A recent number of this Journal contained an excellent account of the career of Sir James McGrigor, Wellington's Principal Medical Officer in the Peninsular War, and afterwards Director-General of the Army Medical Department. The following is an account of the life work of the greatest surgeon the Peninsular War produced. Great as Sir James McGrigor was as an Army physician and administrative medical officer, equally so was George James Guthrie as an Army surgeon.

Guthrie was descended from an old Forfarshire family, one of the members of which settled in Wexford. The hero of our story was born in London on May 1st, 1785. He received his early education from M. Noel, a Frenchman, from whom he acquired in early life a thorough knowledge of the French language. When only 13 years of age he was, on the advice of Mr. Rush, Inspector-General, and at that time a member of the Army Medical Board, apprenticed to a surgeon named Phillips, and studied under Hooper at the Marylebone Infirmary. In 1800 Mr. Rush appointed him hospital assistant to the York Hospital. He held this post until the following year, when Mr. Keate, the Surgeon-General, ordered that all hospital assistants who had not been examined and approved by the College of Surgeons should be removed. On the day the order was issued Guthrie, confident in his knowledge,
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applied for examination, and, two days later, February 5th, 1801, received his diploma. He was not yet 16 years of age. In the following year age became one of the qualifications for the College, and the precedence Guthrie thus gained was afterwards of great value to him, enabling him, when only 38 years old, to take a seat on the Council of the College, an honour never before enjoyed by so young a surgeon. Before his sixteenth birthday, in March, 1801, he was appointed Assistant Surgeon to the 29th Regiment, the Colonel of which was also very young, being but 22 years old. The Times said, however, that “notwithstanding the youth of both, it was always admitted that there was no regiment better commanded or doctored.” In 1802 the regiment went to Canada, where it remained until 1807, when Guthrie, now Surgeon to the regiment, embarked with it to take part in the proposed expedition for the reduction of Ceuta. The “Dominica,” the ship in which Guthrie sailed, was, owing to stress of weather, obliged to put into Gibraltar. Whilst here an extraordinary incident occurred, the watch being asleep, the ship drifted into Algeciras Bay and came under the Spanish guns. Guthrie, who was in his berth, thought the ship’s motion unusual, and going up on deck saw that the ship had dragged her anchors. He roused the watch and the ship was got under sail, not, however, before the enemy had opened fire with some 42-pounders, several shots striking the vessel. In tacking the ship had to pass under the guns of another battery, but luckily escaped injury, and got back in safety to her anchorage on the Gibraltar side of the bay.

The Spaniards having rebelled against French dominion, the expedition to Ceuta was abandoned, and the troops landed at the Puerta de Santa Maria, near Cadiz. Guthrie now took up the study of the Spanish language, ultimately becoming a proficient speaker of that tongue. In August, 1808, the whole army was collected together and landed at Mondego Bay, under the command of Sir Arthur Wellesley, and, advancing towards Lisbon, met the French in Battle at Rolica on the 17th of the same month. The greater part of the casualties fell to the 9th and 29th Regiments, and the wounded were for three days after the battle almost entirely under Guthrie’s care. He rejoined his regiment on the evening of the 20th. Next day the Battle of Vimiera was fought. A great part of the wounded again fell to Guthrie’s care, his regiment having sustained such heavy losses in the two battles that it was sent back again to Cadiz. At Vimiera Guthrie received a severe gunshot wound, but accom-
panied his regiment to Cadiz, and was there in charge of the whole of the sick of the troops under General Mackenzie for several months, during which time he also learnt Portuguese. He then accompanied the Army in the advance on Oporto, and, as no staff-surgeons had yet arrived, Guthrie performed the duties of staff-surgeon in addition to his own during the fighting which occurred before Oporto was taken. At the passage of the Douro he contrived to be the first mounted officer to cross the river, having, thanks to his knowledge of Portuguese, persuaded a Portuguese boatman to take both him and his horse across the river in a country boat. The French had rapidly evacuated the town, and the streets were encumbered with the baggage they had left behind. Guthrie was thus delayed and becoming separated from his regiment, attached himself to Sir J. M. Doyle at the head of the Portuguese regiment, which had crossed the river, and was following the road the English had taken. This road brought them to a precipitous ridge, upon which a British regiment was drawn up with the enemy in their front. The Colonel of this regiment mistook the advancing Portuguese for a French force coming out of Oporto to attack his rear, and made one rank turn about and prepared to fire. Guthrie at once saw the mistake and realised the danger. With a quickness of perception and promptitude of action, which saved many lives, Guthrie tore open his great-coat, thus exposing his red tunic, and held it back. This caused a universal cry to break from the whole regiment, which was about to fire on "the doctor and the Portuguese." The regiment now advanced and Guthrie with it. Guthrie riding forward saw in a narrow lane to his left front a French gun, which the mules attached to it had some difficulty in dragging. The French drivers and artillerists were dismounting to run away on foot, and Guthrie, the only mounted officer present, galloped to the gun and took possession of it. Not knowing what to do with it Guthrie cut the traces of the leading mule, and, bringing it back with him as a trophy, he sent a serjeant and a file of men to take charge of the gun until he could report the capture to the Colonel of the regiment. Sir J. Sherbrooke, the Colonel, was greatly amused at the surgeon's capturing a gun single-handed. Talavera followed in due time. Here Ferguson, the Deputy-Inspector of Hospitals at Oporto, was Principal Medical Officer. He was an able and efficient officer, and had been recommended for promotion to Inspector-General after Oporto, and Guthrie to Staff-Surgeon. The Board in London,
however, negatived both recommendations. The losses at Talavera were heavy, Ferguson was ill in bed with dysentery, and Guthrie was employed as a sort of staff officer in conveying the necessary orders to the regimental surgeons. Guthrie collected the wounded of his regiment in his own regimental hospital and attended to them himself. The wounded of the other corps were collected together in a general hospital, which was placed under the care of the Staff-Surgeons and Purveyors who came up after the battle was over. When the British were forced to retreat across the Tagus at Arzobespo many wounded were left behind at Talavera, and fell into the hands of the French. They were treated very well. A large number of wounded, however, in dread of becoming prisoners, struggled back with their regiments, and these were afterwards collected together in the large convent of Deleytosa, near Truxillo, where a general hospital was established. The great loss of life which occurred here as a result of bad surgery and want of care caused Guthrie to stigmatise it as “the slaughter-house of the wounded.” Amputation was the order of the day, and, as a consequence, many lives and limbs were sacrificed, which under better arrangements might have been saved. Guthrie, whose experience was already considered valuable, thought it his duty to make a formal protest against the removal of several limbs which it had been decided should be amputated. The limbs were saved, but Guthrie, by his expression of opinion, made many enemies in the department. Guthrie accompanied his regiment into quarters in the Pueblo de Calcada, between Merida and Badajos, and here malarial and typhoid fevers broke out amongst the troops; there was a lack of good hospital accommodation, and the loss of life was considerable. It is recorded that the line of graves belonging to Guthrie’s regiment was about half that of any other regiment, although he had an equal number of men and sick to look after. At last he himself fell ill with fever when on the march with his regiment, and was left behind at Abrantes to die. He gave up taking bark, the usual remedy, and during the night he tells us he drank two gallons of water, into which a couple of dozen lemons had been sliced. To this he attributed his cure, but he did not completely recover until he had been invalided to England in the spring of 1810. During his illness he had been offered the appointment of Staff-Surgeon, and it was in this rank he rejoined the army in the field at the end of the year at Lisbon, just in time to take part in the pursuit of Massena. He now joined the 4th Infantry Division, under General Sir
Lowry Cole, and accompanied him from the action at Campo Mayor until the end of 1812. This was the most eventful period of Guthrie’s life, a period during which his reputation as a surgeon, and, indeed, his after success, became established. He was present at the siege of Olivença, and the two first sieges of Badajos. On one occasion, when riding in front of Badajos, a round shot from the enemy passed between his back and his horse’s tail. Guthrie acknowledged the compliment by raising his hat as he galloped out of range. Later, during the third siege, he and the other surgeons of the besieging force slept in front of the spot, and nearer the town, where he had formerly had such a narrow escape. Powder and shot were then much scarcer with the garrison.

At Albuera, the hardest fought battle of the war and the one in which the greatest loss occurred in proportion to the number of troops engaged, Guthrie was the senior surgeon present, and therefore acted as Principal Medical Officer. It is recorded that Guthrie was considered an expert in estimating the strength of the enemy, and had ridden forward at the beginning of the fight to see the numbers of the French manœuvring below. Dr. Sandford, of the 29th Regiment, came to him and asked permission to amputate an artilleryman’s leg. Guthrie gave orders that the man should have a tourniquet applied, and be left in a hut until the action was over. Sandford protested that the man wanted his leg off at once, but Guthrie again refused, saying, “Those gentlemen below do not intend to make their real attack here; it will be over there”—pointing to some hills on the right—“where you now see nothing, but if the French get possession, we shall be killed or taken to a man. On those hills the British must win the battle. Do not leave your regiment for an instant, or you will not see it again.” Guthrie was correct, a few minutes afterwards the 2nd and 4th Divisions advanced to the hills pointed out, where, finding the enemy already in possession, a terrible struggle ensued. The Fusilier Brigade lost 1,050 men out of a strength of 1,500. The 57th, who here won the title of “Die-hards,” lost 23 officers and 400 men out of a total of 570, and the King’s colour was shot through in thirty places. Assistant Staff-Surgeon Bolman was killed here by a shot which passed through his chest. Albuera was fought during a thunderstorm attended by torrential rain. It was over by three o’clock.

Guthrie found himself with 3,000 wounded at his feet, only four wagons for their removal, and no surgical equipment other than
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that carried by the regimental surgeons in their panniers. The nearest shelter was the village of Valverde, 7 miles away. The surgeons, who had been exposed to the same fatigues and dangers as the regiments to which they belonged, had now, whilst others rested, to turn their attention to the care of the wounded. Many of the wounded lay on the field for three or four days. The serious cases were first removed and soon all were got to Valverde. From five in the morning until eleven at night unceasingly for three weeks the little band of surgeons worked. And their reward was? A severe reprimand from the Adjutant-General who considered that the wounded had been neglected. Guthrie read the Adjutant-General's letter to the wounded officers, who were exceedingly indignant and wrote a long letter denying the truth of the Adjutant-General's communication, also expressing their gratitude in their own names and that of their soldiers for the attention they had received. Guthrie forwarded this with a request that the vilifier of himself and his officers might be punished. The Adjutant-General, whilst objecting to the word "vilifier," refused to name his informant, and stated that the report of neglect did not apply to Valverde. Rewards, promotions, medals, were showered upon the staff and regimental officers, but the medical staff received nothing and only narrowly escaped reprimand.

A winter campaign, which ended in the taking of Ciudad Rodrigo, followed the battle of Albuera. At Ciudad Rodrigo, half the surgical duties fell upon Guthrie, together with the care of the numerous wounded left on the ground after the assault. The Duke of Wellington had a great belief in the general hospital system, and at this time there was in force a general order which directed that all the sick and wounded should be sent to the general hospitals, there to be attended by the general medical staff. Guthrie was strongly opposed to this, being altogether in favour of the regimental hospital system, and in later years was fond of pointing out that whenever the Duke had praised the medical arrangements the Duke's wishes had been disregarded and the regimental system adopted. McGrigor was also opposed to the general hospitals. No doubt they were productive of abuse, many sick and wounded, after recovery, lingering in their convalescent wards instead of returning to duty with their regiments; but to modern ideas it is difficult to understand why it was not earlier recognised that the two should have worked hand in hand and not as opponents to each other. For nearly a hundred years—from Pringle's time until the early part of the nineteenth century—the
controversy amongst medical officers and others continued, and still in any considerable campaign during that period both general and regimental hospitals existed.

After Ciudad Rodrigo, Guthrie had all the sick and wounded placed in regimental hospitals established by the regimental surgeons at Gallegos, Aldea del Obispo, and other villages. This contravention of orders again brought Guthrie in contact with the Adjutant-General, who pointed out that Guthrie's division had more sick with it than any of the others, and that orders had been disobeyed. Guthrie was, however, allowed on this occasion to follow his own plans, but was told that if any evil consequences ensued he would have to take the responsibility. Guthrie discusses the affair in his seventh lecture.

After the taking of Badajos, so graphically described in the pages of Napier, Guthrie had charge of the wounded officers and of 1,200 men, a labour cheerfully undertaken, but which kept him behind his division for some weeks.

The affairs which took place at Castrejon and on the Guarana, in the earlier part of the 1812 campaign, deprived Guthrie of all his transport, and after the battle of Salamanca the medical staff were left with hundreds of wounded on the field without the means of removing one. Guthrie collected in the Convent of San Carlos 300 French wounded who had been abandoned to their fate by the Duke of Ragusa. There they lay on the ground, the living, the dying, and the dead. They ate and drank out of their shoes and hats. The stench was fearful. The Spaniards refused to help them in any way until Guthrie called the Spanish authorities together and told them that unless they gave help at once he would leave a letter for the first French General who came into the town and recommend him to hang them to a man for the outrageous inhumanity they had displayed. As there was a probability of the return of the French, and they were certain that Guthrie meant what he said, they gave in and placed under his orders an alguazil, or police officer. Guthrie assured the alguazil that he would never see his home again unless the wounded were properly cared for. The French wounded were very grateful and drew up a paper expressing their thanks in the strongest terms, acknowledging that officers and men owed their lives to him. One of the French cavalry officers who had been attended by Guthrie was afterwards able to show his gratitude in a practical manner, for, in the following year, Guthrie was taken prisoner by some French cavalry commanded by his former patient who had been exchanged.
Recognition was mutual, and Guthrie was at once set free, receiving also the grateful acknowledgements of the Frenchman for his kindness to their comrades after Salamanca.

After this battle there were many cases of phlegmonous erysipelas amongst the wounded, and Guthrie here introduced the practice of making incisions into the swollen tissues in these cases—a great advance in their surgical treatment.

Guthrie was with the army at Madrid in 1812, and was there appointed to act as Deputy-Inspector of Hospitals, thus becoming the Principal Medical Officer to seven divisions under the command of Lord Hill, a larger number of men than Wellington had with him at Burgos. Guthrie's account of the retreat from Madrid and Burgos, and the wonderful work done by the army surgeons at the time, is worth reading. The reward he received was a refusal by the Medical Board at home to confirm him in his appointment, owing to his youth; others were promoted over his head, ultimately becoming inspectors when on half pay. The result, as far as Guthrie was concerned, was that he thus lost £130 a year for over thirty years.

Guthrie now went to Lisbon, where there were large general hospitals which received the chronic cases of wounds and disease, and all the sick and wounded prisoners of war. He here had considerable scope for his abilities, and when the Duke of Wellington inspected the hospitals he was so pleased that he publicly expressed his approbation of Guthrie's services, and said that, were it not that his present rank debarred him from the appointment, he would like to appoint him surgeon to the headquarters staff.

He was next placed in charge of the large hospital at Santander, which received the wounded from the Pyrenees. This hospital soon contained from 1,200 to 1,400 sick and wounded. At this time he introduced a new system of accounts for the use of regimental hospitals, with the result that the expenses were shown to be much less than those shown by the Purveying Department, whose accounts were made out according to regulation, and which were also subject to audit. Guthrie's accounts were accurate, and the difference appears to have gone into the pockets of the purveyors, one of whom is known to have saved £95,000 during the war. Government could not, however, prove peculation, for it had been cheating itself. Many purveyors were, however, dismissed the Service.

At the battle of Toulouse, Guthrie was the only inspectorial officer on the field, and had charge of the wounded in the hospitals in the town after the battle.
On the termination of the war a large number of medical officers were placed on half pay. Guthrie was one of these. In 1814 he returned to London, and, his half pay not being sufficient for his support, he determined to take up private practice. He also diligently attended the surgical lectures of Bell and Brodie at the school in Windmill Street, and of Abernethy at Bart's.

When war again broke out, on the return of Napoleon from Elba, Picton and Sir Lowry Cole both asked Guthrie to join their staffs and live with them at no expense to himself. Guthrie refused. Sir James McGrigor, then Director-General, offered to employ him for six months. Guthrie offered his services for three months, but was refused.

Ultimately he went to Brussels on his own account and acted as consulting surgeon, being heartily welcomed by his former comrades. He performed an amputation at the hip, and tied an artery in the leg through an incision through the calf muscles. Both succeeded. He also removed a bullet from a gunshot wound of the bladder. After the war, the patients were sent to the York Hospital, which then stood on the site now occupied by part of Eaton Square, and here Guthrie had charge of two wards and gave lectures for two years, illustrated by the cases under his treatment. Guthrie was the first surgeon to use the lithotrite, and, although not the first to do the operation, he was the first to show how excision of the hip might be performed. A very outspoken man, an incautious remark brought upon him attacks in the *Lancet*. Guthrie entered an action for libel, but afterwards withdrew it, and Mr. Wakley having apologised, the two became firm friends.

In 1816 he commenced the series of lectures which he continued for thirty years, and which were open to all medical officers of the Army, Navy, and East India Company as a right. He was appointed on the staff of Chelsea Hospital. In December, 1816, he founded the Westminster Ophthalmic Hospital, to which he was chief surgeon. Elected assistant surgeon at Westminster Hospital in 1823, he became full surgeon in 1827, resigning in 1843 in favour of his son Charles, who was appointed assistant surgeon.

In 1824 he became a Member of the Council of the Royal College of Surgeons, in 1826 was elected Fellow of the Royal Society, and in 1828 became President of the College of Surgeons and one of its examiners. He was Professor of Anatomy from 1828 to 1831. He was dreaded as an examiner, but it is said that he never rejected a candidate by his own unsupported vote. He
brought about many reforms in procedure at the College, raised the standard of education required from candidates for the diploma, and recommended that the College library should be thrown open to the members. He was strongly opposed to the Charter of 1843. It is believed that through him examinations for promotion were instituted. In 1826 he was offered a knighthood by the Duke of York, then Commander-in-Chief, but refused it on the plea of poverty. Guthrie delivered the Hunterian Oration in 1830, which was printed in the *Lancet* of that year.

Guthrie died suddenly of heart disease on May Day, 1856, in London, and was buried at Kensal Green. He was twice married, and by Margaret Paterson, daughter of the Lieutenant-Governor of Prince Edward's Island, he had two sons and a daughter. His elder son, the Rev. Cowry Guthrie, died before him; his second son, Charles, a capable surgeon, died in 1859.

A man of active and robust frame, keen and energetic in appearance, Guthrie had remarkably piercing black eyes. Shrewd and quick, he was at times very outspoken and inconsiderate in speech. But behind his military brusqueness was much kindness of heart. He was very popular as a lecturer, his lectures being full of anecdotes and illustrative cases. As an operator he was noted for his coolness and his delicacy of hand.

Guthrie was known as the "English Larrey," and it is said that no army surgeon, since Wiseman's time, did more to advance the science and practice of surgery. Before his time it was usual to treat gunshot wounds of the thigh by placing the limb on its side. He introduced the straight splint. He differed from Hunter in the treatment of gunshot injuries requiring amputation, advocating primary amputation, whilst Hunter was in favour of the secondary operation. After Albuera, he introduced the practice of tying both ends of a wounded artery at the seat of injury—as contrary to Hunter's teaching. Hunter tied the artery above the injury. Guthrie's experience in the field was certainly very much greater than Hunter's, and Guthrie's practice was soon accepted by the practical surgeons who had gained their experience in the Peninsula. Guthrie advocated the destruction with mineral acids of the diseased tissues in cases of hospital gangrene.

Guthrie's contributions to surgical literature were numerous. In the fourth volume of the *New Medical and Physical Journal*, 1811, appeared his "Observations and Cases of Gunshot Wounds." In 1814 he published his celebrated work on gunshot wounds, dealing particularly with wounds of the limbs requiring amputation.
This was translated into German in 1821. The third edition of this book appeared in 1827 with the title "On Gunshot Wounds, on Inflammation, Erysipelas, Mortification, on Injuries of the Nerves, and on Wounds of the Extremities requiring the Different Operations of Amputation." In 1819 he published a "Treatise on Operations for the Formation of an Artificial Pupil," afterwards embodied in his "Lectures on the Operative Surgery of the Eye," 1823. In 1830 appeared "The Diseases and Injuries of Arteries," dealing especially with the collateral circulation after a main artery had been tied. There followed publications on "Inguinal and Femoral Hernia," 1833; "The Anatomy and Diseases of the Neck of the Bladder," 1834; "The Anatomy and Diseases of the Urinary and Sexual Organs," 1836; "Injuries of the Head affecting the Brain," 1842; and "On Wounds and Injuries of the Arteries of the Human Body, with the Treatment and Operations required for their Cure," 1846. His greatest work, a compendium of his former writings, with new comments, was published in 1853, with the title, "Commentaries on the Surgery of the War, 1808-1815," termed a fifth edition. A sixth edition appeared in 1855, containing comments on the surgery of the Crimean War. This book is a very graphic, highly interesting, and most valuable contribution to military surgical literature. Guthrie presented a copy of it to every regiment in the Service, one to each naval station, and one to the Principal Medical Officer in each Indian Presidency.

In the *Transactions of the Royal Medical and Chirurgical Society* can also be found some "Observations on the Treatment of Syphilitic Diseases without Mercury," a "Letter to the Home Secretary on the Report of the Select Committee on Anatomy," 1829, and "Remarks on the Anatomy Bill," 1832.

[The authorities for the above sketch are: Guthrie's "Gunshot Wounds," 1814, and Commentaries (1853); Biographical Sketch (with portrait) in the *Lancet*, June 15th, 1850; Obituary Notices in the *Times* and *Annual Register*; "Éloge de M. Guthrie par M. Legouste"; "The Dictionary of National Biography," Gordon's "Remarks on Army Surgeons," and a few references in Clarke's "Autobiographical Recollections of the Medical Profession." ]