A clinical lecture delivered to the students of surgery in the Royal Infirmary of Edinburgh, at the conclusion of the winter course for 1828, 1829. Edinburgh, February 1829 / [George Ballingall].

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CLINICAL LECTURE

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REVIEW of some of the Surgical Cases which have lately occurred in the ROYAL INFIRMARY *of* EDINBURGH—*A Clinical Lecture delivered to the Students of Surgery in that Institution, on Thursday, 26th February* 1829, *by* GEORGE BALLINGALL, *M. D., F. R. S. E., Fellow of the Royal College of Surgeons, Surgeon Extraordinary to the King, Regius Professor of Military Surgery in the University of Edinburgh, and one of the Surgeons to the Royal Infirmary.*

GENTLEMEN,

IN commencing a retrospect of the fifth course of Clinical Lectures, which, as the senior attending surgeon of the House, it has become my duty to conclude, I would, in the first place, direct your attention to some of the accidents and acute cases which you have had an opportunity of witnessing during the last four months.

Of these acute cases, the fractures of the limbs have, upon the present, as upon former occasions, constituted a large majority; of simple fractures I find that there have been treated, on my side of the House, twenty-six cases, all of which have either terminated successfully, or are in the progress of cure, with the exception of that of *William Fernie*, Æt. 62, who was admitted on the 3d of January with a fracture of the neck of the femur. This man was brought from Kinglassie in Fifeshire, where he had met with the accident about ten days before. His limb was immediately placed in Boyer's splint, and was extended to the same length as its fellow of the opposite side; but although the old man complained of no inconvenience from the apparatus, it was soon perceived that ulceration had taken place on the sacrum to a considerable extent. This induced me to remove the splint and to place the patient on his side; here again a gangrenous spot appeared over the trochanter of the right thigh, and the patient was subsequently turned to the opposite side, my object now

being to obviate the effects of pressure, and the extension of the gangrene, rather than to look for any successful treatment of the fracture. The ulceration, however, continued to extend, and the patient's strength to sink, notwithstanding the liberal exhibition of animal food, porter, and wine, until the 4th of February, when he died, six weeks after the receipt of the injury; and, I regret to say, that the body was immediately removed to Fife without affording us an opportunity of examining the state of the broken bone.

In the cursory observations which I have had occasion to lay before you on the subject of fractures, I have always inculcated the necessity of giving your attention to the general principles on which fractures are treated, observing that the variety of these accidents is so endless as to render it a matter of impossibility to be previously acquainted with the specialities of each individual case. My views of the treatment of fractures of the neck of the femur, I explained to you from one of my printed Lectures, and I would now only observe, that the result of the foregoing, as well as of some other cases of the same kind which I have witnessed, has made me lately disposed to question whether we would not do well, in many cases of fracture of the neck of the thigh bone to be satisfied with the simple treatment recommended by Sir A. Cooper; to place the limb in a relaxed position with a folded pillow under the knee-joint, and to take our chance of such a cure as nature may be pleased to afford us, rather than by confining the patient in a coercive apparatus to run the risk of inducing ulceration or gangrene, the progress of which, in advanced life, or in broken constitutions, it is so little within our power to control.

Of the cases of compound fracture occurring during the present course, that of *Margaret Thomson*, Æt. 74, who was admitted on the 3d of November, having both bones of the fore-arm broken, terminated fatally with symptoms of effusion into the thorax, four days after her reception into the hospital.

A case of compound fracture of the leg presented itself in the case of *John Hamilton*, Æt. 14, who was under treatment in the early part of the season, in whom the cure was considerably advanced previous to the commencement of the course, and who was eventually dismissed cured on the 21st of December, after a confinement of upwards of twelve weeks.

The only other case of compound fracture which has been under my care during the present session was that of *Alexander Kerr*, Æt. 20, whose case was of a very severe and dangerous character, and of which the following particulars are recorded:

"*Admitted, Oct. 6th.*—The whole left leg is very much swelled, tense

and painful. About one inch and a half above the ancle there is a small wound upon the anterior surface of the tibia, and the skin above the outer malleolus is very much contused, and fluctuates from the effusion of blood beneath it; when the foot is forcibly moved an indistinct crepitus is felt. About 8 o'clock this morning he was overturned in a cart, the edge of which fell against the lower part of his leg, whilst the weight of the horse was resting against the shaft. Limb was placed on M'Intyre's splint, and the spirit lotion applied."

Took an anodyne draught at bed-time, and a dose of oil on the following morning. The spirit lotion was continued to the leg, and an antimonial solution administered internally from time to time. On the 8th, gangrene began to appear, and the following report was entered:

"Slept ill; pulse 108, very full and strong; bowels once relieved; tongue slightly furred; skin upon the outer side of the leg is evidently gangrenous and that upon the inner side considerably discoloured. An incision was made through the former, some serum was discharged, but the wound bled very little. He was bled to twenty ounces.

"11 o'clock. Pulse 132; gangrene does not appear to have spread on the outside, but the skin upon the inside is more extensively discoloured.

Venæsectio ad ℥x.

"*9th.*—Slept a little; pulse 112, not so strong; skin hot; less thirst; bowels once relieved yesterday; gangrene has not spread at all upon the outside of the limb, and there is some healthy purulent discharge from the incision made yesterday; on the inside, the gangrene has certainly spread a little. Last blood drawn neither buffed nor cupped."

The fermenting poultice was applied to the leg, and the antimonial solution continued internally. His feverish symptoms now began to subside, and on the 11th it was reported that "his pulse was 100; skin cool; tongue less furred; appetite returning; gangrene had ceased to spread, but the sloughs had not begun to separate."

It now became obvious that we should not be compelled to amputate by the extension of the gangrene, but when the sloughs came to be detached and both the tibia and fibula were laid bare to a considerable extent, with a copious purulent discharge, and rather profuse sweats, I was greatly inclined to amputate the leg; and had not some of my colleagues entertained a more favourable opinion of the case than I did, it is probable the operation would have been proposed to him.

There was great encouragement however to persevere in our attempts at a cure, from the prosperous state of the man's general health; as well as from his youth, and apparently vigorous habit. The extensive sore which nearly surrounded the lower part of the limb became covered with

florid and healthy granulations; the discharge rapidly diminished, and on the 21st December he was discharged cured, a trifling exfoliation having previously taken place from the fore part of the tibia.

Of compound fractures I have hitherto said but little in these lectures, nor do I now propose to enlarge, for although in the two cases just mentioned you have witnessed a successful termination under the treatment adopted, yet they are, upon the whole, a class of accidents the results of which have been to me the least satisfactory of all that I have had occasion to treat in this house, and are not co-incident with my experience of them in other situations.

Had these results been the consequence of one uniform mode of treatment, I should naturally have concluded that that treatment was erroneous. But when I look back to the mode of dressing the wounds—sometimes by a piece of lint soaked in blood, and allowed to form an encrustation over them,—sometimes by covering them with a paste of gum, or a pledgit of simple dressing, and sometimes by bringing their lips into accurate apposition with adhesive straps:—When I look again to the different positions in which the limb has been placed—either closely enveloped in splints—lying less constrained in a fracture box, or simply resting on a pillow—sometimes in the bent—sometimes in the extended position:—And when I look also to the various means taken to subdue the violent inflammation and high symptomatic fever accompanying these injuries; by general, or by local bleeding, according to circumstances; very frequently by the use of cold evaporating lotions to the seat of the injury, and sometimes by the use of anodyne fomentations or cataplasms; I cannot admit that the unfavourable results which I have so often had occasion to deplore have been attributable to any bigoted prejudices or exclusive partialities in the mode of treatment.

In my remarks upon this subject, I took occasion to observe that we are greatly in want of a work on these accidents, from some surgeon of varied and extensive experience. I say varied experience, because it appears to me that we are often led by the irresistible force of habit to give our attention too exclusively to one mode of treatment. I remember to have heard an hospital surgeon assert that he never expected to lose another case of compound fracture, by following up the practice, which seemed to him to be a new one, of closely enveloping such fractures in splints and bandages, without undoing them for weeks together. But it is not from those who take such a limited or exclusive view of this matter that we are to expect such a work as I could wish to see, but from those who are capable of discriminating between those cases (perhaps numerous ones) in

which the above practice is advantageous, and those in which it is not only injurious, but absolutely insufferable.

Before quitting this subject I would beg leave to mention that there are two points in the treatment of compound fractures upon which my own observation has led me to form a very decided opinion, and to offer you a remark which may possibly prove useful hereafter. I have, I think, too frequently seen a reluctance to use the saw in removing the protruding extremities of the bone, when these were either difficult to reduce, or of a sharp and spicular form; and I have, I think, sometimes seen the closure of the external wound attempted by means too forcible and too long continued.

Amongst the more severe accidents requiring amputation which have occurred during the present course, that of *Robert M'Gregor*, Æt. 15, deserves particular attention. This lad was admitted late on the evening of the 28th of January, and the following notice of his case entered in the journal:

"Had his right arm drawn into the machinery of a paper mill at 5 P. M. The arm was torn off from the body above the middle of the humerus. The extremity of the bone projected out from the muscles. The laceration extends on the inner side of the arm into the axilla, destroys the inferior margin of the pectoralis major and latissimus dorsi muscles. The skin for a short way on the back of the scapula is destroyed, and also a considerable part of the clavicular portion of the deltoid.

"The artery is seen pulsating about three inches from its end, which is closed by coagulated blood. No hæmorrhage had taken place; his extremities were cold, and pulse feeble."

The operation at the shoulder joint was performed by Dr. Campbell, who succeeded me in the active duties of the house. A single flap was made from the deltoid, which completely covered the wound; four vessels were secured, and an opiate administered. The patient had a good night after the operation, and no untoward circumstance occurred until the night between the 1st and 2d of February, when a secondary hæmorrhage took place, which is thus noticed in the journal:

"About 10 P. M. there came on a considerable hæmorrhage from a small vessel which was tied, and about half-past 2 this morning the ligature came away from the axillary artery, and hæmorrhage ensued. The vessel was immediately secured; a considerable quantity of blood was lost. Pulse about 130, stronger than yesterday evening. An anodyne was given.

Cont. H. Anodyn. cum T. Opii. gtt. XXXV."

For several days after this, the patient appeared to be in considerable

hazard, some sloughing took place from the edges of the wound, with a copious discharge of ill conditioned matter; his pulse varying from 125 to 150, with occasional rigors, and profuse sweatings. He was treated chiefly with the free exhibition of opiates, beef-tea, and small quantities of wine occasionally, the wound being dressed daily with resinous ointment.

On the 7th, he is reported to have taken "ten ounces of wine since yesterday morning; about midnight, having had no sleep, 50 drops of Tr opii were given, and he slept soundly for several hours; one natural stool; pulse 128, of moderate strength; tongue clean; feels much better.

Habt. vin. Rub. ℥ xii. *et Haust. Anodyn.* p. r. n. An egg for dinner daily."

From this period, the cure went on progressively, the lad's looks improved daily, while the wound assumed a more healthy appearance, the discharge gradually diminished; and he may now be considered as out of danger.

In my comments upon this case, I considered it as illustrative of three important points, the spontaneous cessation of the hæmorrhage, in cases where limbs have been torn from the trunk; the question of primary and secondary amputation; and lastly, the mode of performing this operation at the shoulder-joint.

In illustration of the first point, I showed you the portion of the humeral artery which was removed along with the remains of the arm, the internal coat of which was in some points slightly lacerated, while the external coat was over-stretched, and a considerable portion of it filled with coagulum. I referred you for farther illustration of the state of arteries after accidents of this kind, to a case detailed in the 19th volume of the Edinburgh Medical Journal, by Mr. Lizars, and to a very valuable paper, containing indeed all the information which we possess on this interesting subject, by Professor Turner, in the Medico-Chirurgical Transactions of this place. By the kindness of this last mentioned gentleman, I was also enabled to show you some drawings, exhibiting the state of arteries in accidents of this nature; where, in some cases, we find their internal coats completely torn through, and corrugated, or coiled up, as it were, within the vessel, so as to prevent the effusion of blood.

On the subject of primary and secondary amputation, we now possess a series of valuable observations, from the time at which it was made the subject of a prize question by the French academy in 1756, down to the present day: when the advantages of primary amputation are, I believe, admitted by every practical surgeon, who is now enabled to add to his own experience that of the French army surgeons, as detailed in Baron Lar-

rey's writings, that of the English army surgeons during the peninsular war, as detailed by Mr. Guthrie and Dr. Hennen, and that of the naval surgeons, as detailed in Mr. C. Hutchison's work. One of the most striking illustrations of the successful issue of primary amputations, is contained in an extract from a report made by Dr. Burke, inspector of hospitals to his Majesty's forces in Bengal, which has been made public by my friend Mr. Annesley, in his splendid work on the diseases of India. Dr. Burke states, that "of eighty cases of amputation," performed at Bhurtpore in Upper India, "the whole recovered in fourteen days."

You must not, however, Gentlemen, expect to meet with the same proportional success in the amputations performed in civil hospitals; at least, I am entitled to say, that the contrast between the success of primary and secondary amputations during the time that I have served in this house, has by no means resembled that which I was accustomed to see and to hear of in the army. For these different results in military and in civil hospitals, many reasons might, I think, be assigned, some of them more satisfactory than those mentioned by Sanson, who, in a recent paper upon this subject, has noticed the fact, but has, I think, failed to give a very luminous or satisfactory explanation of it.

In speaking of the operation at the shoulder joint, I remarked, that although this operation has undergone many modifications, to some of which the names of Morand, La Faye, Le Dran, Larrey, Lisfranc, Broomfield, Alanson and others, have been attached, yet these may all be resolved into two modes of proceeding, either by forming a superior and inferior, or an anterior and posterior flap. I have myself operated in both ways, but not sufficiently often to enable me to institute any fair comparison as to the best mode of operating; I may however be permitted to remark, that in a very large proportion of the cases requiring amputation at the shoulder joint, the soft parts are so lacerated as to leave us no choice, but to compel us, as in the present case, to form the flaps as circumstances best will admit. We are now well aware that the apprehension of an uncontrollable hæmorrhage, which alarmed our predecessors and made them slow to adopt this operation, is altogether unfounded; the bleeding may always be controlled by firm pressure above the clavicle, by the hands of a steady assistant; and, in fact, this compression, as my distinguished predecessor Dr. Thomson observes, has been found "easier in practice than it appeared to be in speculation." It is necessary, however, to remark, that at the moment of cutting through the axillary vessels and nerves, the patient is apt to give an involuntary

start, and may throw the fingers of the assistant off the artery; an accident which once happened to a gentleman assisting me in this operation, and by which I nearly lost my patient. I was for a moment completely blinded by the discharge of blood into my eyes from the open axillary artery.

Another case in which primary amputation was thought advisable during the present course, was that of *Charles Cuthbertson*, Æt. 71. This old man was admitted on the 18th of December, with a comminuted fracture of the radius and ulna at their carpal extremities, and an extensive lacerated wound of the left wrist. He had also received a severe contusion in the lower part of the back, with a fracture of some of the ribs. Although, as I stated to you in the theatre at the time of the operation, I entertained little or no expectation of this man's recovery, I determined, after a few moments consultation with my colleagues, to remove the arm a little below the elbow. It was obvious, however, at the first dressing, that no prospect of union existed; the lips of the wound, instead of presenting that wholesome turgidity and tension which presents itself in a healthy stump, were flaccid, somewhat livid, and apparently tending to gangrene; the smaller vessels (if I may use the expression) had not taken up, but had poured out a quantity of grumous blood which flowed through the dressings; at the same time the patient began to complain of oppressed breathing, and symptoms of inflammatory action within the thorax, so that he had to contend with all those difficulties which you may suppose to exist in the case of an old man labouring under acute inflammation within the trunk, and gangrene in one of the extremities. Amidst a choice of evils, the abstraction of a limited quantity of blood was tried but without any good effect, and the patient died during my temporary absence in London, about eight days after the receipt of the injury. No report of the dissection appears to have been entered in the register, but I am told that the whole of the ribs on the right side, with the exception of the two inferior ones, were found fractured, and some recent deposition of lymph on the pleuræ.

This case, Gentlemen, I am induced to mention, not from any very instructive lesson to be gathered from its progress, much less for any thing very unexpected in its event, but to caution you against an accident which occurred during the operation. While passing the knife through the fore-arm, from the radial to the ulnar side, for the purpose of forming a posterior flap from the extensor and supinator muscles, its point slipped between the bones, which rendered it necessary to withdraw it and to

pass it more carefully behind the ulna; this was perhaps owing partly to my own inadvertence to the exact position of the bones, but partly, I believe also, to the connection between the lower extremities of the radius and ulna having been broken up, so that in pressing the knife close to the back of the radius, with the view of obtaining a sufficiency of muscular substance to form a good flap, the parallelism of the two bones was in some measure destroyed, the radius was pressed forwards, and the interosseous space thus presented to the point of the knife.

Among the cases of secondary amputation, I would notice that of *Helen Coghill*, Æt. 21, as affording an example of the severe sufferings occasionally experienced from inflammation of the joints, and as affording room for a single remark on the mode of amputating the thigh.

This poor girl was admitted on the 8th of October, and the following report entered in the Journal:

"The left knee is swelled, hot, and painful; the patella is moveable, but the slightest motion or pressure upon this bone is attended with very severe pain in the condyles of the femur. The limb is kept constantly in the extended posture. Pulse natural; tongue clean; belly regular. States that her knee was first inflamed ten years ago, in consequence of a fall, from the effects of which she never altogether recovered. Eighteen months ago, after a similar accident, the inflammation was much aggravated, and has been more severe than ever during the last seven weeks.

Applic. Hirud. xx. *genu.*"

Subsequent to this various remedies were employed, but without any very obvious or permanent relief, and on the 3d of November I find the following report entered in the Journal:

"Took 3 grains of opium and slept a little; pulse 124; tongue slightly furred; no sweating; bowels regular; appetite rather worse. Previous to her admission she had been cupped, and leeches had been applied with benefit. Since her admission she has been leeched three times, and cupped three times to a large amount, and has also had a blister applied; but the disease has certainly become worse."

Leeches were again applied, and were followed at a short interval by the use of moxas on either side of the patella; but none of these remedies seemed to check the progress of the disease. The pain was so exquisite, upon any attempt to move the limb, as to preclude any satisfactory examination of the joint; her appetite failed; she was occasionally distressed with nausea and retching, and her bowels became greatly disordered. In short her sufferings were so severe as to induce her to seek relief by

the removal of the limb; but when this was seriously proposed to her she requested permission to consult her friends on the subject; and it was not until the 5th of December that she made up her mind to the operation, which was immediately performed. She took seventy drops of laudanum, and slept a little on the following night.

For some days after this she was harassed with nausea and occasional retching, her pulse varying from 136 to 140, but her bowels became more regular, and her general appearance improved. She was distressed with some superficial ulcerations on the back, but the stump from the first assumed a very promising appearance; the greater part of it united by the first intention, and indeed I am inclined to say that, upon the whole, it healed too rapidly; that is to say, that union had taken place between the lips of the wound before the inflammation contiguous to it had sufficiently abated; in consequence of this some small phlegmonous swellings, formed and burst in the line of the cicatrix, after she left the hospital, which she did on the 3d of January.

On laying open the joint after the amputation of the limb, the disease in this poor girl's knee was found to have made very extensive ravages. The preparation, which I now again exhibit to you, shows that the cartilages covering all the bones of the joint, with the exception of that on the inner condyle of the femur, were either entirely destroyed or floating loose, being completely detached from the bones.

You would observe, Gentlemen, that in amputating this young woman's thigh, instead of forming two lateral flaps, as I had hitherto been accustomed to do, I formed an anterior and posterior flap, the one from the extensors on the fore part, and the other from the flexors on the back part of the thigh. This is a mode of operating which I first saw practised by Mr. Liston in the cases of two boys whom he operated upon in the house last autumn; and in the case of such young subjects who cannot readily be made to retain their stumps in a desirable position, but are constantly inclined to elevate the point of the stump, it appears to me to offer decided advantages; in the first place, it obviates the projection of the bone between the lateral flaps, which I am told has sometimes occurred, and, in the next place, you will see that the more the point of the stump is elevated, the more are the extensor muscles relaxed so as to afford a covering for the point of the bone. Other collateral advantages attendant upon this mode of forming the flaps are pointed out in a paper of Mr. Creasers, formerly of the Bath Infirmary, in the 22d volume of the Edinburgh Medical and Surgical Journal, although he

indeed recommends the flap to be formed by cutting from the surface towards the bone, instead of transfixing the limb and cutting outwards.

The plan of dressing stumps after the common circular amputation of the thigh, so as to place the line of the cicatrix transversely instead of perpendicularly, you will find advocated both by Mr. Guthrie and by Mr. Copland Hutchison, the latter of whom, in the first edition of his Surgical work, gave a marginal sketch well calculated to illustrate his valuable remarks upon this point.

The only other case of amputation with which I propose to detain you at present is, that of *John Browne*, Æt. 37, a seaman, who, about twelve months previous to his admission, had been cast away in a vessel upon the coast of Norway, and had remained five days on the wreck. The circumstances under which he was admitted, are as follows :—" Has lost all his toes in consequence of frostbite. On the under surface of the left foot there is an extensive ulcer, which, from the very extensive destruction of the skin which has taken place, scarcely appears capable of cicatrization.

" States that his toes sloughed off during exposure to cold on the coast of Norway in November last, and that the ulcer of the left foot has never been cicatrized."

On examining accurately the state of this poor man's foot, it was obvious that no firm or permanent cicatrix was likely to be formed without sacrificing the metatarsal bones, and accordingly the following operation was determined on, which I executed on the 4th of November.

" An incision convex anteriorly having been made from a little beyond the base of the first metatarsal bone, to the most extreme point of the base of the fifth, a flap was formed from the integuments on the dorsum of the foot. The four outer metatarsal bones were then disarticulated, the internal cuneiform bone sawn through, and a corresponding flap formed from the integuments of the sole ; the two flaps were then united by three points of the interrupted suture."

The dressings were removed on the 8th, when " the wound was found partially united ; at one point the integuments had sloughed for about the extent of a shilling." Subsequent to this, he sustained a severe attack of erysipelas, which, in two or three points contiguous to the wound, terminated in the formation of matter under the skin ; it assumed the erratic form over the other parts of his limb, and encroached slightly upon the trunk of his body. The cure was, upon the whole, tedious, but he ultimately obtained a good stump, and was well satisfied with the operation. He remained in Hospital until the 5th of January, when a

passage was procured for him to London, where he expected something to be done for him by the owners of the vessel in whose service he had been so severely mutilated.

The only circumstance worthy of notice in this operation is, that in consequence of the destruction of soft parts on the anterior part of the sole, I was obliged to form a longer flap from the dorsum of the foot than what I think desirable. Had circumstances admitted of it, I should have preferred forming a single large flap from the sole, and turning it up over the anterior extremities of the tarsal bones; thus bringing the cicatrix up towards the dorsum of the foot, and rendering it less liable to be injured in walking.

After these remarks upon amputation, I would now solicit your attention to a very interesting case of severe injury of the ancle, with exposure of the astragalus, and consecutive luxation of the joint; a case in which it was apprehended that amputation might have been necessary, but which ultimately did well under Dr. Hunter's care, by the use of repeated bleedings.

Martin M'Owen, Æt. 19, *admitted* 19*th October.*—"Situated over the fore part of the ancle is a contused wound, the size of the palm of the hand, occasioned by a loaded waggon passing over it. The astragalus is felt quite bare on the outer side. There does not appear to be any fracture. The limb was placed on M'Intyre's splint, and a poultice applied.

"*October* 20*th.*—Was bled twice during the course of yesterday. Little swelling of limb. There appeared to be a dislocation of the ancle, which was easily reduced. Slept badly. Bowels freely opened; tongue moist; pulse 60; skin hot; no thirst.

Venæsectio ad ℥xii.
Cataplasma Ferment.
Sol. Tart. Antim. ℥ss. every hour.

"21*st.*—Blood buffed and cupped; some sleep; tongue clean and moist; belly open; pulse 84. Skin cool; some thirst; little swelling of leg, which is looking well.

Venæsectio ad ℥xii.
Sulph. Magnes. ℥i. *statim.*
Cont. Sol. Tart. Antimon.

"25*th.*—Sloughs nearly all separated; pulse 78, rather sharp; belly open; tongue moist.

Venæsectio ad ℥xii.
Tart. Antim. gr. ii.
Aquæ ℥viii. *M.*
Capiat ℥i. *tertiâ quâque horâ.*

" *26th.*—Blood buffed and cupped ; slept badly from pain in limb ; no swelling ; discharge increased and not so healthy ; belly open ; tongue moist.

Venæsectio ad ℥x.

" *27th.*—Granulations more healthy ; no pain of leg ; slept well ; belly open ; tongue moist ; pulse 84.

" *November* 1*st.*—Leg looking well ; was ordered six ounces of beef steak, and a pint of porter daily ; and on the 2d of January was dismissed cured."

Amongst the cases of chronic diseases of the bones, you had two very remarkable instances of the separation of extensive portions of the cranium in two boys who were under Mr. Liston's care, during the present course. The first of these, *James Thom*, Æt. 13, was admitted on the 10th of December, and stated, " that two and a half years ago, he received a blow upon the head from a stone ; a swelling formed which opened three days after the accident ; and a small quantity of blood was evacuated, since which time several portions of bone have exfoliated. There is an opening immediately over the junction of the parietal bones, towards their back part ; a small bridge of integument divided the opening ; the matter in the sore can be distinctly seen rising and falling, corresponding with the pulsation of brain. On introducing a probe, the bone is felt bare for a considerable distance round the wound on all sides. His health has not suffered, neither has he been at any time confined to bed ; no pain of head ; pupils appear dilated, but are perfectly sensible ; tongue white ; appetite good ; pulse 72, somewhat irregular.

" *December* 14*th.*—An incision was made in the scalp, and the bone found extensively bare ; no bad symptoms since."

On the 26th, it is stated that " a circular portion of bone was removed to give a free exit to the matter, has had no headach ; slept well ; tongue clean." From this period the wound assumed a healthy aspect, the patient had no headach, nor other unpleasant symptom, and about the middle of January he was dismissed with instructions to return and show himself occasionally ; upon the last examination the wound was cicatrizing rapidly, and the boy's general health good.

Another case of a more serious aspect, and attended with repeated convulsive attacks, occurred in the person of *Henry Lee*, Æt. 13, who was admitted on the 22d of December, and whose case is thus detailed in the journal :

" Received a blow on his head twelve months ago, a swelling formed which was opened a few days after the accident. Had a good deal of

pain in his head after the abscess was opened, and about a week after this had a fit, which was followed by a discharge of matter, and relieved the pain of the head; has had a great number of fits, which have all been followed by a discharge of pus; has had no fit since the 17th September last. There is an opening, the size of a shilling in the scalp, situated over the junction of the occipital bone, with the parietal bones, and the sagittal suture; the bone is black and bare for a considerable distance round; the discharge is thin and offensive; has no pain of head; health and appetite good; pupil dilated, but perfectly sensible; tongue moist; pulse 104.

"There is a fistulous opening over the sternum, leading down to the bone which is bare; an abscess formed about the same time with that on the head, and was opened; no pieces of bone have been discharged.

"*December 23d.*—A crucial incision was made, and a piece of bone, the whole thickness of the cranium, was found loose, and removed." Had no bad symptom after the operation. On the 27th he was ordered animal food, and a few days afterwards four ounces of wine daily. From this period his cure went on progressively, and on the 10th of January he was made an out patient. The fistulous opening over the sternum was touched with the potential cautery previous to his leaving the house, and has since healed.

Both these cases afforded examples of the beneficial interference of art in removing large portions of the cranial bones when in a state of disease. The contrast between such cases and those of recent injury is very remarkable, for, while in the latter every experienced surgeon dreads the extensive exposure of the dura mater, yet he knows that in cases like those I have just detailed, where the dura mater has been for some time detached from the interior of the skull, and has become covered with granulations, the carious or necrosed bone may be removed with freedom, and often with advantage; witness amongst many other cases the very remarkable one detailed by Saviard, of a woman in the Hotel Dieu at Paris, "who underwent successive exfoliations of the cranial bones to such an extent, that the pieces when put together resembled the skull cap as it is sawn off in dissections."

In the case of another patient of Mr. Liston's, *John Alison*, Æt. 21, who was admitted on the 27th October, you saw an instance of the successful removal of a portion of diseased bone from the os calcis, a bone of very different texture and situation; the detail of this case given in the Journal is as follows:—

"States, that nine years ago he sprained his left ancle. There have been

at different times sores formed, which healed up without any bone being discharged. Ten weeks ago received a slight injury, when it again swelled, and several abscesses formed and burst; one small piece of bone was discharged. There are three sores situated on the outer, and the same number on the internal malleolus. On probing the sores on the outer side, the os calcis is found carious, and the probe appears to enter the joint. The bones opposite intersected on all sides by sinuses. Health and appetite good at present. Motion of the joint not impaired."

On the 3d of November "a considerable portion of the os calcis was removed by Mr. Liston, and the cavity stuffed with lint."

Very little pain or swelling succeeded to the operation; a poultice was applied over the dressings. On the 13th a seton was drawn through the diseased part of the foot, and on the 4th of December it was reported that "no dead piece of bone can now be felt; granulations healthy; general health good."

About the beginning of January, the sores were nearly all healed. Some soft swelling remained about the ancle, the motions of which were perfect. It was done up with plaster and bandage in the manner recommended by Mr. Scott of the London Hospital, and the patient dismissed.

Akin to the last mentioned case is that of *Alexander Beveridge*, Æt. 15, admitted on the 25th of November.

"States that eighteen months ago a swelling began to form over the left os calcis on the inner side. This broke, and discharged a quantity of matter. Two small pieces of bone have been discharged. There is a fistulous opening below the malleolus, leading down to the bone, which is bare; the motions of the joint are perfect; health good."

On the 28th it is reported that "A large portion of dead bone was removed yesterday by Mr. Liston, with the assistance of the trepan; slept badly; some headach; pulse 180; skin rather hot; tongue clean; bowels open; no swelling of limb."

On the 2d of December "Dressings were removed; sore looking well; health good."

From this time forward I find nothing of any importance noted in the journal; the patient's health continued good under the use of animal food and porter, the sore granulated kindly, and on the 14th of January he was dismissed cured.

These cases, Gentlemen, I have been induced to bring to your recollection, because although they offer nothing very striking in the detail, they are well calculated, in my opinion, to encourage a more successful practice in a class of cases which have frequently been, (if I may use the expression)

slurred over, and have too often been allowed to go on from bad to worse until the patient's life has been brought into hazard, and has perhaps been ultimately saved only at the expense of his limb.

Of the partial excision of bones in cases of carious joints I have, during the present winter, seen some very remarkable and successful examples in the practice of Mr. Syme, which are, I believe, intended to be laid before the profession. These cases have struck me so forcibly that I begin to be almost ashamed to look my own preparations in the face. The Museum of the Royal College of Surgeons will, I am afraid, bear witness that I, as well as other surgeons, have amputated several limbs which might have been saved by the excision of the carious joints.

The next case to which I would solicit your attention is one altogether of a different nature, and which too seldom occurs so opportunely as to afford the students of public hospitals an opportunity of seeing the operation required in it. On the 4th of January *Elizabeth Thomson*, Æt. 40, was admitted with strangulated inguinal hernia, and the following detail of circumstances recorded in the journal:

"Has had a reducible inguinal hernia for nine or ten years; but within these last ten days it has become strangulated. Nausea and vomiting of stercoraceous matter has supervened. Much pain and debility is complained of.

"The operation was performed by Dr. Campbell, the stricture divided, and the gut reduced; to which was attached two or three diverticulæ of the intestine.

"*5th.*—Was bled to about ℥xiv; one copious stool from injection; slept well; pulse 100, rather sharp; abdomen not tender; complains of slight nausea and soreness of the wound. Had castor oil this morning; tongue moist.

"*6th.*—Pulse less sharp; tongue moist; slept well from anodyne draught; copious stool from injection last night; feels much easier this morning, and makes no complaint of pain."

From this period her cure went on progressively, and she was dismissed on the 26th of Jauuary.

The appearance of the diverticulæ or appendices to the intestine which were seen at the time of the operation, constitutes one of those unforeseen circumstances which we are constantly meeting with in operations for strangulated hernia, and for which you should never be unprepared. But one of the most remarkable circumstances in this case was, that notwithstanding the long continuance of the symptoms of strangulation, the tu-

mor itself was by no means tense nor inflamed; on the contrary, it felt rather flaccid, and not particularly tender to the touch. Dr. Campbell, however, very properly determined upon an immediate operation, seeing that the woman's bowels had been obstructed for five days, and that he could make no impression on the tumor by the taxis. The patient was upon the operating table in less than half an hour after her admission into the house, and the beneficial effects of this promptitude you had an opportunity of witnessing. The functions of her bowels were speedily restored; the wound healed kindly; and in three weeks she left the house cured, adding another to the large proportion of successful results which we have experienced here from this operation within the last few years.

On the 11th of this month, a case of disease presented itself in another female, which has been of very rare occurrence during my connexion with the house; I allude to that of *Betsy Dodds*, Æt. 41, who was admitted with schirrus of the os uteri, and of whose situation the following particulars are detailed:

"States, that about ten weeks ago, she had stoppage of the menses, which was accompanied with severe pains shooting up the back from the situation of the uterus, also with bearing down pains. These were always worse during the night. At the commencement of this attack, her health was considerably impaired. These lancinating pains still continue in the lower part of the abdomen, but more especially in the back. She now menstruates pretty regularly. She is married, and has eight of a family. She had the last child about four years ago. Has had no miscarriages."

On the 12th, Mr. Liston removed the os uteri by excision, and the part amputated was shown to you at a subsequent lecture. "There was oosing of blood to the extent of nearly a pound after the operation; she had also faintness and vomiting, with considerable pain in the uterus. The bleeding was stopped by the application of cloths dipped in cold water to the pubis; and she had an anodyne draught at bed-time, which was rejected by vomiting."

For some days after this, she had some quickness of pulse, thirst, and other febrile symptoms, with pain in the back; the sore was examined with the speculum two days ago, and found to have a healthy appearance.

In the few remarks which I offered you upon this case, I referred to the recent papers on the partial or total excision of the womb in various periodical works, and noticed particularly the statements of Lisfranc, which abundantly prove the safety of such operations, whatever may be thought of their general expediency; but as I can afford you no farther

information on this subject from my own experience, I would refer you again to the valuable observations of Hesse upon excision of the womb, where you will find numerous details of this operation, as performed by Osiander and other eminent practitioners abroad; you will also do well to consult the writings of Lisfranc of Paris, and of Blundell and others in this country.

Among several other cases of lithotomy, you had an opportunity of seeing a very large stone removed, by Mr. Liston, from the bladder of *Janet Alexander*, Æt. 38, who was admitted on the 13th of November, and whose case is thus detailed in the journal:

"Has been troubled for the last four years with frequent desire to pass urine, which contains a good deal of sediment. Has most pain when bladder is empty. At commencement her urine was bloody. Has at times violent pain in her back. Has occasionally passed portions of gravel. On sounding her, a stone of pretty large size was found. Belly costive; health rather declining; catamenia regular. Had her last child two and a half years ago.

"16*th*.—Mr. Liston removed the stone to-day, which was found of a large size, (so much so, that he required for its extraction to make an incision upwards and outwards on both sides.) A tube was introduced. Has passed a quiet night; slept much; skin moist; urine flows freely through the tube.

"7*th*.—Passed a quiet night; little pain; urine flows freely through the tube; belly not open.

Ol. Ricini ℥i.

"Did not sleep well; complains of some uneasiness about abdomen. Had an enema by which her bowels were freely evacuated, since which she is easier. The tube was removed yesterday; urine flows in good quantity; pulse 100; skin moist; tongue moist.

"24*th*.—Continues to do well; sleeps pretty well; belly open; water is not retained yet; wound looks well; skin cool; pulse 96; appetite improving.

Steak ℥iv. *Vin. Hispan.* ℥iv daily.

"28*th*.—Is doing well, but is unable to retain her urine."

On the 3d of December she was dismissed, but with some incontinence of urine.

The operation for stone, you are all aware, is much less frequently required in the female than in the male subject, and of late we have had a number of cases recorded in which stones of a very large size have been removed by dilatation of the female urethra without the use of cutting in-

struments. Many of these cases have been detailed apparently for the purpose of showing that the use of the knife is here altogether superfluous; but from what I have seen of the practice of lithotomy in the female upon the present, and upon two former occasions, I cannot believe that the sufferings of the patient, either present or remote, are at all to be compared to those occasioned by the forcible dilatation of the urethra. In the case now under consideration the removal of the stone in its entire state, by dilatation of the urethra would, I believe, have been altogether impossible.

In the very extraordinary case of *Andrew Leechman*, Æt. 70, Mr. Liston gave you an opportunity of seeing the employment of an apparatus lately much used in France for the purpose of breaking down stones in the bladder. As this case is intended for publication in the forthcoming number of the Edinburgh Medical and Surgical Journal, I shall offer no comments upon it, but shall merely transcribe the following particulars from the case book.

"States that he has laboured under the following symptoms for five months; pain at the point of the penis; when making water in a full stream it sometimes stops suddenly; has frequent desire to pass his urine, which after any great exertion, is mixed with blood. There is a considerable deposit of mucus when urine is allowed to stand. Passed a small stone on Saturday.

"On introducing a sound, a stone is distinctly felt; prostate gland healthy; no pain in back; has always enjoyed good health; says that two years ago he made his water frequently but without pain.

Descend. in Baln."

On the 13th of November, three days after his admission, "Civiale's instrument was introduced yesterday by Mr. Liston; but from the irritable state of the bladder, (though a solution of opium had been previously injected,) he was obliged to desist, without grasping the stone completely. Several small fragments, however, came away within the fangs of the instrument, and, during the course of the night several pieces of stone have been passed. There was no bloody urine after operation, nor has he passed a worse night, but slept better than for some time past.

"15*th*.—Passed a barley-corn this morning, encrusted with calcareous matter; urine much improved.

"16*th*.—A small piece of wood was passed with the same appearance as the barley-corn; complains of pain in the scrotum.

"18*th*.—A small abscess which had formed in the scrotum was opened."

On the 25th the instrument was again introduced, the stone was fairly

laid hold of, but was so soft that it was crushed by the instrument, in withdrawing which several fragments of seeds were found adhering. Subsequent to this he passed several fragments of stone having entire barley corns for their nuclei. He now confessed, that while reaping last harvest he had introduced a number of barley-corns into his urethra, but would not say for what purpose.

On the 19th of December *James M'Donald*, a delicate looking boy of about ten years of age, was sent over from Perth to undergo an operation for the stone, and was admitted under my care with the following symptoms.—" Complains of great pain in voiding his urine, more particularly towards the end of, and immediately after the evacuation, and there is a considerable quantity of mucus and blood occasionally mixed with his urine. On introducing a sound a calculus can distinctly be felt. The disease is of three years standing, and the symptoms have been gradually becoming more severe." Two days after this he was placed upon the operation table, but after a very strict and rather protracted examination, no stone could be felt with the staff, either by myself or any of my colleagues, and I was reluctantly compelled to send the patient to bed.

He was sounded in the consultation-room a few days afterwards, but without our being able to feel the stone ; and after each of these examinations he passed large quantities of calculous matter, leading me to conjecture, that although the sound could not be distinctly felt nor heard to strike the stone, that it had detached this gritty matter from its surface, or had perhaps broken it completely down.

On the 9th of January he was sounded again, first with a steel catheter and afterwards with a small sized sound, with which latter instrument the stone was distinctly struck by Mr. Liston and afterwards by myself.

The little patient was brought into the theatre on the following day, and the operation performed with a grooved staff and a common scalpel. It was very gratifying, after the circumstances detailed in the history of this boy's case, to find, that I was ultimately enabled to extract the stone with as much ease and expedition as I could ever desire ; the patient recovered without a single bad symptom, and in three weeks was sent home cured.

The stone extracted from M'Donald, which I now show you, is about the size of a large almond, and consists apparently of uric acid. It was, I am persuaded, at the time of his admission, encrusted with an adventitious layer of the mixed phosphates. This I am induced to believe from the very large quantity of calculous matter passed after each examination, amounting, I am assured, to more than a desert-spoonful in all, and also

from the different and more obtuse sound occasioned in striking the stone at the first examination, compared with the distinct stroke which was heard by all the bystanders at the time of the operation.

In reflecting upon the cause of our being unable to feel the stone upon two occasions, I am inclined to think that something was attributable to using too large a sound, which being grasped by the urethra and sphincter of the bladder, did not move freely within it; and although it was subsequently changed for a smaller instrument, yet the bladder having been previously irritated by the presence of the larger one, was probably excited to a spasmodic action, which impeded the discovery of the stone.

In my comments upon this case I noticed various circumstances which occasionally render the detection of stones difficult. I mentioned a case of my own, where, although the stone was of a very large size, it was very indistinctly perceived by the sound, and we were only satisfied of its existence by feeling it through the abdominal parietes. I stated to you also the outlines of the case of a scientific gentleman in London, who was repeatedly sounded by some of the most eminent Surgeons of the day, but not one of them could positively say that he felt the stone, until, in consequence of an accident, it was dislodged from the fundus of the bladder where it had hitherto lain, and was very readily detected by the sound. The same accident however which led to the satisfactory detection of a large calculus, led in that instance to the death of the patient within a few hours afterwards, and upon dissection, a ruptured membranous rim was found surrounding the fundus of the bladder where the stone had been lodged.

It is not however in subjects of the age of M'Donald that occurrences of this kind are generally met with, and I stated perhaps too strongly that sacculated stones are seldom or never found in such young patients. A very remarkable case to the contrary, and one very creditable to the Surgeon concerned, has since been given to the world by Mr. Wickham of the Winchester hospital, and it is not impossible that something of the same kind may have existed in a case of my own; for I mentioned to you that it had happened to me as well as to some more eminent surgeons, to have once cut into a patient's bladder without finding a stone. In the case to which I allude, the young gentleman rapidly recovered, and the mystery remains undeveloped; but into the particulars of that case I do not propose to enter, for, in my opinion, a surgeon never appears to less advantage, than when, after a disappointment of this kind, instead of frankly acknowledging his error, or regretting his misfortune, he enters into a tedious and hypothetical explanation which seldom satisfies any one but himself.

Amongst other cases of disease of the urinary organs the following very remarkable one presented itself on the 31st of October, in *Walter Hay*, Æt. 45. " About two months ago was cut in the Hospital for fistula ani, and discharged almost well. He now complains of a difficulty in passing his water, the half of which he states to be discharged by the anus. A large catheter may be easily passed into the bladder, the right lobe of the prostate is found to be enlarged and hardened, and is very painful when pressed between the catheter and the finger in the rectum."

After a few days respite, during which the fact of his passing large quantities of urine by the rectum was fully ascertained, the case was accurately examined, and " the orifice of the sinus between the urethra and rectum was distinctly seen by means of the speculum ani ; a probe was readily passed through it, and made to grate upon a catheter previously passed into the bladder."

On the following day, the 10th of November, the patient was brought into the theatre, and a full sized catheter attempted to be passed, but from the swelling and tenderness in the urethra, consequent upon the examination of the preceding day, it met with obstruction in the perinæum, and could not be made to enter the bladder; knowing, however, that the patient evacuated a great proportion of his urine freely by the natural passage, I was induced to persevere in my purpose of cauterizing the callous edges of the fistula, which was done with a red hot iron, the rectum having been previously dilated with the speculum.

On the 11th, " more water" was reported to be " passing by the urethra, but he complains much of pain from pressure on the back part of the urethra, and about the anus." Fourteen leeches were applied, with relief, and on the 13th the following report was entered :

" Last night, as the pain and irritability of the urethra had very much abated, an elastic catheter, No. 12. was secured in the bladder," and he took an anodyne draught, with 80 drops of laudanum at bedtime.

On the 14th he was reported to have " passed a tolerable night, and experiences less pain from the catheter ; pulse natural ; tongue slightly furred ; bowels relieved once ; no water appears to be discharged by the anus." After this period the whole of his urine was expelled through the catheter, which lay in the bladder for about a fortnight or upwards ; at the end of this time it was withdrawn ; a puriform discharge, occasioned apparently by its presence in the urethra, gradually subsided, and on the 6th of December he was dismissed cured.

This belonged to a class of cases of all others the most troublesome in their treatment, and but too often unsatisfactory in their results ; the

cure from a single application of the cautery was more than I anticipated, and was no doubt greatly facilitated by the free and pervious state of the urethra, and by our being enabled to introduce a full-sized catheter into the bladder soon after the application of the cauterizing iron, before the eschar occasioned by it was detached. But while this open state of the natural passage obviously contributed much to the cure, it presents to me a very considerable difficulty in accounting for the formation of this fistulous opening, which was more than an inch within the extremity of the gut.

Amongst the diseases of the vascular system, you have, during the present course, had an opportunity of seeing, under my care, two cases of temporal aneurism from arteriotomy, one of these occurred in a patient under treatment for another complaint; was of a very small size; and was cured by compression. The other that of *Bernard M'Kenzie*, Æt. 28, is thus noticed in the Journal. "Admitted on the 8th of December with a small aneurism of the anterior branch of the temporal artery. The swelling is about the size of a nut, of a livid colour, and pulsates very distinctly. Disease is the consequence of the bandage having been too soon removed after arteriotomy practised about three weeks ago."

After having tried the effect of a hard compress over the tumor for several days without any obvious benefit, I was induced to remove the whole of it by an elliptical incision, including a small portion of the surrounding integuments; the inferior or proximal extremity of the artery bled freely, and was secured by a ligature, and the surface of the wound covered with a dossil of lint; on removing this some days afterwards, the sore appeared covered with healthy granulations, and the healing process went on progressively until the 2d of January, when he was dismissed cured.

The aneurism in this case appears, from the preparation which I now show you, to have been of the kind termed false, originating from a wound in the coats of an artery. You may here see a bristle passed through the calibre of the vessel, and a coagulum of blood lying contiguous to it, in a cyst formed of condensed cellular membrane.

This is, so far as my observation goes, the common description of aneurism arising from bleeding in the temple, nor have I indeed seen any other from this cause; but it is stated that this aneurism sometimes assumes a cellular form, and puts on all the characters of aneurism by anastomosis, a disease which is always most successfully treated by the excision of the whole tumor, where it is limited in extent and distinctly circumscribed.

In a case, however, like M'Kenzie's, I am disposed to think that the

simple division of the arterial branch above and below the tumor, with the subsequent application of a compress, would prove not only an equally efficient, but also a speedier means of cure.

The frequent occurrence of these swellings, and the trouble and danger which occasionally arise from them, ought to render you careful in the adjustment of the compress after arteriotomy, an operation now become so common, that it is thought altogether below the notice of an experienced surgeon, and is often left to young men quite unacquainted with its vexatious results.

As a sequel to these cases, I would next mention that of *James Paulin*, Æt. 40, who was admitted on the of 16th January. This man had come in from Berwickshire greatly dissatisfied with the treatment of some of his medical advisers, and anxious to submit to any operation which might be deemed necessary for the cure of some " varicose veins in his right leg, which he first observed about six months ago, and which he attributed to constant riding on horseback. The saphena vein below the knee became first affected, and he has occasionally pain in the course of that vessel, and in the groin. There is much swelling of the veins below the knee, and considerable œdema of the leg. General health good. Bowels slow."

Having given him a few days rest after his journey, and administered some laxative medicine, I determined upon making trial of the mode of cure by caustic, lately recommended to the notice of the profession by Mr. Mayo of the Middlesex Hospital, not however, I own, without many doubts of its success; for, as I explained to you in lecturing upon this case, I was afraid that the caustic, like some other practices, would either do too little or too much; that it would either fail of the desired effect, or excite an active inflammation within the vein, the danger of which you have all been made acquainted with.

On the 20th of January, a portion of caustic potass was made into a paste with soft soap, and applied over the course of the vein a little above the knee, its action being circumscribed by a piece of adhesive plaster previously fixed upon the thigh, with an oval aperture in it for the admission of the caustic. After having been allowed to remain for about seven hours, it was removed, and an emollient poultice applied; the eschar separated in about ten or fourteen days afterwards, and left the trunk of the vein exposed in the bottom of the wound to the extent of upwards of an inch; it was also to be felt hard and swollen for about an inch below, and about two or three inches above the site of the eschar; the portion of it laid bare was expected to slough, it being seen black and apparently dead in the bottom of the sore, this, however, did not take place, the granulations, which were florid and healthy, gradually encroach-

ed upon it and covered it over. The man now became impatient to leave the hospital and to return to his home, expressing much gratitude for what had been done, and being satisfied that he was to obtain an effectual cure. He was with difficulty detained until the 13th instant, at which time the sore was cicatrizing rapidly; and what was remarkable, although the principal dilatation of the vein immediately below the knee, did not appear to be much diminished while the limb was at rest, yet no sooner was it put in motion than the blood began to circulate freely through the collateral veins, and the swelling to disappear.

Such are the outlines of some of the more instructive cases which you have had an opportunity of witnessing in the progress of the present course, and I have now only to direct your attention to a return of the whole of my own cases, which you will find annexed to the present lecture, and which has been made from a Register kept most carefully by my apprentice Mr. Balfour.

I am now, Gentlemen, according to the established routine of attendance in this House, about to relinquish a duty than which I have never discharged any other with more gratification to myself. The practical mode of instruction which best befits this chair, is one the most consonant to my taste and to all the habits of my life. Could I presume to think that our connexion as teacher and student had been as instructive to you as it has been agreeable to me, I should then retire with the conviction of having accomplished a great public good, and of having contributed largely to the education of young men, who require only to have their studies well directed, to ensure their becoming useful members of their profession, and blessings to society. But, Gentlemen, when I look to the very extended experience and deep research which the surgical pupils of this Hospital have long been accustomed to witness in the Professor of Clinical Surgery, I cannot but fear that I may have come far short of the mark; you will, however, permit me to say, that in so far as my experience could be brought to bear on the cases under consideration, it has been fairly laid before you; but while I have ever been most anxious to discharge my duty to the patients in this House, and to the students of this Class, I have never made any display of a questionable zeal, nor have I any affected enthusiasm to support; why then, Gentlemen, should I hesitate to avow, that I now look forward with pleasure to the appointment of Consulting Surgeon, as one demanding less continued atten-

tion, and as one fairly earned, by three and twenty years employment in the responsible and often laborious duties of hospitals? I have no right, however, to promise myself any thing like a respite from my labours as a teacher. I must not forget, that there is another body of young men, the Students of Military Surgery, who have every claim to my best exertions, and to whose behoof I am bound to turn the extensive field of observation which still lies open to me as a Consulting Surgeon of the House; —as a Consulting Surgeon, I shall still enjoy many valuable opportunities of adding to my own stock of experience, and of contributing to their information;—as a Consulting Surgeon of this House, I shall ever retain a warm interest in the treatment of its patients, as well as in the instruction of its pupils; and whenever you or your successors shall give me an opportunity of showing such interest, you will not, I trust, find me forgetful of the kind and respectful attention with which I have uniformly been honoured by the Students of Clinical Surgery.

GENERAL RETURN of Surgical Cases treated by Dr. Ballingall in the Royal Infirmary of Edinburgh, from the 1st of November, 1828, to the 28th of February, 1829.

DISEASES.	Remained 1st November.	Admitted.	Total under Treatment.	Dismissed.					Died.	Remain.
				Cured.	Relieved.	Convalescent.	Without Relief.	By Desire.		
Abscess	2	2	4	3	...	...	...	...	1	...
Aneurism	...	1	1	1	...	...	...	...	...	...
Burn and Scald	2	8	10	5	...	1	...	1	2	1
Carbuncle	1	...	1	1	...	...	...	...	...	...
Contusion and Sprain	...	16	16	14	...	...	...	...	...	2
Diseased Joints, (one amputation)	6	12	18	7	4	...	...	1	2	4
Diseased Spine	1	1	2	...	2	...	...	...	...	...
Dislocation	...	2	2	2	...	...	...	...	...	...
Erysipelas	...	5	5	2	...	...	...	...	2	1
Fistula	1	3	4	2	...	1	...	...	...	1
Fracture, simple	7	19	26	20	...	...	...	...	1	5
Fracture, compound	2	1	3	2	...	...	...	...	1	...
Frostbite, (one amputation)	1	...	1	1	...	...	...	...	...	...
Gangrene	...	1	1	1	...	...	...	...	...	...
Hernia Humoralis	1	3	4	4	...	...	...	...	...	...
Hernia Strangulated, (one operation)	...	2	2	2	...	...	...	...	...	...
Injury of the Head	...	2	2	2	...	...	...	...	...	...
Necrosis	1	...	1	...	1	...	...	...	...	...
Ophthalmia and diseases of the Eye	1	11	12	5	1	...	...	1	...	5
Phymosis	1	...	1	...	...	...	...	1	...	...
Prolapsus Uteri	...	1	1	...	...	...	...	...	...	1
Ruptured Urethra	...	1	1	...	...	...	...	...	1	...
Scrophulous and glandular swellings	1	4	5	2	2	...	...	...	...	1
Stone in the Bladder, (one operation)	...	1	1	1	...	...	...	...	...	...
Stricture of the Urethra	...	2	2	...	1	...	...	1	...	...
Tumor, (removed by operation)	...	1	1	1	...	...	...	...	...	...
Ulcer	11	20	31	24	2	1	...	1	...	3
Varicose Veins	...	1	1	1	...	...	...	...	...	...
Wound, (two amputations)	2	11	13	7	...	...	...	...	2	4
Total,	41	131	172	110	13	3	...	6	12	28

N. B. The cases in the above return have been for a few weeks past under the care of Dr. Campbell.

DISEASES	Number of Cases	Total Number of Cases treated	Deaths	Discharged	Relieved	Relapsed	Remaining
Abscess	2	4	3	...	...	...	1
Aneurism	...	1	1	...	...	...	...
Burn and Scald	2	10	8	...	1	...	1
Carbuncle	1	1	...	1	...	...	...
Contusion and Sprain	...	16	14	...	...	...	2
Diseased Joints, (one amputation)	6	18	7	4	...	1	6
Diseased Spine	1	1	...	2	...	...	...
Dislocation	...	2	2	...	...	...	...
Erysipelas	...	6	3	...	...	3	1
Fistula	1	3	2	...	1	...	1
Fracture, simple	7	76	56	20	...	1	6
Fracture, compound	2	1	3	...	...	1	...
Frostbite, (one amputation)	1	...	1	...	...	...	...
Gangrene	...	1	1	...	...	...	...
Hernia Humoralis	1	3	4	...	...	...	...
Hernia Strangulated, (one operation)	...	2	2	...	...	...	...
Injury of the Head	...	2	2	...	...	...	...
Necrosis	1	...	1	...	...	...	...
Ophthalmia and diseases of the Eye	1	13	12	6	1	...	6
Phymosis	1	...	1	...	...	1	...
Prolapsus Uteri	...	1	1	...	...	...	1
Ruptured Urethra	...	1	1	...	...	1	...
Scrophulous and glandular swellings	1	4	2	2	...	...	1
Stone in the Bladder, (one operation)	...	1	1	...	...	...	...
Stricture of the Urethra	...	2	...	1	...	1	...
Tumor, (removed by operation)	...	1	1	...	...	...	...
Ulcer	11	50	31	24	2	1	3
Varicose Veins	...	1	1	...	...	...	...
Wound, (two amputations)	2	11	12	7	...	...	2	4
Total,	41	131	178	110	18	3	...	6	12	28

N. B. The cases in the above return have been for a few weeks past under the care of Dr. Campbell.