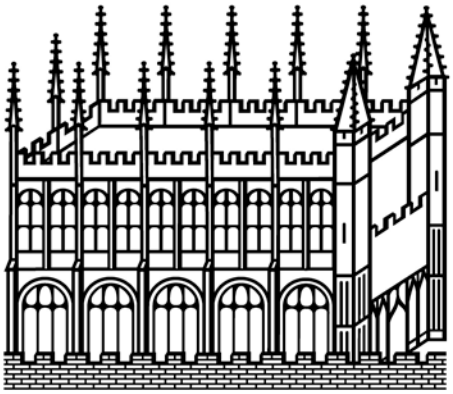

# SIR WILLIAM FERGUSSON, BART.

## A BIOGRAPHICAL SKETCH

HENRY SMITH

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## BIOGRAPHICAL SKETCH

BY

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# PREFACE.

A DISTINGUISHED member of our profession suggested that I should reprint in a separate form the biographical notes of the late Sir William Fergusson which appeared in the pages of the *Lancet;* and as I have found that that somewhat brief and imperfect sketch gave satisfaction to the numerous friends of this distinguished surgeon, I have no hesitation in adopting the suggestion. My intimate association with him for a period of thirty years—first as a pupil, then as a confidential private assistant, and lastly as a colleague,—enabled me to form an estimate of his character in a manner which was not vouchsafed to many. I have taken advantage of this opportunity, and have made some considerable additions to the Memoir, which will render it more complete, and more fully illustrative of the qualities and career of my lamented friend.

HENRY SMITH.

82, WIMPOLE STREET.
*March*, 1877.

# Sir WILLIAM FERGUSSON, Bart.

William Fergusson was born at Preston-Pans in Scotland in 1808, his birthday being March 20th. He received the rudiments of his general education at Lochmaben, and subsequently was removed to the High School at Edinburgh, where he completed that education. At one time he was intended for the study of the law, but circumstances led him to the career of medicine and surgery, and he commenced his special studies in Edinburgh.

He was at an early age fond of mechanics, and a circumstance connected with this peculiar knowledge, and which was narrated to the writer by the late Dr. Knox, materially influenced his future career. At this time Knox, who was, perhaps, the most celebrated teacher of anatomy in Europe, and who numbered young Fergusson among his pupils, was struck by the ability displayed in the construction of

a piece of mechanism, and he determined to avail himself of the services of his clever pupil. In due course Fergusson became demonstrator to Knox.

How beautifully Fergusson at that time could dissect is well seen by a specimen showing the arteries of the foot, and which is now preserved. Knox became very proud of his pupil, and infused into Fergusson the same ardour and energy which animated himself in the pursuit of anatomy, and marked out for him a bright career as a surgeon. Knox lived long enough to see these bright anticipations entirely fulfilled; and, although his own career terminated in gloom and disappointment, he always referred with pleasure to his former connection with Fergusson, while the latter evinced towards his old teacher the utmost respect and gratitude, and was ever willing to assist him when, at the last, health and means were failing him.

Fergusson now betook himself in reality to the study and practice of surgery. He obtained the Fellowship of the Edinburgh College of Surgeons, became attached to the dispensary, and subsequently was elected one of the surgeons to the Royal Infirmary, and there he soon showed the qualities he possessed, especially in reference to the operative department. Success was crowning his efforts in the northern capital, when the turning point of his career occurred by his appointment to the Chair of Surgery in King's College, and to the Surgeoncy of King's College Hospital, which events took place in 1840.

The school of King's College was at that early period of its existence gaining a great reputation. Watson, Green, Robert Fergusson, Todd, and Partridge, in their several positions as teachers, had been the means of attracting large numbers of pupils to the medical school; and when the dismal old workhouse of St. Clement Danes was turned into a hospital, and Fergusson was appointed as its surgical head, it soon became apparent that great deeds would be accomplished there. Imbued with the spirit which had animated Liston and Syme in inaugurating quite a new era in surgery, he followed closely in their path, rendered himself conspicuous by the brilliant manner in which he performed the most difficult and unusual operations, and at the same time simplified his art by strongly leaning towards what he himself was pleased to call "conservative," but which perhaps might better be termed "preservative" surgery.

At that period of time the operation of excision of the elbow-joint had hardly become generally established, notwithstanding the powerful example of Syme. Fergusson, however, was one of the first to practise it on a large scale, and did much towards showing the value and truth of the teaching and example of Syme. His operation, too, on the upper jaw caused at this time a great sensation, and the reception into surgery of this important and valuable proceeding was in a measure due to his influence.

At this period his predecessor and great competitor, Liston, was at the very height of his reputation as an

operating surgeon, and was astonishing the visitors who flocked to the North London Hospital by his brilliant feats. Notwithstanding this, however, Fergusson was slowly and surely attracting a great deal of attention by his own splendid abilities, and comparisons not unfavourable to himself were made as to the merits of the two men by those who had repeated opportunities of witnessing their exploits. While boldness, skill, and rapidity of execution were the prominent characteristics of each in the exercise of their art, it appeared to some that Liston's boldness at times amounted to rashness; whilst Fergusson exhibited, with an equal amount of skill, greater caution and self-command. Liston was a more powerful man, and had an immense grasp of hand; thus he could execute certain movements connected with the larger and rougher operations with wonderful rapidity. In some operations—as, for instance, in lithotomy—they were each and equally distinguished. Each of them, using the simplest instruments, accomplished the entire proceeding with the most marvellous skill and with extraordinary rapidity.

The subject of this memoir, on first coming to London, like many other men who have afterwards become eminent, had a few years of weary and anxious waiting; but as the effect of his teaching and example at King's College and the hospital became recognized, patients began to resort to his house in Dover-street, and it soon became apparent that his success would be assured. Fortune marvellously favoured his efforts, for in a few short years

many of the leading surgeons were called away; and last, and not least, both Liston and Aston Key were within a short time removed by death, when they were in the zenith of their reputation, and in the vigour of their manhood.

From this period Fergusson's practice rapidly increased, and the whole of his time was taken up by his public and private duties. His reputation had been considerably enhanced by the publication of his "Practical Surgery," which has gone through five editions. He had at an early period paid much attention to the subject of stone in the bladder, and so far back as 1834 had introduced the rack and pinion lithotrite, a handy and simple instrument which he ever afterwards used. For a number of years he had a very large practice in the treatment of stone, and a considerable proportion of the cases which came to London for advice were submitted to him, either for lithotomy or lithotrity.

In 1845 he brought before the Medico-Chirurgical Society his views on cleft-palate, a deformity which had resisted the skill of all previous surgeons. Fergusson, however, had made a careful dissection of the parts in a subject who had cleft-palate, and he discovered that the action of the levator palati muscles was such as chiefly to prevent union of the parts after they had been brought together. His operation, as is well known, consisted in the free division of these muscles preparatory to bringing the edges of the soft cleft together. The results were admirable, the operation became as successful as it

was formerly the reverse; and if Fergusson had done nothing more for surgery, he would have gained for himself a great name. This operation was always a favourite one with himself, and he was very proud of the results which occurred in his own hands and in those of his pupils. At first he only succeeded in closing the soft palate, but a few years ago he devised a method which, unknown to him, had been suggested by Dieffenbach as well, and which consisted in splitting the bony palate on each side of the cleft, and at the same time bringing the edges into contact by means of sutures passed through holes made in the edge of the cleft. He had the pleasure to see this operation succeed admirably in his own hands, and with his colleagues at the hospital. The very last communication he made public was a record of his latest experience on this subject.

In 1845 he revived the operation of excision of the head of the femur in an instance of incurable disease of the hip-joint. The operation was a complete success, and at the time attracted great attention. The question of the propriety of this operation was much discussed at that period, and considerable opposition was excited against it, mainly through the violent criticism of Mr. Syme, who denounced the operation in strong terms. However, it soon became established as a recognized and valuable proceeding; indeed, some enthusiastic surgeons have since advocated the proceeding in cases where Fergusson would not have sanctioned it.

In 1847 he performed the operation of excision of

the entire scapula in a case of extensive disease of the bone, where previously amputation of the arm at the joint had been carried out. The patient made an excellent recovery, and this formidable proceeding was subsequently successfully accomplished by himself and some other surgeons. In one notable instance he removed the entire scapula with the arm in a young woman, under discouraging circumstances, with the most satisfactory results. The particulars both of the operation on the hip, and that on the scapula, were published in the *Transactions* of the Medico-Chirurgical Society.

As Fergusson increased in years and in experience, he became more and more imbued with his love of conservative surgery, and in 1850 he directed his attention to the surgery of the knee-joint. Dissatisfied with the practice of amputation of the thigh for incurable disease of this joint, he had long meditated the possibility of supplanting this great mutilation by some other method; and, encouraged by the celebrated case of Park of Liverpool, notwithstanding the unfavourable experiences of Crampton and Syme, he determined to make the attempt to save the limbs as well as the lives of patients suffering under disease of this great articulation. Accordingly, he adopted the practice of excision of the joint in a case in which the operation was called for. Death rapidly followed this praiseworthy attempt. But Fergusson was not discouraged; he repeated the operation in another case with success, and then, so far as he was

concerned, amputation for disease of the articulation alone became a thing of the past.

It was a most difficult task, however, to introduce this operation into surgery, and the most violent opposition was excited against it. The success attending Fergusson's first efforts was by no means encouraging, and at one time it appeared as though the procedure would have to be abandoned; but, thanks to the energy of Jones of Jersey, Butcher of Dublin, the late Peter Price, and others of his own pupils, it soon became apparent that the operation was not only justifiable, but far preferable to amputation, as a highly useful limb could be retained at the same time that the whole of the diseased structures were removed. The operation finally became an established one in surgery, and nowadays it is hardly probable that any hospital surgeon would venture to amputate a thigh for disease of the knee where the ordinary conditions for excision of the joint were favourable.

Fergusson, in his later years, often spoke with just pride of the success which attended his efforts and those of his followers in this matter. As an illustration of the strong feeling at first evinced against this operation, it may be stated that on one occasion when Fergusson was about to perform excision of the knee-joint in the theatre of King's College Hospital, a gentleman, who at one time was associated with him, addressed him in the theatre, and protested against the operation. Of course the interference was unheeded.

At this time Fergusson held the most prominent place in London as a surgeon in active practice, and maintained this position, making a very large income. He was consulted in nearly all the severe cases requiring surgical operation, and a vast number of the profession, both abroad and at home, sought his advice for their patients.

An interesting and important event in connection with his career occurred in 1861—viz., his admission into the Council of the College of Surgeons. He had only passed the College in 1840, on his arrival in London, and therefore, as regards seniority, was far below many men who had not his claim of high standing. His friends, however, thought it was full time that an attempt should be made to break through the rule which had hitherto obtained at these elections. There was great excitement preparatory to and in connection with the election. The Council to a man determined to oppose Fergusson's election, and influences of various kinds were brought to bear against the efforts made for him; but all were useless. The fellows at large took the same view as the small and compact body of his staunch friends in London, and, to the great satisfaction of all right-thinking men, Fergusson gained a seat in the Council. In due course he reached the chair, and filled the office of president of the College with the utmost dignity and ability.

In the years 1864 and '65 he delivered a course of lectures in the theatre of the College of Surgeons on the Progress of Anatomy and Surgery during the present century, and in these admirable addresses he

gave, as it were, an epitome of his own vast experience. These lectures were embodied in a separate volume, which will always be appreciated by practical surgeons.

In 1866 a baronetcy was conferred upon him on account of his eminent merits as a surgeon, and the entire profession looked upon this distinction as an honour to itself, as well as a most fitting reward to the man upon whom it was conferred. In 1867, after the death of Sir William Lawrence, Sir William Fergusson was made serjeant-surgeon to the Queen, and thus he had gained all the honours it is possible for a man in our profession to obtain. In 1870 he retired from the post of Professor of Surgery at King's College, but still retained the surgeoncy to the hospital with the chair of Clinical Surgery.

Up to this period Sir William Fergusson had enjoyed remarkably good health; his fine vigorous frame seemed capable of any exertion; he never tired of work, and after the day's professional engagements he entered into the pleasures of society with great zest. Most hospitable himself, he enjoyed the hospitality of his numerous friends. To music and the drama he was much attached. He was in the habit of spending the autumn at his beautiful seat in Peeblesshire, and in the midst of his family and friends he most thoroughly enjoyed his annual holiday.

It was in the midst of this enjoyment at Spittlehaugh, in September, 1875, that the first shadows of the tomb fell upon Fergusson. At that time he wrote

to an old and attached friend in London—to whom he had been in the habit of describing his country enjoyments for nearly thirty years—that he had not felt very well, and that the place did not seem to agree with him as formerly. He, however, returned to London in the middle of October, and was apparently as well and active as ever; but those who were mostly with him noticed that some of his energy had escaped him, and that he had become somewhat paler.

During the intense cold of the severe winter he complained of bronchial irritation; this increased, and at the early part of the year symptoms of mischief about the chest and heart manifested themselves. His friend and colleague, Dr. George Johnson, was summoned to him, and at once detected renal mischief. Notwithstanding the wishes of his numerous friends that he would abstain from working altogether and seek a more genial clime, he remained at his post; but the malady increased, and after a brief sojourn in the Isle of Wight and at Brighton, he was compelled to take to his bed, and the symptoms of his disorder increased so alarmingly that his death was expected daily. He was conscious of his extreme danger, calmly and resolutely awaited the approach of death, and made his dispositions accordingly. He, however, made a marvellous and unlooked-for rally, and was able to throw off nearly all the effects of the disease. By the summer he was so well as to be able to drive out, and at the end of July visited

his Scottish home. Here he remained quietly with his family and a few intimate friends, and in September the writer of this notice visited him and found him in very fair health, and able to enjoy his beautiful home.

He was at this time strongly urged to resort to Italy or the South of France for the winter, but steadily refused to listen to such counsel. He improved so much that he returned to London at the end of October, and although unable to attend his public duties, saw a few of his old patients. During the whole period of this improvement the albumen in the urine, although less, persisted in certain quantities, and in the middle of last month cough and dyspnœa recurred, he lost his appetite, and had restless nights. He took to his bed on the last day of January, dyspnœa and restlessness, with more or less delirium occurred, but he passed quietly away in my presence on the evening of February 10th.

In forming an estimate of Fergusson's character as a surgeon, we must bear in mind the peculiar circumstances of his education as well as the period in which he was trained, and the influences which were brought to bear upon him. The fact of his having a great love for mechanics assisted him much in directing his mind especially to the more material part of surgery, as it were; and while he was fast acquiring his technical knowledge, a new era in surgery, as we have before stated, was being inaugurated in the school to which he belonged, mainly by the brilliant talents of Liston and Syme.

In the operative department more particularly was this the case. Liston especially, both while in Edinburgh and afterwards in London, astonished the world by his marvellous feats of surgery. Fergusson easily fell under this potent influence, and, attracted by the brilliant displays he witnessed, and filled with admiration for the man who could wield the knife with such masterly skill, he determined to follow in his steps, and, if possible, to equal him. Those who have had opportunities of seeing the two men engaged in the same work must confess that they were equally brilliant in that department of their art which they more especially affected, and that they displayed, in an almost equal manner, the same coolness and firmness of purpose, and that readiness of resource, without which the most profound knowledge and brilliant skill are like "sounding brass and a tinkling cymbal."

All those who saw much of Fergusson in the operating theatre, whilst admiring his wonderful skill, could not fail to recognise the qualities here mentioned; but his self-command and temper, unperturbed by any unforeseen circumstances, were peculiarly striking. If anything of this kind occurred, and others were alarmed and excited, his own coolness and self-possession would reduce everything to order. On one occasion, in the very early days of chloroform, he was about to perform a severe operation on the jaw of a lady. The friends were assembled in the next room, only divided by a thin partition. The patient was placed on the operating

table, and the assistants were at their posts while the chloroformist was at his work. Suddenly the patient became to all intents and purposes lifeless. The chloroformist and assistants were each and all equally alarmed and excited at this unlooked-for complication; but Fergusson, retaining his self-possession, calmly and coolly gave his orders, and in a few minutes the patient was restored. This was effected in such a quiet manner that the assembled family in the next apartment knew nothing whatever of the occurrence in question.

On another occasion, whilst operating on a large deep-seated tumour in the neck, the external carotid artery or one of its large branches was severed, and a tremendous flow of blood occurred. One of his assistants, with commendable alacrity, rushed forward and thrust his finger to the bottom of the wound. Fergusson, undismayed by this mishap, coolly said, "Jist get your finger out of the way, mon, and let's see what it is," cleverly secured the vessel, and completed the difficult dissection.

In his operations he was remarkably neat, if it may be so termed, and he was most particular in all details; and although he had a peculiar and elegant style of his own, and was fond of displaying it as it should be displayed, he hated any unnecessary loss of time or attention to immaterial points. As one illustration of this it may be mentioned, that a friend of his, on one occasion, undertook the ligature of a large artery in the presence of several others. The vessel was cut down upon and demonstrated in the

most masterly manner, and, with a pardonable pride, the operator called Sir William's attention to the denuded vessel. "Then," was the answer, "jist put a thread around it."

On two or three occasions he was placed in great difficulties, and very nearly failed in completing the operation he had undertaken. Once only was he very nearly committing the error of failing to reach the bladder in an operation for lithotomy in a child. This was many years ago, at King's College Hospital. The operation was most trying and arduous. It appeared as though Fergusson must fail; but he maintained his coolness and self-possession, and at last, to the great relief of himself and a crowd of on-lookers, he reached the bladder and extracted the stone.

On one occasion only was he ever known to fail entirely in completing an operation he had undertaken. This was at King's College Hospital, where he was endeavouring to divide an old, hard, and impermeable stricture at the point of the catheter—in fact, the old operation for perineal section. After a long and arduous attempt, he was fairly beaten, and was compelled to relinquish the attempt to carry the catheter into the patient's bladder.

In some of the greater operations of surgery Fergusson exhibited his powers more particularly. Thus, in the removal of the upper jaw, it was wonderful to witness the extraordinary skill which he displayed; and to him we are indebted for the simplicity of the modern operation. By making an

incision through the upper lip into the nostril of the affected side, he was enabled to obtain room enough to apply his instruments in such a manner that the entire jaw could be removed without leaving any material deformity. His lithotomy was perfect, and the work of a few moments; whilst his operations on large and deep-seated tumours, and his excisions of the joints, especially of the knee, manifested his skill in a manner which excited the utmost admiration. Greatly as he excelled in these formidable procedures, however, he nowhere displayed more skill than when operating for hare-lip and cleft palate, to which deformities he had always paid especial attention; and he was more satisfied with his results in this particular department of surgery than any other.

Fergusson excelled chiefly in the operating theatre, there is no doubt, and his peculiar education and early surroundings, combined with his love for mechanics and great skill in the use of instruments, induced him to overrate the operative part of his art, and thus he somewhat failed as a teacher. His powers as a lecturer were not equal to those he displayed in the operating theatre—in other words, he was very reticent. Observant and full of knowledge himself, he forgot that students must be taught these qualities. Those who had much opportunity of watching him in his work in the wards could not fail to recognise this reticence as a defect in his character as a hospital surgeon and teacher, and there is no doubt that he would have added vastly to the benefits

he conferred upon his profession if he had been more liberal in imparting to his pupils in his daily rounds the results of his great and varied experience.

To some superficial observers it might appear that Fergusson did not shine so much in the consulting-room and by the bedside as in the operating theatre. His knowledge of disease, however, his vast acquaintance with all the varieties and forms of morbid action with which the surgeon has to deal, were easily appreciated by those who had the opportunity of discussing grave and important surgical questions with him, and then it was seen what a flood of light he could throw upon some difficult and obscure case, and how seldom it was that he fell into error.

Of Sir William Fergusson's personal character it is unneccessary to say much. It, however, may be stated with truth that he lived and died beloved and lamented by all who came in contact with him. Beneath the somewhat reserved and undemonstrative outside there lay the warm and genial heart. Unselfish to a degree, considerate for others, he was the staunchest of friends, and most forgiving towards those who had done him wrong. He was the true type of a Christian gentleman, and thus, whilst we have the utmost appreciation of his splendid surgical skill and attainments, we do not lose sight of his high moral worth and independence of mind. Added to these qualities were his unfailing courtesy and thoughtfulness for others, a temper scarcely ever disturbed, and a mind always calm and serene under the most trying circumstances.

One of the most interesting episodes connected with Fergusson's early career as a surgeon was his operation on John Reid, the distinguished physiologist and fellow-demonstrator under Knox. As is well known he suffered from a malignant ulcer of the tongue, attended with such severe pains, as led Reid to consult his surgical friends as to the advisability of some radical measure. At this time surgeons were somewhat chary about cutting operations in the tongue, in consequence of the hæmorrhage which was liable to occur, and more than one very distinguished surgeon refused to operate on Reid. Mainly, however, at the suggestion of the late Sir James Simpson and Hughes Bennett, he determined to follow the advice of his friend Fergusson, who did not hesitate to undertake the business. He performed a severe operation on him, removing a considerable portion of the tongue. This was before the days of chloroform, and Reid bore the proceeding with astonishing calmness, exciting admiration in the mind of Fergusson and those around him. Great relief followed for a time, but as usual it was only temporary, and the disease returned and ultimately destroyed this indefatigable worker and excellent man. In a touching memoir published after his death in the *Medical Times*, Fergusson paid a high tribute to his worth—a tribute as creditable to the writer as it was honourable to the subject of the memoir.

About this period, in 1846, another very remarkable and touching circumstance occurred in connec-

tion with his career, exemplifying the remarkable character of the man and the surgeon. A very near and dear relative suffered from a large tumour involving the upper jaw and requiring removal of the bone. Fergusson, perceiving the gravity of the occasion and of the proceeding, refused to undertake it, and requested the patient, a lady, to put herself in the hands of the only man he could trust at that period with such an operation, namely, Robert Liston, but she as resolutely refused, and Fergusson was obliged to perform it, and this was before the days of chloroform. He performed the operation as coolly and cleverly as though he were in the theatre of King's College Hospital.

Of Liston's character as a surgeon he was a great admirer, and he took him as a model. He always spoke of Liston with the greatest enthusiasm, and I shall never forget one occasion on which he and I had been dining together alone when the subject of conversation was Liston's surgical character. Fergusson was not an excitable or demonstrative man, but on this occasion he was describing to me a tremendous operation of removal of a large tumour by Liston, and the vivid picture he gave of Liston's action and manner I shall never forget. He was always glad to obtain any memorial of Liston, and he was particularly pleased when he was able to get a small picture of him riding on his favourite cob, painted by Sir Francis Grant.

Nothing better illustrated Fergusson's generous and forgiving disposition than his demeanour towards

Syme. It is well known to all who moved in the professional circle in Edinburgh that this distinguished surgeon had the misfortune of getting into trouble with many of his *confrères.* Fergusson did not escape his criticism, and so much ill-feeling was created, that at one time a breach of the peace was threatened. Syme had strong feelings and strong views on matters surgical, and did not like any one to question his dicta, and when he attacked any one in his writings he did not dip his pen in honey. Fergusson's proceedings in reference to several questions in surgery were criticised with remarkable severity, in fact, with uncalled-for bitterness. Fergusson felt this much, but still he had the greatest opinion of Syme as a surgeon; and even in the midst of the attacks levelled against him, he always spoke in the highest terms of Syme whenever he had occasion to mention his name on public occasions in lectures or in writing. This admirable trait in his character was also especially noticeable on an occasion when he had invited severe criticism by giving views on a matter which somewhat involved the character of our profession. A journal, which was conducted by an individual who had received kindness and hospitality from Fergusson, was permitted to be the medium of anonymous letters, in which he was held up to ridicule and contempt. On being remonstrated with for still keeping friendly relation with one who could permit such attacks, he replied simply that he should only answer such conduct by forgiveness and kindness.

Illustrations of his generous and forgiving qualities were not unfrequently witnessed by those who were closely associated with him in his work, especially his operations. He was remarkably particular about every thing being in good order, and minutely prepared; and he expected that all his assistants should be in their proper position, and ready to furnish him all the aid he might require. At times it would happen that a clumsy or inexperienced assistant or dresser would either fall short of his duty or would commit some egregious blunder. Fergusson would be very angry for the moment, and at times even severe, when the provocation was great, but so soon as the operation was over his demeanour towards the offender was such as though nothing had occurred. The fact is, he was never unjust; his pupils and assistants felt this, and the result was that these momentary rebukes, though severe, produced no ill-feeling, but only tended to stimulate those about him to better and more careful efforts. He had a great horror of any traces of an operation being allowed to remain behind, either in the hospital theatre or in private practice; and those who were much about him learned most valuable lessons from him. As an illustration of this, I may relate an anecdote. An old assistant of Fergusson had to remove the upper jaw in private. A tumour had been taken away from the part by a very distinguished surgeon some time previously. Fergusson, with myself and others, were present at the second operation, and on the completion of it, as usual

every trace of blood, etc., was removed. I saw the patient a few hours after, and when I went into the room he said, "When I awoke up and looked around me I could not believe the operation was done." On asking him his reason, he said, "When Mr. —— operated, the room was like a shambles when he left, and I cannot see any traces of the operation about this time."

I have alluded to his marvellous composure and command of temper under circumstances of great difficulty, and when he had been sorely tempted to exhibit some amount of irritation; but in an intercourse with him, lasting over thirty years, I have scarcely ever seen him ruffled by a patient. An instance of this self-command occurred many years ago, and made a great impression upon me. A young lady with a cleft palate came to London, for the purpose of having the operation performed. When we got to the lodgings all the persuasion in the world would not induce her to let him touch her. Some time afterwards, and when she had grown older, and we had hoped wiser, we made another appointment. She brought her own medical man with her from a long distance, and everything was prepared for the operation. She was seated in the chair, and asked to open her mouth; directly she caught sight of the instruments she obstinately refused to allow anything to be done. Fergusson, her own attendant, and myself vainly spent a long time in endeavouring to persuade her to submit. Fergusson, although extremely annoyed at this

exhibition of weakness, for a second time, did not show the least irritation before the patient, but as we drove away he expressed his feelings to me about the matter in very warm terms. This occurred at a time when chloroform was not employed in the operation for cleft palate. It was especially in these days and in those cases where it was so extremely difficult to control the patients, that I have so often admired the wonderful tact and temper which were such prominent qualities in Fergusson's character.

One of the most striking features about Fergusson, in connection with his operations, and one only to be thoroughly appreciated by those who were closely and continuously associated with him, was the extreme caution he evinced in operations where important textures were concerned; and yet, paradoxical as it may appear, he on two occasions committed a serious error, which probably a much less skilled and experienced hand would not have perpetrated. I allude to the instances—well known as they are to many, as they took place before crowded audiences in King's College Hospital—where he on one occasion divided the popliteal artery in performing resection of the knee, and on the other wounded the vein whilst passing a ligature around the femoral artery. It seemed as though the very great confidence he had in his own consummate skill led him into error, for his knowledge of healthy and diseased structures was so profound, and the glance of those keen eyes was so unerring,

and the movements of those hands, strong and yet gentle, were so sure and steady, that it is impossible to account for such a mishap in any other way than that I have suggested. He was generally so remarkably cautious when carrying his knife through textures and into regions where danger beset him on every side, and yet so determined to execute the most difficult and dangerous operation thoroughly, that safety and completeness of execution were almost invariably the results of his handiwork. A great deal of his success as an operator, especially when dealing with large and deep-seated tumours, as, for instance, those in the neck and axilla, was due to the fact that, after the first incisions, he was accustomed to use the point of his knife very sparingly indeed. He would make free use of his left hand, and, in many instances, I have seen him, aided now and then by an occasional touch of the knife and the help of the handle, tear away or even clear large tumours from deep-seated and dangerous parts, thereby preventing damage to nerves and vessels, and completing the whole proceeding with wonderfully little loss of blood. In this way he was ambidexterous, but, in the ordinary sense of the word, Fergusson did not possess this power, or at least did not use it, and I have scarcely ever seen him employ the knife as a cutting instrument whilst it was held in his left hand.

It was somewhat the fashion to suppose that Fergusson, though so conspicuously an operating surgeon, was somewhat deficient in powers of

diagnosis, and the very reticence I have alluded to, and the apparently little excitement he would display when consulting with another on an important case of surgery, might lead a superficial observer to a wrong conclusion on this matter; never, however, was there a greater error. The repeated opportunities I have had of judging of his character in this respect have led me to the firmest conviction that his judgment was as good as his manual dexterity was remarkable, and that he not only rarely erred but that he was often right when others were wrong. His vast experience of surgical diseases, added to his natural and acquired shrewdness, made him a most trustworthy guide in cases of great doubt and difficulty. It is perfectly true that he had strong and peculiar views on certain points connected with pathology and practice; and here, I think, he showed his weakness, and as an illustration I may refer to one or two matters. For instance, he held to the view that it was not right or justifiable for a surgeon to amputate the entire limb when the bone was affected with a malignant growth if there was room to operate below the articulation.

His great love for preserving as much of the body as possible led him to adopt this view, and nothing would turn him away from it. He imagined that there was the same danger of the return of the disease after the removal of the entire limb, as when amputation was performed through the continuity of the bone affected; and although the opposite view is maintained, and I think correctly maintained

by the majority of surgeons, facts are constantly occurring which would strongly favour Fergusson's views and actions.

Then, again, his strong love of conservative surgery sometimes led him into errors of practice in regard to operations on joints. I have referred to the opposition which was excited against the revival of excision of the knee-joint, and I have stated that at one period it seemed as though it would have to be abandoned. This was due greatly, I believe, to the very efforts which Fergusson himself made to establish the operation. In the earlier cases there is no doubt that he adopted it in instances where the proceeding was not suitable; in fact, he could see no merit at all in amputating a thigh for disease of the knee. I have many times discussed this matter with him when a case not well adapted for the operation presented itself, but he argued that excision was not more fatal than amputation, and that even if it failed the latter step could be resorted to. The result was that excision of the knee in his own hands, more especially in his earlier cases, was by no means a success, although he used to turn out some splendid cases; and for a time a bad effect was produced, but his pupils and followers profited by Fergusson's errors as much as by his brilliant successes, and the result was that he lived to see the proceeding, which he looked upon as the greatest triumph of conservative surgery, firmly established and recognized by all surgeons of position and character. And whilst I took a humble but prominent

part in the endeavours to establish excision of the knee, I cannot forego paying a tribute to those who worked so successfully in this direction; some, alas! are dead, but others still live. I would especially refer to my late dear and lamented friends—Jones, of Jersey, Peter Price, and Alexander Edwards. I may also refer with pleasure to Mr. Butcher, of Dublin; Mr. Gant, of London; Mr. Humphry, of Cambridge; and Mr. Swain, of Devonport. These gentlemen have very much assisted to establish this operation. It was a source of great pleasure and pride to Fergusson to feel that the prejudices against this great triumph of conservative surgery had been entirely overcome.

His views with regard to the treatment of stone by lithotrity were somewhat contrary to those generally entertained. He was fond of removing the fragments of the broken stone by the lithotrite scoop. He considered that it was the best and speediest way of emptying the bladder.

In instances where there is atony of the bladder, or complete loss of expulsive power, such a practice is undoubtedly the best to follow; but in a healthy bladder it is perhaps a question whether it is not better, after having thoroughly broken up the stone, to allow the fragments to be expelled. It is true I have seen in his practice the most rapid cures produced by removing the fragments, but I have also witnessed a considerable amount of mischief therefrom.

It was often observed of Fergusson that he taught

much more by example than by words, and those who watched him closely in the treatment of surgical disease could learn very much. In this way he really was a good teacher, but in the ordinary sense he was deficient. He said but little in the wards, and in his lectures on systematic surgery he was somewhat heavy, and did not raise his voice sufficiently; but in the operating theatre his remarks upon the cases were admirable, full of meaning and instruction. He would seize the salient features of some case, dwell upon them with eagerness, and infuse into his audience an amount of interest which far more gifted individuals, as regards oratory, would fail to excite. Thus he would turn from a discourse upon some great case of surgery, such as an excision of a large joint or the ligature of an artery—matters always replete with interest—to some minor and apparently insignificant case, such as the removal of a little piece of dead bone, and by his clear and practical remarks on the main features connected with this trifling operation, he would interest and instruct his hearers just as though he were dwelling upon the points of a case of the greatest importance. Thus it was that he taught so well, and hence those who were much with him were continually acquiring from the vast storehouse of his experience hints of the utmost practical value which have stood them in good stead on the day of trial.

Full of experience himself, and able to wield his powers so brilliantly, he was tender as to the failures of others, and nothing gave him more pleasure than

to have an opportunity of helping some one out of difficulty. Many times I have known this occur; and the manner in which he gave this help was as graceful as the assistance itself was valuable. On several occasions he has seized the stone when a friend or colleague has had some great difficulty to contend with, but having so done he would immediately hand the forceps to their rightful owner. On an occasion when I was performing that most difficult of all operations—the old operation of perineal section at the point of a staff—before a very large audience, the most unusual difficulties occurred. Both myself and my patient were nearly exhausted; Fergusson was holding the staff. He saw the difficulty I was in, as I whispered to him that I was afraid I must give it up; whereupon, by a very adroit movement of the handle of the staff, which no one but those immediately around could notice, he thrust the point along the direction of the canal, and thus enabled me to complete an operation which must have failed. It was by such acts as these that Fergusson was so beloved and respected by all who were associated with him. The success of others was a source of great pleasure to him, and the very last visit he paid to the theatre of King's College Hospital illustrated this. Although worn down by his wasting disease, he, on hearing that his old assistant, William Rose—who had been recently made assistant-surgeon to the hospital—was about to perform his first case of lithotomy there, determined to come down and take charge of the staff. Rose performed the operation in

a style worthy of his old teacher, who, on the completion of the operation, turned round to me and said: "It is a great treat, after being away so long, to come to the old place and see lithotomy performed in such style."

His demeanour towards patients, especially his hospital patients, was worthy of all imitation. I recollect well his saying to me thirty years ago that he always made it a practice to treat a hospital patient with exactly the same consideration as one in private; and all who watched his career can testify that he carried out his precept. I shall never forget my first visit to the hospital with him when I entered as a student. His remarkable kindness and gentleness towards a little lame boy made the profoundest impression upon me, in fact it excited more admiration in my mind than did his splendid surgical feats, which at that time I could neither appreciate nor understand.

When consulted by patients in private, although so reticent and undemonstrative, he impressed them with the utmost confidence. This, I believe, was the secret of his great success. There have been and are surgeons of great ability who fail to succeed in private practice, because they, from want of manner or tact, cannot inspire any confidence. Fergusson could do this as much by the way in which he could use his hands in the examination of a case as by his general demeanour and appearance. A good illustration of this came to my knowledge. Many years ago a gentleman came to London for the

purpose of having an enormous tumour of the lower jaw removed. He consulted nearly all the prominent men of the day, and at last saw Fergusson, who successfully removed the tumour. When the patient recovered he went over the history of his case with me, and I asked how it was that after consulting so many he had so quickly hit upon Fergusson as the one who should operate? His answer was, that "directly Fergusson put his hands upon me to examine my jaw, I felt that he was the man who should do the operation for me; the contrast between his examination and that of others was so great."

All his efforts in the practice of surgery tended to simplifying his art; he did not like what he used to term coarse surgery. Anything in the shape of preservation of tissue or remedying the deficiency of nature he was fond of. Thus his great attention to, and wonderful skill in such proceedings as those of hare-lip and cleft palate—the worse the case of deformity the better he was pleased. During the last two or three years of his life he had an unusually large number of cases of cleft palate, in consequence of his having introduced into British surgery the modification of splitting the bone, in cases of cleft of the hard palate; and he was remarkably successful, having very few cases where the operation failed. In operating for hare-lip and in the after treatment he took enormous pains to bring about good results, and he generally succeeded.

I think I have been able to show what was clear to all those who were in the habit of associating

with him in his work, but which was not equally patent to those who saw little of him, that Fergusson not only shone pre-eminently as an operator, but that he possessed a profound knowledge of his art, and that he wielded all its resources with consummate skill. I do not mean to assert that he was a great original thinker, but he possessed in abundance all those qualities which are required to make a great surgeon. His powers of observation were remarkable, his memory was most tenacious, his shrewdness, sound common sense, tact, and knowledge of men and how to deal with them, were acknowledged by all, and conspicuous amongst them was that facility of resource in all trying emergencies, which, added to his extraordinary mechanical skill, made him what he was, and brought about a success which has seldom been vouchsafed to any surgeon in this or other countries. And I maintain that the possession of these qualities and the exhibition of them in his glorious work, entitle him to be ranked amongst those who since the beginning of the present century have spread imperishable lustre over British surgery, and that he will worthily descend to posterity in the proud scroll of names of men who have shone so brightly, and which bears those of Astley Cooper, Cline, and Abernethy; of Syme, Liston, Lawrence, and Brodie.

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