge every day or every second day for a short time after the defervescence has been completed. The result has been entirely satisfactory, and has appeared to them to hasten the convalescence. (6) The location of the tub with reference to the patient's bed. A stationary tub is placed at the end of the small fever ward. The severer cases are

placed near the bath, and are carried by the attendants from the bed to the bath and back. The milder cases and the improving cases are placed in the more distant beds, and walk to the bath with the assistance of the nurses. The fever wards are small, each containing six beds, the more distant of which in the men's ward is a little over 6 metres from the bath, the most distant in the woman's ward being 5.75 metres from the bath. Adjacent to these wards are other small wards in which fever patients can be placed, with separate tubs, but in all instances the improving cases and the milder cases are wrapped in a sheet, rise from their beds every three hours, and are assisted to the tub by the attendants and returned in the same manner after the bath. In no instance have the authors seen any reason to believe that this modification has had unfavorable effects. On the contrary, it has exerted a very favorable influence upon the course and symptoms of the attack, particularly upon the condition of the respiratory and circulatory functions. The method of Brand has been designated the treatment by systematic cold bathing. The measure of its success is largely determined by the period at which it is instituted in any given case—the sooner the better. There is nothing specific in the individual bath. It is to the rhythmic repetition of the stimulation of physiological processes and of the modifications of pathological processes brought about by a succession of baths commenced early in the course of the attack that favorable results are to be attributed. It is also important to understand that the plan does not merely constitute an antipyretic treatment. The lowering of temperature is one of the incidents of treatment, not its only or even its main purpose. Mere antipyretic measures, however efficient, cannot replace the hydro-therapeutic procedure.—*Brit. Med. Jour.*

GALL-STONE CREPITUS AND FRICTION.—J. M. Anders, in the *International Medical Magazine* for December, 1899, says that gall-stone crepitus is a valuable symptom, but the literature is practically silent on the subject. The sign is noted in a comparatively small number of cases, but it is not sought for as thoroughly as its diagnostic value deserves. In cases of gall-stone in which symptoms are doubtful, valuable confirmatory evidence is furnished by this sign. In examining for gall-stone crepitus the patient should lie upon the back with the legs flexed upon the abdomen. In this position gentle but deep palpation over the gall-bladder is made. If crepitus is not obtained in this manner the finger-tips should be pressed into the abdominal wall just below the fundus of the gall-bladder and then turned upward over the organ as though making an attempt to roll the fundus upward and forward. This failing, the patient should be told to inspire

deeply, though slowly. This carries the gall-bladder downward and forward, and during its excursion the examiner, while palpating, should make gentle counter-pressure with the finger-tips. When palpation fails, auscultation should be practised, as by this means a friction may be heard. In one of the cases reported in which the gall-bladder was filled with calculi, combined auscultation and palpation detected a friction sound after other methods had failed. The stethoscope should be placed just below the costal arch, so as to afford space for palpating, over the fundus of the enlarged gall-bladder with the finger-tips of the free right hand.—*Med.*

SELF-REDEMPTION FROM THE COCAINE HABIT.—The *New York Medical Journal* of February 3, 1900, publishes an account written by a West Indian apothecary regarding addiction to the cocaine habit which he overcame himself. He began by using the drug under the advice of a dentist for pain in a hollow tooth. A small quantity of cocaine was placed on a piece of dampened cotton and poked into the tooth. This gave relief from the pain, and was repeated later. The tooth was filled, but the habit was continued. Like most users of cocaine the original plan was followed. In this case he placed a moistened pledget of cotton, upon which a few grains of cocaine had been sifted, between the teeth and the cheek. In this way there was a slow absorption of the drug. He describes the effect of the drug as producing a feeling of well-being and cheerfulness, and under its influence he could perform heavy physical and mental work. Upon increasing the amount there at time developed toxic symptoms; he was morose, quarrelsome, developed persecutorial ideas, and was restless, with a dread of impending evil. Later there was inability to eat, insomnia, and an insatiable craving for alcoholic stimulants. Before beginning the use of the cocaine he was easily affected by alcohol, but under the effect of the drug enormous quantities could be taken without causing intoxication. For five years the habit continued, but at the end of this time he awoke to a realization of his deplorable condition and made a determined effort to discontinue the drug. This he succeeded in doing, notwithstanding that he was handling it daily in his business. He describes graphically the torture he underwent in suspending the use of the drug.—*Med.*

Issued July 23, 1900.
P. H. Brevet, M.A., M.D., Secretary.

MONTHLY REPORT.

Issued by the Provincial Board of Health of Ontario for June, 1900. Showing the deaths from all causes and from Contagious Diseases in the Province, as reported to the Registrar-General by the Division Registrars throughout the Province.

Year.	Month.	Total population of Province.	Total population reporting equalities.	Total deaths from all causes.	Rate per 1,000 from all causes.	Scarlatina.	Rate per 1,000.	Diphtheria.	Rate per 1,000.	Measles.	Rate per 1,000.	Whooping cough.	Rate per 1,000.	Typhoid.	Rate per 1,000.	Tuberculosis (Consumption).	Rate per 1,000.
1900	June	2,283,182	710,91%	1,730	0.	6	0.03	30	0.1	10	0.05		0.04	11	0.06	194	1.0
1900	May	2,237,800	722,92%	2,102	11.1	8	0.04	27	0.1	13	0.07	8	0.04	15	0.07	239	1.2
1900	April	2,272,760	732,94%	2,311	12.2	15	0.08	24	0.1	27	0.1	11	0.06	9	0.05	203	1.0

2 deaths from small-pox.

Year.	Month.	Total population reporting.	Total municipalities reporting.	Total deaths from all causes.	Rate per 1,000 from all causes.	Scarlatina.	Rate per 1,000.	Diphtheria.	Rate per 1,000.	Measles.	Rate per 1,000.	Whooping cough.	Rate per 1,000.	Typhoid.	Rate per 1,000.	Tuberculosis.	Rate per 1,000.
1900	June	2,108,066 92%	675,88%	1,521	0.	12	0.07	22	0.1	5	0.03	4	0.02	13	0.07	157	0.9
1900	May	2,218,263 97%	720,92%	1,767	10.	17	0.09	18	0.09	3	0.01	7	0.03	18	0.09	230	1.2
1900	April	2,265,280 94%	736,94%	2,073	11.	28	0.1	33	0.1	4	0.02	7	0.03	15	0.08	257	1.3

N.B.—Division Registrars will please make their returns on or before the 5th of each month, thus enabling the Department to have the monthly report compiled much earlier than heretofore.

DOMINION MEDICAL MONTHLY

AND ONTARIO MEDICAL JOURNAL

EDITOR:

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No. 1.

ALUM IN BAKING POWDERS.

From the laboratory of the Department of Inland Revenue has recently been issued a bulletin on the subject of baking powders, giving in detail the results of the analyses of one hundred and fifty-six samples of these collected from the leading cities of the Dominion. The cream of tartar powders number 44, the alum and acid phosphate 88, and the alum 24, which goes to show that something over seventy per cent. of the baking powders sold in Canada contain alum, associated in the main with acid phosphate. Of the total number of samples collected fifteen per cent. of them were made up of bi-carbonate of soda and burnt alum without any other acid constituent. According to the analyst making these examinations of well-known baking powders, in judging of a baking powder the following points should be taken into consideration, and these are placed in what is deemed their order of importance: 1. The wholesomeness of the materials used in the powder both with regard to their characteristics individually and to the nature of the residues which they leave in the bread. 2. Efficiency as gas producers, having regard not only to the total quantity of gas which is evolved, but also to the conditions of temperature, moisture and time as affecting gas production. 3. Keeping qualities. We are herein told "that in order to a complete reaction of the components of a powder, not only must they be completely got into solution by the water (or milk) used in making the dough, but they must be present in the baking powder itself in exactly equivalent proportions. This assumes that the manufacturer took care to prepare his powders upon scientific principles, using properly proportioned ingredients, and thoroughly mixing these together, and also that no separation of these ingredients has since taken place." The wholesomeness of the cream of tartar baking powders may be taken as well established, as the use of this chemical with bicarbonate of soda was long in use before the commercial baking powders

of the present day entered the field. The difficulties and the dangers arise when burnt alum is employed. It is almost impossible to decide how much soda shall be used in an alum baking powder, to secure a neutral residue in the bread, and there is almost constantly more or less alum left unchanged in the bread after an alum baking powder has been used. This point then having been determined, the injurious action upon the digestive functions is apparent, for once having established that a large quantity of alum remains unchanged in the bread after baking, the inhibitory action of this substance upon the gastric ferments will be exhibited, while if a large excess of the bi-carbonate remain over, the normal acidity of the gastric juice will be diminished or even neutralized. Taking up the question of the opponents of this doctrine who assert that alum does not remain as such after baking, but that it is changed into the hydrate of alumina, which they asserted was non-injurious to health, it has not yet been sufficiently demonstrated that hydrate of alum and in the case of the phosphate powders phosphate of alumina are harmless substances in food, and until such has been conclusively proven, it must remain that the use of alum baking powders is attended with considerable risk. Professor Ruttan, of McGill, has before published his views on the employment of these ingredients in baking powders and this is the conclusion he arrives at: "While the affect of alum is to entirely prohibit ferment action, that of the products resulting from the use of an alum powder is merely to retard digestion, not entirely to prevent it. The unanimous verdict of my experiments is that alum powders introduce into a form of food in universal use, agents which are detrimental to the functional activity of the digestive ferments. They must, therefore, be prejudicial to health, and the only course is to carefully avoid them. What are the results which follow this continued ingestion of alum which makes its employment in baking powders dangerous to the human economy? When taken into the mouth, it at first excites salivary secretion, precipitating the albumen in it as well as that in the buccal mucous membrane. In larger quantities and prolonged ingestion its astringent effect comes into action; the secretions are diminished; the mucous membranes of the mouth are dry, puckered and more or less bloodless. It also exerts a baneful effect upon the enamel of the teeth, which breaks under its influence, and may perhaps be the cause of the wholesale destruction of the teeth of the young, a sufficient cause alone to prohibit its employment. Through its action upon the gastric and intestinal juices, disorders of digestion, succeeded by chronic constipation result, and there is also the frequent accompaniment of derangement of the hepatic functions. Sufficient has been said of its deleterious effects to warrant the Government in taking prompt action against the fraudulent manufacturers of

inferior articles ; and it would appear under a certain clause of the Adulteration Act, or the Amendment thereto, of 1888, where the expression "food" is defined as being and including "every article used for food or drink by man or cattle and every ingredient intended for mixing with the food or drink of man or cattle for any purpose whatsoever," that under this clause the Government could easily secure a conviction of offenders.

MEDICAL AFFAIRS IN CHINA.

Considering the fact that many of us know some one who is at present a medical missionary in the Flowery Kingdom some fragmentary information culled from the leading editorial of *The Lancet* for June 30th, may at the present time prove interesting reading in regard to the state of medicine in that country. In that part of the world's domain, the science of medicine and the art of surgery have not as yet done anything more than to attempt to creep out of the realms of empiricism. It is stated that no savage tribe, however debased, practises surgery or medicine in a more primitive fashion ; and the consequences at the present time to the thousands of wounded must truly be calamitous and appalling, when one contemplates the results which are sure to follow the neglect of modern antiseptic surgery as would be applied to these injuries. Seven years ago, schools of medicine were established both at Hong Kong and Tien-Tsin. At the latter place, at the instance of Dr. Irwin, that arch-conspirator and intriguer, Li Hung Chang established a medical school some ten years ago ; and the Government of England deputed a British medical officer, Surgeon-Major F. S. Hueston, to superintend the teaching of medicine in that institution. In 188, a college was opened at Hong Kong for medical instruction to Chinese, and its rules and regulations were constructed by a Mr. James Cantlie and Dr. Patrick Manson, the latter being its first dean. We are told that Li was, and still is, the patron of this medical college, and in his letter of acceptance of the office he said that "he hoped anatomy and chemistry would form a prominent part in the training of the students, for he held these sciences to be the basis of all medical knowledge." These two schools at Hong Kong and Tien-Tsin are the only ones which attempt the teaching of modern medicine and surgery, and in this the former is said to have been very successful. For fourteen years now the medical men in the district have given their time and their talents in the prosecution of this work, but as yet the Government has not seen fit to pay them for their services. "Ambulance work," to quote from *The Lancet*, "was taught in

Formosa by Dr. W. W. Meyers, and in Hong Kong a bearer section was inaugurated, equipped and maintained by Mr. Cantlie from amongst the students of the College of Medicine. This bearer section was attached to the Hong Kong Volunteer Artillery and has done excellent work." These are the only medical schools in China to-day; but there are practitioners of Chinese origin galore, such as they are. Some examples of their therapy is a plaster to a fractured leg; for a poultice, a live duck is cut up longitudinally, and half applied to the affected part; for fever, the duck's blood is smeared over the temples, face and neck, which with magic, mythical rites and incantations, constitute a large part of the Chinese medico's armamentarium. *The Lancet* is of the opinion that while the medical missionaries from Great Britain and the United States have no doubt done a vast amount of good work, that good work has in most instances been thwarted by the fact that proselytising has constituted a feature of the improvement which hardly tends to advancement in medical science amongst the Chinese. They advise the encouragement of secular Western education and especially medical science amongst the Chinese by sending Chinamen thus trained into every centre and town of China. In this way will the country progress in education, and science and civilization, and Christianity will follow as a natural consequence.

A BUREAU OF PUBLIC HEALTH.

Dr. Roddick, M.P., took the opportunity the other day from his place in the Dominion House of Commons of calling the attention of the Government, and the Minister of Agriculture in particular, to the importance and necessity of having established in Canada a Department of Public Health. In looking up material for his speech he had occasion to go to several departments of the public service and his labors in this direction brought the matter more forcibly home to his mind, so that the need of concentrating all matters relating to the health of the community at large was abundantly apparent. He was not, he stated, casting any reflection upon the excellent work performed by the present Director-General of Public Health, Dr. Montizambert, whom he considered would make an admirable Deputy-Minister if such department were established by the Government, but held that all such matters as marine quarantine, sanitary inspection of Indian Reserves, inspection of leper asylums, vital statistics, the sanitary portion of the census, the protection of waterways, sanitary police, the control of sanitary measures in unorganized districts, the protection of the public health against the invasion of tuberculosis, a watch over the arrival

of consumptive emigrants, the importation of unhealthy articles of food, and undesirable freight such as rags, should all be placed under one responsible head to be controlled accordingly. He spoke also of the need of the Dominion of a bacteriological laboratory; at present we had to depend upon the United States, England, and even sometimes on Japan. Not long ago he had attended the meeting of a prominent medical association in the United States, where a gentleman read a paper on leprosy, announcing that he intended visiting Ottawa for the purpose of continuing his studies in the laboratory there on the same subject, and Dr. Roddick felt quite chagrined to have to inform that gentleman that there was no such institution at the Capital. He thought that such a laboratory should be erected and equipped by the Government without delay, be placed under a capable man, and then we would have a laboratory in our own country where the manufacturing of prophylactic serums could be carried on.

In replying to the requests of Dr. Roddick, Mr. Fisher thought that the main obstacle in the way was that public health in our scheme of Confederation was relegated to the provincial legislature, and thought that friction might arise between the Dominion and the various provincial health authorities. He, however, promised to consult medical men during recess and report at the next session of the House.

Sir Charles Tupper commended the proposal. Whilst the establishment of a Dominion Medical Council would go far towards bringing about the establishment of a Bureau of Public Health, he feared that such Council could only be obtained by the passing of Acts by the various legislatures, to be afterwards ratified by the central Government.

Dr. Roddick always considered that a Dominion Medical Council would act as a sort of adviser to the Dominion Government in sanitary matters and his movement in the direction of a Public Health Department is on a line with his proposed Bill for the establishment of such Council. It is to be hoped that he will become identified with both, and ultimately see success crown his labors.

SOME OBSERVATIONS ON THE RECENT MEETING OF THE ONTARIO MEDICAL ASSOCIATION.

It seems to be the general consensus of opinion that the meeting of the Ontario Medical Association for 1900 was one of the best, if not the best, ever held under the auspices of the Association. The papers were fully up to the standard of former years,

whilst the discussions were far in advance of what has taken place for many years. There seems to be no valid reason why sectional methods should not be done away with entirely and general sessions prevail throughout the entire meeting of the Association. On only one afternoon was there any division this year, and we sincerely hope that that will be the last occasion anything of the kind ever transpires in the Association again until the attendance reaches such proportions as to compel a division into medical and surgical sections. Ontario possesses a medical population of something approximating 2,500 practitioners; and the Association has on its rolls nearly 800 members, the annual attendance rarely if ever reaching 200; this year it numbered 160 odd. The importance of attending these annual meetings was emphasized by the President, Dr. Wright, in his presidential address; and the practitioners who stay away from these meetings surely do not realize the good things they are missing. Next year ought to be made a record-breaker in point of attendance. The probability that the Canadian Medical Association will be meeting in 1901 outside the Province, should tend to make next year's gathering more successful in point of attendance.

Another thing: that section of the meeting in which is transacted the general business of the Association appears to be held at the wrong time. Year after year all the general business of the meeting is held on the evening of the last day, when the out-of-town members have gone home, and only the city practitioners remain to transact the business of the Association. This should not be. This business should be done when all the members are present, and no time appears to be more opportune than the morning session of the second day. If the sectional method is done away with next year, and the Association would convene for three days instead of two as at present, we might expect to make some tangible progress in important matters of medical politics, which now drag along from year to year, no nearer completion than they were twelve months back.

Then the question of having the proceedings of the Association properly compiled and published is a very important one, which if it is ever to be brought about must take into consideration the abandonment of the division into sections, which would certainly contribute obviously to the facilities for having this work accomplished. This question came up for discussion at the last general session and was referred to the Committees on Publication and on Papers and Business to report upon at the beginning of the next meeting. At present the funds of the Association do not permit of this being done, but no doubt the Committee on Publication will be able to formulate some plan for its accomplishment in the future. For doing this we think there ought to be some method.

of collecting the annual fee from the members who do not attend as well as from those who do attend, on the understanding that they are paying for a copy of the transactions of the Association. If in future, applicants for membership would sign their nomination paper, promising to remit the annual fee when called upon by the Treasurer, if not forever, for at least five years, whether they attend the meetings of the Association in that time or not, that might possibly bridge the difficulty of raising the essential "where with," absolutely necessary to undertake this work.

News Items.

DRS. ALLAN BAINES and Bertram Spencer are in England.

QUARANTINE against smallpox was raised in Winnipeg on the 29th of June.

THE health department of Montreal will strictly enforce reports of cases of measles.

THE exact number of lepers in the lazaretto at D'Arcy Island, B.C., is six; they are all Chinese.

SIR W. C. MACDONALD has offered to build a crematory for the city of Montreal at his own expense.

DR. ALEX. HUGH FERGUSON, Chicago, has been elected First Vice-President of the Chicago Medical Society, which numbers about 1,000 members.

SMALLPOX has again appeared in Montreal; so far six cases have been reported, and one death recorded. The Royal Victoria Hospital has been quarantined.

DR. DWYER, Medical Superintendent of St. Michael's Hospital, sailed on July 18th from New York for Germany, where he will remain a year in the German hospitals.

IN the last issue for the month of June *Public Opinion* has a neat little sketch of the career of Lieutenant-Colonel George Stirling Ryerson in the columns devoted to "Men of the Day."

UNDER the new prohibitory legislation of Manitoba, druggists will not be charged a license; doctors will not be limited in the amount of liquor prescribed, although an attempt was made to limit it to six ounces.

OWING to the fact that the United States quarantine authorities on the Atlantic sea-board are excluding immigrants afflicted with tinea favosa it may become necessary for the Dominion officers to take similar precautions at St. John, N.B., and other ports of entry.

DR. GEO. L. LIDDELL died suddenly of heart failure on July 5th last. He was around as usual attending to his practice up till the night of the 4th, but was taken suddenly ill and died at 5 o'clock. Dr. Liddell was 32 years of age and graduated at McGill in 1899.

FOR the year 1899 the Toronto General Hospital treated in all departments, with the exception of the out-door, 3,388 patients, with 206 deaths; St. Michael's, 2,127, with 115 deaths; Grace, 1,090, with 64 deaths; Children's, 670, with 42 deaths; Western, 365, with 16 deaths; Orthopedic, 72, with no deaths.

DR. JOHN A. AMYOT, of Toronto, was yesterday appointed by the Government Provincial Analyst in charge of the laboratory in connection with the Board of Health to fill the vacancy created by the resignation of Mr. J. J. Mackenzie, who was appointed to the staff of the medical faculty of Toronto University.

SOME pretty severe strictures have been passed by a gentleman interested in mining matters who was reported to have brought smallpox from Rossland to Montreal at the last outbreak, against the administration of the smallpox hospital at Montreal. He alleges very uncleanly and unsanitary conditions and maintains that the accommodation was simply vile.

DID you note the humor displayed by a city contemporary in its July issue? It regretted that owing to lack of space it had to cut its report of the recent meeting of the Ontario Medical Association almost in half. Its leading original (?) article appeared in our October number, 1899. Such cribbing without due acknowledgment savors of the "quack" in medical journalism.

PRINCE EDWARD ISLAND MEDICAL SOCIETY.—The annual meeting of this medical society took place on the 5th and 6th of July, at which there was a large attendance. "Advertising" was debated at some length. Election of officers for the ensuing year resulted as follows: President, Dr. Sutherland, Bedeque; Vice-President for Prince Co., Dr. Rose; for Queen's Co., Dr. W. Robertson; for King's Co., Dr. Barnes; Secretary, Dr. S. R. Jenkins; Treasurer, Dr. F. F. Kelley. For the Medical Council, Drs. Richard Johnson, James Warburton, Mayor, S. R. Jenkins, F. P. Taylor, J. Robertson, James MacLeod and F. F. Kelley.

THE Maritime Medical Association, which this year convened at St. John, N.B., on the 18th and 19th of July, was a pronounced success. The discussion in medicine was on "Arterio-Sclerosis," led by Dr. W. H. Hattie, Superintendent of the Nova Scotia Hospital for the Insane at Halifax; that in surgery on "Spinal Deformities" was opened by Dr. E. Farrell, of Halifax; whilst the discussion in "Gynecology on Retro-Displacements of the Uterus" was begun by Dr. P. Conroy, of Charlottetown.

THREE of this year's graduates of the Ontario Medical College for Women have been appointed house surgeons in large American hospitals: Dr. B. Chone Oliver goes to the Woman's Hospital at Philadelphia; Dr. Mabel L. Harington has been appointed to the New England Hospital for Women and Children; and Dr. Mary E. Crawford will assume similar duties in the West Philadelphia Hospital for Women. Two members of the class of 1889, Drs. Janet Hall and Anna C. Macrae, have just returned from abroad, having spent a year in the hospitals of Dublin, Edinburgh, London and Paris. One-half the number of this year's graduates have volunteered for service in the foreign field, but at present they will probably steer clear of China.

THAT Canada is prepared for any appearance of the bubonic plague is evidenced by the manner in which the quarantine station on our western shores at William's Head is equipped. This station is under the superintendency of Dr. Watt, who is described as an active and efficient officer. It is situated on a long narrow peninsula, distance about eight miles from the city of Victoria, and possesses the finest equipment of anything of its kind in the Dominion and even surpasses anything in the United States. On the wharf is a moveable engine for the purpose of forcing sulphur fumes into and through the holds of the vessel, whilst the ropes which hold the visiting vessel to the wharf are carefully covered with funnel-like rat-catchers to prevent the landing of any of these vermin. The formaldehyde process is also employed in disinfecting, and in addition there is a large tank holding over 8,000 gallons of muriatic acid and bichloride of mercury, constantly ready at any moment to spray the exposed surfaces of ships where fumigation would not be feasible. The arrangements are said to be such that 800 Asiatics can be accommodated at one time. The hospitals occupy another portion of the grounds and are scientifically constructed on the pavilion plan and complete in all their arrangements. There is also a cheery home for first-class passengers at some distance from the common quarters. With such perfect arrangements on our far western confines, the plague will have some difficulty in finding footing on Canadian soil.

MEDICO-PSYCHOLOGISTS OF QUEBEC.—The fifth semi-annual meeting of the Medico-Psychological Society of the Province of Quebec took place at the Protestant Hospital for the Insane, Verdun, Wednesday, June 27th. The association has for its object the interchange of experiences and the development of mutual co-operation as regards their patients by the medical men connected with the several institutions for the care of the mentally afflicted in this Province. There were present Dr. Burgess, the retiring President; Dr. G. Villeneuve, Vice-President; Dr. E. P. Chagnon, Secretary, and Drs. L. U. A. Belanger, Pireur, Anglin and Perreault. Technical papers were read by Drs. Anglin and Chagnon. Dr. Villeneuve made some interesting observations concerning the relation between the legal and the medical professions regarding the incarceration of inmates in Asylums. Dr. Chagnon suggested that a special committee should draw up a scheme for uniformity in the tabulation and classification of statistics by the several asylums in the Province, a suggestion heartily commended and unanimously adopted. Dr. Villeneuve was elected President and Dr. Belanger Vice-President; Dr. Chagnon being re-elected Secretary. The next meeting of the Society will take place at the Beauport Asylum in October. A vote of thanks to the Board of Management and officers of the Verdun Hospital for hospitable entertainment closed the proceedings, which occupied the day, and included a thorough inspection of the arrangements, patients and system of the Protestant Hospital for the Insane.

CHANGES IN MEDICAL FACULTY OF TORONTO UNIVERSITY.—The Senate of the University has decided that there shall be an examination at the end of the third year of the medical course, and has recommended several changes in the staff of the medical faculty, though the personnel remains much the same, the most important addition being the appointment of J. J. McKenzie, B.A., M.B., as professor of pathology and bacteriology in the room of Dr. John Caven, who resigned on account of ill-health. The Ontario Government will deal with the recommendations, which are as follows:—J. J. McKenzie, B.A. M.B., to be professor of pathology and bacteriology, in place of Dr. John Caven, who has resigned. Dr. J. A. Amyot, to be associate professor in pathology and bacteriology, or professor of clinical pathology, at his option. Dr. F. N. G. Starr, associate professor of clinical surgery and also demonstrator of anatomy. W. Mackeown, B.A., M.D., demonstrator of clinical surgery. C. L. Starr, demonstrator of clinical surgery, instead of assistant demonstrator of anatomy. A. R. Gordon, M.B., demonstrator in clinical medicine, instead of assistant demonstrator of anatomy. Dr. R. D. Rudolf, lecturer

in medicine and clinical medicine, instead of assistant demonstrator in anatomy. Dr. K. C. McIlwraith, demonstrator of obstetrics, instead of assistant demonstrator of anatomy. Dr. W. P. Caven, associate demonstrator of clinical medicine. H. T. Machell, M.D., associate professor of obstetrics and pediatrics, his work to be confined to pediatrics. G. Chambers, M.A., M.B., demonstrator on clinical medicine. Dr. G. R. McDonagh, professor of laryngology and rhinology. W. H. Ellis, M.A., M.B., professor of toxicology. Bertram Spencer, M.D., professor of medical jurisprudence. Dr. W. H. Beemer, to be extra mural professor of mental diseases.

Correspondence

TREATMENT OF INEBRIATES.

To the Editor of DOMINION MEDICAL MONTHLY :

SIR,—Just previous to the meeting of the Ontario Legislature the Public Health Committee of the Ontario Medical Association had an interview with the Hon. G. W. Ross regarding the medical treatment of inebriates. This was followed by an interview from the Prisoners' Aid Association. At this latter interview the Premier made a request that a bill be drafted and submitted for the consideration of the Government. This was done jointly by the two bodies mentioned, and it was submitted to, and endorsed by, the medical members of the Legislature. It was also strongly endorsed by an influential deputation of ladies and gentlemen who waited upon the Government a little later, but from whatever cause the bill was not introduced. This bill is based on the Massachusetts Probation System, and as I wished to strengthen the hands of those who are promoting the adoption of the proposed bill I recently visited Massachusetts in the interests of the proposed measure. My observations and conclusions may possibly be of interest to the readers of the DOMINION MEDICAL MONTHLY.

The probation system was adopted in the State of Massachusetts several years ago in dealing with youthful offenders under sixteen years of age, and the results were so satisfactory that about five years ago the system was extended to cases of adult first offenders and to the more hopeful cases of inebriety. The results, it is claimed, have been most gratifying. In every criminal court throughout the State an officer, called a probation officer, is appointed by the court who takes the supervision of cases placed on probation under suspended sentences. The probation officer makes

friendly visits to the probationers, not in the capacity of an informer, but in the capacity of a friendly visitor, and he does what he can to place the probationer on a higher plane of life and living. At the end of the probationary period the probationer appears in court and if the report of the officer is favorable the person on probation may be discharged or the probation may be continued. If the report is unfavorable the probation may be continued or the person may be committed either to prison or to a House of Correction.

While in Boston I made it my business to look into the practical working of the probation system. I accompanied the probation officers while making their early interviews with prisoners in the police cells awaiting trial. I made the rounds with one of these officers outside to ascertain the truth or falsity of the statements made, and I followed the cases as they were afterwards dealt with in court. I also attended the weekly probation court held for the purpose of dealing with cases whose term of probation has expired.

Besides this, I interviewed the chief probation officer and several of his assistants—two of whom are ladies—regarding the working of the probation system. I also interviewed others who are in a position to judge regarding the results attained by the system of probation. As a result of this investigation and these inquiries my conclusions are as follows: That from 80 to 85 per cent. of those placed on probation for petty offences, and about 45 to 50 per cent. of those placed on probation for drunkenness are either reformed, or at least are not known to be again arrested. It is claimed that 80 per cent. of all those placed on probation are reformed, but unfortunately the statistics are not compiled in such a manner as to demonstrate this. I found, however, that there is a consensus of opinion among those who are in a position to know that the probation system in Massachusetts is giving great satisfaction. The Secretary of the Massachusetts Prison Association said to me that although the statistics are not as complete as they might be, "we know that probation is doing a good work." I found, moreover, that there is now a bill before the State Assembly which when adopted will extend very materially the scope of the probation law.

I visited the State Institution for the treatment of dipsomaniacs, which is situated at Foxborough, about thirty miles from Boston. It is on a farm containing 100 acres, most of which is under cultivation. The hospital is on the cottage plan, and there were 198 patients under treatment the day of my visit. Dr. Woodbury is the superintendent, and he has one medical assistant. The institution is thoroughly equipped, including gymnasium, baths, lecture hall, etc., etc., at a total cost of about \$2,000,000. The income is about \$48,000 a year—\$13,000 of which is from municipalities,

\$11,000 from industries, \$2,500 from pay patients and the balance made up by the State. Patients are admitted on the certificate of two licensed physicians and the municipality where the patient is committed is liable for the payment of the expense of maintenance the same as in the case of lunatics. In cases, however, where the patient has no legal settlement the expense is borne by the State. Besides farming the principal industry is broom making. Patients are committed for a period of two years, but they may receive a conditional discharge (on parole or probation) any time after six months' detention. The average cost per patient is \$5.30 per week. This includes all expenses as follows: Provisions, \$1.32; clothing, etc., \$1.77; wages, \$2.21. The results of treatment (report for 1899) are as follows: Doing well, 37.12 per cent.; improved 13.77 per cent.; unimproved, 32.93 per cent.; dead, 1.19 per cent.; could not be found, 14.97 per cent. In reply to my question the Superintendent stated that the chief cause of relapse after discharge is lack of employment; a second cause is lack of efficient supervision.

While in Boston I also visited the Washingtonian Home for Inebriates, which is under the charge of Dr. Ellsworth, and I had an interview with Dr. Temple, Surgeon to the Massachusetts Home for Intemperate Women. I submitted the provisions of the proposed Ontario bill for the treatment of inebriates to these specialists, as well as to Dr. Woodbury, of Foxborough, and also to members of the Massachusetts Prison Association, and I was gratified to find the consensus of opinion was in its favor. Dr. Woodbury was very emphatic in his commendation of the idea of combining medical treatment with the probation system and he assured me he was convinced that very great good would be accomplished by making provisions for home treatment in addition to general hospital treatment in connection with the probation system and as provided for in the Ontario bill.

Yours truly,

A. M. ROSEBRUGH.

Confederation Life Building, Toronto, June 20th, 1900.

Physicians' Library

A Manual of Obstetrics. By A. F. A. KING, M.D., Professor of Obstetrics and Diseases of Women in the Medical Department of the Columbian University, Washington, D.C., and in the University of Vermont, etc. In one 12mo. volume of 612 pages, with 264 illustrations. Cloth, \$2.50, net. Lea Brothers and Co., Publishers, Philadelphia and New York.

A new edition of this long-time favorite manual will be welcomed by practitioners, instructors and students. No more helpful small work has ever been issued on any branch of medicine, and the fact of its hearty appreciation by the several classes for whom it is intended is well attested by the demand which has brought it to its eighth large edition. Thorough revision to date has always characterized it, and the present issue is no exception. Forty-one new engravings have been added to the already rich series of illustrations. If the clearest, most trustworthy, comprehensive, up-to-date and most richly illustrated Manual of Obstetrics is desired, Professor King's work is the book indicated.

A Handbook for Nurses. By J. K. WATSON, M.D., Edin., late House Surgeon Essex and Colchester Hospital; Assistant House Surgeon Sheffield Royal Infirmary and Sheffield Royal Hospital. American Edition, under the supervision of A. A. STEVENS, A.M., M.D., Professor of Pathology in the Woman's Medical College of Pennsylvania; Lecturer on Physical Diagnosis in the University of Pennsylvania, etc., etc. Philadelphia: W. B. Saunders. Toronto: J. A. Carveth & Co., Canadian Agents. Price, \$1.50.

As the author puts it, it certainly is a vexed question as to how much medical knowledge should be imparted to nurses; and without being captious in our criticism, we almost think there is material to be found here that might well have been left out entirely. The book, as a whole, however, we deem an excellent one for the field it is to cover, aptly arranged and written in a style which will readily appeal to the beginner in this branch. We conceive it to be the vocation of the nurse to be the instrument in the hands of the physician to intelligently carry out his orders and wishes; we know that many, however, go farther than that, and attempt to be a sort of "extra" in an endeavor to bring the patient back

to the paths of health. Amongst nurses, the book will be sure to meet with popular favor; amongst physicians, it should be read in order that it may be recommended to those who need it especially.

A Pocket Text-Book of Chemistry and Physics. By WALTON MARTIN, M.D., and WILLIAM H. ROCKWELL, JR., A.B., M.D., of the College of Physicians and Surgeons, New York. In one 12mo. volume of 366 pages, with 137 illustrations. Just ready. Philadelphia and New York: Lea Brothers & Co. Cloth, \$1.50, net. Flexible red leather, \$2.00, net.

This very compendious volume contains everything in Chemistry and Physics necessary for the medical student, and therefore more than covers the requirements of the practitioner who may wish to look up forgotten points without the labor of searching through larger works. It is all meat, unencumbered with matters not germane to medical purposes. Not only has a wise judgment been exercised as to the subjects admitted, but also as to the extent to which they are treated. Specially full consideration is accorded to those compounds which are of medical interest either therapeutically or physiologically. The volume is amply illustrated and is issued at an exceptionally low price, characteristic of the Series of Pocket Text-Books, in which it is the eighth already published of the sixteen which are to cover medical science.

A Text-Book of Practical Therapeutics: With especial Reference to the Application of Remedial Measures to Disease and their Employment upon a Rational Basis. By HOBART AMORY HARE, M.D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia. With special chapters by DRs. G. E. DESCHWEINITZ, EDWARD MARTIN and BARTON C. HIRST. New (8th) edition. In one octavo volume of 796 pages, with 37 engravings and 3 colored plates. Cloth, \$4.00; leather, \$5.00, net. Lea Brothers & Co., Philadelphia and New York.

Practitioners as well as students will be interested to hear that still another edition of *Hare's Practical Therapeutics* is at their service. Eight large editions have been demanded in a little over nine years and as the author has utilized each opportunity to the full, his book has become synonymous with up-to-date knowledge

of remedies and how to apply them. The scheme of the book is ingenious and convenient. Its first half gives all necessary knowledge of drugs, non-medicinal remedies, foods, etc., and the second half is virtually a pithy Practice of Medicine, the best treatment of the various diseases being given with full directions. Everything in the book is arranged alphabetically for obvious convenience and abundantly cross-referenced so that the reader has no trouble in finding full information on any given subject. Besides the tables of doses, weights and measures, the book contains a General Index and a Special Index of Diseases and Remedies. The latter being arranged alphabetically and by Diseases and annotated, gives suggestions and indications for the best treatment, together with page references to the full information in the text. A more convenient aid could scarcely be imagined. The new edition contains the large number of important new remedies which have stood the test of clinical experience and many added facts of therapeutic value. New illustrations and colored plates have been introduced. Those who are still unacquainted with this book should by all means procure it, and those who have previous editions and know their value will secure this new one to post themselves to date on the most important of all departments of medicine—treatment.

A Practical Treatise on the Sexual Disorders of the Male and Female. New (2nd) edition. By ROBERT W. TAYLOR, M.D., Clinical Professor of Venereal Diseases in the College of Physicians and Surgeons, New York. In one handsome octavo volume of 435 pages, with 91 illustrations and 13 plates in colors and monochrome. Cloth, \$3.00, net. Lea Brothers & Co., Philadelphia and New York.

In preparing the first edition of this work the author "buiided better than he knew." It was the first practical, scientific, comprehensive and trustworthy covering of a subject of vital importance which had for many years been appropriated by a class of advertising charlatans, and the medical profession eagerly welcomed the views and opinions of Dr. Taylor, than whom perhaps no other man has had so large an experience with these disorders. The demand for the book was so great that the first edition was exhausted far earlier than could have been anticipated and many orders remained unfilled. Those who were not able to obtain the work, and likewise those who are owners of the first edition, will be interested to know that it has undergone a thorough revision, one of the principal enlargements being in the sections treating of

sexual diseases in the female, quite as important as those in the male. The practicality which was so prominent a feature of the book in its first issue has been not only preserved but increased.

A Text-Book of Medical Treatment of Diseases and Symptoms, for the use of Students and Practitioners of Medicine. By NESTOR TIRARD, M.D., F.R.C.P., Professor of Principles and Practice of Medicine, King's College, London. Adapted to the U. S. Pharmacopeia by E. QUIN THORNTON, M.D., of Jefferson Medical College, Philadelphia. In one octavo volume of 624 pages. Just Ready. Cloth, \$4.00, net. Lea Brothers & Co., Philadelphia and New York.

The most practical of books and one that has been badly needed. It is strange that treatment, the most important subject in all medicine, has been largely neglected in books on Practice, in fact, crowded out by less vital matters. The explanation is probably that it needs a book to itself for adequate presentation. Here is just such a volume from the pen of a master. It answers the need of the student by bridging the gap between his plentiful knowledge of theory and his scanty acquaintance with actual disease. It answers the need of the physician who does not "know it all," and none do, for it gives him in great detail the most modern and approved treatment of every disease, including its pressing symptoms, complications, stages and prophylaxis, utilizing all the best and most advanced agencies, both medicinal and non-medicinal. Its full therapeutical directions and prescriptions have been revised to conform to the United States Pharmacopeia. A work so advantageous for everyone—student, physician, and last but not least, the patient—is sure of a wide sale.

MR. W. B. SAUNDERS wishes to announce the final accomplishment of a step that he has long had in mind. Feeling that the growth of the business to its present large proportions has been due, not alone to his own exertions, but quite as much to the efficient co-operation of a number of his employees, he has decided to give recognition to such service by associating with himself in business, under the firm name of W. B. Saunders & Co., Mr. F. L. Hopkins, manager of the Subscription Department, and Mr. T. F. Dagny, manager of the Publication Department. These gentlemen have been connected with the establishment almost from its inception, and to their capable management of their respective departments Mr. Saunders attributes much of the success that has

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attended his efforts. Mr. Saunders believes that this action will strengthen the position of the house in the eyes of the medical profession, as it will secure a permanence of organization that will ensure the perpetuation of the business. Besides this, it will obviate the disadvantages incident to a large business that rests entirely upon the shoulders of one person, by permanently attaching to the house those whose ability and experience have contributed in bringing the business to its present state of prosperity. The Subscription and Publication Departments will be conducted as heretofore. The Trade Book Department will be under the management of Mr. W. D. Watson, whose connection with the house has extended over the past eight years, and who has demonstrated his ability to manage that department with efficiency and success.

Warner's New Therapeutic Reference Book.—Regarding this hand-book of therapeutics we wish to say it is one of the very few guides of its kind now offered to students and busy practitioners. As its preface states, it is not intended to teach graduates anything about therapeutics, but it is to be regarded rather as a handy aid to a poor memory. Many exceedingly valuable tables are represented, including the metric table, thermometric equivalents, etc., valuable tests for various matters, including urinary tests for albumen, sugar, etc., comparative values of certain foods, a complete dose table of drugs, a list of diseases and their remedies, hints as to indications of pregnancy, recommendations as to *post mortem* examinations, etc. The brief mention above gives but a faint idea of the many valuable departments of this new book. The subjects are interesting, and are written in such a manner as to give a comprehensive idea of what is in the author's mind. "Warner's New Therapeutic Reference Book" must not be confused with "Warner's Therapeutic Reference Book." The latter has been discarded, the new one taking its place. So many new features have been added, and the other parts entirely re-written to a great extent, that it may be termed a new book. It is bound in two styles: one leather, at 50c., and the other a leatherette at 25c. per copy, postage prepaid in both instances.