The Royal Army Medical College is the direct descendant of the Army Medical School, founded at Fort Pitt, Chatham, in 1860, on the recommendation of the Royal Sanitary Commission of 1858 (1), and moved to Netley in 1863 on the opening of the Royal Victoria Hospital.

Although, before this time, there had been no provision for the systematic instruction of medical men in the military aspects of their duties when they joined the army, it had been the practice for those who were not directly appointed to regiments to begin their service at the York Hospital, Chelsea, or at the General Invaliding Depot, at first in the Isle of Wight and later at Fort Pitt, where they learned, by association, something of military medicine, and where there were a museum of military medicine and a library, both established by Sir James McGrigor (Director-General of the Army Medical Department, 1815-1851).

Long before the deliberations of the Sanitary Commission in 1857-8 which led to the foundation of the Army Medical School, enlightened opinion had suggested that some instruction of army surgeons in their military duties was called for, the first indication of this view being expressed in a letter by John

* The Royal Army Medical College was opened in its new premises at Millbank on 15th May, 1907. The plate is taken from the second volume of the Journal published in 1904.
Bell, surgeon at Yarmouth, addressed to the First Lord of the Admiralty in 1798. This letter may be found quoted and discussed in Sir George Ballingall’s *Military Surgery* (2) and in a paper by Colonel Kenneth MacLeod (3). The outcome, however, was the establishment, not of a joint School for the instruction of naval and military surgeons, but of two Regius Chairs of Military Surgery, one in Edinburgh in 1806 and one in Dublin in 1851, to which Dr. John Thomson and Dr. Thomas Jolliffe Tufnell were respectively appointed. Tufnell, who had begun lectures in Military Surgery in 1846, was the first and only incumbent of the Dublin chair, and as an aid to his instruction he formed a museum of specimens of military medical interest which was later acquired by the War Department and incorporated with the existing museum in the cellars of Fort Pitt. Thomson should be remembered for his report on the British Military Hospitals in Belgium after the Battle of Waterloo (4); his successor, Sir George Ballingall, was a prolific writer upon military medicine.

Following the recommendations of the Sanitary Commission, a further committee was appointed to organise the new Medical School to be established at Fort Pitt. Immediate opening at Chatham was thought preferable to waiting for the new invaliding hospital to be built at Netley, partly because it was desired to avoid delay, and partly because the Chatham Hospital served a large garrison which contributed cases of acute disease to the wards, in addition to the chronic sick received as invalids from overseas and the insane who were accommodated and treated, under conditions surprisingly humane for the time, in Fort Clarence (5, 6, 7).

It was early decided that the School should be governed by a Senate, composed of the Principal Medical Officer at Chatham, the Professors, the Director-General of the Army Medical Department, and the President of the Medical Board at the India Office, reporting its proceedings through the Director-General to the Secretary of State for War. Three Professors were appointed, Dr. E. A. Parkes (Hygiene), Surgeon-General W. C. Maclean (Military Medicine) and Surgeon-General Thomas Longmore (Military Surgery); to these were added, on the protestations of Miss Florence Nightingale, a professor of pathology, William Aitken.

The teething troubles of the School are illustrated by the following extract from Mrs. Woodham-Smith’s biography of Miss Nightingale (8):

“Sidney Herbert had just had a demonstration of War Office power in the matter of the Army Medical School. Miss Nightingale had set out the necessity for an Army Medical School in *Notes on Matters affecting the Health, Efficiency and Hospital Administration in the British Army* (9). ‘Young men were sent to attend the sick and wounded who perhaps had never dressed a serious wound, who certainly had never been instructed in the most ordinary sanitary knowledge, although one of their most important functions was hereafter to be the prevention of diseases in climates and circumstances in which prevention is everything.’

“The School was designed to provide training in military hygiene and military surgery. Miss Nightingale drew up the regulations in conjunction with Sir James Clark, and the nomination of the professors was left entirely in her hands. The
third of the four sub-Commissions which Sidney Herbert extracted from Lord Panmure was concerned solely with it.

"The nominations were made in 1857. Dr. Parkes, the great military sanitarian, was to be Professor of Hygiene, and Dr. William Aitken, afterwards Sir William Aitken, to be in charge. Panmure could not be got to the point of making the appointments: he would not actually appoint anyone 'even if the Angel Gabriel had offered himself, St. Michael and all angels to fill the different chairs,' wrote Sidney Herbert. Panmure went out of office and General Peel succeeded him, but still nothing was done. Then General Peel was succeeded by Sidney Herbert, who wrote that something should be done about the Army Medical School 'at last.' He converted nominations into appointments, but still delay continued: the officials at the War Office were not yet defeated. Premises were selected at Fort Pitt, Chatham, yet work on them did not begin; the professors were appointed, but their salaries were not paid; requisitions were sent in for instruments and equipment, but they were not filled. Month added itself to month, it was a year, it was nearly two years before the original authority for the establishment of the School had been given, and still nothing had been accomplished. In 1860, Sidney Herbert insisted on fixing a day for the opening of the School. Three letters sent by Miss Nightingale to Douglas Galton, in August of that year, relate what occurred. The first, from Dr. Aitken, marked 'Wail No. 1,' states: 'No work even begun.' The second, also from Dr. Aitken, marked 'Wail No. 2,' states: 'No money for instruments.' The third, from Miss Nightingale herself, dated September 3rd 1860, marked 'Wail No. 3,' relates 'the disaster of the opening day.' 'On Saturday I had a letter from the Professors of the Medical School quite desperate . . . the authority for the money and the instruments had not yet come. Ten of the students arrived. They stared at the bare walls, and in the absence of all arrangements for their work concluded that the School was a hoax.'"

Despite these discouragements, however, the first course duly began on 2nd October, 1860, an introductory address explaining the objects and methods of the School being given by Surgeon-General Longmore (10). Each course lasted for five months, and after the first five courses, the School was transferred, under the supervision of a committee composed of Sir James Clark, Sir James Ranald Martin and Dr. John Sutherland, to the newly completed hospital at Netley.

Here a large ward had been converted into a class-room, another into an operating theatre: accommodation was found in the central block for professors' and secretarial rooms, a library and a museum. Some of the buildings behind the hospital were appropriated as hygiene and pathology laboratories, and quarters and mess buildings assigned to the young officers. The sixth session, the first at Netley, was opened on 1st April, 1863.

At this time the Medical Candidates, as the probationary surgeons were styled, were limited to those seeking appointment to the Medical Department of the British Army, but in 1865, with the reopening of recruiting for the Indian Medical Services, men who had passed the entrance examination for them attended the Netley courses on equal terms with their British Service colleagues. From 1871 until 1880, probationers for the Royal Naval Medical Service
attended the courses also, an additional professor being appointed to teach Naval Hygiene. During this period the Medical Director-General of the Royal Navy was a member of the Senate.

Candidates for Commissions in the British and Indian Medical Service entered the School by competitive examination, the marks obtained being added to those awarded in the examination held at the end of the course to determine the candidates' order of merit, and hence their seniority in the army. The minutes of the meetings of the Senate, the examination papers and the candidates' marks are still retained in the library of the Royal Army Medical College (11). At the beginning of every session a formal introductory lecture was given by the professor whose normal teaching day it was, while at the end of each course prizes were presented and a valedictory address given by some person of distinction in the army or the medical profession.

The minutes are far from being dry bones. For example, Mr. James Borchaert, who had been Secretary of the School since 1868, protested in 1893, at the age of 75, at the proposal to dispense with his services, on the grounds that he had been given to understand, when joining the School, that his was a permanent appointment.

From time to time moves were made in Parliament to close the School on grounds of economy, the contention usually being that as the medical candidates were already qualified to practise medicine throughout Her Majesty's dominions, public money was being wasted on the maintenance of a school which could only teach either what they already knew or what they would speedily learn in practice. In fact, then as now, tropical medicine was taught hardly, if at all, to the medical undergraduate; emergency surgery was the smallest part of the student's experience, and he came into the service knowing nothing of the peculiar stresses imposed upon a wounded man by transport, climatic conditions and the privations inseparable from active service; hygiene was little taught and less examined; and although from its inception the Army Medical School has been equipped with microscopes (indeed, the official name for the pathology laboratory at Fort Pitt was "The Microscopical Room"), when David Bruce began in 1890 to give the first systematic course in bacteriology in England, qualified medical practitioners were entering the School and service without having ever looked down a microscope. Furthermore, the examination of recruits before enlistment and of invalids before discharge had to be conducted with a precise knowledge of the requirements of the service if public money was not to be wasted upon men unlikely ever to make efficient soldiers. Any criticisms levelled at the Army Medical School on grounds of redundancy were therefore readily rebutted, since it was abundantly clear that all these subjects, and others, were well taught by professors, and their assistants, of wide experience and the highest academic standing.

The School therefore continued until the time of the South African War, when the adverse comments levelled at the newly formed Royal Army Medical Corps were examined by a Royal Commission (12). Among the recommendations made by this body was one that "a military Hospital and Medical Staff
College for training of officers would add materially to efficiency, and immediate steps be taken by the Advisory Board to prepare a scheme for the establishment of one.” The advantages of having a military medical instructional establishment in London, in close proximity to the great teaching hospitals, was apparent, and preparation of plans was at once begun. The last full course to be held at Netley closed on 29th June, 1902, when the prizes were distributed and an address given by Field-Marshal Earl Roberts of Kandahar, V.C.

Premises were hired in London, and on 1st September, 1902, classes in hygiene, pathology and hospital administration were begun in the Examination Hall of the English Conjoint Board on the Victoria Embankment. Entrants to the R.A.M.C. and I.M.S. attended this course during September and October, Lieutenants on Probation, R.A.M.C. then going to Aldershot and those of the I.M.S. to Netley for instruction in military medicine and surgery. During this phase, while the Netley School remained partly in existence, the London Department was known by the Royal Commission name of the “Medical Staff College.” Further transfers were gradually effected, until the final closing address was given at Netley on 31st May, 1905, by Surgeon-General A. M. Branfoot, I.M.S., President of the Medical Board at the India Office. Classes continued to be held in temporary quarters until the present College was opened on 15th May, 1907 (13).

The Senate was abolished and control vested in a Commandant and Director of Studies, responsible to the D.G.A.M.S.

Bi-annual courses for Lieutenants on Probation and for Captains qualifying for promotion to Major continued until the outbreak of war in August 1914, when teaching ceased and the College became a centre for the production of vaccines, and, later, for investigation into methods of protection against chemical warfare. Research into insecticides, problems of nutrition, protective inoculations, and other matters affecting the health of the soldier was pursued. At the conclusion of the First World War, teaching activities were gradually resumed, and they continued until 1939, when war again terminated the normal routine of instruction.

Courses in tropical medicine were maintained throughout the Second World War, and were attended, up to the end of 1945, by some 3,000 officers. The Vaccine Department was moved to the country early in September, 1939, and air-raid damage compelled the transfer of the Hygiene Department to Mytchett from the end of 1940 until March, 1943. As in the 1914-18 war, the College again became primarily a research establishment, investigating problems of water supply, clothing and equipment, field rations and, possibly most important, the suppressive and toxic effects of mepacrine.

Senior officers’ courses were resumed in February, 1946, and courses for officers on first appointment to the Corps in 1948. At the present time, courses are held twice a year for senior officers and officers on appointment to Short Service Commissions; instruction for National Service medical officers is practically continuous; special classes are held for officers of Queen Alexandra’s Royal Army Nursing Corps and for other ranks, R.A.M.C. and Q.A.R.A.N.C.
as well as for officers taking the D.P.H., D.I.H., and D.T.M. & H. and for those reading for higher qualifications in medicine and surgery.

The spacious laboratories and well-equipped lecture theatre are frequently in demand for meetings of scientific societies. Recent expansions of the work of the College include an entomological reference bureau, a serological reference laboratory and the Army Tumour Registry.

THE MUSEUM*

In 1810, Dr. James McGrigor, while Principal Medical Officer at Portsmouth, instituted a collection of morbid anatomical specimens at Hilsea, which was transferred in 1816 to the York Hospital, Chelsea, where many additions were made to it. The collection was later moved to Fort Pitt, Chatham, and augmented not only by morbid anatomical specimens but also by rare and curious specimens in botany, zoology, geology, anthropology and archeology, sent by military medical officers from all parts of the world. This museum formed the basis of the teaching collection when the Army Medical School opened in 1860, when it was augmented by the addition of Dr. Tufnell’s collection of carriages, instruments and appliances, brought from Dublin. This last collection was deeply drawn upon by Surgeon-General Longmore in compiling the first edition of his Treatise on Ambulances (1869) (14).

Although no systematic instruction was afforded to newly joined medical officers before the establishment of the School, they were required to perform routine duties under supervision, including autopsies. Some of the report books still survive in the Library. Some of the material thus, and otherwise, accumulated was made available to a wider public than the medical officers serving in Chatham by the publication between 1824 and 1850 (15) of a series of elegant atlases of morbid anatomy, based upon specimens in the Fort Pitt collection.

No account of the early days of the museum could be complete which failed to mention Surgeon-Major George Williamson (1819-1865). As a young Assistant-Surgeon, he was curator of the museum at Fort Pitt, of the contents of which he compiled a catalogue which was printed in 1845 (16). Some of the specimens listed still remain in the College pathology museum, notably an excellent gourdou skull from West Africa and some of Williamson’s minutely painstaking dissections, coloured, varnished and mounted. But his principal claim to the fame which has eluded him, and the chief glory of the museum, was the collection of over 450 human skulls, of which Williamson published a catalogue in the Dublin Quarterly Journal of Medical Science in 1857 (17) (subsequently reprinted as a separate pamphlet (18)), which appears to have been the first British work upon the ethnological implications of craniometry. The

* Only the Pathology and Army Health Museums can be said to have survived from the original Netley Museums. The present Army Health Museum in the College, which is designed to illustrate the teaching of the Army Health Department, is directly descended from that built up by Dr. Parkes, the first Professor of Military Hygiene at the Army Medical School. Many vicissitudes, not least the Millbank flood in 1928, have, however, completely changed the character of the museum; models and specimens have largely given way to photographs and an accompanying text.—Ed.
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late Professor Arthur Thomson has written a sympathetic account of Williamson’s work (19).

Ever since its inception, the museum has undergone depredation as well as augmentation. Subject to several removals, severely damaged by the Thames flood of 1928, virtually gutted by air attack in September, 1940, and depleted by the failure to return some of the specimens evacuated, for safety, during the 1939-45 war, little now remains of the earlier collections: in particular, Williamson’s collection of crania has been lost to the College. It was transferred in 1931 to Oxford University and thence in 1946 to the British Museum (Natural History), where it now is. The present museum, being slowly re-instated both as to structure and contents, is almost wholly modern.

Some fifty years later, production of another catalogue of the whole museum was contemplated, but the only volume to be published was the first, of the pathological specimens, compiled by Sir William Aitken (20).

THE LIBRARY

The Library, founded in 1816, was annexed to the museum in 1822. Medical officers of all ranks generously contributed to it, Sir James McGrigor, to whose initiative the inception of the Library was due, presenting on a single occasion 1,500 volumes. Sir James was an assiduous collector of books (21), as well as the frequent recipient of complimentary copies from authors, as such of his collection as remains in the Library bears witness. It will thus be appreciated that, although for some forty years past a Crown grant has been made for upkeep of the Library, the founding and maintenance for nearly one hundred years were entirely due to voluntary effort by medical officers of the army.

From time to time the collection has been enriched by considerable gifts and bequests, notably:

(a) The Waring Gift, principally of clinical works of the nineteenth century, of great practical value to the Medical Candidates at Netley at the time the gift was made.

(b) The Fayrer Collection, of the works of, and books collected by, Sir Joseph Fayrer. Sir Joseph, an eminent physician of the later nineteenth century, had served as a surgeon successively in the Royal Navy, the Ordnance Medical Department and the Bengal Medical Service, and for eighteen years represented the India Office upon the Senate of the Army Medical School. The collection includes the manuscript of Sir Joseph’s autobiography (bound in nine volumes, in half morocco), some of his personal operation registers, and several volumes of his lectures and contributions to medical literature.

(c) The Johnston Collection, consisting mainly of sets of orders, regulations and other ephemeral material bearing upon military history. Colonel William Johnston, compiler of the “Roll of Commissioned Medical Officers” (22), was the first Staff Officer for the Army Hospital Corps when control of the Corps was transferred to the Army Medical Department in 1882. He fought hard for the well-being of the medical
services of the army, and is one of the five men commemorated by the bronze plaque over the Library door, "from the officers of the R.A.M.C. to those who helped to found it."

(d) The Spiller Collection, of books on Indian topography, the Sepoy Mutiny of 1857-59 and other Indian subjects.

(e) The Sir William Macpherson Gift, of works on military medical administration, tactics and history. Lastly, in this connection, mention should be made of:

(f) The Sir Everard Home Collection. This, the remains of the personal library of Sir Everard Home, Bt., F.R.S., contains a high proportion of theses and eighteenth and early nineteenth-century pamphlets. Sir Everard, surgeon to St. George's Hospital and Serjeant-Surgeon to King George IV, retired from the army to become Surgeon to the Royal Hospital, Chelsea (1821-1832). The mahogany press in which the collection is housed was specially designed for it by Sir John Soane, Home's contemporary as Clerk of Works (1807-1837) at Chelsea Hospital. This collection is held on permanent loan from the Commissioners of the Royal Hospital.

Much of the Army Medical School Library, as the older collection of books is known, remained at Netley until 1927, when it was brought to London, though some part had previously been transferred. The present Library, therefore, consists of two parts, the older collection, representing the A.M.S. Library augmented by books from station medical libraries overseas as these have been closed from time to time, and a modern library of text-books, monographs, pamphlets and journals, maintained partly by Crown grant and partly by gift, for the day-to-day working use of the staff and students of the College.

The Library, like the museum, has been depleted in the course of time, notably during the period of disuse at Netley from 1905 to 1927, and by fire and water during the air raid of September, 1940. Rye's Guide (23) notes the Library as containing some rare early items, but not all of these now remain.

THE MUNIMENT ROOM

In close proximity to the Library, though nominally a detached part of the R.A.M.C. Historical Museum established at Queen Elizabeth Barracks, Crookham, Hants, the Corps Depot, is the Muniment Room, a repository for books, documents and manuscripts bearing upon the history of British Military Medicine.

It contains, among other items, personal papers of Sir William Leishman, Sir David Bruce, T. R. Lewis, Major-General R. J. Blackham, Colonel C. H. Milburn (who was intimately associated with the negotiations which led to the issue of the R.A.M.C. Warrant in 1898), and Colonel H. A. L. Howell, an assiduous student of military medical history and editor of Johnston's Roll after Colonel Johnston's death.

Of great interest and importance is a collection of seventeen water-colour
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drawings of war injuries of the battle of Waterloo, executed by Sir Charles Bell and illustrative of cases treated by him in Brussels in 1815. Many of the follow-up notes of these cases, by the military surgeons in whose charge the patients were left after Bell’s return to England, survive, but Sir Charles’s original sketch-book and his interleaved copy of his work on Gunshot Wounds (24) can no longer be found.

CONCLUSION

The preface to an early printed catalogue of the Library (25) expressed the hope “that the time may come when the Medical Department of the Army shall have an Establishment of their own in the Metropolis, which will not only contain the museums of Anatomy, of Natural History, and their Library, but afford means for officers from all parts of the world again meeting and associating with others who have more recently entered the service, and thus afford the opportunity to exchange opinions or professional questions.”

The recommendations of the South African Commission opened the way to the fulfilment of this hope, now fully realised in the College, Headquarter Officers’ Mess and The Queen Alexandra Military Hospital, Millbank, together in close and constant touch with all that is best in the medical life and teaching of London, to the benefit of the sick soldier and the enhancement of the professional standing of the Royal Army Medical Corps.

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