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CANADA
MEDICAL JOURNAL
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Monthly Record
OF
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1871-72



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CANADA

MEDICAL JOURNAL.

ORIGINAL COMMUNICATIONS.

Excision of the Elbow Joint, in a case of partial Anchylosis in the straight position, the result of unreduced dislocation. By GEORGE E. FENWICK, M.D., Professor of Clinical Surgery McGill University.

It is seldom that the surgeon is called upon to deal with a case of the kind about to be described. Dislocation of the elbow joint is an accident which is accompanied very frequently by rapid swelling of the parts, so much so as to render it somewhat difficult to determine the nature of the lesion. When dislocation of the elbow joint is overlooked for any length of time, it becomes a matter of great difficulty to return the bones to their proper position. This is sufficiently apparent from the irregular shape of the joint, so that whereas in other joints, such as the shoulder and hip, reduction of a dislocation has been successful after several months, surgeons of experience have failed to reduce dislocations of the elbow after the lapse of a few weeks.

Sir William Ferguson, in the last edition of his work on Practical Surgery, in speaking of dislocation of the bones of the forearm backwards, observes: "Within the last few years I have seen a considerable number of cases of this kind which had been overlooked or neglected, and I have attempted reduction in many, at periods from four weeks to three months, but have never, even under anæsthesia, succeeded in fairly reducing them." I do not wish to assert that dislocation of the bones of the forearm have never been reduced at lengthened periods, because we have the evidence of Capelletti of Trieste, Sir Astley Cooper, Malgaigne, Roux, and others, who succeeded in replacing the bones in cases of unreduced dislocation of the elbow joint at periods varying from seventy days to five months. Hamilton, in his admirable work on Fractures and Dislocations, mentions a case of dislocation of both bones backward in a boy aged seven years, which had been overlooked for nine weeks. Assisted by Dr.

Gurdon Buck, he reduced the bones, not however entirely, "as the head of the radius did not seem to occupy its original position fully;" furthermore, the epiphyseal end of the olecranon separated fully half an inch. The success of the operation in giving the boy a useful arm was not wholly satisfactory. Boyer was of opinion that dislocation of the elbow was incapable of reduction after four or six weeks. We need but refer here to the fact that the most severe constitutional disturbance has followed violent and long continued efforts at replacing the bones in this form of injury, even to the loss of the limb, and in some cases the loss of the life of the patient.

This should, in my opinion, be quite sufficient to warn the surgeon against using excessive force in attempting the reduction of the bones in cases of long standing. Of course it is his duty to make the attempt, but should he fail, he has an alternative which generally yields most favourable results. I refer to excision of the joint. In the case under consideration two attempts at reduction were made, but failure followed on each occasion. On the second attempt I flexed the arm gradually but steadily, using at the same time extension with the pulleys. The bones were rigidly fixed, and from the spastic contraction of the triceps I felt convinced of the impossibility of reducing the dislocation. I continued, however, the attempt until the olecranon separated with a snap. I then determined to abandon all further attempts, to allow a few days to elapse, so that all inflammatory action, consequent on the force used, should subside, and then to resect the joint. I am indebted to Mr. A. E. Mallory for the notes of the case.

Zoe D., aged 19, a delicate looking girl, came as an extern to the Montreal General Hospital on the 25th April, 1871, suffering from ankylosis of the left elbow joint, caused by dislocation of the bones of the forearm backwards; the arm was in the straight position; there was slight rotatory motion, but flexion and extension were impossible.

On the 1st March the patient was thrown from a carriage, lighting on the left hand. She was seen by a surgeon, who told her that her arm was broken; no attempt at reduction was attempted; it was put up in the straight position, with a splint leading from the axilla to below the fingers, and was maintained in this position for a period of forty days. When the splint was removed the arm was found fixed and useless. The house surgeon, Dr. Ross, on examining the case, discovered the nature of the accident, which was quite apparent. The condyles of the humerus lay in front, forming a large prominence; the olecranon process was backwards

and upwards, and the head of the radius could be distinctly felt rotating to the outer side, above and behind the external condyle.

There was great fixity and rigidity of the limb. She would not submit to any manipulative interference, and left the hospital. She returned again on the 28th April, when Dr. Reddy, aided by the House Surgeon, placed her under chloroform, and attempted the reduction, but failed. Considerable swelling followed this attempt, and she refused to enter the hospital, but said she would return in a day or two. She returned on the 1st May, when she was admitted under my care. At that time the joint was swollen, hot, glazed, and could not be handled without much increase of pain. I ordered an evaporating lotion, and decided for the present to abstain from all attempts at reducing the bones.

The arm was placed on a pillow and perfect rest enjoined. At the end of ten days an attempt at reducing the dislocation was made, and as much force employed as I thought prudent. Indeed, after using considerable force, the olecranon process separated with a snap, but the bones still remained unreduced. The limb, however, was semiflexed, a position in which it was retained, as being more advantageous, provided she refused to submit to further operative measures.

Considerable inflammatory action followed, but was in time subdued under perfect rest and the application of a lotion of acetate of lead. Towards the end of May the arm was found in the semiflexed condition, pronation and supination was limited, and flexion and extension perfectly impossible. It was deemed advisable to recommend the operation of resection, as affording the only means of restoring a useful limb. This the patient consented to, and the operation was performed on the 1st June, 1871.

An incision was made on the inner side of the arm and forearm and a cross incision cutting outwards opening the joint; the ulna nerve was carefully raised from its bed and turned aside; the ends of the bones having been carefully freed, the head of the radius and upper fragment of the ulna were first removed; the condyles of the humerus were then treated in the same manner; three small vessels were ligatured. The wound was freely washed out with carbolic acid lotion of the strength of one to forty, water being the menstruum used. Finally the edges of the wound were closed with wire sutures, and dressed with carbolic acid lotion; the arm was supported on a rectangular splint. The ligatures came away on the fourth day; the wound looked healthy; there was union by the first intention in the greater portion of its length on the eighth day, all the stitches were removed, and the discharge was trifling. The case progressed most favourably. On

the 22nd June, exactly three weeks from the operation, the arm was taken off the splint, and motion attempted. There was considerable swelling in the vicinity of where the joint had been, as though lymph in quantity had been thrown out between the sawn ends of the bones. The firmness was considerable, so that the motions of flexion and extension, pronation and supination, were limited.

In extending the arm about a teaspoonful of fluid, strongly resembling synovia, was forced out through a small opening in the transverse incision. From this date free motion was practised daily.

On the 27th the splint was entirely removed, and the patient enjoined to use the arm freely. This she continued to do. All the motions were more free, and the muscles of the forearm became developed, the arm assuming the plumpness of its fellow. She continued steadily to improve, and left the hospital on the 10th July, promising to return in a few days. On the 17th July she returned, when the motions were found to be perfect. She can grasp an object with firmness, and the limb is increasing in strength daily.

On Dislocation of the Phalanges. By G. PROUT GIRDWOOD, M.D., M.R.C.S.E., Lecturer on Practical Chemistry McGill University, late Assistant-Surgeon Grenadier Guards, Attending Physician to the Montreal Dispensary.

Luxations of the joints of fingers and toes, especially of the former, are, though not of every day, yet of frequent occurrence. They are more commonly the result of accident, accompanied by compound fracture, which often extends into a joint. These cases are of little trouble usually, as when fracture has taken place simple amputation is often necessary, and conservative surgery induces the surgeon to save all, of so important a part as the hand, that is possible. Many such cases must have been seen by every hospital student, and the modes of treatment adopted.

But a more rare form is simple dislocation of some of the phalangeal or meta carpo, or meta tarso, phalangeal joints. These joints are formed by the ends of the bones held in situ, by a capsular ligament, with a lateral ligament on either side, on the dorsal and palmar or plantar surfaces by the tendons of extensor and flexor muscles, and their aponeuroses and sheaths.

When simple dislocation of these joints takes place it does so generally either to the dorsal or plantar or palmar surface, and, indeed, it would be difficult to say which was the bone displaced. It is generally caused by force applied directly to the base or head

of the displaced bone. In the case of any dislocation of this kind it would be either a luxation of the base of one phalanx dorsally, or palmarly or plantarly upon the head of adjoining phalanx or metatarsal or metacarpal bone.

The lateral luxation without fracture is, I believe, unknown, and in such case the lateral ligament on one side must be torn. The simple dislocation of the distal phalanges backwards into the dorsum of the first phalanx, or of the first phalanx back onto the dorsum of the metacarpal bones, is the most common, and is usually the result of direct violence to the head of the displaced bone when strongly flexed. The importance of this dislocation arises from difficulty sometimes met with in reducing it, and this difficulty is greater in the case of the first phalanx of the thumb than in any other. When dislocated back on to the dorsum of the metacarpal bone, the ordinary method recommended for reducing the dislocation is extension, and extension has been made with all sorts of instruments, including pulleys and forceps. Some works on surgery recommend extension with flexion and extension of the joint repeated alternately; and, Sir W. Ferguson says, "in some it will be advantageous to bend the member forcibly backwards or forwards."

This method is recommended also by others, and this I believe to be the best method of returning the displaced bone in these cases, and I think an examination of the joints will explain the reason.

The heads of these bones, as they are called, are rounded masses of bones, held into depressions in the bases of the adjoining bones, in which they work in a ginglymoid manner, the axis of motion being the point of attachment of lateral ligament to the head of the bone forming the joint, the circumference being the arc described by the other point of attachment of this lateral ligament. Immediately behind the heads and bases of these bones is found a depression forming almost a neck at the commencement of the shaft of the bones, and into these depressions the head and base of adjoining bones become locked, and are held in this abnormal position by the extreme inelasticity of the lateral ligaments. If it be noticed there is from the two points of attachment of the lateral ligaments no difference of distance between flexion and extension when in situ, when the bones are displaced, and once the base has passed over the ridge of the head, or *vice versa*, the distance is also the same as when the bones are in their normal position. It is just in passing over this prominence that the ligaments become stretched, and those who have suffered from dislocation of this kind know the agony it gives.

Now, to reduce these dislocations, I think extension, although it may be successful sometimes, is not likely generally to succeed, because the surgeon has to extend these lateral ligaments, not by direct tension on them, but by secondary force in trying to haul the bones over these respective groves in the head and base, which the inelasticity of the lateral ligaments prevents.

This has been recognized by authors, who have advised that the lateral ligaments be divided either on one or both sides. This I do not think is necessary in any case; but, at any rate, should only be resorted to in the very last extremity. The clove hitch or two half hitches of tape, as recommended to enable the surgeon to obtain hold of the distal end of the finger or thumb, is extremely useful, but to effect reduction, the plan I recommend, and which I have used with success in three cases, two of the dislocation of the distal phalanx of the thumb and one of the first phalanx on the metacarpal bone of the thumb, is to bend back, if the phalanx is dislocated onto the dorsum, the dislocated bone until it is at right angles with the dorsum of the bone on which it is dislocated. This is done with but little pain. Then a little more bending back will lift the palmar edge of the base of the bone out of the groove or the dorsal surface of the head of the phalanx or metacarpal bone, when a slight push forwards of the base of the bone, assisted by the action of the flexor muscles, which are now on the stretch, replaces the displaced bone with ease, thus making a lever of the phalanx itself, acting on the dorsum of the adjoining phalanx as a fulcrum. The first case I saw was of the dislocation of the distal phalanx of the thumb into the dorsum of the first phalanx. I tried extension with the clove hitch, and, even with the assistance of my father, could not make any impression on the dislocation. I then thought I would try the forcible bending back of the last phalanx. Grasping the displaced phalanx with my thumb behind the base of the phalanx and my forefinger round the apex of the bone on its palmar surface, I bent the bone backwards, at the same time pushing the base forwards, it slipped into its place with ease the moment the extension was sufficient, with but little pain.

The second case was in the same patient, only on the opposite hand, and occurred within a week. It was reduced also with ease in this manner. Both accidents occurred whilst rising in a hurry from bed.

The third case I saw was as house surgeon to the Liverpool Infirmary, where a patient applied with his first phalanx dislocated on to the dorsum of the metacarpal bone of the right hand from a blow during a fight.

Remembering my previous cases, I tried the same plan with this, and reduction ensued with ease.

Dislocations of these bones into the palmar surface may, I believe, be reduced by forcible bending in the reverse way, *i. e.*, forcible flexion, pushing the base of the bone out at the same time.

I have not seen any case of this kind, but I once reduced a dislocation of the head of the tibia backwards by forcibly bending the joint, at the same time pushing the head of the tibia into its place. This accident was the result of an explosion on board a steamer at Sorel, where I happened to be.

The analogous shape and motion of the joint led me to adopt this mode of reduction, and it readily succeeded, and the man made a good recovery afterwards under the care of my friend Dr. Prevost, of Sorel.

Case of Syme's Tibio-tarsal Operation for Severe Injury, under the care of JOHN REDDY, M.D., Attending Physician, Montreal General Hospital. Reported by GEORGE ROSS, A.M., M.D., House Surgeon.

John Hope, aged 20 years, was admitted into the Montreal General Hospital on the 15th June, 1871, under the care of Dr. Reddy, suffering from the results of a severe injury of the left foot. The foot looks like a large, shapeless mass, with numerous openings on its surface, which communicate with sinuses leading to diseased bone. The integument covering the heel, and for some distance forwards on the plantar surface of the foot, is sound.

It appears that on the 31st March last, whilst engaged in chopping wood in Muskoka, P. O., a tree of some size fell in the direction opposite to what had been intended, and struck him across the left foot. From his description we should suppose that he had thus sustained a compound fracture of two or more of the metatarsal bones, with very great bruising and laceration of the soft parts. The wound had subsequently healed, but the bones had become carious, and on admission this process had continued to such an extent that it involved most of the tarsal and metatarsal bones. In view of the extensive and incurable nature of the disease, together with the fact that the skin of the heel was safe, it was at once decided to perform Syme's amputation at the ankle joint. Accordingly, on the 17th June, with the patient under chloroform, this operation was performed by Dr. Reddy in the usual way, by an incision from one malleolus to the other across the plantar aspect of the heel, connecting the two extremi-

ties of this incision by a second across the front of the joint, disarticulating, and sawing off the lower end of the bone. The flap thus made fitted very accurately, and was fastened by silver sutures; three ligatures were required. It was dressed with carbolic wash (1 to 40.)

The line of junction of the flaps, healed almost entirely by first intention, leaving only two small orifices at either angle, through which the slight remaining discharge readily escaped. It was then syringed through these openings with the solution of carbolic acid. On the 30th June there was some redness seen, and pain complained of at the middle of the leg on the inner side, and there was also some slight enlargement and tenderness of the lymphatic glands of the same side; an abscess formed at the seat of redness, and was evacuated with relief. From this time very slight sero-purulent discharge exuded from the two angular openings, and it appeared to be nearly well, when, on the 1st August, another abscess formed in the posterior cul de sac of the flap, and required to be let out. After this it rapidly closed and consolidated, and he was discharged on the 7th August, with a firm, hard, uniform, useful stump, and with his general health much improved.

Correspondence.

(For the *Canada Medical Journal*.)

To the President and Governors of the College of Physicians and Surgeons of Lower Canada:

GENTLEMEN,—Seeing that the Governors of the College of Physicians and Surgeons elected at the eighth triennial meeting of the College, held at Three Rivers on the 12th inst., have elected the President from the City and District of Montreal, and the Registrar and Treasurer from the City and District of Quebec, permit me to call your attention to the by-laws, rules and regulations of the College, by which it will appear, that the President and Registrar and Treasurer for the time being *shall* belong to the same district.

I call your attention to this fact, which seems to have been ignored by the College, in order that you may *correct* the error into which the Governors have fallen, by a new election at the next meeting of the Board of Governors of a Registrar and Treasurer from the District of Montreal, or by rescinding the rule.

W. MARSDEN, M.A., M.D.,
Ex-President Col. P. & S., L. C., &c.

QUEBEC, 14th July, 1871.

To the Editors of the Canada Medical Journal.

SIR,—As you have always taken the greatest interest in everything that pertains to the Honour and advancement of our profession, will you do me the justice to give publicity to the following circumstances and correspondence:

On the 30th May last, a young man of this city was unfortunate enough to be very severely wounded at a charavari, several buck-shot having penetrated the left side of the chest. He was placed under my charge, and has remained under treatment by me up to the present time. The individual who fired the shot, as worthy of sympathy as of blame, was arrested, but pending the result of the treatment he was released upon bail, principally upon my representations, but subsequently, as a favorable termination was doubtful, he was re-arrested.

Upon the evening of the 12th inst., the jail physician called at the home of the patient and demanded admission to the sick room during the absence of the parents of the patient, and persisted in entering, although informed that it was contrary to orders. On making my visit the following morning I found him very much depressed from a night of nervous excitement, the result of the forced interview of the preceding evening. His mother was naturally very much incensed, and forwarded by me the following note to the physician, which, with one from myself and his answer, I enclose, and which speak pretty forcibly for themselves.

(COPY.)

SIR,—I cannot refrain from expressing my surprise and indignation that you should have taken the liberty of entering my house, though informed of my absence, for the purpose of examining my poor son, who is lying dangerously ill, without the previous consent of myself and the doctor attending him. The discussion of law which you held with him left him in a state of great nervousness, and might have been seriously injurious to him. Requesting an immediate apology for such an intrusion,

I am, &c.,

OTTAWA, Thursday, 13th July, 1871.

OTTAWA, 13th July, 1871.

SIR,—Will you please favour me with some explanation for your most unwarranted conduct in visiting Mr. ——— yesterday evening in the absence of his parents, and during the time that he was under treatment by me. Surely the slight knowledge you may have of professional etiquette will render it cognizant to your

mind that such a course of procedure is entirely without precedent. If there is a single palliating circumstance, I hope you will do me the favour to allow me share the knowledge of it with you, especially as this is not the first time you have forgotten the respect due me as a member of the medical profession. I beg also to enclose a note addressed to you by Mrs. ——— previously to the time I had become acquainted with the circumstances above recorded. If you refuse to give proper satisfaction upon this point, and forward a due apology therefor, I must consider myself in duty bound to lay the matter in some tangible form before the profession.

Yours, &c.,

DR. MALLOCH.

JOHN SWEETLAND, M.D.

OTTAWA, July 14th, 1871.

MRS. ———.

MY DEAR MADAM,—This morning I received your note, and deeply regret that you should think it was my intention to be discourteous to you when I visited your son. The following are the facts:—When the door was opened I asked to see you; the servant said you were not in; I then enquired for your son, and she said he was up stairs; I at once run up, and found him on a sofa; I informed him that I had been asked by Mr. ——— (the prisoner) to call and see him, *not as a medical man*, but merely to, if possible, learn his true state. I at the same time requested him to mention the fact to the medical attendant, that I in no way wished to interfere or make any inquiries respecting the nature of his wound or the treatment pursued. As jail physician I see ——— (the prisoner) every day, and when he made the request I thought it but right and just that I should comply, as he had no other means of obtaining information on a subject that he would most naturally feel most anxious. It is to be regretted that you were not at home, but if you consider I acted imprudently accept this, my apology, and the assurance that I deeply regret having displeased *you*.

The low and impertinent note you enclose from Dr. Malloch I will not reply to. He is a person who I do not personally know, but he is evidently not possessed of the first instincts of a gentleman. He threatens a mode of obtaining satisfaction. Let him try it.

Very truly yours,

J. SWEETLAND.

But little comment need be made upon this correspondence. I am content to leave the case as it stands for the judgment of the profession, merely noting the fact that J. Sweetland's professional "instinct"—appropriate term—did not impel him to apply to the patient's medical attendant in the ordinary and regular way, but led him to commit an act of professional vagrancy which none can deplore more than myself. I may state in conclusion, and in rebuttal of J. Sweetland's assertion of his being an emissary of the person in custody, that enquiries as to the injured man, on behalf of the prisoner, have been constantly made, and have as constantly received the fullest attention.

Hoping you will pardon the length of this letter,

I have the honour to be,

Your obedient servant,

E. C. MALLOCH,

OTTAWA, 17th July, 1871.

M.D., M.R.C.S.

Reviews and Notices of Books,

The Pathology and Treatment of Venereal Diseases: including the results of recent investigations upon the subject. By FREEMAN J. BUMSTEAD, M.D., Professor of Venereal Diseases at the College of Physicians and Surgeons, New York, &c., &c. Third Edition, revised and enlarged, with illustrations, 8vo: pp. 704. Philadelphia: HENRY C. LEA. 1870.

Ten years have passed since Dr. Bumstead first gave to the medical world the results of his experience in venereal diseases, and during that period this work has passed through three editions. In his first effort the author was desirous of furnishing the student with a full and comprehensive treatise on venereal affections, together with a practical guide to their treatment. How far he succeeded may be reckoned by the avidity with which the profession sought for and obtained the work. In consequence a second edition was called for in the course of three years.

This, the third edition, was rendered necessary, inasmuch as the views of surgeons on some points connected with the disease Syphilis have very materially altered.

The work has in consequence undergone a thorough revision. Some subjects have been more fully entered into, more especially the subject of stricture of the urethra, and its treatment by the operations of internal division and forcible rupture.

The chapters on chancre and chancroid have been remodelled and rewritten, and the more recent views on the subject of visceral syphilis have received due attention. Syphilitic affections of the eyes—this subject is brought up to the present level of ophthalmic knowledge, and in this department the author has received the valuable aid of Dr. E. G. Loring, Surgeon to the Manhattan Eye and Ear Infirmary. Although very considerable changes and additions have been made, yet is the size of the present volume increased only by sixty-four pages, a fact of importance to the busy practitioner, as nothing can be more wearisome than to have to wade through hundreds, or even thousands, of pages for information which in all reasonableness might have been compressed into one-fourth the space. Hence our author has wisely omitted portions of the work which were no longer needed as bearing on questions which are no longer controversial. It was the intention of the author and publisher to have issued with the present edition a series of coloured lithographs, and labour and expense was not spared to carry out this design. It was, however, found that the execution of this scheme would have very largely added to the expense of the volume. Moreover, the recent issue of "Cullerier's Atlas of Venereal Diseases," an American edition of which appeared in 1868, the text being translated, and valuable additions made by Dr. Bumstead, was a further reason for abandoning the scheme. We can heartily endorse the views held by the profession generally of the excellence of this work, and can freely admit that it deservedly retains its reputation of being the very best treatise on venereal affections in the English language.

A Practical Treatise on the Diseases of Infancy and Childhood. By THOMAS HAWKES TANNER, M.D., F.L.S., revised and enlarged. By ALFRED MEADOWS, M.D., Lond.: Third American from the last London Edition; 8vo., pp. 559. Philadelphia: LINDSAY & BLAKISTON, 1871.

We are told in the preface to this edition that from the press of other engagements, the task of its preparation was entrusted to Dr. Meadows, who is alone responsible for the alterations and additions which will be found in the present volume. We perceive by the *Lancet* of July 15th that Dr. Tanner died at Brighton on the 7th July instant, whither he had repaired on account of failing health. "His desire was to live a useful life to the world." His career was one of constant labour both of mind and body, an error of which many professional men are guilty, and which, in his case, cut short his career at the early age of forty-six years.

The work before us is divided into four parts. In the first the

physiology and pathology of childhood is discussed in eight chapters.

Part two is devoted to general diseases, as fevers and diseases influenced by what has received the name of diathesis. Some sixty pages of the work are devoted to this part, in two chapters.

In part three we have very fully discussed the subject of special diseases of infancy, such as: 1. Diseases of the nervous system; 2. Diseases of the respiratory system; 3. Diseases of the circulatory system; 4. Diseases of the digestive system; 5. Diseases of the urinary system; 6. Diseases of the skin; 7. Diseases of the eyes; 8. Diseases of the ears.

This certainly is a practical division of the subject, and one which will be readily referred to.

In looking over the subject of croup we perceive that the author, or rather, we presume, the editor, hesitates in his own mind as to the identity between pseudo-membranous croup and diphtheria. This question has been for some time past a most serious and absorbing subject with the writer, and he is convinced that the diseases are identical in every respect. From the almost constant lack of success in cases of undoubted pseudo-membranous croup, when treated as an acute inflammatory attack, he had determined that the very next case that came under his charge he would treat on different principles. Towards the end of May of this year a case presented itself, and an opportunity of putting a different line of practice to the test was afforded. It was in the person of a fine healthy boy of eighteen months old. When first seen the child appeared to be greatly distressed; the features were livid, the stridor was considerable, and the pulse exceedingly rapid and flickering. The little fellow had been ill for several days. The bowels were freely open, inasmuch as the mother had been resorting to repeated doses of goose oil, a favourite remedy with many. The general symptoms were very alarming. The child was put on a half grain of quinine, two grains of chlorate of potash, and five minims of muriate tincture of iron, to be repeated every two hours. Stimulants and beef tea were ordered at stated intervals. The first dose acted as an emetic, and the child expelled a long strip of pseudo membrane bearing the tubular shape of the larynx. Great relief followed the vomiting, and the child fell into a quiet sleep, which lasted some four hours. We may state that the mother, supposing that the first dose of the medicine had been rejected, gave a second dose immediately after the act of vomiting had passed off; this was retained. Gradual but steady improvement followed, and in the course of a week all symptoms of the attack had passed off.

We are fully alive to the fact that this case, imperfectly recorded though it be, will carry but small weight in inducing others to follow our example. Still we give it as it occurred, and we must say that the result was most satisfactory and speedy.

Part four is devoted to the discussion of accidents and diseases connected with birth, malformations and deformities, and accidents in early childhood. In this latter are considered, foreign bodies in the air passages; burns and scalds; frostbite and chilblains; carbuncle and boils; and blows and bruises. At the end of the volume there is a useful appendix of formulæ. In this will be found various methods described for preparing aliments for the sick, a subject of much importance, and one to which the author in his life time gave much attention.

The work bears the stamp of the practical mind of the author and will be found of great value by both student and practitioner. The publishers have done their work well, and have turned out a handsome volume on excellent paper.

Surgery.

Personal Experience of Lithotomy in India. By WILLIAM CURRAN, L.R.C.P., Edinburgh; M.R.C.S., England, &c.; Assistant-Surgeon, Army Staff.

The subject of calculous disorder in India is a comprehensive one from whatever point we may regard it, but I have neither the time nor the materials that would enable me to deal with it in its entirety, and it is one which will easily admit of delay. Numerous ably written papers on the subject are to be found in the medical journals published in that country, but these are not now accessible to me, and even if they were, they could scarcely be turned to account in this place. I prefer discussing the question on its own merits, and from my personal point of view; and though it may, when thus divested of its native surroundings, appear somewhat stilted and individualized, it will gain in interest what it loses in importance, and have the further advantage of being supported by facts which rely on other than personal evidence for their guarantee. I will, for these reasons, confine myself to describing here, as concisely as I can, what I saw or did myself in the matter, while in India; but to enable me to do so

with more effect, I will not hesitate to avail myself of the experience and observation of those gentlemen from whom I received cases, and to whose courtesy and kindness I owe it, that I am in a position to speak on the point at all. Viewed in this light, the rehearsal at such a distance of time and place may appear to lack originality, and some even may regard it as open to the imputation of being biased by prejudice, or exaggerated by favour. It may be so, though I am not conscious of being influenced by either, and no fear of consequences will ever prevent me from doing justice to the merits of a friend. I do not pretend to or aim at being original. I merely undertake to state here, in plain unvarnished English, the results of my own experience and observation, that I purpose doing to the best of my ability, and I am content to leave the rest to the indulgent criticism of my readers.

When I first went to India, medical officers of the Queen's as distinguished from those of the native army or local establishments, were eligible for appointments under the Indian Government, which frequently placed them in some of the smaller outlying stations, in charge of dispensaries, gaols, and other civil duties, but these openings exist no longer, as the line of demarcation between the two departments has been drawn hard and fast, and, limited as my experience is, it is not likely to be equalled by any of my successors. The statistics I am permitted to produce will show that the success claimed by Indian surgeons is not exaggerated, and I am in a position to give some account of an operation which must be new to many of my readers, and which is only known by name to curious searchers of surgical bibliography. For these reasons, if for no other, the subject will justify some discussion, and its interest and importance will scarcely be questioned. I will only add, that, as I had no separate charge of my own that would enable me to secure a regular flow of cases, and as I was indebted entirely to the kindness of others for those I have received, I kept no very minute or searching record of my proceedings. My custom was to write a short account of the case and its surroundings on a scrap of paper as soon as it was completed, and to enclose the stone in that scrap. The white ants have eaten many of these, time and the vicissitudes to which I am subject through my office, have destroyed others, and I am now dependent for information on a few scattered notes of uncertain date and questionable authenticity which have survived the effects of change, and are only decipherable with difficulty by myself. My memory is, however, a good one. I have done my best to exercise it by frequent walks in the wholesome atmosphere

of facts, and if I cannot promise entire accuracy in my statements, I can at least say that I have endeavoured to escape error and avoid miscalculation.

That stone in the bladder prevails to a larger extent in the peninsula of Hindoostan, and especially so throughout its central and upper provinces, than perhaps anywhere else of equal extent in the world, is a fact which admits of little doubt. I have been or served in most of the principal stations between Calcutta and Peshawur, including the Saugor district and Bundelcund, and have found the same diathesis, and heard the same story told in all. I believe, however, that the prevalence increases as we approach the hills, but why this should be so, if it is so at all, is more than I can undertake to say, and, indeed, the causation and etiology of calculous disorder in India has never, to my knowledge, been satisfactorily accounted for or explained. Some maintain that its great prevalence is owing to the quantity of lime salts that obtains in the drinking water, and stone is particularly common in the hilly districts near Abbottabad, Almorah, and other parts of the Himalayas, in which limestone enters largely into the geological formation. But this material does not operate as a cause of calculus elsewhere, and stone prevails in equal abundance in parts of the plains, in which lime enters but feebly into the composition of the water. Again, the diathesis is almost, if not altogether, unknown in other parts of the world in which lime forms a principal ingredient in the water, as would appear from the writings of Dr. Livingstone, who, after alluding to the rarity, or rather almost entire immunity of the Bakwains and other tribes of Central Africa from syphilitic disease, says, at page 123 of his very interesting "Missionary Travels and Researches":—"Equally unknown is the stone in the bladder and gravel. I never met with a case, though the waters are often so strongly impregnated with the sulphate of lime that kettles quickly become encrusted with the salt, and some of my patients who were troubled with indigestion, believed that their stomachs had got into the same condition." He adds, "This freedom from calculus would appear to be remarkable in the Negro race, even in the United States, for seldom, indeed, have the most favoured lithotomists there ever operated on a Negro." This is another puzzling point of pathology which calls for elucidation, and it does seem strange that the dark man of Africa and America should be almost entirely free from a disease to which his darker complexioned Aryan brother of Asia is so liable. A mere difference of race can scarcely be said to account for the fact, for that fails to secure any such or similar exemption in other instances, and whatever effect lime may have

in producing or aggravating the tendency to stone that exists in India, it is clearly inoperative in that direction elsewhere.†

Others hold that it depends in great measure, at least, on the quality of the food used by the natives, and the immunity in this respect enjoyed by flesh-eating Eurasians and Europeans would seem to lend some support to this hypothesis. But stone is very prevalent in certain parts of Persia, and also, but to a lesser extent, in the interior of Cabul and along the banks of the Oxus—as I learned from traders—where the inhabitants are all Mahomedans, who eat flesh and live in some other respects like Europeans. I have heard it more than once ascribed in conversation with friends in India, to the predominance of the vegetable or coarsely powdered materials of their food, and to the absence of that regulated admixture and combination of those nitrogenous elements that are considered essential to health, and which are so little cultivated by the poorer class of natives. This view has the support of analogy in its favour, inasmuch as a similar prevalence obtains

†Dr. Cameron informs me that lime is found in considerable quantity in the drinking water in this country, and he added that he believed stone is less frequent in Dublin than it used to be before the introduction of the soft Vartry water.

Since writing the above I have come across a communication by Dr. Crisp, on "Urinary Calculi in the Lower Animals," which appeared in the "Transactions of the Pathological Society of London," vol. xxi., p. 427-8, and which contains matter so pertinent to the question under review, and so generally confirmatory of my own impressions, as to justify me in reproducing it here. After stating that "the constant use of Norfolk and Suffolk dumplings has been assigned as one cause of the greater prevalence of this affection," and saying that he "thinks it is not an unlikely one," he adds, "Dr. Greenhow (Annals, 1866) wrote to forty different surgeons in the North-West provinces of India, for the purpose of ascertaining the nature of the operation, amount of division of the prostate, use of tubes, the comparative success of lithotomy and lithotripsy, and the effect of chloroform!" From twenty surgeons he received answers, and these gentlemen, most of them attached to dispensaries, had operated on 1,851 patients, including 91 females. Dr. Courtney had 201 cases in twelve years, Dr. Keernander 28 cases in one year, Mr. Gorgaon 143 cases in six years, Mr. Newton 48 cases in four years, and the cases of the remainder occurred within a short period. Of these 1,851 examples, 1,160 occurred among Mussulmans, and 551 were Hindoos. Taking the population into account the numbers are about equal. The youngest patient was one and a quarter years. The largest stone weighed 11oz., the smallest 3 grains, and the largest number of stones was 12. The mortality after operation, 1—6.93. Curvy prevailed to a great extent both among Hindoos and Mussulmans. An interesting statement is made respecting the analysis of a collection of calculi from this district of India. Only two kinds were found, bone calculus, and earthy phosphates and ammonia (p. 14.) *No lithic acid nor triple phosphate calculi were found.*"

In another communication, in 1868, by Dr. Garden, an analysis is given of 831 cases of urinary calculus—including females—which occurred at the Saharnapose Dispensary (Calcutta Presidency) during a period of 18 years. The mortality after operation was 1—7.63—two or three per cent. less than the mortality in the United Kingdom. Of these 577 were Hindoos and 254 Mussulmans, forming, as in the example already quoted, but a slight difference when the number of the two castes is taken into account. The chief causes assigned by Dr. Garden are exposure, bad grain, bad digestion, and rheumatic complaints. An analysis of 260 calculi examined forms a remarkable contrast with that already quoted:—"15 were fusible, 1 triple phosphate, 3 phosphate of lime, 81 uric acid, 55 urate of lime, 23 urate of ammonia, 72 oxalate of lime. Of these 58 were pure calculus, uric acid 26, fusible 10, oxalate of lime 10, urate of lime 5, urate of ammonia 1, triple phosphate 1." I will only say, with reference to the above, that it appears to me the relative position of the Mussulmans and Hindoos ought to be changed in the first part of this quotation, and I can scarcely help thinking it stood differently in the original.

in parts of the Highlands of Scotland, in Norfolk in England, and near Malaga in Spain, in the first and last of which places, the poor, as is well known, live largely on barley meal and the products of the vine, while the want of apples, pears, cider, and other articles of that description has been said to conduce towards its causation and development in the latter. Certain it is that the miserable mills used by the poorer class of natives are but ill adapted for grinding, and the kind of corn or rather pulse they use has a hard, horny, coriaceous rind. But it is not easy to see how particles of this could enter the bladder, and yet an impression to that effect prevails largely elsewhere. When on a visit to Malaga, in June, '58, I called on the late Dr. Sutcliffe, who then practised there, and who possessed a considerable local experience and repute. He showed me several specimens of calculi he had extracted on the spot, and he assured me that the disease was comparatively common in the neighbourhood. He unhesitatingly ascribed its prevalence to the wine which is manufactured in the vicinity, and which the peasantry are so fond of, and to the use of a species of bread which is made of maize and the husks of the vine, and which is of a coarse, indigestible and gritty nature. Whether any similar effect can be ascribed to the barley meal of the Highlanders, I cannot say, but stone prevails largely, I am told, in the mountains near Aberdeen, and a friend informs me while writing this, that he heard the use of treacle and dumpling by the inhabitants assigned as a cause for its frequency near Norwich. How far such a diet is calculated to affect digestion or perpetuate the tendency towards calculous formation that clearly exists in the above-named localities, I cannot undertake to say, but the facts admit of no question, and I am not aware of any better explanation of them.

Another hypothesis exists which deserves a passing mention, and as the custom on which it is based prevails universally throughout the East, it is not so flimsy or improbable as it may at first sight appear. The natives of India, as every one who has visited that country must know, squat down on their haunches*

*Those who have read the interesting "Journey to Mecca and Medina," written by Captain Burton of the Indian army, and now English Consul in the Brazils, will remember an incident in connexion with this attitude, which is as amusing as it was nearly being tragical. It is wonderful in how many small details of habit a difference is to be observed between the European and the Asiatic. An observation of these has led me to heartily agree with Mr. Palgrave when he says that the attempts made by European travellers to personate or pass for natives by assuming the garb of Dervishes, Fakeers, Merhants, &c., are miserable failures. Mr. Kaye—than whom there can be no better authority on such a point—says substantially the same thing in his life of Eldred Pottinger, and any one familiar with the East, and who will take the trouble of comparing Sir Alexander Burnes and Mr. Vambery in their costumes, with natives similarly dressed, will see at once the difference. I can say for myself that I never saw a European who could talk

during the act of micturition instead of standing up as we do in Europe, and there can be no doubt that such an attitude is not as favourable to the free and entire evacuation of the contents of the bladder as the one we assume is. On the contrary, it seems to favour the retention of urinary debris and salts in that viscus, and when we consider that "urinary concretions may be formed either in the kidney or in the bladder, and are almost always the result of the deposition and retention of a urinary sediment in some portion of the uropoietic tract,"† we will be able to appreciate its bearing on the question, and influence in propagating the disease. It may also, perhaps, serve to explain the great exemption from this complication which women everywhere enjoy. Dr. Day adds, "Around the nucleus thus formed, additional matter is gradually deposited, till at length the concretion may attain an enormous size." Just so, and if to the action of this custom we add the agency of the other influences mentioned above, we will be able to suggest an explanation, or, at least, lessen the difficulty that now exists regarding the wide-spread prevalence of the condition here contemplated. Neither cause will suffice of itself to produce the disease, but assuming the existence of a diathesis, one can easily see how the three may concur and conduce to the same result, and at any rate the coast is clearer in regard of a remedy. But whatever the cause, there is no doubt as to the fact, and the following table, which is taken from a statement that was prepared for circulation among the officers of his circle by the late Deputy Inspector General of Hospitals, John Wilkie, M.D.,‡ and which

and act in all respects like a native, but the fear of consequences, the innate courtesy of the Oriental, his fatalism or *sans froid*, and perhaps also his doubt as to the sanity of those members of our race who undertake journeys and embark on enterprises for which he can find no better explanation, constitute their claims to protection, and some are, I believe, sped on their way through feelings of charity, pity, or contempt.

†Day's Physiological Chemistry, page 377. Mr. Erichsen speaks to the same effect in his Clinical Lecture on Lithotomy in Recurrent and Multiple Calculus, in the *Lancet* for March 18th, 1871. He says, "Just as the water of a petrifying well will give rise to calcareous deposit on a twig left in it, so will the urine under certain conditions, local or constitutional, give rise to a phosphatic deposit round any body on which crystals can form, and for this purpose a clot of blood or a shred of cellular tissue will suffice."—See also Neubauer and Vogel's Guide, Sydenham Society, p. 431.

‡Dr. Wilkie sums up the above as follows in a letter to a friend, which was kindly placed at my command, and which is dated Meerut, 26th July, 1863:—"From the half-yearly returns of dispensaries it appears that at Delhi there have been 91 capital and important operations, of which 22 were for lithotomy. At Shahjehanpore, 45 with 12 lithotomy. At Budaon, 78 with 39 lithotomy. At Bareilly, 89 with 35 lithotomy. Bijnore, 15 with 6 lithotomy. There have been 180 cases of lithotomy during the past six months." In other words, if we assume that the population of the Meerut Circle equals that of Scotland, and put down both roughly at three millions, we will be able to form a pretty good estimate as to the percentage and prevalence of stone in the former. I doubt, however, if Scotland could produce half the number in double the time. Another friend discussing the subject with me said:—"In a population of, say, a million, forty or fifty cases of stone may occur in a twelvemonth, and one of these might, *perhaps*, be a female." It will be seen from what is said elsewhere that the import of the italicised word *perhaps* would be more clearly defined by a note of interrogation,

was kindly placed at my command for the purpose of this inquiry by a friend, will show this and show also the advantages of India as a field for the cultivation and practice of the higher branches of surgery. It will further, I think, tend to show that the prevalence increases as one approaches the hills; but be this as it may, the document is a highly suggestive one, and though shorn of much of its interest by the absence of details, its perusal is calculated to enhance the repute of our Indian brethren, and confirm the impression that prevails respecting the vital capacity, endurance, and great powers of recovery possessed by the natives. As such it is subjoined here, and I will throw in under the head of remarks such brief, explanatory notes as space may allow, or as I may find absolutely necessary for its elucidation:—

A Comparative Statement of Operations performed in the MEERUT CIRCLE, and prepared from the Half-yearly Returns of Dispensaries in that District, for the Six Months ending 30th June, 1863.

Districts	Stations	OPERATIONS				REMARKS
		Lithotomy	Deaths	Capital & Important	Minor	
Delhi,	{ Delhi, Goorgaon	22 —	2 —	60 14	320 64	The district contains, according to Thornton, an area of 789 square miles, and its population amounted in 1853 to 435,744. Of this number, 171,694 are returned as Hindoo agriculturists, and 18,917 are Mahomedans. Upwards of one third of the entire population is concentrated in the City of Delhi, and is pretty equally divided into Hindoos and Mahomedans. The soil is sandy and barren, and remarkable for the saline efflorescence, and the wells for the blackishness of their water. A large portion of the supply is obtained from a canal which begins 70 miles away.
Allygurh,	{ Allygurh, Hattrass, Khyr. Secundra-Rao,	3 — — —	— — — —	3 — — —	390 — — —	

Districts	Stations	OPERATIONS				REMARKS
		Lithotomy	Deaths	Capital & Important	Minor	
Meerut,	Boolunshuhur, Meerut, Haupper, Gur Moozuffurnug-Rourkee,	8	—	7	136	The Meerut district is about 57 miles in length from east to west, and 48 in breadth; its area, 2,332 square miles; and its population upwards of 1,135,072, the majority of whom are Hindoo in creed and non-agricultural in occupation. The soil is sandy, with a subsoil of kunkar or calcareous conglomerate, and "the vicinity of the mountains, the comparatively high latitude, and considerable elevation, render the district one of the healthiest parts of the plain of India."
		11	—	15	525	
		—	—	—	167	
		2	—	16	185	
		4	—	8	48	
Deyrah,	Saharunpore, Deyrah, Khalsee, Mussooree,	16	3	2	273	The Dehra Doon is a fertile valley at the south-western base of the lowest ridge of the Himalayas. "the soil is in general a deep rich mould, though in some places composed of shingle or gravel swept down by the torrents from the mountains," and it produces rice, grain, and maize in large quantities. The ridge on which its famous sanitarium Mussoorie is situated consists of beds of compact limestone, alternating with others of soft slate, which resembles the mountain limestone of England. In some places trap rock makes its appearance, and the district is everywhere traversed by or irrigated from the Ganges and Jumna.
		4	—	12	309	
		—	—	8	103	
Shahjehanpore	Shahjehanpore, Goolurree, Kutra,	12	2	36	338	A large Mahomedan city and district, in which, however, the Hindoos predominate. These live for the most part by agriculture, and their children are very subject to stone.
		—	—	—	123	
		—	—	—	116	
Budaon,	Budaon, Bilsie, Bisowlee, Datagury, Gonour, Saheswaw,	39	3	30	750	An almost purely agricultural district, in which the rice-eating Hindoos constitute nearly six-sevenths of the population. The prevalence of stone in this and the following places which are near the hills, would seem to lend support to the impression formed above, and which implies that the tendency thereto increases as we approach to the Himalayas.
		—	—	5	235	
		—	—	16	211	
		—	—	12	319	
		—	—	4	207	
—	—	12	207			

Districts	Stations	OPERATIONS				REMARKS
		Lithotomy	Deaths	Capital & Important	Minor	
Bareilly.	Bareilly,	35	4		736	An important military station, and the capital of a large agricultural district, which numbers a population of 1,378,268, whose alluvial soil is very fertile, and which is watered by rivers that rise in and bring down large quantities of gravel, sand, and other similar material from the neighbouring hills.
	Amlah,	—	—		215	
	Bessulpore.	—	—		305	
	Baharee.	—	—		295	
	Philibeet.	—	—	54	305	
	Rampore.	—	—		60	
Moradabad	Moradabad	18	1	19	1,411	A densely populated and very fertile district, in which, though the quality of the water is good, and that fruit and vegetables grow in abundance, yet stone is very prevalent, but I have heard no adequate reason assigned for this.
	Kaseepore.	—	—	—	—	
Bijnore,	Bijnore,	6	2	19	394	Near the hills, and therefore, as I think, the subject and seat of a large predominance of calculous disorder.
	Nugeenah.	—	—	—	49	
	Nujeebabad,	—	—	—	91	
Nynee Tal,	Nynee Tal,	1	1	1	54	—
	Huldwalee.	—	—	—	—	
	Kaladungee.	—	—	—	—	
Almorah.	Almorah.	8	—	15	251	In the hills, and limestone enters largely into the local geological formation.
	Petoragurh,	—	—	—	—	
Gurwhal.	Bhe Kya.	—	—	—	—	In the hills, and limestone enters largely into the local geological formation, but there is no European officer at either of these stations, and the returns are consequently worthless.
	Chamolie.	—	—	—	—	
	Josee Mah,	—	—	—	—	
	Kurumparag,	—	—	—	—	
	Melchourie,	—	—	—	—	
O'Keemath,	—	—	—	—		
	Sreenuggur,	4	—	5	49	
Grand Total.		193	18	391	9,225	

This shows a percentage of 9.3 of deaths to recoveries, or about one death to every eleven and a half persons subjected to operation, a result which, though not altogether as favourable as might be expected, is yet considerably in advance of that obtained in England and Europe generally, where, according to the authorities quoted by Erichsen, it varies between one in six and one in eight, the latter being, according to him, the latest and perhaps most favourable average hitherto obtained. And that this result holds good on a larger scale, and when tested, by larger numbers will appear further from the table subjoined, which was drawn up by the same gentleman from similar or equally authentic sources, and which extends over a period of time and includes a variety of cases that are amply sufficient for purposes of comparison. They

both, however, labour under the grave drawback of being wanting in particulars, and of saying nothing about the age, caste, condition, or sex of the sufferers, but stone is so rare among women in India, that we may safely exclude them from the calculation; and as to caste, that did not appear to me to affect the result, or aggravate a tendency to the disease in any of the cases with which I had to deal. The rich Brahmin who was clothed in purple and fine linen, and who fared sumptuously every day, on rice, milk, butter, and other equally digestible articles, was as subject, in proportion to the numbers of his highly-flavoured order, as the poor pariah sweeper or chumar, who went about in rags that barely sufficed to cover his nakedness, and fed on such offal as his miserable daily pittance could procure, or as the cold and casual charity of his neighbours would allow. The same may be said, with perhaps some modification, of the flesh-eating Mahomedan, whose drink, like that of his Hindoo brother, was the same "pure element" from the brook, and whose religion is equally exacting in respect of bodily purification and cleanliness. The children of both seemed to me to suffer in equal proportion, and I never met a woman of either sect who laboured under the complaint. Not that women are altogether exempt, for such is not the case, but the number of them that suffers bears no proportion to that of the men, and such is the innate bashfulness or mistaken modesty of the Hindoo female, that many, I am sure, would rather suffer in silence than submit to an examination. A friend of mine of many years standing in India, and a very successful lithotomist too, assured me that he had only met two cases in women during his time, and I never knew a surgeon there who had seen more.

On the other hand, very old men are often found affected with stone, which may have caused them no inconvenience till displaced by accident, or otherwise interfered with; and very advanced age is not necessarily a bar to operative interference, provided that the bladder has not lost its contractility or the kidneys been its first seat; and in any case the simpler the expedients and appliances employed the more speedily is the operation performed, and the more satisfactory and enduring are the after-treatment and results. So selfish is the nigger *pur sang*, so impatient of restraint, and so anxious to make the most of his time and opportunities, that he is willing to incur the gravest risks, nay, even to expose his life to the hazard of a throw, rather than wait patiently for improvement, or accept with equanimity an alternative which offers him a better chance of recovery. Hence lithotomy is, and ever must remain, the operation for India; and so reckless are

some of the natives of consequences that they do not give even that a fair chance. It is no uncommon thing for patients there to "bolt" before their cure is half complete; and such is the impatience of mothers, or so great their love for their children, that they often try to steal them away as soon as the stone is extracted. Expectant measures will never find favour with a people who prefer remedies that appeal at once to their senses; and lithotomy, with its more complicated details and numerous sittings, will never commend itself to their untutored understandings, longing for personal freedom, and unreasoning dislike of whatever imposes a restraint or entails an obligation.

The following general statement includes the number of cases and their results, that were subjected to operation in the Meerut circle of Supervision during the years '61-'62, and first half of 1863:—

Period	Lithotomy	Deaths	Capital and Important	Minor	Remarks
1st half of 1861, -	180	19	360	3,842	By capital and important are meant. I presume. amputations. excisions, the ligature of arteries. removal of tumours. &c.: such operations. in a word, as involve danger to life, and call for extra watchfulness and skill on the part of the surgeon, or entail greater expenditure by the medical department on behalf on the public.
2nd half of do., -	118	9	256	4,834	
1st half of 1862, -	160	12	432	5,532	
2nd half of do., -	145	15	284	8,357	
1st half of 1863, -	193	18	391	9,225	
Total, 2½ years,	796	73	1,732	31,790	

The results differ so little in this instance from those given above as to save me the trouble of adding anything by way of explanation; they are, in fact, substantially the same in both cases, and being doubtless based on or derived from similar premises, may be set down as, in round numbers, deaths 9.1 per cent., or about one death to every eleven persons; in other words, nine men died, according to the above-quoted return, out of every hundred who were treated by lithotomy; or, better still, for every sufferer who succumbed to shock, exhaustion, peritonitis, hæmorrhage, or other cause incidental to this operation, among a hundred cases, 90.9 recovered. This is a percentage which, as far as I can determine, has never been exceeded on an equally large scale

elsewhere. If we could only know the numbers operated on by European surgeons, and base our estimate on them alone, I am quite certain the result would appear more favourable. Many, perhaps the greater part, of these were treated by Bengalee sub-assistant surgeons from Calcutta, and some were doubtless left to the native doctor of the North-West. This is an item and an element which should not be lost sight of in the calculation; and even with this, the result is such as European surgery in India need not be ashamed of.*

And with regard to this distinction, I have often regretted the absence of reliable statistical information on the subject of lithotomy in India, and have endeavoured from time to time, as opportunity offered, to collect such myself. But it is not easy to procure any, as the disease is, comparatively speaking, so common as to attract but little notice; the genius loci is not favourable to exertion, and familiarity in this, as in other matters, begets contempt. I am, however, satisfied, from the conversation I held with my brethren, that the case stands pretty much as I have stated it; and I have now before me a note from an old friend, dated August 3rd, 1863, in which he says:—"I have operated on about eighty cases of stone since I came here, and of these I have only lost three, and one of these was *in articulo* on admission." He added that the operation was almost always successful in his hands in children.

This confirms what I said above that caste does not materially affect the result or influence the diathesis, as Brahmins and Mosulmen are here as numerous as their neighbours, being seven in each case, and so far in about the proportion they bear to the general community. It also supports the view I have taken of the statis-

*The following is Sir Henry Thompson's summary of the results obtained by him from an investigation into the causes of death after lithotomy, which is, as far as I can determine, the completest and most comprehensive in our language. I will leave it to speak for itself:—"A table in another part of this work shows that, from the first to the fifth year the deaths are about one in fourteen; they then decrease, so that between six and ten years inclusive they are only one in twenty-three or twenty-four cases. Between eleven and sixteen the mortality gradually rises to one in nine and a-half cases, and from the sixteenth to the twentieth year to one in seven cases."—*Practical Lithotomy and Lithotripsy*, pages 93-4. Again, he adds elsewhere: "As we pass from twelve to sixteen years the death-rate rises; for during the period when puberty is declaring itself, as sexual activity becomes developed, we find the increased susceptibilities thus aroused, raising the mortality to one in nine and a-half, and from thence to the twentieth year, to one in seven cases. It improves but slightly up to the thirtieth year, being until then about one in eight cases. As manhood advances and the strength increases, the death-rate diminishes to one in ten and a-half between the thirtieth and thirty-eighth year. But during the succeeding ten years, organic morbid changes beginning to set in, and the influence of continued depraved habits to tell on the constitution, the rate rises to one in six. These causes become more active, and, at the same time, the powers of life diminish as age progresses from fifty to seventy years, the rate rising to one in four and three-quarters between forty-eight and fifty-eight, and gradually to one in three and three-quarters between fifty-eight and seventy; and finally to one in little more than three between seventy and eighty."—*Ibid.*, pages 142-3.

tics formerly submitted, and more than sustains the high repute of our Indian brethren, of whose performance the statement of my friend might be taken as a fair echo and illustration. Dr. Grant is not a dashing or brilliant operator; on the contrary, he is slow, cautious, and methodical. But his caution has nothing of timidity in it, his slowness indicates care and a conscientious regard for the responsibilities of his office, and the steady hand, the collected manner, and the concentrated look bespeak an amount of self-possession that can only be acquired by long practice, and that clearly shows his mastery of the situation. I am proud that it has fallen to my lot to testify thus publicly to the capacity of a friend whose own retiring habits and native modesty would shrink from such a disclosure, whose skill as a physician has been proved in many a rough encounter with tropical disease, and who has achieved a success in a difficult department of his art, in what a great authority would call the "master handywork of surgery," which has not, to my knowledge, been ever exceeded before.

As to the manner of operating, stone is almost invariably extracted in India by the common process of lateral lithotomy, and has not that been sufficiently described elsewhere? I think so certainly, and though I have looked into some books on the subject while preparing this paper, I have no intention of quoting from them. Indeed it was with difficulty I waded through some of them, so finickly minute and circumstantial are they, and so full of details which any man with a diploma ought to be able to supply for himself, and which no man who looks to the success of his treatment could hope to imitate with safety in the hour of trial. Had some of the writers here referred to, witnessed as I have, the facility and readiness with which this process is performed by natives of India who never opened a book on anatomy, and know as much about the *Veru Montanum* as they do about the man in the moon, they would be less exacting in their requirements, and more disposed to trust to the common-places of surgery and the dictates of common sense. As it is they clearly overdo their parts and invest a simple proceeding with an air of importance and a degree of danger which it does not deserve or entail, and I can scarcely help thinking that the object of such writings is to deter less experienced responsible men from undertaking an operation which is, in my humble opinion, quite within the compass of all. The same remarks will apply to the apparatus employed, and I believe with an old and eminent lithotomist that "with a knife, we have it in our power to make our incisions adequate to the extraction of a stone of any size, and such as will

readily admit the forceps, and allow of an easy extraction without laceration. The incision with the knife is at once easy and sure in the hands of one acquainted with the anatomy of the parts; in the hands of one unacquainted with such anatomy, no instrument founded on any principles of mechanism is safe." This ignorance, or inexperience, or whatever else we may elect to call it—and I have no wish to use stronger language than the occasion will require—is at the bottom of all the strange machinery and complicated apparatus we see figured in books in connexion with this subject, and I believe that a good deal of the mortality that prevails after lithotomy is due to the variegated manœuvring, protracted manipulation, and other rough usage to which unfortunate patients are subjected during its performance. Be this, however, as it may, my experience is entirely in favour of simplicity, and I will now describe a procedure which is practised by simple, uneducated, mountaineer surgeons in the hills, and which, if the information placed at my command respecting it be reliable—and I have no right or reason to think otherwise—can boast of a success that admits of no approach elsewhere. This is nothing else than the old plan that was practised upwards of two thousand years ago by Ammonius of Alexandria, in the time of Herophilus and Erasistratus, and by Meges, at Rome, in the reign of Augustus, and which is so well described by Allan, Bell, Burns, and Cooper, as to dispense me from the necessity of describing it again. The author of an interesting work, entitled, "A Summer Tour in the Himalayas and Sporting Adventures in the Valley of Cashmere," alluding to the professional performances of the native hakeems or surgeons of the hills, says, at page 212:—"The only surgical operation they perform well is extracting the stone, in which they are very successful." So successful, indeed, that, as I was credibly informed by a gentleman who has resided many years among them, and who knows them better, perhaps, than any living European, they lose no more than four per cent. of their cases. Their mode of proceeding may be roughly described as follows:—They begin by thrusting the two first fingers of the left hand as far up the rectum as they can, and placing them behind the stone. As soon as they have found this they drag or push it down till it can be felt in the perineum, and then, but not before, cut upon it with the stump of an old razor, or with a blunt and primitive-looking weapon not unlike a cartilage knife.

They will not operate on particularly obese subjects, or on persons whose redundancy in this respect they cannot easily reduce; but the meagre fare of the hillmen does not often produce embonpoint or require a resort to Banting, and they dispense

altogether with the old-fashioned clyster and other preparatory treatment. Should it so happen, however, that a fat patient, who is otherwise fit, presents himself for relief, he is forthwith placed on "short commons," something like the bread and water diet of our prisons, and thereby soon brought into a condition that will admit of interference. The uncouth instrument represented on the opposite page has been the means of relieving a great many, twenty-seven in all, I believe, and its rude owner was very loath to part with it. It constituted his principal means of support; rough as it was it could not be easily replaced, and it was only by the exercise of a little gentle pressure that he could be brought to terms. At last, yielding to the earnestness of my friend, or "moved by the rhetoric of a silver fee," he consented to part with it, and I now retain it by me as a curiosity. Should the stone refuse to start forward under the *vis a tergo* brought to bear on it from behind, the iron hook or lever shown in the woodcut is brought into play, and by means of this, aided by the fingers in the rectum, the offending calculus is dragged *volens volens* to the front.

But the size or friability of the stone, the depth of the perineum, the restlessness of the patient—for they know nothing of anaesthetics—the escape of faeces from the rectum, or other troublesome occurrence, may prevent or delay the usual happy consummation. In either case the Puharee doctor is equal to the occasion. He is not, as one without resource; on the contrary, he shows himself master of the situation, by thrusting his hand into the recesses of his wallet, and extracting therefrom an implement which is specially kept in reserve for such a contingency. This is nothing else than a pair of pincers, not unlike those used by cobblers for stretching leather, and with this he never fails. The one here figured was used successfully twenty-three times, and was so prized by its owner that I could only obtain permission to sketch it. That was, however, accurately done, and figure No. 3 is a faithful delineation of it.

Such is the apparatus and such the plan of operating practised in the hills, and the outcome of both is a saving of ninety-six per cent., a saving which no other apparatus or operation has ever been able to secure.* It is, in fact, unparalleled in the history of

* I never saw or heard of the high operation or of that through the rectum, in India. I assisted the late Dr. Brinton once during my incumbency as house surgeon at the Royal Free Hospital, Gray's Inn Road, London, in extracting a piece of mortar from the bladder through the rectum of a corpse, but the proceeding struck us both as being little less than barbarous. For instance in which calculi passed or were extracted through the umbilicus and through a fistulous opening in the abdominal walls, see "London Medical Repository," Vol. i., pages 43 and 291.

lithotomy anywhere, and such a result is calculated to put our boasted superiority to the blush, and proved that nature, however rude and unaided she may be, is a better guide to the complications of her own causing and to the relief of the sufferings she inflicts, than art, with all the resources which a too fastidious and exacting competition may have placed at her command. It also gives additional weight to the old saying, that "there is nothing new under the sun," for the proceeding here referred to is nothing more or less than a modification of the old method of "cutting on the gripe," which was first described by Celsus, and more recently by Allan,† Bell, Burns, and Cooper, and which was successfully practised by such surgeons as Hildanus, Heister, Raoux, and others. But to the curious on the subject the authors here quoted are as accessible, perhaps more so, than they are to me, and this part of my paper would be scarcely complete without a reference to the position and practice of the native doctors of the plains. Of these, however, I need not say much, as several of them are already well known by their writings or otherwise in Europe, and they are, as a rule, the very antipodes of their rude brethren of the hills. Some of these are doctors of the Calcutta University; some drive large and lucrative practices in the great cities of India; some are professors in provincial schools or personal attendants on native princes; and many are expert and successful lithotomists. But as this paper is likely to assume proportions which I did not contemplate, and as I agree with Horace when he says—

"Segnius irritant animos demissa per aures,
Quam quæ sunt oculis subjecta fidelibus."

I will content myself with giving here a representation of an operation by a native surgeon—for which I am indebted to the courtesy of Dr. Playfair, of Agra—and leaving the rest to the indulgent criticism or conjecture of my readers.

From this it will be easy to see who is the master and who is the man. The spectators in the foreground are students, who will in time become dispensers and dressers in Her Majesty's Military

As Allan's "Treatise on the Operation of Lithotomy" is out of print, and likely to remain so, and as his description of "this antique operation" is the best I am acquainted with, I make no apology for reproducing it in full here. He says, "the manner of operating was this—the rectum was emptied by a glyster a few hours before the operation, the surgeon introduced the fore and middle fingers of his left hand, well oiled, into the anus, while he at the same time pressed with the palm of his right hand on the lower part of the abdomen above the pubis, to assist in bringing down the stone; he then grappled it, brought it forward to press on the neck of the bladder, and made it protrude and form a tumour on the left side of the perineum. He now took the scalpel and made a lunated incision through the skin and cellular substance, directly on the stone, near the anus, down to the neck of the bladder, with horn pointing downwards to the hip." He then made a second incision transversely through the neck of the bladder, and the stone being strongly pressed upon by the fingers, started out into his bosom, or was picked out by a hook provided for the purpose."—A Treatise on the Operations of Lithotomy by Robert Allan, surgeon, pages 10-11.

Hospitals in the North West, and the expression of all is free from flurry and excitement, and more composed than one would expect under the circumstances, or perhaps than one could find in a similarly constituted assembly at home. And having said so much of the proceedings of others it is now time I should turn to and say something of my own.

My operations extended over a series of years, and were performed in various parts of India, but chiefly in Shahjehanpore, Furruckabad, Cawnpore, Futtehpoore, the Punjab and Himalayas. They may, therefore, be fairly said to be representative specimens of their class, and to economize space, I will endeavour to crush into the following table all the facts regarding them that I can now recall, or that appear to me necessary for their clinical history and elucidation. Any that may escape my memory while recording the same, or that may not find room in the table, I will add subsequently, and so bring this already too lengthy communication to a close. And firstly, as regards the opération itself, that, as I said before, was always lateral, and the instruments used in its performance consisted of a scalpel, a staff grooved on the side, or, as I preferred it, down the centre, and the forceps that is always found in the common operating cases furnished by the Government. There was no blunt knife or cutting gorget; no lithotome caché or canule à chemise, nothing, in fact, but the plain apparatus mentioned above, and it accords with my experience that these are quite sufficient for the purposes of lateral lithotomy in nineteen cases out of twenty. In the twentieth case there may be some complication that calls for other instrumental aid or accessory, as happened in an instance mentioned below, wherein I had to use a long bullet forceps, but the most successful lithotomists will be those who use the simplest instruments, and it will be obviously unnecessary for me, after what has been already said, to prescribe any rules or enter into any details as to the manner of sounding the bladder, holding the staff, or cutting through the perineum. Any man with a diploma ought to be able to effect these objects for himself, and I will never forget the pithy and forcible, but not the less significant and appropriate advice I received from the gentleman—himself an able lithotomist—who gave me my first case and assisted me in my first operation. While the patient was taking chloroform and I was adjusting my weapons, I asked him if he had any dodge or wrinkle he could put me up to before I began. "No," he said, "get your staff into the bladder and your knife into the groove of the staff, and you must be a greater fool than I take you for if you can't do the rest." And though this direction may not suffice in all cases, it will in most,

in proper hands, and it has at least the merit of expressing, in few words, the estimate formed of this operation by practical men in India, and of showing how irrelevant and unnecessary they consider a great deal of what has been written about it at home. The case here referred to was a man in the very prime of life, who recovered without a bad symptom, while that upon which my friend had just operated died from the effects of shock; and this brings me to the reflection that while lithotomy is a comparatively easy proceeding in the adult male, it is quite the reverse in the child, in whose pelvis the viscera are somewhat differently situated, and in whom, to use the words of Mr. Butcher, "the tissues comprising the urethra are so feeble in their cohesion that they will readily yield to violence, and the angle to the bladder is so acute that great facility is afforded to the instrument in going astray." This is strictly true, and equally applicable is his advice about introducing a couple of ounces of water into the bladder before operating, for "it facilitates the detection of the stone, and the stone should invariably be struck previous to cutting the patient—not only because the stone, if a very small one, might have escaped from the bladder, but because this evidence proclaims the presence of the stone, and also the guide to it is direct and certain, the instrument has not gone astray," though I did not always follow it. And apropos of this point and also of the question of lithotomy in children generally, I may here reproduce the substance of a conversation I had with a friend in India, about the time that Mr. now Sir Wm. Fergusson's lectures on the subject were appearing in the *Lancet*, which will better serve to show my estimate of it than any other course or statement I could employ. Having discussed some strange mistakes and malpractices we had witnessed or heard of ourselves, and among others those of tying the urethra in mistake for the perineal artery, cutting through both coats of the bladder into the rectum, and in a third instance including that structure itself, and actually scraping away at the sacrum in lieu of the stone. I asked him, "Did you read Fergusson's lecture about it in last week's *Lancet*?" "Yes," he said, "I did." "Didn't you consider it," I inquired, "very much to the point?" "Yes, yes," he replied, "very much so indeed," and holding up his hands, he added with emphasis, "'tis the very best I ever read on the subject." "It is, I subjoined; it deserves to be printed in letters of gold, and read, learnt, and inwardly digested by every one who undertakes to operate on children, and who wishes to do so successfully." And this is, perhaps, as much as I need say on the matter at present.

Bus it sometimes happened to me, and I know it has often hap-

pened to others, to have children brought us with all the symptoms of a calculus, in whom, however, none existed, and whose sufferings were induced or aggravated by uncleanly habits, or intestinal irritation. Sounding frequently failed to disprove the fact or throw light on the cause, and it is not to be wondered at that in such instances the usual thing was done. I have heard of several cases in which the operation of opening the bladder was performed, with, of course, negative results as regards the stone, and with no injurious consequences as regards the patient: indeed the proceeding seemed sometimes to have done good by diverting the sufferer's mind from the bladder, or concentrating it on other organs, and inducing his parents to look elsewhere for a remedy. Be that as it may, I never heard of a death from such manipulation, but the mistake must necessarily be an unpleasant one for a sensitive mind, and I was happily saved from resorting to it myself, by remembering an anecdote of the late Mr. Liston, whose authority on this and other similar details could admit of no question. It is told of that distinguished surgeon, that, while lecturing one day on the symptoms of stone in the child, he had exhausted the usual stock somewhat sooner than he anticipated, and was obliged to fall back on his own experience for illustration. He accordingly addressed his class as follows:—"But, gentlemen, when you happen to be in doubt about your case, I advise you to place him on a chair and desire him to jump down; if he has no stone he'll readily do so, but if he has, he'll see you d—ned first."

And this is a test which can be so readily resorted to by all, that it deserves more attention than it would appear to have received. I acted on it in a case of the kind here contemplated, and finding that my little patient readily complied with my request, I refused to operate, and I was afterwards glad I did so, for his worst symptoms yielded to time and treatment, and he ultimately regained perfect control of his water. As intimated before, I do not pretend to entire accuracy in the particulars given below; it is always difficult to obtain reliable information from the natives, and this difficulty was enhanced in my case. One daily meets very old men in India, but their ages can, in many instances, only be inferred from their appearances, and, when interrogated on the point, they either refer back to some great event, such as the siege of Bhurtpore, the battles of Lord Lake, or the reign of Runjeet Sing, which may have happened in the time of their grandfathers, or they put you off with a shake of the head and a Khuda Jane—God knows.* The same may be said, to some

* I find the same trait or peculiarity ascribed to the Indians of South America, by the great traveller, Humboldt. He says, "travellers who merely judge from

extent, of the account they give of the rise and duration of their symptoms, for with them time is of no value, they act on the Epicurean maxim of caring for nothing but their bellies; food and farthings engross all their thoughts, and I never yet heard the poorer class of natives discussing anything else than the price of grain, or the fluctuation of wages.†

This table presents few points of divergence from those already given; in all the results are pretty much the same, and it will be seen from mine and Dr. Grant's that the operation was eminently successful in children. But this is so much the case elsewhere also, that I am inclined to look to the operator for any departure from it, and I cannot too strongly impress on the minds of my younger brethren the necessity of forgetting for the time or ignoring altogether what they may have learnt of the position of the bladder in the adult, when they come to deal with the subject of calculous disorder in children. The relative positions are almost reversed, the one being low down towards or rather upon the rectum, and the other above tilted forwards under the pubis; but they'll learn these things better from Sir Wm. Fergusson's excellent lectures than they can from me, and with regard to their incisions they cannot do better than act on the advice of Mr. Butcher. That able operator, writing on this point in the "Dublin Quarterly Journal," for February, 1870, says:—"I cannot lay too much stress on the necessity of freely opening the entire of the

the physiognomy of the Indians are tempted to believe that it is rare to see old men amongst them. In fact, without consulting parish registers, which in warm climates are devoured by the ants every twenty or thirty years, it is very difficult to form any idea of the age of Indians. They themselves are completely ignorant of it."—"Life and Travels of Alexander Von Humboldt." New York: Rudd & Carleton.

†How often have the words of Horace occurred to me when listening to or looking at a group of natives;—

"Nil admirari, prope res est una, Numici,
Solaque quæ possit facere et servare beatum."

As regards the size and composition of calculi I made the following note, which is, perhaps, worth preserving. "In the Futtegurh Dispensary, there were on the 13th of October, 1866, eighty-six calculi, all the subjects of which had recovered. They appeared to consist chiefly of uric acid and phosphate of lime. I noticed more than one of a dark brown colour. A large, egg-shaped, seemingly phosphatic stone weighed 7 drachms and 40 grains. Another of a similar description weighed 1 ounce and 15 grains, while a third brownish specimen, the neck of which appeared to have been adjusted to the prostatic portion of the urethra, weighed 7 drachms and 19 grains. There was one stone—the subject of which, who was over sixty, had died—kept apart, which appeared rough and jointed like a piece of consolidated lime from an old house, and which weighed 3 ounces 4 drachms and 5 grains. My own specimens have lost considerably in weight since they were extracted. It stated in an old number of the *Lancet*, that Mr. Paget removed a calculus at St. Bartholomew's that weighed upwards of 9 ounces. Mr. Do Morgan mentions a case in the *Pathological Transactions of London*, vol. xxi., p. 271, in which two calculi, which weighed together 2½ ounces, were removed from the body of a man who had exhibited symptoms of stone for years, but who was supposed to be shamming for the purpose of obtaining poor-law relief. In the same volume there is a woodcut of a stone which weighs 25 ounces, and which was taken from the body of one Sir Thomas Adams, who accompanied General Monk to Buda to congratulate and bring the King—Charles—home.

membranous portion of the urethra, by the one and continuous stroke of the knife. This should be the surgeon's aim, for if the knife be introduced again and again with the intention of clearing the staff, the difficulties of completing the operation are greatly increased, the urethra is wounded and notched in several parts. Shreds of it may hang into the groove of the staff, and it may be so impaired that the remaining connecting tissues may fail to resist the efforts essential to the completion of the operation and give way, and so the surgeon may be foiled in reaching the bladder." This, however, ought not to happen as long as the staff is adhered to; *that should on no account be lost sight of*, like the poor compassless benighted mariner described by the poet, who looked to one solitary star alone for the guidance of his struggling ship, the operator should say, "if I lose thee I'm lost," and he who sticks to the staff will in all probability reach the stone and save his patient. No matter how awkward and bungling may be his manipulation, no matter how vague and imperfect his knowledge of anatomy, no matter how feeble and faulty his incisions, provided, of course, they are not carried too far, if he sticks to the staff and *that that is in the bladder and on the stone*, he ought, if he be not a fool, or something worse, to feel and remove the latter. Sir Henry Thompson says, that "the most frequent cause of death after lithotomy in children is peritonitis and constitutional exhaustion," and that is doubtless so in England; but the deaths I witnessed or heard of among children in India, appeared to me rather to be due to shock, hæmorrhage, or injury of the rectum, and I did not find that a few years one way or the other materially affected the result. Advanced age, on the contrary, does so terribly, by preventing union of the perineal wound, inducing irritative fever, diminishing the desire for food, and the capacity for sleep, and ultimately paving the way for sub-acute peritonitis or incurable exhaustion.* My two fatal cases were both old and feeble, and the last was an old man who had to be carried by his son, and who could not, in any case, long survive his sufferings. Yet he recovered well from the effects of the chloroform and the shock of the operation, but the wound in the bladder refused to

* Barnes, the celebrated editor of the *Times*, having suffered for years from stone, was at length persuaded to submit to an operation, which, although it was most skilfully performed by Liston, gave such a shock to his nervous system that he sank under it, and died on the 7th of May, 1841, in his fifty-sixth year.—Andrew's History of British Journalism, vol. ii., p. 84.

"Suffering for years" is a bad preparation for such an operation, and shock to the nervous system is much more likely to occur and prove fatal after the powers of life are on the wane than before. For other instances of great men in whom delay proved dangerous, see the preface, &c., to Mr. Allarton's "Median Lithotomy," and Traver's "Constitutional Irritation."

heal; he lost his appetite, and could not sleep; aphthæ appeared on the tongue; and he passed away at last, without pain.

For the analysis of the calculi given in the table I am indebted to the courtesy of Dr. Cameron, the accomplished Chemist and Analyst to the City of Dublin, who most kindly undertook the labour of determining for me the composition of the stones which I had brought home.

And thus I bring to a close my personal experience of lithotomy in India.—*Dublin Quarterly*, May, 1870.

A SIMPLE METHOD FOR REMOVING CYSTIC TUMORS FROM THE EYELIDS.

By Prof. J. J. CHISOLM, M.D., Baltimore.

It is a modification in the use of the nitrate of silver that I have found so effective in the treatment of sebaceous cysts of the lid, and which has enabled me to discard for many years the tedious, painful and sometimes dangerous cutting out of such tumors. If the tumor be a sebaceous cyst, located between the upper portion of the tarsal cartilage and the skin, a Desmarres's ring forceps is used as a clamp upon the lid, to shield the ball of the eye from injury, to fix the tumor, and prevent annoying oozing of the blood. Under this ring-pressure a small opening is made into the cyst, through which its contents are squeezed out. The end of a small silver probe, dipped in nitric acid, is then passed into the cavity, is made to pass over the epithelial lining surface, and is withdrawn. Usually, in its passage into the cavity of the tumor, it cauterizes sufficiently the lips of the incision to prevent any oozing of blood when the clamp forceps is removed. When the cyst is formed by the closure of a Meibomian duct, the better plan is to evert the lid and make the puncture from the conjunctival surface, the caustic being applied as directed. The advantage gained by this modification is in the more certain, thorough, and yet restricted application of the caustic, confining its cauterizing influences only to those portions in which action is desired. The results are in every case satisfactory. No after-treatment is needed.—*Baltimore Med. Journal*, p. 261.

Medicine.

TREATMENT OF CHRONIC DYSENTERY, WITH LARGE DOSES OF POWDERED IPECAC.

Subjoined are brief histories of three cases of chronic dysentery, treated on the Pacific coast, by W. E. Whitehead, M. D., assistant surgeon U. S. army.

CASE 1.—N. M., white, single, aged thirty-six years, sailor. Came under my observation and treatment in April, 1868; much reduced in flesh and strength; loss of appetite; frequent mucous and bloody stools, often as many as twenty-five a day. Three years previously, while in Australia in the mines, had a very severe attack of dysentery, with fever; was then sick for nearly three months; when sufficiently strong, he left the mines and went to sea, but did not fully recover his flesh and strength, and for three years had daily from five to twenty-five small, watery, bloody, and mucous discharges from the bowels. Upon examination, I found he had soreness in the left iliac region; no piles or ulceration about the anus; appetite capricious; tongue coated and slimy; skin dry; urine scanty and highly colored.

Treatment.—To take a warm, salt-water bath twice a week; to eat soups and farinaceous food, with milk and weak green tea; no spirit or fermented liquor; to wear flannel at all times; to sleep in a warm, dry, and well ventilated place. To take R. pulv. ipecac, grs. xv, three times a day.

At the end of one week his condition was much improved; his stomach now tolerated the large doses of ipecac; the discharges from the bowels were less frequent and more solid; appetite, spirits, and general condition much improved. He said that he felt more like doing his duty (general hand on board a small Government schooner) than he had done for several years. Continue the powdered ipecac in twelve grain doses three times a day; no change made in the general treatment. At the end of ten days more he was so much improved that he did not think it necessary to take any more of the powders; but I concluded to continue them in doses of ten grains twice a day; to take one as soon as he arose in the morning, and one just before retiring to bed at night. This was continued for two weeks, with advice to begin the use of solid food. At the end of this time, or about the fifth week of treatment, N. M. was much improved in strength and flesh, good appetite, digestion good, from two or three healthy alvine dis-

charges in twenty-four hours, secretions normal and healthy. Cured.

CASE 2.—S. R., white, single, aged twenty-eight years, sailor in the revenue service. Was sent to me for treatment by the captain of the revenue cutter, Joe Lane, in June, 1868. Four years ago had fever and dysentery while in China; had then been unfit for duty for three weeks, when he went to sea, and his general condition improved, got rid of the fever, but has had dysentery discharges continuously since the first attack—an average of five discharges daily, frequently bloody and slimy.

Physical examination revealed decided tenderness over the course of the large intestine, and several ulcers just within the margin of the anus. Appetite fair, tongue red on the edges, thickly furred in the middle; some loss of flesh, and a general feeling of languor, with loss of strength and vigor; the skin lacked its natural elasticity; urine normal.

Treatment.—To take a hot salt water bath three nights a week, just before going to bed; to eat such nourishing food as best agreed with him; to eschew all kinds of intoxicating liquors; to wear flannel next his skin; to sleep in a well ventilated, dry, and warm room; to take fifteen grains of powdered ipecac morning and evening, on an empty stomach. At the end of eight days he was much improved; discharges from the bowels more consistent and much less frequent: general condition much better. Continue the ipecac in ten grain doses twice a day for a week. Reported at the end of the week so much improved that he desired to be returned to duty, as his ship was short-handed. To take every night, at bed time for two weeks, eight grains of powdered ipecac. Was seen again in three weeks entirely well, and about going to sea on a cruise. Cured.

CASE 3,—T. R., white, single, aged forty years, sailor in the merchant service. First seen in August, 1868. Two years ago he had an attack of dysentery in Chili; was then very sick for one month, when he left for the north, and had not been able to do any heavy work since; had been compelled to abandon the sea. He presented a very unhealthy appearance: skin of a bad color, lax and bloated; great tenderness on pressure over the entire abdomen; no piles or ulceration about the anus; urine highly colored and scanty; appetite capricious, strong desire to eat whatever disagreed with him; thirst considerable; tongue red and dry most of the time; strength much reduced; flesh soft and flabby.

Treatment.—To take a sea bath daily during the summer, as had been his habit; diet to be light and nourishing; to drink two glasses of grog a day; to wear flannel next the skin; to sleep in

a dry and warm bed. To take eight grains of powdered ipecac three times a day for one week ; then, twice a day for one week ; and then, once a day (at bed time) for another week. Reported at the end of the third week very much improved in general health ; ordered to stop taking the powders, and take ten drops of the muriated tincture of iron, morning and night, in a wine-glassful of water. When seen again, in three months, was well, and had shipped for a voyage to sea. Cured.—*Pacific Medical and Surgical Journal*.

Midwifery, etc.

CHOLERA INFANTUM.

BY J. R. BLACK, M.D., NEWARK, OHIO.

The student of medicine, just past his collegiate honours, with head full of a confused sort of learning, anxiously awaits the calls of the public for his services. Usually, he thinks his medical teachers among the best, if not the very best in the world ; fully informed upon the latest improvements, and hence, that he, being their recipient, will make a brilliant success of his management of disease. But it does not take long for him to discern that disease is not the unit, names led him to infer, and that many cases obstinately resist, nay, seem to be made worse by the treatment laid down by the distinguished Prof. A. or B. Or, perhaps, he is very apt to reason, for example, in a case of cholera infantum, that there is great irritability of the stomach with a too profuse secretion and excretion from the intestinal canal ; indications to lessen this irritability by opium, and diminish the excessive secretion by astringents. But, alas, the pathology and treatment so clearly defined in the mind, too often do not answer the fond expectations in practice ; the disease running on for an indefinite period—the results of treatment so uncertain that it is difficult to say whether this or that case got well in correspondence with, or in antagonism to the remedies.

Good common sense without profundity, requires in the healing art to see a near approach to uniformity in therapeutic results, else it is proper, nay, involuntary to doubt the success of our efforts to remove disease, and so in the decline of life think and act as skeptics in medicine. Unless this uniformity in therapeutical results is attained, the practitioner should be dissatisfied with his knowledge and cease not day or night to grope his way to a

better knowledge. Perhaps, in many phases of disease, this groping is a necessity, for the assemblage of conditions and manifestations that make up any disease may in near, or in widely separated localities, differ so greatly in their underlying qualities that what may be a very successful mode of practice in one place, may be very unsuccessful in another. I am the more certain of this on account of the success and confidence with which men in every way eminent, announce their success in treating certain diseases with stimulants, when under my own eye the same diseases under a like plan have grown steadily worse, every unfavorable symptom intensified, and the patient's consciousness of distress increased, or mercifully obliterated by delirium. If such differences in results, from the same medicines for the same disease, are not imaginary—which I think they are not—not only from the above consideration, but from others not proper here to bring forward, it follows that before adopting this or that line of treatment for any given disease, we should endeavor to ascertain if the circumstances and conditions in which that disease arose, are the same, or nearly so, to those with which the reader has to do. This must have reference not only to what are known as climatic conditions, but to regimen, purity of the air, and the weak or faulty organizations derived from the parents.

The milk, both human and animal, on which babes subsist, is from pernicious surroundings and faulty habits, less pure in compact cities than in rural districts. The air in the first mentioned places is also, as a rule, very impure; and the number of procreations with constitutions weakened and vitiated by excesses, extreme artfulness in living and syphilitic disorders is far greater in the city than in the country. Hence, even in places not ten miles distant from each other, the treatment appropriate for cholera infantum may be very different, and the results, under the most skilful management, very dissimilar. In the large eastern and western cities cholera infantum is a very fatal disease, while from my experience in the second class cities of Ohio, it is one of the most manageable. In the last five years I can recall only a single fatal case under my supervision. Nor is the number of cases to be met with small: it being not uncommon to have eight or ten new cases each week. Any description of cholera infantum is to the practitioner superfluous; its symptoms are everywhere so familiar, and withal, very distinctive.

In reference to its etiology, opinions do not seem to be well settled; mine may be summed up in a few words, viz: great heat, bad air and diet. Weakly and faulty constitutions and the period of dentition undoubtedly incline to the disease, but neither are essen-

tials, children possessing them will escape when the other three are absent, and children not possessing them will suffer when the three are present; the difference lying in this, that the former will yield to the causes much more readily than the other, and the disease be more likely to terminate fatally.

The influence of great heat is shown by the prevalence of the disease only when the temperature of the year is the greatest, and by the fact that as the scene of observation shifts to the higher latitudes, it diminishes and finally disappears. The influence of bad air in the production of cholera infantum is beyond question, and by air is not meant malaria, or an unintelligible something which is supposed to develop intermittent fever, but tangibly bad air from reeking animal excreta, piles of animal and vegetable *debris*, and the foul exhalations from human skin and lungs. It was an idea of former times that children were poisoned by sleeping with adults, and it would be well if the same idea prevailed to-day. In thousands of households, father, mother, and child sleep in an eight-by-ten box, called a room, without the slightest attention to ventilation; nay, rather with attention to guard against it, from the fear that the little being committed to their care may take cold. Ignorant and fatal kindness! The lungs must have their natural food, which is pure air, far more urgently than the stomach needs its natural food. A child can live a day or two without eating, but not five minutes without breathing. Pure air, it is no figure of speech to say, *is the breath of life*, and to starve the blood of this will prove more quickly disastrous to its healthy life than to starve it through the stomach. As in medical men ignorant of these facts, they bestow the most marked attention to the sustenance of the blood through the stomach, and little or no attention to the sustenance of the blood through the lungs. It is the medical fashion of to-day to direct that patients have an abundance of concentrated nutriment, with wine, iron and quinine, and pay no heed to the needs of the poor half starved lungs. Some medical men would be indignant if a spoonful of unwholesome food were given the sick, while they carelessly allow gallons of unwholesome air to be drawn into the lungs day and night. They apparently forget what ventilation is, thinking it is secured by a single small outward opening in a house, whereas a constant renewal of air can only be secured by two or more. It should never be forgotten that a gorged stomach is no substitute for starved lungs, and that healthy life under such circumstances, is just as impossible as it is for plants with their roots imbedded in a rich soil, but deprived of light, and kept in a stagnant air.

Children suffer more from air impurity than adults, because the change in their blood is much more rapid and relatively greater in the one than in the other. Infants breathe from five to seven thousand times oftener in twenty-four hours than adults, and this is because they need relatively more oxygen, and the more frequent rinsing out of the lungs of the poisonous matters which the cells of their lungs exhale. They also suffer more than adults from the out-door air, impurities of towns and cities; and every experienced physician is aware that in cholera infantum a change of air often acts like magic in reviving the drooping energies. So impressed am I with the importance of pure air for children, that when they have it constantly in doors, and out, an attack or the results of cholera infantum need not be feared. It very seldom occurs under such circumstances, and when it does, the attack is seen to be mild and tractable. Improper diet, especially that which is crude, or unduly refined or concentrated, will often excite an attack. But if the constitution is not faulty, and the blood deprived by feeding the lungs with unwholesome air, the removal of the exciting cause will be followed by a speedy resumption of healthy action. I have not seen the very unfavorable result which some attribute to feeding an infant on cows milk, provided the kine are healthy, and not too much sweetening be added to the milk with crude brown sugar.

Treatment. To arrest vomiting no remedy equals calomel in from one-fourth to one-eighth of grain doses, mixed with a little prepared chalk, and given every two or three hours, administered, if possible, just after emesis. The drink to allay intense thirst ought to be given often, ice cold, and in small quantities. Sometimes it is better to put a sprig or two of mint in it, or when there is great intestinal irritation, the bark of slippery elm. Later, when the prostration is great, I have seen very happy effects from the use of equal quantities of ale and water as a drink. The little patient will cling to the vessel containing it, and reject the one containing pure water when they have the chance of preference. I can not speak too emphatically of the soothing, toning influence of this mixture in cases of extreme debility.

The discharges from the bowels are usually, at the onset of the disease, watery, floccy or frothy, sometimes exhibiting bright green tints. The calomel in small doses will change the evacuations for the better in a day or two in nearly every case, and after vomiting is somewhat arrested, and the intestinal discharges remain copious and frequent, to combining it with two or three grains of sub. nit. bismuth answers an excellent purpose. This checks as well as thickens the evacuations.

After the stomach becomes retentive, the thirst less intense, the heat of the head lower, the eyes fully closed in sleep, and the intestinal evacuations tinged with bile, these measures may be suspended, or be carried out less frequently, and others adopted in accordance with the exigencies of the case. If the evacuations are yet too frequent, attended with considerable pain, the chalk mixture with paregoric will restrain them in a very admirable manner. If digestion is very imperfect, which it is almost certain to be, pepsine wine immediately after partaking food as recommended by Dr. Reeve, is of great benefit. If to the same conditions there are superadded flatulence and diminished tone, the aromatic syrup of rhei, guarded by a little paregoric will be found to render efficient service in progressing the cure. In the way of nourishment nothing equals milk and lime water, and for the advanced stages, mutton broth, with tapioca, or blanc mange when the tongue is not dry.

During treatment close attention should be paid to pure air which, too often unattainable in cities, may be readily secured by removing to the suburbs or the country.

I have been led to present this mode of treating cholera infantum not from its novelty, but from its simplicity and success. No doubt others may think the same of theirs, and if so, may peruse the above mode more from curiosity than for information. But there are others, especially junior members of the profession, whose mode of treating this disease may not be all that they could desire. It was so once with myself, and I would then have been grateful for suggestions, which would have tended to make its management in this region and civic conditions more efficient. There are also those who treat this affection with castor oil and paregoric, a line of treatment often very offensive to an irritable stomach, and which I have seen superseded by that above narrated to the immediate relief, and amendment of all the symptoms. Again, the opiate and astringent plan, even during the height of the febrile movement, is in favor with others. I cannot help regarding this mode as highly mischievous. Brain complications, visceral engorgements, an increase of fever, a greater fatality or a prolongation of the struggle with disease are the almost invariable results. I speak on this from personal observation, a mode which I was years ago led to adopt from the plausible way of reasoning upon the indications of cure in cholera infantum, namely, to subdue irritability, and diminish excretion.—*Cincinnati Lancet and Observer.*

Canada Medical Journal.

MONTREAL, JULY, 1871.

MEETING OF THE COLLEGE OF PHYSICIANS AND SURGEONS, LOWER CANADA.

In another column we publish the report of the triennial meeting of the College of Physicians and Surgeons of Lower Canada, which was held recently at Three Rivers. It will be observed that the College adopted a very important amendment to their by-laws, bearing on the licensing of chemists and druggists.

Some misconception has existed as to the power possessed by the College to grant a license to practice to chemists and druggists. We have never doubted the legality of the action of the College in this respect, as the functions of the old Medical Board, established in the reign of George the Third, were continued to the College at the time of the passing of the act incorporating the medical profession, in the year 1747.

In the year 1864 the College sought for and obtained an amendment to their charter, whereby all chemists and druggists applying for license and enregistration were obliged to produce evidence of having attended a certain curriculum. This measure was obtained in the interests of the chemists and druggists, as it was thought very desirable that these gentlemen should take rank as professional men, and not be looked upon as merchants. There was no desire on the part of the College to force their license on the chemists and druggists. The College is in point of fact the legally constituted body to regulate these matters, and give to the public an assurance of competency on the part of dispensers.

It has been felt desirable that the chemists and druggists should possess legislative recognition, and secure for themselves an act of incorporation, with powers to regulate their curriculum and mode of examination. The action of the College in the motion, which will be found elsewhere, was suggested by the fact that several chemists and druggists applied for examination without the prescribed curriculum, and based their claim for enregistration on the statement that they were in actual practice before the year 1864.

The College decided that it had no power, under the circumstances, to remit the prescribed curriculum, and so the matter for the time dropt.

The amendment, which becomes law on the sanction of the Governor General, throws the door open to such chemists and druggists who desire to avail themselves of the privilege, but we do hope the legislature will entertain the application for a special act of incorporation, so that the chemists and druggists may manage their own affairs, and we feel certain they will adopt such measures as will elevate the standard of their profession.

TRIENNIAL MEETING OF THE COLLEGE OF PHYSICIANS AND SURGEONS, L. C.

The College of Physicians and Surgeons of Lower Canada held their triennial meeting for the election of Governors for the ensuing three years at the town of Three Rivers, on Wednesday, the 12th July instant.

The meeting was held in the Court House.

The following members were present:—Drs. Michaud, Tessier, Peltier, Russell, Rottot, H. Blanchet, A. G. Fenwick, Robillard, Gilbert, Wilbremere, Mignault, Tetu, Howard, Duchesneau, Trudel, Scott, Marmette, Craik, Hamilton, Brigham, Gibson, J. B. Blanchet, Ross, E. Landry, Hingston, Worthington, and G. E. Fenwick.

In the absence of the President, J. E. LANDRY, M.D., of Quebec, the Chair was taken by the Vice-President, Dr. MICHAUD, of Kamouraska.

The Secretary for the District of Montreal, Dr. ROTTOT, read the minutes of the last triennial meeting, which were confirmed.

The Secretary for the District of Quebec, then read a report of the transactions of the College during the past three years.

The following gentlemen being licentiates of over four years, were duly proposed, seconded, and elected members of the College, viz.: Drs. Dagenais, Desjardins, and Brosseau, of Montreal; Dr. Robertson, of Lennoxville; Dr. Wood, of Coaticook, and Dr. Austin, of Sherbrooke.

The above gentlemen being present, all except the two latter took their seats as members of the College.

Twenty-nine proxies were handed in, making the total number of votes represented sixty in all.

The Vice-President appointed the following gentlemen a committee to examine the proxies, viz.: Drs. Trudelle, Russell and Tessier.

It was then moved by Dr. SCOTT, and seconded by Dr. PELTIER, "That in future the second semi-annual meeting in the year, shall be held in the City of Quebec on the last Wednesday in September, in each and every year, instead of as at present, on the second Tuesday in October, with the exception of the fall meeting of the year 1871, which shall be held on the second Tuesday in September, in place of the last Wednesday in the month, as subsequently." It was explained by the mover that in accordance with the by-law notice of this motion had been given at the meeting in October, 1870, which notice had been duly advertised.

Dr. TESSIER opposed the motion. He was a conservative, and did not like the introduction of changes. The change sought might be more convenient for the gentlemen connected with the medical schools of Montreal, but they should not consult their own convenience if it interfered with that of others. This alteration would interfere with the examinations of the University of Laval, which began in September, and might be continued almost to the end of it.

Drs. HOWARD and KOTTOR supported the motion, and explained that under the present arrangement, three of the teachers from each of the Montreal schools, being members of the Board of Governors of the College, were obliged to absent themselves from their lectures to attend the meeting in October at Quebec. This would be avoided by the alteration proposed in the motion, and as the day mentioned was the last Wednesday in September, ample time would be afforded for the completion of the examinations at Laval University.

The motion was then put and carried.

Dr. HOWARD called the attention of the Chair to a notice of motion contained in the minutes of last October meeting just read, which motion, in the absence of Drs. Marsden and Chamberlain, the original mover and seconder, he would advocate.

It may not be known to all present that one of the functions of the College of Physicians and Surgeons of Lower Canada is to grant a license to druggists to carry on their business, and that without such license they are not legally qualified. The words of the act (27-28 Vic., cap. 72) section 16 are these :

16. "Except such persons as may lawfully practise physic in Lower Canada, no person whatsoever shall carry on the business of apothecary, chemist and druggist in Lower Canada, who shall not have obtained a license from the Provincial Medical Board, which license the said Board are hereby authorized to grant to any person applying for the same who shall have passed such examination in pharmacy as the Board may deem satisfactory, and such license

shall be enregistered in the books of the College of Physicians and Surgeons of Lower Canada."

This act was passed in 1864, and the object of the motion he was about to present was to permit the Governors of the College to exempt those druggists who were in practice before that date from the by-law, which requires all candidates for the apothecaries' license to submit to a literary and classical examination upon entering upon their studies, and to attend two six-months courses of lectures upon chemistry, materia medica and pharmacy, and a three-months course in botany at some incorporated school. It was but fair that men who were in active practise before the passing of the act should be required to comply with the requirements mentioned; yet such of them as had not obtained a Governor's license after examination, in accordance with the law existing before the year 1864, should be prepared to satisfy the College that they possessed sufficient knowledge of pharmacy to entitle them to a license. The motion, then, he was about to move would enable the Governors of the College to exempt such men from compliance with the above curriculum, and permit them to submit those persons to such examination as, under the circumstances, the Governors thought suitable. He begged to move, seconded by Dr. Tessier,—“That the Board of Examiners shall have power to exempt candidates for the practice of pharmacy, who were in practice as such prior to the passing of the Act 27 & 28 Vic., cap. 51, from the curriculum prescribed for candidates under the by-laws, who commenced their studies subsequent to the passing of the above act; also, that the penalties against chemists, druggists and apothecaries practising without license shall be the same as those against persons practising physic, surgery, or midwifery, and recoverable in the same manner.

After some discussion the motion was put and carried.

The members then proceeded to the election of thirty-six Governors for the ensuing three years.

The following gentlemen were named scrutineers by the Vice-President, viz.: Drs. Scott, Gilbert, Rottot, Russell, and Tetu.

A recess of two hours was taken to give the scrutineers time to examine and report on the election.

On the re-assembling of the College, the following members were declared duly elected Governors of the College for the ensuing three years:—

FOR THE CITY OF QUEBEC.—Drs. Landry, Sewell, H. Blanchet, Jackson, Tessier, R. H. Russell, Robitaille, and J. B. Blanchet.

FOR THE DISTRICT OF QUEBEC.—Drs. Michaud, Boudreau, Marmette, Dubé, Tétu, Charest, Larue.

FOR THE CITY OF MONTREAL.—Drs. Peltier, Howard, Scott, Smallwood, Robillard, Rottot, Trudel, and G. E. Fenwick.

FOR THE DISTRICT OF MONTREAL.—Drs. Chamberlin, Gibson, L. R. Church, Weillbrenner, Brigham, Duchesneau, and Lavallée.

FOR THE DISTRICT OF ST. FRANCIS.—Drs. Worthington, Gilbert and Hamilton.

FOR THE DISTRICT OF THREE RIVERS.—Drs. Ross, A. G. Fenwick, and Landry.

A vote of thanks was then passed to the retiring officers of the College.

It was then moved by Dr. WORTHINGTON, seconded by Dr. ROBERTSON, and carried, that the next Triennial meeting of the College, to be held on the second Wednesday in July, 1874, should take place in the town of Sherbrooke.

The College then adjourned.

At a subsequent meeting of the Governors of the College, held on the same day and place, the following gentlemen were elected office-bearers for the ensuing three years:—President: W. E. Scott, M.D.; Vice-Presidents: Drs. Weillbrenner and Russell; Secretary for Quebec: Dr. Tessier; Secretary for Montreal: Dr. Rottot; Registrar and Treasurer: Dr. H. Blanchet.

The meeting then adjourned till the second Tuesday in September, to be held in the City of Quebec.

Medical News.

THE OBSTETRICAL SOCIETY OF LONDON have recently appointed a "Pelvis Committee," having for its object—

(1.) The collection of specimens of the pelves (male and female), of the various races, together with, if possible, foetal heads at term.

(2.) The collection of abnormal female pelves or casts of such, especially those of which an accurate history can be procured.

(3.) The collection of histories, drawings or photographs, and descriptions of abnormal pelves, even where it is not possible to procure the pelves themselves nor casts.

We understand that Dr. Perrigo, of Montreal, has been named a member of this Committee, and he will be glad of the assistance of the profession throughout the Dominion in carrying out the objects of the Committee.

BELLADONNA AS AN APERIENT IN CONSTIPATION.

By F. B. NUNNELEY, M.D.

Adverting to the frequency of constipation and the abuse of purgatives, the author offers a few remarks on its medicinal treatment by means of belladonna, from observations made, for the most part, on the patients of the York Dispensary, where I gave it to nearly all who suffered from constipation, simply to restore the natural action of the bowels, and not to cause a flow of secretion from the intestinal mucous membrane. The method followed was, in the main, that recommended by Trousseau. Extract of belladonna was given in doses of gr. 1-6 to gr. 2-3 on rising every morning. A grain of the extract and gr. iij. of the ext. gentian were divided into six pills, and one to four prescribed for a dose.

* * * Belladonna in the usual dose of gr. 1-6 to gr. 1-2 produced no dryness of the throat, or dilatation of the pupil, but presented the following advantages over ordinary purgatives: It did not gripe, but gave usually a healthy, solid stool; increased constipation did not follow its use, and it very often restored the natural action of the bowels, so as to render a recurrence to this or other aperient unnecessary. Another and important advantage is the small bulk in which the remedy can be given.—*Practitioner.*

MODE OF ADMINISTERING CREASOTE.

As creasote is now frequently employed in the treatment of typhoid fever, and is exceedingly distasteful to some patients, it may be worth while to mention here a formula which in great measure covers its flavor, and is easily prepared:—

Creasote, 3 drops.

Essence of lemon, 2 drops.

Orange-flower water, 1 ounce.

Spring water, 3 ounces.

A spoonful to be taken at frequent intervals throughout the day.

Dr. HUGHES BENNETT recently reported the following sad case:—A beautiful daughter of an Edinburg barrister, in perfect health, went to a dentist's office one morning and had a tooth extracted. Five minutes afterward she was dead. He believes this is only one of many similar cases which occur, and are never published.