DEPARTMENT OF TROPICAL MEDICINE
Colonel R. J. G. MORRISON C.B.E., M.D., F.R.C.P.
Professor in Tropical Medicine and Consulting Physician

The history of the Department of Tropical Medicine is so intimately bound up with the first Professor of Military Medicine that some account of his life and times forms an essential background. William Campbell Maclean served as Professor from 1861 until he retired some 25 years later. His influence on his students, and on the teaching of Tropical Medicine in general, was immense. During his tenure of office 1,476 medical officers of the British Army, the Royal Navy, and the Medical Service of the Government of India attended his classes, and during this period the mortality rate of the Army in India dropped from 69 to 13 per thousand. Maclean's appearance should be well known to all R.A.M.C. officers. His portrait hangs in the Smoking Room of the Headquarter Mess an honour he shares with his beloved teaching colleagues Parkes, Longmore and Aitken. From his position above the letter-rack Maclean surveys the present students with an air of serene dignity tinged with autumnal melancholy. He was born in 1811 in Scotland: Both sides of his family were of Highland stock. The Clan Macleans had had military associations for many years. The Clan Maclean had been "out" for the Stuarts in the rebellion of '45, and some of the family, probably his father's uncles, were forced to flee to America after Culloden. Maclean's father, John Maclean, was descended from Neil Ban "the fair" who was the second son of Donald, the first Maclean of Ardgour. Neil Ban obtained the lands of Boreray in North Uist and these remained in the family for more than 300 years. Early in the 19th century Maclean's father left his ancestral hearth and purchased the estate of Drimnin in Morvern, on the Sound of Mull. Maclean's wife was the daughter of Donald Macleod of Bernera. Donald possessed a virility seldom excelled in these days of pallid temperaments. He married at the age of eighteen. By the time his wife died she had presented him with twenty children. He lived with his second wife for nineteen years before she died without issue. But his fires were not damped. At the age of seventy-five he took as his third wife Margaret, a girl of sixteen, and had nine children by her!

During the early days of his life Maclean was saturated with military atmosphere. Indeed, he derived his Christian names from William Campbell of Ainsay, the Colonel of the 78th Highlanders, who had been a great friend of the family and was killed in action at the capture of Java in the year Maclean was born. Maclean was four years old at the time of Waterloo, but it is doubtful if he had any recollections of it. It is, however, quite certain that he knew many men who had served under Wellington and that he listened to their tales of adventure. The Highlands in those days were swarming with half-pay officers who had fought with Highland regiments in Spain, Holland and Belgium. Maclean's father offered hospitality to them, and on frequent occasions his sons heard the talk of the mess-table, which was, as often as not, con-
dusted in Gaelic. In his early childhood Maclean was considered a delicate child and for a while suffered from blindness. His autobiography recalls an incident when at a tender age he was enlivening the bleakness of a Highland Sabbath by playing a fiddle. He was surprised in this by the sudden appearance of Dr. Hill, the Principal of St. Andrew’s University. Maclean neatly deflected the wrath to come by asking if God would “be angry with a poor blind boy for playing the fiddle on a Sunday?” The good doctor was so affected that he turned his head aside and wept. Whatever may have been the nature of his blindness, Maclean’s recovery of his vision was complete and he continued to have exceptionally good eyesight up to his eighty-fourth year. In the year 1818 the Maclean family moved to Stockbridge and in this year a series of misfortunes occurred. In the first place his father’s health declined. He had for long been troubled with the stone, and the time had now come when facing the surgeon’s knife held fewer terrors than the illness. The operation was performed by Mr. George Bell, the Edinburgh surgeon. It lasted one hour and was bravely borne. It was not a success and the old gentleman was taken by sea to London where Sir Astley Cooper performed a further operation which relieved his distress until he finally succumbed to renewed symptoms a few years later. At this time, too, the family’s finances were becoming strained. In 1824 Maclean and his brother Roderick were sent to school at the Dollar Academy in Clackmannanshire. He boarded with a Mr. Bell, the mathematics master, who neglected him completely, being most of the time “with his head in a creel” deeply absorbed in some mathematical problem. His health gradually improved. The sick headaches from which he had long suffered disappeared. His morale and his reputation in the school were considerably fortified by his administering a boxing lesson to the school bully—Tammy Scotland, with whom a fight had been arranged for him.

In 1829 Maclean began the study of Medicine at the University of Edinburgh. Life at once became an intensely exciting affair. His interest was stimulated by a new aspect of society. Edinburgh was then at the height of its fame as a seat of learning. The great Dr. Knox was Professor of Anatomy. He was, however, not destined to remain on his pedestal for long. The trial of Burke and Hare, the murdering resurrectionists,” revealed that Dr. Knox did not inquire too deeply into the source of his bodies for the dissecting room. His good name was blasted. His influence declined and although he stood his ground for some years he eventually had to leave for England where he eked out a living as an occasional lecturer. He eventually died in poverty. Maclean always held that Knox was hard done by, the real fault lying with his subordinates who misinformed him about the origins of the subjects. Another stimulating personality was Professor Sharpey, the Secretary of the Royal Society. The Professor of Medicine, Dr. Home, had the enviable reputation among the students of being forty years out of date. Apart from medical men, other noted men of learning were out and about in Edinburgh at that time. Maclean would often catch sight of Sir Walter Scott as he limped home of an evening, from his duties as Clerk of the Courts of Sessions to his house in Castle Street. Then there was Ballantyne the famous printer, at whose house Maclean attended on many a musical evening. These were the days of Allison the physiologist, Professor Monro, the grandson of the discoverer of the foramen of that name, and Playfair the architect who had an impor-
tant part to play in the design of the New Town of Edinburgh. Maclean met and knew all these people and their influence must have touched him.

In due course Maclean qualified, becoming a Licentiate of the Royal College of Surgeons in 1832. After a short holiday in the Highlands he returned to Edinburgh to work for his M.D. degree, which he obtained in 1834. Maclean started his career at the age of 23 as a ship’s surgeon, making two voyages in this capacity. The first was in the *Upton Castle* proceeding to the Bombay Presidency. To join the ship was Maclean’s first journey of any length, and certainly a varied one. He went from Glasgow to Liverpool by sea. At Liverpool a great excitement awaited him—the prospect of the journey from Liverpool to Manchester by train. This was the first railway to run in England, and the only one then in operation. From Manchester he took the crack coach *Peveril of the Peak* and had an exhilarating run down to London. He found the *Upton Castle* to be a well founded ship; a transport carrying the future Commander-in-Chief, Sir John Keen, and crowded to capacity with officers to whom Maclean took an immediate dislike and with whom he had little in common. This may explain an occasion which Maclean records with relish in his autobiography. It appears that a young Bombay officer was his partner at a game of whist. It was Maclean’s turn to deal the cards, but the violent action of the ship caused a misdeal. Whereat his partner “made a foolish observation together with an impudent gesture” which brought Maclean’s Highland blood to the boil. He told his partner “not to twist his moustache” at him. Further offence was taken. Tempers mounted. Finally his partner hotly issued a challenge which was at once accepted. It was arranged that on the ship’s arrival at Bombay a duel should immediately be fought. A site called Phipp’s Grove had been set aside for such meetings. When the parties arrived at the duelling ground and faced each other, each fired with deliberate intent to miss. Whereupon they were both overcome with laughter and retired to the Bombay officer’s lodgings for a convivial celebration of their renewed friendship. Maclean’s mature reflection upon this incident is that he was appalled that none of the senior officers on board, who were fully aware of the circumstances, made any attempt to affect a reconciliation but were quite content to allow the affair to proceed to its ridiculous, but dangerous, conclusion.

Maclean’s second sea voyage was to China. He called at Macao and on the return journey at St. Helena, where he saw Napoleon’s grave under the willow tree where he was buried before being removed to the Invalides. It was shortly after his return from this voyage, in 1836, that Maclean had his first contact with the Army Medical Department. His uncle, Sir John Macleod, wrote to the Director General, Sir James McGrigor, offering the services of his nephew. Sir James replied offering the appointment of Surgeon to the Gold Coast which was politely declined. Instead, Maclean took a holiday in Paris and did the rounds of the famous teaching hospitals. In 1838, at the age of 27, he obtained an appointment as Assistant-Surgeon in the Madras Army. This was the start of that period in his life when practically everything he did in some way influenced his later teaching at the Army Medical College. These were the years from 1838-1860 when Maclean was actively engaged in diagnosing and treating tropical diseases, experience which formed the basis for his teaching days. The lessons he learned made vivid impressions and were not easily
forgotten. In those days, service in the tropics was very different from modern times. Medical officers had no power and little influence. Any officer commanding a regiment could, and very often did, flout medical advice with impunity. Maclean found that the only way of ensuring that his advice on matters of army health was followed was to make his views known to those in high authority. The soldiers were coarse and cruel, often the sweepings of the prisons. Floggings were still common. Maclean was foremost in condemnation of such treatment. He described a case in which a soldier died with extensive lacerations of the back from 150 strokes. Drunkenness was rife. It is notable that Maclean would often give a homily to the officers and men on the evils of strong drink, a theme that recurs frequently in his autobiography. Sanitation was primitive and dysentery common. Not infrequently cholera broke out on the transports. On arrival at Madras Maclean spent two months on probationary duty at the General Hospital. One aspect of his service had much in common with modern times—the frequency with which a young unmarried officer receives a change of posting! In 1840 the Opium War with China broke out. Maclean volunteered for service in China and for the next three years was engaged in active fighting. He took part in the occupation of the Island of Chusan. He considered the operation as one of the most disgraceful episodes of our military history. The force was led by an incompetent commander. The meat, which had been salted in Bombay, was foul. The commander would not allow it to be condemned, but to save the expense of replacement insisted on its being issued to the troops. A severe form of "scorbutic dysentery" resulted. The 26th Cameronians lost 82 men in a few days. When the island was taken, further health troubles arose. The soldiers were poorly quartered. They had unsavoury billets, mostly in joss-houses in the centre of the town. Dysentery continued to take its toll. Maclean found ipecacuanha an effective remedy. There was also heat stroke to be treated. Maclean early noticed how this disease was easily confused with apoplexy and noted the differences between them. Cholera broke out from time to time and was always in the offing.

In 1843 Maclean was posted back to Madras and after a short time was sent as Residency Surgeon to the Court of Hyderabad, Deccan. This was an important position. Maclean regarded it as the turning point in his life. Here he was to all intents and purposes a busy civilian practitioner fulfilling the duties of what was later to be known as a Civil Surgeon of the Indian Medical Service. It was an ideal posting with an attractive house and garden and an income of about £1,000 a year. He was his own master, being responsible only to the Resident. His duties were interesting and pleasant. He had charge of the general hospital which was within the walled city of Hyderabad. The Nizam at this time ruled over the city. Maclean found him to be fat, ignorant and lazy. He was aloof and unhelpful to the British and enjoyed creating difficulties. Towards Maclean, however, he relented. He was the only European to be allowed access to the city at all times without a special pass. His duties embraced every branch of medicine and on many occasions he was required to stitch wounds or mend bones broken in the warfare between rival bands of merchants.

Under the genial influence of his happy domestic state Maclean, after one year's residence at Hyderabad, married Miss Louisa Macpherson, a niece of his brother-
in-law, General Duncan Macpherson. It was soon after this that there came another event to prepare him for his future professional appointment. The Resident had long been anxious to start a Medical School at Hyderabad to build a body of local doctors. The Nizam and the Governor General acquiesced in the project, appointing Maclean as superintendent of this school. This involved a great deal of extra labour and Maclean found himself teaching, in the vernacular, for nine hours a day except in the extremely bad weather of March, April and May. However, the job brought in an extra £500 a year, welcome with his family beginning to increase.

Maclean laboured happily at Hyderabad for the next twelve years until in 1855 he went home on leave. He returned in 1857, having decided to leave his family in England. Breaking his journey at Ceylon he found that the Indian papers gave a rumbling warning of the Sepoy Mutiny which was to break out soon. When he arrived in India it was in full swing. He was posted as Garrison Surgeon at Visagapatam. Life now was very different from the old position. He was quartered next to the native regiment, whose loyalty was under considerable suspicion. Every post brought sacks of letters to the Sepoys urging them to turn on their officers and join their comrades in mutiny. Maclean and his brother officers were subjected to considerable tension. They slept every night with loaded revolvers under their pillows. It must have been with immense relief that one day the news trickled through of the fall of Delhi. The back of the mutiny had been broken. Shortly afterwards came further good news. Maclean received a letter from Mr. Sidney Herbert, then Secretary for War, offering him the chair of Medicine in the Army Medical School, then in the process of foundation.

Maclean, now aged 49, hastened home to England only to find that his job was now in jeopardy. The War Minister had decided that the appointment was to be for five years in the first place. This did not suit Maclean for it was an Indian Office rule that any officer who had left the service for more than five years was not eligible for re-employment. If Maclean's contract was not to be renewed at the end of five years he would find himself high and dry without employment just at a time when his children were approaching an expensive age. He asked for and obtained an interview with Mr. Herbert. He found him, as had so many other people, charming, courteous, exquisitely mannered—but unshifting in his opinion. But there was another mind fighting on behalf of Maclean—a mind more determined, more inflexible, indomitably fixed on the attainment of its own purpose: the mind of Miss Florence Nightingale. She was in daily communication with Maclean and quite determined that he was to be the first professor. Through her influence Sir Charles Wood, Secretary of State for India, agreed to re-instate Maclean if he should prove unsatisfactory after a probationary period of two years. This was fine and Maclean was accordingly firmly in the chair. The Director General of the Army Medical Department, Sir James Gibson, at the end of the two years made a bid to return to the five-year appointment, but Maclean was immediately up in protest—the professor should be appointed for life or until found unsuitable. A committee was appointed by the Secretary for War to pontificate over the wrangle. They found in favour of Maclean.

From its very inception Tropical Medicine played a very important part in the curriculum of the College. It is true that Maclean's official title was Professor of
Military, not Tropical, Medicine, but his charge was “to describe and clinically demonstrate those diseases most commonly met with in the Army, their prevention and treatment, more especially infective and epidemic diseases encountered and acquired in Tropical and Sub-Tropical countries.” Maclean divided his teaching into two parts. There were set lectures of a formal character, and demonstrations and clinical rounds at the Royal Victoria Hospital at Netley. Netley was then largely an evacuation hospital, more than three quarters filled with soldiers evacuated from India. Students at the College were allocated patients and, under the assistant professor, responsible for them. The subject matter of the lectures has been preserved for posterity. In 1886 Maclean published his lectures in book form, Disease of Tropical Climates. This makes interesting reading, especially with respect to malaria. Laveran had very recently described the malarial parasite. Maclean remarks: “Should future observations by independent observers in other malarial regions confirm these conclusions, it would be difficult to overrate their importance.” Remittent and intermittent fever are separately described. Other subjects were enteric fever, relapsing fever, dengue, yellow fever, dysentery, cholera, beri-beri—indeed the subject matter has not changed a great deal since early times. Maclean kept up a lively correspondence with his old pupils after they proceeded to the Tropics. Frequently his lectures are graced by some little anecdote told him by one of his past students and used by him to illustrate a point. Maclean’s long period as professor lasted until he was 74. The Proceedings of the Senate Meetings towards the latter years of his term are punctuated by periodic appeals from Maclean to be released from his duties due to “private and personal matters”, but always he was prevailed on to remain.

Maclean was much loved and respected. In addition to his lectures he published sections on Tropical Medicine in Russell Reynold’s System of Medicine, and Richard Quain’s Dictionary of Medicine, besides sundry articles and papers. He was made a Companion of the Most Honourable Order of the Bath, and Her Majesty Queen Victoria appointed him her Honorary Surgeon. The University of Glasgow gave him the Degree of Doctor of Laws. On his retirement he lived happily at Clifton and died in 1898 at the age of eighty-seven. He was succeeded by Dr. D. B. Smith, who had served in India, but he was not to enjoy the chair for long. Soon after taking up office he developed a deep seated cerebral tumour from which he died.

The teaching of Tropical Medicine has continued from these early days. Maclean’s zeal and industry, his kindly interest in his students, his genuine desire to further the study of Tropical Medicine did much to set his department on a successful path. The fact that his courses have needed little modification over the years says much for the wisdom and foresight of their originator. Perhaps the greatest innovation has been the addition of a new discipline, entomology. This was introduced by another remarkable man who held the chair for seven years, Lieut.-General Sir William MacArthur. As knowledge grew of the role of insect vectors, Medical Entomology became more closely wedded to Tropical Medicine. Sir William was quick to realize the importance of entomology, and on his appointment in 1922 the subject was included in the syllabus and gradually extended until it occupied its present position of importance. Sir William is a remarkable man. He has achieved distinction...
in three fields. As a lecturer he is quite without equal. His subject matter is learned by heart. His sentences are hammered and turned until they are perfect. They are delivered with poise and grace. Every word can be heard. Each phrase has its deserved emphasis. There are no embarrassing pauses, no throat clearings, no furtive glances at notes, no hesitations. A lecture by him belongs to the same order of things as a Dickens reading by Emlyn Williams or a Shakespearian monologue by Gielgud. In the field of medical research the name MacArthur will be linked with the discovery of cysticercosis and its importance to the Army. But it is as a scholar, pure and simple, that most people will surely remember him; the classics and the study of the Gaelic language are the subjects which lie closest to his heart. His three special talents— oratory, tropical medicine and the classics—were fused on the occasion of his Presidential address to the Royal Society of Tropical Medicine, in which he identified as typhus the Athenian Plague of 430 B.C., so graphically described by Thucydides.

Entomology needed but one more advance to bring it to its present status. This was achieved by Major-General W. R. M. Drew during his term as professor, when he found and appointed the right man to be wholetime Entomologist to the College, Mr. J. H. Grundy. Recently the College has extended the scope of its teaching. Apart from helping to prepare candidates for membership of the Royal College of Physicians, special courses have been given for the D.T.M. & H. examination. The Director General has taken a personal interest in this matter and under his urgent stimulus nearly every member of the Senior and Junior courses has sat for the examination. It is a happy thought, which augurs well for the future of the College, that so far, out of 50 candidates who have presented themselves, 43 have been successful.

PROFESSORS OF TROPICAL MEDICINE
ROYAL ARMY MEDICAL COLLEGE

1860-1886 INSPECTOR GENERAL W. C. MACLEAN.
1887-1889 SURGEON MAJOR D. B. SMITH.
1890-1897 BRIGADE SURGEON H. CALEY.
1898-1905 COLONEL K. MCLEOD.
1906-1909 MAJOR R. J. SIMPSON.
1910-1913 MAJOR W. S. HARRISON.
1914 LIEUT.-COLONEL O. L. ROBINSON.
1915-1918 NO APPOINTMENT.
1919-1920 LIEUT.-COLONEL O. L. ROBINSON.
1920-1921 COLONEL J. C. KENNEDY.
1922-1929 COLONEL W. P. MACARTHUR.
1930-1934 COLONEL J. HEATLEY SPENCER.
1935-1938 LIEUT.-COLONEL A. G. BIGGAM.
1939-1940 LIEUT.-COLONEL S. SMITH.
1941-1942 LIEUT.-COLONEL T. MENZIES.
1943-1946 LIEUT.-COLONEL W. R. M. DREW.
1947-1948 BRIGADIER S. SMITH.
1948-1952 LIEUT.-COLONEL A. N. T. MENECES.
1953-1956 COLONEL W. R. M. DREW.
1956-1957 COLONEL W. D. HUGHES.
1957-1959 COLONEL J. A. G. CARMICHAEL.
1959 COLONEL R. J. G. MORRISON.

Note: The title of Professor of Tropical Medicine has not always been used for the Head of the Department. For example the Director of Medicine at the War Office used to be styled "Consulting Physician to the War Office and Professor of Tropical Medicine" although he was not engaged in teaching duties at the College. In these circumstances the actual teaching was done by the "Assistant Professor of Tropical Medicine." This title was re-instated in 1952 when a second instructor in Tropical Medicine was posted to the College. In other periods the Head of the Department was designated "Reader in Tropical Medicine." The above list refers only to those who were the Head of the Department and actually engaged in teaching.