Address of George Johnson, M.D., F.R.S., President of the Royal Medical and Chirurgical Society of London, at the annual meeting, March 1st, 1886.

Unable to display this page

ADDRESS

OF

GEORGE JOHNSON, M.D., F.R.S.,

PRESIDENT,

AT THE

ANNUAL MEETING, MARCH 1st, 1886.

Gentlemen,—The preparation of the annual address with its obituary notices, at all times an anxious and a difficult task, has this year been rendered more than usually so by the fact that, unhappily, since the last anniversary meeting the number of our Fellows who have been taken from us by death is unusually large.

You will have learnt from the report of the Council that during the past year twenty-one Fellows of the Society have died. Of these six were *resident* Fellows, namely, Dr. Maclean, Mr. Arnott, Dr. Harris, Mr. John Gay, Dr. Wotton, and Dr. Sutro. Eleven were *non-resident* Fellows, namely, Dr. William Johnson Smith, Mr. Egerton, Dr. Livingston, Mr. Fortescue, Dr. Edward Howard, Dr. Wardell, Dr. James Russell, Dr. Scott, Mr. Tufnell, Mr. Page, and Dr. Maule Sutton.

To this list have to be added one *Honorary* Fellow, Dr. Carpenter, and three *Foreign Honorary* Fellows, namely, Professor Henle, Dr. Noël Gueneau de Mussy, and Professor Milne Edwards.

I propose now to refer to our deceased Fellows, resident and non-resident, in the order in which their deaths occurred, reserving for subsequent notice the names of the Honorary Fellows of the Society.

I have no doubt that each of my predecessors in this chair, while engaged in the responsible task of briefly sketching the lives and the professional work of those Fellows of the Society who had recently died, has, like myself, been influenced by the desire that his obituary notices should be animated by the same spirit of equity and of charity—equally remote from unmerited eulogy and from unfair criticism—as he would wish to be displayed by some future President when referring to his own professional career.

In preparing these biographical sketches I have derived much assistance from obituary notices which have appeared in the various public journals. In some instances, too, I am indebted to private friends and relatives of the deceased for information with which they have favoured me, and which I could not otherwise have obtained.

Dr. William Johnson Smith, of Weymouth, who was elected a Fellow of this Society in 1847, was born in October, 1813. He was educated in the University of Edinburgh, where he graduated M.D. in 1842.

In 1844 he became a member of the Royal College of Physicians, and afterwards settled at Weymouth, where he obtained a large practice. He there established the Weymouth Sanatorium for the treatment of diseases peculiar to women and children, which, from small beginnings, became in course of years a large and flourishing institution. In 1883 the friends of the Sanatorium placed in the entrance hall a marble bust of the founder, at a cost of £150. During the last two years of his life Dr. Smith suffered much from acute gout in his feet. He gradually became weaker, and died on the 12th of April, 1885, in his seventy-third year.

At his funeral, which was quite of a public character, a large number of friends and former patients attended to

pay their last tribute of respect and esteem for one whom they had learnt to look upon as a great public benefactor.

Mr. Charles Chandler Egerton[1] was born on the 13th of April, 1798, at his father's vicarage, Thorncombe, in Dorsetshire. Dr. Chandler, one of the physicians of Guy's Hospital, was his uncle, and Mr. Egerton received his medical education at the then united Guy's and St. Thomas's Hospitals, under Sir Astley Cooper, Mr. Travers, and others.

In May, 1823, he was appointed by the East India Company Assistant Surgeon on the Bengal establishment to practise as an oculist, and especially to take charge of the Lower Orphan School, composed of Indo-European lads who had contracted disease of the eyes; and at the end of the following month he sailed for Calcutta. Mr. Egerton dealt successfully with the epidemic in the Orphan School, and during his stay in India he held the first position as an oculist, first at the Eye Hospital, which was established under his own immediate care, and afterwards at the Medical College Hospital. He was a very skilful operator and a good surgeon.

He was appointed the first Surgeon at the Calcutta Medical College Hospital, and he held that appointment until he retired from the service. He had much influence in carrying out the plan of the Bengal Medical Retiring Fund when Lord Wm. Bentinck was Governor-General, and he assisted in the establishment of the Medical College for teaching the natives human anatomy by dissection.

Mr. Egerton left India at the end of 1846, or the beginning of 1847 and, having retired from practice, he went to live on his paternal estate, Kendal Lodge, Epping, where he died on the 4th of May last, at the age of eighty-seven. In 1858 he was placed on the Commission of the Peace for the county and until within five or six years of his death

[1] For the particulars of Mr. Egerton's work in India I am indebted to Dr. John Jackson, the well-known retired Indian practitioner.

he was one of the most regular attendants on the bench. One of his neighbours, Dr. Fowler, of Epping, who had known him for twenty years, says of him, in a note with which I have been favoured, "He was a man of no ordinary type; firm, resolute and self-relying, yet kind, hospitable, and benevolent. He was highly respected by his neighbours and by all who knew him, and warmly admired by his numerous friends." Mr. Egerton was elected a non-resident Fellow of this Society in 1823.

Dr. John Maclean was born at Shiels, near Renfrew, on the 13th of March, 1817. He was educated at the University of Glasgow and graduated M.D. in 1838. He became a member of the Royal College of Physicians in 1859, and was elected a Fellow of this Society in 1860. In 1845 he was appointed by the late Sir James Graham an Assistant Inspector of Prisons in the home district and, while holding this office, he was the author of numerous prison reports which were presented to both Houses of Parliament.

In 1847 Dr. Maclean was appointed Chief Medical Officer of the Mutual Provident Alliance Office, and in 1848 Physician to the Provident Life Office. His life office experience enabled Dr. Maclean to supply Mr. Gladstone, when Chancellor of the Exchequer, with statistics in aid of the Government scheme of life assurance. This service was acknowledged by Mr. Gladstone in his speech in the House of Commons, on introducing the Government Annuities and Assurance Bill in 1864.

Sir Spencer Wells, in a note with which he has favoured me, says that twenty years ago he often met Dr. Maclean on life assurance business, and he adds, "I was always impressed by the great care he devoted to this branch of the profession."

Dr. Maclean died on the 28th of April last, aged sixty-eight.

Mr. James Moncrieff Arnott[1] was born at Cupar-Fife on the 15th of March, 1794, where his father and his grandfather

[1] 'British Med. Journal,' June 20th, 1885.

had been in practice before him. He was educated, first at the grammar school of his native place and subsequently at the High School and the University of Edinburgh. He entered the medical classes in 1809, passed the Edinburgh College of Surgeons in 1813, and the following year obtained the M.D. of the University at the age of nineteen. Mr. Arnott then came to London for a year and attended Abernethy's lectures on anatomy at St. Bartholomew's and Astley Cooper's on surgery at Guy's. He also became a pupil at St. George's. In 1814 he went to Paris for a year, where he attended the classes of Pelletan and Dupuytren at the Hôtel Dieu and those of Roger and Roux at La Charité. He afterwards studied at Vienna for a year, chiefly under Beer, the ophthalmologist, and Hildebrand, the then famous teacher of clinical medicine. In 1817 Mr. Arnott returned to London and became a member of the Royal College of Surgeons. For many years he occupied himself by seeing the poor at his own house and often operating upon them at their homes. During these years he was a frequent visitor at the great hospitals on operation days.

At length, in 1831, Mr. Arnott was elected Assistant Surgeon to the Middlesex Hospital, and two years later he became full Surgeon. In 1836, while continuing to hold office as Surgeon at the Middlesex, he was appointed Professor of Surgery at King's College. This office he resigned in 1840, when, at the opening of the new King's College Hospital, he had to choose between the resignation of his Chair and that of his surgical appointment at the Middlesex. At that time his King's College pupils, of whom I was one, presented him with an illuminated address expressing their admiration of his character and his teaching and their extreme regret for his resignation.

In 1848 Mr. Arnott resigned his office at the Middlesex on being appointed Professor of Surgery at University College and Surgeon to University College Hospital. Two years later, in 1850, he retired from University College, and from that time he held no hospital appointment.

Mr. Arnott became a Fellow of the Royal College of

Surgeons in 1843, and an Examiner in 1847. He was twice elected President of the College—in 1850, and again in 1859. It was chiefly through his exertions that the College obtained the Government grant of £15,000 towards the rebuilding of the Hunterian Museum, and, aided by his former pupil, Mr. John Tomes, he did much to establish the license in dental surgery. In recognition of his services to the College, the Council, in 1852, voted the marble bust which may now be seen in the College.

He joined this Society in 1819, and since the death of Dr. Billing, five years ago, he had been our Senior Fellow. He held in succession nearly every office in the Society, and in 1847 he became President.

And here I am tempted to refer to a matter which occurred during his Presidency, his method of dealing with which serves, I think, to illustrate his good sense and discretion. In June, 1847, it happened that my friend and former colleague Mr. John Simon and I communicated each a separate paper on the same subject, namely, "Inflammation of the Kidney." The chief interest of the papers, and the only point of difference between the authors consisted in the interpretation of the microscopic appearances associated with the development of cysts in the kidney. The drawings which accompanied the papers were essentially alike, but the interpretation of the appearances by the respective authors was entirely different. In these circumstances, as I learnt afterwards from the President, some members of the Council suggested that both papers should be returned to the authors until they had found the means of reconciling their differences. Mr. Arnott, on the contrary, maintained that both papers should be published, together with their illustrations, so that facilities might be given for future observers to investigate the points in dispute. The President's arguments prevailed and the two papers, with their illustrative drawings, were published in the thirtieth volume of our 'Transactions.'

Mr. Arnott contributed eight papers to our 'Transactions;' of these the most important is entitled "A Patholo-

gical Inquiry into the Secondary Effects of Inflammation of the Veins." In this paper, which occupies 131 pages of the fifteenth volume of the 'Transactions,' after a full and complete reference to previous writers on the same subject, including not only English, but also French, German, and Italian authors, he gives a number of cases, and from the details of these he concludes that the fatal results of inflammation of the veins are due, not, as John Hunter had surmised, to the extension of the inflammation along the veins to the heart, but to the fact that the secondary abscesses in the viscera, the joints, and elsewhere are the result of contamination of the blood by pus and other morbid secretions. He insists on the resemblance between the secondary results of phlebitis and those diseases which are known to result from the inoculation of a morbid poison, and in this connection he makes especial reference to the local and constitutional symptoms which result from poisoned wounds received in dissection. And, lastly, he maintains that the secondary abscesses which sometimes result from injuries, whether of the extremities or of the head, and those which have not seldom followed parturition, have the same pathological origin, namely, the existence of phlebitis in the part of the body primarily affected, and the consequent transfer of infecting morbid materials to various remote parts.

Mr. Arnott was elected a Fellow of the Royal Society in 1843.

He held in succession various Royal appointments; he was Surgeon-Extraordinary to the late Queen Adelaide, Surgeon-in-Ordinary to the late Prince Consort, and Surgeon-Extraordinary to the Queen. In 1865 he retired from active practice on succeeding to an old family estate at Chapel in Fifeshire.

During the last two years of his life, Mr. Arnott occasionally asked me to see him on account of some disturbance of the circulation which was associated with evidence of atheromatous degeneration of the arteries and with a loud systolic murmur over the apex of the heart. In the

early part of last year his only daughter, who was his constant companion, noticed that he was losing colour and strength, and when he came to London in the spring, Mr. Sibley and I were asked to consult together upon his condition. We found him greatly changed in appearance, without discoverable organic disease, other than the state of the circulation before mentioned. He continued to lose flesh and colour until he was suddenly seized with urgent dyspnœa and extreme restlessness, symptoms which led us to the conclusion that a clot in the right side of the heart or in the pulmonary artery was obstructing the flow of blood through the lungs. After a few hours of acute suffering he died on the 27th of May in the ninety-second year of his age.

His funeral in Kensal Green was attended by Mr. Cooper Forster, then President of the Royal College of Surgeons, and by many friends.

Mr. Arnott was universally held in the highest esteem not only for his acknowledged professional skill and acquirements, but also for his unswerving integrity. I can bear personal testimony to the high appreciation of his clear and emphatic teaching by those who attended his lectures.

I remember once being much impressed, in common with my fellow-students, by the candid manner in which he acknowledged an error of diagnosis. We had gone to the Middlesex Hospital to see him operate; and a testicle believed to be medullary was removed. After the patient had been carried out, Mr. Arnott sliced the testicle, and turning at once to the class, without a moment's delay or hesitation, he said, "Gentlemen, we have been mistaken; that which we took for malignant disease of the testicle we now find to be a hæmatocele."

Mr. George Fortescue[1] was a native of Cornwall, and in 1840, when scarcely two years of age, was taken by his parents to Tasmania, where, at Christ's College, he

[1] 'Australian Medical Gazette,' June 15th, 1885.

received his primary education, and subsequently he returned to complete his education in England.

In 1857 he entered the Medical School of King's College, where in 1858 he obtained a junior scholarship, in 1859 a prize in Chemistry, and in 1861 he was appointed House Surgeon. He was a general favourite amongst his contemporaries, and was greatly admired for his splendid physique. The museum of King's College contains a cast of his right arm, displaying a magnificent muscular development, and there is a tradition that on one occasion a fellow-student, having insulted him, was seized and held at arm's length over the baluster of the hospital staircase, with a threat that if the offence were repeated he should be dropped upon the pavement below. Having obtained the M.R.C.S. in 1860, and graduated M.B. London in 1861, he soon afterwards returned to Australia, and for near a quarter of a century he was one of the leading practitioners of Sydney. For many years he was Surgeon of the Sydney Infirmary, and subsequently Surgeon of the Prince Alfred Hospital, from its foundation to the time of his death, which occurred on the Paramatta River near Sydney on the 1st of June, 1885, at the age of forty-seven, from an attack of typhoid fever.

Mr. Fortescue was highly esteemed in the community amongst whom he had lived and worked. Respected for his skill in the profession he for so many years adorned, he was no less beloved in private life, for the many kindly and genial qualities he possessed. His own saying that absolute "sanity" is the highest human quality, is said to have been thoroughly exemplified in his character. He was elected a Fellow of this Society in 1877.

Dr. John Livingston, whose death at the age of forty-five occurred suddenly from apoplexy on the 10th of June last, was educated at the University of Glasgow, where he graduated M.D. in 1861. For a number of years Dr. Livingston had a large practice at New Barnet, where I have occasionally met him in consultation, and was much impressed by his intelligence and his energy. Amongst

other appointments he held that of Medical Officer of the Great Northern Railway. Dr. Livingston was elected a Fellow of this Society in 1870.

Dr. Edward Howard was M.R.C.S. 1838, L.S.A. 1839, M.D. Giessen, 1844, M.R.C.S. London, 1860.

He was appointed Assistant Surgeon in the 20th Regiment of Foot in 1842. He became Surgeon in 1854, and Surgeon-Major in 1862. In 1867 he retired on half-pay with the honorary rank of Deputy Inspector-General. For more than twenty years Dr. Howard was on foreign service in various parts, Bermuda, Canada, Turkey, and the East Indies. For his services in Turkey he received the Order of the Medjedie (5th Class). The Director-General of the Medical Department of the Army, to whom I am indebted for the particulars of Dr. Howard's services, states that "this officer was highly esteemed by his brother officers, and his duties were always performed to the satisfaction of the Director-General."

I learn from Dr. Goldsmith, who had attended Dr. Howard for many years, that he caught a terribly severe epileptiform neuralgia in the trenches before Sebastopol, and that this malady clung to him for the remainder of his life. He died at Bedford on the 28th June of last at the age of sixty-nine. He was elected a Fellow of this Society in 1865.

Dr. John Richard Wardell[1] was born at Pickering in Yorkshire in September, 1819. After receiving his early education at a private school in Doncaster he began the study of Medicine in the University of Edinburgh, where he graduated M.D. in 1844. During his residence in Edinburgh he filled the offices of Assistant Pathologist and Resident Physician at the Royal Infirmary. He was also President of the Royal Physical and Hunterian Societies. In 1859 he became a Member of the Royal College of Physicians, and in 1867 he was elected a Fellow of the College. He was elected a Fellow of this Society in 1858.

During the earlier part of his professional life Dr.

[1] 'British Medical Journal,' Sept. 6th, 1885

Wardell acted as private physician to a gentleman of rank, upon whose decease he commenced practice at Tunbridge Wells. There until within four years of his death he continued to practise, and was acknowledged as the chief consultant of the town and neighbourhood. As Physician to the local Infirmary he devoted much time to laborious and careful clinical research, the good results of which are apparent in his numerous professional writings. Four years ago he was struck down by illness and compelled to relinquish practice. He went for rest and change to Brighton, where for a time he was restored to a moderate state of health, but a few days before his decease the symptoms became aggravated, and he died on the 21st of August. Throughout his prolonged illness his mind remained clear and active, and during the last year of his life he collected and published in a large octavo volume of 800 pages entitled 'Contributions to Pathology and the Practice of Medicine,' some of his numerous and varied professional writings. The volume consists of fifty chapters on a great variety of subjects, affording conclusive evidence of great industry, extensive reading, careful clinical observation, close and accurate reasoning and great practical skill in the prevention and treatment of disease. The longest and most elaborate chapter is that on relapsing fever, which is based on the author's observation of that disease in Edinburgh during the epidemic of 1842-3, and which, as he says, he was induced to republish mainly by a remembrance of the value which the late Dr. Murchison put upon the facts and statistics there given. One of the most interesting and instructive chapters in the book is that entitled "A Thorn in the Flesh," in which the author gives a graphic account of his own prolonged and severe suffering from inflammation and abscess in the lower part of the thigh, by which the loss of the limb was threatened, and which was ultimately found to have been caused by a thorn, an inch and a half long, which he concluded must have penetrated the thigh five years before, when his horse fell in

leaping a hedge. The removal of the foreign body was at length followed by a complete cure.

Dr. Francis Harris[1] was born on December 1st, 1829, at Winchester Place, in Southwark. His father, who had for some time represented the borough in Parliament, died while the son was very young. After his earliest schooling and some later studies at King's College, London, he entered at Caius College, Cambridge. He graduated B.A. in 1852. After leaving Cambridge he entered as a student at St. Bartholomew's. He graduated M.B. in 1854. From November, 1856, to August, 1857, he was House-Surgeon to the Hospital for Sick Children in Great Ormond Street. In 1857 he was admitted M.R.C.P. London. In the same year he went to Paris for six months and afterwards to Berlin, where he attended Virchow's lectures, and he subsequently visited Saxon Switzerland, Dresden, Prague, and Vienna in company with Dr. Chance. Returning to England after an absence of about a year, he was appointed Demonstrator of Morbid Anatomy at St. Bartholomew's; he was also elected Obstetric Physician to the St. George's and St. James's Dispensary, and Assistant Physician to the Hospital for Sick Children in May, 1859. The same year he took his degree of M.D., and chose for his academical disputation "The Nature of the Substance found in the Amyloid Degeneration of Various Organs in the Human Body." This essay, which was printed in 1860, was his only published work. He was elected a Fellow of the College of Physicians in 1863. The dispensary he soon gave up and with it any intention he may have had of practising obstetrics. After Dr. Baly's accidental death in 1861 Dr. Harris was elected Assistant Physician to St. Bartholomew's and, about the same time, he was appointed Lecturer on Botany, a science in which he took a deep interest to the end of his life. In 1865 he resigned the Children's Hospital and the Lectureship on Botany, and bought an estate which was situated partly

[1] For the particulars of Dr. Harris's career I am indebted to a memoir by Dr. Gee, in the 'St. Bartholomew's Hospital Reports,' vol. xxi.

in Lamberhurst and partly in Brenchly parish, in the Weald of Kent. His love of a country life drew him more and more away from London and from the pursuit of his profession. In 1863 he was elected Physician to St. Bartholomew's. At that time he had retired from all medical work except at the hospital, and he lived as much as possible on his estate, taking especial pleasure in his garden, his orchard house, his vinery, and latterly in his orchid houses, where he turned his botanical knowledge to good account and made numerous successful experiments in crossing orchids.

In 1874 ill-health compelled him to resign his hospital duties. Two or three years before this time he began to suffer from progressive emphysema and pulmonary catarrh connected with a disposition to gout, and these infirmities gained upon him somewhat quickly. During the last three or four years of his life dyspnœa was almost continual and sometimes very severe. In June, 1882, he had an attack of pneumonia, and a recurrence of this disease put an end to his life on September 3rd, 1885. His death was felt to be a great loss by many friends both in town and country, to whom his kind and hospitable spirit had made him dear.

One friend and former pupil (Dr. Andrew) bears testimony to Dr. Harris's high qualities and success as a teacher of pathological anatomy,—"the severity of study being relieved by his ready wit and sense of humour." Another friend (Dr. Chance) says, "That he might have made a large practice is undoubted. His presence was good and calculated to inspire confidence. All that he wanted was energy, ambition, and lack of money. If he had had no money he would have made it; but even then he would have stopped when he thought he had sufficient." Dr. Chance adds, "I used to go to him not only for the sake of his conversation, but to ask him for advice, for I considered his judgment to be very sound."

Mr. John Gay[1] was born at Wellington, Somerset, in

[1] 'Lancet' and 'British Medical Journal,' Sept. 26th, 1885.

September, 1813, and began the study of his profession under the late Mr. Bridge in his native town. In 1833 he entered at St. Bartholomew's, where he was clinical clerk to Dr. Latham and dresser to Sir William Lawrence, and where he was at the head of the prize list. In 1834 he became a Member of the Royal College of Surgeons, and in 1843 an Honorary Fellow. In 1836 he was elected Surgeon to the Royal Free Hospital, an appointment which he held with great credit to himself and advantage to that institution until the year 1853, when he became Senior Surgeon to the Great Northern Hospital, an appointment which he continued to hold during the remainder of his life.

Mr. Gay obtained a considerable practice in the City, and he was the author of various original and important contributions to the science and practice of surgery. Of these one of the earliest and most valuable was a treatise 'On the Anatomy, Pathology, and Surgery of Femoral Hernia," published in 1848. The main object of the author was to deprecate too free incisions into the hernial sac, by which not only is the immediate risk of the operation greatly increased but a future return of the hernia is rendered probable. The principles of Mr. Gay's operation "consisted in reaching the seat of stricture when external to the sac by a small incision made through healthy structures and in such a situation that the hernial mass shall not be injured or disturbed thereby." Sir William Fergusson said of this proposal, "By this simple difference a vast improvement has been effected in the operation for crural hernia."

In 1855 Mr. Gay published 'A Memoir on Indolent Ulcers and their Surgical Treatment.' In this treatise he advocated the practice of making free incisions through the indurated tissues, the object being to relieve tension and so to favour cicatrisation. The practice is said to be good and successful.

In the Lettsomian Lectures delivered at the Medical Society of London in 1867-8 and subsequently published, Mr. Gay discussed the treatment of varicose veins and allied

disorders. He maintained that the common practice of treating this troublesome condition by prolonged rest and permanent bandages tends to increase congestion of the skin and the subcutaneous tissues, and to cause an injurious dilatation of the deeper veins. The lectures were illustrated by numerous elaborate dissections.

Mr. Gay's last contribution to surgical literature was a paper "On certain points connected with the Anatomy of the Venous System," which was read before the Medical Society of London in November, 1883. In addition to the publications before mentioned, Mr. Gay from time to time communicated to the medical societies and to the medical journals papers of high practical value on various important points in surgery.

In 1869 Mr. Gay was elected a Member of the Council of the Royal College of Surgeons. In 1877, when his term had expired, he failed to secure his re-election, but in the following year he was successful.

He joined this Society in 1848 and served on the Council in 1874-5.

In the autumn of 1883 Mr. Gay had an attack of hemiplegia. From this illness he never recovered, and for some months before his death, to the distress of his family and numerous friends, he remained in a condition of semi-consciousness. At length he died tranquilly on the 15th of September, 1885, in the seventy-second year of his age.

Mr. Gay had a large circle of friends both in and beyond the limits of his profession. He was held in the highest esteem not only on account of his honorable and successful surgical career, but his bright intellect, his varied accomplishments, and his admirable social qualities endeared him to all his intimate associates.

Dr. James Russell, who was a descendant of one of the oldest and most influential Nonconformist families of Birmingham, was born in that city on the 1st of April, 1818. His father practised in New Hall Street, Birmingham, for more than half a century, and was highly esteemed as an able practitioner, and a most conscientious and benevolent

man. His great-uncle, William Russell, of Showell Green, was one of the Nonconformists whose houses were pillaged and burnt during the disgraceful Church and King Riots in 1791, at the same time that the philosophic Priestley was driven from the town.

James Russell received his early education under the Rev. E. Bristowe, and in addition he took mathematical lessons from the Rev. W. Lawson, of Moseley.

In 1835 he entered at the then newly-established "School of Medicine," now known as Queen's College, whence in 1840 he removed to King's College, London, where I made his acquaintance, which led to a lifelong friendship. His choice of King's College as a school, notwithstanding his staunch Nonconformist principles, was doubtless in great part determined by the fact that three distinguished Birmingham men, and more or less intimate friends of himself and his father, were then on the teaching staff of the College. Mr., now Sir William, Bowman, was Demonstrator of Anatomy and Assistant Surgeon to the hospital, the late Mr. Partridge was Professor of Anatomy and Surgeon to the Hospital, and the late Dr. William Allen Miller, while pursuing his medical studies with a view of obtaining the M.D. of London, was acting as Assistant to the late Professor Daniell, whom he afterwards succeeded in the Chair of Chemistry.

During his pupilage at King's College James Russell was held in the highest esteem, both by his teachers and by his fellow-students, amongst whom his irreproachable character, his great intelligence, his untiring industry and devotion to duty, his unswerving truthfulness, and, in spite of an occasional combativeness in argument and brusqueness of manner, his genuine kindness of heart and his tolerance of diverse opinions, were thoroughly and very generally appreciated.

At the end of his student career he held, for the usual period of six months, the office of House Physician of the hospital, and during this period I had the privilege of being his colleague as House Surgeon.

He passed what is now called the Intermediate, and the M.B. examination at the University of London in the same year, 1842, and at the latter examination he was second in the list of honours in surgery. He graduated M.D. in the first division, in 1848.

Originally intending to practise surgery he was elected one of the Honorary Surgeons of the Birmingham General Dispensary in 1844, but he was soon induced to change his views, and in three months, having resigned his surgical appointment, he henceforth devoted himself entirely to the study and practice of medicine; and as a preparation for practising as a physician he went to Paris and pursued his studies there for a considerable period. On his return in 1847 he commenced practice in Temple Row. He became a Member of the Royal College of Physicians in 1859, and in 1867 he received the well-deserved honour of the Fellowship.

In 1848 he was elected Honorary Physician to the General Dispensary, an appointment which he held for five years.

In 1850, when the Sydenham College Medical School was established, Dr. Russell was appointed Lecturer on Therapeutics in the Materia Medica course, a position which he occupied with marked success for a period of sixteen years. He then joined Dr. Bell Fletcher as co-lecturer on the Practice of Physic, of which subject he retained the Professorship after the amalgamation between the Sydenham and Queen's Colleges had been accomplished.

In 1859 Dr. Russell was elected one of the Physicians of the General Hospital, where one of his former colleagues (Mr. Alfred Baker) says of him:—"His painstaking interest in the regular instruction of students in attendance was on a par with his unflagging attention to the wants and comforts of the sick. His hospital labours were assiduous and thoughtful, contributing to the stability, high character, and popularity of the Institution. The medical periodicals testify to his research, his accuracy of observation, his diagnostic skill, and his cautious conclusions;

qualities that are very notable in his comments on intricate nervous maladies, which were always interesting subjects of his study."

At the commencement of last year failing health compelled him to resign his hospital appointment, when his past and present pupils, to the number of 109, subscribed to a testimonial fund, and the subscribers and friends of the hospital commissioned Mr. Papworth to execute a marble bust.

Dr. Russell, as a townsman, was a steady supporter of all educational movements and of all public sanitary measures. He also devoted much time to the management of various charities. His nomination as a borough magistrate in 1880 gave satisfaction alike to the profession and the public.

About a year before his death Dr. Russell discovered that he was the subject of a serious form of Bright's disease, and, with a full knowledge of what this involved, he, for a time, kept almost complete silence on the subject —confiding the fact only to one or two of those from whom it was not prudent and scarcely possible to conceal it—his object being to prevent the lives of others from being darkened by the cloud of sorrow before the stern necessity arose. He suffered much during the last months of his life from that distressing form of dyspnœa which so often results from the later stages of the disease, but his intellect remained unclouded until the last. At length on the 5th of October, 1885, he was released from suffering.

Of all the men whose friendship I have had the privilege of enjoying, I know of no one who appeared to me to act more consistently upon the maxim, "Whatsoever thy hand findeth to do, do it with thy might," than Dr. James Russell, who since the year 1845 had been a Fellow of this Society.

Mr. Thomas Jolliffe Tufnell,[1] the well-known Dublin Surgeon, was a younger son of Colonel Tufnell, of Lachlam House, Chippenham, Wilts, where he was born

[1] 'Lancet' and 'Medical Times and Gazette,' Dec. 5th, 1885.

in 1819. In 1836 he was apprenticed to Mr. Limscombe, of Exeter, and subsequently entered at St. George's Hospital. In 1841 he became a Member of the College of Surgeons, and soon after entered the Army as Assistant Surgeon of the 44th Regiment, which was then serving in India. On his arrival at Calcutta to join his regiment he was ordered to take charge of the troops at Chinsura, and thus he escaped the massacre of the British forces in the disastrous retreat from Cabul. On his return home he was appointed Surgeon to the Dublin District Military Prison. When the Crimean War broke out Mr. Tufnell again went on foreign service, and during that campaign he obtained an extensive practical knowledge of military surgery. After his return to Dublin he retired from active service, and was appointed Surgeon to the City of Dublin Hospital; and when, after many years, he resigned the office of Visiting Surgeon, he was unanimously elected Consulting Surgeon to the Hospital. He was for some years Professor of Military Surgery in the School of the College of Surgeons, and also an Examiner in that institution. In the year 1873 he was elected Vice-President, and the following year President of the Dublin Royal College of Surgeons.

Mr. Tufnell was the author of several monographs on surgical subjects. Of these, the earliest was entitled 'Practical Remarks on the Treatment of Aneurism by Compression,' 1851. In 1864 he was elected a Fellow of this Society, and in 1873 he communicated a paper, which is published in the 57th vol. of the 'Transactions,' "On the Successful Treatment of Aneurism by Position and Restricted Diet." This paper contains the history of two cases of aneurism of the abdominal aorta and one of popliteal aneurism, in each of which a cure was effected. These cases are republished, with coloured illustrations, in the author's treatise on 'The Successful Treatment of Internal Aneurism by Consolidation of the Contents of the Sac,' 2nd edition, 1875. In one of the cases of cured abdominal aneurism (that of John Kelly, pp. 29 to

34) the patient is reported to have died some weeks afterwards of Bright's disease. But the excellent coloured illustration which accompanies the case shows, I think, that the different morbid conditions of the two kidneys were not due to Bright's disease, but were an indirect result of the aneurism which implicated the aorta at the place of origin of the renal arteries. The right kidney was "rather smaller than natural," and has obviously been invaded by embolic particles of fibrine from the interior of the aneurism. The left kidney, on the other hand, was "greatly enlarged, measuring five inches in length and three and a half inches in width." The renal veins are not represented in the drawing nor is their condition described, but there can, I think, be no doubt that the structural changes in the enlarged left kidney were caused by compression of the vein in its passage over the large aneurism towards the vena cava. Although, therefore, the aneurism was filled by firm fibrinous coagula, the cure was not effected before serious structural changes had occurred in both kidneys, but more especially in the left.

In 1879 Mr. Tufnell published a paper on "The Consolidation of Internal Aneurism," in which he rightly maintained, in opposition to Dr. William Colles, that the fibrinous layers within an aneurismal sac are the result of successive deposits from the blood, and not an exudation from the walls of the aneurism.

Amongst other papers by the same author may be mentioned one "On Luxation Downwards and Backwards of the three Internal Metatarsal Bones, a form of Dislocation of the Foot not previously described," 1854. "Practical Remarks upon Stricture of the Rectum, especially in relation to its connexion with Fistula in Ano and Ulceration of the Bowel," 1860. "On the Radical Cure of Varicocele by Subcutaneous Ligature of the Spermatic Veins" from the 'Dublin Journal.'

Mr. Tufnell died on the 27th of November last after a tedious illness at the age of sixty-seven. He was highly

esteemed by all classes, not only for his professional abilities and attainments, but also for his upright and honorable character and his kind and courteous disposition.

Dr. John Moore Johnston Scott[1] was born in Belfast, December 4th, 1850. He passed his matriculation examination and commenced his medical studies in Queen's College of his native city in 1869, where he is said to have secured the esteem and affection of his fellow-students.

After the breaking out of the Franco-German war, although he had not yet completed his full course of study, he was induced by a love of adventure and a desire to increase his professional knowledge and experience, to apply for, and through the interest of Sir William Mac Cormac, he obtained, the appointment of Assistant Surgeon to the Anglo-American Ambulance Corps. In this capacity he worked with his corps in aid of the French troops at Sedan. For his services during the war he received a bronze medal and a flattering testimonial from the French Government. After returning home he resumed his studies, and in 1842 he passed his examination in medicine, surgery, and obstetrics, and graduated M.D. in the Queen's University.

Soon after this he commenced practice in Belfast where he was highly successful. But in 1878 an eligible opening having occurred in Lurgan, Co. Armagh, Dr. Scott determined to take advantage of it. There his genial disposition gained for him an early and hearty admission to the good graces of all classes and creeds of his fellow-townsmen. Though a prominent Conservative and an energetic Orangeman, he never allowed his political or his religious opinions to interfere with his private relations or his professional duties.

In 1881 his popularity was shown by his return at the head of the poll as a candidate for a seat at the local Municipal Board. In 1882 he was elected a Guardian

[1] 'Lurgan Times,' Dec. 5th, 1885.

of the Lurgan Union, and in that position his exertions on behalf of both the ratepayers and the poor were unceasing and well-directed.

Dr. Scott, though to outward appearance in robust health, had for some time been aware that his heart was unsound, and on the 30th of November last, which was the day appointed for the parliamentary election in Lurgan, while conversing in the street with some friends on the prospects of the election, he suddenly staggered and fell backwards, his head, however, not coming in contact with the ground. He was immediately carried into a neighbouring office, where he retained consciousness until the arrival of Dr. Adamson, who happened to be near the spot, and whom he requested to examine his heart. In a few minutes, however, the pulse and breathing had ceased.

At his funeral, although a hearse had been procured, his brethren, the Town Commissioners, insisted on carrying the coffin to the grave ; and, notwithstanding the inclemency of the weather, his fellow-townsmen of all classes assembled to pay the last tribute of respect to one whom they had learned to regard with feelings of the closest personal attachment.

Dr. Scott had been a Fellow of the Society since 1873.

Dr. Henry Wotton received his medical education at University College. He became a Member of the Royal College of Surgeons in 1859, and a Fellow by examination in 1864. He was elected a Fellow of this Society in 1865. In 1878 he graduated M.D. at St. Andrews.

He was Surgeon-Accoucheur to the West London Lying-In Institution, and he practised at Kensington, where he died suddenly on Christmas Day last at the age of forty-six. The verdict of the coroner's jury was "Suicide during temporary insanity." Such a catastrophe as we know may overtake the wisest and the best of men.

> "This frail bark of ours, when sorely tried,
> May wreck itself without the pilot's guilt,
> Without the captain's knowledge."
>
> TENNYSON, "*Aylmer's Field.*"

Mr. William Bousfield Page,[1] who died at St. Ann's, Carlisle, in his sixty-ninth year, on the 5th of January last, was born at Ashford in Kent in the year 1817.

He belonged to an Essex family, who have long had their seat at Southminster Hall, where they still reside. He received his medical education at the London Hospital, became a Member of the College of Surgeons and of the Apothecaries' Society in 1841, and a Fellow of the College in 1856. At the early age of twenty-four, on the recommendation of Mr. John Scott, then one of the surgeons of the hospital, Mr. Page was appointed Surgeon to the Cumberland Infirmary, which had been recently established. He arrived in Carlisle on New Year's Day, 1843, an entire stranger to the city, but being possessed of courage and tact, as well as skill, he set to work with great energy and soon found many influential friends. He had not been three days in the city before he was summoned to attend a member of the Bishop's family, and in the course of a few years he became the trusted adviser of all the cathedral dignitaries and of the leading county families. During the London season he had so many of his county patients here that he had serious thoughts of settling in the metropolis; notably in 1851, when Sir B. Brodie advised him to apply for the appointment of Surgeon to the then recently opened St. Mary's Hospital. This appointment, however, he left for his eldest son at a later period to obtain.

Mr. Page rendered important services to several of the great railway companies. In this service his promptness and his organising power had full play, and in the distressing scenes of a great accident his self-possession and his skilfully applied surgical resources animated all around.

With regard to subsequent claims for compensation his advice, which was always implicitly relied upon, often resulted in an equitable arrangement without resort to costly and uncertain legal proceedings.

[1] The 'Carlisle Patriot,' Jan. 8th and 15th, 1886; 'Lancet,' Jan. 23rd, 1886.

In connection with his work at the Infirmary, Mr. Page induced Bishop Percy to institute a system of boarding out convalescents, which in time resulted in the establishment of the Sanatorium at Silloth. He was also the prime mover in the measures which led to the enlargement of the Infirmary, which now contains 100 beds, one of the wards, in well-deserved compliment to him, being named "The Page Ward."

In 1877 he resigned the office of Surgeon to the Infirmary, when he received a cordial vote of thanks for his distinguished services, and at the same time he was appointed Consulting Surgeon and a Vice-President.

Among other public appointments Mr. Page was for many years Surgeon to the Gaol and Consulting Surgeon to the Lunatic Asylum. In 1877 he resigned his office in the Gaol, and at the ensuing Quarter Sessions he received a cordial vote of thanks for his valuable services to the county and for his disinterestedness in relinquishing his right to a pension.

For more than a quarter of a century Mr. Page was a Justice of the City of Carlisle, and in 1878 he was appointed a magistrate for the County of Cumberland. Apart from his profession he took a lively interest in all local works of public benefit, and he was always a wise and munificent supporter of charities.

He was elected a Fellow of this Society in 1847, and he contributed two papers to the 'Transactions,' one on "Cases of United Fracture successfully treated" (vol. xxxi), and the other "On Excision of the Os Calcis in Incurable Disease of the Bone as a substitute for Amputation of the Foot" (vol. xxxiii). In the earlier years of his practice he contributed various papers to the medical journals.

He was a bold and successful operator. The 'Lancet' of April 5th, 1845, contains the first account of his success as an ovariotomist, and as long ago as 1846 he had obtained complete success in two cases of excision of the knee-joint.

Mr. Page had been in good health until within nine

months of his death, when his strength began and continued to fail from a progressive anæmia, the starting-point of which seemed to be the shock of a heavy personal sorrow.

The large and distinguished assembly at his funeral, including the bishop of the diocese, who took part in the service, afforded a striking demonstration of the high estimation in which he was held by those who were best able to appreciate his character and his public services.

It is a remarkable circumstance that within forty-eight hours of Mr. Page's death his only brother died, after a short illness, and the two brothers were buried together.

Dr. John Maule Sutton,[1] who was born in 1829, was a great grandson of Mr. Daniel Sutton,[2] the famous inoculator for small-pox in the last century, to whom in 1767 King George III granted a patent of arms.

Dr. Sutton, having when young been left an orphan, was educated under the care of his grandfather, the late Mr. John Sutton, of Lee, Kent. He received his medical education at Queen's College, Birmingham, and at St. Thomas's Hospital.

Amongst other legal qualifications he obtained the following: F.R.C.P. Edin., 1853; M.R.C.P. Lond., 1859; M.D. St. And., 1853; M.R.C.L. Eng., 1851; L.M., 1853; L.S.A., 1853. He must therefore have had a full share of medical examinations.

Dr. Sutton, after serving the office of Resident Physicians' Assistant at the Brompton Hospital for Consumption, commenced practice in Bath, and was elected Physician to the Eastern Dispensary, and on resigning the appointment to take up his residence in Pembrokeshire—where some landed property had come into his possession—he was made a Life Governor in recognition of his services. Having settled at Tenby he devoted himself assiduously

[1] For the particulars of Dr. Sutton's career I am indebted to Mr. Joseph Chambers, chief clerk in the Officer of Health's Department, Oldham.

[2] "The Inoculator or Suttonian System of Inoculation,' by Daniel Sutton, Surgeon, 1796; 'The Tryal of Mr. Daniel Sutton for the High Crime of preserving the lives of His Majesty's Subjects by Inoculation,' 2nd ed., 1767.

to his profession, and took a prominent part in public affairs. He was three times elected mayor of Tenby, and subsequently he was appointed a Justice of the Peace for the Borough of Tenby and for the County of Pembroke. He also became Deputy-Lieutenant of the county.

In 1863 he was elected Physician to the Queen's Hospital, Birmingham, and Professor of Clinical Medicine. About that time the inhabitants of Pembrokeshire presented him with a service of plate at a public dinner, which was presided over by Captain Ramsay, R.N., C.B., afterwards Earl of Dalhousie, the father of the present earl.

In 1865, on the death of his aged grandfather, under whose will he obtained an increase of fortune, Dr. Sutton, who had never taken up his residence in Birmingham, resigned his appointment at the Queen's Hospital and retired from private practice.

Soon after this he invested largely in a colliery yielding "anthracite coal," and as the colliery not long afterwards became flooded and had to be abandoned, he thereby lost the greater portion of his fortune.

In 1873 Dr. Sutton was appointed the first Medical Officer of Health, under the Public Health Act, for the Borough of Oldham. There he organised most thoroughly the Sanitary Department, and soon, by his genial disposition, drew round him a host of friends and supporters.

In 1877 an epidemic of smallpox having broken out, he made it the occasion for founding the Westholme Hospital for Infectious Diseases, which, having been subsequently enlarged, now contains 100 beds.

Dr. Sutton during his ten years' tenure of office is said to have treated in that hospital upwards of 600 patients with great care, skill, and kindness.

The subject of infant mortality was one to which he devoted much attention, and upon which he published a treatise, and another on "Day Nurseries and their bearing upon Public Health."

Dr. Sutton devoted much attention to the means of

abating the "Smoke Nuisance." He contributed to the 'Lancet' (1871) a paper on the "Deodorisation and Utilisation of Town Sewage." He founded a Meteorological Observatory in the Alexandra Park, Oldham, where during the last ten years observations have been regularly taken; and as a Governor of the Oldham Infirmary he established the Hospital Saturday Collection, from which the Institution now receives a considerable annual sum.

After ten years of great public service to the borough ill-health compelled Dr. Sutton to resign his office in September, 1883. He then went to reside at Hoylake, a small village on the coast of Cheshire, where he died from disease of the heart with dropsy on the 20th of January last, at the age of fifty-six. He has left a large circle of sorrowing friends.

Dr. Sutton was elected a Non-Resident Fellow in 1855.

Dr. Sigismund Sutro was born in Bavaria in 1815. He studied medicine at Heidelberg and Munich, and at the latter University he obtained his degree of Doctor of Medicine in 1840. Soon after this he came to London, and in 1845 he was appointed Physician to the German Hospital when that institution was in its infancy. He resigned that office in 1877, and was then appointed Consulting Physician.

In 1859 Dr. Sutro became a Member of the College of Physicians, and in 1873 he was elected a Fellow. He had a considerable knowledge of the Spas of Europe, and especially those of Germany, and he was the author of a practical work on the subject, a second edition of which was published in 1865. Dr. Sutro's advice was highly valued by his countrymen, and especially by his co-religionists of the Jewish persuasion. He was in active practice up to the time of his death, which occurred on the 19th of February from an attack of apoplexy.

Dr. Sutro was elected a Fellow of this Society in 1860.

Dr. William Benjamin Carpenter[1] was born at Bristol in

[1] 'Times,' Nov. 11th, 1885; 'Lancet' and 'Brit. Med. Jour.,' Nov. 14th.

1813. He was the son of Dr. Lant Carpenter, an eminent Unitarian minister, under whose superintendence the son was educated. Dr. Carpenter's medical education was commenced at Bristol, but at the age of twenty he entered the Medical School of University College. He became a Member of the College of Surgeons and a Licentiate of the Apothecaries' Company in 1835, after which he went to Edinburgh, where he graduated M.D. in 1839. Dr. Carpenter then returned to Bristol, where he was appointed Lecturer on Forensic Medicine in the Medical School, and where he commenced the practice of his profession; but in 1843 he came to London with the intention of devoting himself to the pursuit of physiological science. He was soon appointed Lecturer on Physiology at the London Hospital Medical School, and later he became Professor of Medical Jurisprudence at University College, and Examiner in Comparative Anatomy and Physiology in the University of London. In 1856 he was appointed Registrar of the University of London, which office he held with great advantage to the University until the year 1879, when he retired with a pension, and at the earliest vacancy he was appointed by the Crown a member of the Senate, in which capacity he continued to the last to exert a powerful and most beneficial influence.

Dr. Carpenter was the author of numerous well-known and highly popular works. While in Edinburgh he contributed several papers to the medical and scientific journals, and in 1839 was published his prize graduation thesis 'On Physiological Inferences from the Structure of the Nervous System in Invertebrated Animals.' In the same year appeared his earliest systematic work on 'The Principles of General and Comparative Physiology,' a new edition of which was called for in 1841. In later editions the subject was divided, and in 1842 'The Principles of Human Physiology' was published as a separate work, the 'Principles of Comparative Physiology,' henceforth appearing also as a distinct work. Both these works and the 'Manual of Physiology,' which was first published

in 1846, passed through several editions, as did also the well-known and popular work on 'The Microscope and its Revelations,' which first appeared in 1856. The last, and one of the most important of Dr. Carpenter's physiological works, was that entitled 'Principles of Mental Physiology,' 1874. In this work he discusses in the spirit of a true philosopher the strange and perplexing subjects of so-called "mesmerism," "table-turning," "thought-reading," and other phenomena of what is commonly known as "spiritualism." With a large amount of success he laboured to separate the authentic facts from the results of fraud and imposture, and while he denounced the latter he showed that the former, incredible as they may at first sight appear, admit of a strictly physiological explanation.

Dr. Carpenter contributed to the 'Philosophical Transactions' several papers on the "Foraminifera" and other subjects. He also took an active part in promoting the expeditions for deep-sea exploration, for which purpose the "Challenger" was despatched. His reports of these expeditions are contained in the 'Proceedings of the Royal Society' and the 'Journal of the Royal Geographical Society.' For several years Dr. Carpenter was the editor of the 'Medico-Chirurgical Review.' He was elected a Fellow of the Royal Society in 1844, and in 1861 the Society voted him a Royal Medal for his physiological researches. The University of Edinburgh conferred on him the honorary degree of LL.D. in 1871. In 1872 he was President of the British Association at its Brighton Meeting. In 1873 he was elected a corresponding member of the Institute of France, and in 1875 he was created a C.B. in recognition of his services to the University of London. In 1883 he was elected an Honorary Fellow of this Society.

Dr. Carpenter's last published writing was a letter which appeared in the 'Times,' in which he contended against the arguments employed by certain opponents of vaccination. Few men were so well qualified as he was

to expose the fallacious statements of anti-vaccination fanatics.

Dr. Carpenter's death, which occurred on the 10th of November last, was the result of accidental burns occasioned by the overturning of the lamp of a hot-air bath. It scarcely need be added that Dr. Carpenter was universally held in the highest esteem, not only for the extent and variety of his scientific attainments, but also on account of his high principles and his stainless life.

Professor Frederick Gustavus Jacob Henle[1] was born at Fürth in Bavaria, in 1809. When twenty-one years of age he became a pupil of Rudolphi and afterwards of Johannes Müller. When Müller was appointed Professor in the University of Berlin Henle became his Prosector, and taught not only anatomy and physiology, but also pathological anatomy and pathology. In 1840 Henle was appointed Professor of Anatomy at Zürich, and four years later he obtained the Chair of Anatomy and Physiology at Heidelberg, where again he taught pathology in addition to anatomy and physiology. Once more, in 1852, he migrated from Heidelberg to Göttingen, where he continued to work for the remaining thirty-three years of his long and laborious life. He died on the 13th of May last in the seventy-sixth year of his age. He was elected a Foreign Honorary Fellow of this Society in 1859. The name of Henle, and his great reputation as an Anatomist, Physiologist, and Pathologist must be familiar, not only to every anatomist but to almost every practitioner of medicine throughout the civilised world.

In addition to numerous important separate papers and reports, including his annual reports of the progress of anatomy and physiology in the 'Zeitschrift für rationelle Medicin,' Henle was the author of several works of great value. Of these the first in the order of publication was his 'General Anatomy' ('Allgemeine Anatomie'), 1841. Next the 'Handbook of Rational Pathology' ('Handbuch der rationellen Pathologie'), 2 vols., 1846—53.

[1] 'Proceedings of the Royal Society,' No. 239.

Then the 'Handbook of Systematic or Descriptive Anatomy' ('Handbuch der systematischen Anatomie des Menschen'), 3 vols., 1855—71. In 1862 appeared his 'Monograph on the Anatomy of the Kidney' ('Zur Anatomie der Niere'). In this treatise the author described the looped tubes which have been named after him, and which he supposed to be connected with the Malpighian bodies, but to have no openings into the pelvis of the kidney, while he concluded the urine-secreting open tubes to be unconnected with the Malpighian bodies. Most competent observers who have investigated this question are agreed that Henle's conclusions were erroneous[1] and that he greatly exaggerated the number of the looped tubes in the cones of the kidney.

One of the most interesting and important of Henle's anatomical discoveries was that of the muscularity of the middle coat of the arterioles, which he clearly described and figured in his 'Allgemeine Anatomie' in 1841 (p. 498, Plate III, figs. 8, 9, and 10). This discovery formed the anatomical basis for the experiments and conclusions of Brown-Séquard and Bernard which led to our present knowledge of the regulating function of the muscular arterioles and of the vaso-motor nerves. And assuredly until this knowledge had been acquired we were but imperfectly acquainted with the forces which are concerned in effecting and regulating the circulation of the blood. It has now been proved to demonstration that the muscular force possessed by these Lilliputian canals is so great that the united forcible contraction of the pulmonary or of the systemic arterioles is more than equal to the propulsive power of the corresponding right or left ventricle of the heart, and in consequence the onward movement of the blood may be thereby arrested.

This arrest of the circulation by the contraction of the muscular arterioles is most easily demonstrated in the lungs. When, from any cause, the aeration of the blood

[1] See Dr. Beale on 'Kidney Diseases, &c.,' 1869, p. 10.

is prevented, the animal dies in a few minutes and the chest being opened immediately after death, the right cavities of the heart are found to be enormously distended, while those on the left side are nearly empty. The immediate cause of death has been the arrest of the blood by the forcible contraction of the pulmonary arterioles.

Physiologists all agree in teaching that the function of the arterioles is to regulate the blood-supply to the tissues, —to exert, in short, what I have ventured to call a "stop-cock" action upon the blood stream. But there is not the same agreement amongst pathologists.[1] Thus the learned and eloquent Bradshawe Lecturer at the Royal College of Physicians, last August,[2] maintained, in opposition, as he admitted, to the teaching of modern physiologists, that the now generally recognised hypertrophy of the muscular arterioles in cases of chronic Bright's disease is the result, not of over-action in opposition to the heart, but of an "effort of the entire muscular element of the circulatory system to forward a fluid to which the absorptive or appropriative powers of the tissues are ill adapted." It is unnecessary to say that if this doctrine of the propelling power of the muscular arterioles is true the physiologists are all wrong. And in reply to Dr. Goodhart's objection to the "stop-cock" theory, that there is no such antagonism in nature as that would imply, I need only refer to the notorious fact that muscular antagonism, in the case of both voluntary and involuntary muscles, with resulting physiological harmony is of constant occurrence. Amongst voluntary muscles there is the orderly antagonism of flexors and extensors, abductors and adductors, pronators and supinators. In the case of muscles only partly voluntary, those of inspiration and expiration, the sphincters and detrusor muscles are opposed, while amongst

[1] So little acquainted are some controversialists with the physiology of the circulation that they refer to the doctrine of contraction of the arterioles as a regulating influence, as if it were a theory of my own, and they actually compare it with Cullen's hypothesis of spasm of the extreme vessels!

[2] 'Lancet,' August 22nd, 1885.

purely involuntary muscles the radiating and circular fibres of the iris, though directly antagonistic, work together with perfect harmony. And so, it is probable, do the propelling heart and the regulating muscular arterioles co-operate in carrying on the circulation of the blood both in health and in disease.

A consideration of the many important physiological and pathological phenomena which depend for their solution upon a knowledge of the structure and function of the muscular arterioles suffices to show that Henle, by this single anatomical discovery, conferred a great benefit upon mankind. In his doctrine of the etiology of contagious diseases, Henle anticipated in a general way the more exact discoveries of later years. He maintained that the material of contagium is not only organic, but organised and living, and that it must consist of "parasitical beings which are among the lowliest and smallest, but the most productive which are known."

Dr. Noël Gueneau de Mussy[1] was a highly distinguished and accomplished French physician, whose death in Paris, at the age of seventy-two, after a long and painful illness, occurred in May last. After a brilliant student career he became Chomel's Chef de Clinique in 1839, Physician to the Hôtel Dieu in 1842, Assistant Professor of the Faculty of Medicine in 1847, and Member of the Academy of Medicine in 1867. This Society elected him a Foreign Honorary Fellow in 1878.

He is said to have been a highly successful clinical teacher, while the dignity of his character, the extreme affability of his manner, and his scientific ability rendered him, for a number of years, one of the leading physicians of Paris. He was connected with England by the tie of marriage, and he was a frequent attendant at the meetings of the British Medical Association and a valued contributor, on French topics, to the 'British Medical Journal.'

The subject of this notice was the cousin of Dr. Henri

[1] 'Medical Times and Gazette,' June 13th, 1885; 'British Medical Journal, June 6th, 1885.

Gueneau de Mussy, who, after the French revolution in 1848, came with the exiled Orleans family to London, where he was a highly esteemed and successful physician, until, after the deposition of the late Emperor Napoleon, he again returned to Paris.

Professor Henri Milne Edwards[1] was born at Bruges in October 1800. Having completed his elementary studies in Belgium he studied medicine in Paris, where he graduated in 1823. While continuing through life to take an interest in medical subjects he soon gave up the practice of his profession and devoted himself to the study of natural history, and especially to researches among the lower forms of animal life.

During the years 1826 and 1828, in company with his friend and fellow-labourer, Audouin, he made a careful study of the various vertebrates on the coasts of Granville, around the isles of Chaussey, and as far as Cape Frehel. A member of the French Academy was at that time engaged on some hydrographical work off this coast, and he assisted the two naturalists by enabling them to use the dredge in deeper water than they could reach from a row-boat. The results of these investigations were laid before the Academy of Sciences in 1829 and formed the subject of an elaborate laudatory report by Baron Cuvier, which was presented to the Academy in November, 1830. The researches thus commenced were continued by Milne-Edwards throughout his long life.

In 1841 he was appointed Professor of Natural History in the Collége Royal de Henri IV, and about the same time he held the Chair of Zoology and Comparative Physiology at the Faculty of Sciences, of which Faculty he was afterwards the Dean. On his friend Audouin's death he became Professor of Entomology at the Museum of the Jardin des Plantes. About this time he published numerous original memoirs in the 'Annales des Sciences Naturelles,' of which famous periodical Milne-Edwards was for fifty years one of the editors.

[1] 'Nature,' Aug. 6th, 1885.

In addition to his reputation for original research he became widely known and popular by the publication of his elementary works on zoology. His 'Éléments de Zoologie,' published in 1834, was reissued in 1851 under the title of 'Cours Élémentaire de Zoologie.' This work had a very large circulation and was translated into several languages.

Amongst his more important separate works may be mentioned his 'Histoire Naturelle des Crustacés,' 1834-40, in which he was assisted by his friend Audouin; the 'Histoire Naturelle des Coralliaires,' 1857-60, with which was associated another friend, Jules Haime. The 'Leçons sur la Physiologie et l'Anatomie comparée de l'Homme et des Animaux,' published between 1857 and 1882 in fourteen volumes, were dedicated to his friend, M. J. Dumas. 'Recherches Anatomiques et Physiologiques pendant un Voyage sur les Côtes de la Sicile, &c.,' forms a quarto volume of more than 850 pages, illustrated by nearly 100 coloured plates.

For a number of years Milne Edwards was one of the leaders of zoological science. He was one of the first naturalists who made prolonged visits to the sea coast to study the living forms of animal life and to investigate their habits. His investigation of the lower forms of invertebrate animals led him to the theory of there being distinct centres of creation, and this theory is said to have prevented his full and complete acceptance of Darwin's wider generalisation.

In 1838 he was elected a Member of the Academy of Sciences, in the section of Anatomy and Zoology. He was made an Officer of the Legion of Honour in 1847, and a Commander of the Order in 1861. In 1862 he succeeded Geoffroy Saint-Hilaire as Professor of Zoology at the Jardin des Plantes, and soon afterwards he became Assistant Director of the Museum. He was elected an Honorary Fellow of this Society in 1876, and he was a member of most of the learned societies of Europe and America. He died in Paris on the 29th of July last.

If, now, for a moment, we contemplate the work accomplished by the twenty-one men who have recently been taken from our midst, who shall estimate its value ? While some —a minority it must be confessed—with a genius for discovery, were enabled to extend the boundaries of our knowledge, and so to confer untold benefits upon all future ages of mankind, there is not one amongst them who has not, in proportion to his ability and his opportunity, been a public benefactor, and as such has earned the gratitude of his contemporaries. Now we trust " that they may rest from their labours, and their works do follow them."

It will be in the recollection of the Society that in my address last year I referred to the subject of the lighting and ventilation of this room as one which would demand the attention of the Council. Without loss of time the Council appointed a sub-committee to inquire and report upon this important matter. And, in the first instance, the question of lighting by electricity was carefully considered. We felt that if the products of gas combustion could be got rid of we should secure the double advantage of a more wholesome atmosphere throughout the building, and a diminished annual expenditure for bookbinding. We therefore obtained from two firms an estimate of the primary cost and the annual expenditure that would be incurred if lighting by electricity were adopted. The estimates given by the two firms were almost identical, and they were to this effect :—The immediate outlay for machinery and fittings would be about £500, and the annual cost of gas for the engine would be somewhat in excess of that which is entailed by our present consumption of gas.

Then, in reply to our inquiry, it was admitted that the vibration and noise caused by the gas engine, which would have to be placed in the basement immediately beneath the floor of this room, might be a source of annoyance during our meetings. Therefore, after due consideration, the Council unanimously decided not to incur the large expenditure and the probable annoyance which the scheme

of electric lighting would at present involve. And they had the less difficulty in arriving at this decision from the consideration that probably at no very distant period the means of electric lighting will be supplied by public companies at a comparatively small cost and without the noise and vibration attending the generation of electricity by an engine working on our own premises. I have no doubt that this decision of the Council will be confirmed and approved by the Society.

Meanwhile we had to consider the best means of improving the lighting and ventilation of this room. The outside metal tube which conveys the products of combustion from the sun-light had become corroded and had broken off. It was necessary that this should be renewed, and in doing this the opportunity was taken to increase the number of burners and at the same time to improve the ventilation by giving additional facility for the escape of the heated air.

The increased illumination which has thus been obtained from the sun-light enables those who sit at this table to dispense with the two large gas burners which have always hitherto been in use, and as a result the heating and contamination of the air have been very materially lessened.

In the adjoining back room the illumination has been much improved. Some years since two sun-lights were fixed immediately beneath the ceiling, in fact so close to the ceiling as to expose the floor above to the risk of ignition. This danger was felt to be so great that from the first the use of those sun-lights was forbidden. Now the burners have been brought down to a distance of about twelve feet from the ceiling, and the products of combustion are effectually carried off by trumpet-shaped tubes suspended above them. By this change, while improved ventilation and increased illumination have been obtained, the risk of overheating the ceiling and floor above has been entirely removed.

It will be observed that the expense of these alterations following upon the large expenditure involved in the im-

portant drainage works last year leaves us in debt to our bankers; but as the receipts of the annual subscriptions will restore the balance in a few weeks, and as no such extraordinary expenditure is likely to be called for in future, the Council have deemed it undesirable to sell out stock, the annual income of the Society being about £200 in excess of the ordinary expenditure.

The discussion on cholera, which in my last year's address I announced that I had undertaken to initiate, occupied two evenings during the month of March, and brought together a large number of Fellows and Visitors, many of whom took part in the debate.

The discussion, if it did not materially increase our knowledge of the subject, served to bring into view the very contradictory opinions which are held not only with regard to the etiology, the infectiousness, the pathology, and the treatment of the disease, but also with reference to such easily demonstrable and often demonstrated anatomical facts as the relative amount of blood on the two sides of the heart when the chest is opened soon after death during the stage of collapse.[1]

Amongst the subjects which excited most interest and which were most fully discussed was that of Dr. Koch's comma-bacillus and its relation to the disease. Upon that question I did not then venture to express any opinion, but Dr. Koch's later observations and experiments, as related by him in his speech at the opening of the Cholera Congress at Berlin in May last,[2] many of which have been repeated and confirmed by Mr. Watson Cheyne[3] and other competent and trustworthy observers, appear to render it at least highly probable that the comma-bacillus is not only constantly associated with Asiatic cholera, but that it is the morbific agent by which the disease is propagated.

[1] See the report of the discussion, 'Proceedings of the Royal Med. and Chir. Soc.,' new series, vol. i, pp. 392—420.

[2] 'British Medical Journal,' Jan. 2nd and 9th, 1886.

[3] "Reports to the Scientific Grants Committee of the British Medical Association," 'British Medical Journal,' April 25th *et seq.*, 1885.

After a series of carefully conducted experiments Dr. Koch discovered a certain method of inducing cholera in guinea-pigs by introducing the bacilli into the stomach of the animal. And one of the most interesting and practically instructive facts which he records is that, in order to ensure the deadly action of the infecting material, it is necessary to prevent its too rapid escape from the intestinal canal by the narcotic effect of opium injected into the cavity of the peritoneum, the object being to arrest or retard peristaltic movement, and so to render it possible, as he says, "for the comma-bacilli to remain longer and gain a footing in the intestine." The result of this experiment of Koch's is quite in accordance with my own observation that the abrupt arrest of choleraic diarrhœa by opium prevents or retards the escape of the poison, and is often followed by fatal collapse. Additional evidence of the pathogenic power of the cholera bacilli is afforded by the case of a physician who got a severe attack of cholera at a time when the only possible source of infection was the incautious manipulation of the cholera bacilli in Dr. Koch's laboratory. The intestinal discharges in that case contained very numerous cholera bacilli.

It will be seen from the report of the Council that the attendance of Fellows and visitors at the meetings and the number of those who have taken part in the discussions during the past year have been above the average, while the last volume of our 'Transactions' will bear comparison with its predecessors for the interest and importance of the papers which it contains. The Council, too, have received a large number of interesting papers for future reading and discussion.

The publication of the discussions on the papers which are read before the Society in the 'Proceedings,' a practice which was initiated during my predecessor's tenure of office, has proved a complete success, and has added greatly to the value and interest of the 'Proceedings.'

In now retiring from the Presidential Chair, which by

your favour I have been privileged to occupy during the past two years, I do so with a very grateful sense of the honour which has thus been conferred upon me, and with a most fervent and heartfelt wish for the continued prosperity and usefulness of this the greatest of the medical societies in the United Kingdom.

PRINTED BY J. E. ADLARD, BARTHOLOMEW CLOSE.