

## Obituary.

SIR GEORGE DANCER THANE, LL.D., Sc.D.,

F.R.C.S.,

Emeritus Professor of Anatomy, University College, London.

SIR GEORGE THANE, both by reason of length and intensity of service, may justly be regarded as the most whole-hearted servant of a school which has never lacked sons who placed the interest of the medical school and hospital before all personal advancement.

George Dancer Thane was born at Great Berkhamsted, Herts, on May 27th, 1850, and was the eldest son of G. D. Thane, M.D. He died at home, in Harrow, on January 14th, as the result of gradual cardiac failure during the last two months. He entered University College in 1867, following such alumni as H. Newell Martin, the founder of American physiology; John Williams, obstetrician; William Gowers, neurologist; John Tweedy, ophthalmologist; Marcus Beck and Rickman John Godlee, surgeons. The entry in the years immediately following bears names which became familiar as Henry Morris, surgeon; Ray Lankester, biologist; Thomas Barlow, physician; Albert Edward Sharpey-Schafer, physiologist. The late Dawson Williams, Frederick Mott, Victor Horsley, Stanley Boyd, and Montague Murray had enrolled before 1874. This was a goodly company. Thane's progress in anatomy was such that he was appointed demonstrator by Professor Viner Ellis in 1870, a year before he qualified M.R.C.S. He succeeded Ellis in 1877, at the early age of 27, and continued in the chair of anatomy until 1919, when, elected emeritus professor, he was succeeded by the present holder, Professor G. Elliot Smith. He was knighted in 1919 largely for his services as inspector under the Vivisection Act of 1876, as well as for his services to University College.

Thane occupied a distinguished position among British and Continental anatomists. He was one of the founders of the Anatomical Society of Great Britain and Ireland, and became president. He was a member of the French and German societies, and foreign corresponding member of the Anthropological Society of Paris. The environment into which Thane was thrust as a youthful demonstrator and professor from 1870 to 1877 was a remarkable one from the point of view of the development of British medicine and of British physiology in particular. The quarrels of the anatomists and surgeons among themselves on questions of division of labour, no less than the antagonism between the anatomists and the College Council, had threatened to wreck the institution soon after its foundation in 1827. In 1837 William Sharpey was appointed professor of anatomy and physiology, at a time when Richard Quain held the chair of practical anatomy and served as surgeon to the hospital. Sharpey, with tremendous energy, commenced a course in microscopic anatomy, and re-edited the fifth edition of Jones Quain's *Anatomy*, with Richard Quain as co-editor. He introduced into this book the results of his researches in microscopic anatomy and in relation to bone in particular. He instituted a lectureship in practical physiology "with a view to supplying medical students with instruction in the use of the microscope in

examining the textures and fluids of the bodies." Thus the teaching of histology and neurology was undertaken by the department of physiology, and the department of anatomy was left with no equipment beyond the cadaver, and sank to be the handmaid of surgery.

Thane was placed in charge of a department which had been obscured by the brilliant energy of the school of physiology under Sharpey, seconded by the no less brilliant Michael Foster and Burdon-Sanderson. The school of physiology not only attracted workers like Schafer, W. H. Gaskell, Gotch, Halliburton, Benjamin Moore, Leonard Hill, a sequence which was destined to reach maturity with Bayliss and Starling, but also attracted from the hospital back to the physiological laboratories such workers as Sydney Ringer, Oliver, Rose Bradford, Beevor, J. H. Parsons, and Page May. The wave of enthusiasm for physiology at this time left most departments of anatomy sterile. Yet Thane managed to provide the clinical and

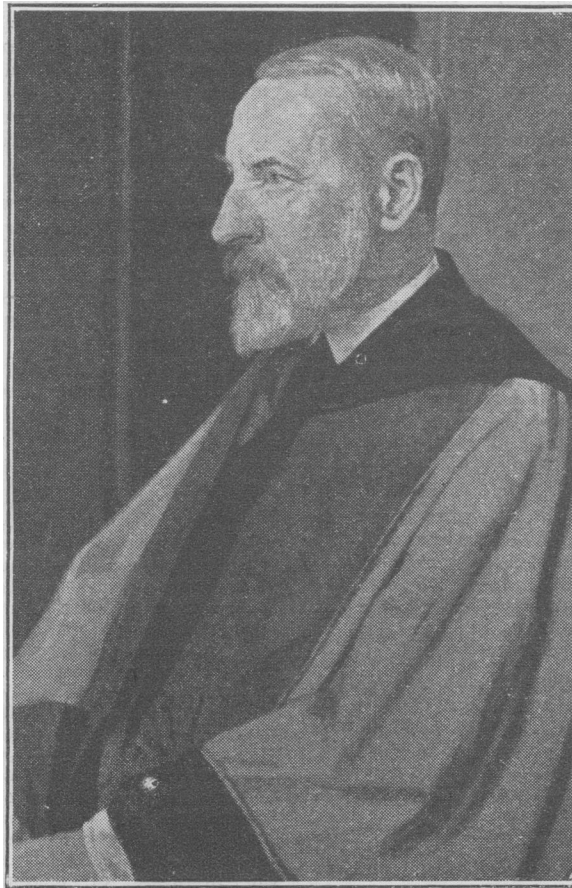
pathological staff of the hospital with a succession of young men trained to think anatomically. His demonstrators included Rickman Godlee, Silcock, Bilton Pollard, Rose Bradford, Percy Flemming, Raymond Johnson, Mower White, George Blacker, S. G. Shattock, C. Stonham, T. W. P. Lawrence, Donald Armour, Batty Shaw, Wilfred Trotter, A. M. H. Gray, E. K. Martin, and G. S. Hett.

Thane was no transcendental anatomist. He refused to pretend to be a morphologist or physiologist. His mind was content with that conception of anatomy which satisfied Claude Bernard.

"Anatomy is the basis necessary to all medical investigation, whether theoretical or practical. Anatomy in itself is a sterile science; its existence is justified only by the presence of living men and animals, well and sick, and by its own possible usefulness to physiology and pathology. . . . Anatomy is the necessary foundation of physiology, and never can we become good physiologists if we are not first deeply versed in anatomical studies and trained in anatomical dissections."

Poetic and philosophical intrusions into the domain of precise and accurate descriptive anatomy he abhorred, and he scoffed at loose analogy or fantastic simile. He distrusted the statistical method, and maintained that the higher mathematics was but a form of intellectual shorthand which contributed nothing to the sum total of anatomical knowledge.

As most of Sharpey's contributions to anatomy and histology were incorporated in the various editions of *Quain's Anatomy*, so most of Thane's original observations are incorporated in the ninth and tenth editions of the same book, with Sharpey-Schafer as co-editor. The tenth edition of "Quain" furnishes the highest standard of precise, naked, and finally concentrated anatomical truth. The brevity is classical. There is not a redundant word or phrase. Here is no tolerance of "it is almost universally accepted"; "there is every reason"; "it is safe to assume"; "it is tempting to suppose"; "probably each"; "presumably." On one occasion Thane said that "any fool is perfectly at liberty to assume anything he likes, but it is very much open to question whether it is safe to assume anything when considering so intricate a subject as the central nervous system." The illustrations of the bones of the skeleton in the tenth edition of *Quain's Anatomy*, from drawings by two of his demonstrators,



T. W. P. Lawrence and D. Gunn, are the most accurate osteological drawings extant, and represent the highest standard of the woodcut in anatomical illustration. Thane's drawings of the small bones have been widely copied.

The influence of *Quain's Anatomy* is but inadequately appreciated. A definitive translation of the seventh edition was published in German by Hoffmann in 1870. The translation was an immediate success. Schwalbe, not satisfied with translating the second volume, dealing in particular with the nervous system, more than doubled its size by additions. The Hoffmann-Schwalbe translation next served as the basis of Rauber's *Lehrbuch der Anatomie des Menschen* and of Schwalbe's *Neurologie der Menschen*—with no reference to "Quain." By 1920 eleven editions of Rauber's *Lehrbuch* had appeared, mainly under the editorship of Kopsch. The Rauber-Kopsch *Lehrbuch* has been repeatedly translated into various languages. It is not without humour that Rauber's description of the muscles, translated from the "Quain," should have been retranslated into English as the basis of many textbooks of anatomy since 1889. The time is not yet ripe for a candid history of these translations and retranslations.

As in the "Quain," so in Ellis's *Demonstrations of Anatomy*, which Thane edited through many editions, in brief articles to *Nature*, such as that "On the Brain of the Gorilla" (December 14th, 1876), and in the various communications to the *Proceedings of the Anatomical Society*, the same precision, brevity, and careful usage of words is seen. Thane, in his descriptive anatomical writings, had as much precision as the French anatomists, as much thoroughness as the Germans, and a higher standard of self-control and a stronger appreciation of anatomical truth than either.

As dean of the Medical Faculty and as member of the College Committee Thane had a most intimate acquaintance with the students and the affairs of the College and hospital. Differences between the department of anatomy and the College Council in 1828-30 had almost led to the dissolution of the College. It is fitting to note that the strong bond of friendship between Thane and the late Provost, Sir Gregory Foster, at the critical period at the beginning of this century, did much to raise the College to its present standard of efficiency, and led to the successful transfer of various departments under a special charter of January 1st, 1907, to a separate corporation as the University College Hospital Medical School. Thane's delight in the welfare, progress, and subsequent history of the student was unequalled. From 1874 to 1914 he kept a detailed Students' Register, written in a careful hand, with red ink for failures and purple ink for successes. The perusal of this register is the acme of delight to one who loves naked history untarnished by scissors and paste.

George Hancock, who was laboratory assistant to Thane for twenty-nine years, said: "I always remember the professor as one who dominated all others, high and low, without bullying. He was a martinet in regard to rules and regulations. He was intolerant of smoking, and made me take the names of eminent members of the staff when he detected them smoking, while he was preparing for his lecture in the theatre. Students were orderly in his presence not from fear, but from a real desire to stand well in his sight. I was impressed by the frequency with which he was consulted by such surgeons as Beck, Godlee, Bilton Pollard, Johnston, Spencer, Blacker, and others. His memory for names and faces was unequalled, and I remember seeing him meet a former student who had been abroad for twenty-five years. He greeted him by name on sight. I have seen many such incidents. The professor was very direct in speech, and he once told a student that the specimen which he was handling roughly was of more use to medicine than the student."

Since his retirement in 1919 Sir George Thane was a frequent visitor to University College, and maintained his interest in the department which is now so well endowed. For several years he brought with him, on each visit, two or three of his treasured books and presented them to the library, thus taking a tender farewell

of each book, rather than sending all at once. His knowledge of the history of anatomy remained as wide, as accurate, and as unequalled as ever, for he possessed an extremely active memory. His pleasure in the *Dictionary of National Biography* and in the *Oxford English Dictionary* was characteristic. The history of botany and the history of the Roman occupation interested him greatly, and he was a keen field naturalist.

He welcomed the good fortune which made possible, through the munificence of the Rockefeller Foundation, the erection of the new Institute of Anatomy, in which histology, neurology, and embryology returned to the fold of anatomy under the guidance of Professors Elliot Smith and J. P. Hill. Thane's frequent visits to the new laboratories, his interest in the Page May neurological collection, his appreciation of the developments in radiology and anthropology, his frequent inquiries concerning the extent of the liaison between the department and the hospital, showed to what an extent his manly and energetic zeal outlasted his years, as did his cordial and undisguised contempt of the fashionable quackeries. To have been the last of his demonstrators and curator of the anatomical museum, to have had his kindly interest and paternal affection in the last twelve years, has been an education in the art of being joyfully overburdened with duties.

H. A. H.

Sir George Thane was buried at Highgate Cemetery on January 17th, after a memorial service held at St. Pancras Church. At a meeting of the Faculty of Medicine, held in the anatomy theatre of University College, the Dean (Professor Drummond) read the following resolution, which was supported by Professor Elliot Smith, F.R.S., Sir John Rose Bradford, P.R.C.P., F.R.S., and Mr. Percy Flemming, F.R.C.S., who had both been closely associated with Sir George as senior demonstrators of anatomy.

"It is resolved that the Faculty of Medical Sciences places on record its sense of the great loss the College has suffered by the death of Sir George Thane, who for forty-two years was professor of anatomy in the College, and for ten years emeritus professor. In the fulfilment of the duties of his chair, as dean of the Faculty of Medical Sciences, and as a member of the College Committee for many years, he rendered conspicuous services to the Faculty and to the College. His wide and exact knowledge of anatomy found luminous expression in the ninth and tenth editions of *Quain's Text Book of Anatomy*, which his predecessors in the chair of anatomy in this College had created. At the time when it was first issued it was a new type of textbook of anatomy, more comprehensive and exact than anything that had preceded it. It was copied in Germany and in France, and soon became the recognized type of book adopted in medical schools throughout the world. In Thane's hands it attained a still higher standard of precision and lucidity, which made it the most reliable and comprehensive textbook of the subject which had ever been issued. Into it Sir George put the wide knowledge he had acquired by original investigation and an amazing familiarity with the literature of anatomy. His personal knowledge of anatomists, both in this country and abroad, and of their activities, social as well as academic, was as wonderful as his knowledge of the literature. Even more surprising was his intimate acquaintance with the life-history of every student who had worked under him. He maintained his interest by keeping himself informed of the subsequent careers of all his students. His memory of the personal details of the lives of thousands of medical men and women was truly astounding. By his death the College has lost a man, not only of wide knowledge and genial humanity, but one who was a link with those who laid so truly and so well the foundations of the Faculty of Medical Sciences, and who himself consolidated their efforts by his loyal and devoted work."

In supporting this resolution Professor Elliot Smith said: By the death of Sir George Thane, within four months of the eightieth anniversary of his birth, University College has lost a distinguished teacher of anatomy who was associated with the College for sixty-three years, and devoted practically the whole of his life to its service. When a student of medicine he came under the influence of George Viner Ellis, who was then professor of anatomy, and before he had completed his course of training was elected a demonstrator of anatomy before he was 20 years of age. He held this position for seven years, and in 1877 was appointed professor of anatomy in succession to Ellis.

After occupying the chair for forty-two years he was given the title of emeritus professor ten years ago on his resignation of the professorship. Ellis's conception of teaching anatomy was an insistence upon the exact observation of fact and a clear and restrained expression of what he exposed by dissection. It has been said of him that he regarded an interest in the subject as outside the scope of a teacher's aims. Without sacrificing any of the discipline of precise observation and lucid expression Thane made the study of human anatomy a humane occupation, and he threw into his teaching the whole force of his personality and became keenly interested in every individual student. He made a practice of keeping a record of the life-history of every student who came under his teaching, and he followed up this interest after the students had left the department of anatomy, so that he had imprinted upon his memory a full record of the life and achievements of every individual student. It was not merely their knowledge of anatomy or their academic achievements that interested him, but their social circumstances and everything that related to them, which appealed strongly to his deep feeling of humanity. Thane was a man who had a profound knowledge of anatomy, which he had acquired by persistent observation and the study of literature. He was not merely acquainted with the writings of his contemporaries, but he knew every prominent anatomist personally and intimately, and knew the circumstances of their social life and interests as well as their achievements. During the sixty years of his activity he devoted the best energies of his life to University College, and as he had a personal knowledge of the men who immediately preceded him his life may be said to have been a living link throughout the whole career of the College. But his work is distinctive of the type of anatomy which grew up in University College. When Thane became associated with Allen Thomson and Schafer as editors of the ninth edition of *Quain's Anatomy* they said of William Sharpey, whom they described as the distinguished anatomist and histologist, that he put his most valuable original observations into the texture of the book which they were revising. Sir George Thane also put into *Quain's Anatomy* the results of a lifetime of original observation and a knowledge of the literature of anatomy which in his day was probably unsurpassed.

[Our portrait of Sir George Thane is reproduced, by permission of the artist, from the painting by Professor William Rothenstein.]

ALBERT MORTON MARTIN, M.B., B.S.,  
Consulting Surgeon, Royal Victoria Infirmary,  
Newcastle-upon-Tyne.

It was only last September that Albert Martin, consulting surgeon to the Royal Victoria Infirmary, Newcastle-upon-Tyne, retired from the staff of the Infirmary on attaining the age limit of 60 years, after an uninterrupted service of nearly forty years. Though at that time it was known that his health had not been very satisfactory, none anticipated so sudden a curtailment of the many years of useful life which all hoped lay before him. Just after his retirement he was able to take part in the final examination in clinical surgery, and those of his colleagues who met him after his short absence from his hospital duties noticed a marked restoration in health, as shown by a return of the cheery optimism which was so characteristic of him. Unhappily it was otherwise ordained, and on the last day of 1929 a return of bronchitic trouble was followed by cardiac failure, which rapidly proved fatal.

Albert Morton Martin came of a South Shields family, but he was educated at the Royal Grammar School in Newcastle and the University of Durham College of Medicine in the city. After graduating M.B., B.S. Durham with honours in 1890, he acted for a short time as house-surgeon in the Ingham Infirmary in his native town. At the end of this appointment he returned to the Newcastle Infirmary as house-surgeon to the late Professor W. C. Arnison, and he served that institution in one capacity or another continuously and faithfully from that time almost to the day of his death. For twenty-nine years he had been an honorary surgeon in charge of wards, and for a

short period he was also the surgeon in charge of the then existing orthopaedic department. He acquired an early interest in the surgery of bones, joints, and deformities, and throughout his professional life this branch of work especially appealed to him. It may be said that he very largely developed and perfected the surgery of the semilunar cartilages, not only in this district, but among surgeons the world over, and thousands of patients—miners and footballers for the most part—are grateful witnesses to his skill in this department, which he made peculiarly his own. The clinical features of the various forms of injury to the knee-joint were so familiar to him that his diagnosis was only rarely at fault. The simple transverse incision which he advocated gave an ample exposure in his hands, and he was so adept at this operation that a distinguished visitor, himself an orthopaedic surgeon of renown, characterized the proceeding as being almost as simple as shelling peas! The results were remarkable and were greatly appreciated by the public, and no miner in the counties of Northumberland and Durham ever hesitates to accept an operation as *the method of treatment* if "the cartilage" is at fault. This position is largely due to the work initiated and carried out so successfully by Mr. Martin. Many visitors to his clinic were surprised at the simplicity of his technique, and those of small experience and poor knowledge of surgical principles looked upon his theatre arrangements as perhaps old-fashioned. The reason why he persisted to the end of his days in a technique which was largely antiseptic was because it had given him such admirable results and had enabled him to open the knee-joint so freely in so many hundreds of cases almost without a fault. Change he felt was unnecessary, and not likely to bring any reward for the additional responsibility thrown on the surgeon.

As so often happens, his work in his own specialty overshadowed his great capacity as a general surgeon, for he was most skilful, and operations in his hands appeared to be conducted with surpassing ease. The confidence of those about him in his manipulative skill was illustrated by a story of one of his students who, years ago, suggested to Mr. Martin, then working in the out-patient department, that a mass of acute inflammatory glands in the groin might, perhaps, be successfully dealt with by the operation of excision. To this Mr. Martin replied that he would not let anyone dissect out his glands in the same circumstances. Like a flash came the answer from the student, "Perhaps not—but I would allow you to remove mine." His teaching was direct and common-sense, and he endeavoured to fit his students for their life's work, holding that the special branches were the more suited for post-graduate study. His classes in the out-patient department, in the old days, were extremely popular, and the writer can testify to their great practical value. The same traditions pervaded his bedside teaching, and served generations of students in good stead. As a hospital officer he was most regular in his attendance, and punctilious in the performance of his duties. Since 1914 he had acted as chairman of the honorary staff, and in that capacity he was a regular attendant at the meetings of the House Committee. Unhappily, he wrote seldom, and it is sad to think that his large experience bears so little record. During the war he did yeoman service at the 1st Northern General Hospital, with the rank of lieutenant-colonel, and after the armistice he served on the staff of the orthopaedic hospital as its senior surgeon, until it was moved to other quarters ten years later.

He was always fond of the country and the life of the open, and he looked forward to spending his retirement among his farmer friends on his estate at Bingfield, in the Hallington district of Northumberland. He will indeed be sadly missed, for he possessed qualities for friendship and

