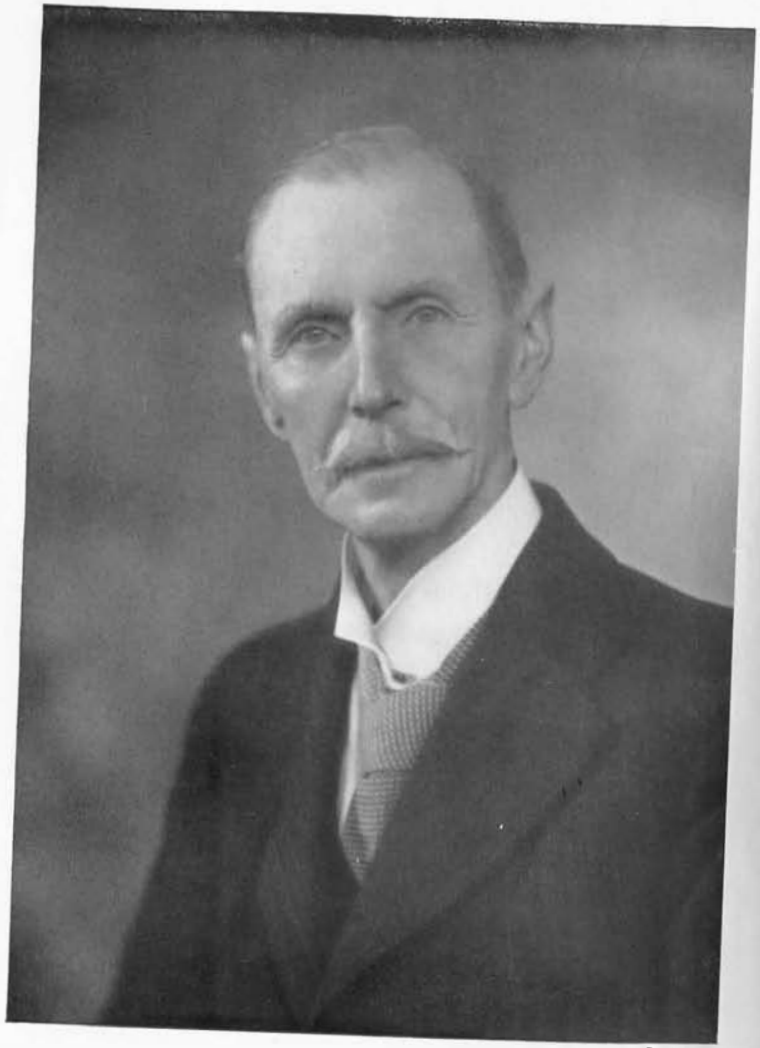


Lafayette

ALFRED HARKER

OBITUARY

ALFRED HARKER
(1859–1939)

ALFRED HARKER was born at Kingston-upon-Hull on 19 February 1859; he was the eldest son of Portas Hewart Harker and Ellen Mary Harker (née Tarbotton). He was educated at the Hull and East Riding College and afterwards at Clewer House School, Windsor, a private school endowed by the famous geologist, Sir Roderick Impey Murchison. One wonders whether Clewer House was chosen because of its association with a geological benefactor; it is at least a possibility that Harker's interest in Geology even as a boy may have been a determining factor. The following extract from a letter kindly supplied by Miss Rose Harker is well worth quoting; it was written in 1873 by the Headmaster (Mr W. H. Harris) of the Windsor School to the father of his pupil: "Alfred pleased us exceedingly by his diligence last term...we regard him as one of the most talented pupils; and if he continues in good health, he will, I believe, turn out a somewhat remarkable youth and man." In June 1876 he matriculated, as was then possible, with honours at the University of London, but did not proceed to the higher examinations. About this time he contributed several articles to the *English Mechanic* and *Design and Work* on a variety of subjects which throw light on his early interests. One of them, "Arithmetical Devices", a description of methods by which operations may be shortened and simplified, is significant as the first of several articles subsequently published in scientific journals affording evidence of his ingenuity and the use of mathematical knowledge as an aid to conciseness, exactitude and tidiness, qualities characteristic of Harker throughout his life. Among other contributions in the pre-Cambridge period are articles on Euclid, East Yorkshire Geology, Artificial memory, Perpetual motion, and particularly a series on Geology. It is clear that he was attracted to Geology before he decided to read Mathematics at the University. In the opinion of Professor W. W. Watts, Honorary Fellow of Sidney Sussex College, who took the Natural Sciences Tripos in 1881, it was Mr C. S. Middlemiss, a friend of Harker's at Hull and later a fellow Johnian, who gave him his first interest in Geology. Mr Middlemiss tells me that if he had any influence on Harker's choice of Geology as a subject for the tripos—he

disclaims any earlier influence—it must have been "because we lived on adjacent staircases in the First Court of St John's and frequently met in each other's rooms, when Harker's great ability for work and his passion for burning the midnight oil fascinated and attracted me because I too loved working late". In 1877 and 1878 Mr Teall (afterwards Sir Jethro Teall, Director of the Geological Survey), a Johnian and Fellow of the College, gave two courses of University Extension Lectures at Hull on Geology, and Harker accompanied him on field excursions: this no doubt increased his interest in the subject. We learn from his own words, spoken in 1922, on the occasion of the award to him by the Geological Society of London of the Wollaston Medal the source of a later impetus: in acknowledging the presentation he said: "I should be ungrateful were I to forget the constant support extended to me by my College, or the debt I owe to Professor Hughes who turned my steps into the paths of Geology."

Before going to the University, Harker read Mathematics with the Reverend H. Lowther Clark, Vicar of Hedon near Hull, a Johnian who became Archbishop of Melbourne. He was awarded the Ferries Exhibition, founded in 1630 under the will of Alderman Thomas Ferries, and tenable for natives of Hull proceeding to Oxford or Cambridge. In October 1878 he went into residence at St John's as a Sizar, and in the following year was elected to a Proper Sizarship and a Hare Exhibition of £30. In June 1880 he gained a Foundation Scholarship which he held until 1884. His College tutor was the Rev. Dr Stephen Parkinson, F.R.S., and he coached with Mr R. R. Webb of St John's. Harker's name appeared in the eighth place among the wranglers in January 1882. The Mathematical Tripos was then taken at the beginning of the Lent Term in the fourth year after admission to the University. On 21 January, the day after the tripos, Harker wrote in his diary: "The wicked cease from troubling": in the evening he went to a whist party in a friend's rooms and the following day with J. S. Yeo of St John's (second wrangler in Harker's year) to London. Another of his College friends was T. G. Tucker, senior Classic in 1882. On 28 January, the day on which he took the B.A. degree, he "began work for the Natural Sciences Tripos". It is not surprising to read in the Diary for 3 May: "difficult to do any work except mechanical: I have lost energy". On 30 May he was placed in the first class of Part I of the Natural Sciences Tripos, and on 1 June he "began to read Geology" for Part II, no doubt as a subsidiary subject to Physics. On the last day of the Part II examination, a year later (1883),

he wrote in his Diary "most disastrous result for me", followed on the publication of the list by "first class after all". The rapidity with which Harker obtained a first class in three triposes was a remarkable performance, and yet, before the stress of preparation for the final examination was over, he found leisure to coach two men in Physics. For several years he continued to take a few pupils. An occasional entry in the Diary, "... cut coaching", is evidence of continuity from one age to another in the vagaries of undergraduates. In October 1882, while reading for Part II, he accepted an invitation from Mrs Sidgwick, later Principal of Newnham, to give lectures on Physics at the College. It is a matter of personal interest to an old Lancastrian that in the same year he was offered a mastership at Lancaster Grammar School by the Headmaster, Dr W. E. Pryke of St John's. Another entry in his Diary about this time—"wrote to the Librarian of the British Museum about an Assistantship"—shows that he was still uncertain of his future career. Fortunately he remained faithful to Cambridge. One outstanding fact in Harker's life is that he never, so far as we know, despite very small emoluments, made any attempts to seek a post that would have taken him away from his spiritual, academic home. At the beginning of 1883, before Part II of the tripos had been taken, he was invited by Professor McKenny Hughes to give demonstrations in Mineralogy and Lithology at what was then the Woodwardian Museum: in January 1884 he was appointed Demonstrator in Geology; it was a new post and in fact a Demonstratorship in Petrology, a subject previously taught in a less systematic way by Dr Bonney before he left Cambridge to occupy the chair of Geology at University College, London. Professor W. W. Watts writes: "I think we were all rather surprised that Hughes took Harker on to his staff nominally for Petrology in which so far as I know up to that time he had not worked much. However, Hughes had a remarkable eye for a man." The fact that in December 1883 Harker was proposed for Fellowship of the Geological Society by Professor McKenny Hughes, Dr Bonney, Dr Teall, and Professor Prestwich of Oxford, shows that he had already attracted the attention of some of the leading geologists.

In the Easter vacation of 1884 Harker joined Professor Hughes's geological excursion to Anglesey: that was my first experience of field work, and a vivid recollection remains of an exceptionally complicated region bewildering to a novice. In 1885, after two previous attempts, he was elected Fellow of St John's. The title of his dissertation was "Foliation in Rocks", a subject allied to

slaty cleavage, the first geological problem to which Harker seriously devoted himself. The fellowship was extended from time to time without a break until in October 1931 he was elected to a life Fellowship without stipend under Title D (College Statutes): for a few years before his death Harker was Senior Fellow in residence, a position which he filled with dignity and enjoyment. One of several geological excursions to North Wales deserves special notice; at the end of the Lent Term 1887 Harker visited the Lleyn Peninsula, taking with him J. R. Tanner (elected Fellow in 1886), one of his closest College friends, who acted as photographer. The object of the expedition was to study the igneous rocks in the neighbourhood of Sarn and obtain specimens of picrite, a rare rock, for the Woodwardian Museum. Among Harker's MSS was a note-book entitled "The Book of Sarn, being further adventures of the Photographer and Petrologist": the earlier work "The Book of Pwllheli" has unfortunately not been found. "The Book of Sarn" is written partly in verse and partly in prose, the two authors sharing composition: it begins ambitiously with a poem "The origin of all things" in a familiar Longfellow metre. In one of his contributions the petrologist described the driver of a mail cart, which was often used for transport, as a man with a falsetto voice, as smiling and unreliable as usual. The asthmatic horse, as energetic as ever, inspired the motto: "Week in week out, from morn till night you can hear his bellows blow." On another page is a second reference to the horse: "as we slid down the hill the asthmatic horse's legs beat the empty air as that long-suffering brute was suspended from the shafts by his girth".

The departure of the photographer for home called forth a lament from the petrologist:

"No doubt he'll fare better (he cannot eat more)
When he greets the ancestral abode:
His friends he will meet at a quarter past four
If he isn't delayed on the road (but he was);
And there as he sits on a boulder of schist,
With ne'er a companion near,
He can eat the Photographer's portion of lunch,
And drop a memorial tear."

A poem by Harker includes an amusing description of a meeting of the Geological Society of London when controversy was much more thrilling and virulent than it is to-day.

"And still at many a meeting
In Piccadilly's hall
Where Geikius and Bonneius
On one another fall;
Where Hixius for a moment
Requests the Chairman's leave
The while the swarthy Teallius
Sits chuckling in his sleeve."

Sir Archibald Geikie was Director of the Geological Survey; he and Bonney were warriors of the old school who neither gave nor expected quarter: Teall, a Johnian, was one of the pioneers of modern petrology, and Dr Hicks was a well-known and rather eccentric geologist with decided views.

Later in 1887 Harker made his first geological tour on the Continent, visiting France, Belgium and the Rhine. It was his invariable custom to take a busman's holiday; his work was also his recreation. One of the results of visits to North Wales was the Sedgwick Prize awarded in 1888 for an essay published in the following year by the University Press, on "The Bala Volcanic Series of Caernarvonshire and Associated Igneous Rocks". An offer of a position on the Geological Survey of Ireland in 1891 was declined. In August of the same year Harker went to an International Geological Congress in the United States and visited many classic localities on the Pacific seaboard. In 1892 J. E. Marr of St John's, who took the Natural Sciences Tripos in 1878, and Harker agreed to write a text-book on Physiography for Messrs Macmillan and Co.; this never materialized. In the same year Harker was appointed College Lecturer in Physics, a post which he held only for one year. That is the sole College office he accepted: he was long a member of the College Library Committee, but consistently declined invitations to be nominated for the College Council. Preferring to remain a free lance he was at times unsparing in his criticism of College administration; his opinions—one never knew what they would be—were expressed in words entirely free from ambiguity; he was given to picturesque exaggeration conveyed without a smile and with conviction. He declined the Stewardship of the College in the Great War.

He recorded in his Diary on 8 May 1895: "I become member of the Geological Survey of Scotland tomorrow." From this date Harker, the Yorkshireman, became a whole-hearted son of Scotland; he adopted the country with enthusiasm and joyously and assiduously devoted himself to the solution of many problems

presented by the rocks of the Highlands and Western Isles. The appointment of Harker as a temporary Assistant Geologist in 1895 was a new departure from official practice initiated by the Director, Sir Archibald Geikie, who wished to secure the services of the best petrologist available. The arrangement was that Harker should continue to perform his duties at Cambridge in the Michaelmas and Lent Terms and spend the summer as an officer of the Survey. In 1901 he was promoted to the rank of Geologist: he resigned from the Survey in 1905. The appointment to the Survey was the beginning of the most fruitful period in Harker's geological career: he loved Scotland with an enthusiasm which continued to the end; with untiring energy he devoted himself to the search for clues that might enable him to read the secrets of the rocks in the West Highlands and Inner Hebrides. His remarkable successes in this endeavour are recorded in the official memoirs of the Geological Survey on the islands of Skye, Mull, Rum, Eigg and others, also in the maps for which he was solely or partially responsible. Other important contributions were made to the Geological Society of London. This is not the place in which to attempt a résumé of his Scottish researches, but it may be of general interest to refer briefly to his famous work on the island of Eigg. As Seton Gordon says in his *Highways and Byways in the West Highlands*, "of Hebridean islands Eigg is one of the most distinctive; it is recognizable from a distance by the precipitous sgùrr (or scùrr) reaching a height of 1289 ft., and rising from a pedestal made of the sloping sides of an eroded plateau of horizontal sheets of lava. This great crest of pitchstone, a glassy volcanic rock, rises gradually from the southern end of the island and attracts to itself the ocean clouds drifting eastward from the Atlantic." Sir Archibald's fascinating description of the Sgùrr written in his attractive and convincing style is well known to readers of *The Scenery of Scotland*; it became one of the most often quoted geological romances. This was Geikie's interpretation: after a long succession of lava-flows had built up the great plateau of which Eigg is a dismembered fragment, a river carved a channel in the basalt and associated rocks; in the channel Geikie found what he believed to be water-borne gravels. Eventually the river channel and the gravels were invaded by a mighty lava-flow which quickly consolidated into a glassy pitchstone. After the lapse of millions of years the lava that was once in the bed of a river, was left, by reason of its successful resistance to Nature's sculpturing tools, as a majestic monument demonstrating the amazing power of denudation. Harker set himself the task of

examining the evidence on which Geikie's conclusions were based: he was not a man to be unduly influenced by the pronouncements of previous workers, however widely accepted and from whatever source. The result of his intensive study of the rocks led him definitely to dissent from Geikie's conclusions: he described the pitchstone as a sheet of volcanic rock intruded into and cutting across the older basaltic lavas; the supposed river-gravels he believed to be fragmental rocks of volcanic origin. There is a touch of irony in this iconoclastic treatment by an officer serving under the Director of the Survey, who was naturally strongly opposed to the new interpretation. In 1914 the present Director, Dr E. B. Bailey, who was then a junior member of the Survey, published a paper criticizing Harker's conclusions and supporting Geikie: to this Harker effectively replied. There can be little doubt of the correctness of Harker's deductions, based as they are on an intensive survey by a man whose ability as a field geologist and whose judicial attitude of mind are universally recognized.

The days and the nights in camp spent among the Cuillin Hills of Skye appealed to Harker's temperament; he loved the close undisturbed communion with the lonely moorland and the grim mountains; he had the instincts of a naturalist, whose concentration on the rocks did not preclude enjoyment of flowers and birds: for him the occurrence of the moss campion, *Dryas*, and other arctic plants had a deeper meaning than they have for most people; they were reminiscent of an ancient continent embracing the Hebrides and regions stretching far beyond the southern limit of the arctic circle. Year after year, when his official connexion with the Survey ceased, he went on a cruise on the S.Y. *Killarney*, often in company with Cambridge friends, and usually left the ship, before she returned to Liverpool, in order to continue geological rambles. It was a great privilege to be with Harker on the *Killarney*; he was always ready to share his unrivalled knowledge with all who were interested in Scottish geology and Scottish legend and history; the captain, a native of Ayrshire, usually referred passengers eager for information to Dr Harker.

On his eightieth birthday, 19 February 1939, he wrote to me: "Many thanks for your kind letter with its pleasant recollections of former days. I have received congratulations from many quarters, a telegram from the Norwegian Academy of Science (of which he was a Foreign Member) has just now been handed in; but the best of all is to know that valued old friends have lost nothing of their kindly feelings.... I wish I could meet you both again on the *Killarney*. I am proposing to join Cruise 4 (to

Lerwick) on 23 June and also Cruise 6 (to the Outer Isles) on 21 July. What do you say? Friends here are very kind. The Fellows, I am told, are to drink my health to-night, and Cambridge geologists are talking of a complimentary dinner. It almost makes one feel that one has done something meritorious in growing old." The two cruises were enjoyed only in anticipation; illness intervened and he philosophically accepted the inevitable.

Over a long period Harker paid two and not infrequently three visits to Scotland each year. It is probably true to say that he enjoyed no greater happiness than days spent in the land to which his affection had been given, and the memory of such days: he had the satisfaction that comes from work well done and from the knowledge that he had settled many problems in earth history which had baffled previous workers and were the cause of acute controversy. He was never idle: a lonely life in college rooms or on the Scottish hills was for him a full life; his mind was richly stored with facts drawn from the "Manuscripts of God", and with the writings of favourite authors, such as Shakespeare, an almost constant companion, Thackeray and Dickens. He, more than most men, lived in close companionship with the infinite, and yet he was very human. He did not wear his heart on his sleeve; he was in a certain sense a recluse; capable of strong affection; he was always intensely loyal to his friends who valued his friendship as a precious possession.

After this digression let us take up again the thread of his life. In 1896, he received his first award from the Geological Society, the balance of the Wollaston Fund: in 1902 he was elected Fellow of the Royal Society. In 1906 three weeks were spent in Norway. In 1913 he visited Canada and received an Honorary LL.D. degree from McGill University. Three years later he was elected President of the Geological Society of London, a position held for two years, and delivered two memorable presidential addresses. In December 1918 a Grace was passed by the Cambridge Senate establishing a special Readership in Petrology for him: he had been promoted to the status of University Lecturer in 1904. In 1919 the University of Edinburgh conferred upon him the LL.D. degree. The highest award in the gift of the Geological Society, the Wollaston Medal, was awarded to him in 1922; he had received the Murchison Medal in 1907. In 1924 he went to Denmark, Sweden, and Finland and met many geological colleagues. He resigned the Readership in April 1931. The award to him of a Royal Medal by the Royal Society in 1935, though a belated honour, gave him much pleasure. On 3 May 1936 he preached

the Commemoration Sermon in the College chapel, where he worshipped regularly as an undergraduate. On 18 March 1939, thirty-four Cambridge geologists gave a dinner in the Combination Room in celebration of his eightieth birthday: the oldest of his friends present was C. S. Middlemiss who, owing to long residence in India, had not met Harker for close on sixty years. The dinner, though it gave him genuine pleasure, was, he confessed, an ordeal which he faced with some misgiving, as he was already far from well.

Reference has already been made to Harker's earliest efforts as an author and to a few of his later contributions to Geology. From his first appointment as a member of the staff of the Geological Department he took charge of the petrological teaching and gave lectures and demonstrations on minerals and rock structure. Lecturing to beginners was not easy to him: his mannerisms and a certain hesitancy made his lectures a little difficult to follow. When, on the other hand, he gave advanced lectures to students reading for Part II of the tripos he was at his best, and the quality and freshness of his teaching reached an exceptionally high level. His first book published in 1895 by the University Press was a text-book—*Petrology for Students, an Introduction to the Study of Rocks under the Microscope*: the seventh edition appeared in 1935. This most successful book was translated into French. In 1909 he expanded a course of advanced lectures into a book entitled *The Natural History of Igneous Rocks*. He treated rocks as biologists treat animals and plants, as products of an evolutionary process, as related types with peculiarities denoting the diverse circumstances of their origins. This, probably his greatest book, considerably enhanced the author's reputation as an original thinker and had a far-reaching influence on petrological science. Another very important book *Metamorphism, a Study of the Transformation of Rock Masses*, also based on a course of lectures, was published in 1932, and a week or two before his death Harker completed the revision of the manuscript for a second edition. A Russian edition was published in 1937. The subject is intensely interesting even to a layman who realizes for the first time the kind of metamorphosis which is effected in Nature's workshop—the conversion of a limestone into marble, of layers of muddy sediment into slate, and the wide range of chemical change set in motion by the contact of molten material with rocks into which it has been intruded. Harker never permitted himself to get within measurable distance of flamboyant writing or relaxed his self-control; his writings are distinguished by clarity and conciseness, never ambiguous or verbose.

While merely recording the fact that Harker contributed more than 200 articles to scientific journals, it is worth while to add a word or two on one of the first subjects in which he made his mark as a promising research worker in the geological field. In 1885 he wrote two papers for the *Geological Magazine* on Slaty Cleavage and, at the suggestion of Dr Bonney, prepared a full report on the subject which was published by the British Association in 1886. It is well known that a good roofing slate can be split almost indefinitely along parallel cleavage planes into extremely thin sheets: this tendency to regular splitting is a superinduced property of certain rocks, the direction of splitting being independent of the original plane of sedimentation. Harker's mathematical and physical training were of great value in his enquiry into the cause and nature of cleavage; he showed that the tendency to cleave is the result of subjection of rocks to intense stresses in the earth's crust which induces a semi-plastic consistency and a rearrangement and parallelism of the minute constituents.

In 1891 and 1893 Harker and Marr contributed to the Geological Society two papers on "The Shap Granite and the associated Igneous and Metamorphic rocks". The well-known granite of Shap in Westmorland, recognizable by its large pink crystals of felspar, forms a great oval mass, two miles in diameter from East to West and rather more than a mile from North to South, which was forced upwards from a deep-seated molten magma into the surrounding rock at least 300 million years ago. It was the investigation of the history of this intrusion and particularly its effects on the rocks with which it came into contact that were undertaken by the two authors. They described in detail the metamorphism of the aureole girdling the transforming granite.

Reference has already been made to the Memoirs and Maps of Skye and other islands which for the most part are Harker's unaided work. Professor Tilley spoke of the work on the rocks of Skye as "one of the greatest achievements in igneous Geology". The Memoir on *The Geology of the Small Isles of Invernesshire*, published in 1908, has been described as "a model for all subsequent survey work in the volcanic centres of Western Scotland". The whole of Harker's work is characterized by judicial presentation of results obtained in very difficult circumstances, demanding not only thorough familiarity with petrology and an ability to grasp the major features of rock structure coupled with meticulous attention to details revealed by laboratory examination of rock slices, but also mountaineering skill and enormous patience. In his earlier years Harker wrote several papers on the nature and

place of origin of boulders collected from glacial deposits in the Holderness district of South-east Yorkshire; many of them had been brought from the highlands of Norway by an ice-sheet which crossed the North Sea and invaded East Yorkshire.

The honours awarded to Harker were hardly commensurate with the eminence to which he attained in his chosen field of research, a field cultivated with a singleness of purpose that has seldom been equalled in the pursuit of natural knowledge.

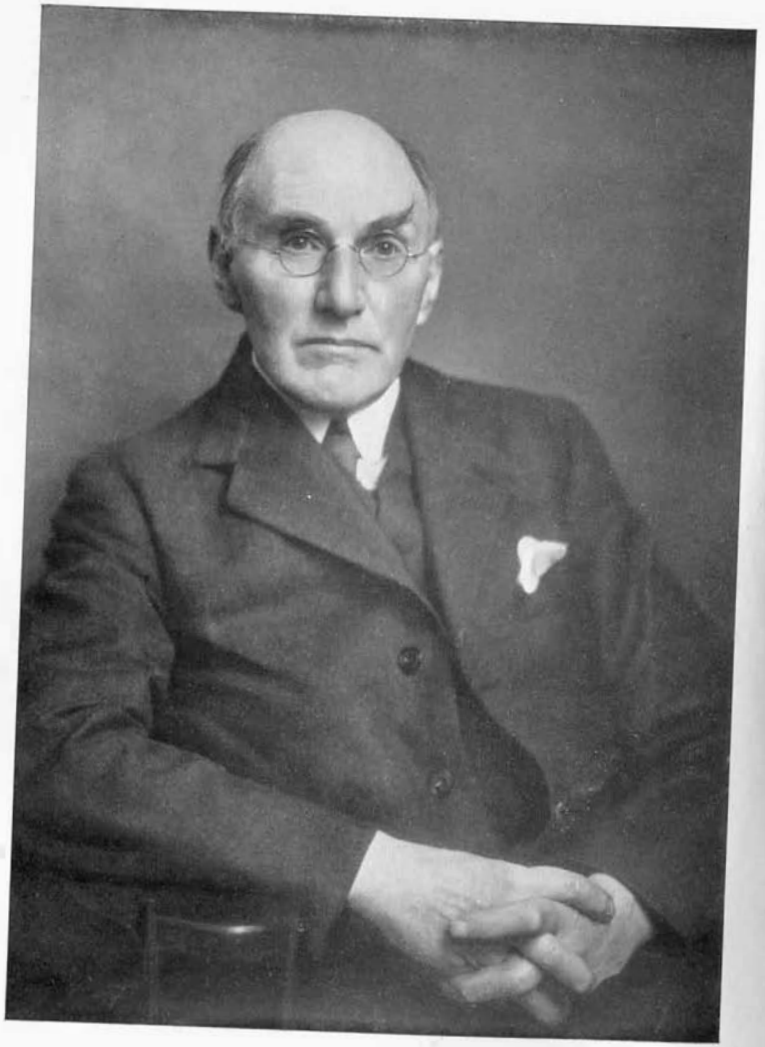
Let us now turn to the non-scientific and human side of Harker's life; and here a personal note is perhaps permissible. It was my good fortune to spend the first years of my residence in college on Harker's staircase (F, Third Court). Soon after coming up in 1883 I attended his elementary lectures on petrology and later his advanced lectures: he treated me from the first as a friend and soon made me unconscious of the gulf which usually divides a junior undergraduate from a Bachelor of Arts: his more formal teaching and the still more valuable informal help given to me when I went to his rooms for advice and assistance inspired in me a keen interest in petrology which stood me in good stead in the second part of the tripos when geology was my chief subject. From our first meeting as teacher and pupil until 1939 we remained close friends without any interruption; my debt to him cannot be adequately expressed in words; to me he was the ideal man of Science, a man whom one respected for his human qualities no less than for his scientific attainments; he had the genius of heart and the genius of brain. His life was strictly regulated and everything he did was done with the greatest efficiency, an efficiency illumined by originality. It might almost be said of him as Charles Lamb said of John Tipp of the South-Sea House: "his actions seemed ruled with a ruler"; but this is only a partial truth; always busy, he never showed a trace of annoyance even when one hammered at his sported oak for admission. For many years his favourite recreation was cricket, which he played regularly in the Long Vacation, and he seldom missed University matches. In 1884 he noted in his Diary: "First attempt at sculling"; similarly he learnt to ride a bicycle, but neither of these forms of exercise was adopted. In 1886 he took lessons in dancing and not infrequently attended the College Ball. Over and over again he made the entry "walked round the Avenue"; it became a ritual as did his walks in the Wilderness. He took an active interest in the College Mission. The College was his home for sixty-one years: after his retirement from the Readership he often spoke of his gratitude to the Council for allowing him to retain his rooms.

For many years he acted as Presiding Examiner at Cambridge Local Centres, often at Hull where he occasionally gave addresses to the Yorkshire Naturalists' Union, of which he was president in 1911, and the Hull Geological Society. He was one of the original members of the Cambridge Sedgwick Club, a society of young geologists and a few seniors which still persists.

Harker spent the whole of his academic life in College: from 1879 until 1883 he lived in G 1, First Court; from 1883 to the end of 1896 in F 4, Third Court, when he moved to E 11, New Court; in 1911 he moved to I 6, New Court, where he remained until 21 June 1939, when he left for the Evelyn Nursing Home.

The biographies of many men make up a tale of adventure, changing environment, rises and falls in worldly prospects: Harker's life is a simple story of work that satisfied, of recreations always kept within bounds, occasional games of billiards, whist and poker, cricket and lawn tennis. It was a surprise to his friends to hear that more than twenty stamp albums had been found on his shelves; no one, except, indeed, Mr Lockhart, the College butler, knew of this hobby; another hobby, collecting newspaper and magazine cuttings on Dickens, was known only to a very few. He lived to himself and yet not in a selfish sense for himself; he consistently avoided talking about himself; he was intensely reserved and combined to an extraordinary degree the capacity of following the precept of Marcus Aurelius, "be able to be alone", with the faculty of enjoying on occasion social intercourse with men and women. An old-world courtesy, stedfast attachment to friends, genuine modesty, a deep sense of spiritual values, absolute sincerity and abhorrence of cant—these are some of the qualities which will remain in the memory of many who were privileged to share such part of his life as was possible. Words spoken by Harker in the College Commemoration Sermon reflect his attitude to religion and are truly descriptive of the impress of his personality upon his fellows. He said: "If, since old differences have been composed, religion is less frequently on the lips of men, we need not therefore conclude that it is less effective in their hearts. There have been in St John's those who, more by example than by precept, have exerted an influence for good wider perhaps than they themselves knew."

In addition to his published work Harker left a noble memorial, a collection of 40,000 rock slices neatly labelled in his writing and many of them from rocks which he collected. This unique collection is now in the Museum of Mineralogy and Petrology presided over by Professor Tilley, who is worthily maintaining



RALPH ALLEN SAMPSON

the great tradition established by Alfred Harker. His last published paper (1939) is "The Cambridge Collection of Rock-slices". It was on his daily walk to and from the Museum that one often met him wearing a small cloth cap—a practice adopted also by a distinguished Professor of Latin—and smoking a briar pipe with a curved stem. The photograph chosen as a frontispiece to this article, taken in November 1935, reproduces something of his humour and kindliness, but the stiff collar that he felt constrained to wear on visits to the studio strikes a discordant note. I last saw Harker a few days before he left his College rooms for the nursing home, where the last days were spent with courageous resignation and in welcoming a few old friends who paid him frequent visits. He died on 28 July 1939.

It is a pleasure to record my gratitude for help of various kinds to the Rev. J. S. Boys Smith and Mr F. P. White of St John's, also to Harker's oldest College friend, Mr C. S. Middlemiss, Professor W. W. Watts and Professor Tilley.

A. C. S.

RALPH ALLEN SAMPSON

RALPH ALLEN SAMPSON, who died at Bath, 7 November 1939, was born 25 June 1866, at Skull in County Cork, son of James Sampson, metallurgical chemist; he came to St John's, from the Liverpool Institute, as a Sizar, admitted June 1884; but matriculated in the Easter Term 1885, and was admitted Scholar June 1885. He graduated in the Mathematical Tripos of 1888. The Senior Wrangler of that year was William McFadden Orr, of St John's, also from Ireland, where he was afterwards Professor at the Royal College of Science in Dublin, and Sampson was third, and was also placed in the Second Division of the First Class in the second part of the Tripos in 1889. Orr, who had a wonderful gift for solving the mathematical problems which at that time were held in high esteem, probably overworked himself, and did not compete for the Smith's Prizes, and Sampson was awarded the first Smith's prize; and he became Fellow of the College (for the then usual period of six years) in November 1890. Sampson and Orr were intimate friends of two other Irishmen, classical members of the College, H. D. Darbishire, who died in College, and W. A. Russell, who was afterwards concerned with the Education Service in the Orange Free State; from these it was possible to learn a good deal about the quality of the men who were classical and theological lecturers in the College at that time.

Three at least of these four friends were ardent chess players. To his contemporary undergraduates Sampson would have seemed a man of striking appearance, of clear-cut and independent views, and capable of impatience when moved. While still an undergraduate he formed a friendship with a lady to whom he was afterwards married; he had one son and four daughters; the son, who went out young to America, came over to fight in 1914–18, and was among the British who occupied Cologne after the armistice; one of his daughters is a distinguished 'cellist, and lives with her mother in Edinburgh, where she is on the musical staff of the University. A brother of Sampson, long librarian to the University of Liverpool, was intimately friendly with the gypsy community; Sampson himself was an enthusiastic admirer of George Borrow. While an undergraduate Sampson was accustomed, on Sunday evenings after Hall, to meet with three others to discuss the foundations of Ethics, and greater things, in a society which one of its members, F. N. Schiller, appropriately named the "Gropers"—and the side of his make-up, indicated by this, prompted a comment on the government of the world when war broke out in 1914, which is unforgettable. For many other evenings of the week he formed one of an After-Hall club of six, who also called themselves by a name, the "Sex stulti"; among these was Schiller, Telford Varley, Walter Harris (part author, with R. H. Forster, of a *History of the Lady Margaret Boat Club*) and P. J. Fagan (now Sir Patrick Fagan, K.C.I.E., C.S.I., Treasurer of the Fairbridge Farm Schools). Of Schiller and Varley, notices have lately appeared in the *Eagle*.

After his degree, from 1889 to 1891, Sampson was Lecturer in Mathematics at King's College, London. During this time he published in the *Transactions of the Royal Society* a memoir of 70 quarto pages, with the title "On Stokes' Current Function"; this was communicated (1890) to the Society by Professor Greenhill (formerly of St John's and Emmanuel). In 1891 he relinquished this appointment, and returned to Cambridge to be the first holder of the Isaac Newton Studentship in Astronomy and Physical Optics. He worked with Professor Newall, the founder of the Cambridge School of Astrophysics; an outcome was an important memoir of 60 pages (1894), "On the Rotation and Mechanical State of the Sun." After two years, in 1893, he again moved, to become Professor of Mathematics at the Durham College of Science, in Newcastle-on-Tyne, passing thence, in 1895, to be Professor of Mathematics, and, afterwards, of Astronomy, with a small observatory, at Durham, where he remained till 1910.

During these seventeen years in the North of England, amid the not very arduous duties of his position, and the upbringing of his children, his scientific activity was well in evidence. In 1900 he published an edition of Adams's lectures on the Lunar Theory, identical with that in Vol. II of Adams's *Collected Papers*, lodging with the Master, Sir R. F. Scott, for a time, while consulting the Adams manuscripts from which these lectures had been reprinted; and he published a description of Adams's manuscripts on the Perturbations of Uranus (1843), with special reference to the manuscript now in our College Library (see *Memoirs of the Royal Astronomical Society*, LIV). In 1903 he was made Fellow of the Royal Society. About this time he was much concerned with a project for a collected edition of Newton's works, supported by the Cambridge Philosophical Society and the University Press, for which he was nominated editor-in-charge (see *M.N.R.A.S.* LXXXIV, 1924). But this undertaking he allowed to lapse because he had become much interested in the study of the four principal satellites of Jupiter, a matter which was to occupy him for the best part of ten years. His papers on this theme are enormous. There is one in the *Harvard Annals*, LII, 1909, one, of 60 large pages, in the *Mem. R.A.S.* LIX, 1910, and another, of 270 pages, in these *Memoirs*, LXIII, 1921. The tables for the satellites arising from the theory were published by the University of Durham in 1910. The scientific importance of the work was recognized later (1928) by the Royal Astronomical Society's award of their Gold Medal. The President's address, on the occasion of the Award (*M.N.R.A.S.* LXXXVIII, 1928), gives an account of Sampson's contributions to Astronomy to that time.

In 1910 Sampson was appointed Astronomer Royal for Scotland, and moved to Edinburgh, where he lived at the observatory, beautifully situated on Blackford Hill, until his resignation about two years ago. In 1915 he was awarded the Hopkins Prize by the Cambridge Philosophical Society, and in 1921 became Correspondent of the Paris Bureau of Longitude. His post as Astronomer Royal constituted him also Professor of Astronomy in the University of Edinburgh. This he did not take seriously; but he was for many years Secretary of the Royal Society of Edinburgh. After the end of his work on Jupiter's satellites, he became interested in astronomical clocks, about which he wrote papers (one in the *Proceedings of the R.S. Edin.* XLIV), and also in questions of Astrophysics. One of the suggestions he made in his account of Jupiter's satellites was that the planet probably has an extensive and very dense atmosphere. I am informed by the present

Astronomer Royal for Scotland, Professor Greaves, also an alumnus of St John's College, to whom I am much indebted for the exact references in this notice, as I am to Mr White for the College dates, that this conclusion is now regarded as confirmed, the atmosphere containing at least ammonia gas, and probably also methane gas. And Sampson worked spectroscopically at the colour temperatures of (80) stars, and published at least three papers thereon (*M.N.R.A.S.* LXXXIII, 1923; LXXXV, 1925; XC, 1930).

Altogether this is a record of an earnest and virile, if unquiet, nature, desperately loyal to what seemed the highest aspirations, moral and intellectual, of a period of unexampled change, possibly of renaissance, possibly of decay, in which his life was passed.

Mrs Sampson writes: "He had worked very hard and constantly at the observatory (as always); he felt he had got the equipment and place into good order...and one would find him sitting at his empty desk, with the drawer open, ready to shut should some one come in on business, poring over a Madagassy and Greek Testament. For he had settled to break away from his old life and go to a colony of Friends in Madagascar, and take a part in Social Service....Perhaps you can pick up something out of this for the sunset time of your biography—I have not been able to convey his unselfish charm and beauty of character—biography only gives glimpses and half truths—and all our natures are so complicated."

H. F. B.

DONALD JOHN CAMPBELL (B.A. 1928) died 26 July 1939, aged 35, in circumstances which can only be described as tragic. After returning from France, where he had been on holiday with his wife, he was at King's Cross railway station in order to pay a short visit to Cambridge, when his death was caused by one of the numerous acts of terrorism committed during the summer of 1939 by the Irish Republican Army in order to intimidate the British public. It is particularly regrettable that the second fatal casualty caused by these irresponsible extremists should have been a Johnian who was in his early prime, and had achieved considerable distinction in scholarship. His marriage took place on 4 April, less than four months before his death. The sympathy of his contemporaries at St John's will be extended to his widow, who was herself injured in the explosion.

He was the son of Peter Campbell, retired schoolmaster, of Inverness, and was born at Strachur, Argyllshire, 29 October 1903. From Inverness Academy he went to the University of Aberdeen

in 1921, and graduated there in 1925 M.A. with first class honours in Classics. Entering St John's in October of that year as an affiliated student with an Exhibition, he obtained a first class in Part I of the Classical Tripos in 1926. In 1928 he was placed in the first class in Part II of the same tripos with distinction in the History group and special merit in the rest of the examination, whereupon he was elected to a Scholarship and awarded the Graves Prize. In October of the same year he became assistant to the Regius Professor of Humanity in the University of Aberdeen and in 1931 was appointed to a Lectureship in Humanity in the University of Edinburgh. Here, as in Aberdeen, his ability as a teacher and his devotion to scholarship marked him out as a rising Latinist who deserved yet further distinction. In addition to various articles and reviews in British and American periodicals, he published at Aberdeen in 1936 a commentary on the second book of Pliny's *Natural History*. This useful work contains valuable information about the style and language of that neglected author, and was itself an abridgement of a larger study for which he gained the degree of D.Litt. at Aberdeen. Between 1936 and 1939 he occupied himself with work upon Cyrene, and he has left a monograph, which deserves to be published as soon as national affairs become normal, upon that important Greek settlement. Its value is enhanced by first-hand information collected by the author from a visit paid to the site in 1938, by his inspection of the inscriptions found there as well as of the remains themselves, and by a thorough study of all relevant literary evidence. The loss of a Latinist of growing reputation is all the more to be deplored at a time when able workers in that field are all too few.

A modest and retiring temperament did not prevent him from being appreciated by his students and his colleagues as a patient teacher and true friend; and he held during his career at Edinburgh such responsible positions as the sub-wardenship of Cowan House (the University hall of residence) and the secretaryship of the E.U. Association of Teachers. Those who knew him will appreciate the pain which would have been caused to so shy and sensitive a nature, had he realized that in his passing he would evoke the sympathy and dismay of a nation.

R. J. G.

ARTHUR HENRY BINDLOSS (B.A. 1887) died 26 June 1939 at Harrow-on-the-Hill. He was the son of the Rev. Edward Bindloss (of Magdalene, B.A. 1834), British chaplain at Archangel, where

the son was born 25 September 1863. He was educated abroad, more especially at the Collège Gaillard, Lausanne, Switzerland. He graduated with a third class in the Natural Sciences Tripos, Part I, 1887, and went on to St Mary's Hospital, where he was University Scholar, qualifying M.R.C.S., L.R.C.P., in 1890. The next year he proceeded to the M.B. degree at Cambridge. After acting as resident assistant at Leicester Infirmary, he settled down in practice at Harrow, where he remained, except for war service in the R.A.M.C., until his death.

THOMAS ALFRED BROCK (B.A. 1895) died in Cambridge 20 October 1939 after a short illness. He was the son of Edmund Brock, for many years a reader at the Cambridge University Press, and was born in Cambridge 15 December 1872. He was educated at the Higher Grade Boys' School, Cambridge, and came up to St John's as a sizar in 1892. He was bracketed 25th wrangler in the Tripos of 1895, and was elected a Scholar of the College.

JOHN BERNEY DRUMMOND (B.A. 1917) died 2 September 1939 at 1 Belle Vue Gardens, Brighton. He was the son of Charles Maltby Drummond and was born at Brighton 28 June 1895. He came up to St John's from Brighton College in 1914 and obtained a third class in the Mathematical Tripos, Part I, 1915. He then obtained a commission in the Royal Engineers. After the war he taught engineering in London.

FRANKLEN PAINE FRANKLEN-EVANS (B.A. 1886), formerly Franklen Paine Evans, died 26 July 1939 at Fir Trees, College Road, Buxton, aged 76. He was the second son of Franklen George Evans, surgeon, of Llwynarthen, near Cardiff. He studied chemistry at University College, Bristol, before coming up to St John's, where he obtained a first class in the Natural Sciences Tripos, Part I, in 1885, followed by a second class in Part II in 1886. He then went to St George's Hospital; he took the Cambridge M.B. degree in 1889 and the M.D. in 1912. He also studied at University College, London, and in Vienna. His appointment in 1912 as bacteriologist and radiologist to the Devonshire Hospital, Buxton, gave him the facilities he desired to continue the study of rheumatoid arthritis begun with Strangeways at Cambridge. Unfortunately he published little or nothing. He resigned in 1924, but continued to work privately as a bacteriologist.

JOSHUA REYNOLDS GASCOIGNE GWATKIN (B.A. 1880) died 12 September 1939 at the Manor House, Potterne, Wiltshire. He

was the eldest son of John Reynolds Gwatkin, of Nonsuch House, Wiltshire, and was born at Millbrook, Hampshire, 24 March 1855. He was a major in the Royal Wiltshire Imperial Yeomanry and a J.P. for Wiltshire. He married, in 1882, Arundel Augusta, daughter of J. H. Penruddocke, of Seend, Wiltshire.

HUGH HANMER (B.A. 1886) died 21 November 1939 at The Mount, Oswestry, Shropshire, aged 77. He was the sixth son of the Rev. Henry Hanmer, M.A. Oxford, rector of Grendon, Warwickshire, where the son was born 21 January 1862. He went to Newark on Trent Grammar School. Ordained in 1889 by the Bishop of Ripon to the curacy of St Mary, Hunslet, he was vicar of Hanmer, Flintshire, 1891–8, rector of South Runcton with Holme and Wallington 1898–1904, of Grendon 1904–13, of Stoke-on-Tern 1913–20, of Whitchurch with Doddington 1920–7, and of Selattyn 1927–31. He was rural dean of Whitchurch 1926–7, and of Oswestry 1927–34. He married, in 1894, Margaret Maude, daughter of Robert Peel Ethelston, of Hinton, Shropshire; one of his sons, Stephen Henry Hanmer (B.A. 1928), is a member of the College.

WILLIAM OLIVER CHAMBERS HEMMINGS (B.A. 1937), Flying Officer, Royal Air Force, was killed on the night of 26 June 1939, when the "Hurricane" fighter which he was piloting crashed near Goodwood, Sussex. He was the son of Isaac Hemmings and was born at Sheffield 11 June 1915. He came up to St John's as a Johnson Exhibitioner from Oakham School in 1934, and obtained a second class in the Classical Tripos, Part I, 1936, and a third class in the Law Tripos, Part II, 1937. He was given a commission in the Royal Air Force and, after passing through the Flying Training School at Hullavington, was in 1938 posted to No. 1 Fighter Squadron, near Tangmere, Sussex.

FREDERIC WILLIAM HEPPENSTALL (B.A. 1883) died 13 October 1939. He was the son of the Rev. Frederic Heppenstall (of St John's, B.A. 1854), successively headmaster of the Perse School, Cambridge, and of Sedbergh School, and was born at Newark 13 October 1860. He came up to St John's in 1879 as a sizar and Lupton and Hebblethwaite Exhibitioner. Ordained in 1888 by the Bishop of Carlisle, he held several curacies in the north, and in 1902 he was appointed vicar of Skelton with Newby, near Ripon, where he remained until his retirement in April 1939. He was rural dean of Ripon from 1922 to 1927, and since 1935 had been an honorary canon of Ripon.

JOHN BENNETT HIRON (B.A. 1903) died at Dormans, Surrey, 24 April 1939. He was the son of John Samuel Hiron, stationer and printer, and was born at Deddington, Oxfordshire, 21 December 1860. He went first to Derby School and then to Hereford Cathedral School. He studied at the University of London, and took the B.A. degree there in 1888. He was ordained in 1896 to the curacy of Smethwick, moving in 1898 to St Michael, Shrewsbury, and in 1900 to Chesterton, Cambridge. Here he matriculated as a non-collegiate student, but after a year was admitted to St John's. He never held a living, but from 1902 to 1928, with the break of a year when he was lecturer of Watford, he was a licensed preacher in the diocese of Ely.

FREDERICK TYRIE SIDNEY HOUGHTON (B.A. 1878) died 5 November 1939 at 188 Hagley Road, Edgbaston, Birmingham. He was the son of Frederick Houghton and was born at Balsall Heath, Birmingham, 8 July 1855. He was at Rugby School from 1869 to 1874, when he came up to St John's as a sizar. He was placed in the second class in the Natural Sciences Tripos, 1877, and was elected a Scholar of the College. In 1883 he was appointed an assistant master at King Edward's School, Birmingham, where he remained until his retirement in 1915. He was a Fellow of the Geological Society and a Fellow of the Society of Antiquaries, and a vice-president of the Birmingham Archaeological Society. He helped in recording place-names in Warwickshire and Worcestershire for the English Place-Name Society, and assisted in the production of the *Little Guide* to Worcestershire. He also served on the executive committee of the Incorporated Association of Assistant Masters, and was for a time chairman of the Birmingham Library.

GERARD AINSLIE KEMPTHORNE (B.A. 1898) died at St Austell, Cornwall, after an operation, 4 December 1939, aged 63. His great-grandfather, John Kempthorne, was Senior Wrangler in 1796 and was a Fellow of the College; his grandfather, Richard Kempthorne (B.A. 1827) was a Scholar, and his father, Philip Henry Kempthorne (B.A. 1866), was eighth Classic and a Fellow (see a note on the family in *Admissions to St John's*, Part IV, p. 345). G. A. Kempthorne was born 10 May 1876 at Wellington College, Berkshire, where his father was a tutor. He entered Winchester College in 1889 and came up to St John's in 1895. After taking his degree he went on to St Thomas's Hospital, where he qualified M.R.C.S., L.R.C.P., in 1902. He was assistant house surgeon at Derby Royal Infirmary for a time, but in 1903

he obtained a commission in the Royal Army Medical Corps, serving in India. He was promoted major in 1915 and served in France from 1915 to 1918, being twice mentioned in despatches and winning the D.S.O. After service on the North West Frontier in 1919 he retired with the rank of lieutenant-colonel. He acted as medical inspector of recruits at Glasgow, and occupied his leisure with archaeology, publishing a history of Sandhurst, Berkshire, in 1923, and a history of Sheviock, Cornwall, in 1934. He married, in 1904, Kathleen Mary Mackarness, and has one son and two daughters.

At Cambridge he rowed "3" in the First Lent Boat and the Second May Boat, L.M.B.C., 1896, and "7" in the Second May Boat, 1897 and 1898.

ATHERTON KNOWLES (B.A. 1881) died 8 October 1939 at 83 Limes Avenue, London, N. 11. He was the son of the Rev. John Knowles, a Wesleyan minister, and was born at Stratton, near Cirencester, 2 July 1858. He was sent to New Kingswood School, Bath, and came up to St John's as a sizar in 1877. He was ordained in 1881 by the Bishop of London to the curacy of Bromley St Leonard, Middlesex. In 1895 he was appointed vicar of St James, Ratcliff, where he remained until, in 1930, he was presented by the College to the rectory of Lilley, Hertfordshire. He retired in 1938. He published in 1895 a text book of Anglican service music from Tallis to S. S. Wesley.

JAMES MARTIN (B.A. 1885) died in August 1939 at Grahamstown, South Africa. He was the son of James Martin, schoolmaster, and was born at Battersea 26 March 1864. He came up to St John's from Newcastle-under-Lyme School in 1882 as a sizar, and was thirty-fourth wrangler in the Mathematical Tripos, Parts I and II, 1885; he obtained a third class in the Natural Sciences Tripos, Part II, in 1886. He went out to South Africa as professor of chemistry in the University Section of the Diocesan College, Rondebosch; this was closed in 1910, when he moved to the department of mathematics at Rhodes University College, Grahamstown.

CHRISTOPHER BASIL MIDDLETON (B.A. 1906) died suddenly in London 22 August 1939. He was the son of Christopher Middleton, of Darlington, and was born at Marton in Cleveland, Yorkshire, 2 October 1884. He was at Sedbergh School from 1899 to 1903. He graduated with a third class in the Natural Sciences Tripos, Part I, 1906, and was appointed to the Govern-

ment Survey Department in Egypt, where he spent the remainder of his life, except during the last war, when he served in the Royal Field Artillery.

JOHN NEALE (B.A. 1886) died suddenly, of heart failure, 20 November 1939 at Hardingstone Grange, Northampton. He was the second son of John Neale, of Kneeton, Nottinghamshire, by his wife Charlotte, daughter of Thomas Hayward, of Wellingore, Lincolnshire, and was born at Kneeton 17 April 1863. On the death of his uncle Charles Neale in 1875, he succeeded to the Laneham estate in Nottinghamshire. He went to Newark Grammar School, and came up to St John's in 1882. Ordained in 1886 by the Bishop of London, he went out to China with the Church Missionary Society, and was missionary at Hangchow from 1887 to 1894. He then returned to England and was appointed vicar of Harmston, Lincolnshire. From 1897 to 1900 he was rector of Brockhall, Northamptonshire, and from 1900 until his retirement in 1935 rector of Harpole. He married, in 1890, Ada Rossall, third daughter of Humphrey Sandford, of the Isle, Shrewsbury (of St John's, B.A. 1834). One of his sons, Humphrey Rossall Neale (B.A. 1921), is a member of the College.

HENRY ECKLEY HERBERT OAKELEY (B.A. 1898), of Durban, Natal, died 17 March 1939. He was the son of the Rev. James Oakeley (of Jesus College, Oxford), and was born at Llanishen, Monmouthshire, 8 February 1877. He came up to St John's from Hereford Cathedral School in 1895 and was a prominent member of the L.M.B.C., rowing "7" in the First May Boat for the four years 1896–9. He gained a Trial Cap in 1897. From Cambridge he went on to the London Hospital, and qualified by means of the Cambridge B.Chir. degree in 1908. He was house physician and house surgeon to the County Hospital, Newport, Monmouthshire: about 1912 he went out to South Africa, where he became senior house surgeon to the Kimberley Hospital. During the war he served in France in the 1st South African General Hospital. By his will he left £100 to the Strangeways Research Institute, Cambridge.

NICHOLAS GUY POWELL (B.A. 1898) died 21 October 1939 at Marlborough, after an operation. He was the son of Walter Joseph Powell, of Abingdon, Berkshire, where the son was born 16 February 1876. He was admitted to St Paul's School in 1892, and, coming up to St John's as a sizar in 1895, was placed in the second class, division 1, of the Classical Tripos, Part I, in 1898.

From 1900 to 1903 he was classical master at Heidelberg College, Germany, and then for seven years at Sunningdale School, finally becoming headmaster of a preparatory school, The Towers, Crowthorne, Berkshire. He married, in 1907, Harriet Mary Aldworth, of Frilford.

JOHN HOPKINS PUGH (B.A. 1872) died 10 December 1939, aged 90. He was the son of the Rev. James Baldwin Pugh (of St John's, B.A. 1838), vicar of Hemel Hempstead, and was born at Walsall. He came up to St John's in 1868 but, after keeping seven terms, took his name off the College Boards and proceeded to his degree as a Non-Collegiate Student. He was ordained deacon in 1876 by the Bishop of Worcester to the curacy of St Clement, Nechells, Birmingham, but later gave up his Orders and qualified as a doctor. After serving as doctor on board various ships of the Castle and White Star Lines, he became medical officer to the Training Ships *Worcester*, *Chichester* and *Arethusa*. Next he went to Birmingham as surgeon to the Royal Small Arms Factory and civil surgeon in charge of troops. In 1884 he returned to London, where he was in practice in Marsham Street, Westminster. About 1900 he went out to the Fiji Islands as medical officer at Levuka, and later was at Hong Kong as surgeon superintendent of coolies for the Transvaal Government. In 1906 he returned to England, where he settled down at Buckhurst Hill, Essex, for the remainder of his life.

CHARLES CAMPBELL RILEY (*Matric.* 1873) died 7 July 1939 at Hazelgrove, Slindon. He was the son of Charles Riley and was born at St John's Wood, London, 10 June 1854. He came up to St John's in 1873 from Maze Hill School, Greenwich, but kept only three terms.

RICHARD SHEEPSHANKS (B.A. 1893) died in London 4 October 1939. He was the son of the Right Rev. John Sheepshanks, Bishop of Norwich, (of Christ's, B.A. 1865), and was born at Bilton Vicarage, Harrogate, 6 November 1871. He entered Winchester College in 1885, and came up to St John's as a Scholar in 1890. He was placed in the first class, division 2, of the Classical Tripos, Part I, 1893, and in the first class in the Law Tripos, Part II, 1894. He was appointed to the Indian Civil Service after the examination of 1894, and spent the year of his probation at University College, London; he was called to the bar by the Inner Temple 18 November 1895. He arrived in India 27 December 1895 and served in Bengal as assistant magistrate and collector.

In 1899 he was appointed under-secretary to Government, financial and municipal department, and in 1901 registrar of the High Court, Calcutta. In 1905 he became deputy secretary to the legislative department, Government of India, and in 1910 district and sessions judge, transferring to Bihar and Orissa in 1912. He was for a short time in 1916 acting judge in the Calcutta High Court. He retired in 1920 and returned to England. For some years he had acted as polo correspondent of the *Daily Telegraph*, which describes him as an ardent and energetic player and a most astute student of the game.

GORDON HENRY MURRAY SMITH (B.A. 1939) died 29 August 1939 after a short illness, aged 21. He was the son of Mr James Gordon Murray Smith, and was born at Hampstead, 6 May 1918. He entered St John's in the Michaelmas Term 1936 from Uppingham. He was placed in the second class in the Mechanical Sciences Tripos in 1939.

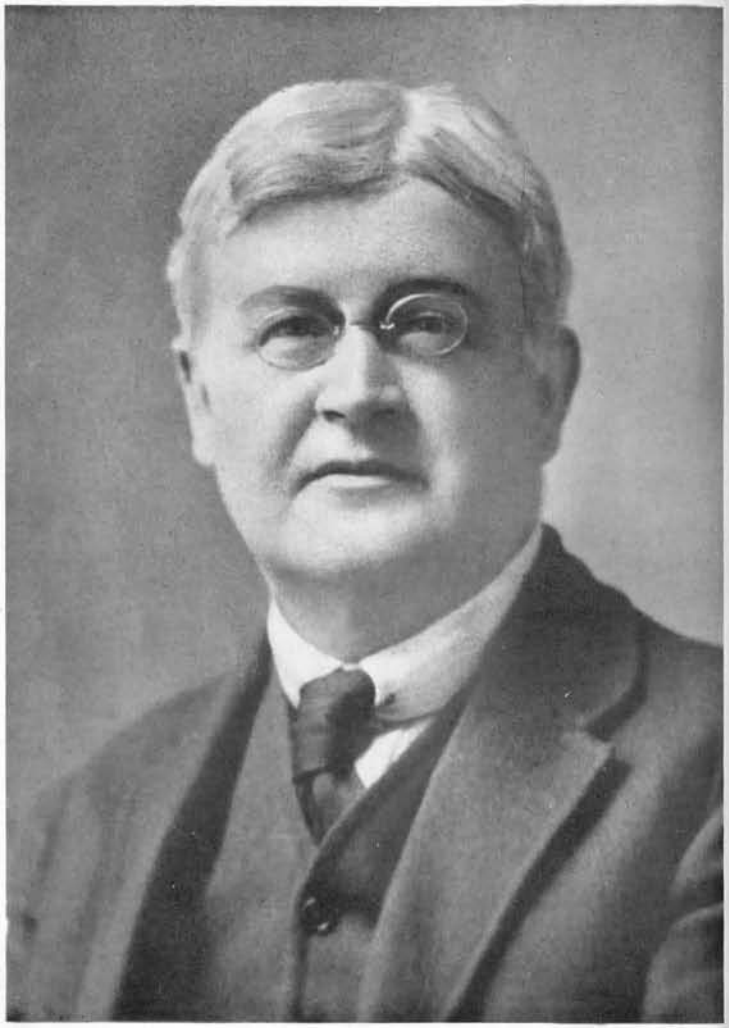
GEORGE HARRIS TEALL (*Matric.* 1900) died in London, 21 June 1939, after an operation. He was the son of Sir Jethro Justinian Harris Teall (B.A. 1873), sometime Fellow, Director of the Geological Survey, and was born at Nottingham 24 October 1880. After a year at Oundle School, he went to Dulwich College in 1894, leaving in 1898 and having a year at Guy's Hospital before coming up to St John's. He kept only five terms and then went into the Army, receiving his commission as second lieutenant, 3rd (Militia) Battalion, King's Own Yorkshire Light Infantry, 25 January 1902. He was transferred to the Royal Garrison Regiment in 1903, was promoted lieutenant, Lincolnshire Regiment, 1906, captain 1914, and major 1916. During the war he was Staff Captain, 164th Infantry Brigade, and later Deputy Assistant Adjutant General, 32nd Division. He was mentioned in despatches five times, was wounded, and was awarded the D.S.O. in 1918. He retired from the Army in 1923, and was called to the bar by Gray's Inn in 1925. He married, in 1913, Josephine, daughter of Robert George Burrell, J.P., of Thetford.

FREDERICK WILLIAM WHITELOCK TUNSTALL (*Matric.* 1879) died 11 September 1939 at St Faith's Nursing Home, Ealing, after four years' illness. He was the son of William Croudson Tunstall, banker, and was born at Gloucester 30 December 1858. He kept only three terms at Cambridge. His son, William Cuthbert Brian Tunstall (B.A. 1921), is a member of the College.

JAMES STANLEY TUTE (B.A. 1881) died 16 October 1939. He was the son of the Rev. John Stanley Tute (of St John's, B.A. 1846), vicar of Markington, Yorkshire, and was born in 1857. He came up to St John's from St Edward's School, Oxford, in 1877. His brother, William Andrew Tute (B.A. 1875) was also at St John's. He was ordained in 1881 by the Bishop of Lichfield to the curacy of Newbold. After holding several curacies in large industrial towns in the Midlands, including St Alban's, Birmingham, he was in 1906 appointed vicar of St Chad, Smethwick, where he remained for twenty-one years. He took an active part in the work of the Christian Social Union. In 1927 he moved to the country parish of Brilley with Michaelchurch, Herefordshire; he retired in 1936, but continued to do duty in the diocese of Hereford until the end of 1938.

ROBERT YATES WHYTEHEAD (B.A. 1869) died 17 December 1938 at Campsall Grange, Doncaster, aged 92. He was the son of Henry Yates Whytehead, M.D., and was born at Crayke, near Easingwold, Yorkshire, 28 July 1846. He came up to St John's from Shrewsbury School in 1865; after taking his B.A. degree he migrated to St Catharine's as a fellow commoner, but he returned to St John's when he proceeded M.A. in 1890. Ordained in 1870 by the Bishop of Chichester, he held curacies in Sussex and Yorkshire, and in 1875 became vicar of Nunkeeling with Bewholme, Yorkshire. From 1890 to 1894 he was vicar of Madingley, Cambridgeshire, and then, after a year as vicar of St Edmund, Northampton, he was appointed vicar of Campsall, Yorkshire. In 1903 he was presented by the College to the rectory of Great with Little Hormead, Hertfordshire; in 1906 he was moved to Lawford, Essex, where he remained until his retirement in 1924. From 1917 to 1919 he was rural dean of Harwich.

Mr Whytehead was a nephew of Thomas Whytehead (B.A. 1837), second classic and Fellow of the College, who went out to New Zealand as chaplain to Bishop Selwyn (see *D.N.B.*). Mr R. Y. Whytehead, only a few months before his death, presented to the College various family books and papers, including his own "Recollections of a Nonagenarian" (in typescript).



EDWARD ERNEST SIKES

OBITUARY

EDWARD ERNEST SIKES

(Born 26 April 1867, at Halstead Rectory, Kent.
Died 5 February 1940, at Bournemouth)

IN 1886, in the Lent Term number of *The Eagle*, which used then to be published with a regularity that must be the envy of war-time Editors, occurs the prim and precise notice that among those who were approved for election to Scholarships on 21 December 1885 was E. E. Sikes, of Aldenham School. On that day began a connection with the College that lasted for fifty-five years. His scholarly career was a distinguished one; it included a Bell Scholarship, a Browne Medal (for a Latin Epigram), and a place in the first division of the First Class in Part I of the Classical Tripos of 1889. Next year he repeated his success, taking Part II of the Tripos, his special interests being Literature and Archaeology, interests that were to remain happily blended throughout his life. His performance gained him the award of the Newton Scholarship at the British School at Athens, and he went out to Greece at the end of the Michaelmas Term of 1890. The fruits of his work there were soon evident when, on 2 November 1891, he was elected to a Fellowship as the result of a dissertation on early Greek sculpture, entitled "The *Nike* of Archermos; a dissertation on the winged female type of the sixth century B.C." In 1892 he was appointed Assistant Lecturer in Classics, and in 1893 came the first of a long series of contributions to learning, an article in the *Classical Review* on "Folk-Lore in the *Works and Days* of Hesiod". It must be remembered that these were times long before *The Golden Bough*, when students were still being taught to look upon the Parthenon Frieze as the apex of Greek Sculpture, and Sikes was a pioneer in the appreciation of the importance of archaic Greek Sculpture and of Classical Anthropology. It was natural enough that on the death of Haskins he should be appointed Lecturer, and that post he held from 1894 to 1938 with distinction and devotion. Yet another burdensome honour was to fall to his lot, appointment as Tutor in 1900, a post which he held for a quarter of a century. How in the midst of a life so occupied he found time for the writing of his books and for the fastidious corrections of proofs remains a marvel.

His first book, an edition of Aeschylus's *Prometheus Vinctus*, was produced in conjunction with another Johnian, St J. B. Wynne

Willson, in 1898. Sikes's hand can be traced in the scholarly and stimulating introduction on *The Fire-Bringer* and *The Myth of Prometheus before Aeschylus*, and his good sense in the rejection of the idea, then sweeping the continent, that Prometheus in this drama must have been represented by a wooden dummy. Next, in 1904, came another joint production, an edition of *The Homeric Hymns*, by Sikes and Allen (well-remembered names); in 1914, a book of essays, *Anthropology and the Classics*. The war of 1914–18 interrupted Classical studies greatly, and imposed additional burdens on a hard-working tutor. There were new problems to face, his colleague, Bushe-Fox, died early in 1916, and Sikes had to carry a great load of work; but he shouldered it all, and in addition found time to do his drills in the "Veterans' Corps". As Sikes was a Private, and the Head Porter a Captain, a pretty problem might well have arisen as to who was to salute whom, but a working compromise was somehow evolved. Amid all his duties Sikes found time to translate into heroic couplets Musaeus's *Hero and Leander*, which was published in 1920. A little later, in 1923 and 1931, appeared what many think the most important of his contributions to learning, *Roman Poetry* and *The Greek View of Poetry*. Here he could express the width and profundity of his knowledge and love of ancient poetry, linking it up with modern theories of poetry and the function of the poet in society, in which he took the greatest interest. His last published work, in 1936, was on Lucretius: here he returned to an old and constant love, the strange and fascinating figure of the poet-artist-philosopher. It is a book that is not only full of knowledge of the poet and of previous work upon him, but also shows generous appreciation of the work of another scholar of the College (now a Fellow), whose article on "Metaphors" in the *Criterion* had broken fresh ground.

This brief catalogue has left much out of account; reviews and articles in learned journals and contributions to the *Cambridge Ancient History* upon Latin Literature. To assess the abiding value of his work is not easy, but I fancy most would find it in his books dealing with ancient poetry and ancient theories about poetry. Not that he neglected archaeology: I well remember how at a meeting of the College Classical Society, where one young scholar (now a Professor at Harvard University) had read a paper with the alluring title of "Aphrodite: a goddess with a past", he charmed the company by suddenly producing from his pocket an archaic statuette from Cyprus, and by discoursing on the age and antecedents of Aphrodite. But he was at his finest when he allowed his thought to move in the circle of Homer and Aeschylus, Lucretius and Virgil, meditating on the significance of a word or a phrase, and drawing on his astonishing knowledge of ancient and modern literature to illustrate and to prove

his remarks. In much of his writing he was a pioneer, and may suffer the fate of pioneers; others will write longer (but not necessarily better) books, others will deal out more epigrams to the square foot, but if a man wants to appreciate something of Roman poetry let him turn to the chapters on *Language and Style* and *Ornaments of Latin Verse*, and he will see how a scholar can deal with those subjects.

But of his writings Sikes would never have thought first; "habent sua fata libelli" he would have said, for his work for the College was always uppermost in his thoughts. He was a Lecturer for over forty years, and a Tutor for twenty-five, and it was on those tasks that he spent himself. He became Tutor when the College was not enjoying a high period; he worked steadily and unremittingly to improve its entry both in character and in scholarship. When he resigned his Tutorship, in 1925, he could view a very different college, and if the improvement could be ascribed to any one man it must be ascribed to him, though Sikes would have been the first to deny it. As a Tutor he was conscientious to a degree, and he never lost sight of a pupil of his afterwards. Yet he was a shy man; there were some with whom he found difficulty in making contact, but they had no doubt that he was ready to help. He had very definite standards; when one scholar of the College, fearing that the Tripos might interfere with his cricket, proposed that he should take an Ordinary Degree, Sikes's look was sufficient. But in spite of occasional severity, or shyness, to many people he represented the College, and in their letters they would always enquire how "Billy" or "Psyche" was.

Lecturing he loathed. He lacked completely that slight touch of histrionics which can be such a help to a lecturer, and he had no wish to dogmatize on matters of taste. His lectures were always written out in full, with great care and fastidious choice of word and phrase, the matter was always excellent—and yet he would spend a sleepless night before delivery. It was probably in private tuition, especially in Composition, that his qualities were best seen; with a good pupil, who had something of his keenness and fine taste, he was really inspiring. Sitting at the table, lighting his pipe from time to time, he really entered into the mind of the man he was teaching. You felt as though he *knew* Greek and Latin in all their richness and subtlety, *knew* exactly how much meaning a word could have, why this adjective was wrong here, why that noun would not do: "I don't think I can remember ζῆλος being used in the sense of sexual jealousy, Mr ——." But though he was impatient of slipshod work, he could be encouraging even in correcting; "That is not worthy of you, Mr ——", he would say, and leave you with the feeling that you were capable of doing better work, and that he was able and willing

to help you do it. His own Fair Copies were beautiful things, wrought out with slow and loving care and with the most meticulous attention to getting everything translated, so that not a *nuance* should be missed. They were much treasured, for they are in the finest tradition of Cambridge verbal scholarship; his friends could pay no better tribute to his memory than by collecting them for publication.

But it was not only as a teacher or tutor that the College claimed his devotion: whenever his engagements allowed he would be found watching the College teams at football or cricket, and he used regularly to turn out for the High Table side at Cricket; he was frequently in attendance at the various College Societies in which he was interested. He had a great love of Music; in 1893 he appeared first as Chairman of the Smoking Concerts, and *The Eagle* noted gratefully how much of the success of that concert was due to his genial chairmanship; after the war of 1914–18 he was President for many years of the Musical Society. Even after his retirement from teaching he read a paper to the Classical Society on "The Humour of Homer", and carried his point in spite of the protestations of one colleague that what we *all* ought to read was *Don Quixote*. He was a member of the Eagles' Club; in his later years he loved a game of tennis or a round of golf, and the High Table owes to him the institution of the President's Cup, for which senior members compete during the Long Vacation, when their efforts (and their scores) cannot so easily be witnessed by junior members. One of the activities he took most seriously was the entertainment of his pupils; many retain grateful memories of luncheon-parties or tea-parties at his house, and of the great part played by Mrs Sikes in them. No pupil of his ever went down for the term without "keeping a Billy" on some Sunday afternoon.

It was a crowded and busy and exhausting life. As a colleague he was helpfulness itself; if there was extra work to be done he would accept it uncomplainingly, and you knew that anything you asked him to do would be carried out with conscientious thoroughness. He cared little for external honours, though he was naturally pleased when he was asked to undertake, in 1926, a Visiting Professorship at Harvard University. But from the day he entered the College his life and energies were governed by an unremitting devotion to its prosperity and to its best interests, as he saw them, and perhaps nothing made him happier or more proud than the fact that the Fellows chose him to be their President in 1925. A memory that many of us bear with affection is of Sikes, white-haired and benign, presiding at High Table. Another one is that of going to consult him on some point—for none of his Classical colleagues would have ventured to print a Fair Copy of his own without submitting it first

to his critical eye. Entering Sikes's room you would find him busy at an enormous table, covered high and majestically with books and papers and tobacco-ash, in apparently irremediable confusion, though his hand moved easily and unerringly among them; after some minutes of "Now, let me see", he would always produce the book you wanted. Then, in two armchairs in friendly contact, you could discuss to your heart's content, and go away the gainer from his rich knowledge and experience in scholarship. Though he was always ready to be helpful, where help was needed, he had very definite likes and dislikes; as a College teacher he had little use for Professors—"I don't believe much in Professors", he once hummed in my ear, after a particularly exasperating display by one of them—and at meetings of the Livings Committee he could be caustic in his comments upon the qualifications of some candidates. One thinks of him as a great teacher—indeed, the number of his pupils who now hold high posts in academic circles must be very large—as a colleague upon whom one could always rely, but above all as an utterly devoted son of his College. It was a good life, and the College owes more to him than perhaps it has yet realized.

M. P. C.

My first impression of Sikes, so far as memory serves, was from behind. We both attended the lectures of C. E. Haskins in Lecture Room VI (later renumbered V by a matter-of-fact bursar, and now cut into oddments). Haskins was one of the worst lecturers of my time; as W. C. Summers wrote, I fancy during one of those lectures:

"A dauntless nine to Haskins came;
Half-dead they went away;
But high in list was each man's name,
When lists came out in May."

But Haskins was a teacher. He never finished a sentence, though we alleged he would begin five times; each shot at it was divided from the next by the refrain "Erm-nerm-ner"; and then he gave up the job; but, if you did not give it up, you saw that he was after something, and you might get it yourself. Sikes, then, sat in the front row, and I in the row behind him; and, as I write, I can see Haskins grinning all over, having obviously caught Sikes's eye; for Haskins was human and a friend. At the end of that year Sikes's name was indeed "high in list", for he "got a one-one", as we used to say, in the Classical Tripos (and so did Summers next year).

After that I did not see much of him, back or front, for some time. He did Archaeology for the Second Part of the Tripos, and he went

out to Greece and there grew a beard, if I remember, which did not, I think, reach England, but was commemorated by Theocritus:

οἴμοι τοῦ πώγωνος ὃν ἠλιθίως ἀνέφυσα.

After his Second Part he went to Winchester and taught for a term or two. The rest of his life was spent at Cambridge but for a semester (or words to that effect) at Harvard. He became a Fellow of the College in 1891, a lecturer shortly after, and about the end of the century, tutor. Lecturers are too obscure to achieve nicknames, but on becoming tutor he was christened. There was an early Victorian novelist, still read occasionally at that period, who had a character called Sikes; so the tutor inherited his Christian name and was long known as Billy. Apart from the surname there was little in common between the characters. In old age he was given a more affectionate, a more paternal, prefix. Now that I speak of old age, let me add a word on his magnificent and enviable head of white hair, which, however, he seemed not to like. When his white hair grew long, it would turn a little yellow at the end; and when a colleague in some doggerel suggested it proved the saffron rams of Virgil, he replied with some Latin elegiacs, ending

Mox mihi canities concolor adveniet.

In those early years he had his brother A. A. Sykes (with a "y") about in Cambridge—a Russian scholar and translator of Gogol, a genial humorist, a "Cantabard" and "Universifier" in the *Granta*, and a contributor to *Punch*.

As Junior Fellows, and both of us Classical (I was elected in November 1892), Sikes and I were rather thrown together—not reluctantly. We began doing compositions together—generally in Greek Verse—some of which I have had till quite lately. We walked together—I do not mean what Peter Green in those times called "soul-destroying walks", but reasonable distances—and the memory stays with me of one towards Girton village, when we capped Browning quotations, Sikes carrying (you would not believe it) an improvised flag. Once we went to the seaside together and were blessed with sunshine, Fairlight Glen-way. Then a big separation. In 1896 I went to Canada, with no expectation of return. But the College recalled me, and the day after I landed in England I met Sikes by the big archway of the New Court cloister—an illuminating encounter. He was tutor, as I said; and I learnt then, though I did not realize how universal it was, that you never speak to a tutor whose mind is quite disengaged. I also learnt that my vocabulary needed to be re-Europeanized. We greeted, spoke a few words, and then, "Excuse me", said Sikes, and turned to speak to a young man.

He came back to me. "Was that a student?" I asked simply. "We don't use that word here", said Sikes austerely. We always used it in Canada; but I learnt my lesson, and the word has been for forty years strange to my lips, never at any rate applied to a member of this College.

Nearly forty years—and we both gave lectures, and we wrote books and read each other's MSS and proofs. Of course I never heard a lecture of his, but I heard about them. There was no "erm-nerm-ner"; everything was written, everything was read. "Do you know those red text-books of Macmillan's?" a man said to me, "well, Sikes's lectures could be printed as they stand to be one of them." I think this was a pity. St Augustine, we read, when he preached, had half a sheet of note-paper with his headings written on it, and talked. Sikes evidently did not trust himself as an extempore lecturer; perhaps memories of Haskins swung him to the opposite extreme. All along he showed a curious mixture of certainty and distrust; he had no doubt about his opinions, but he had little adventure in his make-up. I recall a case (I must not be too explicit) where we differed about a man; I had a much higher opinion of him than Sikes had, and I got my way—and found that Sikes was right. There was no recrimination but it was made clear that I had to mop up the spill I had made. There was one fine characteristic about Sikes, which not everybody *could* know. Over those many years various appointments were made in College. Nobody gets his way all the time, and Sikes did not; but, the appointment once made, the man was Sikes's colleague, and he must have been good at guessing if he realized that he had not been Sikes's choice. He could work with people he did not want, and do it in such a way that they would not guess his initial views. Some part of this grace (that is what it was) may have been due to a profound loyalty to the College. Few living to-day can have any idea what the College owes to the loyal service of Tanner and Sikes; Tanner was naturally, as senior man, and because he was built that way, more in the foreground; he had easier ways of intercourse; but there was always there the steady, dogged loyalty of Sikes co-operating, dogged, yes, and almost dour sometimes.

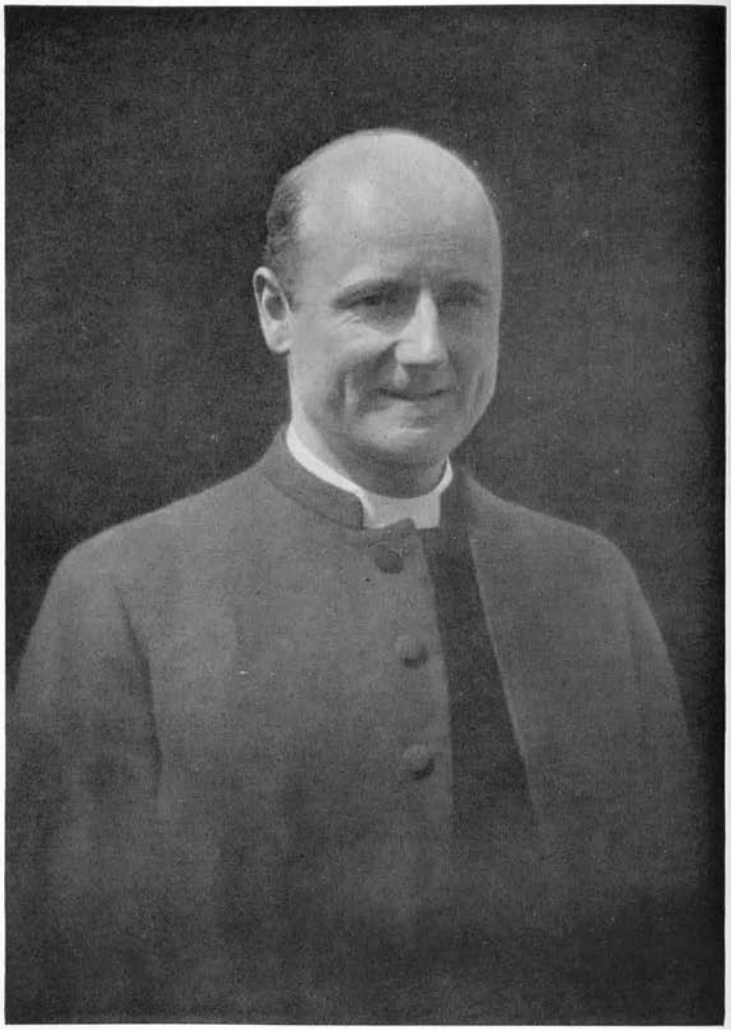
His early interest in archaeology led him to the Homeric Hymns, which he edited with Mr T. W. Allen of Oxford (1904). Allen was a literalist, an adherent of "the MS"; "the kind of man", said Sikes to me one day, "who would print ἀπὸ with the accusative, because it was in the MS, and would write a note to say it was a rare usage." It was a good book; it has been long out of print, and it has been re-edited by Mr Halliday; but I am not clear that the immense additions of general learning, with which the new edition bulges,

really make it a much better book. There is a feeling among some scholars that no variety of literature can be good except the encyclopaedic. Now Sikes had had a turn for modelling in clay—and for writing Greek iambics and Latin hexameters—and in both fields he had developed a sense of form. His next two books, on Greek and on Roman poetry, were not encyclopaedias, they were books, real books. They embodied ideas; and that of course limits a man and limits a book; they were to suggest and to quicken. The one I liked best was on Roman poetry; and a small thing will show how the book appealed to others. A favourite sort of question in the English Tripos was to quote a sentence, aphorism, idea or something of the kind, and invite the candidates to say what they thought of it. In the spring after Sikes's *Roman Poetry* appeared, the chairman of the examiners had to tell his colleagues, that, with no disrespect to the book or its author, he thought *three* quotations from one book rather many for *one* Tripos. Professor Soutar of Aberdeen had a great admiration for the book and set it to be read by his students (perhaps the word may be used of Scots).

Sikes used to read MSS of mine, and in particular "fair copies" and drafts of my Latin speeches. He was a most invaluable critic; "he struck his finger on the place, and said Thou ailest here and here"—very definite he was and very liable to be right. Where we differed was on English verse, where I was thoroughly conservative, and found him painfully *libre*; but I never could budge him.

Take all in all, his scholarship, his turn for ideas and form, his interest in science (he wrote a book on Lucretius, too), you might say that, but for his shyness, he might have made a far bigger figure than he did; he had the gifts for it; but perhaps he was better pleased to avoid the limelight.

When Professor Liveing died, after his accident at ninety-seven, it was generally agreed that Sikes was the man to succeed him as President of the College. It involved some publicity, which was not acceptable. He mastered the after-dinner Grace with a little rearrangement of the Latin at the end; and, though the Professor of Latin—it was Housman—told him maliciously that he had "heard Mayor read it", most of us liked Sikes's rendering of it, unless perhaps a Classical man or a stray conservative preferred *omnibus Christianis*. The illnesses of Sir Robert Scott threw work and responsibility and publicity on Sikes, culminating in the dinner to honorary graduates in 1933, when Sikes presided most happily and a pleasant speech was given by the genial Earl of Athlone and an amazingly interesting one by W. B. Yeats on lines of his own—very fresh and alive about Poetry and not about the merits of the graduates or the honour done them.



JOHN MARTIN CREED

Sikes was happy in this, that serious illness did not come till the very end of his career, hardly anything of the kind in the many years of work. His life was given to the College, and he did little outside. His short period at Harvard seems to have been uneasy—perhaps dyspeptic in the main, to live in lodgings in America and "eat" elsewhere is rough work; but his style of lecturing may have been above the men he had to teach, implying a great deal sounder training in Classics than most of them had had. He never liked inaccuracy; he complained of it in a bishop; but he once came near a public exhibition of it himself. In his earlier days he was Librarian of the Union Society, and it fell to him to read in public the list of books given to the Union Library with the giver indicated in each case; and it appeared on the surface that he wanted us to believe "the book Genesis" was given to us "by the author". Such benevolence on the part of Moses startled his listeners for the moment; there was an explanation, it was a less interesting donor, and it came out that Sikes was accurate again.

A genuine scholar—shy, even timid, if one may say so, as a good many scholars are—careful and conscientious, reserved, thoroughly English—no other country could have produced him—a reliable and loyal colleague, he served the College and the cause of Classics well. It might be hard to say which meant more to him, but in serving one he served both.

Perhaps I should add that once in conversation he said I was to write no obituary of him. But I have done it in deference to another friend of mine who bears his name.

T. R. G.

JOHN MARTIN CREED

JOHN MARTIN CREED died in Cambridge on 17 February 1940 at the age of fifty. His death came a few days after a heart-attack, of which there had been no warning. The loss is great to the College and to the University, and it is a loss alike to scholarship and to his friends.

He was the eldest son of the Rev. C. J. Creed, and he went to Wyggeston Grammar School, Leicester. In 1908 he entered Gonville and Caius College as a Scholar, and in 1909 he was elected a Bell Scholar. He took First Classes in the Classical Tripos, Part I, and in the Theological Tripos, Part II, and won the Winchester Reading Prize. He was a Ramadge Research Student of his College, and was elected a Fellow of Caius in 1914. In 1913 he had been ordained to a curacy at St Paul's, Manningham, Bradford. He

returned to Cambridge in 1915 as Chaplain of Caius, and from 1917 to 1919 he was a Chaplain to the Forces in France.

In 1919, when the University reassembled after the war, he was elected into a Fellowship at St John's and appointed Dean and Lecturer in Theology. It was characteristic of him that from the first he devoted himself fully to his new College, studied its history, and interested himself in its traditions; and in his outlook and affections he became in the fullest degree a Johnian. Not all his duties as Dean came easily to him; but he served the College with great loyalty, and his theological pupils especially owed a great debt to his teaching, to the interest he took in them and their work, and to his unfailing kindness and encouragement.

In 1926 he was elected Ely Professor of Divinity in succession to Dr A. E. Brooke. The Canonry of Ely Cathedral annexed to the Professorship, and his marriage in the following year to May Geraldine, younger daughter of Canon A. L. Lilley, meant that henceforward much of his time was spent at his home in Ely. This changed the form, but did not lessen the intimacy, of his association with the life of the College. His sound judgment, his tolerance and fairness of mind, and the loyalty of his affection, won him an increasing regard in its Society. Though always reserved, and without the readier gifts of making contact with others, these qualities of character, and the warmness of his heart, gained him the confidence of widely different types of men. They assured his influence in the College, and they were shown conspicuously in his work on the College Council. He retained a close interest in the undergraduates reading theology, and whenever possible was at the meetings of the College Theological Society, which he was always glad to entertain in his rooms.

The field of most of Creed's written work was the New Testament and early Christianity. But his interests were far from confined to this field, and the value of his work in it was much increased by the wide range of his interests. A second field, in which he was equally at home, and to which he would perhaps have devoted himself increasingly, was the religious thought of the eighteenth and nineteenth centuries, of which he had an extensive knowledge. He was interested in each of these widely separated periods for its own sake; but they were closely associated in his work, because the latter gave him the background against which to view the modern study of the former and the nature of the problems raised about it. He was well read in all the periods of Christian history, and he had always a strong historical sense and a keen biographical interest. Another of the merits of his work, associated with these wide interests, was the degree in which he united familiarity with recent literature and

appreciation of older work. This gave proportion to his own work, and it showed itself in a strong sense of tradition and yet a keen interest in modern questions and problems.

At Ely, as at St John's, he quickly took up the study of the history and traditions of the place, and he was especially interested in the history of the Saxon Convent. Those who knew him best expected that his influence in the Church of England would grow. His affinities were with that central tradition which values the Reformation and the Elizabethan Settlement, and he looked upon the complex association of the Church of England with the life and history of the English people as integral to the idea of the historic Church of England and as the true basis from which to start in working for a wider and more united English Christianity. For him the idea of a National Church was not a compromise but a proper form of church polity in a world in which the nation was, and seemed likely to remain, the fundamental social organization. The Church of England has lost much by the death of one who represented this point of view so well and supported it with so much learning and fairness of mind.

By his early death the Divinity Faculty has lost its most representative member, who more fully than any other preserved the continuity of its tradition; and here too his broad outlook and accurate scholarship were of very great value.

J. S. B. S.

J. M. Creed was a man of many and great gifts, moral and intellectual, bound together by a quiet strength of character, and these gifts have won recognition—in his writings his exact learning, his sound judgment, the lucidity of his thought, his critical insight and fairness, and in his actions his uprightness, courage, sober sense, and warmth of heart—but, when one makes it, the list seems bare and inadequate beside the living man. The keynotes of his daily life, which gave him his attractive influence, were, in one's recollection, his innate, unpretentious, unexpressed sympathy, and his intimate, resolute will to tread the Christian path. The two were linked, and one partly depended on the other: it was the *anima naturaliter Christiana*, kindling instinctively to its ideal and striving steadily towards it. Being so natural and deep-seated, his belief and its congenial endeavour left him pleasantly human and unstrained. His high standards were felt rather than said, and he was the kindest of friends, ready to help, to listen and counsel, or to discourse, with a wide range of pleasant wisdom and healthy thought, and a kind of modest self-respect. The pleasure he took in doing good never seemed mixed with self-gratulation or facile good nature. He never appeared professionally "clerical"—rather he seemed to appreciate a thoroughly

"lay" attitude—but yet one feels that he represented the best and fullest tradition of English divines and moralists in thought and practice: the life given to him to live he lived well.

C. W. P.-O.

OLIVER GATTY

OLIVER GATTY (M.A. by incorporation, 1936), was born in London on 5 November 1907, the son of Sir Stephen Herbert Gatty, Chief Justice of Gibraltar. He was educated at Winchester (1921–26) and at Balliol College, Oxford, where he was elected to a Tutorial Fellowship in 1931. This he resigned in 1933 in order to work at Rothamsted, and in 1936 he came to Cambridge to work in Professor James Gray's laboratory. He married, in 1939, Penelope Noel, only daughter of the Rev. H. B. Tower.

He died on 5 June 1940 as the result of injuries sustained in the course of scientific work in connection with the war.

When Oliver Gatty came to Cambridge from our sister-College, Balliol, he was asked to dine with us. He had been a somewhat irregular, but very welcome, guest of our society for the last few years, and had become more than an acquaintance to at least some of us.

It was difficult to place him academically with precision, for he worked in many fields with apparently equal interest and facility. He had been trained both as a mathematician and as a chemist, but his real interest seemed to lie in applying mathematical methods to the investigation of any problem whatsoever. He did a good deal of work in that somewhat indefinite region which lies between physiology, zoology, and biochemistry. He also carried out extensive inquiries into spiritualism, water-divining, and psychic phenomena generally.

He had offered a large sum of money to the first water-diviner who should be able to prove his ability to divine water under strictly controlled conditions. A number of claimants were courteously received, entertained, tested, and rejected. I suppose they went away disappointed, but their disappointment must have been tempered by Gatty's unfailing kindness and fairness.

He had what must be rare among psychic investigators, a really open mind, genuinely open to conviction by evidence, but not liable to be carried any further than the evidence would take him. I remember only one occasion on which, for a few days, his enthusiasm got the better of his judgment. He was carrying out a long series of tests with a medium who claimed to be able to foretell the future—she was foretelling things which would appear in evening papers two

PATRICK PLAYFAIR LAIDLAW

days later. For a very short time Gatty was convinced, and saw before him startling possibilities. However, a little further investigation, and deeper reflection on the nature of evening papers, left the future to itself once more.

In everything he did, Gatty had the same steady cheerfulness and unquenchable conviction that problems of every kind could be solved if they were attacked in the right way. Once he decided to learn to play a piece on the piano. He was not a pianist, and hardly aspired to become one; but he observed that it was only necessary to depress the keys in certain combinations in a certain order to play this piece; and in a week or two he could play it. With the same sort of happy courage he engaged in experiments bearing on some aspect of our war-technique, and it was in the course of these experiments that he met his death.

H. S. D.

PATRICK PLAYFAIR LAIDLAW

THE sudden death of Sir Patrick Laidlaw on 20 March 1940, in his fifty-ninth year, has removed one of the outstanding figures of medical science. It is probable that he will be longest and most widely remembered for the part he played in the study of virus diseases, and particularly in the discovery of the virus of influenza; but those who worked with him will feel the loss of a colleague whose unusual width of knowledge and experience gave him a position that was all his own.

He was born in Glasgow in 1881, the son of Dr Robert Laidlaw. On his mother's side he was related to more than one Playfair who had made his mark in science or in medicine. When Laidlaw was six his parents moved from Glasgow to London, and when he was sixteen they moved from London to Cambridge. His later schooldays were spent at the Leys; and he entered St John's as a Scholar in 1900. He was a born investigator. He published three anatomical papers while he was an undergraduate, passed from anatomy to physiology, and then invaded the fields of biochemistry, pharmacology, pathology, bacteriology and immunity, in each of which he became a master.

He learned his clinical medicine at Guy's Hospital, and he retained throughout his life an interest in clinical problems and a respect for the work of practising physicians and surgeons. Though marked from the first for the laboratory, he was never one of those who believe that it can profitably be divorced from the study of natural disease.

Soon after qualification he obtained a post at the Wellcome Physiological Laboratories, and it was here, in association with Dale, that

he made his mark in pharmacology. There followed a period, including the years of the last great war, when he held the Sir William Dunn Lectureship in experimental pathology at Guy's Hospital. Formal teaching and routine pathology did not suit his temperament; but he made the best of conditions that were difficult for him, and missed no chance of adding to his own knowledge, or to that of others. The last eighteen years of his life were spent at the National Institute for Medical Research, acting as leader of the team that, during this time, achieved such notable successes in the study of virus diseases. With Dunkin he demonstrated the virus of dog distemper, and with Wilson Smith and Andrewes the virus of human influenza. Both were outstanding discoveries; and the latter has activated research in all parts of the world.

In his later years, and greatly against his will, he became increasingly involved in committee work and in administration. He gave wise counsel, and his words, usually few and spoken almost reluctantly, carried great weight.

He was elected a Fellow of the Royal Society in 1927, and to the Fellowship of the Royal College of Physicians in 1934. He gave the Linacre Lecture on epidemic influenza, and the Rede Lecture on the nature of viruses and virus diseases. He was knighted in 1935. Shortly before his death he was elected an Honorary Fellow of St John's, and this gave him very special pleasure.

Laidlaw lived a retired life. This was due in large measure to a lameness that resulted from an attack of infantile paralysis in early childhood. His physical disability became very irksome to him, particularly in his later years, when he had to abandon many of the minor activities that had been possible before. He would have dearly liked to do so many things that were denied him. He was one of those to whom the term "genius" can properly be applied, in the sense that his natural endowments fitted him in a special way for the tasks he undertook. He was not merely a widely read scholar, an original thinker, a first-rate technician, and a sound critic of himself and of others, though he was all of these things. He had the insight that enabled him to pick hopeful problems and to devise effective ways of solving them; and he seemed to know instinctively which observations mattered and which did not.

An extreme modesty in regard to his own achievements was combined with a constant interest in the work of others; and he always gave freely of his stores of knowledge and experience. In his bachelor home he could be the most delightful of companions. Often silent, his silences were never awkward. He liked his work, his friends, red wines, ballades and most detective stories. Those who knew him best will miss him most.

W. W. C. T.

SAMUEL LEES

SAMUEL LEES was born at Salford, Manchester, on 26 August 1885, the son of Samuel Henry Lees, J.P., and Sarah Hannah Lees (née Shearman). He was educated first at St Clement's School, Broughton, later at the Central High School, Manchester, and from 1900 to 1906 at the Municipal School of Technology, Manchester. During the last four years of this period he served his apprenticeship successively with two engineering firms, but realizing the importance of a good scientific training, at a time when this was not as yet generally recognized or encouraged in the engineering profession, he devoted his limited leisure to extending his education. In 1906, having held a Whitworth Exhibition for the preceding year, he gained the Whitworth Scholarship in open competition, and came into residence at St John's in October 1906, being admitted pensioner under Bushe-Fox.

The next three years he devoted to mathematics. In 1907 he was elected to a Foundation Scholarship, which he held until 1910. He sat for Part I of the Mathematical Tripos in 1908 and was bracketed 24th Wrangler. In Part II, in 1909, he was in Division 2 of Class I.

The autumn of 1909 found him torn between the desire to devote his life to research in mathematical physics and a sense of duty to the engineering world. Eventually the latter prevailed and in 1910 he took up research, under Professor Bertram Hopkinson, on suddenly-applied stresses in metals. This he carried on without abandoning his work in mathematical physics, gaining in 1911 a Rayleigh Prize for a mathematical essay and a John Winbolt Prize for an essay on an engineering subject. The same year he was Hutchinson Student in the College. In November 1912 he was elected to a Fellowship, which he held for the then normal period of six years.

During the sessions 1911–12 and 1912–13, while still resident in Cambridge, he held a lectureship in mathematics at King's College, London. He left Cambridge in the autumn of 1913, on being appointed Reader in Thermodynamics in the Manchester School of Technology and in the University of Manchester. Soon after the outbreak of the last war Lees was gazetted Engineer Lieutenant, R.N., and was promoted Lieutenant-Commander in June 1918. One of his first duties on joining was the design and construction of new workshops on the upper deck of one of the five ships which then constituted the engineering training establishment, H.M.S. *Fisgard*. Besides taking part in the training of engine-room personnel he was responsible for the working of the Diesel-engined launches in the Portsmouth command. Shortly before the Armistice he was transferred to the R.A.F. for experimental work on aeroplane engines.

In January 1919 he married Elsie Elizabeth Mann, and leaves two sons.

He returned to Cambridge at Michaelmas 1919, having been appointed to the newly-founded Hopkinson Lectureship in Thermodynamics and re-elected to a Fellowship at St John's. He came back in the stress of the enthusiasm of men returning after the war to take the engineering course. This meant duplicating lectures and laboratory demonstrations in the Engineering School, which previous to the war had been condemned as being too small and inadequate for the numbers then wanting to take Engineering. These numbers were practically doubled in 1919 and for many years following, and it was Lees's task to organize the Heat lectures and laboratories to meet this situation. The successful lay-out of the new Heat Laboratory and its plant of engines and apparatus of every kind are a tribute to his work and to his knowledge of the present and future requirements of a great laboratory. In the research work of the laboratory nothing was too much trouble, and he was tireless in his efforts to help his students and to give them the benefit of his knowledge and experience. On his return to Cambridge his interests, as far as original work is concerned, lay mostly in the direction of applied mathematics and physics, with an engineering bias. In addition to published work along these lines, in various byways which others had neglected, he was one of that band who evolved an "equation of state", frequently quoted; and he was one of the first to publish formulae for the efficiency of the more complex cycles in internal combustion engines allowing for variable specific heat.

In Michaelmas 1929 Lees resigned his Lectureship and Fellowship to take up an appointment with Silica Gel, an American firm concerned with refrigerating apparatus having many applications, such as air-conditioning in workshops. He worked at the London office in Aldwych until 1931, when he was appointed Chance Professor of Mechanical Engineering in the University of Birmingham (in succession to F. W. Burstall, also a Johnian).

During the last nine years at Birmingham he had little leisure, even during vacations. In addition to his professorial duties he was responsible for the running and maintenance of the University power plant, in itself no light task; his advice was often called for in connection with engineering problems, and during the last five years he had served on the Engine Sub-Committee and Lubrication Panel of the Air Ministry. He died at Birmingham on 27 January 1940, after an emergency operation, having kept at work to the very last.

Among his colleagues at Birmingham he was held in high regard for his faithful devotion to duty, so faithful that he never spared himself enough to recover fully from his operation for appendicitis

in the summer of 1935; for the efficient manner in which he ran his department; and for his personal charm.

Those familiar with Lees's capability as a mathematician will regret that he has published so little. He had a short note on "The Analysis of Energy Distribution for Natural Radiation" in the *Philosophical Magazine* (1914). In a paper on "The Superposing of Two Cross-line Screens at Small Angles and the Patterns obtained thereby" (*Mem. and Proc. Manchester Literary and Philosophical Society*, 1919) he gave a full mathematical treatment of certain questions arising in the printing of pictures. While still at Manchester he also published a paper on "The Whirling of an Eccentrically-loaded Overhung Shaft" (*Phil. Mag.* 1919). These and four other mathematical papers published between 1919 and 1924 appear to be his only publications in the field of pure science.

In paying tribute to the man himself perhaps a personal note is permissible. When I came up to St John's Lees was in his third year and rather older than the average undergraduate. Despite a self-effacing modesty he was of a live personality, easy to approach and most attractive in its freshness and humour. These characteristics, throughout his varied career, have endeared him to a large circle of friends and colleagues, by whom he will always be remembered as "Sammy". Keeping on adjacent staircases in New Court, we soon formed an acquaintanceship, which developed into warm friendship. In those days he used to rise at an early hour, so as to do the greater part of his work in the morning; this routine he had adopted after an illness due to overwork, but for which his place in Part I of the Tripos would have been higher. Never very robust, he could not take as active a part in College athletics as he would have wished. He was a good amateur pianist with a keen interest in music, which he maintained throughout life. Since his return to Cambridge in 1919 I had been in fairly close touch with him and had been able to appreciate his patience and integrity. He set himself a high standard of duty and spared no pains to live up to it. His engineering teaching was so framed as to inculcate scientific principles; this he regarded as of vital importance, in spite of the intensive training called for by a wide curriculum. He insisted that engineers should have a good knowledge of mathematics; and admitted regret at not having given more attention in his undergraduate days to certain parts of pure mathematics having no direct application to engineering. The institution of the Ph.D. degree he rather deprecated, as tending to encourage hasty publication of immature work. Holding that his duty as professor was to give all the time at his own disposal to research, he refused to augment his income by undertaking routine consulting work. Even during the heavy pressure of the last few

years he managed to devote a large part of his scanty leisure to keeping abreast of recent developments in Relativity and Quantum Theory. When I last saw him, early in January 1940, he was in his usual good spirits and there was no indication of the approaching calamity, which came as a great shock to his many friends. He made the most of a fully occupied life, taking a keen interest in every phase.

T. L. W.

AUGUSTUS EDWARD HOUGH LOVE

PROFESSOR A. E. H. LOVE, Sedleian Professor of Natural Philosophy in the University of Oxford and Fellow of the Queen's College, Oxford, died on 5 June 1940, after an operation. He was aged seventy-seven. Up to a very short time before his death he was fulfilling the full duties of his chair, lecturing and attending meetings of the Sub-Faculty of Mathematics. For the last few years his health had been frail, but only to the extent that he took a taxi to go into Oxford for his lectures from St Margaret's Road where he resided. To the end he retained full use of all his faculties, and there was never any apparent dimming of the acuteness with which he would deal with a piece of University business, the precision of his lecturing, or the wisdom and judgment which he contributed to matters of current policy. Under the present statutes he was, at his age, ineligible for service on the Board of Faculty of the Physical Sciences, or the Board of Visitors of the University Observatory, but he never on that account forsook the society of his colleagues as they gathered at their informal lunch club before meetings of the Sub-Faculty. He last examined in the Final Honours School of Mathematics in 1936, at the age of seventy-three; I once heard an Oxford colleague say: "We are none of us as good as Love at that game." Certainly, if compulsory retirement from participation in formal University business is in general wise, the case of Love shows that it would be still wise to provide for exceptional relaxation of the rule. Love's tenure of his chair, dating as it did from 1898, came under older statutes, and he was under no obligation to retire from that appointment; no breath of criticism was ever heard against him in that he occupied the chair for twelve years after the normal date of retirement.

Augustus Edward Hough Love was born on 17 April 1863, at Weston-super-Mare. The name Hough was in memory of some association with S. H. Hough, F.R.S., the Cape astronomer, the exact details of which, though once told to the writer by Miss Love, are not available. Augustus, or "Gus" as his sister always called him, was the second of three brothers, the sons of John Henry Love,

surgeon, a Somersetshire man. The father was later Police-surgeon to the Borough of Wolverhampton, and the family lived there, at a house at the corner of Queen Street and Walsall Street. Later they lived in the Waterloo Road, until the death of the father in Love's later Cambridge days, when they settled down at Cambridge under Love's care. The three brothers attended Wolverhampton Grammar School, to which Love was admitted in 1874. They are said by a contemporary to have been very reserved, and to have taken little, if any, part in school life outside their work.

In 1881 Love was awarded a sizarship at St John's College, Cambridge, on the results of the examination for Minor Scholarships, and with that and a school-leaving scholarship (Warner Scholarship) he came up to St John's in the Michaelmas Term of 1882, when he matriculated. He was at first doubtful whether to read classics or mathematics, but chose the latter, and gradually came to the top of his year. It is said that "no one with any personal acquaintance could fail to recognize his extraordinary cleverness", for he evidently matured rapidly after his school-days. He coached with R. R. Webb. He was elected Scholar of the College in 1884. He was Second Wrangler in Parts I and II of the Mathematical Tripos in 1885. He was placed in Division I in Part III in 1886, and obtained the First Smith's Prize in 1887. He had been elected Fellow of the College on 8 November 1886. This Fellowship he held until 1899. He took his B.A. in 1885, his M.A. in 1889. Soon after his B.A. degree he became College Lecturer in mathematics, his colleagues being R. R. Webb, J. T. Ward and Sir J. Larmor, F.R.S., and later H. F. Baker, F.R.S. Later he was elected to a University Lectureship. In those days, when great importance was attached to the order of merit in the Tripos, Love was much occupied with private coaching, but nevertheless found time for research. He was elected to the Fellowship of the Royal Society in 1894.

In 1898 a vacancy occurred in the Sedleian chair of Natural Philosophy at Oxford and Love was elected at the age of thirty-five. He went to Oxford in 1899 and resided there continuously until his death, mainly at 34 St Margaret's Road. He was made a member of Common Room at the Queen's College, Oxford, on his election as professor; he was elected a Fellow of Queen's in 1927, when the University Commission assigned fellowships to all chairs. He was also elected an Honorary Fellow of St John's College, Cambridge, in 1927.

The greater leisure afforded by his Oxford chair gave Love opportunities of writing both students' textbooks and more serious works, besides increasing his output of original papers. In 1911 he was awarded the Adams Prize of the University of Cambridge for an

essay on "Some Problems of Geodynamics". He was awarded the Society's Royal Medal in 1909, the London Mathematical Society's De Morgan Medal in 1926, and, as a fitting recognition of his lifetime's devotion to mathematical research, the Royal Society's Sylvester Medal in 1937. He became an Associate of the Italian Society of the Lincei, and a corresponding member of the Institute of France.

Love's standards in all matters was of the highest. No trouble was too much for him to take, in the matter of the preparation of lectures or examination papers, and he never indicated whether some of his self-allotted tasks might have been personally distasteful to him. Though his interests were in the fields of mechanics, elasticity, geodynamics and electrodynamics, he prepared advanced courses of lectures on tensor calculus and general relativity. His lectures, given largely in the Electrical Laboratory at Oxford, were extremely popular with students for their clarity, intelligibility and real efforts to enter into the student's point of view; his problem classes were always well attended. He was a man whose striking candour and honesty as to his own aims and achievements were very noticeable—of great modesty in regard to his personal achievements—of great generosity and kindliness, especially to younger men.

E. A. M.

The writer of these notes had but a slight knowledge of Professor Love as an undergraduate, for on his return to residence at Cambridge in 1885 Love had just taken his degree as Second Wrangler between two King's men, Arthur Berry, who devoted his life to important College activities over a wide range (and wrote a History of Astronomy which never received its due), and H. W. Richmond, whose career as a mathematician has been conspicuous. The First Smith Prize fell to Love. Later, in due course, he was elected to one of the five newly founded University Lectureships in Mathematics, and then played an energetic and influential part. On the death of his father, who was a physician in Wolverhampton, the family settled down in Cambridge under his care.

In 1899, when a vacancy occurred in the Sedleian chair of Natural Philosophy at Oxford, the absence of further immediate prospects at Cambridge gave rise to the question of possible unsettlement of domestic life by migration. During forty years the University of Oxford had no occasion to regret that they were induced to select a comparatively young candidate. The chair was attached to the Queen's College, which co-opted him as an Honorary Fellow until new statutes enabled them to elect him to a Fellowship on the foundation.

His lecture room soon became the focus for mathematical and physical studies, which it ever remained. In addition to these activities he produced the standard treatise on the Theory of Elasticity, greatly enlarged by subsequent editions, and widely available by translation into foreign languages. The Adams Prize at Cambridge had been awarded to him for a study of the elastic relations of the Earth, afterwards enlarged into a treatise entitled *Problems of Geodynamics*, which has become fundamental in the science of earthquake phenomena.

In those days the members of St John's College were conspicuous in the direction of the scientific societies of the metropolis: Love was an energetic secretary of the London Mathematical Society for many years, and served also for a period on the Council of the Royal Society, which in due course awarded him the Royal Medal for his work on Geodynamics, followed long after (1937), as winding up his career, by the special Sylvester Medal, founded at the Royal Society in memory of the great scientific achievements of J. J. Sylvester, another Honorary Fellow of St John's College.

In recent years his activities were impaired by ill health, the result of a pleural illness which necessitated serious operational treatment; but important memoirs continued to flow at intervals from his pen into the *Philosophical Transactions* and elsewhere.

J. L.

Though I was a colleague in the College with Love for nine years, I hardly saw him in the forty years that he was at Oxford, and was junior to him. But he was a man of generous nature, utterly honest with himself as to his aims and outlook, very modest as to his own achievements, though of quite extraordinary versatility as a mathematician. He was chiefly satisfied with himself if he could find a useful thing to do, which others accounted too laborious to undertake—witness the Index he made to the first thirty volumes of the *Proceedings* of the London Mathematical Society, which occupies 112 pages, and includes a section in which all the papers are classified under 54 different kinds of mathematics. In conversation he was sometimes apt to yield to the temptation to be clever and personal; but, as a consequence, he could sustain an interesting talk and draw out a comparative stranger. One of his attractive traits was the close friendship with his sister, who survives him.

One of the actions he took in College politics deserves to be remembered. It had been the custom for the various College tutors each to have his own side and receive the fees of his pupils. Pushful junior tutors were apt to complain when a letter addressed to the Tutor was appropriated by a senior. Love moved at a College

meeting the institution of a Tutorial Bursar, to receive the fees of the students; this was warmly supported by J. R. Tanner, who became and long remained the first Tutorial Bursar.

H. F. B.

ERNEST WILLIAM MACBRIDE

(Born 12 December 1866. Died 17 November 1940)

IN 1888 at Cambridge my friends who were teaching zoology told me that they had a wonderfully hot man among the Freshmen, a St John's man, named MacBride, in quite a different class to all the others and bound to go very far. They pointed him out to me one day at the bench by the door in the Balfour Room, a powerful young man with a most extraordinary convex forehead, standing in his shirt sleeves, intent on some dissection on the table. His lecturers were good prophets, for there followed for him half a century of unbroken success.

Few have been university students for so long. He came up to Cambridge three years older than most men, but before that he had gone from Queen's College, Belfast, to London University, and at the end of his freshman's year at Cambridge he took his B.Sc. in London, with a University Scholarship in Zoology. In his Tripos year, 1891, he was President of the Union. It was an honour of which he was justly proud, and an office which probably had a considerable share in moulding his naturally self-reliant character further into the habit of firm decision and definite magisterial pronouncement.

With a brilliant first class in his pocket he went out to Naples in 1891 to occupy the Cambridge University table, and to spend a year in beginning those researches on Echinoderms which gained him, fourteen years later, his thoroughly deserved F.R.S. and which have assured his name a permanence in the record of zoologists. To Naples also went Minchin to work on the Oxford University table, and Pollard on that of the British Association. I occupied a table as the guest of Professor Anton Dolern. We formed a merry party of Englishmen. We generally had tea together—laboratory tea, made over the bunsen, with biscuits or cakes from a screw of paper—in the big north room of the original building, now part of the library. MacBride, Pollard and Minchin had tables side by side there, I had worked there in 1886–7 beside Bury, and in 1888–9 between Weiss and Calderwood; now I enjoyed the dignity of a room to myself on a loggia facing the sea. Occasionally we would charter a boat and go out to bathe. MacBride had no fine art in swimming, but he had the most powerful breast-stroke that I have ever seen. He used to

put his face down under water, so as to get the full horizontal sweep of his strong arms on their great shoulders, and the pace obtained was unexpected. Blue sky bounded by Capri, Vesuvius and Naples, twenty fathoms of crystal water laughing in the light, and three or four young Englishmen—of whom I was much the eldest at twenty-nine—glowing in the July sun, rejoicing in the strength of their limbs and the delight of their eyes:

"ma questo giorn' non torna più."

All the rest of his life MacBride looked back with yearning pleasure to his year at Naples.

Back in Cambridge, Sedgwick made MacBride University Demonstrator in animal morphology, and St John's College elected him a Fellow. I returned to Cambridge for the winter of 1894–5 and we were drawn together very closely by some private affairs. He was a strong and important person in the Laboratory. His great admiration and friendship for Adam Sedgwick, combined with his very great differences in mode of thought and of character, rendered him a valuable ingredient in the new school of Zoology at Cambridge, then developing in its own way as a living organism. Six years earlier Shipley had said to me: "I have heard of laboratories governed by all sorts of great men but I never knew of a laboratory governed by a ghost before." At first in Sedgwick's deep loyalty and affection for his late teacher and friend there was room for the imputation of this weakness. But under the strong and complementary influences of Caldwell and Weldon, Harmer and Bateson, Heap and Shipley, Lister and MacBride the ship was beginning to find herself. MacBride's firm positive contribution, based on untiring industry and wide knowledge, knitted deep into the axial skeleton of the growing Cambridge School.

In 1897 he was appointed Strathcona Professor of Zoology at Montreal, a position which he held until 1909. In 1902 he married Miss Constance Harvey, daughter of F. H. Chrysler, K.C., Ottawa. Marriage increased the rate of his achievements and successes. He became F.R.S. in 1905, published *Echinodermata* (in the Cambridge Natural History) in 1906, and in 1909 resigned his Montreal chair and became Sedgwick's right-hand man once more—this time in the Imperial College of Science.

For him and Mrs MacBride London was now a home for twenty-five years. In 1913, on Adam Sedgwick's sad death from lung trouble, MacBride succeeded him as professor. In the following year he hit a very high mark with his *Textbook of Invertebrate Embryology*. There must be twenty ways in which such a book can be designed, and nineteen lines of criticism for any such book actually published.

Many of these have been applied to MacBride's book, but whatever their foundation, it was eminently readable and clear, and covered a vast expanse of learning in its small compass. A criticism, which may be just, is that it leads the reader too much by the nose to the conclusions the author had drawn, not indicating sufficiently the possibility of other conclusions from the facts. I think this would be perhaps a natural consequence of the author's character. The late Sir George Jessel, (1824–83), Master of the Rolls, once said in an *obiter dictum*: "I may have been wrong—I must have been wrong—but I have never doubted." MacBride might almost have made the same statement: it is an attitude of mind which has its own value in the conveyance of knowledge to other minds and the influence of opinion in them....

This sketch of a very full life does not attempt to catalogue his publications nor his honours; nor is the writer competent to describe his teaching, except by the brilliant success of many of his pupils, nor to estimate how high was the certainly high value of his additions to scientific knowledge. Certainly MacBride added importantly to our knowledge of echinoderm embryology, and his *Invertebrate Embryology*—doomed, as is the nature of such textbooks, to follow Balfour's *Embryology* into the dusty top shelf—played a valuable part when it was much wanted. Zoologists will judge diversely his long and strong advocacy of the doctrines of Lamarck. My own view is that his metaphysical opinions prejudiced him in favour of any theory which might be considered to breach the fortifications of necessitarianism and materialism.

Intense industry, a vastly stored memory and a finality in his form of statement were the qualities that most widely impressed those that met him. Then some chance turn would perhaps surprise them with the very high ability he could use when necessary, or perhaps would show the Achilles heel of a region of knowledge of which he was unknowingly ignorant. He was a loyal friend, a loving husband and a justly proud father; he was kindly and generous to the young junior in science. He enjoyed remarkable strength and health nearly all his life, but they failed him a little towards the end. His last illnesses were brought on by two falls in the darkness of the black-out—had it been five years earlier he would not have fallen. He had nearly three-quarters of a century of full life and left a long record of which his wife, his sons, and his College may be proud.

G. P. B.

MacBride's death wakens a whole host of memories. The first of them is of a striking figure I saw leaving the Little-go (I suppose in the Corn Exchange) in my first week at Cambridge in October 1888.

A massive heavily built man, with a big head and great shoulders, moving down the passage between the desks—not so very unlike Dr Johnson in Boswell's famous phrase, "rolling his majestic frame"—with his undergraduate gown slipping off one shoulder. In a week or two I was to find he was a member of my own College, with rooms across the First Court from my own.

It was not long before MacBride became a marked man. He spoke soon at the Union, and did it, if I remember, pretty often—on the Unionist side, with a North of Ireland speech, and all the force and vigour that the North of Ireland bred in its atmosphere of old Scottish blood and ceaseless Papist warfare. It was always—well, "always"? yes! memory says—a fighting speech, delivered with no end of what we have since been taught to call "punch and pep". Of course he roused antagonism—or, at any rate, antagonists were roused. Those were the early days of acute Home Rule controversy, and there were no neutrals in Ireland or perhaps in England; and, if there were, it was not in MacBride's nature to be neutral—"I was ever a fighter", as Browning (much read in those years) put it. And, apart from politics—no, not very far apart—there was religion; and MacBride, coming from Belfast, brought strong religious opinions, for which he was not reluctant to do battle. He had plenty of battles. The *Granta* was being edited (under R. C. Lehmann's general care) by a King's man, E. A. Newton, who came to be the champion of the anti-MacBride groups, and fought MacBride in one week's issue and another, on "the floor of the house" in private business and in debates, and in the polls right up to the chair. They were hotly contested elections, and MacBride "carried" them. Even in the chair battle followed him—notably, one over a collie dog that invaded a debate.

Meanwhile he took or had taken some London degrees, worked for his Natural Science Tripos, gained his first classes, and went to the Marine Biological station at Naples, from which he brought back an enthusiasm for his fellow-student George Bidder's poem—"Halcyon Days". Then followed a Fellowship at St John's, and later a chair in McGill University in 1897. He crossed the Ocean with me, and was welcomed with a portrait in the Montreal paper. Alas! two convicts had just escaped from the St Vincent de Paul penitentiary, and their portraits were in the same issue; and by the fatality that hangs upon journalism, they were better pictures—likenesses or not—than those of the two new professors. It was a year before this that the students' paper at McGill posed the conundrum, "Why is there no duty on imported Professors?" and answered it: "Because they are raw products."

MacBride was not quite raw. An early attachment had been ended by a sudden and painful death, and MacBride's inherited orthodoxy

went to pieces—a water-tight system shattered; and for the rest of his life, so far as I knew it, inquiry replaced dogmatism. This is not to say that the dogmatic temper was extinct in him. He landed in September. Shortly after the first snow, he gave a public lecture on Evolution, which in those days was a very revolutionary subject—no matter of indifference or of languid doubt, as it has become. MacBride was ever ardent, and that first public lecture let Montreal know that he had arrived. There followed a "judgment"; for after the lecture that night he went snow-shoeing with a party on the mountain. He had not, I think, tried it before, and I never heard of his doing it again. For he had a bad fall, and wrenched his ankle to such an extent that the hospital people pronounced it beyond anything they had seen. Of course he recovered and was just as ardent for Evolution and Echinoderms as ever he had been; and was given his F.R.S. while still at McGill.

Our Canadian periods overlapped for four years; and we had more than one voyage together. He stayed with me at Kingston, Ontario, one or two Christmases; I with him in Montreal for a spell one summer. I always remember a major's wife on one of the ships, who said: "I don't understand you two men. You walk together on the deck and get on perfectly; but if there's anybody else joins you, you fight one another at once." Why, yes; but in one of those vacations, walking by the Lake shore (Ontario), I silenced him effectively. He started some discussion, and I agreed—with every syllable; so he went off on something else, and again I agreed; so he launched out on a third topic, and a third time I agreed; and MacBride laughed and owned himself beaten; it was the only time he was. It was, as a rule, a case of what Carlyle called "except in opinion not differing". It was a provocative friendship, but, as such friendships can be, a real one.

He did not please everybody. The old Cambridge maxim was "Whatsoever thy hand findeth to do, remember that other people think differently"; and the application of it was not to think at all or not to mention what you thought. Of neither procedure was MacBride capable. With an instinct for speech, and bred in a hot-bed of national, racial and religious controversy, he had little gift for being trivial. So he said what he thought, with the positive accent of his people—said it in Hall, and clashed there, and perhaps elsewhere, with those who wished to eat in silence or who lost an audience when he was there; and his reputation suffered from their resentment. Like Dr Johnson again, he talked for victory; and as in Johnson's story, the vanquished could always retaliate with a snarl at the absent, and men who did not know him picked up at second hand a notion of him which did not represent the whole man. For, of course, a character like his lent itself to legend and parody. Parody is very well when it is face to face, and good tempered; but it can be used effectively in backbiting.

The time came when he and I crossed the Ocean no more, and our tasks and positions in England kept us apart, with only very occasional meetings—as at the last Old Johnian gathering in College, when he sat by me, an old man now and very white. But it is to the earlier years that the mind goes back. "To be young with one's friends!" ran the old Athenian catch; and he and I were young together—argued, fought, argued, differed, but kept in touch, and gained by it; at least I did, and I look back on the old friendship with gratitude.

T. R. G.

GEORGE CHARLES MOORE SMITH

GEORGE CHARLES MOORE SMITH, M.A., Litt.D., F.B.A., and honorary Fellow of the College, who died on 7 November 1940, was born on 3 September 1858, at Whittlesea, where his father, George Moore Smith, practised as a solicitor. His mother, whose maiden name was Franks, came of clerical stock. His father was a nephew of Sir Harry Smith of Peninsula, Waterloo, Indian and South African fame, the memory of whom and of his wife is perpetuated in the two towns of Natal, Harrismith and Ladysmith, the latter made still more famous by its siege and relief in the Boer War. Sir Harry died when George was only two years old, but the Spanish beauty Juana, whose story added romance to his heroism, survived till 1872, and Smith in his supplement to the *Autobiography* of Sir Harry, which he edited, has put on record some of his memories of her.

George Moore Smith senior died in 1870 and the family moved to Tonbridge, where George and his brother Harry were sent to Tonbridge School as day boys. Among his Tonbridge friends were the brothers Cox, Homersham the mathematician, who died early, and Harold the well-known publicist, who ran as Liberal candidate for the University in 1910. Another somewhat junior friend was R. S. Lachlan, late Fellow of Trinity, who still lives in Cambridge. The Headmaster, the Rev. T. B. Rowe, was a Johnian, and it may have been his influence that sent George and later his brother Harry to St John's. George gained an Entrance Exhibition in 1877, which was later exchanged for a Foundation Scholarship. In the Classical Tripos of 1881 he was placed tenth in the first class. He continued to reside mainly in College till 1896 engaged in those studies in English and Modern Literature which later brought him fame. Among the friends whom he made during that period, now dead,

I should note particularly Macdougall and William Bateson. He spent some considerable time in German Universities. He was also for some years an Extension Lecturer. How far he succeeded in this I do not know, though when in 1889 I went to Plymouth, which had been one of his centres, I found that he had left very favourable memories behind. In 1896 he was made Professor of English Literature in Firth College, Sheffield, and there with his sisters he settled down for the rest of his life. In 1905 Firth College became Sheffield University. Smith retained his post under the new status till his retirement in 1925.

My friendship with Smith, who was one year junior, began in his early College days. For a very short time and in a very limited way our relations were those of teacher and pupil. There was an odd notion at that time current among undergraduates that a person who had done well in the Classical Tripos of his year was, however inexperienced otherwise, the proper person to coach his successors in the following year. The idea perhaps was that he knew the ropes, had frustrated the knavish tricks of the examiners, and might hand on the secret to the next generation. Anyhow Smith and another Classical scholar of the College applied to me to coach them for the term before the Tripos. I should not think the result was very important for good or ill. The other landed in the third class, but at any rate I did not prevent Smith from getting into the first. Our friendship continued for the whole of his life, and we were seldom for long out of touch with each other in one way or another. Perhaps my pleasantest memories are of two walking tours, when we trudged together through the Yorkshire dales and the south of Scotland by Melrose to St Mary's Loch. But there are a good many others.

Smith had any number of friends in England and abroad, and there may be many living who could claim a greater intimacy with him than myself, though there are few outside his family, and not I think any Johnian, whose friendship dates so far back. So far I am competent to write his obituary for *The Eagle*, but in one respect I am ill-fitted to do him justice. I know little about his published work, and therefore I have asked Professor Previté-Orton to give some estimate of it. There are one or two exceptions to my ignorance. I heard a good deal from him about the life of his great-uncle, Sir Harry, and about the way in which the success of his edition of the *Autobiography* led Lord Seaton to invite him to draw up a memoir of the first Lord Seaton, better known as Sir John Colborne—a task which, though perhaps not very congenial to him, was executed with a care and thoroughness patent to anyone who has even glanced through the book. But apart from this, though our general tastes in literature agreed, I was never much drawn to those byways in which he mainly walked, and it was characteristic of his modesty

and freedom from egoism that he never called attention to his work upon them. It was therefore something of a revelation to me when on his seventieth birthday he received a presentation from some 200 scholars of "A token of the esteem and affection in which he is held by Friends and Fellow Students in all parts of the World and their high appreciation of the very great service he has rendered to the study of English, not only in England, but also in America, France, Germany and Scandinavia". The "token" took the form of a bibliography of all his published work from 1880 to 1928. It occupies 52 pages and contains some 30 items of books written or edited and about 300 contributions of various length to periodicals, etc. Before this his services to the study of English had been recognized by honorary degrees at Louvain, St Andrews and Sheffield. In the last twelve years of his life he received the further honours of election to the British Academy and an Honorary Fellowship at this College, but of his work during that period I have no record. It may well have been considerable, though towards the end at any rate on by no means the same scale, for during the last few years he was terribly crippled with rheumatism. His annual visits to the College during the Long Vacation ceased altogether and my intercourse with him was confined to letters.

I will not attempt an estimate of the many fine qualities which endeared G. C. M. S. to his friends, but there are two things I should like to say. He was never married, but I always got the impression of a man whose family affection was more than usually deep and strong. As his sisters are living it would be an impertinence to say more than this, but I may recall to Johnians the memory of his brother Harry Wakelyn Smith, named after his great-uncle, and a godson of Lady Smith. Harry Smith, two years younger than George, was also a Scholar of the College, a fine Classicist, but still more remarkable as a teacher, particularly at Malvern College. When he died in 1919 George sent *The Eagle* a notice which is at once an evidence of the loving esteem which was felt for Harry Smith at Malvern and of the deep affection which united the two brothers.

He was also a great Johnian. His interest in and affection for the College were unbounded. It is shown in the bibliography which records, besides many contributions to *The Eagle*, that most laborious compilation of the lists of the former occupants of College rooms. But it also appeared in all that he said and did and not least in the last years when he was unable to visit Cambridge. His occasional letters to me in those years showed how carefully he followed College events. Its losses, such as the death of Rootham, Sikes, Harker, Mrs Heitland, were all noted and evidently keenly felt. The College has never had a more loyal son.

F. H. COLSON

G. C. Moore Smith was eminent both as a teacher and as an expert in English literature. His knowledge of the highways and byways of seventeenth-century authorship would be difficult to surpass. He had a happy instinct in attributing fatherless or many-fathered poems to the true author. When he chose to write himself he showed the classic ease of "English undefiled". As an editor of texts he was a model of accuracy and full, apposite, enlightening annotation. For years (1915–27) he conducted successfully the English section of the *Modern Language Review*. These merits were recognized when he was presented with his *Bibliography* by his many friends in 1928, and elected a Fellow of the British Academy in 1933 and an Honorary Fellow of the College in 1931 (a distinction specially welcome to him). Yet a full-dress book, all his own, of his writing is not to be found, save the *Life of Lord Seaton* (1903). Even his excellent *College Plays* (1923), a subject on which he was the first authority, is almost presented as a supplement to what Dr Boas had written. The *Autobiography* of his great-uncle Sir Harry Smith (1901), which went through several editions, owed far more to him than appeared from the title, but was not his as a whole. His British Academy lecture on Thomas Randolph (1927) and his Introduction to his selections from Henry Tubbe (1915) were examples of impeccable scholarship and thoroughness, but Randolph was by no means of the first magnitude and the plagiary Tubbe was a telescopic star. Gabriel Harvey's *Marginalia* (1913), Lord Herbert of Cherbury's *Poems* (1923), Sir William Temple's *Essays and Romances* (1930) were alike edited by him. Perhaps his *Letters of Dorothy Osborne* (1928) was his most interesting subject. One reason for his preference for the byway over the thoroughfare in his publications may have been that he disliked re-phrasing what other men have said well (as one must in a work on a wide theme or a famous personality), but more decisive probably was his natural temperament. He was a born glossator, not an essayist, and his glossing is among the best of its kind. He took endless pains over every detail of biography, source or meaning. He shunned no dark passage—any gap that was left testified to long, fruitless research—he was loth to "hold a candle to the sun", or to expatiate on what to him was commonplace, though it might not be so to his readers. He was frugal of words and spoke, more than he knew, to the elect. He had all the virtues of a first-rate antiquarian, and perhaps they unduly cast into the shadow those which he also possessed of an accomplished critic, too delicate and orthodox in taste to clamour or shock his way to a jaded public ear. Add to this his native friendliness and generosity, which made him lavish time and knowledge in helping others, "sibi et amicis" like Niccoli's library.

C. W. P.-O.

SIR ALBERT CHARLES SEWARD

A NOTABLE Johnian passed away on 11 April 1941. Albert Charles Seward was born in Lancaster on 9 October 1863. He received his early education at Lancaster Grammar School and entered St John's College as a Sizar in 1883. He was elected to a Scholarship in 1885 after taking Part I of the Natural Sciences Tripos, and to a Fellowship in 1899. Soon after this he became a Tutor of Emmanuel but returned to St John's as a Fellow in 1906 on becoming Professor of Botany. In 1915 he was elected Master of Downing and retired only in 1936. During the whole of that period he maintained a lively interest in his original College, of which he was elected an Honorary Fellow in 1936.

Few men can have lived lives in which so much was accomplished. He not only achieved outstanding distinction as a scientist but was at the same time one of the best teachers and most able administrators that Cambridge has ever had. His researches on the plants of past ages described in ten important books and more than a hundred papers, brought him a position as the world's most eminent palaeobotanist, a position recognized by his appointment as President of the Fifth International Botanical Congress (1930). He was awarded the Royal and Darwin medals by the Royal Society, the Wollaston medal by the Geological Society. Universities, Academies and learned societies all over the world paid tribute to his work by the award of honorary degrees, and by electing him to their Fellowship.

The study of Botany at Cambridge owes much to his abilities. He became a University Lecturer in 1890, and was Professor from 1906 to 1936. During this period the subject continued to attract students in increasing numbers and the Botany School became a great centre for research along many different lines.

Seward's genius for administration extended far beyond his department and his colleges. He was a member of many University Syndicates, Boards and Committees and often directed them as Chairman. His work for the Press Syndicate, the Botanic Garden Syndicate and the Faculty of Biology A, merit special mention. He served for many years on the Council of the Senate, and on the General Board of Studies, and was Vice-Chancellor of the University 1924–6.

Outside Cambridge his work in connection with the British Association is especially noteworthy. He was twice President of the Botanical Section and was President of the Association at Dundee in 1939. He also acted as an organizing secretary for the Cambridge meeting in 1904, and did valuable work on both the Council and the sectional committees. He served on the Council of the Royal Society for

three terms and was Foreign Secretary and Vice-President, 1934–40. He presided over the Geological Society in 1922 and 1923.

After his voluntary retirement from the Chair of Botany and the Mastership of Downing he resided in London and devoted his still abundant energies to work for the Department of Scientific and Industrial Research, to the affairs of the British Museum—of which he became a Trustee—and to other public work. He gave many popular lectures, carried on research work at the British Museum and did much writing.

After the outbreak of war he returned to live in Cambridge for almost a year and once more enjoyed the life of his original College. In spite of his intimate association with two other colleges over a long period and of the eminent position which he achieved both in Cambridge and in the world of science, he always felt a special pride in his membership of St John's. He maintained close friendship with many of the men who were his friends as an undergraduate, among whom may be mentioned Alfred Harker, Humphry Rolleston, L. E. Shore, A. B. Rendle, H. H. Brindley, P. Lake and H. F. Baker. His fellow-workers at the Botany School included F. F. Blackman, R. P. Gregory and G. E. Briggs. Two of his sons-in-law were Johnians. One of his outstanding qualities was his friendliness, especially to undergraduates: many of his students have written about the influence which his friendship has exerted on their lives and work. He took a particular interest in those members of his old College whom he met in the course of their work or other activities, and was proud of having been asked to give an address in the College Chapel.

He died very suddenly when apparently still full of vigour and power. Even in death he was not separated from the College to which he owed so much, where his name and influence should be long remembered.

H. H. T.

SIR PENDRILL VARRIER-JONES

On 30 January 1941, when in good health and spirits and apparently quite recovered from an influenzal attack early in the month, Sir Pendrill Charles Varrier-Jones died at Papworth within half an hour after the onset of a sudden heart seizure. Thus to the last he was actively devoted to the Papworth Village Settlement which he had organized as an economic and social continuation of the tuberculosis sanatorium. He was the pioneer of the colony system for the tuberculous in which, when patients have so far improved as the result of sanatorium and other treatment that the disease is well on the way to be arrested, they continue to live under medical supervision and

begin to work and so to earn a living wage. Otherwise in the past tuberculous patients on leaving a sanatorium were generally obliged to return to the environment where the disease began, and to the unequal competition with vigorous rivals for a living; this is often responsible for a relapse and acceleration on the downward path. At first this conception shared the fate of other advances now thoroughly orthodox; some authorities, though admitting that it was an ideal, regarded it as visionary and financially impossible. It was Varrier-Jones's achievement to prove that it could be successfully accomplished.

He was born on 24 February 1883, as the only son of the late Dr Charles Morgan Jones and Margaret Varrier of Glyn Taff, Troedyrhiw, Glamorgan, and had one sister. Educated at Epsom College, and Wycliffe College, Stonehouse, Glos., of which he later became President, he was a Foundation Scholar here and was placed in the first class of Part I of the Natural Sciences Tripos 1905 and in the second class of Part II in the next year. Then entering the medical school of St Bartholomew's Hospital he qualified M.R.C.S., L.R.C.P. in 1910 and was house physician during the following year. Returning to Cambridge as a research worker under Sir German Sims Woodhead, Professor of Pathology, he investigated the continuous temperature by a self-recording instrument previously devised by Arthur Gamgee. While acting as temporary tuberculosis officer for Cambridgeshire he became painfully conscious of the incongruity and futility of giving the routine advice to "get a light job in the open air and have three good nourishing meals a day", which poor patients can very rarely carry out. Accordingly in 1915 he opened, at first with one patient in a shelter, the Cambridgeshire Tuberculosis Colony at Bourn. Three years later this colony, then with twenty-five patients, moved to Papworth Hall, twelve miles from Cambridge, formerly the property of Hooley, the financier.

In the early days the difficulties, especially of finance, were many and serious but his enthusiasm and organizing ability won him the encouragement of Sir Robert Morant, Sir Frederick Milner, "the soldiers' and sailors' friend", who interested the Royal family in Papworth, and of Sir Ernest Cassel who most generously helped in the move to Papworth. Sir Clifford Allbutt and Sir German Sims Woodhead gave their support by collaboration with Varrier-Jones in publications between 1915 and 1925, showing the limitations, such as waste of time and money, of tuberculosis sanatoriums and dispensaries alone, and explaining the value of the Papworth scheme as an addition to the after-care of the tuberculous. Sir James Kingston Fowler in his *obiter dicta*, such as "the working man cannot afford the time to be an early case of pulmonary tuberculosis", "a

light occupation in the open air is seldom found", "a tuberculosis dispensary that has become a tuberculin dispensary has become a very dangerous place", expressed some of Varrier-Jones's principles.

During twenty-two years expansion was continuous and intensive at Papworth. The population of the colony is now 1200; of these 500—men, women, and nurses—are ill and in new hospitals. No tuberculous applicant, whatever the state of the disease—early or advanced—is ever refused admission on that score. Sanatorium treatment is provided in 100 chalets until the occupants are well enough to be transferred to the hostels where single men and women at work in the Papworth workshops are lodged; and there are 141 model cottages occupied by ex-patients with their families. Of the 122 children born in the colony all are free from tuberculosis, thus meeting any suggestion that a tuberculosis colony is certain to be an infective focus of endemic tuberculosis. Varrier-Jones took a far wider view of the control of tuberculosis than the purely medical; he paid special attention to the patients' economic needs which often, on account of disability, become acute, and with understanding sympathy for the mental anxiety about the financial state of their families and dependants arranged a psychological clinic, just as he provided for their physical requirements at Papworth, for example by a surgical unit under J. B. Hunter, and an X-ray department. The economic and psychological factors were thus important in the organization of the village settlement for the tuberculous. Constantly on the watch for advances he instituted research laboratories with a *Bulletin*. As recently as January 1941 he was actively preparing the ground for an undergraduate school of tuberculosis at Papworth.

He was most courageous, and some indeed thought rash, in financial matters; thus when extensions appeared necessary he started them whether or not funds were available to meet the cost. Eventually he always made good, especially in connection with the phenomenal success of the Papworth industries, the sales of which increased from year to year, reaching fresh records in 1939 and 1940. But in the early period there was the question of payment for raw material before the fine products of the Papworth workshops could be made and sold. This was accommodated by an overdraft at the bank, and when warned about its mounting height he seemed to comfort himself by the remark that he "might really be driven to remove his overdraft in a taxi to the nearest bank". The most important practical features of the Papworth scheme are the industries and workshops, which solve the economic difficulty by enabling ex-patients and convalescents to work for a living under the Trade Union rate of wages and under medical supervision. As the founder and administrator of the Papworth industries Varrier-Jones showed a business capacity rare indeed, especially among members of the medical fraternity. A shrewd judge of character, he chose his assistants, trusted and inspired them with his ideals for many years; thus Miss K. L. Borne has been matron since 1915, and Dr L. B. Stott a medical officer from 1921.

At the time of his death he had reached the highest point in his career, though he did not consider that his labours were nearly completed; he might have echoed Rhodes's last recorded words: "So little done: so much to do." His work has been widely recognized, for many pilgrims from abroad visited the Mecca of tuberculosis after-care at Papworth, which has been copied in this country at Preston Hall near Maidstone, at Barrowmore Hall near Chester, in Eire at Peamount near Dublin, in the United States at the Potts Memorial hospital at Livingston, New York, and in France by the village settlement at Salagnac. He visualized a great expansion of the Papworth model, and was always glad to advise similar colonies for subnormal men, and did so at Enham (now allied with Papworth), of which he was honorary medical director, at Preston Hall, and at Peamount. He received the honour of knighthood in 1931, was appointed president in 1932 of a new international body formed for special and intensive study of the after-care of the tuberculous, which is affiliated with the Union internationale contre la Tuberculose, and would have represented the Government at Berlin in 1939 at the meeting of the Union internationale contre la Tuberculose, arranged for September 1939. At the Royal College of Physicians of London he was elected a Fellow in 1934, had delivered the Mitchell Lecture on tuberculosis in 1927, taking village settlements for the tuberculous as his subject, and in 1939 was awarded the Weber-Parkes Prize for tuberculosis.

He was a truly great man, the like of whom we can hardly hope to see again; he set a wonderful example of whole-hearted devotion to the good work he organized and has left for others to continue.

HUMPHRY ROLLESTON.

HERBERT HENRY BAKER AYLES (B.A. 1885) died on 18 June 1940. He was the son of Peter Weston Ayles, shipbuilder, and was born at Wyke Regis, Dorset, 3 August 1861. Before coming into residence he obtained the B.A. degree from the University of London with honours in classics. In 1884 he won the Carus Greek Testament Prize for undergraduates, and in 1885 was placed alone in the first class in the Theological Tripos, Part I, with distinction both in Old and New Testament. In the following year he obtained a first class in Part II, with distinction in Old Testament, and was awarded the

Hebrew Prize and the Crosse Scholarship. He had been elected a Scholar of the College in 1885; later he was Naden Divinity Student. He was ordained in 1886 by the Bishop of Ely as curate of the Round Church, Cambridge; in 1888 he was awarded the Tyrwhitt Hebrew Scholarship and was appointed by the College vicar of Horningsey. In 1901 he was presented to the College living of Barrow, near Bury St Edmunds, where he remained until his death. He proceeded B.D. in 1899 and D.D. in 1905. He was made an honorary canon of St Edmundsbury in 1916, and was chapter clerk from 1936. His publications include a work on the Epistle to the Hebrews and a commentary on chapters two and three of Genesis. He married Esther Mary, daughter of Sir J. J. Briscoe, baronet; she died in 1930.

EDWARD PERCY BOYS SMITH (B.A. 1884) died at Hightown, Ringwood, Hampshire, on 20 November 1940. He was the son of the Rev. John Boys Smith (Trinity College, B.A. 1844), who was later vicar of Corsham, Wiltshire; and he was born on 4 October 1861, in Warsaw, where his father was then chaplain to the British Legation. He was a day boy at Tonbridge School and entered St John's College in the Michaelmas Term 1881 under Dr Parkinson. He read for the Moral Sciences Tripos and was placed in Class II in the summer of 1884, and was elected to an Exhibition. He was awarded College Essay Prizes in 1883 and 1884, and he was President of the College Debating Society in 1883. For a brief period he acted as assistant to the Headmaster of Tonbridge, and whilst preparing for ordination he was Tutor in the family of Mr Frederick Locker-Lampson, the poet, at Rowfant, Sussex. He was ordained in 1886 and held curacies at Holy Trinity, Southampton, 1886–89, and at Havant, 1889–91. In 1891 he became vicar of Hordle, Hampshire, a country parish, which he held for forty years till his resignation in 1931. He was Rural Dean of Lyndhurst from 1927 to 1937. Some account of him, and of his work in Hordle and the Rural Deanery, is given in *The New Forest Magazine* (published by King, Printer, Lymington) for January and February 1941. In 1898 he married Charlotte Cecilia, daughter of Thomas B. Sandwith, C.B. (St Catharine's College, B.A. 1856), formerly Consul in Crete and Tunis and Consul-General at Odessa. Of his four children, the eldest son is now a Fellow of the College and Ely Professor of Divinity.

MOYLE SHERER BROWN (B.A. 1877) died 28 April 1940, aged 85. He was the son of the Rev. Samuel Christmas Brown, and was born at Marshfield, Gloucestershire, 8 October 1854. He came up to St John's from Repton School, and graduated with a third class in the Theological Tripos, 1877. He was ordained deacon the same

year by the Bishop of Dover to the curacy of Holy Trinity, Dover, but shortly afterwards he was received into the Roman Catholic Church, and in 1882 he was ordained in that Church by Cardinal Manning. He was with the Oblates of St Charles at Bayswater, but his health broke down in 1913, and he was never able to resume active work.

WILLIAM KELLMAN CHANDLER (B.A. 1880) died 24 May 1940, at Welbeck, Barbados. He was the son of Andrew Boyce Chandler, and was born at Barbados 19 February 1857. He obtained a second class in the Law Tripos of 1879. He was called to the bar by the Inner Temple 25 June 1879 and returned to Barbados, where he practised before the Supreme Court. He held many offices in the Colony, being Escheator-General and Solicitor-General 1880–1, Judge of the Assistant Court of Appeal 1881–3, President of the Assistant Court of Appeal 1883–1925. He acted as Chief Justice 1901–2, and as Colonial Secretary 1902–3. He represented the Colony in the negotiations at Washington in connection with the McKinley Tariff Act, as a result of which certain exemptions and reductions were made on the duties of the Colony in favour of the United States in return for the admission of the sugar of the Colony into the United States free of duty. In 1903 Parliament voted money for the relief of the sugar-growing colonies of the West Indies, and Chandler was appointed chairman of the Board of Commissioners which supervised the expenditure of the grant which fell to Barbados. In 1912 Chandler represented Barbados at the Canada and West Indies Tariff Conference at Ottawa.

As early as 1881 he had been elected a member of the House of Assembly; in 1884 he was elevated to the Legislative Council, of which he became President in 1912. He was also President of the General Board of Health and of the Central Quarantine Authority for the West Indies. He was created C.M.G. in 1902, knighted in 1915, and advanced to K.C.M.G. in 1927. He married, in 1882, Ella Delisle, daughter of the Hon. J. T. Jones, a member of the Legislative Council of Barbados, and had two sons and six daughters.

WILLIAM JOSEPH CHAPMAN (B.A. 1879) died 18 February 1940, aged 83. He was the son of Walter Chapman, agent of the Shrubland Park Estate, Suffolk, and was born at Coddenham 23 March 1856. He came up to St John's in 1875 from Dedham Grammar School. He was ordained in 1879 by the Bishop of Chester and, after holding curacies in Liverpool, Penge, Sandhurst and Norfolk, was presented by his godfather, Sir William Broke Middleton, to the rectory of Hemingstone, Suffolk, in 1885. Here he remained until his retire-

ment in 1935, when he went to live at Ipswich. He married in August 1880 Mary Augusta, only daughter of George Frederick Carnell, solicitor, of Sevenoaks; she survives him, with five sons and one daughter.

MARCUS WELLESLEY CHURCHWARD (B.A. 1882) died 10 January 1940 at 38 The Chase, Clapham Common, S.W. 4. He was the son of Benjamin Churchward, who held a position in the Dockyard at Chatham, where the son was born 11 November 1860. He went to the King's School, Rochester, in 1873, and matriculated as a Non-Collegiate Student in 1878, migrating to St John's the next year. He was ordained in 1883 by the Bishop of London as curate of Christ Church, Notting Hill; after three years in Suffolk he returned to Notting Hill as Diocesan Home Missioner, but in 1890 he became a chaplain to the Forces. He served at Aldershot, Shoeburyness, Malta, Lichfield and Woolwich, and was assistant Chaplain-General for the London District from 1916 to 1920, when he retired from the Service. He was awarded the C.B.E. in 1919. For the next ten years he was European secretary to the Society for the Propagation of the Gospel. He married first, in 1884, Mary Ella Woodall, of Liverpool; she died in 1929; and secondly, in 1930, Winifred Agnes, younger daughter of the Rev. Frank Wilcox.

CHARLES JAMES EASTWOOD (B.A. 1892) died 14 February 1940. He was the son of William Eastwood, merchant, and was born at Liverpool 22 August 1863. He was sent to Liverpool Institute and leaving in 1878 was for some years in a merchant's office in Liverpool. Deciding to read for orders he came up to Cambridge in 1889 as a Non-Collegiate student but transferred to St John's after one term. He obtained a third class in the Theological Tripos, Part I, in 1892, and was ordained the same year by the Bishop of Rochester to the curacy of Christ Church, North Brixton. From 1896 to 1898 he was vicar of Wickham-Skeith, Suffolk; he was then presented by the College to the living of North with South Lopham, near Diss, where he remained until his death.

JOHN THOMAS EVANS (Matric. 1895) died at Crowcombe, Somerset, on 10 May 1940. He was the son of Titus Evans and was born at Fishguard 1 August 1869. From Llandovery School he went on to the London College of Divinity, and was ordained in 1892 to a curacy near Liverpool. In 1895 he came to Cambridge as curate of St Andrew the Great, and joined the College, but did not take a degree. From 1899 until his retirement in 1936 he was rector of Stow-on-the-Wold. He published no less than eight volumes on

the church plate of Wales, Gloucestershire and Oxfordshire, and had in preparation a work on the Altar Vessels of the University of Oxford. The University of Wales conferred upon him the honorary degree of M.A. in 1926, and he was elected a F.S.A. in 1922. He married first, in 1896, Isabella, daughter of J. Owen, of Rowton Castle, Shrewsbury; she died in 1930; and secondly, in 1931, Selina Charlotte, grand-daughter of the Hon. Richard Watson, of Rockingham Castle, Northamptonshire.

JOHN HARVEY FORD (B.A. 1884), of Wigganton House, near Tamworth, died in 1939. He was the son of George Ford, land agent, and was born at Barlaston, Staffordshire, 23 July 1861. He was at Repton School before coming to Cambridge.

HENRY HUNSDON GREENHILL (B.A. 1875) died 23 February 1940 at 12 Foxgrove Road, Beckenham, Kent, aged 90. He was the son of Thomas Greenhill, engineer, and was born at Twickenham 18 March 1849. He was a senior optime in the Tripos of 1875. He was a younger brother of Sir George Greenhill (B.A. 1870; died 1927), sometime Fellow of the College.

BERNARD JOHN HAYES (B.A. 1890) died in Cambridge 14 December 1939. He was the son of John Thomas Hayes, of Croydon, and was born at Wallington, Surrey, 12 April 1863. He went to King's College School, London, but left at the age of sixteen to help his father, whose health had broken down, in his publishing business. In his leisure time he read classics and in 1887 he obtained the B.A. degree of the University of London with first-class honours in Classics. In 1888 he came to Cambridge as a tutor of the Correspondence College, where he remained until August 1939. He matriculated as a Non-Collegiate student, but joined the College after two terms and graduated with a first class in the Classical Tripos, Part I, in 1890. He was elected a Scholar of the College in June 1890.

HARRY SAMUEL LEWIS (B.A. 1884) died 28 April 1940 at St George's Hospital, London. The son of Alfred David Lewis, engineer, he was born in London 31 July 1863 and came up to St John's from King's College School. He was bracketed thirty-second wrangler in the Mathematical Tripos, Parts I and II, 1884, and obtained a third class in the Semitic Languages Tripos in 1886, being elected Tyrwhitt Hebrew Scholar in the same year. He became chaplain and teacher at the Jewish Institute of Religion, New York. For twenty years he was a resident of Tonybee Hall.

JAMES HARRIS LILLEY (B.A. 1876) died 4 February 1940 at Hereford. The son of James Harvey Lilley, physician, he was born at Ansty, Thurcaston, Leicestershire, in 1865. From St John's he went to University College Hospital, where he qualified M.R.C.S. in 1884, taking the Cambridge M.B. degree in the same year. He proceeded M.D. in 1888. After holding resident appointments at Leicester Infirmary, he went into practice in Hereford.

JOHN BISHOP MARSH (B.A. 1884) died 22 April 1940 at Sospel, Farnham Royal, Buckinghamshire. His father, Richard William Bishop Marsh (B.A. 1839), and his elder brother, Richard Henry Marsh (B.A. 1878; died 1912), were members of the College. He was born at Plaistow, Essex, 27 July 1862, and went to the Forest School, Walthamstow. He graduated with a third class in the Theological Tripos, Part I, 1884, and went on to Ely Theological College. He was ordained in 1885 by the Bishop of Oxford to the curacy of Abingdon; after holding curacies at Twickenham and Haggerston, he was in 1902 appointed vicar of Belchamp St Paul. He was rector of St Giles, Colchester, 1910–17, vicar of Nayland 1917–23, and chaplain at Monte Carlo 1923–30. He married, in 1902, Beatrice Durrant, eldest daughter of H. W. Field, of Shillingford, Oxfordshire.

WILLIAM THOMAS DAKIN MART (B.A. 1898) died 19 May 1940; he was taken ill while driving his car in Sheffield. The son of William Mart, grocer, he was born at Sheffield 22 June 1876, and came up to St John's from Bedford Modern School. He obtained a third class in the Natural Sciences Tripos, Part I, 1898, and went on to St Bartholomew's Hospital, where he qualified M.R.C.S., L.R.C.P. in 1901. He was in practice for many years in Sheffield; during the war 1914–18 he served in the R.A.M.C. with the rank of major. He served on the Sheffield City Council from 1921 to 1924 and was chairman of the Burngreave Unionist Club.

GEORGE JAMES MILLER (Matric. 1922) died 14 May 1940 at 3 Kirklee Terrace, Glasgow. He was the son of James Miller, architect, of Randolphfield, Stirling, and was born in Glasgow 2 January 1903. He was at Fettes for two years before coming up to Cambridge.

JAMES LEDGER WARD PETLEY (B.A. 1885) died 11 January 1940 at Fairfield House, Uckfield, Sussex. The son of Thomas Petley, he was born at Staplehurst, Kent, in 1863 and went to Sutton Valence School. He was ordained in 1886 by the Bishop of Chichester to the curacy of Pevensey. After holding other curacies in Sussex, he was

appointed in 1899 vicar of Flitwick, Bedfordshire, where he remained until his retirement in 1926. From 1919 to 1926 he was rural dean of Ampthill. He married, in 1898, Charlotte Emily, eldest daughter of the Rev. J. B. M. Butler, rector of Maresfield; she died in 1931.

VALENCE CHARLES POWELL (B.A. 1925) died 18 March 1940 at St Francis's Vicarage, Dudley. He was the son of the Rev. Charles Thomas Powell, vicar of St John, Dudley, and was born at Worcester 23 August 1903. He went to Worcester Cathedral King's School. From Cambridge he went to Salisbury Theological College, and was ordained in 1927 by the Bishop of Worcester to the curacy of St John the Baptist, Kidderminster. In 1934 he was placed in charge of the parish of St Francis, Dudley, becoming vicar in 1935.

RICHARD PRATT (B.A. 1887) died 31 March 1940 at 2 Milburn House, Raynes Park, S.W. 20. He was the son of Thomas Pratt, farmer, and was born at Bubwith, Yorkshire, 23 February 1865. He went to the Grammar School, Drax, and to Prospect House School, Tring. He was ordained in 1888 by the Bishop of Manchester to the curacy of St George, Mossley, Lancashire. From 1891 to 1897 he was curate of Christ Church, Heaton Norris, then moving to Norris Bank, of which he became rector in 1899. He was vicar of Patricroft 1909–21, rector of Emmanuel, Didsbury, 1921–7, and was then presented by the College to the rectory of Freshwater, Isle of Wight. He retired in 1938, having been rural dean of West Wight since 1933.

FRANCIS LIONEL RAE (B.A. 1893) died 10 May 1940 at Blagdon, Broadwindsor, Dorset. The son of William Maple Rae, he was born at Cheltenham 22 June 1871. From Cambridge he went to Guy's Hospital, where he qualified M.R.C.S., L.R.C.P. in 1899. For some time he was medical officer to the Assam Railway and Trading Company, India.

WILLIAM TRAILL RITCHIE (B.A. 1904) died 22 May 1940 at Timaru, New Zealand. He was the son of John Macfarlane Ritchie, merchant, of Dunedin, New Zealand, where he was born 27 March 1882. He was at Wanganui Collegiate School. He obtained a third class in the Mechanical Sciences Tripos, 1904, and returned to New Zealand, where he farmed. He married, in 1909, at Sydney, New South Wales, Dorothy Cecil Dibbs; one of his sons, Brian William Thomas Ritchie (B.A. 1938), is a member of the College. Two brothers of W. T. Ritchie were also at St John's, Charles Henry Ritchie (B.A. 1910) is archdeacon of Northumberland, and John Nevill Ritchie (B.A. 1902) was killed in action in Mesopotamia in 1916.

WILLIAM ROBERT SHARROCK (B.A. 1867) died 23 March 1940 at the vicarage, Driffield, East Yorkshire. At his death he was stated to be the oldest beneficed clergyman in the country, and to be 98 years of age, but according to the College Admission Register he was born 17 November 1843. His father, James Sharrock, was a brass and iron founder at Congleton, Cheshire. He went to Macclesfield Grammar School. He graduated with a third class in the Moral Sciences Tripos, 1866, and was ordained the next year by the Bishop of Durham to the curacy of Stockton-on-Tees. In 1868 he moved to North Ormesby, of which he became vicar in 1871; he was vicar of Ormesby from 1883 to 1892, when he was presented to the vicarage of Driffield by Archbishop Maclagan, who also appointed him rural dean of Harthill. The latter office he resigned in 1931. Archbishop Lang appointed him canon and prebendary of Husthwaite in York Minster in 1907. He married first, in 1874, Elizabeth Ann, youngest daughter of R. Jackson, of Stockton-on-Tees; she died in 1913; and secondly, in 1915, Catherine Annie, youngest daughter of Henry Weatherill, of Driffield.

CHARLES SLATER (B.A. 1879) died 15 March 1940 at 9 Hungershall Park, Tunbridge Wells. He was the son of Nathan Slater, wine and spirit merchant, and was born at Southport 6 October 1856. He came up to St John's in 1875 from Clifton College, and was placed in the second class in the Natural Sciences Tripos, 1878; he was elected Scholar of the College in June of that year. He then worked under Pattison Muir, Praelector in Chemistry at Caius, with whom he brought out a primer of elementary chemistry, and became a Fellow of the Chemical Society. In 1881 he entered St George's Hospital Medical School, from which he qualified M.R.C.S. in 1884. He was medical registrar in 1887 and, after a short period at the Pasteur Institute in Paris, he was appointed lecturer in bacteriology at St George's Medical School and hospital bacteriologist. Later he became University reader in bacteriology. He retired in 1913 and went to live in Tunbridge Wells, but he maintained his connection with St George's as consulting bacteriologist, and in 1933 at the bicentenary he made a gift of £10,000 to build a new clinical laboratory. At St John's he established a research studentship for advanced study in some branch of physical and natural science, and by his will he left a further sum to increase the endowment of the studentship. He was for a time joint editor of the *Review of Bacteriology* and he published, with Dr E. J. Spitta, an atlas of bacteriology. He was also a member of the Alpine Club and a contributor to the *Alpine Journal*.

JOHN FRANCIS LOVEL SOUTHAM (B.A. 1901) died 6 February 1940. He was the son of the Rev. John Henry Southam (of St John's, B.A. 1872) and was born at Kilmington, Axminster, Dorset, 20 May 1880. He came up to St John's from Blundell's School, Tiverton, and obtained a second class in the Law Tripos, Part I, 1900, and a second class in Part II, 1901. He then went to Wells Theological College, and was ordained in 1903 by the Bishop of St Albans to the curacy of Buckley. In 1905 he moved to Hawarden, and in 1908 to St Mary Redcliffe, Bristol. During the war he was a temporary chaplain to the Forces. In 1919 he was appointed vicar of St Mary, Portsea, where he remained until 1927, when he became a residentiary canon of Chester Cathedral.

REGINALD STOWELL (B.A. 1893) died 23 March 1940 at Southport. He was the son of the Rev. Thomas Alfred Stowell, and was born in Salford 20 June 1870. He came up to St John's from Sedbergh School as a Lupton and Hebblethwaite Exhibitioner, and graduated with a third class in the Classical Tripos, Part I, 1893. He was ordained in 1896 by the Bishop of Southwell to the curacy of Wirksworth. In 1908 he became vicar of Burton-in-Lonsdale, Carnforth, where he remained until his retirement in 1937. From 1926 to 1933 he was rural dean of Ewecross, and from 1932 to 1937 honorary canon of St Wilfrid in Bradford Cathedral.

GRAHAM SINCLAIR TAYLOR (B.A. 1937), Pilot Officer, R.A.F., died on active service as the result of a flying accident on 26 January 1940. He was the son of Claude Sinclair Taylor, consulting engineer, and was born at Shanghai 27 July 1915. He was at Uppingham School from 1929 to 1934.

ARTHUR LOCKHART WATSON (B.A. 1904) died 19 March 1940. He was the son of the Rev. Frederick Watson (B.A. 1868), Fellow and Lecturer of the College; his brother, Basil Lockhart Watson (B.A. 1911), was also at St John's. He was born at Starston, Norfolk, 29 June 1883, and went to All Saints' School, Bloxham. After graduating, he went on to Cuddesdon College, and was ordained in 1907 by the Bishop of Southwark to the curacy of Plumstead. He moved to Wantage in 1909 and to Cranham in 1913, and in 1918 was presented by the College to the vicarage of Aldworth, Berkshire. In 1936 he accepted the rectory of Ufford with Ashton and Bainton, near Stamford, also a College living, and he remained there until his death. He married, in 1908, Mary Frances Olive, daughter of John W. Courtenay.

BENJAMIN WEST (B.A. 1874) died 29 March 1940 at 117 Kennington Park Road, S.E. 11. He was the son of Joseph West, builder, and was born in London on 31 July 1844. He did not come up to Cambridge until he was twenty-five, and already a married man. He was ordained in 1873 by the Bishop of Winchester to the curacy of St Jude, Southwark. In 1876 he became chaplain of Westminster Hospital, and in 1879 chaplain of King Edward's School, St George's Road, Southwark, where he remained until his retirement in 1922.

CHARLES ERNEST WESTLAKE (B.A. 1884) died at Penzance 6 April 1940. He was the son of Robert Jackman Westlake, grocer, and was born at Exeter 19 May 1862. He came up to Cambridge from Exeter Grammar School and was a junior optime in the Mathematical Tripos, Parts I and II, 1884. He became a private tutor, residing in Penzance from 1899 to 1927, when he went to Tatterford, Norfolk, to teach in the Test School of the College of the Resurrection, Mirfield, which is housed in the Rectory there. He retired in 1932 and returned to Penzance. He was unmarried.

GEORGE GOODE WILKINSON (B.A. 1881) died 16 December 1939 at 33 King's Avenue, Eastbourne. He was the son of George Goodley Wilkinson, and was born at South Audley Street, Mayfair, 9 July 1858. He came up to St John's from Rugby School as a minor scholar in 1877. He became master of a preparatory school at Quebec House, St Leonards-on-Sea. He was ordained in 1883 by the Bishop of Chichester and held various curacies in St Leonards. In 1915 he became rector of Knossington with Cold Overton, Leicestershire, retiring in 1934. He married, in 1883, Barbara McAlister, elder daughter of W. Thomson; she died in 1927.

JOHN CROSSLEY WRIGHT (B.A. 1887) died 21 December 1939 at Wotton-under-Edge, Gloucestershire. He was the son of John Hodgson Wright, physician, and was born at Grove House, Halifax, Yorkshire, 5 October 1866. He came up to St John's from Marlborough College and, after graduating, went to St Bartholomew's Hospital. He took the Cambridge M.B. in 1891. He practised in Halifax and during the war was in charge of the Halifax War Hospital, with the rank of lieutenant-colonel, R.A.M.C. After moving to Wotton-under-Edge he acted as honorary consulting radiologist to the Stroud General Hospital. He married, in 1899, Florence, eldest daughter of Colonel H. Bellingham Le Mottée.

[The following are notices of more recent deaths. Longer notices will appear in a subsequent number of *The Eagle*.]

HERBERT MARCUS ADLER (B.A. 1897), barrister at law, died 24 August 1940, aged 64.

WALTER BEATTIE ALLAN (B.A. 1894), shipowner, died 7 April 1941, at 5 Ashbrook Crescent, Sunderland, aged 70.

ARTHUR THOMAS BARNETT (B.A. 1881), canon of Gibraltar, formerly vicar of Stoke Poges, died 2 September 1941, at Westover, Guildford, aged 82.

JAMES HERBERT COOPER BARTON (B.A. 1891), solicitor, died 16 July 1940, at Cheltenham, aged 71.

JOHN BRILL (B.A. 1882), formerly Fellow, inspector of schools, died in London 13 April 1941, aged 83.

THOMAS ORMISTON CALLENDER (*Matric.* 1919), director of the Callender Cable and Construction Company, died 10 May 1941, aged 44.

STANTON FREELAND CARD (B.A. 1887), Instructor-Captain, Royal Navy, retired, died 6 October 1940, aged 75.

WILLIAM MONOD CRAWFORD (*Matric.* 1894), Indian Civil Service, retired, died in Belfast 2 April 1941, aged 68.

WILLIAM JOHN DOBBS (B.A. 1890), formerly a successful mathematical coach for Woolwich, died at Weston-super-Mare 11 December 1940, aged 72.

JOHN ROSSLYN EARP (B.A. 1913), director of the division of public health education in New York, died at Delmar, New York, 19 May 1941, aged 50.

EDWARD HORNBY EDE (B.A. 1884), solicitor, died at Cardiff 14 July 1940, aged 77.

LEWIS HUMFREY EDMUNDS, K.C. (B.A. 1883), an authority on patent law, died at Hillingdon, Uxbridge, 27 April 1941, aged 81.

FREDERICK EDMUND EGERTON (B.A. 1881), for 55 years vicar of Knottingley, near Pontefract, died in July 1940, aged 85.

WILLIAM HOLLAND BALLETT FLETCHER (B.A. 1875), well known in horticultural circles as the owner of the garden at Aldwick Manor, Bognor Regis, died there 4 March 1941, aged 88.

HENRY THOMAS GILLING (B.A. 1885), D.L., late lieutenant-colonel, R.F.A., died at Cardiff 8 November 1940, aged 78.

ROGER NEVILLE GOODMAN (B.A. 1884), M.D., for 42 years a general practitioner at Kingston-on-Thames, died at Oxford 9 July 1941, aged 78.

WILLIAM EBENEZER GRAY (B.A. 1881). barrister at law, late general manager, Employers' Liability Assurance Corporation, Ltd., died 24 September 1941 at Draycott, Bickley, Kent, aged 83.

HENRY FRANCIS GREENWOOD (B.A. 1888), vicar of High Melton, near Doncaster, and formerly vicar of St John, Park, Sheffield, died at Doncaster 2 March 1941, aged 78.

WALTER GASPER GREGORY (B.A. 1888), barrister at law, died at Kalimpong, Bengal, India, 1 May 1941, aged 75.

RALPH HARE GRIFFIN (*Matric.* 1873), barrister at law, formerly Registrar of Patents and Designs, and sometime secretary of the Society of Antiquaries, died at Micheldever 20 August 1941, aged 87. He was a generous benefactor to the College Library.

WILLIAM HEWISON GUNSTON (B.A. 1879), formerly Fellow, and for many years auditor of the College accounts, died at King's Lynn 25 January 1941, aged 84.

ROGER CHAMBERLAIN HARMAN (B.A. 1933), second son of N. Bishop Harman (B.A. 1897), died 2 October 1941.

ARTHUR BROOKE HASLAM (B.A. 1873), formerly headmaster of the Royal Grammar School, Sheffield, died at Ambleside, Westmorland, 16 April 1941, aged 90.

THOMAS ARNOLD HERBERT, K.C. (B.A. 1887), of the Chancery Bar, M.P. for South Bucks from 1906 to 1910, died 22 November 1940, at Marlow, aged 78.

CLAUDE MEMYSS MACKENZIE HUTCHINSON (B.A. 1891), C.I.E., formerly Imperial agricultural bacteriologist at Pusa, India, died at Aldeburgh 2 August 1941, aged 72.

MAURICE JAQUES (B.A. 1880) died at Hampstead 1 September 1940, aged 85.

CHRISTOPHER JOHN FREDERICK JARCHOW (B.A. 1901) died at Merstham, Surrey, 27 July 1941, aged 63.

BENEDICT JONES (B.A. 1879), J.P., barrister at law, late of Birkenhead, died at The Copse, Pampisford, Cambridgeshire, 26 May 1941, aged 86.

ALFRED JOHN JUDSON (B.A. 1888), rector of Norton, Faversham, died there 4 June 1941, aged 74.

CHARLES PAUL KEELING (B.A. 1896), canon emeritus of Manchester, vicar of Old Milverton, Warwick, died there 4 August 1941, aged 67.

HENRY TORRENS KENNY (B.A. 1880), late Indian Army, died at Sandhurst, Berkshire, 31 March 1941, aged 82.

JAMES KERR (B.A. 1884), M.D., formerly the school medical officer for London, died in Edinburgh 5 October 1941, aged 79.

RICHARD HENRY LANDOR (B.A. 1882), solicitor, died at Rugeley, Staffordshire, 13 August 1941, aged 81.

FREDERICK GEORGE ALEXANDER LANE (B.A. 1874), late of Blair Atholl, Dickoya, Ceylon, died at Bloxworth House, Wareham, Dorset, 25 June 1940, aged 87.

DONALD MACAULAY (B.A. 1906), rector of Melton, Woodbridge, Suffolk, died there 14 July 1941, aged 57.

WILLIAM PATRICK GLYN MCCORMICK (B.A. 1899), vicar of St Martin's-in-the-Fields, died 16 October 1940, aged 63.

CHARLES ROBERT MCKEE (B.A. 1895), vicar of Bickerton, Cheshire, until 1935, died 21 July 1940, aged 67.

MILES HAYNES HILL MASON (B.A. 1883), for 36 years a master at the Whitgift School, Croydon, died 2 October, 1940, aged 80.

GEORGE FREDERICK MATTINSON (B.A. 1884), formerly rector of Marwood, Devon, died at Barnstaple 11 February 1941, aged 78.

FRANK MELLOR (B.A. 1884), late Senior Registrar in Bankruptcy, Royal Courts of Justice, died at Oxford 2 February 1941, aged 77. He was knighted on his retirement in 1936.

FRANK MORLEY (B.A. 1885), for many years lecturer in English subjects at Blackburn Technical College, died 26 October 1940, aged 75.

BERNARD THOMAS NUNNS (B.A. 1890), formerly headmaster of Wolborough Hill School, Newton Abbot, Devon, died at St Briavels, Gloucestershire, 21 February 1941, aged 73.

JOHN EDWARDS PELLOW (B.A. 1900), in medical practice at Kingsclere, Newbury, died there 22 April 1940, aged 61.

CHARLES PENDLEBURY (B.A. 1877), from 1877 to 1910 senior mathematical master at St Paul's School, died 18 August 1941, at Chiswick, aged 87.

FREDERICK FITZPATRICK PENRUDDOCK (B.A. 1884), formerly vicar of Woodley, Berkshire, died at Bath 30 July 1941, aged 79.

REGINALD WALTER GEORGE POUND (B.A. 1884), for many years rector of Combe-in-Teignhead, Devon, died 30 April 1941, at Ruggin Court, near Taunton, aged 84.

JOHN STANLEY RICHARDSON (B.A. 1932) was killed in an air raid on London in March 1941; he was 29 years of age.

JOHN HASELWOOD ROBERTS (B.A. 1891), medical practitioner, of Priory Grange, Newmarket Road, Cambridge, died 30 November 1940, aged 70.

GEORGE FREDERICK JENNER ROSENBERG (B.A. 1892), formerly an assistant master at the King's School, Canterbury, died 25 July 1940, at St Ives, Cornwall, aged 70.

HENRY HERBERT ROSEVEARE (B.A. 1904), late headmaster of Newquay County School, died at Newquay 25 January 1941, aged 72.

JAMES SIMPSON SALMAN (B.A. 1869), for 20 years vicar of Ebberston, near Scarborough, died in August 1940, aged 95.

CHARLES ARCHIBALD ANDERSON SCOTT (B.A. 1883), D.D., Emeritus Professor of New Testament, Westminster College, Cambridge, died at Cambridge, 23 July 1941, aged 83.

FRANCIS ALEXANDER SLACK (B.A. 1875), C.S.I., Indian Civil Service, retired, died at Budleigh Salterton 8 August 1940, aged 87.

THOMAS D'OYLY SNOW (*Matric.* 1878), K.C.B., K.C.M.G., died in London 30 August 1940, aged 81. He received his commission in the 13th Foot in 1879, during the Zulu War. He had a distinguished career in the Army and rose to lieutenant-general. *The Times* said of him: "His military gifts matured with the changes that gradually transformed the Army, and in outlook and ideas he was always in advance of his time. He excelled in the practical training of troops and staffs for modern war, and the fighting efficiency of the British Expeditionary Force in 1914 owed a great deal to him."

WILFRED SCOVIL SODEN (B.A. 1910), medical practitioner at Winchcombe, Gloucestershire, died there 13 March 1941, aged 52.

ROBERT AUGUSTINE STORRS (B.A. 1882), formerly rector of Shanklin, Isle of Wight, died at Sandown 8 July 1941, aged 82.

JAMES ARTHUR STRACHAN (*Matric.* 1869), late colonel, 43rd Light Infantry, died at Cheltenham 2 November 1941, aged 91.

HENRY WILLIAM STREET (B.A. 1866), of Southsea, an enthusiastic yachtsman, died 1 November 1940, aged 95.

HENRY STROUD (B.A. 1885), Emeritus Professor of Physics in the University of Durham, died at Gerrard's Cross, Buckinghamshire, 3 September 1940, aged 79.

LAWRANCE EDGAR TANNER (B.A. 1913), solicitor, of Nailsea House, near Bristol, died in June 1941, aged 50.

JAMES MUNRO TATE (B.A. 1875), formerly vicar of Syleham, Norfolk, died in January 1941, aged 89.

CLAUD BUCHANAN TICEHURST (B.A. 1903), of Saxon House, Appledore, Kent, died at Hastings 17 February 1941, aged 60. He was a medical practitioner, but the leading passion of his life was ornithology, in which he had an international reputation.

MILES WALKER (B.A. 1899), F.R.S., Professor Emeritus of Electrical Engineering in the University of Manchester, died 22 January 1941, aged 73.

GEORGE WENTWORTH WATSON (B.A. 1881), for many years associated with the new edition of *The Complete Peerage*, died at Golder's Green 15 June 1940, aged 82.

ALAN WILLIAM WHITE (B.A. 1891), formerly headmaster of St Aubyn's Preparatory School, Barrow-in-Furness, died at Tunbridge Wells 12 November 1940, aged 71.

WILLIAM NEWCOMBE WILLIS (B.A. 1887), sometime headmaster of Ascham St Vincent's Preparatory School, Eastbourne, and vicar of Ottershaw, Surrey, died at Uckfield 27 November 1940, aged 75.

CHARLES RICHARD THOROLD WINCKLEY (formerly WINKLEY, B.A. 1877), late chaplain on the Bengal Establishment, died at Leamington 12 January 1941, aged 85.

RICHARD MOUNTFORD WOOD (LL.B. 1875), of Toms Hill, Aldbury, Tring, died 1 November 1940, aged 86.

GEORGE WILLIAM PARSLEY, formerly College cook, died 5 January 1940, aged 81. He was 35 years in the service of the College and retired on a pension in 1919.

JOHN WILLIAM TURNER, who died on 18 December 1940 at Cambridge, aged 81, was Bursar's Clerk in the College for over 40 years.

He was at the College Choir School as chorister from about 1869 to 1874, and returned to the College as Bursar's Clerk in 1888, holding the appointment till his retirement on reaching the age of 70 in 1929.

He was also employed by Dr Charles Taylor and Sir Robert Scott, when Masters, to collect on their behalf the rents of the Dove House, Close estate, which at that time formed part of the Master's emoluments, and he continued to collect these rents on behalf of the College until his death, the total length of his association with the College thus extending to over 60 years.

ROLL OF HONOUR

CYRIL CORNELIUS BONE (*Matric.* 1922), lieutenant-commander, R.N.V.R., died at Mount Vernon Hospital 8 February 1941, aged 36.

COLIN ABBOTT BONNER (*Matric.* 1938) was reported missing, believed killed, in H.M.S. *Hood*, in May 1941, aged 21.

ROGER JOHN BORCHARDT (B.A. 1940) was killed in action in H.M.S. *Ajax* 12 October 1940, aged 22.

JOHN BREWSTER (B.A. 1938), flying officer, R.A.F., was killed on active service in April 1941, aged 25.

JOHN WOOLTORTON CARR (B.A. 1938), pilot officer, R.A.F.V.R., was killed on active service in August 1941, aged 24.

JOHN ALEC CHAMPNESS (B.A. 1932), flying officer, R.A.F., was killed in action in November 1940, aged 30.

RALPH ALEXANDER COWLEY (B.A. 1939), temporary sub-lieutenant, R.N., was killed in action off Dunkirk in H.M. Minesweeper *Skipjack*, 1 June 1940, aged 23.

JOHN MICHAEL EWAN DANIELS (*Matric.* 1938), pilot officer, R.A.F.V.R., was killed in action in August 1941, aged 21.

JOHN PETER ARCHIBALD DAVIDSON (B.A. 1938), flight lieutenant, R.A.F.V.R., was killed on active service in January 1941, aged 24.

GEOFFREY BOWCHER DAVIE (*Matric.* 1929), lieutenant (A), R.N.V.R., Fleet Air Arm, H.M.S. *Formidable*, is presumed killed on active service in May 1941 in the Middle East.

THOMAS JEFFREY EARLE (*Matric.* 1938), sub-lieutenant, R.N.V.R., was killed in action in H.M.S. *Glorious* 8 June 1940, aged 20.

OBITUARY*

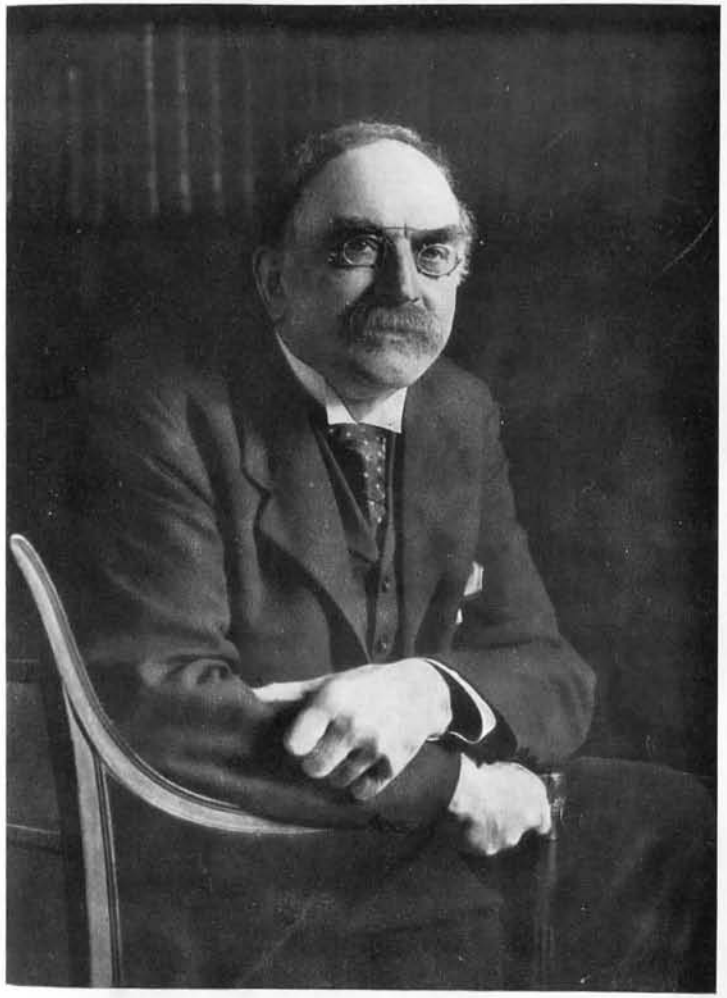
SIR JOSEPH LARMOR

SIR JOSEPH LARMOR, Sc.D., F.R.S., Lucasian Professor of Mathematics from 1903 to 1932, died at Hollywood, Co. Down, on 19 May 1942. In him the College has lost one of its most distinguished members.

Larmor was born at Magheragal, Co. Antrim, on 11 July 1857. From the Royal Belfast Educational Institution he went on to Queen's College, Belfast. After graduating there he came on to St John's, where he was elected a Minor Scholar in the examination of April 1876. He became a Foundation Scholar in 1878. He took the Mathematical Tripos in 1880 and was Senior Wrangler and First Smith's Prizeman, J. J. Thomson being Second Wrangler. The two were destined in the next twenty years to complement one another in building up the electromagnetic theory of matter.

In 1880 Larmor was elected a Fellow of the College, and in the same year went back to Ireland as Professor of Natural Philosophy in Queen's College, Galway. He returned to St John's in 1885 on his appointment to a College Lectureship. During the tenure of this office he made his most important contributions to scientific theory. They were contained in three memoirs published in the Philosophical Transactions of the Royal Society (1894–6–7), of which he was elected a Fellow in 1892. His main conclusions were submitted as an Essay for which he was awarded the Adams Prize (founded in memory of John Couch Adams, the discoverer of Neptune, another distinguished member of the College). The essay was published in 1900, under the title: *Aether and Matter: a development of the dynamical relations of the aether to material systems on the basis of the Atomic Constitution of Matter, including a discussion of the influence of the motion of the earth on optical phenomena.* Of this book, Sir Horace Lamb, speaking as president of Section A of the British Association in Cambridge in 1904, said that it would be better described by the title: 'Aether and No Matter', for in it the conception of matter adopted and developed is that of an aggregate of freely mobile centres of intrinsic strain in the aether which slip through it only as recognisable forms as a knot may slip along a piece of string.

* We are indebted to the Editors of *The Cambridge Review* and the *Monthly Notices of the Royal Astronomical Society* for permission to reprint matter that was first published in their columns. EDITORS.



SIR JOSEPH LARMOR

In 1903 the Lucasian Professorship of Mathematics became vacant by the death of Sir George Gabriel Stokes, and it was natural that Larmor should become his successor and so one of the long line of successors to Sir Isaac Newton. This Chair he held until his retirement in 1932.

After the publication of *Aether and Matter* Larmor showed his wide interest and his shrewd judgment in the counsels of the College, University and nation. He was for many years a member of the College Council. Here he was often critical, but he never failed to see when an important point of principle was in danger of being overlooked. Though radical in his natural philosophy he was conservative in temperament, questioning modern trends, even in such matters as the installation of baths in the College. 'We have done without them for 400 years, why begin now?' he once said in a College meeting. Yet once the innovation was made he was a regular user of the baths. Morning by morning in a macintosh and cap, in which he was never seen at other times, he found his way over the bridge to the New Court Baths.

From 1901 to 1912 he was Secretary of the Royal Society, received the honour of knighthood in 1909, and the Copley Medal of the Royal Society in 1921. From 1912 to 1922 he represented the University in Parliament as a Unionist. In 1914–16 he was President of the London Mathematical Society, receiving the de Morgan Medal in 1914.

Owing to ill-health he left Cambridge after his retirement and lived in his native country.

In the history of physical science Larmor stands as one who as much as any other helped to break down the attempt to explain all natural phenomena in terms of the laws of mechanics as laid down by Newton and developed during the eighteenth and nineteenth centuries. Stokes, Kelvin and others tried to develop a model aether which was in effect some kind of matter and from that model to explain the phenomena of electromagnetism and light. But Larmor saw clearly that this aether would be so different from any other kind of matter as no longer to deserve the name. At first he is much attracted by the kind of medium suggested by his fellow-countryman, MacCullagh, in which the energy depends not on the compression or distortion of the medium, but on the rotational displacement of its parts. In the end he frankly admits that it must be pictured not at all as some strange kind of solid, liquid or gas, but as something so distinct that we have no analogy by which we may describe it. In fact one cannot browse in his work for long without feeling that it is the elaboration of a purely mathematical structure, and that all that is left either of matter or aether is a scheme of differential equations, and a certain type of solution of them.

But this is precisely where he is paving the way for the revolution in thinking in which Einstein played such an important part. In fact *Aether and Matter* is the direct forerunner of the Principle of Relativity proposed by Einstein in 1905. This principle as then stated, the so-called Special Principle of Relativity, rounds off and completes Larmor's work at an important point. The realisation of the ambiguity in the measurements of space and time, together with the resolution of atoms into the more universal electrons, set scientists in a new path, freed from the fixed concepts of the mechanical theory. The new freedom of thinking led to a great new outburst of experimental knowledge. On the new theories designed to explain this Larmor looked with questioning, as if doubtful of that which he had helped to bring to birth.

Larmor was always looking for the general principles behind phenomena. The laws of thermodynamics and the Principle of Least Action were the two things to which he seemed always to turn. The general trend of the universe he felt must always be such as to make some quantity tend to a minimum whether it be action or available energy. This interested him much more than spinning webs of thought out of the mind. He had not too much sympathy for the pure mathematician, the geometer or the analyst. Minute attention to logic and playing with geometrical constructions just for the joy of it were not his way. He looked round on the objective world and took his pleasure in speculating on its ways of working. But even here he was not always willing to give patient attention to details, and so at times failed to be convincing. The same generality of view characterised his lectures. To the critical student they appeared slow and rambling and not getting far; but to those who were prepared to follow through they were full of stimulus, sometimes by their incompleteness provoking the mind to wrestling and questioning. His outlook was very far from that of the famous nineteenth-century coaches for the Mathematical Tripos, masters of manipulation and method, solvers of special and artificial problems. In these he showed no interest, and as his powers of production faded he turned more and more to matters of wide national and cultural interest. He leaves behind with those who knew him the remembrance of one of the greater men of Cambridge, somewhat remote, impatient of unreality, independent in judgment, doubtful of what a new age would bring.

His collected works are published, under his own editing, with valuable notes and comments from his later thinking, in two large volumes (Camb. Univ. Press, 1929). He contributed largely also to scientific literature by completing the editing of the works of Sir George Gabriel Stokes and Lord Kelvin. He received many honours in recognition of his great services to science, including honorary

degrees of D.Sc. from London, Oxford and Dublin, LL.D. from Glasgow, Aberdeen, Birmingham and St Andrews, and D.C.L. from Durham.

The following extracts from his will tell something of the kindness of heart to which many can bear witness: 'I bequeath to the Chancellor, Masters and Scholars of the University of Cambridge the sum of two thousand pounds to be devoted by them to providing medical and surgical assistance and sick nursing to junior members of the University according to their discretion.

'I bequeath two hundred and fifty pounds to the Vice-Chancellor of the University of Cambridge for the time being in trust to be invested at his discretion for the benefit of the University and College Servants' Association or other cognate institution.' E. C.

Larmor's chief work, *Aether and Matter*, was published in 1900, and incorporated much of three mammoth papers in the *Philosophical Transactions*. It may be said to have marked the end of the various mechanical models of the ether that crowded nineteenth-century physics. Larmor's model had a gyroscopic stability and enabled him to explain why light can show only transverse waves without longitudinal ones. It could be imitated by a model containing a sufficient number of gyrostats: it is not very clear from his writings whether he wanted it to be. The essential point was that he was able to assign a form to the energy that would give the right differential equations. He continually insisted on the necessity of reducing everything to the Principle of Least Action, which is out of fashion these days. But the principle has the great recommendation that when a form has once been chosen for the energy it is possible to see at a glance what is revelant; all irrelevant quantities automatically cancel. He made the outstanding discovery that a certain linear transformation of the co-ordinates and time leaves Maxwell's equations unaltered to the second order of small quantities, the transformation being that completed by Lorentz and shown to be exact. Larmor's contribution covers the whole of the experimental facts within the experimental uncertainty, and if verifiable prediction is a consideration in the assignment of proper names the transformation might well be called the Larmor-Lorentz transformation. From this result the theory of relativity sprang. Larmor was also the principal creator of classical electron theory—the electron was predicted long before Thomson observed it. In particular he gave the classical theory of the Zeeman effect.

Not many of his papers are directly astronomical or geophysical. He gave the general form of the correction of the period of the Eulerian nutation for the elasticity of the Earth, a further correction

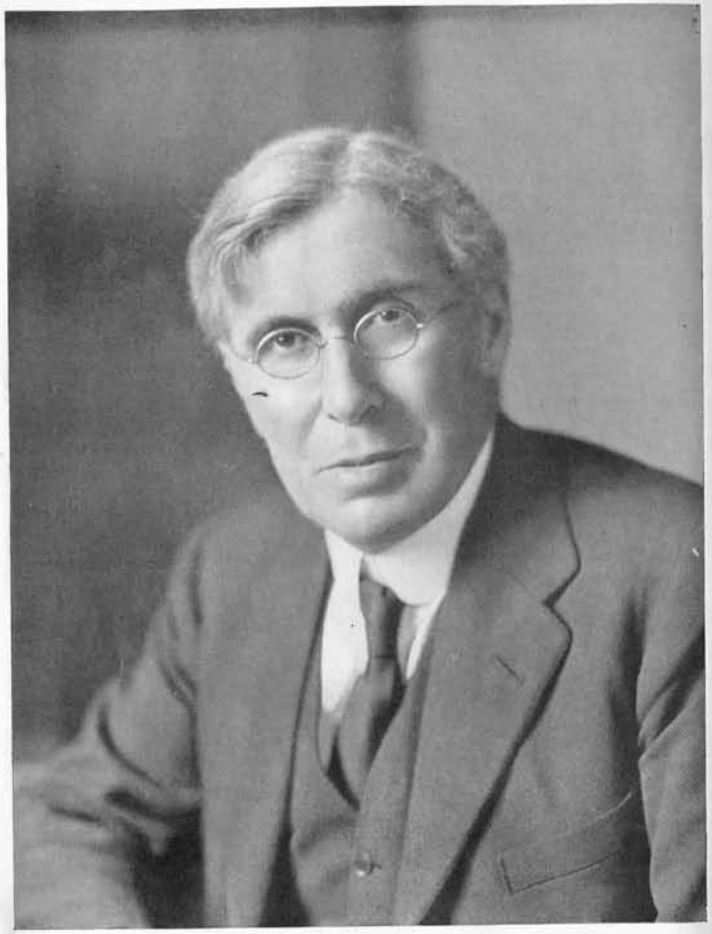
for the fluidity of the ocean, and the equations for the effects of changes of the products of inertia on the axis of instantaneous rotation. In two papers with Col. E. H. Hills (later Grove-Hills) he adopted the standpoint that the correct treatment of the problem of the variation of latitude is to use the observed displacements to calculate the changes of the direction of the axis of maximum moment of inertia with respect to the Earth's surface. In other words, instead of separating out the annual component directly from the observations by harmonic analysis, they treated all disturbances together, whether regular or irregular, by numerical differentiation of the observed displacements. The corresponding free vibration has a period of 14 months, and consequently a disturbing couple produces a much larger displacement if its period is a year than a couple of equal amplitude with a shorter period. Their treatment was equivalent to estimating the couples from the displacements, and therefore the annual terms were much less conspicuous in their results than in the original data, being comparable in magnitude with the irregular variations lasting a few months. The chief value of their work is that it showed the importance of this background of irregular variation, which is still not understood.

Larmor also offered two suggestions about the Kimura term in the variation of latitude, one that it is due to the annual melting of polar ice, the other that it is due to local refraction over the dome of the telescope.

One rather long paper, with N. Yamaga, deals with the analysis of sunspot frequencies, and maintains that a regular periodicity of 11·1 years dominated the whole record of 160 years except for a discrepant interval from 1776 to 1798. One fundamental paper showed that electric conductivity in the upper atmosphere would not account for the transmission of electric waves around the Earth, and appealed to the oscillations of free ions instead. These could produce much more reflexion with less damping.

His papers are difficult to read on account of diffuseness and prolixity of style. The same applied to his lectures, which suffered badly by comparison with those of Bromwich on similar subjects; though it is probable that Bromwich himself had been greatly inspired by Larmor, he was a far better expositor of Larmor's ideas than Larmor was. In conversation and at a committee he could be quite clear—sometimes all too clear. He dearly loved an argument, and never forgot that he came from Northern Ireland. Of his handwriting it can only be said that few people could deal with it better than the compositor who rendered 'it would be' as 't cosec C'.

He always maintained an interest in public affairs, resembling in this his greatest predecessor. He represented Cambridge University



TERROT REAVELEY GLOVER

in Parliament from 1911 to 1922, and afterwards was a frequent correspondent to *The Times*. The present writer remembers vividly his plaintive query over the Food and Drugs Act about whether there was any scientific evidence that boric acid did anybody any harm.

He was secretary of the electors to the Isaac Newton Studentship for a long period, and in that capacity his indirect influence on astronomy was much greater than appeared through his personal contributions. He was always helpful to the young research worker, in spite of his underlying belief that real science came to an end with Lord Kelvin. H. J.

TERROT REAVELEY GLOVER

(Born 23 July 1869. Died 26 May 1943.)

'Glover is dead', wrote a friend to me the other day; 'It is hard to imagine so vital a spirit and so familiar a figure no longer in Cambridge courts.' Vitality, that is certainly what comes into the mind when one thinks of T. R. G.—a large and invigorating aliveness. The outline of his life can be given simply and shortly. He was born on 23 July 1869, at Bristol, that gateway looking out upon the Western seas: small wonder that one of his great loves was for the seafaring Greeks, for travellers and story-tellers, such as Herodotus, for those brave men, whether Greek or English or Scottish, who went forth to colonize unfamiliar lands. His father, Dr Richard Glover, was for many years Baptist minister at Bristol, and 'something of a saint' (that cautious English way of expressing admiration for a godly man). His schooldays were spent at Bristol Grammar School, from which he won an Entrance Scholarship to St John's College; there he was taught by some great Classical scholars, whom he celebrates in his last book, *Cambridge Retrospect*. He carried off many prizes (the Browne Medal in 1890 and 1891, and the Porson Prize in 1891), First Classes in the Classical Tripos, and won the first Chancellor's Medal for Classics in 1892. In that year he was elected a Fellow of the College, and though he relinquished that on becoming (in 1896) Professor of Latin in Queen's University at Kingston, Canada, he was re-elected to a Fellowship on joining the teaching staff at St John's in 1901, and remained a Fellow until his death in 1943. Those five years in Canada left an indelible impression upon him; he saw and appreciated the British Empire in working, history being made under his eyes. To Canada he returned often, in visits and the renewal of contacts with friends, more often still in conversation and

lectures and writing; indeed one of his latest books (in collaboration with his friend D. D. Calvin), *A Corner of Empire*, was about that much-loved country.

Throughout his life he had something of the lively curiosity, something too of the restlessness, of the Greeks, whom he so admired. Greece, Roumania, Italy, India, Canada, the United States—he had travelled in all those countries, much further afield than falls to the lot of the average Classical don. But we are more concerned with his life in Cambridge, for his business over a period of forty years (as Classical Lecturer of the College, and University Lecturer in Ancient History) was the teaching of the literature and thought and history of Greece and Rome. He never disguised his belief that the study of the Classics was the best education possible, and was always ready to indulge in friendly banter with exponents of Engineering or of what he termed 'the Modern and Muddled Languages Tripos'. To go to him for supervision was sometimes awe-inspiring, and nearly always enjoyable; even though your composition might not be particularly good, something you said would touch him off, and at once there would be such a spate of information as made you realize that you were in the presence of a scholar, and of a widely-read and much-travelled man, who had an eye for everything. 'I shall never forget', writes a famous scholar, 'the effect of *Pericles to Philip* on me . . . or the impression created by Glover's lectures on the Peloponnesian War—and the way in which he let me prowl round among his books in his college rooms.' He did not necessarily fill you with facts; he had the greatest contempt for what he called 'spoon-feeding'; but with his pupils, by question and answer, by continual discourse (with frequent digressions), half bullying, half cajoling, he did his great work of education. Sometimes a casual encounter in the street would mean that your arm would be seized, and you would be compelled to go with him at least as far as David's, or to his house in Glisson Road, with its family of what he called 'large and rampageous children'.

For nearly twenty years he held the honourable and exacting post of Public Orator, a task over which he took endless pains; and there were days when it was injudicious to interrupt him. But on the appointed day in the Senate House his audience would relish the pungent phrases, the graceful compliments, delivered in that curiously strong and penetrating voice. The picture of a former much-loved Provost of King's 'dum redit laetus et fumifer', the motto for Sir Frederick Gowland Hopkins, 'dat vitam vitaminando', the epigram about the herring, 'harenga quidem tota nostra est', who that heard them will ever forget them or their effect? Or his confession of stupefaction when, travelling in the United States, he passed in a train through a station bearing his own name, and realized that

Glover lay 100 miles South of St Louis between Arcadia and Chloride? Or the noble panegyric upon Cambridge which he pronounced in June 1930, when welcoming the new Chancellor? He could boast, too, that during his term of office he had presented for honorary degrees, among a crowd of notabilities, several Dominion statesmen, four English Prime Ministers, two English sovereigns, four Emperors, and one god (the present Emperor of Japan).

On two occasions he occupied the responsible office of Proctor, the second coming in the difficult days after the last war, when hopes and spirits ran high, and disciplinary officers were often presented with difficult problems by the Pavement Club, or the Co-optimists, or other undergraduate bodies whose object was to make life brighter. Here, while he could be firm and unbending in the administration of University regulations (and woe betide the undergraduate who appeared wearing an ordinary hat, instead of a square, with his gown!), he also showed a large good humour and tact. One night, after a Bump Supper, a crowd of revellers was standing at the very gates of the College, and the Proctor's eagle eye observed that one member of the crew had no gown. 'This is too easy', protested the victim, 'Give me a decent start.' Solemnly Proctor and undergraduate together paced out one hundred yards, the agreed figure of 'a decent start', and at once the victim was off like an arrow from a bow, with the bulldog panting after him. 'Run, Johnny, run!' came the cry from his companions, and down Jesus Lane he sped, to reach his college safe and with his six-and-eightpence intact.

To the world outside Cambridge he was known as letter-writer, as speaker, and preacher, but perhaps best of all as author. To choose among the numerous books he wrote would be a difficult task, but perhaps one may mention here the *Virgil*, the *Jesus of History* (published in 1917), his short history of *The Ancient World*, and his translation into Latin verse of Stevenson's *Child's Garden of Verses*, for they serve to illustrate the extraordinarily wide range of his versatile genius. In his *Virgil*, 'the best single book on the poet that we possess' (as one eminent scholar pronounced), are gathered together all his love for the poet, for his poetry and his humanity, all his sensitive appreciation of words and situations, all his sudden flashes of insight. In the *Jesus of History* he at once excited some readers and shocked others by bringing out (as Seeley had done two generations before) the human personality of our Lord, in all its vividness and reality; the book had a wide sale, and passed through many editions; my own copy (I remember) was purchased in Cairo at the end of the last war. His *Ancient World* remains the best short introduction for those who wish to learn about what happened in the classical Mediterranean world, and why it is still of importance

nowadays to know about it. His translations of Stevenson, lively and charming, are full of felicitous touches, and show mastery in an art that has few practitioners now.

In letter-writing he had the most happy knack of putting on paper his immediate reactions to a topic. In the spring of 1932 *The Times* had printed an article upon the Crocodile and Crocodile Tears. On Wednesday, 24 February, readers found upon the centre page the following comment.

Hard Luck on the Crocodile

Sir,

Suffer a word for the crocodile, sadly maligned, I think, in your article to-day. I am not a crocodile myself: one of my colleagues in this University is a crocodile—he was admitted to the tribe long ago in Torres Straits. I am wholly disinterested.

You accuse the crocodile of indifference to her offspring. But the father crocodile is far from indifferent. Turn up Aelian's *Natural History*, IX, 9, and you will find that he watches his children as they creep from the egg. If the newly hatched infant does not instantly try to catch something, be it only a fly, he kills the new arrival as bastard. If, however, the newcomer at once snaps at something he is a true crocodile, a chip of the old block, and counts at once as one of the tribe. This shows, I feel, a real sense of moral responsibility. Please rectify your injustice.

Yours faithfully,

T. R. GLOVER

On other occasions, too, he appeared in the columns of *The Times*, and those who care to turn up the issue for Thursday 15 November 1934, will discover a patriotic inquiry. Having read somewhere that at one time Oxford and Cambridge men were distinguishable 'by their respective methods of arriving at the interior of an egg', Glover asked anxiously for information from the Editor so as to guide his hand aright; 'tell me, if you can, how not to open an egg like an Oxford man'. *The Times*, perhaps typically, headed this letter 'The Oxford Egg'.

His private letters to his friends were equally 'Gloverian', as witness the following, addressed to one of his travelling companions at the end of a voyage from Montreal (which was sent to the Master by Mr S. K. Ratcliffe):

'The late T. R. Glover was not perhaps known to many of our readers. Outside the English Cambridge and the American continent he was rarely to be seen, but in both of these he was a familiar figure, and in the latter he was esteemed. He was a regular contributor to the *Daily News* before it became the up-to-date organ of opinion that

modern Liberalism requires. The fundamentalists oddly enough counted him their enemy, and by apt misquotation made him more interesting than he really was. Of Highland origin, as he liked to think, he turned naturally to Canada, and his favourite travelling companion was Mr S. K. Ratcliffe, to whom he was very dear. Indeed, his last journey was made with Mr Ratcliffe, who recalls with melancholy satisfaction his friend's enthusiasm for the Firth of Clyde, which, through a cold in the head passing into the brain, carried him off on Tuesday of Easter Week at a ripe old age.'

His circle of friends was large, including men of all sorts and shades of opinion. He could sometimes offend and be offended, for he was human; but he was the most placable of men, and a laugh would often settle a dispute. For there was a vitality and richness about him that attracted and cemented friendship. He had often entertained others; perhaps one little ceremony that pleased him as much as anything was a small dinner to which he was invited, shortly after his retirement, by some of his friends. I have the menu beside me as I write, and the signatures of the company; they include F. E. Adcock, our Master, J. F. Cameron, (Sir) J. H. Clapham, A. B. Cook, G. G. Coulton, Bernard Manning, C. E. Raven and S. C. Roberts. The menu itself it would be kinder perhaps not to reproduce in these days of rationing.

Orator, writer, lecturer, interpreter of the ancient to the modern world, preacher—here was a packed and crowded life! But of all the elements in that life the most important was his religion; he gloried in the name of Christian; he was proud of being a Baptist, proud to be elected to the high position of President of the Baptist Union. As an undergraduate he had to defend both himself and his faith; he remained always a 'bonny fighter', conscious of Covenanting blood in his veins, ready both to give and receive hard knocks in argument and dispute. Yet though there might be occasional misunderstandings, a saving sense of humour and of humility prevented him from ever nursing grudges. That humility and that sense of humour he owed to his religion, and to a deep and understanding humanity; for to him Jesus Christ was the centre of history. 'Where through a nebulous philosophy men have minimised Jesus, or where, through some weakness of the human mind, they have sought the aid of others and relegated Jesus Christ to a more distant, even if a higher sphere—where, in short, Christ is not the living centre of everything, the value of the Church has declined, its life has waned. That, to my own mind, is the most striking and outstanding fact in history.' Both religious and scholarly circles are the poorer for his loss, and both will long remember his life and his works.

M. P. C.

We reproduce here, by the kind permission of Mr D. D. Calvin, a notice which he contributed to *The Queen's Review* in August 1943.

A few years ago, when 'T. R.' had been staying with me in Toronto, Norman Macdonnell telephoned, hoping to see him once more. I had to say, with regret, that he had left and was sailing that very day for England. 'What? Again!' was the reply. 'What's he always running to England for? Why doesn't he stay at home?'

A quip, if you like, but it goes much deeper than a mere quip. Glover's time at Queen's was only five years as against fifty spent at Cambridge, yet in those five years he became in a curiously real way a Canadian and a Queen's man. The sweep of the country and the vigorous climate delighted him; Lake Ontario—'The Lake'—was almost an idol. Again and again in his writings he has acknowledged the debt he owed his colleagues at Queen's; again and again he has recalled his 'second Alma Mater', set 'in a scene which Nature and History make a wonder and a delight with vast waters and heroic memories'.

Yes. As time went on Glover belonged to an increasingly wide constituency in Canada, and his rooms in 'Second Court' at St John's College were ever open to Canadians—especially Queen's folk—who sought his advice and help. But, though it is fitting that he should be remembered at Queen's as one of the most loyal and devoted friends this University has ever had, that is only one side of the man.

He was a very distinguished classical scholar, from a 'double first' in the Classical Tripos at Cambridge, 1891 and 1892 (with a Chancellor's medal), to the presidency of the Classical Association in 1937. His distinction is amply attested by his long years as Public Orator at Cambridge, by the honorary degrees conferred upon him, and by the attempts made to lure him away to other universities. His writings on the classics and on ancient history hold a sure place.

Glover was one of the great lay-preachers of Britain, and it was perhaps as preacher that he was best known in Canada in recent years. He had a gift of simplicity in preaching, and in writing upon New Testament subjects, which enabled him to speak to ordinary people without a trace of superiority.

But it was neither as scholar nor preacher, one feels, that his greatest power was shown. He was above all a teacher, from whose lips his students learned that the classics are a living literature. Latin, to him, was not a 'dead' language; he once found himself seated at dinner beside a French Roman Catholic bishop, whose English was no better than his own French—they 'got on famously with Latin'.

Thinking of Glover's versatility, it is probably fair to say that his death will sadden men in more walks of life than is commonly true in our world of specialists. For he could so present a subject that hearers and readers of vastly different capacity and education were alike made to feel that something rare and worth-while was being set before them. We have lost a great man, a man who believed passionately in Christianity and in humanistic studies, a man whose words, spoken and written, have been sown far and wide throughout the English-speaking world—and not in vain.

The following letter was addressed to the Editors of *The Eagle* from the late Harris Rackham, of Christ's College.

Sir,

T. R. Glover

An extract from a private letter may be worth placing in your next issue:

'Very many thanks for sending me Glover's last book, *Cambridge Retrospect*. I was very sad when I heard that he had died. He was certainly the greatest of all those who taught me, whether at school or at Cambridge, and the one whom I loved and honoured most.... In spite of his stature he had a wonderful way of making himself the personal friend of all his pupils, even the most junior.'

I am,
Sir,
Your obedient servant,

DOMINAE MARGARITAE ALUMNUS

FRANCIS HENRY COLSON

FRANCIS HENRY COLSON, formerly Fellow of St John's, who died at his home in Cambridge on 11 June 1943, was a son of Canon Charles Colson and was born at Great Hormead, Hertfordshire, 24 April 1857. His father, also at one time a Fellow of the College, was the founder of the Hughes Exhibition in Ecclesiastical History at St John's in memory of Henry Hunter Hughes. It is interesting to note that father and son between them spanned 125 years.

Francis Colson was educated at Haileybury College and came into residence with a Somerset (Open) Exhibition in 1876. He was elected a Scholar at the end of his second year, was highly distinguished in the examination for the Chancellor's Classical Medals and graduated as fourth Classic in 1880. The following year he was elected a Fellow and, after teaching at Clifton and Bradford, became Headmaster of Plymouth College in 1889, a post which he held for

twenty years. In 1882 he married Maud, daughter of the Very Reverend Principal Tulloch, of St Andrews, who died, after a long illness, in 1940.

Of his work and influence on his pupils, Sir Alexander Maxwell, an old boy of Plymouth College, writes: 'Mr Colson will be remembered not only for his valuable contribution to scholarship, but also as a teacher who exercised a profound influence on his pupils. His erudition was never dry; it was full of sap and gusto and often found such homely and humorous expression that even schoolboys could appreciate its fine flavour. Perhaps Mr Colson's outstanding power lay in the penetrating honesty of his thinking. His fierce scorn of shams and his contempt for all woolly statements made a lasting impression on all his pupils. Whatever subject he taught became an instrument for developing in the student a capacity to detect sophistry. To learn Latin or Greek grammar accurately and to construe an ancient author intelligently were first steps towards recognising inaccuracies, half-truths, exaggerations, confusions of thought and the deceptive power of words in contemporary speakers and writers. "Some people", he said in the course of a Scripture lesson, "think it blasphemous to make sense of the Bible, but that is a mistake"; and his imperious insistence that his pupils should "make sense" of everything they read was an unforgettable lesson. With this acutely critical faculty there were combined a natural goodness and a reverence for whatsoever things are lovely. His Sunday evening addresses, which in language of extreme simplicity—with no hint of rhetoric and no trace of the didactic—conveyed to his boyish audience the beauty of holiness, will not be forgotten by many who feel for their old Headmaster deep respect, gratitude and affection.'

After his retirement from his headmastership, Colson returned to Cambridge, where he passed the remainder of his life, residing at 23 Grange Road. Always an active man, he continued in his retirement both his classical studies and his interest in educational matters. He served on the Cambridgeshire Education Committee from 1919 to 1939 and was for many years a Governor of the Perse School, and in this period of his life his more important classical works were produced. He always followed with a keen interest the affairs of his college, to which he was deeply attached. In politics he was a strong Liberal, though he took no active part. An interesting and energetic talker, he preserved his powers of mind to the end. His opinions and his attachments were strong, but he was not without a sense of humour and a fondness for an anecdote, and with memories of old Cambridge days and people he enlivened many a talk with old friends. He gave a true service to learning and upheld its highest standards.

E. A. B.

Of Mr Colson's contribution to Classical Studies, Professor Anderson writes:

In his earlier years Colson produced some unpretentious but very helpful schoolbooks. On returning to Cambridge he set his hand to larger tasks. Important papers in the *Classical Review*, the *Classical Quarterly* and the *Journal of Theological Studies* showed clearly that Quintilian and Philo had long been claiming his attention. In 1924 his edition of the First Book of Quintilian removed a standing reproach from classical scholarship. Hitherto no adequate commentary on this extremely important Book had existed. Colson's edition has admirably supplied this long-felt want. His notes, learned but never diffuse, bear the stamp of rigorous scholarship, sound judgment and honest thinking. His invaluable illustrative matter, the result of many years' concentrated reading, has done once for all what had never been successfully attempted before. The introduction is full of good things, including salutary corrections of some current opinions which go beyond the evidence. The sections on the influence of Quintilian in later ages are more learned and more thorough than any previous treatment of the subject. Altogether, this edition makes a contribution of the highest importance to the study and the understanding of Quintilian.

Between the edition of Quintilian and Colson's other great work, a little book entitled *The Week* formed a pleasant interlude. The evolution of the familiar seven-day cycle, with its quaint names for the individual days, makes a pretty problem. Colson's entertaining book is intended especially for the general reader, but in its own way it is no less scholarly than his more ambitious works.

Soon after this came the most formidable task of all, the Loeb Philo. Another ex-Fellow of St John's, Canon G. H. Whitaker, had undertaken to collaborate in this work. He died in May, 1930, while Vol. III was in preparation, leaving behind him some materials for the next two volumes. Colson, already advanced in years, took the whole burden upon his own shoulders, and the succeeding volumes came out with a regularity quite wonderful when one considers the immense labour of all kinds which they entailed. At the time of his death he had completed the tenth and last volume except for the index. It would ill befit one who is no authority on Philo to assess this great achievement; one can only say that it has been enthusiastically acclaimed by the best judges and that even a non-specialist cannot fail to be struck by the varied learning shown in the introductions and notes, the happy handling of textual problems, and the triumphant skill with which formidable linguistic difficulties are surmounted.

It is all too easy to underestimate the amount of thought and patient research which work like Colson's requires. He preferred hard

and unspectacular fields where the labourers had been comparatively few and where much remained to be done. He never spared himself, and he enjoyed it all. He was truly a singlehearted scholar, and a very modest one.

W. B. A.

Professor A. D. Nock writes: It is given to few scholars to leave such a monument of selfless, unpretentious scholarship as the text and translation of Philo which F. H. Colson began with his friend G. H. Whitaker and carried on unaided. Philo is an author whom many people have to use from time to time and few read connectedly. He is very difficult as well as very important. Colson's translation and short notes represent a superb piece of interpretation which shirks none of the difficulties, and his version has an elegance which is surprising. By nature almost unduly modest, he nevertheless advances not a few emendations all of which are good and some of which, if made on a more commonly read author, would have evoked widespread admiration. Colson's college and university and country have reason to be proud of his Philo, and his other work has deserved and won high praise; for instance, Martin P. Nilsson, the greatest living authority on time reckoning, reviewed *The Week* in flattering terms.

A. D. N.

HERBERT LEONARD OFFLEY GARRETT

Herbert Leonard Offley Garrett died in Cambridge on 6 December 1941. He was born at 5 Park Side, Cambridge on 16 June 1881, son of the well-known Dr G. M. Garrett, organist of St John's College and of the University. He was educated at Charterhouse (1894–9) and at St John's College, where he joined as a sizar in 1899 and graduated in 1902. Another link with St John's was the marriage of his sister to E. E. Sikes, Fellow, Tutor, and later President of the College. He passed into the Colonial Educational Service and was posted to Queen's College, Hong Kong, from 1904–12, then transferred to India. He was professor of history at the Government College, Lahore, where, after an interlude on military duty in 1917, he became Vice-Principal in 1919, and Principal in 1927, succeeding A. S. Hemmy, another Johnian (B.A. 1896). He retired in 1936 with the C.I.E. and was elected Esquire Bedell of Cambridge University that autumn, a ceremonial post for which he was eminently suited by physique, training and temperament; a year later he also obtained the newly created appointment of Supervisor of Probationers for the Indian Civil Service. In 1922 he married Sibyl, daughter of the late H. H. Young of Normanton, and had two daughters.

Garrett was a man of all-round ability. He was a successful and popular head of a college of a thousand students, Commanding Officer of the University Training Corps, a Syndic of the Punjab University and Keeper of the Government Records. All this must have entailed a constant and heavy strain but outside the academic sphere he also played a full part in the life of the Punjab capital. He was Chairman of the Punjab Club for a number of years, a prominent Freemason who attained Grand Lodge rank and a member of the Cathedral Vestry and Diocesan Finance Committee. He had won cups for running at Hong Kong and so it was therefore fitting that in 1923 he should become the first President of the Punjab Olympic Association, a team which included several players from the Government College, Lahore, and which won for India the hockey event at the Olympic Games of 1936. He wrote numerous articles on historical subjects, produced a new edition of Cunningham's *History of the Sikhs*, and also of C. Grey's *European Adventurers of Northern India*, in which his share can be identified by his vigorous and effective style. The results of his research in the Punjab Government Record Room are embodied in a valuable series of monographs: an outstanding contribution from his own pen is the account of the trial of Bahadur Shah, the last Mughal emperor.

R. B. W.

FRANK JAMES ALLEN

Dr Frank James Allen (B.A. 1879) died at Letchworth 28 December 1942, aged 88. The following 'Outline of my life' was found among his papers:

'I was born on 17 April 1854, the eldest child of Mr and Mrs James Allen, of Park House, Shepton Mallet. From a very early age I had a passion for every kind of natural science, including science as applied in music, architecture, painting and philology. I intended to follow music as a profession, and at Taunton School I prepared myself for this by studying harmony and musical composition, also the German, and Italian languages. As an alternative profession I considered architecture, and interested myself in the mechanics of building. But my parents would not hear of music and I doubted my ability in architecture. Ultimately I accepted medicine on account of the scope which it offered for the application of science. After a preliminary course at the Royal College of Chemistry (now the Royal College of Science), I went up to St John's College, Cambridge, and later to St George's Hospital. At Cambridge I took a first class in the Natural Sciences Tripos with physiology as principal subject, and obtained the qualifications M.R.C.S. in 1882, L.R.C.P. in 1883,

M.B. in 1885 and M.D. in 1895. It was not long before I realised that the general result of medical treatment is to lower the standard of human health by defeating the elimination of the unfit, and this deprived me of the joy that a medical man should have in his work.

'I was intensely attracted by physiology, especially in its biochemical aspect. I returned to the Physiological Laboratory at Cambridge in 1885 for research, and in 1887 I was appointed Professor of Physiology at Mason College, Birmingham, which chair I held until 1899. Afterwards I spent most of my life in Cambridge, and for 17 years, until 1930, I was secretary of the Cambridge Antiquarian Society.

'All through my life I have continued the earnest study of music and architecture, but in a life busy with other affairs I have not thought it wise to attempt any large musical composition. My endeavour had been to produce ideal settings of the best lyrics in our language. Only a few of my songs have been published: the best of them are in a book *Dainty Ditties, or Nursery Rhymes with New Tunes* (Novello). Some of my hymn tunes are in use in churches.

'I have published many papers on architectural subjects, especially in the Proceedings of the Somersetshire Archaeological and Natural History Societies, and the Proceedings of the Cambridge Antiquarian Society.

'I have also produced a monograph on *The Great Church Towers of England*, published by the Cambridge University Press, 1932.

'I have given much attention to the application of photography in the study of nature and art; and whatever success I have achieved in this way, I owe to my previous training in drawing from nature, and in chemistry and optics.'

By his will, Dr Allen left to the College £100 to be applied 'preferably in promoting the study of the fine arts, music, architecture, sculpture, painting or literature, but not in founding a prize unless no better use can be found for the legacy'. He also left to the College his musical compositions, published and unpublished, with the message: 'I hope that St John's College will allow a place, a small but not dishonourable one, in its Library for this small collection, as a relic of a former devoted alumnus.'

SIR GEORGE WILLIAM AGNEW, Bart. (B.A. 1874), of the firm of artdealers, printsellers and publishers, of Manchester and Old Bond Street, died 19 December 1941 at Thurston Grange, Bury St Edmunds, aged 89.

SIR JAMES ALLEN, G.C.M.G., K.C.B. (B.A. 1878), High Commissioner for New Zealand in London from 1920 to 1926, died 28 July 1942, aged 87. He had been a member of the Legislative

Council of New Zealand since 1927, and he had served as Minister of Defence, Minister of Finance and Education, and Minister of External Affairs and Finance.

EDMUND JOHN AUSTIN (B.A. 1886), rector of Ashtead, Surrey, since 1928, died at Bournemouth 8 August 1942, aged 80.

GERARD GIBSON BAILY (LL.B. 1895), solicitor, died at Derby 23 February 1942, aged 67.

ABU BAKAR BIN TAMIN (B.A. 1942), Queen's Scholar from the Federated Malay States, died at Ringwood 11 December 1942, aged 22.

JOHN BAMBER (B.A. 1890), rector of St Mary, Radcliffe, Lancashire, from 1918 to 1936, died 27 March 1942, aged 74.

HAROLD STEVENS BASDEN (*Matric.* 1884), M.R.C.S., L.R.C.P., late of Brooke, Norfolk, died at Taunton 20 August 1942, aged 76.

KINGSLEY DARWIN BATES (B.A. 1922) died in India 16 June 1942, aged 41.

LAWRENCE AMBROSE BODY (B.A. 1895), classical lecturer at St Chad's College, Durham, from 1907 to 1939, died at Falmouth 20 January 1943, aged 69.

LESLIE HAROLD BOWEN (B.A. 1938) died 23 October 1942 at the West Suffolk General Hospital, Bury St Edmunds, from injuries received in a motor-car accident, aged 25.

GEORGE BURNSIDE BUCHANAN (B.A. 1890), M.B., C.M. Glasgow, died 12 February 1943 at St Albans, aged 74.

JAMES HARTLEY BUTTERWORTH (B.A. 1886), barrister at law, died 1 January 1943 at Kendal, aged 77.

HILDRED BERTRAM CARLILL (formerly CARLYLL) (B.A. 1903), late Senior physician at the Westminster Hospital, specialist in nervous diseases, died at Tavistock 16 April 1942, aged 60.

HENRY THOMAS JOHN COGGIN (B.A. 1876), clerk in Holy Orders, headmaster of Woodlands Preparatory School, Folkestone, from 1898 to 1907, died at Folkestone 1 February 1942, aged 90.

SIR JEREMIAH COLMAN, Bart. (B.A. 1882), chairman of J. and J. Colman, Limited, mustard manufacturers, died at Gatton Park, Surrey, 16 January 1942, aged 82. He was President of the Johnian Society in 1926, and contributed towards the cost of the College Squash Racquets Courts.

CHARLES PAGE CORY (B.A. 1882), Archdeacon of Rangoon from 1907 to 1917, died 7 November 1942, aged 81.

JAMES HAROLD EDWARD CREES (B.A. 1904), headmaster of the Cathedral School, Hereford, from 1919 to 1940, died 29 December 1941 at Much Birch, Hereford, aged 59.

JOHN WILLIAM CROOKES (*Matric.* 1875) died 6 February 1942, aged 86. He was formerly in the Army, but was ordained in 1885 and held various cures in Kent, retiring from the vicarage of Allington in 1923.

JOHN PEDROSO D'ALBUQUERQUE (B.A. 1889), late Director of Science and Agriculture, Barbados, died 20 December 1941 at Ilfracombe, aged 75.

JOHN GUY DOLLMAN (B.A. 1908), of the British Museum (Natural History), an authority on big game animals, died 21 March 1942, aged 55.

SIR PATRICK JAMES FAGAN (B.A. 1887), K.C.I.E., C.S.I., retired Indian Civil Servant, died 26 June 1942 at a Hampstead nursing home, aged 76.

ARCHIBALD WALTER FAWKES (B.A. 1877), K.C., formerly a Judge of the Supreme Court of South Africa, died 19 December 1941 at Englefield Green, Surrey, aged 86.

ARTHUR MOTTRAM COX FIELD (*Matric.* 1891), poultry farmer, died 8 November 1942, aged 70.

SIR ALFRED WILLIAM FLUX (B.A. 1887), statistician and economist, died in Denmark, where he had made his home, 16 July 1942, aged 75. He was bracketed Senior Wrangler in 1887 and was a Fellow of the College from 1889 to 1895. He became Stanley Jeavons Professor of Political Economy at Owens College, Manchester, in 1898, and William Dow Professor at McGill University, Montreal, in 1901; here he remained until 1908. From 1918 to 1932 he was assistant secretary to the Statistics Department of the Board of Trade.

ARTHUR LINZEE GILES (B.A. 1892), vicar of Malvern from 1913 to 1924, died 13 July 1942 at Exmouth, aged 77.

JAMES JOHN GILLESPIE (B.A. 1892), chairman of Moss Empires, died 20 January 1942 at Morpeth, Northumberland, aged 69. He was President of the Johnian Society in 1937.

HERBERT GODWIN (B.A. 1888), rector of Norton-in-Hales, Shropshire, from 1897 to 1904, died at Cranleigh, Surrey, 27 June 1942, aged 79.

ERNEST LAKE LE FLEMING FREELAND GORST (B.A. 1893), vicar of Bickley, Cheshire, from 1899 to 1935, canon emeritus of Chester Cathedral, died 25 January 1942 at Christleton, Cheshire, aged 70.

ALFRED GRIFFITHS (B.A. 1878), vicar of Northmoor, Oxfordshire, from 1915 to 1924, died at Southsea 24 May 1942, aged 89.

PERCY BARNES HAIGH (B.A. 1900), retired Indian Civil Servant, died at Bracknell, Berkshire, 26 February 1942, aged 63.

HENRY ARTHUR HALL (B.A. 1884), vicar of Holy Trinity, Eltham, since 1907, died at the Vicarage 12 February 1942, aged 79.

JOHN RUSSELL AYSCOGHE HOCKIN (B.A. 1928) died 20 August 1942 at Little Treglyn, St Minver, Cornwall, aged 40.

JOHN CHRISTOPHER IRVING (B.A. 1910), journalist, died at Lincoln 25 November 1941, aged 53.

JAMES KINTON JACQUES (B.A. 1887), perpetual curate of Carlton on Trent from 1908 to 1937, died at St Annes-on-Sea, Lancashire, 2 December 1942, aged 77.

ERNEST WILLIAM JOHNSON (B.A. 1904), formerly mathematical master at the Central High School, Manchester, died in May 1943, aged 61.

HENRY THOMAS KEMP (B.A. 1880), K.C., Recorder of Hull from 1917 to 1928, Bencher of the Middle Temple, died at Tunbridge Wells 12 January 1943, aged 90.

JOHN VERNON THOMAS LANDER (B.A. 1878), solicitor, sometime coroner for the South Bradford and Brimstree Shifnal District of Shropshire, died at Wellington, Shropshire, 22 December 1942, aged 87.

JAMES LEIGHTON (B.A. 1880), rector of Linton-in-Craven with Hebden, Yorkshire, from 1911 to 1927, died 13 August 1942, aged 85.

STANLEY PERRY LODGE (B.A. 1939) was killed in a flying accident 20 July 1940.

JOHN FRANCIS LOMAX (B.A. 1884), who had retired from the Nigerian Government Service, died 13 February 1942 at Kingston-on-Thames, aged 79.

AARON LEWIS MANBY (B.A. 1880), vicar of Startforth, Yorkshire, from 1904 to 1923, died 28 January 1942, aged 86.

GILBERT DENNIS HEBER MARDON (B.A. 1933), late a private in the Black Watch, died 18 June 1942, aged 32.

FRANCIS ALLEYNE MARR (*Matric.* 1913), son of Professor J. E. Marr, geologist to the Burmah Oil Company since 1919, was lost at sea on his way back to England, through enemy action, November 1942, aged 50.

ERNEST WILLIAM GURNEY MASTERMAN (*Matric.* 1898), medical missionary in Palestine until 1914, and again after his retirement from the charge of St Giles Hospital, Camberwell in 1934, died in Jerusalem in April 1943, aged 76.

SIR THOMAS HUDSON MIDDLETON (M.A. 1902), K.C.I.E., K.B.E., C.B., F.R.S., chairman of the Agricultural Research Council from 1938, died at Twickenham 14 May 1943, aged 79. He became a member of the College on his election in 1902 to the Drapers Professorship of Agriculture in the University of Cambridge.

WILLIAM LOMBARD MURPHY (B.A. 1899), formerly in practice as a specialist in throat and nose surgery at Merrion Square, Dublin, but since his father's death chairman of the Independent Newspapers, Limited, of Dublin, died at Dartry, Dublin, 9 January 1943, aged 66.

JAMES OSBORNE (B.A. 1877), rector of Holton-le-Beckering, Lincolnshire, since 1891, died in hospital at Lincoln, after an accident, 30 September 1942, aged 89.

JOHN JOSEPH BEAUCHAMP PALMER (B.A. 1888), formerly principal of Cambridge Nicholson Institution, Kottayam, Travancore, from 1891 to 1919, archdeacon of Kottayam from 1906 to 1921, and vicar of Mudford, Somerset, since 1921, died 16 February 1942, aged 76.

FRANK WHITLEY PARKER (B.A. 1887), rector of Twyford with Guist, Norfolk, since 1907, died at the vicarage, Guist, 1 April 1942, aged 79.

JOHN HENRY PAYNE (B.A. 1881), solicitor, died 24 January 1942 at his home, Victoria Park, Manchester, aged 83.

THOMAS HENRY GIBBONS PEARSON (*Matric.* 1871) died at Bedford 5 April 1942, aged 88.

WILLIAM RICHMOND PHILLIPS (B.A. 1884), clerk in Holy Orders, for 33 years headmaster of South Lodge Preparatory School, Lowestoft, died at Bath 18 November 1942, aged 82.

ALFRED HENRY RICHARDSON (B.A. 1907), F.R.C.S., of Harley Street, died in London 20 August 1942, aged 58.

ARTHUR HERBERT WENTWORTH RIDSDALE (B.A. 1890), vicar of Ampfield, Romsey, Hampshire, since 1937, died 21 March 1942, aged 74.

HAROLD WARLOW ROBERTS (B.A. 1929), in business with the firm of Messrs Joseph Heap and Sons, Limited, flour and rice millers, Liverpool, died 27 March 1942, aged 34.

ANDREW JOHN ROBERTSON (B.A. 1890), rector of New Alresford, Hampshire, honorary canon of Winchester, died 3 January 1942 at Alresford Rectory, aged 76. He was St John's College Missioner and vicar of the Lady Margaret Church, Walworth, from 1899 to 1905, when he was presented by the College to the rectory of Freshwater, Isle of Wight. He left in 1917 to become vicar of Romsey, moving to New Alresford in 1925.

WILLIAM ARTHUR DOUGLAS RUDGE (B.A. 1899), science master at Rugby School from 1916 to 1930, died at Rugby 14 February 1942, aged 78. He had been a master at Plymouth College before coming up to St John's, and from 1907 to 1916 he was professor of physics at University College, Bloemfontein, South Africa.

ALGERNON CHARLES DUDLEY RYDER (B.A. 1870), rector of Maresfield, Sussex, from 1902 until shortly before his death, died 19 January 1943, aged 95.

SELWYN EDWARD SEARS (B.A. 1912), rector of Meppershall, Bedfordshire, died in Hitchin Hospital 22 May 1942, aged 52.

ANTHONY WILKINSON SEWART (B.A. 1880), rector of Brignall, Yorkshire, died at Barnard Castle 26 April 1943, aged 85.

WALTER HORTON SPRAGGE formerly SPRAGG (B.A. 1889), a master at the City of London School from 1891 to 1931, died 31 July 1942, aged 76.

HERBERT STUART (B.A. 1912), rector of St Fillan's Church, Comrie, Perthshire, died at the Rectory 30 January 1943, aged 53.

ARTHUR JAMES KAYSS THOMPSON (B.A. 1894), chaplain to the British communities in North Chile from 1936, formerly rector of the College living of Rampisham, was lost at sea 3 May 1943, when the ship in which he was returning to England was sunk by enemy action.

LAWRENCE BERKLEY TILLARD (B.A. 1909), barrister at law, died in London 12 February 1943, aged 54.

HUGH TINSLEY (*Matric.* 1888) died at Manor House, Bunbury, Cheshire, 28 April 1943, aged 74.

THOMAS WAITE (B.A. 1892), barrister at law, died at Warwick Lodge, Redhill, 17 September 1942, aged 73.

GEORGE ERNEST WARREN (*Matric.* 1890), D.S.O., late Major, The Border Regiment, died 4 May 1942, aged 71.

HERBERT ALBAN WILLIAMS (B.A. 1878), rector of Sheering, Essex, from 1900 to 1936, died at St Albans 15 February 1943, aged 88. He was the last survivor of the first Oxford and Cambridge Rugby Football match.

HAROLD TEMPLE WILLS (B.A. 1884), for 23 years London Missionary Society missionary in Travancore, died at Brixham 6 February 1942, aged 79.

GEOFFREY ERSKINE WOODMANSEY (B.A. 1913), rector of Walcot, Bath, and formerly vicar of St Mark, Barrow-in-Furness, was killed in an air raid 27 April 1942, aged 50.

FRANK FOISTER, L.M.B.C. boatman for 52 years, died at Addenbrooke's Hospital, Cambridge, 21 May 1942, aged 68. The following appreciation appeared in *The Cambridge Daily News:*

To generations of rowing men, in the Lady Margaret Boat Club and on the whole Camside, 'Frank' was a familiar and beloved figure.

Beginning as a boy at Logan's boathouse, he looked after the red-oared crews there until the new boathouse below Victoria Bridge was completed 40 years ago, when he became definitely attached to the Lady Margaret Club. Here day by day he said 'Hold on to your oars, gentlemen, please', as he gently pushed the eights out into mid-stream.

His craftsmanship as a boat-builder and repairer was of a high order and many times he got the Club out of a difficulty by his ingenuity and skill. He was a skilful coach, too, especially to aspirants for the Colquhoun Sculls and to crews in the Town Regatta. For many years he could be relied upon to give a good start to the eights in the Lents and Mays.

His retirement after 50 years' service was a great loss to his club. His death will be mourned as that of one who was a real friend to rowing men and to rowing.

GEORGE ARTHUR SUTHERLAND (B.A. 1913), of Dalton Hall, Manchester, to MARY SANDERS LAKEMAN, of Elsternwick, Lenzie—on 10 September 1943, at Union Church, Lenzie, Dumbartonshire.

RONALD FRANCIS TUCKETT (B.A. 1938) to ELIZABETH MARY FRITH —on 21 March 1944, at Rogate, Sussex.

WILLIAM AYLMER LAWS TURNER (B.A. 1935) to PHYLLIS MARY DWELLY, only daughter of the late R. Dwelly, and of Mrs A. F. Pearce, of Luton—on 19 June 1943, in Liverpool Cathedral.

LEONARD JOYNSON WESSON (*Matric.* 1907), captain, Intelligence Corps, to ALIETTE EL SAWY, only daughter of the late Ahmed Bey El Sawy—on 9 May 1943, at G.H.Q., Cairo, and the Church of St Michael and All Angels, Heliopolis.

RICHARD WILLIAM RUSSELL WILSON (B.A. 1926) to NANCY OPENSHAW COUPE, younger daughter of the Rev. Thomas Openshaw Coupe, of Stockton Rectory, Shropshire—on 29 December 1943, at St Chad's Church, Stockton.

OBITUARY*

HENRY FRASER HOWARD

SIR HENRY HOWARD, Fellow and Senior Bursar of St John's College, died on 19 October 1943 after a very brief illness. At the College audit meeting only four days earlier he seemed in his usual health, and commented with pride and pleasure on the completion of twenty years of service in his office.

Henry Fraser Howard, born in 1874, was the son of Henry Howard, a business man and financial journalist. From Aldenham School he entered Trinity Hall as an Exhibitioner in 1893 and became a Scholar in the following year; in 1895 he took a I. i. in the Classical Tripos and graduated B.A. in 1897. In 1896 he rowed bow in the 1st May boat when it was head of the river. He also won the mile for Cambridge *v.* Oxford in 1896 and 1897.

In 1896 he passed high in the examination for the Indian Civil Service and went out to India towards the end of 1897, serving first in Bengal as assistant magistrate and collector, and superintendent of gazetteer revision. As his special liking for and ability in finance were recognised, the work to which he was assigned became more and more specialised in that line; we may note his appointments as under-secretary to the Government of India, Finance Department, 1904;

* We are indebted to the Editor of *The Cambridge Review* for permission to reprint matter that was first published in it.—EDITORS.

HENRY FRASER HOWARD
(1936)

officiating secretary to the same Department, after a spell in the Calcutta Customs, 1912; Controller of Currency, 1914; secretary to the Government of India, Finance Department, 1917; temporary member of the Governor-General's Council, 1919. In 1920 he came home to take the post of Controller of Finance at the India Office, and in 1922, when the Retrenchment Committee under Lord Inchcape was formed, the Chairman found in Howard, to quote the writer of *The Times* obituary, 'a secretary after his own heart'. Publications by Howard during this period include a *Handbook of Criminal Procedure*, *India and the Gold Standard*, and articles in the *Imperial Gazetteer*. The value of his work in India was recognised by the award of the C.I.E. in 1913 and the C.S.I. in 1919; in 1923 he was created K.C.I.E.

In 1913 Howard had married Mabel Rosa, daughter of Mr R. J. Roney-Dougal, by whom he had two sons and three daughters. She died in 1923, while he was absent in India on the work of the Inchcape Committee, and Sir Henry was then desirous of finding work at home so as to be able to live with his children. At the same time St John's College was in search of a bursar to replace J. G. Leathem, who had died in March; and approaches were made to Sir Henry which happily led to his acceptance of the bursarship and appointment to that office in October. From that time onward, with a break of some months in 1931, when he was called on to return to the East to represent Burma in the discussions as to financial arrangements after the intended separation from India, his whole work lay in Cambridge and his whole heart was with it. Some of the brief obituaries published in the daily press almost give the impression that this later period was little more than an unimportant sequel to Howard's work in India, but no greater mistake could be made.

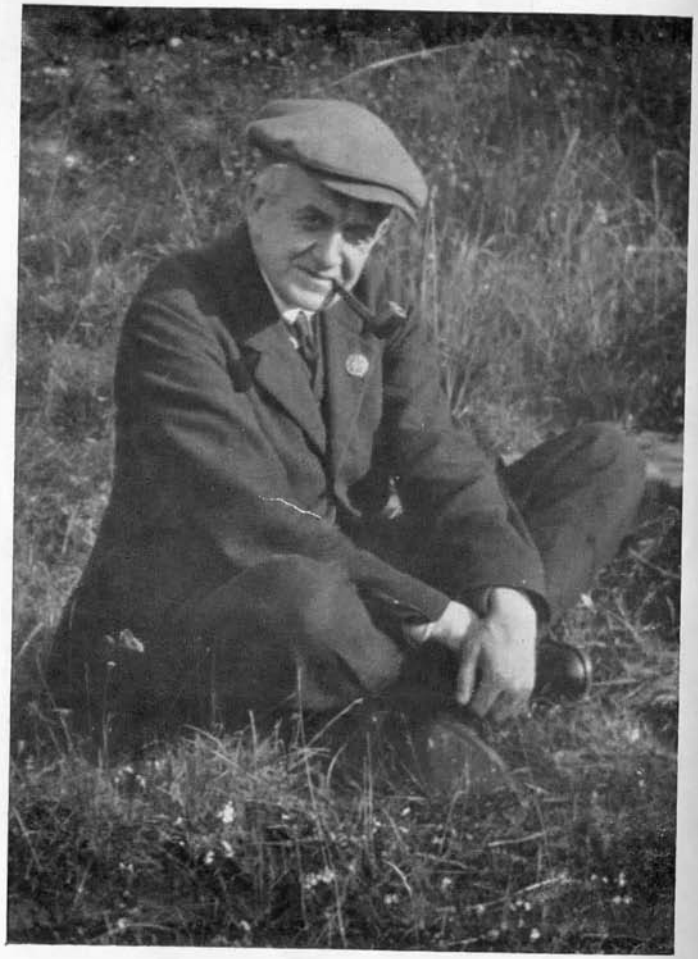
He will long be remembered as one of the great Senior Bursars of the College. When the new statutes were under consideration his wide knowledge of affairs and administrative experience were invaluable. He had to guide our finances through a period of years in which the College had to meet heavy expenditure on the repair of the old buildings, and on various improvements and additions culminating in the erection of the new buildings on the Bridge Street frontage. Yet, as every bursar must desire to do, he left the College more prosperous financially than he found it—a result in happy contrast with the sequels of some earlier building operations. He delighted in the human side of his work. Tenants in the neighbourhood of Cambridge were visited as opportunity offered or as need arose, estates at greater distances every year or two; letters received since his death show the genuine friendliness of the relations he maintained. Like every true enthusiast he was only too pleased to talk to others

about his work; how deep was his interest in every side of it is evidenced by the laborious hours spent on the compilation of his history of the *Finances of St John's College* (C.U.P. 1935). His balanced and judicious counsel will be very greatly missed.

But Howard's work soon extended to other fields, outside the College. From 1925 he was a member of the Assessment Committee of the Borough and a Conservator of the River Cam, holding the chairmanship of the Conservancy from 1932 until he ceased to be a member at the end of 1942. In 1930 he became a member of the Borough Council, on various committees of which he also served, in 1933 a member of the Financial Board of the University, and in 1941 one of Storey's Trustees and a Trustee of Cambridge municipal charities. One of the useful but onerous duties that he voluntarily undertook and carried out for many years was the auditing of the accounts of the Papworth Hospital Guild. Many a man of his standing might have handed over the more mechanical part of the work to a clerk, but not so Howard: every item—and there were hundreds of small subscriptions—was checked and ticked by his own hand, and his advice was always willingly given on any point of doubt or difficulty. For his work on the Cam Conservancy he had quite a special affection, related perhaps to his love for rowing; and the annual inspection of the river under his chairmanship was, I gather, something to be remembered.

Howard had indeed a deep humanity that delighted not only in such social occasions, in tenants' dinners, and in visits to tenants—it is characteristic that amongst his memoranda on visits will be found notes on the tenants' children and their progress—but also in association with undergraduates, and indeed with men in all lines of life. For many years he acted as coach to the Lady Margaret Boat Club, until that activity became rather too strenuous for his advancing years, but his interest in rowing never waned and he continued to accompany the crews to Henley. Under his coaching they went head in 1926 for the first time for 54 years, and in 1925, 1930 and 1933 won the Ladies' Plate at Henley. For some time he was Treasurer to the University Boat Club, and from 1924 to the time of his death President of the Cambridgeshire Rowing Association—and no mere official President, but the friend and 'elder brother' of officers and members, regarded by them with both affection and respect. Indeed, he was a keen supporter of all forms of sport, and held that members of the University had a duty in the matter, to help and encourage those less fortunate than themselves.

With his strong sense of duty, strong sense of justice, and strong common sense, Howard, for all his friendliness, could not suffer fools gladly—such men seldom can; and wrath lay in wait for any who



HAROLD HULME BRINDLEY
at Wicken Fen (about 1933)

offended against his judgment as to what was right, true or fitting. But peace be to his kindly, hospitable, humorous soul! He was indeed a great bursar, but he was great also in much else. Many a friend will miss him in college, in university, and far beyond their bounds, and each will treasure different memories. Many Fellows will recall those pleasant, hospitable, evenings in his rooms after the annual audit meeting. My own happiest memories are of the days in August 1933, when we went together on a tour of College estates through the Midlands and Yorkshire and so across to Cumberland; and especially of the evenings on that tour when, Howard's notes written up and his work finished, we had long talks on the day's doings and all things else over a smoke and a pint. G. U. Y.

HAROLD HULME BRINDLEY

HAROLD HULME BRINDLEY, born 17 June 1865, was the son of J. B. Brindley, of Gray's Inn, Recorder of Hanley, and of Mary, daughter of Joshua Brough, J.P., of Leek. He came up from Mill Hill School to the College in 1884 and took his degree in the Natural Sciences Tripos, his principal subject being Zoology. He contributed to the study of variation in the Mollusca and of the Orthoptera group of insects, and of the common earwig, while several of his most interesting papers were those on the march of the larvae of *Cnethocampa pinovora*. He was a demonstrator in the Zoological Laboratory and, with the rapid growth of the Medical School at that time, was chiefly occupied in teaching. In this he was a great success. Many generations of medical students will remember his coaching rooms over the Hawks Club, and later in St John's, crowded with pictures of engines, ships, heraldic shields, flags and bric-à-brac of all kinds. He was fond of the sea and deeply interested in shipping. He had sailing boats of his own, and was often one of the crew in William Hardy's sea-going yachts. He was an original member of the Cambridge University Cruising Club, founded in 1893, and a member of the Royal Harwich Yacht Club.

He studied ships represented in ancient church windows, in mural paintings and on bench-ends, and in particular on early seals, realising that from them something might be learnt of the construction of ships before there were any published treatises on ship-building. He was aware of the difficulty of drawing conclusions from them owing to the little knowledge some artists evidently had of the vessels they illustrated and to the conventionality of the drawing. By this study Brindley rose to distinction as a nautical archaeologist. When the

Society for Nautical Research was founded in 1910 he was an original member, and during the period 1910–34 he contributed some forty articles to that Society's quarterly publication, *The Mariner's Mirror*.

He pointed out that, as the thirteenth, fourteenth and fifteenth centuries were a period of many important changes in ship construction, it was fortunate that during that period a ship was commonly borne on seals attached to charters acquired by towns on or near the sea-board.

From 1911 onwards there is a series of papers by Brindley discussing the significance of stem-ropes passed two or three times over the gunwales at the stem head. He found them in a ship in a window of Malvern Abbey dated 1440–60, on seals dating from 1391 to 1500, on the gold noble of Edward III, in miniatures and in the Bayeux tapestry. After much discussion Brindley's opinion prevailed that stem-ropes were a girdling necessary to secure the fore-stage for fighting, which survived in representations of ships long after they were necessary. He described the two methods of adding and reducing sail in use in the Middle Ages. The bonnets were strips of canvas which could be laced to the foot or top of the sail. He found the earliest reference to them in the inventory of ships of the Royal Navy dated 1338, and he showed they were in use in the Navy as late as 1720. The earliest representation of reef points, the other method of reducing sail, is in the twelfth-century seal of La Rochelle. They occur in the seals of Dublin, Hastings, Rye and many others, in the windows of Thaxted Church, Essex, and in several village churches of the Lower Seine. He found them also in the miniatures of the Harleian MS. of 1399, and in other miniatures. From this study the curious fact emerged that for more than a century, from 1528 to 1665, although many more representations of ships are found in that period than in earlier centuries, none shows reef-points, so probably bonnets only were in use all that time.

He pointed out that the sail of the early one-masted ship was spread by a yard, and the earliest picture known showing a fore-and-aft sprit sail dates from 1420. He showed that the early bowsprit as seen in the thirteenth-century Southampton seal and in church windows was for carrying grapnel, and was not used for canvas until the sprit sail appeared in the fifteenth century. He was helped in this study of early shipping by the long series of Paris seals extending from the thirteenth century to our own time. The ship represented shows frequent changes in the hull and rigging, so that there is a record of evolution through six centuries. He obtained casts of nineteen of these seals, which are now in the Maritime Museum at Greenwich.

Brindley showed that the introduction of the stern-post rudder transformed the double-ended hull of similar form into the bow and

stern of different form, that the rudder was in use before 1200, the date of the Ipswich seal which clearly shows how it was slung by gudgeon irons and pintles, and that it was an English invention. Many mediaeval seals from the twelfth century to the fourteenth century show the earlier method of steering by an oar with some sort of attachment to the hull, usually on the starboard quarter. He maintained, against considerable criticism, that the earliest representation of this quarter rudder is on the font of Winchester Cathedral, *c.* 1150–1200.

The account given by Maud Haviland, a member of the 1914 Czaplicka anthropological expedition to Siberia, of the boats used by the aboriginal people aroused Brindley's interest. He read the description of these river crafts given by every traveller to Siberia he could hear of, and the outcome was an important comprehensive account of the various types of boats, from the primitive dug-out made by burning out a tree trunk to canoes of bark or skin, sewn to wood or bone frames.

Another of his studies was to trace the evolution of the simple raft of reeds as used on Lake Chad and the White Nile to the highest stage of reed-bundle sailing craft in the Old World in use on Lake Tana in Abyssinia. He pointed out that reed-bundle boats are found among primitive people in all continents, and traced their development in the New World through some twenty types till their highest form is seen in the large sailing balsa of Lake Titicaca in Peru.

Brindley also wrote an account of the boats of the Lesser Antilles from observations made by himself during a trip in the winter of 1905–6. Dug-outs are the surviving primitive boats in these islands.

Brindley was a Fellow of St John's College and for a period of nine years was Steward of the College. He was President of the Cambridge Antiquarian Society, a Councillor of the Navy Records Society, for several periods a Vice-President of the Society for Nautical Research, and in 1935 Head of the Seal Room of the National Maritime Museum, Greenwich. By 1938 he had completed the Catalogue of the Impressions and Casts of Seals and other objects of art there preserved. This catalogue gathers together Brindley's most important work. In addition he presented to the Museum some 200 impressions of seals and coins which he had collected during many years.

A man of many friends, a wide reader of biography, travel and fiction, he had a tenacious memory and his endless telling of tales of the oddities of the people he had met will long be remembered in Hall and Combination Room.

He married first Gertrude Roberta Froggatt, daughter of Robert Brindley, of Alstonefield, Staffs., who died in 1921, leaving a son and daughter; and, secondly, Maud Doris Haviland, the well-known

ornithologist and Fellow of Newnham College, who died in April 1941. There was a daughter of this marriage. L. E. S.

Something should be said of the last years of his life, which he spent as a resident in College. To the younger generation of Fellows he had become almost a legend in his lifetime—Brindley, who knew the history of shipping from dug-outs and catamarans to the *Cutty-Sark*, who had at his fingers' ends the working time-tables of the British railways, who could cap any quotation from Dickens or supply the name of any of his most minor characters, who included City churches, stained-glass windows, seal-stones and old silver in the astonishing range of his knowledge. Was it not Brindley who was reputed to have driven a passenger train (during the General Strike of 1926) at express speed from Liverpool and, when congratulated upon his fast time, replied 'Dammit, I've only just discovered how the brake works!'? He was the hero of many exploits, some true, some doubtless legendary, but legends do not accrete save to a remarkable and strong personality, and that Brindley undoubtedly was.

For many years, long before he finally took up residence in College, he supervised the work of men taking Zoology in his rooms on B staircase, First Court. Here, although he could prove a formidable figure to those whom he considered idle or inattentive, hurling them out of his door, to the keen student he was all kindness and helpfulness. The equipment of the room was somehow characteristic of the man, stacks of books, strange objects, bundles of files; some files that contained notes for Freshmen were distinguishable by a green paper circle stuck upon them, symbolic (as he would explain) both of the greenness and emptiness of the Freshman's mind. His teaching was always linked with human interest: parasitology led him naturally to review the deaths of various kings of England, and an apparently unpromising topic would suddenly become alive. His pupils knew that every Sunday afternoon he and his wife would be at home at their house on Madingley Road; always there would be interesting conversation and reminiscence, or notable figures to meet and to talk with, always generous hospitality.

He was a born *raconteur*, telling and embellishing a story in a fashion that was all his own; it was an artistic treat to listen to him as on some Sunday night, over port in the Combination Room, he developed his theme, guiding it dexterously through a series of digressions to a triumphant conclusion. His varied knowledge was always at the service of his friends, and his kindness and promptness were continually being exercised: you might have asked his opinion on some small point; the next morning there would be an envelope lying on your table, addressed in his large and vigorous handwriting, containing all the relevant passages, with exact references, that you could desire. With all his knowledge he never thrust his views forward in such a way as to dominate a conversation. In the last two or three years he was physically weak and frail, yet he never complained, never claimed the privileges of age and infirmity, indeed would often reject proffers of help, and struggle on magnificently alone.

WILLIAM WHITEMAN CARLTON TOPLEY

William Whiteman Carlton Topley died in London on 21 January 1944. He was born in 1886, and came from the City of London School to the College in 1904, where he gained a first class in the Natural Sciences Tripos. In 1909 he qualified M.R.C.S., L.R.C.P., from St Thomas's Hospital, and took his M.D. in 1918: in the same year he was elected a Fellow of the Royal College of Physicians, of which in 1910 he had been Murchison Scholar. During the 1914–18 war while serving as a captain in the R.A.M.C. he was appointed bacteriologist to the British Sanitary Commission in Serbia, where typhus fever was raging. On his return he devoted himself to teaching and research, and began his experimental studies of the spread of a natural disease of mice among a herd of normal animals. The results of these early experiments were described by him in the Gouldstonian lecture of the Royal College of Physicians in 1919, and he continued the work while professor of bacteriology at the University of Manchester, 1922–27, and later, 1927–41, as director of bacteriology and immunology at the London School of Hygiene and Tropical Medicine. The fundamental importance of his studies was recognized in 1930 by his election to the Royal Society. He was a member of the Medical Research Council from 1938 to 1941, and served on numerous other bodies, including the councils of the Royal Society and of the Royal College of Physicians, and the animal disease committee of the Agricultural Research Council. The country is indebted to him in the present war for anticipating the major problems of epidemic disease that might arise from air bombardment and indiscriminate evacuation. Mainly at his insistence the War Cabinet set up the Emergency Public Health Laboratory Service, which thanks to his advice and guidance had become well established by 1941 under the Medical Research Council. He then accepted appointment as secretary of the Agricultural Research Council, and right up to the time of his death was continuing to render signal service both to the nation and to individual research workers in this sphere also. The College appointed him Linacre Lecturer in 1940 and elected him an Honorary Fellow in 1942.

[The Editors regret that owing to the death of a contributor they are unable to include a full appreciation of Topley's life and work in the present number of *The Eagle*.]

GEOFFREY THOMAS BENNETT

GEOFFREY THOMAS BENNETT died in Cambridge on 11 October, 1943. Born in London 30 June 1868 he went to University College School, and entered the College as a Scholar in 1887. He was Senior Wrangler in 1890, was awarded the first Smith's Prize in 1892, and in the same year elected to a Fellowship. He did not, however, remain long with the society, since Emmanuel elected him to a Lectureship and a Fellowship in 1893. Here he spent the rest of his life, ultimately becoming Senior Fellow, and presided at the Fellows' Table for many years with distinction and courtesy.

In Mathematics he ranged over a wide field, his publications covering algebra, theory of numbers, geometry and mechanisms and dynamics. He was elected a Fellow of the Royal Society in 1914. During the war of 1914–18 he turned his talents to the solution of practical problems, for example in early anti-aircraft work, where he invented a device for determining the height of an attacking plane, and later he worked for the Admiralty on the development of the gyro-compass. Throughout his life he maintained a great interest in athletics; he rode on three occasions in the fifty-mile annual road race of the University Bicycle Club, and also won a medal for riding 100 miles in one day; his return from Newmarket with first news of the races was eagerly awaited by watchers on the road. He derived great pleasure, too, from music, being himself a good pianist; he lectured occasionally for the University Musical Society, and was frequent in his attendance at concerts.

JOHN ALEXANDER (*Matric.* 1869), major, King's Dragoon Guards (retired), died 17 June 1944 at Milford, co. Carlow, aged 93. He served in the Zulu War of 1879, and was present at the capture of Cetewayo.

ROBERT PICKERING ASHE (B.A. 1880), one of the earliest missionaries to Uganda, died at Croydon 25 May 1944, aged 86.

GEORGE BARR (B.A. 1877), vicar of Milton-next-Gravesend, 1883–97, rector of Longhope 1897–1917, and vicar of Cropredy 1917–28, died 18 March 1944 at Bathampton, aged 92.

FRANCIS GEORGE BIRD (B.A. 1928), housemaster of St Paul's School, died 15 July 1943, aged 37.

JOSEPH ERNEST BOYT (B.A. 1898), headmaster of King Edward's School, Stourbridge, from 1905 to 1934, died at West Hagley, Worcestershire, 10 May 1944, aged 75.

PERCY HOUGHTON BROWN (B.A. 1889), LL.D., barrister at law, of East Knoyle, Salisbury, died 19 March 1944, aged 76.

ARTHUR FREDERICK CAHUSAC (B.A. 1884), formerly of Tokyo, Japan, died 20 June 1943 at Pymble, Australia, aged 81.

CHRISTOPHER ANTHONY CARTER (B.A. 1876), vicar of St Titus, Liverpool, 1896–1918, died 15 May 1943, aged 89.

JAMES MCKEEN CATTELL (*Matric.*, as Fellow Commoner, 1887), formerly Professor of Psychology at Columbia University, New York, editor of *Science* for 50 years, died in January 1944, at Lancaster, Pennsylvania, U.S.A., aged 83.

JOHN PENN COCKERTON (*Matric.* 1931) died 12 May 1944, aged 31.

FREDERICK GEORGE COLE (B.A. 1895), headmaster of Thetford Grammar School from 1909 to 1930, died 23 June 1944 at Bawtry, Yorkshire, aged 76. Six brothers and one son have also been members of the College.

SIR HARRIE EDWARD SPILLER CORDEAUX, K.C.M.G. (B.A. 1892), Governor and Commander-in-Chief of the Bahama Islands from 1921 to 1926, died 2 July 1943 at 43 Lowndes Square, aged 72.

EDWARD ROWE MORES CORNELIUS RATCLIFFE COUSINS (*Matric.* 1884) died 11 February 1944 at Prittlewell, Essex, aged 83.

JAMES DONALD MAXWELL CURRIE (B.A. 1923), of Currie Line, Limited, Edinburgh, died 27 November 1943 from an accident, aged 42.

JOHN PAUL DE CASTRO (B.A. 1898), sometime principal of the School of Mines, Redruth, Cornwall, a frequent contributor to *Notes and Queries*, died 18 February 1944 at Richmond, aged 69.

WILLIAM WALTER STRONG FLEET (B.A. 1906), vicar of Marchwood, Hampshire, 1921–40, died 23 January 1944, aged 62. He left to the College, subject to life interests, a third part of his residuary estate.

JAMES GIBSON (B.A. 1890), formerly Fellow, Emeritus Professor of Logic and Philosophy, University College of North Wales, Bangor, died 1 August 1943 at Bangor, aged 78.

EDWIN HERBERT GOMES (B.A. 1896), for seventeen years missionary in Sarawak for the Society for the Propagation of the Gospel in Foreign Parts, died 3 March 1944 at Upper Norwood, aged 81.

JOHN EDWARD GREEN (B.A. 1890), vicar of Lower Guiting, Gloucestershire, from 1895 to 1904, died at Broughton, near Chester, 12 December 1943, aged 81. Mr Green was a Mus.Doc. and LL.B. of Trinity College, Dublin.

THOMAS THEODORE GROOM (B.A. 1889), lecturer in geology in the University of Birmingham from 1906 to 1914, died 26 March 1943 in Oxford, aged 79.

WILLIAM JOHN HAWKES (B.A. 1903), formerly headmaster of Woodrough School, Moseley, Birmingham, died 12 December 1943 at Oxford, aged 61.

ARTHUR HAWKINS (B.A. 1881), vicar of Leysters, Herefordshire, 1886–1918, rector of Easton Hastings, Berkshire, 1918–30, died 10 February 1944 at Malvern, aged 85.

EDMUND HUGH HODGKINSON (B.A. 1882), son of Sir George Edmund Hodgkinson, died 16 October 1943 at Lewes, Sussex, aged 85.

ARTHUR RALPH INGRAM (B.A. 1899), rector of Marston Mortaine, Bedfordshire, and formerly College Missioner in Walworth, died 28 December 1943 at Harpenden, aged 68.

THOMAS JOHN JEHU (B.A. 1898), Regius Professor of Geology and Mineralogy in the University of Edinburgh from 1914 to 1943, died 18 July 1943 at Edinburgh, aged 72.

HERBERT RICHES JENKINS (B.A. 1919) died 8 February 1944 at Treorchy, Glamorganshire, aged 63.

RICHARD SYDNEY JENKINS (B.A. 1902), M.R.C.S., L.R.C.P., in practice at Richmond, Surrey, died in 1943, aged 63.

WILLIAM WALTER KELLAND (B.A. 1885), headmaster of Oakfield School, Crouch End, London, N., from 1896 to 1911, died 8 December 1943, aged 80.

PHILIP ARTHUR KINGSFORD (B.A. 1893), late rector of Dallington, Sussex, died 14 January 1944, at Morven, Jarvis Brook, Sussex, aged 73.

HENRY WYNYARD KNIGHT (B.A. 1887), rector of Irby on Humber, canon of Lincoln, died December 1943, aged 80, as the result of falling out of an apple tree in the preceding autumn.

WALTER ROBERT LEWIS (B.A. 1893), sometime headmaster of Hampstead Preparatory School, died 15 December 1943, aged 73.

JOHN HENRY LLOYD (B.A. 1877), of the firm of Stewarts and Lloyds, tube manufacturers, Birmingham, Lord Mayor of Birmingham in 1901, died 18 January 1944 at Edgbaston Grove, Birmingham, aged 88.

HERBERT ENGLAND LONG (B.A. 1893), sometime headmaster of Sowerby Bridge Secondary School, Yorkshire, died 23 September 1943, aged 71.

ANDREW WILLIAM ROSE MCKELLAR (B.A. 1922) died 5 March 1944, aged 43.

THOMAS CLARK STREET MACKLEM (B.A. 1885), Provost of Trinity College, Toronto, from 1900 to 1921, died at Toronto 18 June 1944, aged 81.

CECIL MARTIN (B.A. 1887), rector of Holford, Somerset, from 1896 to 1904, died 30 January 1944 at Chilcombe, Bicknoller, Taunton, aged 78.

WILLIAM PETER MAYOR (B.A. 1882), rector of Whitburn, co. Durham, from 1923 to 1936, died 27 January 1944 at Felixstowe, aged 82.

HUGH ALEXANDER MERRIMAN (LL.B. 1894), solicitor, died 17 March 1944 at Abney, Worplesdon, Surrey, aged 70.

CHARLES MOORE (B.A. 1892), chaplain and instructor-commander in the Royal Navy from 1894 to 1922, vicar of Bexley, Kent, died 11 December 1943 at the Vicarage, aged 74.

WILLIAM ROBERT MOORE (B.A. 1880), barrister at law, died 21 February 1944 at Exmouth, aged 90.

THOMAS ALLEN MOXON (B.A. 1899), rector of Blymhill, Shropshire, and prebendary of Lichfield Cathedral, formerly headmaster of Denstone College, died 15 September 1943 at Blymhill, aged 65.

NEVILLE GEORGE PARMENTER (*Matric.* 1897) died in 1943, aged 64.

ARTHUR HILL KELVIN PETRIE (Ph.D. 1929), plant physiologist, Waite Agricultural Research Institute, University of Adelaide, South Australia, died January 1942, aged 38.

WILLIAM SLYMAN PICKEN (B.A. 1885), rector of St Martin-by-Looe, Cornwall, from 1905 to 1937, died at the Rectory 4 October 1943, aged 79.

ROBERT MARTIN POPE (B.A. 1887), Wesleyan minister, died 29 May 1944 at Lymington, Hampshire, aged 79.

STEFAN REDLICH (*Matric.* 1899), of the London Stock Exchange, died 30 January 1944 at Hove, Sussex, aged 66.

ARTHUR GODFREY ROBY (B.A. 1884), K.C., son of Henry John Roby (B.A. 1853), Honorary Fellow of the College, died 15 April 1944 in London, aged 81.

ALBERT STANLEY ROSCAMP (B.A. 1898), formerly vicar of St Nicholas, Wallasey, and canon of Chester, died 8 November 1943, aged 66.

HERBERT CECIL SANDALL (B.A. 1902), rector of Great Hormead, Hertfordshire, died 8 March 1944, aged 63.

WILLIAM JAMES VICTOR STEAD (B.A. 1907), rector of Murston, Kent, died 5 October 1943, aged 65.

NOEL PARRY SYMONDS (B.A. 1886), mathematical master at Bedford School from 1886 to 1933, died 31 December 1943 at Bedford, aged 80. He rowed in the Lady Margaret First May Boat in 1884, 1885 and 1886, and obtained his blue in 1885, rowing twice against Oxford. In 1888 he won the Silver Goblets at Henley, partnered by P. C. Buck. Four sons have been members of the College.

ARTHUR JAMES TAIT (B.A. 1894), residentiary canon of Peterborough Cathedral, Principal of Ridley Hall, Cambridge, from 1907 to 1927, died 3 April 1944 at Peterborough, aged 71.

ARTHUR THOMAS TALLENT (LL.B. 1889), solicitor, died 12 April 1944 at Hampstead, aged 75.

ROBERT NIEMANN THAINE (B.A. 1897), C.M.G., formerly Ceylon Civil Service, died 11 July 1943, aged 68.

HENRY ARTHUR THOMAS (B.A. 1882), solicitor, of Cheltenham, died in 1943, aged 85. He left £10,000 to the College to found a Classical Scholarship.

THOMAS BERNARD VINYCOMB (*Matric.* 1903), of Point Cottage, Rottingdean, Sussex, died 23 June 1943, aged 64.

ARCHIBALD GALBRAITH WALKER (B.A. 1903), member of the Institute of Civil Engineers, a managing director of Walker Brothers, Limited, Pagefield Iron Works, Wigan, died 24 September 1943 at Lathom, Lancashire, aged 61.

RICHARD VICTOR WARD (B.A. 1884), assistant master at Wycliffe College, Stonehouse, Gloucestershire for 50 years, died 3 May 1944 at Stroud Hospital, aged 81.

HENRY SAMUEL WARE (B.A. 1886), medical practitioner, of Worthing, died 3 February 1944, aged 79.

JOHN ANTHONY CROSBY WARREN (B.A. 1934), test pilot for the Gloster Aircraft Company, was killed accidentally while flying 27 April 1944, aged 33.

GERARD WILLIAM WILLIAMS (*Matric.* 1898), D.S.O., major, Royal Engineers, died 25 February 1944, aged 65. He went to South Africa in 1901 with the Loyal Suffolk Hussars, and stayed in the country, becoming a mining engineer. At the outbreak of war in 1914 he returned to England and obtained a commission in the Royal Engineers, serving in France as signals officer. In 1919 he went back to Africa and worked as a consultant mining engineer in Nigeria, East Africa, and the Belgian Congo.

FRANK ELLIS WOODHEAD (*Matric.* 1888), a director of the *Huddersfield Examiner*, died 25 August 1943 at Huddersfield, aged 75.

ROLL OF HONOUR

GERARD BRUCE ARMSTRONG (*Matric.* 1941), second lieutenant, Royal Armoured Corps (King's Dragoon Guards), killed in action in Italy, February 1944.

IAN AITKEN BANSALL (admitted 1939, but did not come into residence), lieutenant, Durham Light Infantry, killed in action in June 1944.

JOHN STUART BARBER (admitted 1940, but did not come into residence), flying-officer, R.A.F.V.R., missing since October 1943, presumed killed.

JOHN PHILIP BLAKE (B.A. 1939), M.C., captain, Royal Marine Commando, killed in action in Italy in June 1944.

GEORGE CHARLES MONTAGUE MAJOR CAVE (*Matric.* 1939), lieutenant, Devonshire Regiment and Commandos, killed in action in Sicily 14 July 1943.

PHILIP JOHNSON DRAPER (*Matric.* 1940), captain, Royal Engineers, killed in action in Normandy, 6 June 1944.

JOHN DAVID GWYN (B.A. 1942), lieutenant, Welch Regiment, killed in Italy 2 December 1943.

OBITUARY

HUMPHRY DAVY ROLLESTON

ONE evening early in October 1883 two rather shy freshmen met in the first court and asked each other the proper procedure for entering Hall, so 'new' were they. Thus started the friendship which only ended more than 60 years later when they died within a few weeks of each other. Each was destined to bring distinction to our College, for one was Arnold Chaplin who became the learned Harveian Librarian at the Royal College of Physicians; the other was Humphry Rolleston.

Humphry Davy Rolleston was born at Oxford on 21 June 1862, the eldest son of George Rolleston, F.R.S., Linacre Professor of Anatomy and Physiology in the University, and great-nephew on his mother's side of Sir Humphry Davy, P.R.S. At Marlborough he displayed much prowess on the football field but so little in the classroom that his father decided a University education would be wasted on him, and sent him to St Bartholomew's Hospital to become qualified in the easiest manner. But his teachers there thought otherwise and advised him to go to Cambridge, which he accordingly did, being admitted pensioner at this College on 5 October 1883, under W. E. Heitland. Rolleston himself confessed that he was backward at school and even in his first year as an undergraduate. Then one day he awoke 'consumed with a passion for knowledge' which never left him. He attributed this to some endocrine gland hitherto dormant coming suddenly into action. Which renders the perspicacity of his Bart's advisers all the more meritorious.

At the end of his second year he was elected Scholar when he attained a first class in Part I of the Natural Sciences Tripos. In 1886 he was placed in the first class of Part II for human anatomy with physiology. He became junior demonstrator in physiology and in 1887 demonstrator in pathology. Here in conjunction with Professor C. S. Roy he undertook research work on the mechanism of the heart and was elected to a Fellowship in 1889. Meanwhile he had become qualified, and proceeded to the degree of M.D. in 1891. Two years later he became an examiner for the Cambridge M.B. and was elected F.R.C.P. in 1894, delivering the Goulstonian Lectures the following year. He chose for his subject The Suprarenal Glands and, at a time when they were becoming regarded as adjuvant excretory organs, maintained on clinical grounds that the symptoms of Addison's disease implied an 'atony', as he expressed it, due to the loss of some unrecognised factor. His acumen was confirmed later in the same year when Schäfer and Oliver prepared an active extract from these glands, from which adrenaline was isolated a few years later. This was his pioneer work in endocrinology, a subject in which he always retained his interest.

There were many aspirants then waiting for vacancies on the staff of Bart's and Rolleston wisely decided to avail himself of the opportunity of joining the staff of St George's Hospital. In earlier years there he devoted himself largely to the teaching of pathology, in which he proved himself highly successful. One of his students who afterwards became surgeon to St George's Hospital wrote of that phase as follows: 'His methods were gentle, as he was himself in all his ways, but they were none the less inspiring. Under his guidance the recognition of tissue under the microscope, instead of being a rather dull affair, became an exciting adventure. His own reputation as a pathologist became so great that his opinion on a difficult section was widely sought and his verdict upon it accepted as final without demur.' He also became a member of the staff of the Metropolitan Hospital and of the Victoria Hospital for Children at Chelsea, to which latter Hospital he long remained attached. A rapid succession of vacancies placed him on the Senior Staff of St George's Hospital at the unusually early age of thirty-five. When everything seemed in his favour there came a temporary set-back, for he was threatened with lung trouble and in 1901 went to S. Africa as consulting physician to the Imperial Yeomanry Hospital at Pretoria during the latter half of the S. African campaign, with fortunate effects on his health. His earliest editorial enterprise appeared as three handsome volumes recording the work of the Imperial Yeomanry Hospitals. With these it became clear that the literary side of medicine made a special appeal to him; indeed his knowledge of medical literature was almost unique. His labours in producing the second edition of Allbutt's *System of Medicine* which appeared under their joint names are well known and widely appreciated. Another important and perhaps his most original work was his book on *Diseases of the Liver and Gall-bladder*.

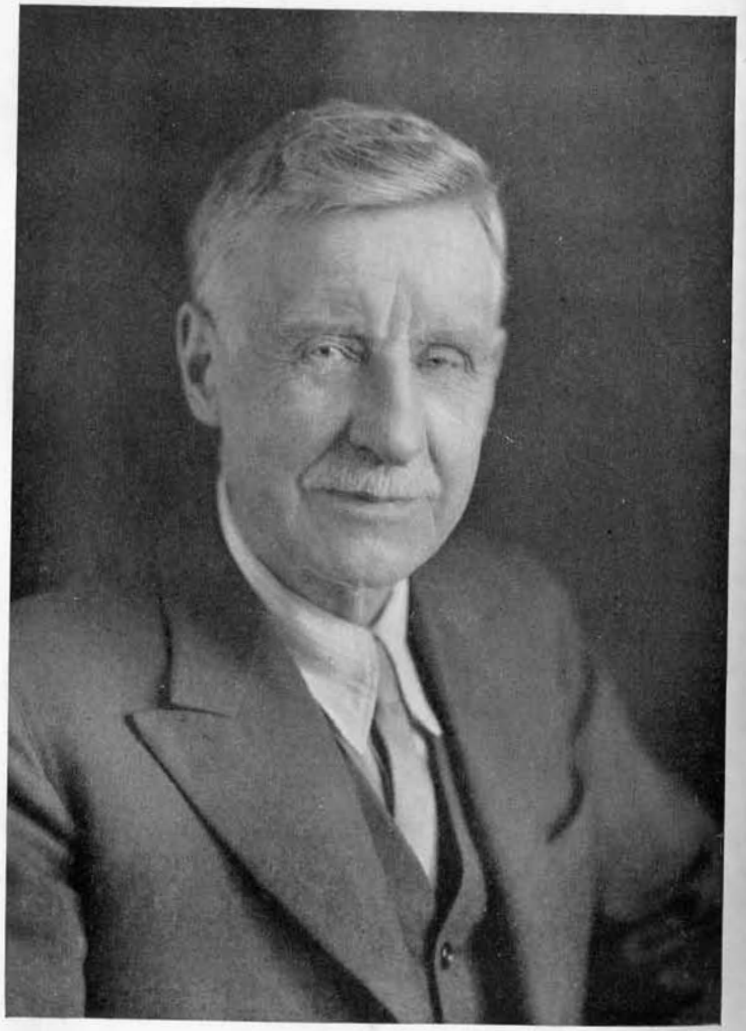
The drawback to early promotion to the Senior Staff of his Hospital was that under the twenty-year rule in force there he was due to resign at 55, a prospect very distasteful to him. But before that evil day arrived the last war found him a Surgeon-Rear-Admiral in the Navy, a position he filled with distinction and to the great pleasure of his colleagues. Indeed, it was not likely that a man of his ability and character would be left unemployed and, on his relinquishing Naval rank with the honour of a K.C.B., he became President of the Royal Society of Medicine. Then in 1922 he was elected President of the Royal College of Physicians and discharged

the responsibilities of that distinguished office with conspicuous urbanity and dignity. During his tenure of office he was created a Baronet, in 1924. In 1925, on the death of Sir Clifford Allbutt, he was appointed Regius Professor of Physic, as had been confidently anticipated. Indeed, any other appointment at that time would have come as a disappointment to the profession. It is of interest that the only other man to hold both these offices was Francis Glisson in the seventeenth century.

Among his many activities while he was at Cambridge he followed his predecessor in interesting himself in Varrier-Jones' work at Papworth, becoming president of the Village Settlement there, work in which he had the inestimable advantage, here as elsewhere, of Lady Rolleston's sympathetic insight and practical co-operation. He also placed all medical graduates of Cambridge under a debt of gratitude by his *Cambridge Medical History*, published in 1932, which bears the mark of the careful research so characteristic of him and which is full of interest. In this book, among other things, he rescued from oblivion the great services of John Haviland, Fellow of this College, who held the Regius Chair from 1817 to 1851, and who laid the foundations of the School which was later to achieve such success. He also wrote a full-length biography of Sir Clifford Allbutt.

Rolleston used to say that one of the results of the retiring age, enforced by the new statutes, would be that Emeritus Professors would live on in Cambridge *watching* their successors. This he was determined not to do, retiring to Haslemere where he continued an active literary career until the last few months of his life. To this the *British Encyclopaedia of Medical Practice* and the *Practitioner*, to which he more than restored a prestige that had begun to fade, bear ample testimony. He was certainly a leading authority on the presentation of medical articles in clear and polished prose. There were two aspects of his literary work: first a scrupulous exactitude which made him an ideal editor, though a terror to a contributor careless of his references; and secondly, a wider outlook to include such studies as the changes in the incidence of disease, the history of endocrinology, idiosyncrasy and the medical aspects of old age (which seemed to have an almost painful interest for him). Reference should be made to his minute and delicate calligraphy; his friends jestingly told him that the greater he became, the smaller his handwriting.

In this personal tribute it is not necessary to detail all the honours which were showered upon him. The list of his presidencies has been called 'a formidable one', as indeed is the list of his honorary degrees. He was Harveian Orator at the College of Physicians and Linacre Lecturer here. In 1923 he was appointed Physician-in-Ordinary to King George V, and with Lord Dawson and other



LEWIS ERLE SHORE

specialists he had a time of intense anxiety during the grave illness of the King in 1928. On the recovery of the Royal patient Rolleston received the G.C.V.O. He much appreciated his election into an honorary fellowship of our College, to which he always remained a devoted *alumnus*, and his name will now appear on our list of benefactors.

In 1894 he married Miss Lisette Eile Ogilvie, thus beginning what has been described an ideally happy partnership, which reached its fiftieth anniversary a few months before his death. The tragedy of their lives was the death of their two sons, one of whom was killed in Flanders in 1915, and the other in quelling a native riot in Zanzibar in 1936.

Rolleston's outstanding quality was a sterling integrity. A delicately sensitive sense of honour entered into all his words and deeds. Modest, patient, always courteous if a trifle aloof, his kindness and encouragement to his juniors was inexhaustible. Self-disciplined, he was happily at home in the disciplined service of the Royal Navy. A man of peace, he disliked controversy and detested intrigue. His unfailing respect for the personality of others sometimes gave an impression of timidity which was illusory, for where a matter of principle was involved he could be adamant. He had a keen sense of humour which expressed itself in a quaint, whimsical smile when amused. Though an academic physician he had great wisdom in consultation and the great gift of restoring the patient's confidence. Rolleston's chief recreation was lawn tennis which he continued to play with zest until he was over 70, enjoying it most as an interlude between spells of hard work. For such a public figure he was a retiring man. He refused to give an Inaugural Lecture when he became Regius Professor, and it is typical of this and of his consideration for others that he left instructions there should be no memorial service for him. But his best memorial is in the minds of the profession he served so well and himself adorned.

WALTER LANGDON-BROWN

LEWIS ERLE SHORE

DR SHORE, formerly University Lecturer and Fellow and Junior Bursar of St John's, died after a short illness on 27 July 1944. For over 40 years he had been a member of the staff of the Physiological Laboratory, for he became demonstrator to Michael Foster in 1887 and continued lecturing for several years after Langley's death in 1927. He was born on 5 July 1863, second son of T. W. Shore, F.G.S., and was educated at Southampton Grammar School and

Hartley College before coming to St John's. After gaining a first class in both parts of the Natural Sciences Tripos in 1884 and 1885 he entered St Bartholomew's Hospital, where he was clerk to the redoubtable Dr Samuel Gee. After graduating in medicine he returned to Cambridge and was soon after elected to a University demonstratorship and to a fellowship at St John's. Those were years of very active development both for the science of physiology and for the Cambridge school. Shore himself went to Breslau for post-graduate work and in those days a visit to a German laboratory was a normal part of the training of a physiologist: but the school which grew up under Michael Foster was soon to gain an international reputation of its own, and by 1914 Langley had a staff which numbered eight fellows of the Royal Society, each pre-eminent in his special field of research. There were no large research teams or elaborate programmes; indeed, there was very little in the way of equipment or assistance, but nowhere can there have been more inspiration to scientific work.

In this band of specialists Shore fitted admirably as an all-round teacher and a colleague whose good nature could never be shaken. He had a wide knowledge of physiology; and his own research work, mainly on peptones, was not at all negligible, but teaching was his chief concern. He knew how to arrest the attention of his audience by occasional touches of the dramatic; he took great pains to keep his lectures up to date and they were always clear and accurate. His lectures were greatly appreciated, but many generations of medical students will remember him principally as a demonstrator who was always ready to help them and was never impatient or discourteous. The shyest undergraduate could approach such a friendly person and would be made to feel that his questions deserved serious consideration. With his colleagues he was equally friendly and appreciative and to the end of his life he preserved his enthusiasm for the progress of physiology in general and the achievements of the Cambridge school in particular: in fact, his last illness cut short a book he was planning on the history of the laboratory.

During the last war he acted as neurologist to the 1st Eastern General Hospital. Besides this he was for 30 years Junior Bursar of St John's, winning the same regard and showing the same care with any work to which he set his hand. His period of office covered the time when medieval buildings had to be submitted to the electrician and the plumber, and the College was fortunate in having a man of Shore's artistic feeling and conservative temperament to control the development of its fabric.

He married in 1908 Agatha Catherine, daughter of R. Gresley Hall, and had one daughter and one son. E. D. ADRIAN

Dr W. L. H. Duckworth writes:

These notes relate to an acquaintance which lasted from 1890 to 1944. During that period Dr Shore showed wonderfully little evidence of the lapse of time. His physique, his manner and his mental activity seemed equally defiant and indestructible.

As a medical student, my chief recollections are naturally of the years 1890–4, and my memory is materially aided by references to my physiological note-books of those years.

Thus I renew the sight of Dr Shore demonstrating the nature and mysteries of the 'buffy coat' displayed in a long glass cylinder. The spectators were assembled (I believe) in the so-called 'machine-room' of the newly opened extension of the Physiological Laboratory. Anatomy did not take possession of the corresponding new 'School' until the next term, and meanwhile remained housed on the site now occupied by Zoology. Having survived the notorious test of standing in a crowd to gaze impassively on an unaccustomed quantity of blood, we proceeded upstairs to study blood-corpuscles and fibrin in the 'Histology Room' overhead.

By 18 October 1890, we were encouraged by the same teacher to investigate the structure of cartilage. Animals so diverse as the cuttle-fish, the newt, and the mouse were laid under contribution. My note-book enables me to reconstruct the experiences of the course, class by class thrice weekly until 26 May 1891, and a feature of the instruction was the supply of leaflets setting out methods to adopt and results to be obtained. These leaflets were I believe mainly drafted by Dr Shore.

Occasionally he staged much more impressive demonstrations, and probably there were then but very few such experiences available to audiences in this country. Two in particular I recall. Both were given in the Demonstration Theatre. One related to vaso-motor effects. Herewith the name of Claude Bernard, and the injunction for great care in the employment of chloral as an anaesthetic, must suffice to indicate the scope of the first demonstration (both carried out on rabbits), while the second involved the exposure of nerves in the neck and the employment of a slip of diaphragm made to serve as part of the recording apparatus. This demonstration involves reference to the name of Henry Head, and it may have been given rather later than 1890.

It was about this time that we began to hear references to the Hyderabad Chloroform Commission, and more particularly to the association of Dr Shore with Dr Gaskell in testing certain details arising from the Report of the Commissioners. Further description would be inappropriate here, but these early memories serve to recall

Dr Shore's impressive manner, his well-chosen and well-delivered sentences, and his unfailing patience and imperturbable temper.

At a later stage I was the fortunate subject of a laboratory 'experiment', which led to the most lively appreciation of Dr Shore's concern for social amenities. Having mentioned this incident, I may be allowed to explain that the inquiry took the form of recording the effect of 'full meals' on the proportionate numbers of white blood corpuscles. When I add that the St John's College Kitchen under Dr Shore's direction provided the meals, readers of *The Eagle* will need no further assurance that the requirements of quality and quantity were assured and indeed exceeded. In fact the 'neutrophile' cells responded nobly and their percentage rose to an almost sensational figure.

The loyalty and success with which he managed the arrangements for the annual (Easter Term) Meeting of the Physiological Society belong to another epoch and are well recorded elsewhere. On a preceding page Dr Adrian has referred to the magnificent staff assembled and retained by Michael Foster for many years in the Department of Physiology. I have heard Dr Shore described as having earned the most unqualified praise from the Head of that Department. And the magnificence of the personnel could be seriously challenged by the Fellows or members of Dr Shore's own College during the corresponding years. Thus it is well to remember the talents and fame of physiologists (including Langley in his pre-Trinity days) in association with Hankin and Rivers, with McDougal and Langdon Brown in their budding phase, with Bateson, Weldon, Marshall, MacBride and Lister as Zoologists, F. F. Blackman and V. H. Blackman as Botanists, and Rolleston and Kanthack as pathologists.

In yet another connection, it has been my good fortune to enjoy and I hope to retain the friendship of Dr Shore's two nephews, whose father I used to meet in the course of clinical work at St Bartholomew's Hospital.

And a final long-distance view of Dr Shore himself brings back to mind the more general impression of his high standards of smartness and efficiency. The scene is laid on the Cambridge Departure Platform, where Dr Shore awaits the train to Liverpool Street. At his side is a porter's barrow with two leather gun-cases and two suit-cases, all exquisitely polished. I hope this does not count as 'telling tales outside school', but as it was the Christmas Vacation, no doubt the story would continue with a description of the spoils, with the College a recipient high up on the list.

The Master writes:

Not the least important part of Shore's work was done in the service of the College. Both in its teaching and administration he held office over an exceptionally long period. Generations of medical students remember him gratefully as the Director of their Medical Studies and their teacher in Physiology. A patient and thorough expositor, he was admirable with a class and always enjoyed the work, continuing it in other colleges for some years after his retirement from his duties in St John's. For the place he was content to fill, and which he filled so successfully, it was not easy to find a successor.

On the administrative side, he became Junior Bursar in 1900. In many respects the College was needing modern improvements, and Shore's office was for a long time a busy and responsible one. Though there were no new buildings undertaken, the introduction of modern conveniences into the old—electric light, baths, gas-rings, the telephone, and the keeping of the whole place in repair, presented problems in which he showed the greatest interest, and which he tackled with a due admixture of conservatism and innovation. The Junior Bursar works amidst the fierce light that beats upon the daily round, and Shore certainly came in for a good deal of criticism; but he took it all in good part. 'You say what you like, and I do what I like' was very often his attitude. But the work was always well done. Nothing was too good for the College. This naturally brought some differences with the Senior Bursar, for finance was not Shore's strongest side.

The appearance of the grounds was very much improved in his early years of office: the care of the water courses, the lawns and the trees, and the planting of flowers occupied him. In our grounds he began the planting of bulbs along the walks, which has added so much to the spring beauty of the Backs.

His plans for the baths were not realised until after the Great War, when also he undertook the burning problem of the redecoration of the Hall. In this matter he was unable to carry the Society with him, but the ultimate compromise has worked very well. Gilbert Scott's chandeliers were also removed and electric light introduced, with another compromise about fittings which has remained. The War Memorial, the re-roofing of the Library and our Wilderness summer-house were other matters which involved no little trouble for the Junior Bursar.

On the College Council he was a useful adviser, and he kept its minutes for many years. He had opinions, but was not contentious, and what he could not carry in discussion, he trusted to achieve in the administration—and generally did.

His relations with College servants were always good, and he managed that part of the Junior Bursar's work with unvarying success. The junior Fellows were apt, however, to become a little impatient with the formula, 'You leave it to me', which, like 'Wait and see', became in time the description of his procedure.

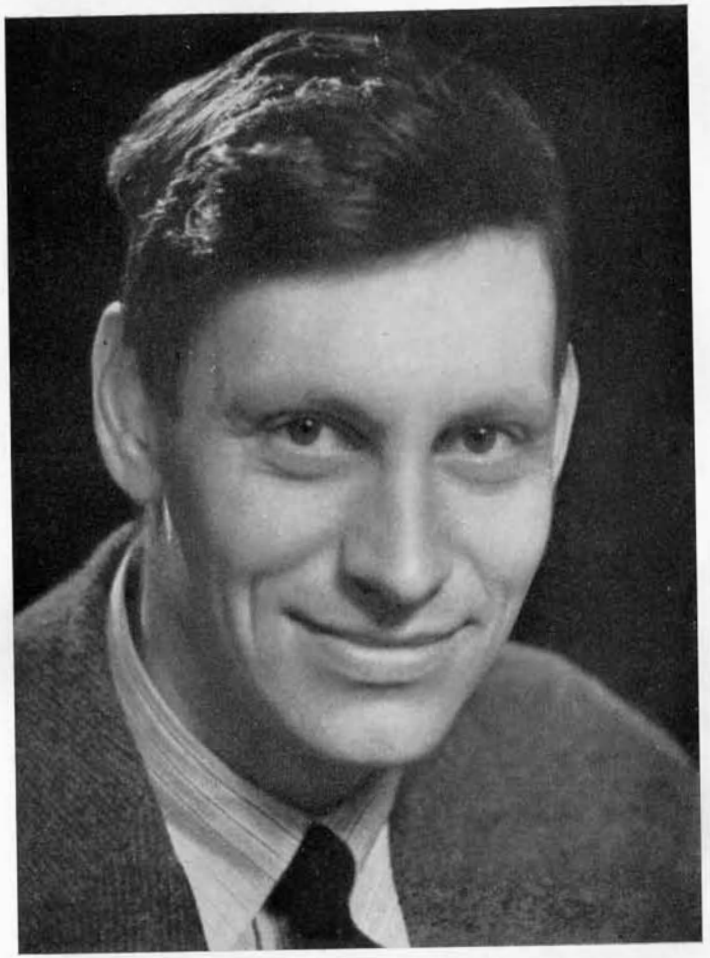
'The rain comes in at my door.'
'You leave it to me', said Shore.
'But it's beating upon my head!'
'You leave it to me', Shore said.

So wrote a friendly critic and expressed a general view. But though the speed of improvements slackened in the later years of his Junior Bursarship, yet, taking it as a whole, one realises how well he served the College through a transitional period in the developments of its domestic life. He certainly had many of the qualities that make a good administrator—caution, confidence and tact, and the work that he carried through was marked by thoroughness and good taste. He was for many years a central figure in the administration of the College, and it was not until he had gone that one realised how successfully he had managed the transition of its affairs from Victorian to post-Great War days. A sure and wise friend, calm and persistent in all that he did, he had no enemies and worked happily with a generation of College officers whose labours through difficult years entitle them to the gratitude of the College.

KENNETH JAMES WILLIAM CRAIK

IN KENNETH JAMES WILLIAM CRAIK, who died on 7 May as the result of injuries received in a street accident, Cambridge has lost one of her younger scientists whose gifts bore promise of exceptional achievements. At the age of thirty-one he had attained a high reputation for his work on vision in the borderlands between psychology, physiology and physics, and the respect of scientists, philosophers and others in many fields.

He was born at Leith in 1914, went to school at Edinburgh Academy, and thence to Edinburgh University, where he took his M.A. with first class honours in Mental Philosophy in 1935, and obtained the Shaw Fellowship in 1936. He came to St John's College, Cambridge, as a research student in the same year, took the degree of Ph.D. in 1940, and was elected a Research Fellow of St John's in 1941. In 1944 a unit of applied psychology of the Medical Research Council was formed in Cambridge, and he was chosen to be its first director. Throughout the war he was actively engaged in government research work, mainly for the three services.



KENNETH JAMES WILLIAM CRAIK

Perhaps the side of his rich and vigorous personality most likely to be noticed by those making his acquaintance for the first time was his gift for dealing with intricate and delicate articles. His rooms at the Psychological Laboratory and in College bore testimony to the breadth of this ability. In them could be found electrical, mechanical and optical apparatus, together with less serious things such as ships in bottles, pieces of home-made furniture, and even a home-made violin and kayak of Esquimo pattern, all of ingenious design and the work of a high-grade craftsman. He took his handiwork seriously, and held firmly the belief that, if a research worker is to be fully competent, he must be capable of maintaining and, if possible, making his own apparatus. His enthusiasm and selflessness made him always willing to use his skill on behalf of others: there must be many in Cambridge and elsewhere whose scientific apparatus, watches, clocks, wireless sets, and a host of other things he had restored to order, often after they had been condemned by the professionals as past repair.

It cannot be emphasised too strongly, however, that he was not, to use his own term, 'a mere gadgeteer'. While at school he won a prize for 'holiday work': his entry included a steam engine, a telescope, two essays on philosophical subjects, an album of photographs, a collection of butterflies, and a number of poems. The interests implied in this entry continued with him during his Cambridge days in a setting of acute and ever deepening scientific and philosophical thought. He was particularly interested in the synthesis of philosophical and psychological theories, and in seeing how far machines are simulated by mental processes. His thinking on these problems was not of a purely detached, academic kind, and, while he exercised the most severe discipline over his thought, he was passionately interested in the practical implications of the theories he considered.

While he had the maturity of mind of a man, he retained something of the spontaneity and high spirits of a schoolboy. Throughout his experimental work he displayed a buoyant enthusiasm and a complete disregard for personal comfort and even safety. He was never content to study his problems at second hand, but always wanted to know for himself just what it felt like to look at lights of blinding intensity, or to take this or that drug, or to work under the conditions obtaining in aircraft or ships or tanks.

Permeating his whole character was a rare kindliness. He hated giving other people trouble, and would never spare himself effort to avoid doing so. He laid great stress on the virtue of being helpful and co-operative, and displayed it in all his activities: he never met people half-way, he always met them at *their* end.

Highly respected by his fellow workers, and beloved by all with whom he came into contact, his untimely death is indeed a great loss not only to Cambridge, but in both present and future to the scientific world. A. T. WELFORD

A further appreciation by Professor Bartlett published in *The British Journal of Psychology*, May 1946, is reprinted at the close of this volume on pp. 454–65.—ED.

JAMES THOMAS WILSON

JAMES THOMAS WILSON, Emeritus Professor of Anatomy in the University of Cambridge, died on 2 September 1945, at the age of 84 years. He was born at Moniaive in Dumfriesshire on 14 April 1861, and was educated in the University of Edinburgh. There he graduated M.B., Ch.M. in 1883, and served under Sir William Turner as demonstrator of anatomy from 1885 to 1887. From Edinburgh he went to the University of Sydney to occupy a similar post, and in 1890 he became the first Challis Professor of Anatomy in that university.

Wilson served the University of Sydney with equal distinction as research worker and administrator. His work on the structure of monotremes and marsupials was outstanding, and in 1909 his scientific reputation earned his election to the Fellowship of the Royal Society. He had a profound influence upon the early development and expansion of the University, and was for many years dean of the Faculty of Medicine. His influence outside the University was equally important. He was in command of the Australian Intelligence Corps before the 1914–18 War, and organised the censorship in New South Wales when that war began. He was promoted to the rank of honorary colonel in 1915. Besides this, he was chairman of the committee for Commonwealth war propaganda in his State.

Wilson returned to England as Professor of Anatomy in the University of Cambridge in 1920, and was elected Fellow of St John's College in the same year. In Cambridge, although he continued his researches, his exacting standards allowed him to publish little, and his tenure of office was marked chiefly by his administrative reforms. He enlarged and reorganised the course of anatomy for the Natural Science Tripos Part I, and he created an excellent departmental library around the nucleus of his own collection of books and papers. From 1922–4 he was president of the Anatomical Society of Great Britain and Ireland, of which he had been the first overseas member,

JAMES THOMAS WILSON

and was president of the Cambridge Philosophical Society from 1924 to 1926. He represented the Australian Universities on the Executive Council of the Universities' Bureau of the British Empire from 1921 to 1938. In 1926 his own University of Edinburgh conferred on him the honorary degree of LL.D.

He retired from his chair in 1934 at the age of 73, but continued to lead an active life almost until his death.

Wilson was a distinguished research worker, but it was perhaps in the field of university administration that he made his greatest contribution to society. He was also a great teacher who inspired many pupils, of whom Sir Grafton Elliot Smith was probably the most distinguished. M. H.

JOHN AMBROSE FLEMING

Sir John Ambrose Fleming, Honorary Fellow of the College, died at Sidmouth on 18 April 1945, aged 95. He had been personally associated, says *The Times* obituarist, with the introduction into this country of three great electrical innovations which have become commonplaces of our daily life—the telephone, electric lighting by incandescent lamps, and wireless telegraphy, in particular the two-electrode thermionic valve. His scientific achievements are fully described in a notice by W. H. Eccles in *Obituary Notices of Fellows of the Royal Society*, vol. v, pp. 231–42. Here we can only give an outline of his career, with special reference to his early years and his Cambridge days, drawn largely from his *Memories of a Scientific Life*, published in 1934, supplemented by College records.

His connection with the College began in April 1877, when he was awarded a Natural Science Exhibition. He was then 27 years of age, having been born at Lancaster 29 November 1849. His father was the Rev. James Fleming, D.D., a Congregational minister. The family moved to Kentish Town, London, in 1854, and, after attending small local schools, Fleming was sent in 1862 to University College School. He passed the Matriculation Examination of London University at the age of sixteen, and then entered University College, to read for a science degree. It was then necessary for him to become to some extent self-supporting, and, after a few months in the drawing office of a firm of shipbuilders near Dublin, he became a clerk in a stock-jobber's office in London, working in the evenings for his final examination. In 1870 he was placed, with one other candidate, in the first division, and so qualified for the B.Sc. degree. He became a science master at Rossall School, but he resigned in 1872, feeling the need for further scientific training, and entered Dr Frankland's

Chemical Laboratory at the College of Science in South Kensington. Once more, however, it became necessary for him to earn his keep, and he took a science mastership in the Military and Civil Department of Cheltenham College. But the urge to a scientific career was still upon him, and the new Cavendish Laboratory at Cambridge, under James Clerk Maxwell, the first Professor, greatly attracted him. He had saved about £400; the College, by the award of the Exhibition, of £50 for three years, made a Cambridge career possible.

In the Michaelmas Term of 1877, then, Fleming came into residence, to lodgings in Portugal Place. The Little-Go, which had involved some intensive coaching in Latin and Greek during the summer, was successfully passed in December, with a first class in both parts, and Fleming settled down to read for the Mathematical Tripos, his private coach being Mr W. H. Besant, Fellow of St John's.

According to his own account, published some 55 years later, it was not until after his father's death in November 1879 that he turned over to the Natural Sciences Tripos, but College records show that, in fact, he took the Natural Science Mays in 1878, being placed in the first class. He records that he attended Maxwell's lectures, finding them difficult and the class minute; but he took careful notes, which he presented to the Cavendish Laboratory at the Maxwell centenary in 1931. He also attended Stokes' lectures on physical optics. In 1879 he was elected into a Foundation Scholarship in the College. He obtained a first class in the Natural Sciences Tripos in 1880, in physics, chemistry and mineralogy, being distinguished in physics; the College awarded him a Hughes Prize and a Wright's Prize. The opportune offer by Professor James Stuart of a demonstratorship in mechanism and applied mechanics enabled him to continue to reside in Cambridge, but in the summer of 1881 he was appointed the first Professor of Mathematics and Mechanics at University College, Nottingham. Here, again, he did not remain for more than a few months, leaving this time to take up a post as electrician to the Edison Electric Light Company. Finally, in 1885 he was appointed Professor of Electrical Engineering at University College, London, and here he remained until his retirement in 1926.

On 5 November 1883 (he himself says 1882) he had been elected into a Fellowship in St John's, being admitted the next day, but he did not return into residence, though he continued to hold his Fellowship for the then normal period of six years. It should be mentioned that in 1912 he advised the College on the introduction of electric lighting. He was knighted in 1929 and, as he notes with pride and gratitude in his *Memories*, on 18 February 1927 he was elected an Honorary Fellow of the College. In his will, after specific bequests and a life-interest, he left one fifth of the residue of his estate to the College.

In the College Library is preserved a letter from Fleming to Sir Joseph Larmor, written from North Wales in August 1923. An extract may perhaps fitly close this inadequate notice: 'It is indeed wonderful how the *electron* has come to the front. It is now the master weapon of the wireless engineer. Not far from here at Carnarvon there is a great wireless station in which a great panel of 60 large valves, the size of footballs, sends out electric wave signals *direct* to Australia. What would Maxwell have thought of that!'

EUSTACE WILLIAM AIRY (B.A. 1897), of Bridge House, West Hythe, Kent, died 10 November 1944, aged 69.

AARON ALEXANDER, LL.M. (B.A. 1912), of the Inner Temple, barrister at law, died 12 September 1945 in Cairo, aged 56.

GEORGE SYDNEY ARUNDALE (B.A. 1898), president of the Theosophical Society, sometime principal of the Central Hindu College, Benares, died in August 1945 at Adyar, Madras, aged 66.

NORMAN ASHBY (B.A. 1907), formerly rector of Thorley, Hertfordshire, died 1 February 1946 at Madingley, Cambridgeshire, aged 64.

CHARLES ASKWITH (B.A. 1890), late vicar of St Matthew, St Leonards-on-Sea, canon of Chichester, died 25 February 1945 at Leamington Spa, aged 82.

FRANCIS GIBSON BAILY (B.A. 1889), Emeritus Professor of Electrical Engineering at Heriot-Watt College, Edinburgh, died 23 February 1945 at Juniper Green, Midlothian, aged 76.

JOSEPH EWART BARKBY (B.A. 1930), lieutenant, R.N.V.R., died 10 July 1945 at East Molesey, aged 36.

CYRIL ELMES BEALE (B.A. 1910) died 30 January 1945 at Bournemouth, aged 56.

JOHN BEGGS (Adm. 1884), formerly vicar of Woodford, Stockport, died 14 August 1946 at St Leonards-on-Sea, aged 89.

WILLIAM HENRY BOX (B.A. 1889), rector of Puckington, Somerset, 1894–8, died 20 August 1944 at Ashurst Wood, East Grinstead, aged 90.

HARRY STANLEY BRANSCOMBE (B.A. 1885), formerly vicar of Rothwell, Yorkshire, died 28 November 1945, aged 81.

SIDNEY BRAYSHAY (B.A. 1906), formerly executive engineer, Federated Malay States, died 12 June 1946 at Meopham, aged 61.

WILLIAM HENRY BROWN (B.A. 1889), secretary for elementary education, West Riding of Yorkshire, from 1903 to 1927, died 27 December 1945 in London, aged 82.

JOHN SHAW BRYERS (B.A. 1897), rector of Bowers Gifford, Essex, died 15 January 1945, aged 69.

CHARLES EDWARD BYLES (B.A. 1895), of Gerrards Cross, sub-editor of the *Illustrated London News* and *Sketch* from 1908 to 1938, died 15 July 1944, aged 70. He was a son-in-law of 'Hawker of Morwenstow' whose *Life and Letters* he published in 1905.

ARCHIBALD PRESTON CAMERON (B.A. 1894), died 17 January 1945 at Marston Green, Birmingham, aged 72. Two of his brothers, John Alexander Cameron (B.A. 1891) and Walter Evan Cameron (B.A. 1893) were also of St John's.

HENRY HERMANN CARLISLE (B.A. 1885), formerly Moderator, Congregational Union of England and Wales, died 14 June 1945, aged 81.

GRAHAM HUNT CASTLE (B.A. 1906), formerly vicar of St Agnes, Kennington Park, and for 14 years general secretary of the Gloucestershire Rural Community Council, died 8 May 1945 at Clifton, Bristol, aged 60.

THOMAS HANCOCK ARNOLD CHAPLIN (B.A. 1886), M.D., F.R.C.P., Harveian librarian at the Royal College of Physicians, died 18 October 1944 at Bedford, aged 80.

HAROLD CHAPPLE (B.A. 1904), M.Chir., senior obstetric surgeon and gynaecologist to Guy's Hospital, died 8 March 1945 at 42 Orchard Court, W. 1, aged 63.

ALFRED ROBERT CHARTERS (B.A. 1887), formerly headmaster of preparatory schools at Edgbaston and St Leonards, died 15 September 1944 at Westerleigh, Wadhurst, aged 79.

PAUL ROGERS CLEAVE (B.A. 1887; father of W. P. O. Cleave, B.A. 1933), headmaster of Llandaff Cathedral School from 1906 to 1912, and vicar of Hempstead, Norfolk, from 1925 to 1931, died 12 January 1945, aged 78.

JOHN COLLIN (B.A. 1887), solicitor, of the firm Francis and Company, Peas Hill, Cambridge, died 20 August 1944 at Saunton, North Devon, aged 77. He was a prominent member of the Lady Margaret Boat Club, stroking the First May Boat in 1886 and 1888, rowing bow in 1887, and stroking the eights which won the Thames Cup and the Ladies' Plate at Henley in 1888.

ARTHUR GEORGE COOKE (B.A. 1889), of Kilburn, died 10 November 1945, aged 78.

Sir CLEMENT KINLOCH COOKE (B.A. 1878), Baronet, died 8 September 1944 at Wimbledon, aged 89. He was a well-known figure in journalism and politics, founding and editing *The Empire Review*, and representing Devonport in Parliament from 1910 to 1923. He was knighted in 1905, made a K.B.E. in 1919, and created a baronet in 1926.

EBENEZER HUNT COOKE (B.A. 1884), M.B., B.Chir., died 28 March 1946 at Hendon, aged 82.

ARTHUR CHARLES CRICK (B.A. 1878), vicar of Pennington, Hampshire, from 1892 to 1929, died 2 August 1944 at Worthing, aged 88.

JOHN FREDERICK HALLS DALLY (B.A. 1898), M.D., M.R.C.P., died 4 November 1944 at 93 Harley Street, W. 1, aged 67.

LEONARD GEORGE DOBBS (B.A. 1923), died 2 March 1945, aged 43.

WILLIAM HENRY DODD (B.A. 1883), assistant master at Whitgift Grammar School, Croydon, from 1886 to 1921, died 18 May 1945 at Sutton, aged 85.

ERNEST JAMES DODGSHUN (B.A. 1902), honorary secretary of the National Adult School Union, of Ilkley, Yorkshire, died 24 August 1944, aged 68, while attending a Summer School at St Briavels, Gloucestershire.

HENRY CHARLES DODSON (B.A. 1884), of Crouch End, London, died 18 November 1944, aged 85.

ARTHUR TUDOR EDWARDS (B.A. 1911), M.D., M.Chir., F.R.C.S., died 25 August 1946 at St Enodoc, Cornwall, aged 56.

ARTHUR CREYKE ENGLAND (B.A. 1894), late Archdeacon of York, died 30 September 1946 at York, aged 74.

JOHN ALBERT FEWINGS (B.A. 1909), headmaster of St Andrew's School, Meads, Eastbourne, died 24 February 1946, aged 58.

REGINALD HENRY CASTLE FITZHERBERT (B.A. 1872), rector of Somersal Herbert, Derbyshire, from 1885 to 1913, died 8 April 1946 at Darley Dale, aged 96.

MATTHEW FORSTER (B.A. 1897), of Forster's Bishop Middleham Brewery, co. Durham, died 5 October 1944, aged 68.

HENRY ALEXANDER FRANCIS (B.A. 1886), for many years in practice as an asthma specialist in Wimpole Street, died at West Hoathly, Sussex, 13 August 1944, aged 81. He rowed in the Lady Margaret First May Boat in 1884 and 1885, and obtained his Trial Cap in 1886. His son, Clement Alexander Francis (B.A. 1921), also a prominent member of the L.M.B.C., is an ear, nose and throat surgeon.

Sir HENRY JOHN GAUVAIN (B.A. 1902), M.D., F.R.C.S., specialist in tuberculosis, died 19 January 1945 at Morland Hall, Alton, Hampshire, aged 66.

JOHN KEY DURANCE GEORGE (*Matric.* 1945) died 11 April 1946 at Cambridge, aged 21. He was elected Scholar of the College in December 1941, but joined the Army, being commissioned in the 27th Lancers in 1943. He served in the Middle East, and was released in October 1945.

THOMAS GILLESPIE (B.A. 1897), M.B., B.Chir., formerly in medical practice in Southampton, died 16 September 1944 at Havant Hospital, aged 68.

HARRY GODDARD (B.A. 1902), formerly mathematical master at Nottingham High School, died 20 April 1946 in Addenbrooke's Hospital, Cambridge, after an operation, aged 65.

NORMAN GREEN (B.A. 1909), assistant master at Acton County School, died 30 December 1944, aged 57. He left a sum of money to the College to buy a piece of furniture for the Combination Room.

WILLIAM GREENSTOCK (B.A. 1887), assistant master at Malvern College from 1892 to 1928, died 13 November 1944 at Lords and Ladies, Dogmersfield, Basingstoke, aged 79.

FRANCIS LEY GWATKIN (B.A. 1899), vicar of Moulsford, Berkshire, formerly rector of Souldern, Oxfordshire, died 16 September 1946, aged 69.

RALPH RADCLYFFE HALL (B.A. 1888), assistant to the Professor of Chemistry and Agricultural Science, Barbados (Professor J. P. D'Albuquerque, B.A. 1889), from 1892 to 1928, died 17 April 1943 in a Bournemouth nursing home, aged 77.

ERNEST HALL HALL-CRAGGS (B.A. 1884, as Craggs), member of the Institution of Civil Engineers and of the Institution of Naval Architects, formerly a prominent member of the Lady Margaret Boat Club, died 17 July 1946 at Reading, aged 82.

NATHANIEL BISHOP HARMAN (B.A. 1897), F.R.C.S., ophthalmic surgeon, of Larksfield, Crockham Hill, Kent, died 13 June 1945, aged 76.

THOMAS LINDGREN HARRISON (B.A. 1889) died 26 March 1946 at Ware, Hertfordshire, aged 80.

FRANK ARTHUR HEPWORTH (B.A. 1900), M.B., F.R.C.S., died 5 November 1944 at Saffron Walden, aged 65.

HENRY VALENTINE HOCKIN (B.A. 1886), assistant master at Swansea Grammar School from 1899 to 1920, died 10 March 1945 at Swansea, aged 81.

CHARLES LEONARD ISAAC (B.A. 1899), M.B., F.R.C.S, Edinburgh, surgeon, of Swansea, died 6 November 1944 at Machen Lodge, Sketty, Swansea, aged 67.

JEHANGIR COWASJI JEHANGIR (B.A. 1934), elder son of Sir Cowasji Jehangir (B.A. 1901), died 23 October 1944 in London, as the result of a street accident, aged 32.

THOMAS JOHNSON (Mus.B. 1887), for 56 years organist of Christ Church, Summerfield, Birmingham, died in May 1945, aged 84.

FRANCIS SAMUEL JONES (*Matric.* 1897), M.R.C.S., L.R.C.P., died 23 July 1946 at Umzinto, Natal, aged 67.

WALTER ANTHONY JONES (B.A. 1870), rector of Pedmore, Worcestershire, from 1879 to 1913, died 10 January 1946 at Saul, Gloucestershire, aged 98.

AUGUSTUS KAHN (B.A. 1889), formerly headmaster of the County Secondary School, Holloway, London, died 16 September 1944 at Hampstead, aged 76.

JOHN NORMAN KING (B.A. 1935), A.M.I.M.E., died in October 1942 from an accident in Manchester, aged 29.

WILLIAM ANDREWS LAMB (B.A. 1894), rector of Desertserges, co. Cork, and canon of Cork Cathedral, died in October 1944, aged 71.

FRANCIS JOSEPH DE LANDA (*Matric.* 1922) died 2 December 1944 at Mexico City, aged 41.

ALBERT PENARD LAYCOCK (B.A. 1898), a medical missionary in China from 1905 to 1911, and afterwards in practice in South-west London, died 5 September 1944 at Fulham, aged 66. His father and two of his sons have been members of the College.

RONALD SAMUEL MANN LEES (B.A. 1942), flying officer, R.A.F., son of the late Professor S. Lees (B.A. 1909), formerly Fellow, died 6 August 1944 after a short illness brought on by war-work, aged 24.

WALTER PATTESON LEGG (B.A. 1888), chaplain at Vevey, Switzerland, since 1921, died 10 February 1946 at Vevey, aged 79.

TOM LISTER (B.A. 1909), C.I.E., late Indian Civil Service, died 26 March 1945, aged 57.

LANCELOT HAROLD LUDDINGTON (B.A. 1897), formerly of The Chantry, Ely, died 20 March 1945 at Wokingham, Surrey, aged 79.

JOHN LUPTON (B.A. 1891), formerly Fellow, for many years headmaster of King Henry VIII School, Coventry, died 9 July 1946 at Tansor, near Peterborough, aged 77.

SYDNEY GRAY MACDONALD (B.A. 1902), F.R.C.S., a specialist in diseases of the genito-urinary organs, died 20 February 1946 at University College Hospital, aged 66.

ALBERT SAMUEL MANNING (B.A. 1886), formerly of Newmarket, died 2 April 1945 at Cirencester, aged 81.

BERTIE EDWARD MATTHEWS (B.A. 1887), formerly secretary of St Mary's Hospital Medical School, died 25 August 1946 at St Mary's Hospital, aged 79.

JOHN CHARLES MATTHEWS (B.A. 1897), a distinguished bacteriologist, died 25 May 1946 at 20 Wimpole Street, W. 1, aged 73.

WILLIAM NAWTON MAW (B.A. 1891), formerly of the Indian Civil Service, died 13 June 1946 at Swalecliffe, Kent, aged 76.

OTTO MAY (B.A. 1900), M.D., F.R.C.P., died 15 August 1946, aged 67.

STANLEY MAXWELL (B.A. 1897), headmaster of Manor House School, Clapham, and secretary of the College of Preceptors, died 20 September 1944 at Surbiton, aged 69. Manor House School was founded in 1875 as a private school by Dr Frederick Charles Maxwell (of St John's, B.A. 1870; see *Eagle*, xx, pp. 574–6), father of Mr S. Maxwell, who succeeded to the headmastership on his father's death in 1898. Two sons are also members of the College.

THOMAS FRANCIS ROBERT MCDONNELL (B.A. 1898), barrister at law, formerly of Rangoon, Burma, died 12 June 1946 in London, aged 70.

CYRIL DENZIL NUGENT MEARES (*Matric.* 1921), Brigadier, died 15 December 1944 at Nairobi, Kenya Colony, aged 46.

VERNON HENRY MELLOR (*Matric.* 1879), honorary colonel, Sherwood Foresters, died 20 April 1945 at Chelsea, aged 84.

CHARLES STEWART MIDDLEMISS (B.A. 1882), C.I.E., F.R.S., superintendent of the Geological Survey of India from 1895 to 1917, died 11 June 1945, aged 85.

FRANCIS GARDEN MITCHELL (B.A. 1884), vicar of Hormead 1913–23, rector of Alburgh, Norfolk, 1923–31, died 2 July 1944 at St Albans, aged 82.

JAMES CECIL MOTTRAM (*Matric.* 1905), M.B. London, director of the Research Laboratory, Mount Vernon Hospital, Northwood, died 4 October 1945 at Northwood, aged 65.

MATTHEW MULLINEUX (B.A. 1896), until recently vicar of Marham, King's Lynn, died 13 February 1945, aged 77.

THOMAS MILLER NEATBY (B.A. 1888), M.D., M.R.C.S., L.R.C.P., died 30 September 1944 at Poole, Dorset, aged 78.

BENJAMIN NOAKS (B.A. 1888), of Bloemfontein, Orange Free State, died 15 April 1946 at Dunskey, Portpatrick, Wigtownshire, aged 80.

THOMAS WILSON PARRY (B.A. 1887), M.D., F.S.A., died 21 September 1945 at Highgate, aged 79.

JOHN LEWIS ALEXANDER PATON (B.A. 1886), formerly Fellow, high master of Manchester Grammar School from 1903 to 1924, died 28 April 1946 at Beckenham, Kent, aged 82.

THOMAS LESLIE FOULKES ROBERTS (B.A. 1929), master at Lockers Park Preparatory School, Hemel Hempstead, Hertfordshire, died 8 September 1945 from a motor accident, aged 40.

REGINALD MURRAY SAMSON (B.A. 1876), priest, headmaster of Hawkeshead Grammar School from 1883 to 1909, died 19 June 1946 at Oxford, aged 92.

JAMES RALPH SCHOLFIELD (B.A. 1889), formerly vicar of Bourton with Silton, Dorset, died 21 July 1945 at Chatham, aged 78.

ERNEST LEOPOLD SCOTT (B.A. 1901), barrister-at-law, died 13 September 1944 at Putney, aged 65.

CHARLES SWANN SHEILD (B.A. 1875), barrister-at-law of Lincoln's Inn, died 21 January 1945 at St Charles Hospital, London, aged 92.

CHARLES PEAT SHEPPARD (B.A. 1885), vicar of Clifton-on-Dunsmore with Brownsover, Warwickshire, from 1896 to 1904, died 29 July 1945 at Wesley House, Bourton, Dorset, aged 81.

GEORGE ERNEST SMITH (B.A. 1915), assistant master at Wilson's Grammar School, Camberwell, and chess editor of *The Field*, died 17 July 1946, aged 53.

HENRY STOKES (*Matric.* 1867), Assistant Admiralty Registrar from 1904 to 1939, died 16 October 1944 at Lewisham, aged 95.

WALTER RONDEL LE SUEUR (B.A. 1892), formerly a master at Downside School, died 21 May 1946 at Blandford, aged 78.

WILLIAM ORMOND SUTCLIFFE (B.A. 1880), Canon of Westminster Cathedral, formerly Rector of St Edmund's House, Cambridge, died 16 November 1944, aged 88.

DONALD GEORGE SUTHERLAND (B.A. 1901), late senior bacteriologist, Metropolitan Water Board, died 10 January 1946 at Ealing, aged 82.

ROBERT OSWALD PATRICK TAYLOR (B.A. 1899), vicar of Ringwood, Hampshire, and formerly Provost of Cumbrae, died 14 December 1944 at Ringwood Vicarage, aged 71.

WILLIAM MARSHALL TEAPE, B.D. (B.A. 1885), vicar of South Hylton, Sunderland, from 1900 to 1922, died 1 November 1944 at Bournemouth, aged 82.

ALAN WATSON THOM (B.A. 1944), of the Royal Aircraft Establishment, Farnborough, was killed 27 April 1945 in an air accident, aged 21.

HERBERT THOMPSON (B.A. 1878), for 50 years music and art critic of the *Yorkshire Post*, died 6 May 1945 at Leeds, aged 88.

WILLIAM HALLIDAY THOMPSON (*Matric.* 1887), vicar of Winkfield, Berkshire, and Gresham Professor of Divinity, died 13 February 1945 at Crawley, Sussex, aged 80.

RICHARD THORMAN (B.A. 1882), formerly vicar of Christ Church, Skipton-in-Craven, died 7 February 1946 at Harrogate, aged 86.

GEORGE ARTHUR TOMLINSON (*Matric.* 1906), D.Sc. London, a Principal Scientific Officer in the Metrology Division of the National Physical Laboratory, Teddington, died 1 December 1944, aged 59.

JOHN HOWARD TOWLE (B.A. 1900), formerly Director-General of Education for the North West Frontier Province of India, died 31 July 1946 at Stamford, aged 67.

THOMAS GEORGE TUCKER (B.A. 1882), formerly Fellow, Professor of Classical and Comparative Philology in the University of Melbourne, Victoria, died 24 January 1946 in Devon, aged 86.

GEORGE JAMES TURNER (B.A. 1889), F.B.A., barrister-at-law, who edited Year-Books for the Selden Society, died 14 June 1946 at Surbiton, aged 78.

CUTHBERT FRANK TYRRELL (B.A. 1903), late rector of Freshwater, Isle of Wight, died 30 December 1945 at St Ives, Cornwall, aged 69.

CHARLES BRAITHWAITE WALLIS (B.A. 1919), Envoy Extraordinary and Minister Plenipotentiary to the Republics of Panama and Costa Rica from 1923 to 1931, died 4 August 1945 in Cambridge, aged 72.

HARRY WARD (B.A. 1885), honorary canon of York, vicar of Appleton-le-Street with Amotherby, from 1893 to 1934, died 1 September 1944 at Thornton-le-Dale, Yorkshire, aged 83.

GERARD TARVER WHITELEY (B.A. 1895), solicitor, died 10 October 1944, aged 71.

HENRY LONGLEY WOFFINDIN (B.A. 1896), rector of Great Gonerby, Grantham, since 1917, died 27 January 1945 at Grantham Hospital, aged 70.

ARTHUR CHORLEY WOODHOUSE (B.A. 1876), formerly vicar of Pampisford, Cambridgeshire, died 19 August 1944 at Bournemouth, aged 90.

OBITUARY NOTICE

[Reprinted from *The British Journal of Psychology* (General Section), vol. XXXVI, Part 3, May 1946, pp. 109–16.]

KENNETH J. W. CRAIK, 1914–1945

Between the two wars a small group of British psychologists used to meet twice annually to discuss problems in which they were interested. On one of these occasions I was walking along a country road with Professor James Drever. He said, 'Next term I am going to send you a genius.' That was the first I heard of Kenneth Craik. It was a sufficiently startling introduction, and all the more so because I had long ago learned to have the deepest respect for Professor Drever's judgement about his students.

I then heard a little more about Craik's life, achievements and promise, and it was with the liveliest anticipation that I looked forward to seeing him in October 1936. Vividly I remember that first meeting. He came into my room at the Laboratory and my immediate impression was of a tall, rather powerful, spare frame; a face pale but full of life; a firm chin, straight mouth, singularly attractive dark eyes, and above a shock of black hair. From the beginning he was wholly 'at home', as we say, with any amount of genuine modesty, but not a scrap of false humility. He knew, and within a very few minutes I knew, of the power that was within him. We talked of what he had done, and more of what he would do. He was not then certain of what he would do in detail, for it was one of Craik's outstanding characteristics that there was very little which lay in the line of developing knowledge in which he was not profoundly interested.

At the Edinburgh Academy he had been a classic, and at the University of Edinburgh he had, with great distinction, studied philosophy under Kemp Smith. Professor James Drever has the honour—and a very great honour it is—of being the first to attract and hold him to the systematic study of psychology. But I am sure that all those who took part in his training would agree with me that a great amount of the best preparation for the work he was to do came from a most happy and free home life, which encouraged him to explore every path of opening interest, presented to him the widest possible outlook, and fostered a love of honest thinking. Particularly his holidays with his parents, by motor boat into remote parts of Scotland by sea and river, gave him independence, a capacity to deal with sudden emergencies, both small and large, and much knowledge

of the natural life of flowers and beasts, and of the structure of the earth.

When he came to Cambridge, Kenneth was absolutely certain that psychology was the subject which above all he desired to study, but he was still a little undecided: should he take for his field the higher mental functions, or should he elect to follow the traditional approach through research upon the special senses? He did not hesitate for long—that was his way always when the question was one which concerned a course of action affecting mainly himself. Already, for Professor Drever, he had begun some studies of brightness discrimination and dark adaptation. At Cambridge at that time was a very active group of research students and others at work upon sensorial problems, particularly of hearing. There was also—and this may easily have been the deciding factor—an exceedingly attractive workshop which captured his imagination from the moment at which he entered it. He decided to research on visual problems, and particularly on visual adaptation and after-images.

Thus began three crowded and happy years. There was, I think, nothing in a very busy and contented Department which Kenneth failed to influence and to help. The very first time I met him, out from his waistcoat pocket came his famous working model of an internal combustion engine. Everybody who had any apparatus problems quickly learned to go to Craik for help, and I cannot remember any case of a vain appeal. He worked with extraordinary rapidity, both in devising and in making instruments and gadgets of all kinds.

But, sure of himself as he was, he never, as some people do, thought of himself as beyond the stage of learning. He went to all the courses he could. I think of him as one of the most stimulating students in my own Discussion Classes that I have had the great fortune to know. He broke out of the conventional limits of psychological training. He went to the Cambridge Technical School for a course on plumbing and welding. He did a lot of physiology, and later on, brain anatomy.

His activity was by no means confined to his own immediate topics. He worked with Oliver Zangwill on some problems of Gestalt Psychology. He was ready to be an observer in every experiment. At the Psychological Society he would come in, often a bit late, sit cross-legged on the floor, listen, and then start some lively discussion, sticking to his point with persistence and good humour, and with his wonderful enjoyment of his own jokes, some of which were very good.

In 1940 he obtained the Cambridge Ph.D., and then, a year later, having enlarged his dissertation considerably, he became, at the first attempt, a Fellow of St John's College, which he had joined when he

came to Cambridge. The Thesis was entitled, 'An Experimental Study of Visual Adaptation, and a Discussion of some more general Psychological Problems'. The title was characteristic. There are some people who take a specific problem, answer it, and pass on to something else. Their work may be very good, but it lacks true fruitfulness. Kenneth was not in that class. I do not think he ever did an experiment, however simple and small it may have appeared, which was not informed by some idea which took its issues at once into a wide field of principle. This thesis, which has not yet been published, although it is greatly to be hoped that publication will come before long, is strongly marked by what became one of the leading ideas of all his work, a lively recognition of the interrelation of physical, physiological and psychological problems and issues. Already he was searching for and using physical analogies: 'The eye resembles a multi-range meter.... When set to any one range, or adapted to any one illumination, it is sensitive to rapid variations in illumination over a certain range. If it is adapted to a different illumination its whole range of sensitivity is shifted bodily to the new adapting illumination. This 'range-setting' is automatic, since the change in adapting illumination itself occasions it. It accounts for the great precision of the eye in distinguishing small, rapid changes in illumination and its inability to detect slow ones, or to act as an absolute photometer.' At the same time he devised, carried out and discussed a number of new experiments dealing with the transmission and scattering of light by the eye media and with peripheral photochemical and neural processes. Further, he was able to combine all his results into an illuminating general study of adaptation from a psychological point of view proper and of its biological significance.

The dissertation was not fully completed when the war broke out. Kenneth came to me at once to discuss whether he should join one of the Fighting Services, which, for many reasons, he genuinely desired to do. The answer was plain, as he well knew. His very unusual equipment should be put at the service of any authority which needed it, naval, military, air or civilian. For many would need it; and in a very short space of time many did. From 1939 to 1945 it is the simple truth to say that he was a key man in the scientific service of the country.

From the beginning I decided that he should have the fullest independence possible. He would have had it in any case; that I was glad and proud for him to have it made no difference, and never, during these incredibly busy years, did he once fail the trust we had in him, or once take any undue advantage of it. I am sorry, and even a little ashamed, that when I first sent him away, entirely by himself, to discuss some technical psychological problems about the role of

the human operator in the manipulation of certain instruments of war, I wondered a little what sort of a show he would make. I need have had no misgiving and ought to have had none. In these years he was to meet and almost immediately to win the confidence of all sorts and conditions of men, from scientists of international repute in very many different subjects to laboratory assistants and working mechanics; from Admirals, Generals and Air Marshals to ratings, privates and airmen; from leaders in industry to the rank and file of the workers. When he made any definite pronouncement everybody was sure at once that he knew what he was talking about. When he did not know, he never pretended, but was eager and astonishingly quick to learn. And when work was over for a time he was a thoroughly good companion.

The story of how he worked, long, intense, absorbed days and nights; and of what he did, solving all manner of mechanical and electrical problems in his stride and getting at once to the point of his problems in simple but brilliant experiment, cannot here be at all fully told. He was a very active member of the Vision Committee of the Flying Personnel Research Committee; he belonged to the Military Personnel Research Committee, and some of his remarkable work concerned tank equipment; he was an original member and became the Chairman of the Target Tracking Panel of the Ministry of Supply, and was also on its Servo-mechanisms Panel. He wrote many reports, all concise and to the point, and almost all of them containing descriptions of highly original methods and results. Although these papers could not be published, they were widely known and sought after. Many of them carried further the work on vision, dealing with dark adaptation, the use of night photometers, and definitely establishing several of the basic principles in radar display. Others broke new ground in studies of the principles of bodily mechanics, and the physiology and psychology underlying the efficient combination of motor responses in the control of instruments.

One story I should like to record. Kenneth and I had been out to look at some new anti-aircraft equipment. We were being driven back to Cambridge in a light car, by a very accomplished Services chauffeur at what may fairly be called a 'tidy pace'. The roads were greasy. For some time I had been trying to think how the conventional laboratory procedure for the study of fatigue might be supplemented in certain ways, perhaps improved. The common methods, based upon an investigation of simple and relatively isolated muscular and mental processes, seemed to me so devised that practically only three types of result could be recorded accurately: the amount of deterioration of work, checks and spurts in work, and the final

collapse of work. I thought something was needed which would show clearly and exactly how skill, long continued, may change and perhaps disintegrate. So I asked Kenneth whether perhaps it would be possible to design an experimental cockpit, so that the essential control responses of the aircraft-pilot, flying on instruments, could be accurately recorded, if necessary for long periods, and we should know, not only whether less or more work was being done, but also by what changes in the co-ordinated activities these, and other variations, were brought about. He jumped to the idea. He pulled out his wonderful black wallet, stuffed to overflowing with odds and ends of bits of paper, with their jotted notes in a strange handwriting about projected experiments, with dates of engagements seemingly in a terrific muddle, with impromptu drawings of apparatus. He found an available bit of blank space. A diagram began to grow.

We were driving down a steep hill. A car immediately in front suddenly stopped. So did we. We got into a terrific skid, made a right-angled turn and, by a bit of fine emergency control by our driver, came to a full stop with the front wheels of the car cocked high up on a steep bank a few inches from a thick-set hedge and in the hedge a number of uncomfortable looking tree trunks. Kenneth straightened himself up from the side of the car, rubbing a bruised arm. He was grinning happily. This was just what he enjoyed. He went straight on with the job.

The very next day he was in the Laboratory workshop fashioning the experimental controls for the first Cambridge cockpit. The design was his. He and George Drew together did the work. The whole thing was a very brilliant and beautiful application of calculating machine principle to a complex psychological problem. It was built in our own workshop, with slender resources and at trifling cost. It was to stand up to years of hard work, and first by the very expert research of Drew, and later by Dr D. Russell Davis, to open up what may well be a new chapter in experimental psychological development. For not only did it show that 'skill fatigue' is in many ways different from that deterioration which long spells of work may impose upon simple muscular and mental tasks, but also it demonstrated that it is possible to submit highly complex bodily and mental processes to exact and illuminating measurement.

Craik's work was rendered possible by constant and generous support from many different quarters. But above all it was Sir Edward Mellanby and the Medical Research Council who had encouraged it, aided it without stint, and given it the widest opportunities. In 1944 the Medical Research Council agreed, should the University concur, to establish in the Cambridge Psychological Department a unit for Research in Applied Psychology. The offer

was accepted and the unit established forthwith. The idea, the name, and above all the appointment of Kenneth Craik as the first Director of the unit, were all due to Sir Edward Mellanby, to whom psychology in Cambridge already owed more than can be expressed. In spite of all his many other preoccupations Craik found the time to inspire every branch of the work of the unit in the most practical manner, showing an unusual power of leadership.

On 7 May 1945 Kenneth came into my room about 6.30 p.m. to tell me about his movements for the next few days, and to discuss plans. He was full of all the usual enthusiasm. We were to meet at St John's College a little later, for it was the anniversary of St John the Evangelist and the annual dinner, greatly abbreviated because of war conditions, was still held. Soon after the dinner began news came that Kenneth had had an accident. I left the College. It was the eve of V.E. day. Flags were flying, many people pursuing their cheerful plans. Back went my mind like a flash to another public holiday years ago when I had come out of the same College gates into a world at play, knowing that W. H. R. Rivers, whom I had seen not long before full of vigour and plans, was lying dead. I went slowly to the hospital, and learned for certain what it seemed that for certain I knew already. There was nothing at all to be done. Kenneth was unconscious. He could not recover. Consciousness never came back to him, and that was a good thing; for if it had it would have meant pain and distress: these, at least, he escaped.

For the last six years—and they are the only ones I can write of with first-hand knowledge—Craik's life in Cambridge had been a very happy one. I often find myself wondering to what his power and its achievements were due. Partly they were due to an exceptionally acute and quick mind; partly to a controlled but agile imagination which was able to take practical problems, solve them, and at the same time use them in the interests of basic research; partly to a kind of training which gave him wide interests and a capacity for honest thinking, but did not prematurely tie him up in any specialism; partly, paradoxically, to a body that was not naturally very biddable, but which he so far trained that he became a most beautiful craftsman and no mean player of certain quick ball games; partly to a temperament which was appreciative before it was critical, so far as other people were concerned, so that he gave his best to them without reserve and got their best out of them without effort. Kenneth himself constantly acknowledged the fact that much of his success was due to his good fortune in having the most loyal experimental assistance, first from Mrs S. J. Macpherson and then from Miss M. A. Vince, and to his coming into a small group of people all intensely interested in the development of psychological science, and both

critical, and co-operative to an unusual degree. Behind and deeper than all these, and the many other similar influences which made him what he was, there were other things which maybe fewer people had the chance to know.

Happy these years were beyond question; but they had also their difficulties and indecisions, sometimes long and hard to resolve. He took tremendous physical risks, not always necessary ones either, and genuinely enjoyed them. More ordinary things could worry him. He had frequent long journeys, with much discomfort, little chance of food, and social encounters impossible to foresee and nothing whatever to do with the purpose of the journey, which were at times irksome to him. When the journeys were over he would joke about them, but their anticipation sometimes bothered him considerably and put him off his work. Making decisions about personal priorities which could perhaps seriously affect the careers of others he found very difficult, as perhaps most people do who have a wide tolerance for many different ways of thinking and for many different qualities of men. More important still, probably, were certain intellectual conflicts, never wholly settled, some of them with emotional roots deep in his earlier years.

One of these sprang from his outstanding capacity for designing and making instruments of all kinds. He found it hard to refuse any problem which gave him a chance to invent some new piece of apparatus, especially of the mechanical kind. There was a danger in this. He knew that it was to some degree interfering with his interests in basic research. Some of his later work, under the war stress, became in fact a little less rigorous than the earlier and a little less scientifically satisfying. There was a chance that he might find himself caught up in one long swirl of merely *ad hoc* investigations. But all those who knew him best were quite sure that this would not have been a lasting danger.

There was a more stubborn conflict than this one. Like many other people who have achieved striking originality Kenneth was exceedingly suggestible. Receptivity to ideas of all kinds and from all sources may well be one of the most effective conditions in the production of that sort of intellectual ferment out of which new developments arise. In Craik's earlier life most of the strongest influences came from people with profound artistic and humane interests. He gained and kept a love of beauty, particularly in poetry and in music, and treated the human mind as something unique, not capable of adequate expression in terms applicable to anything but itself. Then he came to an environment in which the strongest intellectual stimuli were scientific. Many of the people he knew well and most deeply respected were trying to find mathematical expressions for a large

variety of relations between stimuli and the responses which they set up in animals and human beings. The long-standing psychological controversy about the quantitative nature of sensations fascinated him, and although his own studies in sensory adaptation convinced him that none of the earlier formulae proposed for the expression of this particular relationship between the gradation of stimuli and an accompanying gradation of response was adequate, he hoped and believed that more satisfactory formulae would be found. It may even be the case that his rather sudden switch over from the humanities to natural science led him to exaggerate the differences between the two points of view.

When he was seventeen, Kenneth wrote an essay on Immortality.* It is intended to demonstrate, or at least to declare, that there can be no satisfactory accounting for man's life and mind as if they were machines. The notion that keeps cropping up is that however anything may be constructed its beauty may well be something different from the manner and material of its making. 'And it is comforting to think that we need not despise the beauty of things because they consist only of electrical energy; but rather admire them whether they do or not.'

The only completed study of any length which he published was his small book on *The Nature of Explanation* (Cambridge University Press, 1943). In this he appeared at first sight to be taking up a position diametrically opposed to that of his early essay. He argued that perhaps the human mind and body operate exactly according to the mechanical principles of the complex calculating machine or certain developing forms of servo-mechanisms, regulating its output not only according to the quantity but also according to qualitative features of the input supplied by its appropriate stimuli. Others, watching these machines at work have seen them as illustrations of how the human mind, faced with special problems, mostly of a practical character, has set to work to devise instruments which tackle them as nearly as possible with the results that the mind itself might achieve. He seemed to be trying to see them as evidence that in so far as they are successful, they show how the mind works, not in inventing the machines and using them, but in actually solving the problems. If therefore the flexibility of such machines could be so enormously increased that they could deal with as many and as varied situations as the mind and body can master, this would prove that they work just as the mind and body do, and further, the principles explaining their operation would be exactly those principles

* I am deeply indebted to his mother, Mrs M. Sylvia Craik, for a copy of this essay.

which are used in the current explanation of the operations of any system called mechanical.

Both these inferences are dubious. Both seem a far cry indeed from the earlier essay which asserted that 'the mind is...a fit instrument for any research, and something to be treated with a reverence that we can never feel for what may turn out to be a novel and complicated kind of engine'.

Many a time in the last year or so I went to his room in the Laboratory and found him, with absorbed delight, experimenting with lovely self-regulating machines, adapting them to pick out and respond to stimuli in rapid sequence in a different manner from their reaction to stimuli in slower succession, and even to segregate and do something special about changes of shape, like kinks in a straight line. When they broke down, as they not infrequently did, he would look up with a rueful smile and go on trying. In those smiles I think that perhaps I was not wrong in finding some quiet but deep satisfaction. He was so honest that he had to go right through with the mechanistic hypothesis, pushing it to the uttermost. Yet with him, as with many another, there remained the conviction that man's life and search are a perpetual adventure, and that all our advances towards self-knowledge are promises without end.

F. C. BARTLETT

BIBLIOGRAPHY

The following bibliography, which covers only papers written during the years 1937–45, has been compiled by Mrs S. J. Macpherson.

Many of the papers were circulated as special reports and have not yet been published.

Abbreviations

F.P.R.C. = Flying Personnel Research Committee.
B.P.C. = Military Personnel Research Committee.
M.R.C. = Medical Research Council.
A.O.R.G. = Army Operational Research Group.
A.P.U. = Applied Psychology Unit.
R.N.P. = Royal Naval Personnel Committee.
A.R.L. = Admiralty Research Laboratory.

1. *Proc. Phys. Soc.* (1937), XC. 'Note on effect of a.c. on human ear.' With A. F. Rawdon-Smith & R. S. Sturdy.
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The following members of the College were called to the bar on 27 January 1947:

Mr A. K. ALLEN (B.A. 1940) by the Inner Temple; Mr C. B. BOURNE (Matric. 1945) by the Middle Temple.

Mr E. H. GORDON (B.A. 1929) was called to the bar by the Middle Temple 30 April 1947.

Mr J. P. WEBBER (B.A. 1939) was called to the bar by Gray's Inn on 18 June 1947.

OBITUARY*

FREDERICK FROST BLACKMAN

(1866–1947)

By the death of F. F. Blackman on 30 January 1947 the College lost a member who had through many years devoted much time and thought to its interests. He was born on 25 July 1866 in Lambeth where his father practised as a medical man. He was the third child and eldest son of a family of eleven children; a Victorian experience which no doubt played its part in his education. What guided his attention to botany is uncertain. That he should have been interested in biology is not surprising for not only was his father a doctor but his mother was the daughter of a medical man. A bias towards the plant may have been given by a set of Sowerby's *British Botany*, with its coloured illustrations of every British plant, belonging to his father, who had been a book collector when the size of his family permitted this activity. Blackman's interest in plants survived through his school life at Mill Hill during which he started a herbarium. At school he had the reputation of not working very hard but he managed to do well in examinations. His interests extended to football and the performances of this short but sturdy member of the first fifteen were often recounted by Brindley.

The early interest in plants did not dominate Blackman's first choice of a career for on leaving school in 1883 he entered St Bartholomew's Hospital to train as a doctor. In his first year he showed his intellectual quality by sharing the Jenner Scholarship in science and later he was awarded a gold medal for chemistry. Although his medical studies had been highly satisfactory and he had already passed the Primary Examination for Fellowship of the Royal College of Surgeons he accepted an opportunity to come to St John's College in October 1887 to embark on what was to become a distinguished career as a plant physiologist.

* We are indebted to the Editor of *The Cambridge Review* for permission to repeat matter that was first published in its columns.

FREDERICK FROST BLACKMAN

His success as an examination candidate continued through the Natural Sciences Tripos of which he took Part II in Botany in 1891, Roger Fry being a fellow candidate. Appointed to a Demonstratorship in Botany in the same year, he continued as a member of the staff of the Botany School until he retired in 1936 from his Readership, which he had held for 32 years.

As an undergraduate his interests included music and pictures; interests which continued to develop and widen throughout his long life. He visited most of the picture galleries of Europe including those of Russia and at one time had an extensive collection of photographs of old masters. In addition to his wide knowledge of the arts he had fine judgement. This knowledge and judgement were freely given in the service of the College. He was elected a Fellow in 1895 and lived in College until he married in 1917. For six of those years he was Steward, succeeding his friend Bateson in 1908 and being followed by his old school friend Brindley in 1914; an alliterative succession of biologists. In the words of the Master: "No Fellow gave more freely of his time and ability to serve its interests. A lover of the arts, his chief collegiate interest lay in all that concerned the beauty of our possessions and precincts. In such matters we always sought his help and never failed to profit by his genius and his labour. In particular he gave unstinted trouble to all that concerned our new buildings. Only the best would do and no labour would be spared to find out what that was."

He served the University not only by his distinguished work as an investigator and an inspiring teacher of plant physiology, of which he created a leading school, but also as a member for many years of the Fitzwilliam Museum Syndicate. Sir Sydney Cockerell, the Director of the Museum at the time, writes: "Looking back I can think of no member of the University to whom I was so much indebted for unflagging support and encouragement, sometimes sorely needed, while I was in charge of the Museum."

As a scientist Blackman was a pioneer in the use of precise quantitative methods in plant physiology and in the application of physico-chemical laws to the elucidation of biological processes. Yet he never forgot the deeper complexities of the organization of biological systems. He could thread his way through a maze of experimental data until he had achieved a picture of the underlying reality; but he never misled himself into supposing he had reached finality. This is not the place to give details of Blackman's scientific work. His published contributions were epoch-making; but his high standard, and his unwillingness to publish experimental results until he felt that he had placed them in a right perspective, meant that the quantity of published work remained small. He made an enduring impression

on those who heard his lectures and on those who had the privilege of working under his guidance. He had in great measure the great teacher's quality of inspiring reverence. He was elected a Fellow of the Royal Society in 1906 and was awarded a Royal Medal in 1921.

As a scientist, so as an administrator, he proceeded with great care to uncover the nature of a problem and then faced the task of finding the best solution. So adequate was the resulting organization, and the machinery ran so smoothly, that the user was apt to overlook the designer.

He did not make human contacts easily but when the reserve had been penetrated there was to be found a friendly personality. He could bring his critical and candid intelligence to bear on a wide range of topics, never dismissing a subject with a superficial judgement. To discuss a problem with him, no matter whether it was the arrangement of a menu, the preparation of a scientific paper, or some other work of art, was to experience a mental discipline. Although much of his life was devoted to theoretical problems he found time for practical things. After his marriage to Elsie Chick in 1917 he planned a house and after it was constructed they surrounded it with a garden. To the arrangement of the whole he characteristically devoted much time and deep thought and from the results they continued to reap real pleasure. The same attention was given to the placing of his plants as was given to the perfecting of his scientific apparatus or to the choice of a right word or phrase. In all he displayed a rare sense of delicacy.

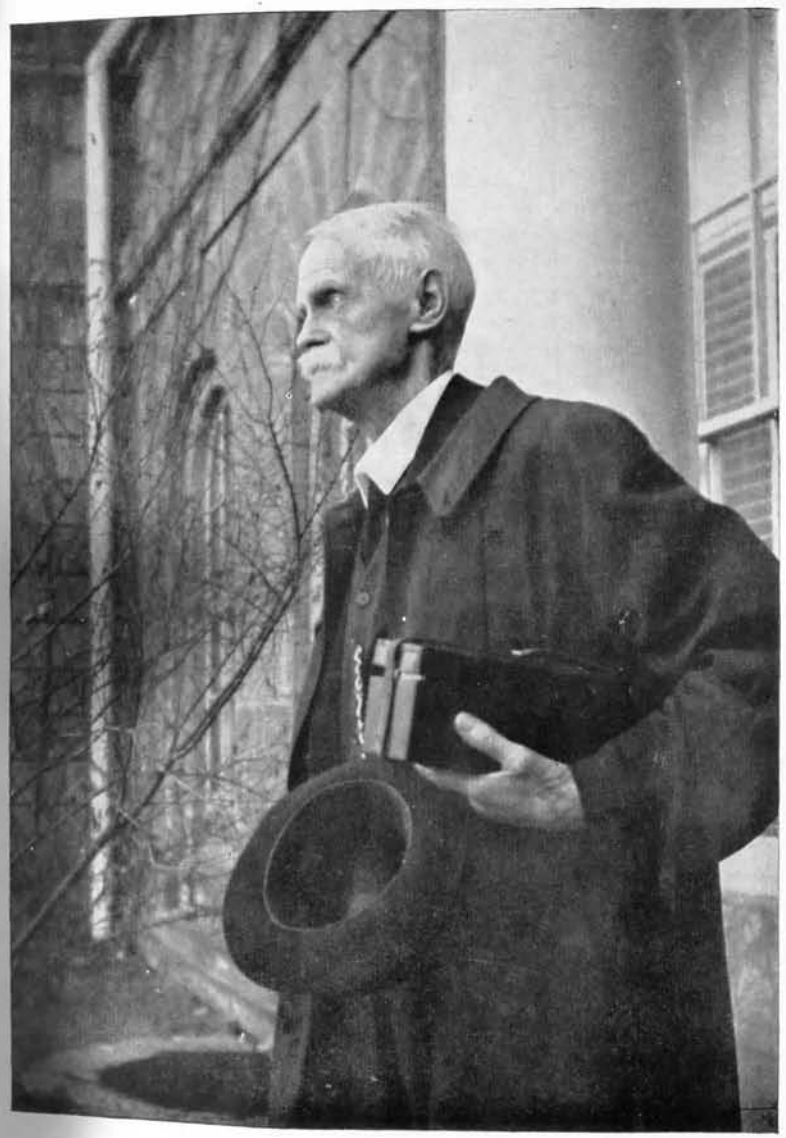
The College did not see much of him after he retired from his University post in 1936. During these years his health was uncertain but his interest in College affairs and his scientific activities continued to the end. Mrs Blackman, who shared many of his interests, and their son survive him.

G. E. BRIGGS

GEORGE GORDON COULTON

(1858–1947)

EARLY in 1919 George Gordon Coulton was elected to a Fellowship at St John's College which he held until his death on 4 March 1947. The election was, in certain respects, unusual, for Coulton was 60 years of age (having been born in 1858), was not a member of the College and was not brought in, as men from other colleges sometimes are, to assist with teaching duties. It was recognition by the College of a most notable Cambridge figure who soon moved into rooms at the top of A staircase, New Court, where, above H. S. Foxwell and



GEORGE GORDON COULTON

the present Master, he looked out on one of the finest of Cambridge views. Into those rooms he moved his considerable library, including many volumes of transcripts, a number of remarkable pictures and prints, and from there he sent out to the world the fruits of ripe and mellow scholarship.

Coulton was a Norfolk man and the son of a fairly successful country lawyer. He was born at Lynn and never ceased to be proud of his connection with that ancient borough whose medieval houses and churches left a permanent impress on his mind. The sixth of eight children, Coulton was sent in 1866 to the Lycée at St Omer where he learnt the French accent that can be acquired so easily by children abroad and with such difficulty, if at all, at home. After that, back at Lynn for a short time at the then rather unsatisfactory city Grammar School and so, in 1872, to Felsted. After trying for a Classical Scholarship at Wadham College, Oxford, he was successful at St Catharine's, Cambridge, in 1877. There he was tutored by Carr and coached privately (as nearly everyone hoping for honours then almost had to be) by Spratt. In a very small College it was not remarkable that a boy from Norfolk should row in the College boat, or that a Scholar of the College should obtain a College Prize, but severe blood poisoning at the critical moment prevented his taking the Classical Tripos and his degree was *aegrotat.*

In 1881 this left little choice for a career. He had already chosen Classics rather than Law, for which he had no inclination, so that school-teaching or the Church, in an age where the two were frequently combined and when most headmasters were in holy orders, became inevitable. For 30 years, with some interruptions, Coulton was a schoolmaster and it was not until 1911 that he returned to Cambridge for more than a brief visit. Herein lay part of his later Cambridge influence. After 30 years' experience in a dozen schools a man of imagination and insight could bring valuable qualities to the teaching of undergraduates and could do something to bridge that formidable gulf between dons and schoolmasters which twentieth-century preoccupation with "research" makes ever wider. Strong antiquarian interests, a good classical training and a passion for truth were the foundations of the future historian. Malvern, Llandaff, Llandovery, Sherborne, Sedbergh and Dulwich successfully made use of his services, and from each move he gained more than he lost.

After a year of preparation with Dean Vaughan, Coulton had been ordained deacon in 1883 and priest a year later. He was curate in two or three parishes but was never beneficed, drawn irresistibly to the teaching which was his real *métier* and becoming so dissatisfied with the implications of life as a priest that, after a few years, without ever

renouncing his orders under the Clerical Disabilities Act or ceasing to be in communion with the Church of England, he resumed the style, dress and irresponsibilities of a layman.

In spite of an early failure to obtain a post at the British Museum and later lack of success to enter educational administration, Coulton continued studies which were never entirely interrupted, and which became intensified as passing years brought opportunities and a sense of emergency. At the age of thirty, and at a time when seniority was given great weight in any question of promotion, he spent a year in Heidelberg, doing a little coaching, but reading widely in medieval literature and becoming thoroughly proficient in the German tongue at a time when German historical scholarship was at its best. It was in order to be near the British Museum and the London Library, too, that in 1892 he left a permanent post at Sedbergh for a less permanent one at Dulwich, interpolating a prolonged Italian holiday which enabled him to understand at first hand the life of the Italian peasant and prefaced the way for Franciscan studies in a not distant future. At the invitation of his undergraduate friend Scott, Coulton moved to Eastbourne to cram young men for army examinations, and it was while at Eastbourne that, in 1904, he married Miss Rose Ilbert. Two daughters soon formed a serenely happy family: and articles, books and lectures were bringing the name of G. G. Coulton before the public.

So much so that in 1911 Trinity College appointed him Birkbeck Lecturer, and, relying on pupils and chances for what is now called Adult Education (largely the result of James Stuart's enthusiasm for "University Extension"), Coulton moved to Cambridge.

To the undergraduate who came to Cambridge with the great flood of returning ex-Service men to read History in 1919, certain names were soon familiar. Clapham, Temperley, Tanner, Winstanley, Lapsley, Brooke, Previté-Orton (to mention those no longer with us), formed the nucleus of a great faculty. Coulton did no regular College teaching, but he did twice as much lecturing as most dons, both for the Historical and the English Tripos. In those years immediately after the first world war he was at the height of his splendid powers. From Four Mile House, Great Shelford, where timid undergraduates on Sundays were assured of tea, most likely in the garden, and either a book or a bag of fruit as an inducement to come again, a rather ancient bicycle brought the tall, thin, unmistakable figure every weekday to the Arts School, to the University Library, and to College. Lectures full of information (in which something might sometimes be heard of misguided pacifists or an impenitent cardinal), and illustrations ranging from hand-made maps and slides to pictures sketched on the blackboard to the accompaniment of cheers, made us

realize how close the Middle Ages, expanded by such a master, could be to the twentieth century. In the afternoon, after the strangest of picnic lunches amid books and papers strewn apparently in the wildest disorder but actually in a cunningly constructed maze, there would be a walk often along the tow-path and then steady reading and writing until Hall.

In term time the stream of undergraduates and research students to those rooms was long: once a week, or once a fortnight, there was a "squash" in which young men and women crushed in to sit on the floor, smoke, drink coffee and discuss, as only post-war undergraduates could discuss, international affairs, philosophy and history. The old schoolmaster knew how to persuade others to talk, while he listened, kept the conversation to the (or at least to a) point and then would sum up or show how much had been omitted. Once or twice an apt quotation from Ruskin or Browning would remind a D. H. Lawrence-soaked generation of another inheritance, or a mild sarcasm would show the moralist. To those happier ones to whom a greater intimacy than this was vouchsafed there were serious assessments of values in thought, books and men and instruction in the technique of historical writing or the technicalities of historical research.

"Grow old along with me"—a few heard that invitation and were caught in a spell which not even death can break. To accompany Coulton on a holiday, whether by the sea in his beloved Norfolk or cycling in Devon or tramping in "la vraie Bourgogne, l'aimable et vineuse Bourgogne...pays de bons vivants et des joyeux Noël" was to realize the tremendous knowledge, the amazing memory, the eye of the artist and the soul of the preacher that made possible so rich a life. A long shelf of learned books with *Five Centuries of Religion* as the bulkiest and the most important, a still longer one of writings inspired and often directed by him, controversial pamphlets and a classic autobiography are there for all the world to see. A correspondence carried on with friends and pupils, strangers and antagonists never ceased. That pen and that brain were active to the end. When the eighty-eighth year was reached and growing lameness made "the foot less prompt to greet the morning dew", reviews, articles, letters, controversy went on with undiminished enthusiasm. The long and bitter sunless winter of 1947 proved too much even for that splendid constitution and the end came with merciful painlessness.

We cannot yet assess the contribution that his writings have made (and at least two more books are ready for the press) to the study of history, but it can be said with certainty that no serious student of the Middle Ages, and of monasticism in particular, can neglect them or their challenge in the twentieth century. We may end by applying to him words that he wrote of his own friend and former colleague,

H. W. Fowler: "At last, he attained to such a mastery of life as a fine rider has over his horse, or a yachtsman over his boat: most impressive to all who could understand, but deceptive in its appearance of ease."

G. R. POTTER

CHARLES WILLIAM PREVITÉ-ORTON

(1877–1947)

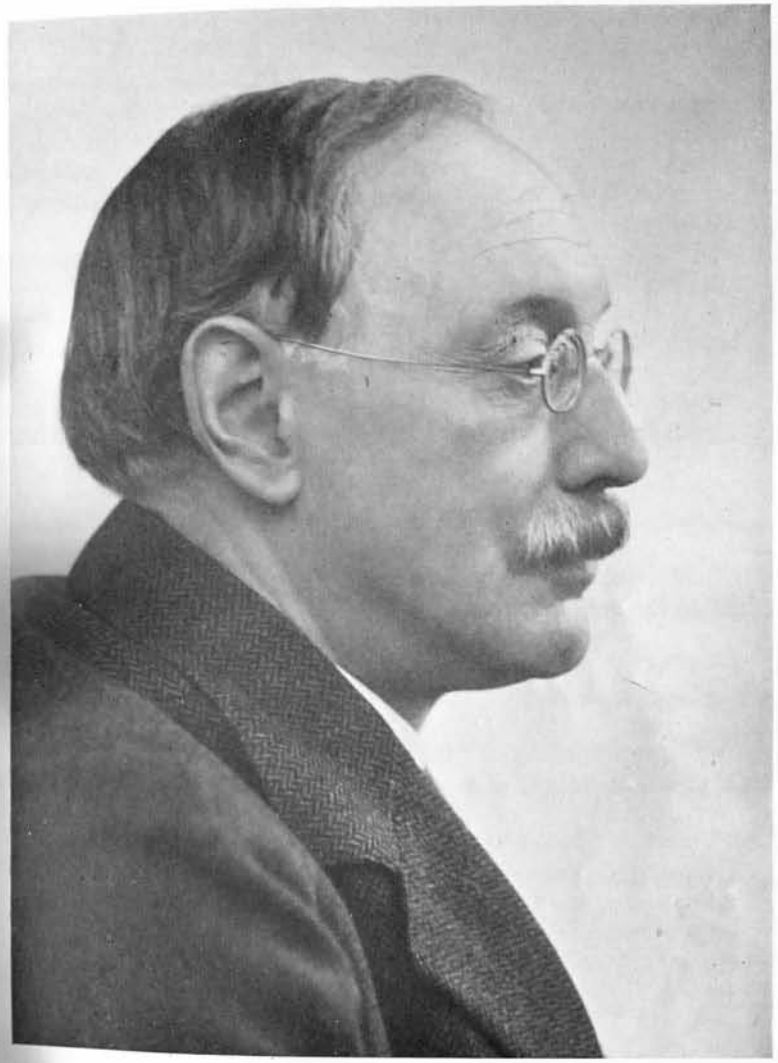
BROOKE, COULTON and PREVITÉ-ORTON formed a combination of scholarship and talent of which any Historical School might well be proud, and to lose them all in one year has been a heavy blow. All three in one way or another were closely associated with St John's, but Previté-Orton alone passed the whole of his life from his undergraduate days at the College. The son of William Previté-Orton, a clergyman, he came up to St John's, of which his father had been a Scholar, in 1905 at the advanced age of 28. He had been educated at Franklin's Preparatory School, Stoneygate, Leicester, and by his father at home.

When he came to College his natural shyness was enhanced by his difference in age from his fellow undergraduates, but Previté, as he was always called, soon appeared happy in College, and a series of remarkable academical successes—firsts in the Historical Tripos in 1907 and 1908, the Gladstone Memorial Prize, the Members Essay Prize, and then a fellowship (1911)—established his reputation and increased his confidence in himself. These successes also determined his career and in 1913 he married and settled down to academical work in Cambridge.

To the College he was closely attached and served it well in various offices. In addition to the part he took in the historical teaching as a Supervisor, and, later, Director of Studies in History, he was also Praelector for nine years, and Librarian for twenty-one. He was an admirable Librarian and held the office until, in 1937, he was elected to the newly-founded chair of Medieval History in the University, which he held until he reached the retiring age in 1942.

His election to the Chair was the result of the high reputation he had steadily established by a series of writings on medieval history—particularly later medieval and Italian history. His father's father was Italian and perhaps from this source was derived his interest in Italian history, which was the principal field of his research and frequently provided the subjects of his courses of lectures.

It is not for me to attempt any estimate of his historical work, yet one may recall the sequence of writings which only ended with his death, their extent, authority and range, the literary flair which



CHARLES WILLIAM PREVITÉ-ORTON

seemed to make production easier for him than for most, and the high scholarly character that marked his books from the first to the last.

His Members Essay Prize, *Political Satire in English Poetry*, was published in 1910 and gave some indication of his powers as a writer. *The Early History of the House of Savoy*, his fellowship thesis, followed in 1912, and then the *Outlines of Medieval History*, the *Defensor Pacis of Marsilius of Padua*, *Opera Inedita T.L. de Frulovisiis*, the *History of Europe* 1198–1378, and, at the same time, contributions to the *Cambridge History of English Literature*, to the *Cambridge Medieval History* and to the *English Historical Review*.

In addition to all these books was the editorial work which occupied a great deal of his time and for which his ample knowledge, unstinted labour and exactness of mind fitted him so well. It may be mentioned, incidentally, that he had been a devoted Editor of his College Magazine, *The Eagle*, which owed much to him, particularly during the war of 1914–18.

With his former Tutor, J. R. Tanner, to whom his first published work was dedicated, and with Zachary Brooke, he collaborated as Editor of the *Cambridge Medieval History*, and with Professor G. N. Clark, for a time, as Editor of the *English Historical Review*, of which from 1926 to 1938 he was sole Editor. He enjoyed such work; it gave him the sense of being in the current of historical progress, which he greatly valued, though difficulties of sight made the work exacting and finally obliged him to resign it.

The Introductions and Epilogue which he contributed to the volumes of the *Cambridge Medieval History* reveal the breadth and quality of his historical judgement. "The student", he writes, "must inevitably be impressed by the relativity of history.... We take narrow views of a world, of which each one of us is an infinitesimal part, secluded within a straitened limit. Perhaps only one general impression is universal—the turbulent movement, the infinite perspective and variety, in great things and in small, of that unfathomed sea".

He took his doctorate in Cambridge in 1928, and to his great pleasure was elected a Fellow of the British Academy in 1929.

Outside of academical work he had few pursuits. In the Great War he was a keen member of the M.A. section of the O.T.C., amused to be guarding bridges, but not physically fit for more arduous service. He was interested in birds, knew a good deal about them and was often to be seen in the Botanical Gardens following their movements with his glasses. Always fond of travel, he visited the Continent regularly, particularly Switzerland and Italy.

He died at his home in Cambridge on 11 March 1947, suddenly

and unexpectedly, at the height of his reputation, and perhaps as he would have wished—at his work, in the midst of his teaching.

He was a man who made no enemies. A lover of the old ways, of unfailing kindness and helpfulness and always good company, he was regarded with warm affection and respect through all his years in College. His apologetic manner was humbling to those who were more conscious than he himself appeared to be of the range of his knowledge, and yet he had a hearty enjoyment of the good things of life, and seemed to have found his right milieu in an academical vocation. We shall remember him always for his wide learning, his shrewd and humorous judgements, his strong convictions, yet perhaps most of all, for the profound modesty which graced his life.

E. A. BENIANS

ZACHARY NUGENT BROOKE

(1883–1946)

A Memoir by Sir Michael F. J. McDonnell

IT is often difficult, in late middle age, to remember the circumstances in which one first met one's old friends, but in the case of Zachary Nugent Brooke ("Zachary" to his Cambridge friends, though "Nugent" to his family), for some reason, I can quite clearly recall the occasion of our first encounter, which led to an unclouded friendship lasting nearly 50 years.

We were both, in December 1900, candidates for entrance scholarships at St John's College, Cambridge, and, fortuitously, found ourselves, on the evening before the examination began, seated beside each other at dinner in Hall. There was something about him that immediately attracted me and we made a point of sitting together at dinner on each of the five or six days during which the examination lasted. The candidates were all under 19 years of age, but Brooke, who was in the sixth form at Bradfield, looked, and was probably, the youngest of us all for he had only entered for a trial trip, while still under eighteen, a year before the normal time. He was not very tall and was slight in build; his thick mop of wavy dark hair, his small features and his high colour, doubtless made him appear even younger than he was. I was in fact only eight months his senior: and I found him more interesting to talk to than any of the older boys who were about us during any of those five or six dinners in Hall.

I went up to St John's in the following October and, at the next scholarship examination in December, Brooke was once more a competitor. I do not recall seeing him then (probably the hour of dinner for scholarship candidates did not synchronize with that for men in their first year), but I remember reading in the result of the examination posted in the "screens" outside the Hall that he had gained a minor scholarship at the College and, if I am not mistaken, he was the senior Classical Scholar in the College of his year.

When he came up in October 1902, recalling my pleasure in meeting him nearly two years before, in the exercise of the curious privilege of an undergraduate in his second year, I made a point of calling upon him before considering whether I should do so upon any of the other freshmen of the year. His rooms were at the top of a turret staircase in the south-east corner of the Second Court. They were rather sparsely and impersonally furnished and I recall that he continued to live in what seemed to me somewhat austere discomfort until he gained his Fellowship six years later. He was, I judged, shy, diffident and very sensitive. He worked hard, probably very hard, he coxed a Lent boat, at any rate in one year, and played moderately good tennis in the summer. He used, I think, to go to camp with the O.T.C. He had a good voice and sang in Musical Society concerts, in the choir, and he spoke a good deal at the College Debating Society. I was somewhat moved to find at the head of a series of neatly tied packages of my letters to him covering a long period of years, which were returned to me by his widow after his death, what was probably my first written communication with him, namely an invitation from me, as Secretary of the Debating Society, asking him to speak as the fourth speaker in a debate, in his first term. Being, when an undergraduate, a heavy sleeper, I was terrified of oversleeping on the mornings of my Tripos examination. With characteristic goodness and regularity, Zachary came each morning and thoroughly roused me in ample time.

It is difficult to know how we became great friends. We differed in religion and in politics, and were reading different schools at Cambridge, but we had a common interest in the theatre, and often went together to hear the Gilbert and Sullivan operas, and we shared an interest in books. I can recall many summer afternoons together in a canoe (there were then no punts) on the river, on the way to the bathing sheds or to the Orchard at Grantchester for tea, and many winter evenings in his rooms or mine when we used, like Dr Johnson, to be perfectly happy if we could fold our legs and have our talk out. Zachary Brooke was, in those days, what came to be known later as a die-hard Tory. I think he moved somewhat away from the extreme right with the passage of years. I have an idea that he had, as a boy, a somewhat Evangelical background: if I am right, from this too he moved as time went on.

I recall that there was conducted in my second, and hence his first, year a mission to undergraduates by a well-known, and very

Protestant, divine of the Church of England. His meetings were well attended, chiefly, at any rate at our College, by Freshmen, and I can remember that several men who had been ordinary, pleasant, light-hearted undergraduates were, as others thought, altered in consequence, for social purposes, for the worse, by what we, the unregenerate ones outside the movement, judged to be a gloomy and priggish air of self-righteousness. I remember hearing from Zachary that he was going, in the tow of some enthusiast, to a great meeting in the Guildhall, and I somewhat wistfully wondered whether he would be affected as had been some of the others, and whether our friendship would founder in a new-born disapproval of one who was a Catholic. I can remember being much relieved when he told me a few days later that he had attended not one but two meetings, a circumstance which was characteristic of his care in coming to a decision. He had not been impressed, and in fact had been much annoyed, by the speaker's attempt to gain credit with an assembly of undergraduates by exploiting his conversion of two or three "Blues" and by his attempt to influence his audience of young men by laying stress on his own physical prowess, in that he claimed to have been able as an undergraduate to leap at one bound from the bottom to the top of the semi-circular steps which lead up from the Great Court of Trinity to the "screens" outside the Hall of that College. To Zachary that type of *ad captandum* approach appeared irrelevant and markedly unworthy. He remained all his life a regular churchgoer with a strong religious sense.

Of his home life I knew little in those days. He was, I believe, the eldest son of his father, the third in a family of six children. His mother had died when he was a little boy, a thing which, I surmise, explained the atmosphere of sadness which seemed in those days to be not far distant with him. His father had married again, and he was very fond of his stepmother and mourned her death not many years later. One of his brothers, the only one of the three who was not a stepbrother, was a year junior to him at Cambridge, a scholar of Corpus. To him also he was devoted.

Zachary's father was a barrister who was one of the legal staff of the solicitors office in the Board of Inland Revenue at Somerset House. I drew the inference that there was imperfect sympathy between the father and son. I gathered that his father had set his heart upon his eldest son becoming a clergyman, and that there was considerable difference of opinion between them on that score. He never told me more than this and I felt it was too delicate a matter for me to ask either the reason for his father's wish or for his refusal to comply. I never met his father nor any other members of his family, except the brother of whom I have spoken, until after his marriage. I lived in

London and he used to come to my home in the vacations where he was much liked by my people. His home, which I never visited, was at Sutton in Surrey, then, I imagine, still semi-rural.

I always thought he retained a territorial attachment to that county. His commission in the war of 1914–18 was, presumably at his instance, in the East Surrey Regiment. Although he always seemed to be *au fait* with contemporary events, I often reflected that all his life I had never seen him do more than glance at a newspaper. He always used to turn to the sporting columns of *The Times* to see what had been the score of Surrey in any match played by that county on the preceding day: throughout his life he retained the habit, acquired, I think, in boyhood of spending a day every now and then at the Oval. I have no recollection of ever hearing of him going to Fenner's or to Lord's, and I imagine that his interest was more in Surrey cricket than in cricket at large.

After I went down I went frequently on visits to Cambridge and saw him there. In vacations we foregathered in London a good deal. After taking his degree, Zachary for a few years held a Lectureship at Bedford College, then in Baker Street, and this gave us more opportunities of meeting and dining together. I imagine that it was at this time that we saw many of the plays of Shaw, Galsworthy and Granville-Barker produced by the Vedrenne-Barker Company at the Court Theatre in Sloane Square, where good plays and good acting were sure to be found.

I always felt that Zachary was much disappointed at not being elected a Fellow of St John's, where two of his ancestors and namesakes, a father and son, had been elected to Fellowships in 1739 and 1789 respectively. The connection, indeed, in the case of the first of these two was even closer for, being Lady Margaret Professor of Divinity, he was in fact in the running for the Mastership of the College in 1765. Zachary, however, was invited to apply for a Fellowship at Caius and was elected in 1908. I stayed with him at Caius on several occasions in the three following years and, in spite of his reserve, it was obvious that he soon acquired the respect and liking of the Fellows of his new society.

In 1911 I entered the Colonial Service. Zachary was good enough to come all the way to Liverpool with me, to stay the night there, and to come and see me off on the boat. He took the trouble to do this on each occasion on which I went abroad, until the war of 1914–18 put an end to it, and moreover, on his return to London, he took the trouble of going to see my people to let them know of my safe departure. In the year 1911 he went to Rome, on a so-called sabbatical year's leave from College, to conduct researches in the Vatican archives. My mother happened to be staying in Rome, in indifferent

health, at the time, and he showed her such kindness and attention as few men of his age would have shown to an elderly delicate lady. All her life she continued to be grateful to him.

Just before the war in 1914 he and I went abroad on the only holiday we had ever been able to take together. After some pleasant days in Paris we went to Florence where we spent about three weeks with great enjoyment. I can well recall the almost boyish enthusiasm which he displayed, the moment we had passed through the Mont Cenis Tunnel and arrived at Bardonecchia, at finding himself once more in Italy.

At one time during the war, when I was on leave, he was in camp in Shoreham while I was frequently in Brighton, and we used to meet a good deal. He got no pleasure whatever out of life in the Army; the routine he found boring and the mess-room life distasteful. He was not very long at the Front in France, but developed trench-fever, and I can recall visiting him on several occasions in the last winter of the war at King's College Hospital at Denmark Hill which had been transformed into one of the London General Military Hospitals. On his convalescence I was able to recommend him for an appointment in the Ministry of Food, but after working there for a short time he was transferred to Military Intelligence, where he was, I think, at last happy in the Army because the post gave him scope to use his particular type of brains.

It was in the course of the war that he met the lady who became his wife. Until, to my surprise, I heard that he was engaged to be married, I had never seen any evidence of his taking the slightest interest in that direction. I need not say more than that it was a supremely happy marriage. He had three gifted sons (the eldest of whom he paid me the compliment of naming after me) and each of his sons in turn became a scholar of Caius. More than one of his books bears testimony to the pleasant co-operation of his wife and sons (at the time little more than school-boys) in their production, by way of copying, typing, indexing and research.

It was a great pleasure to my wife and me to welcome him and his wife to our home in Jerusalem a few years before my retirement. I last saw him in Cambridge in July 1939, and during the whole course of the war I only saw him once when he was passing through London. He had had some middle ear trouble a few years before this and I feared a serious recurrence of this might be brought on by war-time conditions, but on this, the last occasion on which I saw him, he looked as though he was well enough to enjoy many more years of life. I had no idea that he had cardiac trouble, so that the shock of his terribly sudden death was the more distressing.

I am not, of course, competent to speak of him in regard to his work

as a historian. I fancy, however, that a certain hesitation in his speech may have caused him to be regarded as a better writer than lecturer. Of this, at any rate, I am certain, that his work, whether put forth on paper or by word of mouth, was the fruit of endless pains. Anyone who watched him as I did over a long period of years, engaged on his knees every afternoon, eliminating from the lawns of his two successive houses every kind of weed, and particularly yarrow, could not fail to see that there was a man of regularity and pertinacity for whom no trouble was too great for the attainment of any object in view. Again, one of his regular habits for a number of years was to measure the rainfall in a rain gauge in his garden, a practice which I always thought was symptomatic of the same traits of industry and method which had been among his marked characteristics even as an undergraduate, and I am convinced that he employed similar methods in his research and in the preparation of his books.

He was ever scornful of facile writing, and had a great sense of the responsibility laid upon a historian to be honest. He greatly disliked writers of history with a *parti pris* and brought an eminently judicial intellect to bear upon everything he touched, whether historical or otherwise. He most emphatically did not suffer fools gladly. He much disliked pomposity, and he showed great intolerance of charlatanism, and when he found it—as he did sometimes—in academic circles, he was peculiarly indignant, because, I think, of his sense that *noblesse oblige* should rule, if nowhere else, in the republic of letters, whose citizens he felt should be peculiarly concerned to see that it was held in the highest possible esteem.

He was accustomed to exercise much self-control. I do not remember ever seeing him really furiously angry, not even when, as undergraduates, coming back in a Canadian canoe from the May races, we were run into by a clumsy oarsman near the gasworks. Our canoe foundered and we were compelled to walk back to College in flannels covered with mud well above our knees. Since I must paint him, as Oliver Cromwell wishes to be painted, "warts and all", I must confess that during all the years I knew him he groused a good deal about things that he did not like and about people of whom he did not approve, but, while there were a certain number in each category, I do not think he ever got further than *sotto voce* complaints about people and things that in his view merited criticism, a criticism that as a rule was the outcome of his innate fastidiousness. His sense of humour, though well developed, was not obtrusive. I have given several instances of his kind-heartedness; his work for many years for the Waifs and Strays Society in Cambridge testified to his generosity and charity.

Life in Cambridge suited him down to the ground and provided

a good setting for the work to which he was devoted, but even in academic circles one is sometimes constrained to perform duties which distract from the cloistered calm which was the ideal that he would have preferred. He was for some years Praelector of his College and he found the business of shepherding graduates through the mazes of the Registrary, and its regulations, to the Senate House, in their pursuit of higher degrees, not at all to his liking. He was far more happily employed for a number of years as Librarian of his College, a post for which his tenure for a few years of the Librarianship of the Union had, no doubt, helped to qualify him.

His dislike of the Praelectorship was due, I think, to the fact that he never achieved that unduly lauded modern ideal of being a "good mixer". His shyness and sensitiveness, which I believe remained with him during all the years in which I knew him, made him, as the phrase goes, not everybody's money.

He gave his friendship to few, but when he did so he did it most generously, and I for one highly appreciated it and can only look back now with sorrow to the void caused by his loss.

WALTER LANGDON-BROWN
(1870–1946)

SIR WALTER LANGDON-BROWN, M.D., LL.D., D.Sc., F.R.C.P., Emeritus Professor of Physic in the University of Cambridge, and Fellow of Corpus Christi College, died on 3 October 1946, at the age of 76.

Walter Langdon-Brown was born on 13 August 1870. He was educated at Bedford School, and in 1887 won a sizarship to St John's College, Cambridge. He matriculated in 1889, having spent a year studying biology at Owens College, Manchester. He took a first class in both parts of the Natural Sciences Tripos and was elected a Foundation Scholar, and then as Hutchinson Student spent two more years in Cambridge studying physiology. In 1895 he went to St Bartholomew's Hospital with the Senior Entrance Scholarship, and was made Assistant Demonstrator in Biology. He qualified M.B., B.Ch. in 1897, and became house-physician to Samuel Gee, and editor of the *St Bartholomew's Hospital Journal*. He combined his clinical work and teaching in the wards with research in the departments of physiology and pathology until his appointment to the honorary staff in 1913. In 1930 he retired from the active staff of Bart's and became consultant physician, but he continued to visit the Metropolitan Hospital, where he had been a physician since the

beginning of the century. His active career was interrupted by two wars. In 1900, in the South African War, he went to Pretoria as senior physician to the Imperial Yeomanry Hospital; and during the 1914–18 war he was physician to No. 1 General Hospital (T.F.) and worked with the Medical Research Council on trench nephritis.

In all his teaching Langdon-Brown showed how medical practice flowed from a knowledge of physiology, and his book *Physiological Principles in Treatment* (1908) reached its eighth edition. He was a pioneer of endocrinology, and his book *The Endocrines in General Medicine* (1927) was accepted as the work of an expert. He coined the much-quoted description of the pituitary as "the leader of the endocrine orchestra", but himself could say that "it later transpired that the hypothalamus holds the still more important rank of conductor". By training he was a physiologist, but by nature he was a humanist, and saw the patient first as an individual, and only second as an example of disease. He always taught upon the whole patient, showing how body and mind acted each upon the other to make the pattern of disease. As his interest in the mind broadened he became an authority on Adlerian psychology and contributed many papers to the Medical Society of Individual Psychology, of which he ultimately became president.

The breadth of his learning was remarkable. He easily kept abreast of the growing knowledge of physiology and medicine, and could always recall the details of his vast clinical experience to illuminate his newest problem. He constantly called upon his knowledge of the classics and English literature to illustrate his medical teaching, and his writings were models of literary style as well as of erudition. His deep understanding of human nature is clear in his book *Thus we are Men* (1938).

In 1932 he returned to Cambridge as Regius Professor of Physic and Fellow of Corpus Christi College. He came back with very great joy, and, as he said in his inaugural lecture, "filled with the desire to repay something of the debt I owe to Cambridge". Langdon-Brown could only serve three years as Regius Professor before he retired under the age-limit, but he more than repaid his debt. His deep respect for the traditions of his office was shown by his affection for its outward symbols—the seal, "the actual Regius chair of pre-Chippendale design", and the doctor's scarlet gown made for Clifford Allbutt himself. His active interest in medical education continued long after his retirement, and in the words of the present Regius Professor of Physic, "his wisdom, his experience, and his counsel were always available to the undergraduate, the newly qualified, or the embryo professor".

Langdon-Brown achieved many honours. He became Fellow of

the Royal College of Physicians in 1908, Croonian Lecturer in 1918, Senior Censor in 1934, and Harveian Orator in 1936. He received honorary degrees from Oxford, the National University of Ireland, and Dalhousie University, Canada. He was Honorary Fellow of the Royal College of Physicians of Ireland, the Royal Society of Medicine, the Faculty of Radiologists, the Hunterian Society, and the Harveian Society, and an Honorary Freeman of the Society of Apothecaries of London. In 1935 he was knighted, and in 1941 he delivered the Linacre Lecture.

Of all his great predecessors, Langdon-Brown was most influenced by the example of Clifford Allbutt. In his last published work, *Some Chapters in Cambridge Medical History* (1946), he wrote: "Well do I remember his inaugural lecture...a lecture blending science with the humanities which gave me a new outlook. It really was a decisive influence in my life." No description of Langdon-Brown could be more apt than that which he himself applied to Clifford Allbutt—"a cultured scholar-physician". He was a part of the great tradition of Cambridge medicine, worthy of the epitaph which John Caius chose for Linacre: *Vivit post funera Virtus.*

M. HYNES

ST JOHN BASIL WYNNE WILSON
(1868–1946)

THE RIGHT REVEREND ST JOHN BASIL WYNNE WILSON, D.D., formerly Bishop of Bath and Wells, died on 15 October 1946, aged 78. The son of the Rev. William Wynne Wilson, sometime Fellow of St John's College, Oxford, he was born at Godalming, Surrey, on 28 August 1868. He came up to St John's as a Minor Scholar in 1887 and was elected Foundation Scholar in 1889. He was awarded Sir William Browne's Medal for a Latin Epigram in 1889, and graduated in 1890 with a first class in the Classical Tripos, Part I. He was a master at the Leys School, Cambridge, from 1891 to 1898, when he moved to Rugby School; here, under the influence of Charles Gore, he took Holy Orders, being ordained in 1903. In 1905 he became headmaster of Haileybury, in succession to Dr Edward Lyttelton, and in 1911 headmaster of Marlborough College. He was appointed Dean of Bristol in 1916 and in 1919 he married Alice Lilian Proctor Wills, second daughter of George Alfred Wills, president of the Imperial Tobacco Company. He was consecrated Bishop of Bath and Wells in 1921 and retired in 1937, after having exercised a traditional privilege of the Bishop by acting as a supporter of the King at his coronation. A writer in *The Times* says of him: "He was a thoroughly

diocesan Diocesan. He did not divide his time and activities between Wells and London. His duty, as he saw it, was to stay at home and act as pastor to his diocese....He lacked experience of parochial work, yet the parochial clergy quickly found in him a most wise and sympathetic friend. In administrative business, too, his quick mind, his kindliness, and his irresistibly rippling laughter helped him to straighten out tangles. Within the limits which he deliberately imposed on himself he proved a really notable Bishop."

THOMAS FRANCIS ROBERT McDONNELL
(1876–1946)

THOMAS FRANCIS ROBERT MCDONNELL, who died on 12 June 1946, was the elder of two Pauline brothers, who were the sons of Francis McDonnell, a Civil Servant. He was born on 10 February 1876, and entered St Paul's in September 1887, as a very young Foundation Scholar. After some years on the Classical side he transferred, as a medical student, to the Science side, and gained a scholarship at St John's College, Cambridge. In his last year at school he gained what was then, possibly, a unique distinction for a boy on the Science side by being awarded the Truro Medal and Prize for an English essay. As an officer of the School Union, where he was a very successful speaker, he formed a close friendship with Walter Nicholson who, as Captain of the School, was President of the Society, and this friendship continued until the death of Sir Walter about three months before that which is here recorded.

At Cambridge, Robert McDonnell graduated B.A. by the Natural Sciences Tripos and subsequently LL.B. by the Law Tripos; and was elected President of the Union in 1899.

On going down he was for a time in the office of the Treasury Solicitor under the Director of Public Prosecutions and was called to the bar of the Inner Temple in 1902. Shortly afterwards he proceeded to Rangoon and engaged with much success in private practice at the bar in Burma until his retirement in 1936, having been for some time the doyen of the European bar there. He was on more than one occasion sounded as to whether he was willing to accept a High Court Judgeship in India, but preferred to continue in practice at the bar. He contributed much voluntary service to different aspects of life in Burma, including the University of Rangoon, on the Council of which he served for many years after his retirement from the post of lecturer in law there which he held for a number of years before.

On his return to England he appeared in a number of Indian appeals before the Privy Council and was for some time the editor of the Indian reports of cases heard by that Tribunal. During the war he worked for some time in the Ministry of Information. For the last two years of his life he was Chairman of a Pensions Appeal Tribunal and was sitting in that capacity until ten days before his death.

HAROLD THOMAS BARNETT (B.A. 1886), solicitor, died at Tilehurst, Berkshire, 23 May 1947, aged 82.

ALAN ABBOTT BIRKETT (Matric. E. 1944), sub-lieutenant, R.N.V.R., was killed in a motor-cycle accident near Bury St Edmunds 23 September 1946.

HARRY ALFRED BRADY (B.A. 1884), solicitor, died 25 November 1946 in London, aged 83.

GEORGE BLACKFORD BRYAN (B.A. 1898), formerly Professor of Physics at the Royal Naval College, Greenwich, died at Nottingham 29 November 1946, aged 69.

ARTHUR PERCIVAL BUNT (Matric. 1910) died at Ealing 28 January 1947, aged 55.

HOWARD EVERSON CHASTENEY (B.A. 1910), Chief Inspector of Factories, died on 18 February 1947, as the result of a street accident, aged 58.

HENRY JAMES ROWLAND CLEGG (B.A. 1924), lieutenant-commander, Royal Navy (retired), died 26 January 1947 at Eldoret, Kenya Colony, aged 46.

FREDERICK ERNEST COGGIN (B.A. 1881), vicar of Lemsford from 1892 to 1905, died 28 January 1947 at White Lodge, Meads, Eastbourne, aged 87.

DAVID RICHARD DAVIES (B.A. 1903), vicar of Broughton, near Preston, Lancashire, from 1923 to 1940, died at Okewood Vicarage, near Dorking, Surrey, 17 March 1947, aged 66.

FRANCIS DEWSBURY (B.A. 1892), solicitor, formerly registrar of the University of Madras, died at Sedbergh, 5 November 1946, aged 74.

RALPH SHAKESPEARE EVES (B.A. from Trinity Hall 1909), chaplain of the College from 1913 to 1915, vicar of St Alban the Martyr, Holborn, died in London 2 January 1947, aged 59.

JAMES MAURICE HAM (B.A. 1884), rector of Newhaven, Sussex from 1903 to 1927, died at Milverton, Somerset, 10 May 1947, aged 84.

HENRY HANNA (Matric. 1896), for many years in practice as an eye, ear, nose and throat specialist in Belfast, died there 28 September 1946, aged 72.

CHARLES HUGH RICHARDSON HARPER (B.A. 1890), rector of Riddlesworth, Norfolk, from 1915 to 1924, died 18 May 1947 in New South Wales, aged 78.

ARTHUR BERESFORD HOLMES (B.A. 1887), rector of Edvin Loach, Herefordshire, since 1917, died 7 March 1947, aged 82.

CHARLES ERNEST HOPTON (B.A. 1883), formerly vicar of Moseley and archdeacon of Birmingham from 1915 to 1944, died at Birmingham 20 December 1946, aged 85.

HERBERT ALFRED KING (B.A. 1892), rector of Holt, Norfolk, since 1909, died at Cromer 27 April 1947, aged 76.

GORDON ORMSBY LAMBERT (B.A. 1898), M.D., F.R.C.P., died at Bucklebury, Berkshire, on 26 January 1947, aged 69.

DAVID LEWIS (B.A. 1945), died at Birmingham 11 March 1947, aged 22.

FRANCIS ALEXANDER MACKINNON (B.A. 1871), thirty-fifth chief of the Clan Mackinnon, died at his home in Morayshire 27 February 1947, aged 98. He played in the cricket match against Oxford in 1870, and was a member of the English team which visited Australia in 1878–9.

GEORGE MARTIN (B.A. 1886), vicar of Caerhayes, Cornwall, from 1893 to 1899, died in Stockwell Infirmary January 1947, aged 86.

FREDERIC JAMES STEVENSON MOORE (B.A. 1895), assistant master at Sherborne School from 1900 to 1933, died 1 March 1947 at Bracondale, Sherborne, aged 74.

REGINALD MARK MOORE (B.A. 1905), M.R.C.S., L.R.C.P., died 26 January 1947, aged 63.

HENRY SEYMOUR MOSS-BLUNDELL (formerly MOSS), LL.D. (B.A. 1893), barrister at law, died 29 March 1947 at Chipperfield, Hertfordshire, aged 75.

HERBERT WILLIAM MOXON (B.A. 1902), formerly in medical practice at Perth, Western Australia, died in France 8 March 1947, aged 65.

ALBERT CHARLES NICHOLLS (B.A. 1910), barrister at law, died 31 January 1947 at Purley Cottage Hospital, aged 60.

JAMES HALES PARRY (B.A. 1911), M.R.C.S., L.R.C.P., formerly medical officer, Tanganyika Territory, died 24 February 1947 at Bradninch, Devon, aged 56.

GUY PASSINGHAM (B.A. 1893), vicar of Leighton Bromswold, Huntingdonshire from 1934 to 1945, died 13 February 1947, aged 77.

HAROLD VAUGHAN PRYCE (B.A. 1895), F.R.C.S., died at Welshpool, Montgomeryshire, 6 December 1946, aged 73.

REGINALD ROBERTS, O.B.E. (B.A. 1884), died at Limpsfield, Surrey, 29 March 1947, aged 84.

FRANK SLATOR, O.B.E. (B.A. 1902, second wrangler), assistant secretary, Ministry of Health, died 30 March 1947, aged 65.

HENRY HARDWICK SMITH (B.A. 1899), F.R.C.S., died 6 October 1946 at Wellington, New Zealand, aged 69.

GORDON WINSTANLEY SPENCER (B.A. 1910), M.D., formerly ophthalmic surgeon to the Iraqi Government, died at Pembridge, Herefordshire, 25 February 1947, aged 58.

KERCHEVER TILLYARD (B.A. 1886), formerly headmaster of Driffield Grammar School, died at Cheltenham 25 February 1947, aged 83.

HENRY JOHN VAN DRUTEN (B.A. 1914), captain, R.A.S.C., died in a military hospital 3 June 1946, aged 52. (In memoriam, *The Times*, 3 June 1947.)

JEAN ETIENNE REENEN DE VILLIERS (B.A. 1897), formerly Fellow, Judge-President of the Orange Free State from 1920 to 1933, and Judge of Appeal of the Supreme Court of South Africa from 1933 to 1939, died at Bloemfontein 5 February 1947, aged 71.

GUY STANHAM WHITAKER (B.A. 1897), formerly vicar of Bucks Mills, Devon, died at Tooting 11 March 1947, aged 70.

GEORGE SAUNDERS WILLS (Matric. 1940), died in College 7 December 1946, aged 25.

ROLL OF HONOUR

JOHN DAVID BUTLER (elected Munsteven Exhibitioner, March 1940, but did not come into residence), captain, Gurkha Rifles, was killed in action in Burma June 1944.

OBITUARY

HUGH PERCIVAL WHARTON GATTY

(1907–1948)

HUGH PERCIVAL WHARTON GATTY was born at Offley Vicarage, Hertfordshire, on 4 February 1907. His father was the Rev. Percival Edmund Gatty, who had graduated from the College in 1889; his mother Alice Mabel Wellwood (née Ker). His boyhood and formative years were passed in a country rectory, and he retained to the end an affection for the countryside and for country people. After six years at Harrow he entered the College at Michaelmas 1925 as an Exhibitioner in History, under the present Master as Tutor. He read for both parts of the History Tripos, and graduated in 1928; though the place he achieved was not as high as his friends had hoped, yet the award of the Taylor Studentship in 1929, and of a Strathcona Studentship in 1930, showed that his teachers discerned the promise of future distinction in him. Between school and college he had improved his spoken French by attending a summer course at Grenoble; after taking his degree he stayed for some months in East Prussia, and also perfected his German by spending long periods in Thuringia and in Austria, notably at Vienna and at the Benedictine Abbey of Melk. On 12 October 1931 he was elected to a Fellowship; the two theses he submitted were "A Kent Manor in the Middle Ages" (an account of the Nunnery at Lilliechurch), and "The Agrarian Problem in Austria".

From his second year onwards he rowed, stroking the Second Boat in the Lents of 1928, and earning the special thanks of the L.M.B.C. for gallantly stepping in, though untrained, on the very day of the Lents of 1929 to replace a man who had fallen ill. It was natural therefore that, when Mr Cunningham resigned his post of Senior Treasurer, the Club should elect Gatty in his place, and he held office from 1935 until duties in the war of 1939–45 called him away. In 1936 he was appointed a college Lecturer in History, and in 1937 succeeded Dr Previté Orton as Librarian, a post which he held till his death. During the war his admirable knowledge of German resulted in his being given work to do under the Foreign Office, and he carried out that work with his customary deftness and competence. Some of it had to be done in London during the height of the German blitz, later he was transferred to the country; though that gave him rest, it cut him off from life in the capital, from concerts and exhibitions and from things artistic. Add that his duties frequently involved

HUGH PERCIVAL WHARTON GATTY

night-work, much of it on midnight shifts, and it will be understood how eagerly he looked forward to forty-eight hours' freedom to revisit the college and his rooms. The war over he returned to College, and threw himself with zest into the organisation of the Library, resigning his college Lectureship in 1945 in order to give himself more time. He died suddenly after a very brief illness on Thursday, 18 March 1948.

Such is the bare outline of a short and busy life that was focused, with ever greater intensity and certainty of aim, upon things artistic and historical and upon his College. Although the Library tended increasingly to absorb his activity, he had undertaken the secretaryship of the Cambridge and County Folk Museum, and was manfully carrying out his duties amid circumstances of some difficulty; he was secretary of the Walpole Society, a member of the Georgian Group, a Fellow of the Society of Antiquaries of London, and served on the Committee of the Cambridge Antiquarian Society. He knew perfectly well, and could express with great precision, what he admired and liked. Among periods of History the eighteenth century appealed most to him, by its elegance, its rationality and its good taste. He loved its formal and tidy architecture, and would confess to his friends that, on retirement, he would choose to live in "a neat Georgian box". French and German culture meant much to him; so did Vienna, with its memories of imperial magnificence, and the charm of its life; a performance of Strauss' *Der Rosenkavalier* never failed to rouse nostalgic longings. As for his dislikes, these too he knew and could express (occasionally with devastating effect); imprecision, sloppiness, or indifference to the treasures of the College he abhorred, and could not understand.

Most of all he loved the familiar precincts of the College, the walls and buildings, the pictures, the silver, the monuments, the trees and gardens, and it was natural that he should serve on the Garden, the Old Buildings and the Archives Committees, where his opinions were always listened to with respect. Convinced that here was a living tradition of inestimable value, which must be preserved and augmented, he had acquired by constant study of our records and documents a knowledge of the history of the College that was second to none, and that knowledge was immediately at the service of all who sought for it. He catalogued, copied and described a large part of the muniments, he gave great assistance in the compiling of the catalogues both of the college Silver and Plate and of the college Pictures. Over the Library he took immense and loving pains; each morning he could be seen walking across the courts with his characteristic measured step, and he was always happy to display its treasures to visitors. He had himself presented a number of valuable books to it, and latterly had been arranging a series of exhibitions in the

upper library, of manuscripts, of fine bindings, of prayerbooksand bibles, of letters to or from distinguished Johnians. By his will he bequeathed to it whatever the College might care to select from his own magnificent collection of books, and in that same will he made the College the ultimate beneficiary of his whole estate.

Although a college Lecturer in History he gave only one public course, in the Lent Terms of 1938 and 1939; the theme was "L'Aicien Régime, 1648–1789". But public lecturing he never enjoyed, and even in private supervision he was diffident as to his own powers, and seemed unaware of the admiration and affection which he could arouse in the hearts of his pupils. His methods might be unorthodox, but he could be both stimulating and provocative to the highest degree, and for those who shared his interest in medieval documents, or in pictures, or in Georgian architecture and landscape gardening he would pull down volume after volume from his shelves to illustrate the argument or drive home a point.

It is indeed as a person who stood definitely for certain artistic and aesthetic values, which must be kept continually before a society, that he will abide in the memory of those who knew him. No one who conversed with him for long could fail to be impressed by the variety and sincerity of his interests, by the width of his attainments, and above all by his sensibility. A visitor to his rooms would note the fine pieces of furniture; his piano and harpsichord with the volumes of Scarlatti and of eighteenth-century composers; the vast bookcases; he would note, too, the tables overflowing with new books, usually the latest poetry and prose; the Chinese figurines and incense-burners; the big bowl of flowers on the centre table. The whole set reflected the mind and character of its occupant, his neatness, his clear-cut notions, and his fastidious taste. In these rooms he was always at home to any who wished to call; sometimes it might be at a dinner-party, when he would show himself as a most courteous and entertaining host, sometimes one or two Fellows collecting after Hall. People could come and confide to him their worries or their complaints, for quite apart from his own sympathetic nature, there was nothing of the "official" about him; junior Fellows, undergraduates, college servants, all could open their heart to him. With his social gifts and his knowledge of wine it is hardly necessary to add that he proved a valuable member both of the Wine and the Entertainments Committees.

Six years of exacting war-work had left their mark on him, and perhaps he never fully recovered from the intense nervous and mental strain to which that work subjected him, a strain all the greater because he believed so passionately in the great civilising influence that an earlier Germany had exerted upon Central Europe. Yet

though at times he seemed a tired man, anyone who saw him when he was in the country, whether he was staying with a friend or visiting college estates, or when he was playing with his godson—for children were quickly at home with him—got a glimpse of the simplicity and happiness of his nature.

It is a heavy loss for the College that one who had already contributed so much to it, and gave promise of contributing so much more, should be carried off prematurely. On the morning of Thursday, 18 March, he was discovered unconscious in his rooms; he was taken to Addenbrooke's Hospital, where he died that afternoon of a cerebral thrombosis. His body was cremated on Monday, 22 March, and the ashes scattered over the grass of the Fellows' Garden, so to become forever a part of those precincts which he loved so devotedly.

For in her rubbish and her stones
thy servants pleasure take;
Yea, they the very dust thereof
do favour for her sake.

M. P. C.

ALBERT HOWARD

(1873–1947)

Sir Albert Howard, C.I.E., who died on 20 October 1947, was born on 8 December 1873 at Bishops Castle, Shropshire, the son of Richard Howard, farmer, and Ann Kilvert. He received his earlier education at Wellington College, Shropshire, later to develop into Wrekin College, and the Royal College of Science in London. He matriculated at St John's in 1896, was placed under MacAlister as Tutor, and kept in A1 New Court throughout his three years. He was at first a Sizar of the College, but was elected to a Foundation Scholarship on obtaining a First Class in the Natural Sciences Tripos in 1898.

In 1899 he was appointed mycologist and agricultural lecturer in the Imperial Department of Agriculture for the West Indies. Thence he went in 1903 to the South Eastern Agricultural College, Wye, as botanist. In 1905 he moved again, this time to start his long service in India, to the post of Imperial Economic Botanist to the Government of India. That position he held until 1924 when he became for seven years Director of the Institute of Plant Industry, Indore, and Agricultural Adviser to States in Central India and Rajputana. He was knighted in 1934.

He was twice married. First in 1905 to Gabrielle Louise Caroline Mathaei, sometime fellow of Newnham College, who closely col-

laborated with him in most of his research work in India, and became Second Economic Botanist to the Government, and, secondly, after his first wife's death in 1930, to Louise Ernestine Matthaei, also a former fellow of Newnham College, who survives him. Howard had no children.

Howard's botanical and agricultural experience were very great. From his early work with sugar in the West Indies he transferred to the study of hops at Wye, and then to the investigation of wheat in India, the first of the researches that were to fill his 20 years at Pusa in so close a collaboration with his wife that no one knew which part was her work and which his. At that time India exported wheat to the United Kingdom. The Howards had an "eye" for varietal selection which, coupled with the most painstaking selective processes, led to the production of varieties of remarkable success. At the same time work was carried out on a long series of other crop plants of India, including the setting up of a Fruit Experiment Station at Quetta.

The fruitfulness of the botanical collaboration, between Howard and his first wife, their activity and wide sympathy, led to them at times being referred to as the Sidney Webbs of India.

But it is not for his detailed botanical work that Howard will especially be remembered, but for the new phase in agricultural history and practice in which he was so actively engaged after his retirement from India in 1931. In India he had developed the now widely used Indore system of composting vegetable and animal wastes. The success of this novelty, his strong social conscience, his quality as a farmer and as a friend of farmers, his investigations of plant diseases and soil aeration, and other influences, together led him into the role of prophet of a new agricultural outlook and system. His was a gospel of the essential, biological wholeness and linkage, of human health, animal health, plant health, resistance to disease, soil fertility and soil microfauna and flora. The absolute need to put back into the soil, in the form of plant and animal wastes, all that is taken from it in order that it may maintain maximum fertility and maximum capability of sustaining healthy men and animals by the eating of healthy vegetation, became the creed to the propagation of which Howard devoted immense energy during the last 15 years of his life. The Indore process of composting, and variants of it, is the method by which the organic wastes must be returned. Overseas Howard, and his growing retinue of fellow believers, seemed to have more immediate influence than at home. In the United Kingdom he found himself in conflict with official agriculture with, to his way of thinking, its excessive reliance on the chemist and the physicist, and the potency of their chemical fertilizers which he believed ultimately to be harmful in damaging worms and smaller soil organisms, and thereby the health of the people. He believed that the people of this country could have more food, better food and better health, by the return of their wastes, suitably composted.

When, by the years just before the war, Howard had become convinced that he could not spread his gospel further by argument, he determined with the help of his friends the farmers, to convert British agriculture by practical demonstration, as he had so successfully in many ways in earlier years taught the cultivators in India. The farm demonstrations in process at his death are being continued by his followers. His influence has been already great, it may prove to have been immense.

Howard's will contained a bequest of £1000 to the College.

G. C. L. B.

HUGH FRASER STEWART

(1864–1948)

HUGH FRASER STEWART, Fellow of Trinity College and Emeritus Reader in French, who died at his home in Cambridge on 23 January last at the age of 84, will always be remembered by Johnians for the years of service which he gave to the College in the earlier part of his life in the University. In 1907, when Precentor of Trinity, he was invited to become Fellow, Dean and Lecturer in French at St John's, and these offices he held until 1918, when his own College called him back to a Praelectorship in French. It was not only as Dean and Lecturer that he gave devoted service to the College, but he also entered fully into many of its social activities, becoming President of the Musical Society and serving for years on the Committee of the College Mission; and while a Fellow, too, he published his two books on the French Romantic Movement and the first of his works on Pascal and took his Doctorate in Divinity. His heart was in his French studies and in the organisation of the growing school of Modern Languages, and when the opportunity came in 1918 to give himself more entirely to these, it was no doubt very welcome. But he retained throughout his life his affection for and interest in St John's and readiness to serve her, and here as elsewhere he made friendships which were never broken.

E. A. B.

WALTER HENRY AINGER (B.A. 1888), formerly vicar of Eglingham, Northumberland, canon of Newcastle, died at Newcastle-on-Tyne 6 January 1948, aged 83.

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WALTER HENRY AINGER (B.A. 1888), formerly vicar of Eglingham, Northumberland, canon of Newcastle, died at Newcastle-on-Tyne 6 January 1948, aged 83.

HERBERT CALEB ANDREWS (B.A. 1895), F.S.A., sometime assistant keeper at the Victoria and Albert Museum, South Kensington, died 21 December 1947, at Hertford, aged 73.

Sir NORMAN GODFREY BENNETT (B.A. 1891), consulting dental surgeon to the Royal Navy and to St George's Hospital, died at Woldingham, Surrey, 14 September 1947, aged 77.

WILLIAM BENNETT BILLINGHURST (B.A. 1876), of Chislehurst, formerly a member of the London Stock Exchange, died 12 May 1948 at Midhurst, aged 94.

JOHN GUNN BURN (B.A. 1892), Indian Civil Service, retired, died at Amberley, Gloucestershire, 5 July 1948, aged 76.

HARRY DEBRON CATLING (B.A. 1892), of the firm of Catling and Son, auctioneers, Cambridge, died 23 June 1947 at Twyford Abbey, aged 78.

CHARLES CHRISTOPHER CARTER (B.A. 1905), headmaster of St Saviour's Church of England School, Canning Street, Liverpool, from 1926 to 1946, died in Walton Hospital, Liverpool, 18 January 1948, aged 65.

REGINALD CHITTENDEN CHEVALIER (B.A. 1892), mathematical master at Manchester Grammar School from 1897 to 1937, died in January 1948, aged 76.

JAMES RICHARD JOSEPH CLARK (B.A. 1890), solicitor, died at Bowness, 17 June 1947, aged 78.

NOEL DOLBEN COLEMAN (B.A. 1913), secretary for translations of the British and Foreign Bible Society, honorary canon of Bradford Cathedral, was killed in an aeroplane accident in the Belgian Congo 13 May 1948, aged 56.

ALFRED COORE (B.A. 1894), formerly rector of Scruton, Northallerton, died at Brompton, Yorkshire, 14 December 1947, aged 74.

FRANCIS EMERY LASLETT CUTHBERTSON (B.A. 1890), formerly master at Mansfield Grammar School, died 17 July 1947, aged 79.

GEORGE DENNIS DAY (B.A. 1883), solicitor, Town Clerk of St Ives, Huntingdonshire, from 1890 to 1940, died 4 July 1948 at St Ives, aged 88.

JOHN GORDON DOWER (B.A. 1923), A.R.I.B.A., whose investigations were the basis of the 1945 White Paper on National Parks, died at Cambo, Northumberland, on 3 October 1947, aged 47.

HERBERT DRAKE (B.A. 1892), rector of Ufford, Suffolk, since 1919, died 8 November 1947, aged 79.

WILLIAM MAITLAND DURANT (B.A. 1911), solicitor, of Bournemouth, died 25 July 1948, aged 58.

BIMAL CHANDRA GHOSH (B.A. 1898), M.B., died at Calcutta 11 January 1948, aged 73.

HERBERT SIMPSON GILL (Matric. 1882) died at Yeomanstown, Naas, Co. Kildare, 6 March 1948, aged 84.

PERCY GREEVES (B.A. 1896), rector of Hingham, Norfolk, from 1924 to 1945, died at Gorleston-on-Sea 8 December 1946, aged 72.

ROBERT BRUCE HARDING (B.A. 1893), formerly mathematical master at the Royal Grammar School, Lancaster, died at Buckfastleigh, Devon, 26 March 1948, aged 77.

WILLIAM ILIFF HARDING (B.A. 1903) died at Ashtead, Surrey, 29 May 1948, aged 66.

GREY HAZLERIGG (B.A. 1900), O.B.E., late of the Colonial Office, died in London 11 April 1948, aged 61.

EDWARD HUTTON HENSLEY (B.A. 1884), headmaster of Sutton County School from 1899 to 1925, died at Farnham, Surrey, 16 February 1948, aged 85.

WILLIAM EDWARD HILL (B.A. 1909), secretary and director of Lansil, Limited, Lancaster, died 23 October 1947, aged 61.

ROBERT JERMYN HUTTON (B.A. 1911), perpetual curate of Totley, Sheffield, died in May 1947, aged 58.

ARTHUR CHARLES INGRAM (B.A. 1898), M.D., M.R.C.P., formerly in the Indian Medical Service, died at Bournemouth 20 December 1947, aged 70.

ERNEST WILLIAM JACKSON (B.A. 1894), for many years a master at Brighton College, died at Ditchling, Sussex, 19 May 1948, aged 75.

GEORGE FREDERICK JACKSON (B.A. 1883), vicar of St John the Evangelist, Cambridge, from 1914 to 1927, died at Sutton Coldfield 1 October 1947, aged 89.

THOMAS LEONARD JACKSON (B.A. 1892), in medical practice at Cheadle, Cheshire, died 8 September 1947, aged 76.

HORACE MEREDITH JAMES (Matric. 1941), Scholar, died of cancer 29 May 1945, aged 21.

ARTHUR EMRYS JONES (B.A. 1940), lecturer in mathematics at the Imperial College of Science and Technology, was killed in a lift accident on 7 May 1948, aged 27.

CHRISTOPHER HENRY JOSE (B.A. 1901), solicitor, died at Clifton, Bristol, 10 November 1947, aged 67.

JAMES NOEL KELLAR (Matric. 1945, Research Student) was drowned 20 July 1948 in a yachting accident in Holland; he was aged 30.

GEORGE PERCIVAL BASSETT KERRY (B.A. 1887), vicar of Braintree from 1924 to 1929, died at Sandown, Isle of Wight, 28 May 1948, aged 82.

SAMUEL WHITTELL KEY (B.A. 1896, from St Catharine's), vicar of Fulford, Yorkshire, since 1928, died 29 January 1948, aged 73.

HANS HAROLD KIER (Matric. 1947) died 17 December 1947 as the result of a riding accident, aged 18.

JOHN GODWIN KING (Matric 1882), O.B.E., died at Stonelands, West Hoathley, Sussex, 28 February 1948, aged 83.

THOMAS HUGH KIRBY (B.A. 1885), formerly an assistant master at Sherborne School, died at Sherborne 12 January 1948, aged 83.

BERTRAM LONG (B.A. 1891), rector of Whitchurch, Oxfordshire, honorary canon of Christ Church, Oxford, died at Chagford, Devon, 20 May 1948, aged 78.

FRANCIS ALEXANDER STEWART MCCLELLAND (Matric. 1892), late of the Malay Civil Service, died in London 15 December 1947, aged 73.

ARCHIBALD PATRICK MCNEILE (B.A. 1895), formerly vicar of Aylsham, Norfolk, and of Brenchley, Kent, died at Mortimer, Berkshire, 1 April 1948, aged 74.

FRANCIS MILLER (Matric. 1900), major, Indian Army (retired), of Parkstone, Dorset, died 23 January 1948, aged 66.

EDWARD MITFORD (B.A. 1875), vicar of Hunmanby from 1888 to 1918, died at Shepherdswell, Kent, 21 June 1948, aged 94.

JOHN PARKINSON (B.A. 1903), Sc.D., geologist, died 19 July 1947 in London, aged 75.

OTTO VAUGHAN PAYNE (B.A. 1900), M.B., of Alton, Hampshire, died 5 February 1948, aged 68.

JOHN HORACE REEVES (B.A. 1890) died at Torquay 6 January 1948, aged 79.

CHARLES HENRY RIVERS (B.A. 1895, as Reissmann), M.D., a distinguished radiologist, who saw service as a surgeon in the Boer War, worked at Adelaide, South Australia, from 1903 to 1914, and was in general practice at Redruth, Cornwall, from 1917, died there 28 February 1948, aged 76.

WILLIAM NICHOLAS ROSEVEARE (B.A. 1885), formerly Fellow, Professor of Mathematics at Natal University College, South Africa, from 1910 to 1929, died at Monmouth 2 February 1948, aged 83.

SYDNEY NOWELL-ROSTRON (B.A. 1905), B.D., rector of Marston Morteyne, Bedfordshire, died 17 March 1948, aged 64.

ALFRED CECIL SCOTT (B.A. 1883), vicar of Freeland, Oxfordshire, from 1923 to 1931, died at Hawley, Camberley, 26 July 1948, aged 87.

ROBERT HUGH STACEY (B.A. 1889), formerly rector of Pulham Market, Norfolk, died at Norwich 14 November 1947, aged 80.

SAMUEL RUSSELL TROTMAN (B.A. 1892), Nottingham City analyst from 1893 to 1936, died at Nottingham 31 March 1948, aged 79.

WALTER HENRY VERITY (B.A. 1889), formerly vicar of Slaithwaite, Huddersfield, died at St Anne's-on-Sea 19 June 1948, aged 80.

HENRY WACE (B.A. 1876), formerly Fellow, barrister at law, died at Bath 5 November 1947, aged 94.

SAMUEL DUDLEY WILLIAMS (B.A. 1924) died 17 February 1947, aged 43.

WOLSTENHOLME MURRAY OWEN WILSON (B.A. 1880), of the Inner Temple, barrister-at-law, died 2 July 1947 at St John's Hospital, London, S.W., aged 90.

ROLL OF HONOUR

JOHN HILDITCH WAINWRIGHT (Matric. 1922), M.R.C.S., L.R.C.P., Surgeon Lieutenant, R.N.V.R., killed at sea, 18 July 1943.

JOHN DAVISON RUANE (Matric. 1937) to MARY LUCAS PHILLIPS, youngest daughter of Brigadier C. E. Lucas Phillips, of The Old House, Westcott, Surrey—on 8 September 1948, at St James's, Spanish Place, London.

JAMES RODNEY MITCHELL VAUGHAN (B.A. 1948) to ANNE BLYTH, elder daughter of the Rev. Vivian Claud Blyth, of Weymouth—on 18 December 1948, at Holy Trinity, Weymouth.

CHARLES RICHARD WATERFALL (B.A. 1946) to JOAN ALDYTH MALKINSON—on 9 April 1949, at St Leonard's Church, Exeter.

RICHARD GRAHAM WOODWARK (B.A. 1942) to ELIZABETH JANET GLENDINNING—on 2 April 1949, at Holy Trinity, Brompton.

OBITUARY

HANS ADEN BERESFORD (B.A. 1907), rector of Hoby and Rotherby, Leicestershire, since 1922, died in London 25 March 1949, aged 65.

ANTHONY EDWARD BRETT (B.A. 1883), who had a long career as an actor and playwright under the name Eille Norwood, died in London 24 December 1948, aged 87.

THOMAS COOPER (B.A. 1907), assistant master at Felsted School since 1910, died at the Chelmsford and Essex Hospital 11 February 1949, aged 64.

THOMAS BRUCE COOPER (B.A. 1929), D.F.C., Group Captain, Royal Air Force, was killed in a flying accident 5 March 1949, aged 40.

JAMES KILLEN DEANE (B.A. 1910), vicar of St Paul, East Molesey, Surrey, formerly vicar of Malmesbury Abbey, died in December 1948, aged 62.

ARNOLD THOMAS DENSHAM, B.Ch. (B.A. 1903), dental surgeon, died in London 13 October 1948, aged 66.

CUTHBERT DIXON (Matric. 1906), headmaster of New Park School, St Andrews, died at St Andrews, 7 May 1949, aged 62.

JOHN VERNON DOCKRAY (B.A. 1922), M.R.C.S., L.R.C.P., of Stradbroke, Diss, Norfolk, died 29 December 1948, aged 49.

ALLEYNE FITZHERBERT (B.A. 1884), rector of Manby, Lincolnshire, from 1928 to 1937, died 25 February 1949 at South Cockerington, near Louth, aged 89.

WILLIAM HENRY FOSTER (B.A. 1903), for many years a private tutor in Cambridge, died there 29 November 1948, aged 82.

STUART MONTAGU GREEN (B.A. 1910), barrister at law, of Chalfont St Peter, died at St Bartholomew's Hospital 14 May 1949, aged 60.

ERNEST HARRY LOVERSEED HADFIELD (B.A. 1903), barrister at law, died at St Albans 9 May 1949, aged 73.

JOHN ALEXANDER HERBERT (B.A. 1884), Deputy Keeper of Manuscripts in the British Museum from 1921 to 1927, died 7 December 1948, aged 86.

ARTHUR RICHARD KIDNER (B.A. 1901), formerly Director of Postal Services, General Post Office, died at Hove, Sussex, 24 August 1948, aged 69.

Sir MANOHAR LAL (B.A. 1902), formerly Professor of Economics at Calcutta University, and Minister of Education in the Punjab from 1927 to 1930, died in May 1949, aged 69.

FRANK SPILLER LOCKE (B.A. 1889), formerly Reader in Physiology at King's College, London, died at Tunbridge Wells 5 May 1949, aged 83.

ARTHUR SINCLAIR LUPTON (B.A. 1898), C.B.E., barrister at law, formerly assistant secretary, Board of Customs and Excise, died at Kendal 9 January 1949, aged 71.

CHARLES EDWARD MALLOCH (B.A. 1942) died 6 October 1948 after a long illness, aged 27.

HAROLD EDMUND MASON (B.A. 1891), vicar of Sellack, Herefordshire, died 21 May 1949, at Ross on Wye, aged 79.

HERBERT RICHARD DUDFIELD MAY (B.A. 1900), of the Inner Temple, barrister at law, died at The Green Hall, Ashbourne, on 9 June 1949, aged 70.

DOUGLAS CHARLES ADEY MORRISON (B.A. 1901), solicitor, of Swindon, died 28 September 1948, aged 69.

DAVID ARTHUR NICHOLL (B.A. 1890), LL.M., died at Bournemouth 7 April 1949, aged 81.

STEPHAN THEODORE NORMAN (formerly NEUMANN) (B.A. 1939), a representative of the Board of Trade in the U.S.A., died in Washington 26 November 1946, aged 29.

RICHARD FERRAR PATTERSON (B.A. 1910), senior editor of the publishing firm of Blackie and Son, Limited, general editor of the Scottish Text Society, died at Bearsden 17 October 1948, aged 60.

EDWARD PHILIP PAXMAN (B.A. 1923), managing director of Davey, Paxman and Company, boiler-makers, Colchester, died 25 March 1949, aged 47.

JOHN PERCIVAL (B.A. 1887), Professor of Agricultural Botany in the University of Reading from 1912 to 1932, died 26 January 1949 at Mortimer, Berkshire, aged 85.

JOHN CYRIL PERRY (B.A. 1910), solicitor, of New Barnet, died 30 December 1948, aged 60.

ROBERT PURCELL RIDSDALE (B.A. 1893), vicar of Salford Priors, Warwickshire, from 1901 to 1935, died 8 March 1949 at Stratford on Avon, aged 79.

ALLAN JOHN ROBERTS (B.A. 1890), rector and vicar of Harting, Sussex, for over 50 years, died 13 May 1949, aged 89.

CYRIL DEASON ROBINSON (B.A. 1896), canon of Maritzburg, for many years head of the Native Mission in Natal, died in Natal in 1948, aged 75.

CHARLES THOMAS YOUNG ROBSON (B.A. 1884), barrister at law, died 14 February 1949 at Paignton, South Devon, aged 87.

PHILIP EGERTON SHAW (B.A. 1890), emeritus professor of physics at University College, Nottingham, died 10 April 1949, aged 83.

GORDON LESLIE KEMP SHIACH (B.A. 1935), writer to the Signet, died 30 December 1948, as the result of a motor accident, aged 35.

GEORGE SMALLPEICE (B.A. 1890), for many years vicar of Hempton with Pudding Norton, Norfolk, died at Peterborough 4 April 1949, aged 81.

Sir CHARLES AUBREY SMITH (B.A. 1884), cricketer, stage and film actor, died at Berverly Hills, California, 20 December 1948, aged 85.

WILLIAM SNEATH (B.A. 1901), rector of Bubbenhall, Coventry, since 1936, died there 7 October 1948, aged 74.

FRANCIS WILLIAM STALLARD (B.A. 1922), LL.B., solicitor, died at Worcester 18 September 1948, aged 48.

REGINALD PLUMER STEDMAN (B.A. 1878), vicar of Kirtlington, Oxfordshire, from 1902 to 1911, died at Bath 22 September 1948, aged 95.

THOMAS GREER STRAIN (B.A. 1905), sometime lecturer in mathematics at Chelsea Polytechnic, died at Shanklin, Isle of Wight, 30 March 1949, aged 70.

GILBERT BAKEWELL STRETTON (formerly SMITH) (B.A. 1884), assistant master at Dulwich College from 1886 to 1916, died at Hurstpierpoint 27 October 1948, aged 87.

JOHN MCINTOSH SWIFT (B.A. 1908), vicar of St Augustine, Bexhill, and Press and information secretary of the Diocese of Chichester since 1944, died 25 April 1949 at Bexhill, aged 63.

ERNEST AUGUSTUS TRASENSTER (Matric. 1880), vicar of St Botolph, Lincoln, from 1902 to 1911, assistant priest at Holy Trinity, Weymouth, died December 1948, aged 85.

THOMAS GEORGE TREADGOLD (B.A. 1876), assistant master at Dulwich College for 50 years, died 5 February 1949 at Worthing, aged 95.

GEORGE SHERBROOKE TURPIN (B.A. 1887), headmaster of Nottingham High School from 1901 to 1925, died 28 December 1948 at Monkton Combe, Bath, aged 83.

HAROLD WACHER (B.A. 1897), M.D., F.S.A., died 11 April 1949, aged 72.

HARRY BANKS WATTS (B.A. 1896), formerly rector of Nailstone, Leicestershire, died 7 December 1948, aged 74.

EDWARD PHILLIP PAXMAN. The sudden death of E. P. Paxman at the early age of 48 is a serious loss to the engineering world and a sad blow to his many friends. It is not saying too much to describe

it as a national disaster, for he was a man of dynamic energy and personality and a brilliant pioneer in diesel engineering.

Paxman was the son of James N. Paxman, founder of the firm of Davey Paxman & Co. Ltd. of Colchester. He was born in Brussels in 1901 and came from Oundle to St John's in 1921 where he took a first in the Mechanical Sciences Tripos in 1923. After training with Metropolitan Vickers Electrical Company he joined the family firm in 1926 and in a very few years transformed it from a small agricultural engineering business into one of the largest and most progressive diesel engine producers in England. The firm produced the diesel engine which was used to propel more than half the submarines built in England during the late War besides an engine which was adapted for use in Tank Landing Craft and in the Gay Viking Class of blockade runners which penetrated the Baltic to Sweden.

At the outbreak of hostilities Paxman was engaged in the design of a light-weight high-speed diesel engine of revolutionary pattern. Shortage of aluminium prevented production of this engine, but it was adapted to other metals and produced in vast numbers as a light-weight diesel power unit. Edward Paxman was a considerable engineering genius with a clear vision and the ability to instil into others the urgency of his message. In many different directions in the technical field he brought new and startling ideas to bear. Only a few days before his death he attended the trials of a ship containing an acoustic hood for the engines which will prove of immense value in damping the sound from high-speed diesels and is one more triumph for its designer.

Apart from his engineering and business exploits Paxman's phenomenal energy was expressed in many local activities in Colchester and Essex. He was a Justice of the Peace besides being Chairman of several, and a member of many, local social or industrial Committees. He was a leading member of the Grand Council of the Federation of British Industries, and at the time of his death Master of the Farriers Company.

To his friends Ted Paxman was a loyal, generous, kind hearted companion and an irrepressible leader of any light-hearted fun that was going, yet always able to illuminate any conversation, however casual, with some profound gleam of philosophical truth. We were always amazed at his energy and at the variety of his interests. Perhaps many casual acquaintances who met him did not realize his stature as an engineer but no one could ever fail to be impressed by his dynamic personality. Had he lived there is little doubt that he would have become one of the foremost Englishmen of his age, and even now we can safely leave him to join a fellow Johnian, Sir Charles Parsons, whose name is linked with another form of power production unit, the Parsons Steam Turbine. For, living a generation apart, these two made themselves masters of parallel forms of engineering development and their names are fit to be remembered together as pioneers of power production in their respective fields.