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THE ORATOR EMERITUS

THE retirement of Mr T. R. Glover from the Public Oratorship (or Oratorship, as it is now called[1]) severs the connexion which has existed for sixty-three years between St John's and this ancient and honourable office. Such a long period of distinguished service on the part of Sir John Edwin Sandys and his pupil and friend is reminiscent of the spacious days of the Johnians, Richard Croke, John Cheke and Roger Ascham. Croke indeed was the first Public Orator, but his reputation was built on his labours abroad; and the names of Cheke and Ascham were and are better known to Englishmen. Does history repeat itself? If the doubter says no, let him consider what manner of men the last two scholars were and what they achieved.

Is it a mere coincidence on the one hand that Cheke, who was succeeded by his pupil Ascham,[2] played an important part in the much-needed reform whereby the Erasmian pronunciation of Greek was substituted for the Reuchlinian about 1535; and on the other that Sandys helped in redeeming Latin from the barbarity of English vowels and emasculated *littera latrans*, and pronounced it in the Senate House from 1904 onwards to be understood at last by the rest of the world,

[1] The new Statute of 1926 did not alter his preference for the title of the office to which he was elected (the original Statute of 1522 provided "ut unus aliquis orator publicus eligatur"); he liked it also because it was borne by Sir John Sandys, to whom he owed so much, and also by George Herbert (1619–27), who in his application called the Public Oratorship "the finest place in the University".

[2] Cheke, 1542–6; Ascham, 1546–54.

and to be moderately intelligible to the ghost of Cicero? Did not Ascham write of his master in words which Sandys himself has paraphrased:[1]

> For some five years, Aristotle and Plato had been studied at St John's; Sophocles and Euripides were more familiar than Plautus had been twelve years before; Herodotus, Thucydides, and Xenophon were more "conned and discussed" than Livy was then; Demosthenes was as well known as Cicero; Isocrates as Terence; "it is Cheke's labours and example that have lighted up and continue to sustain this learned ardour",

and did not Mr Glover say of Sandys, when he presented him for the degree of LL.D., in a speech which ends with a sincere tribute to the courtesy, charm and friendship of the latter ("Si discipulo talia licet confiteri, ex quo primum Collegio nostro interfui, hunc semper mihi comem recordor, semper jucundum, semper amicum fuisse"):[2]

> Demosthenem, Euripidem, Isocratem, Ciceronem exposuit, Aristotelis *Rempublicam* sarcophagis Aegyptiis erutam edidit, immo senectutis in limine fontis Pindarici haustus non ille expalluit?[3]

And indeed does the parallel require any emphasis other than that attained by Saintsbury's words?[4]

> Ascham appears to have been a very agreeable specimen of a good type of Englishman: humorous, learned, and much more ready to teach others than to pride himself upon his learning; affectionate to his friends and family; zealous for his country and his country's language.

At the age of seventy-five Sandys found that his powers were severely taxed by the spate of Honorary Degrees which were the inevitable aftermath of the last war, and at the end of 1919 resigned from the post which he had graced for forty-

[1] *History of Classical Scholarship*, vol. II, p. 232.

[2] "If his old pupil may say so, I remember that, since I first became a member of our College, he has been always kind, always pleasant, always a friend." The oration had previously stated: "he has commented on Demosthenes, Euripides, Isocrates and Cicero; he has published Aristotle's *Constitution of Athens*, now recovered from the tombs of Egypt; and even on the threshold of old age he has not blenched at the thought of drinking from the fountain-head of Pindar".

[3] Horace, *Epistles*, I. 3. 10.

[4] *A Short History of English Literature*, p. 238.

three years. His successor was elected on 21 January 1920, and made the first of his many appearances in the Senate House on 20 February. In that year he discharged the heavy duty of writing speeches for many of the heroes of 1914–18, including Foch, Joffre,[1] Haig, Plumer, Allenby, Jellicoe, Beatty, Bonar Law, Austen Chamberlain, Mr Lloyd George and Mr J. H. Thomas. During his twenty years as Public Orator, hardly an Easter Term passed without the visit to Cambridge of some monarch, statesman, scholar, scientist or cleric of international fame; and Mr Glover himself tells how he presented four English Prime Ministers, several Dominion statesmen including Mr Mackenzie King, two English sovereigns, four Emperors and one "god". The "god" appeared in Cambridge on 18 May 1921 and was the Crown Prince Hirohito, now the Emperor of Japan, for whom the upper end of the gallery in the Senate House was kept clear lest anybody should look down upon him from above. He, the ex-Emperor of Abyssinia (then heir-apparent and known as Tafari Makonnen), and the King-Emperors Edward VIII and George VI made up the total of imperial monarchs.

The Public Orator was an expert in coining the happiest phrase for the best-known characteristics of celebrated visitors. Viscount Grey of Fallodon was "viri, civis, Angli perfectum exemplar et absolutum",[2] and Mr Montagu Norman "mensariorum Britannicorum princeps, iterum electus ut mensarum omnium augustissimae praesideat".[3] Philip Snowden had, like the elder and the younger Cato,[4] the "rigidum animum Philippi";[5] and of his colleague "Uncle" Arthur Henderson it was said "noverunt et alii, si forte *nepotum in morem* lu
patruae uerbera linguae".[6] Sometimes a phrase would call

[1] Foch and Joffre did not after all come to Cambridge.

[2] "The perfect and absolute model of a man, a citizen, an Englishman."

[3] "The prince of our British bankers, who has been elected Governor for the second time of the most majestic Bank in the world."

[4] Livy, 39. 40; Lucan, 2. 389.

[5] "Philip's rigidity of soul."

[6] "Others, who have played the fool as nephews will, know the weight an *uncle's* lashing tongue can have." The father's brother was the high-handed member of the Roman family, as appears from Horace, *Satires*,

up a vision of a figure so well-known and popular in Cambridge as the former Provost of King's, M. R. James, whose familiar features "memini me iuvenem saepenumero adspexisse, dum e Museo ad Collegium Regale redit laetus et fumifer",[1] and whose ghost stories appealed so much to Theodore Roosevelt that the latter, when in Cambridge, is said "cum illo in primis congredi et colloqui voluisse qui tot terrores magicos tot nocturnos lemures conscripserat".[2] Seldom has a compliment to a distinguished guest of the University been more gracefully introduced than when allusion was made to Sir George Adam Smith's book *A Historical Geography of the Holy Land*. Referring to the humanity of a great preacher and student of the Old Testament, the Public Orator remarked on the authority of Strabo that geography is a part of philosophy, and that it should not be handled by anyone "nisi qui prius res divinas humanasque penitus cognoverit".[3] In passing, it may be recorded that in introducing Dr D. G. Hogarth, Keeper of the Ashmolean Museum, Mr Glover took the opportunity to contrast his own youthful with his more mature attitude to this science, and to associate the new Doctor of Letters with Aeschylus and his beloved Herodotus in his thanks for being able at last to forget the horrors of place-names, isotherms and isobars. "Geographiam pueri (quis non fatebitur?) odimus, scientiam illam funestam, urbibus squalentem, inurbanis scatentem, ἰσοθερμίαις horrentem et ἰσοβαρείαις; viri tamen semper magis amamus, dum hoc duce cum Herodoto quid

2. 3. 88, *ne sis patruus mihi* ("don't come the heavy uncle over me"); and Mr Glover took his last three words from the same poet's *Odes*, 3. 12. 3. The greater popularity of the *mother's* brother with the children is reflected in the survival of *avunculus* (or rather its derivatives), which ousted *patruus* from languages as far apart geographically as French and Rumanian, and in our own adjective *avuncular*.

[1] "I remember I often saw him in my youth, as he used to come back, cheerfully smoking his pipe, from the Fitzwilliam to King's."

[2] "To have wanted before anything else a meeting and a chat with the man who wrote about the terrors of magic and the ghosts that rise by night."

[3] "If he does not possess an extensive knowledge beforehand of things human and divine." This occurs at the beginning of Strabo's *Geography*.

solum quid aer quid genus faciat investigamus et cum Aeschylo Caucasum Sardes Bactra lustramus."[1]

If the classical quotation has vanished from Parliament, its old stronghold, since the days when Gladstone was its last great exponent, it still lives in the Senate House, in the Sheldonian and at Trinity College, Dublin, where a Public Orator has in his quiver many a swift arrow to carry a message to those who understand him. One of Mr Glover's best βέλη φωνᾶντα συνετοῖσιν[2] was a felicitous adaptation of Horace, when he presented the Royall Professor of Law at Harvard with the words: "non cuivis homini contingit adire *Chicago*".[3]

There are, of course, quotations from the Latin poets so well known and, at the same time, so universal in their application as to be a present help to Public Orators. The very human feeling that one's own achievements may be unique can always be encouraged on a Degree Day by Ennius's famous description of Fabius Cunctator "Unus homo nobis cunctando restituit rem",[4] provided usually that for the dangerous *cunctando* some equally or more appropriate gerund is substituted. Of Earl Beatty, however, it could be said truly that he "cunctando et pugnando rem restituit nostram"; and nineteen years later Lord Chatfield, who had been so closely associated with him in victory, entered the Senate House to hear "unus homo nobis" used with perfect propriety of a Minister for the Coordination of Defence. And have the changes ever been rung upon *cunctando* in a racier or more novel context than when Sir F. G. Hopkins appeared to receive well-deserved recognition from his own University?

[1] "We hate geography as boys (who will not own up to this dislike?) —that deadly form of knowledge, stiff and swarming with objectionable place-names, horrible with its isotherms and isobars. But when we are grown up, we like it more and more with Dr Hogarth as guide, as we investigate with the aid of Herodotus what earth, air and living things are made of, and as we travel in company with Aeschylus through the Caucasus, Sardis and Bactria." The play upon *urbibus* and *inurbanis* can hardly be rendered.

[2] Pindar, *Olympians*, 2. 83–5.

[3] *Epistles*, 1. 17. 36, *Corinthum*: "Not every man is lucky enough to go to Chicago."

[4] Cicero, *De Senectute*, 10: "One man has given us back everything by his hesitation."

Wondering whether "vitamin" should be pronounced with its first vowel short or long, Mr Glover made merry with the second half of Ennius's line, and suggested that the President of the Royal Society was himself the person most fit to complete it. The scansion of this new hexameter would then resolve all doubts, and here two alternatives were proposed, namely "the abomination" *vegetat vitam vitaminis* ("he makes our lives lively with vitamins") which made the *i* short, and "the horror" *dat vitam vitaminando* ("he gives life by vitaminizing") which, on the other hand, lengthened it. But, whatever might be the respective merits of the rival pronunciations, there was no question that the Professor of Biochemistry had conferred a great benefit upon humanity ("magnum contulit omnibus hominibus beneficium").

The reverse of Ennius's *cunctando* is undoubtedly Lucan's equally famous description of Julius Caesar "nil actum credens cum quid superesset agendum".[1] Yet only once was this compliment elicited from the Public Orator, and that was when he contemplated the indefatigable activity of Mr Lloyd George. For all his richness of epigram Lucan was no favourite of Mr Glover, though the Irish "troubles" did seem at the time to him "bella plus quam civilia".[2] But the speeches everywhere reveal the influence of Virgil, who is so universal a poet that he can describe Cambridge oarsmen with "nudatosque humeros intentaque bracchia remis",[3] and of Horace, to whose allegiance the Public Orator returned in the course of his career. Hints of Virgil and of Horace can be seen in the lighter touches as well as in the descriptions illuminated by quotations taken openly from the *Aeneid* or the *Odes*; thus Sir James Frazer was complimented by a reference to Virgil's Golden Bough, the "aureus ramus" of the Sixth Book,[4] and "consule Stanlio"[5] was wittily applied to a former Premier. But if to-day Horace's gold seems sometimes to be tarnished by centuries of use in quotations, and if English ears find the sound of "iustum et tenacem"[1] a little hackneyed, even when the words are applied to a Chancellor of the Exchequer,[2] then the learning of the Public Orator could find refuge in Juvencus, and the same statesman was triumphantly yet playfully greeted as "praesolidumque SIMON dignum cognomine Petri".[3]

[1] Lucan, 2. 657: "thinking he had done nothing, while anything remained for him to do."
[2] *Ibid.* 1. 1: "wars worse than civil."
[3] *Aeneid*, 5. 135–6: "bare shoulders and arms strained to their oars."
[4] Vs. 137.
[5] *Odes*, 3. 21. 1: *consule Manlio.*

Many Virgilian passages are of course at least as wide in their application to-day as Ennius's "Unus homo". One such is the famous simile[4] of a patriot quelling a civil disturbance by the sight of his firmness, dignity and worth as "ille regit dictis animos et pectora mulcet";[5] and in 1925 it occurred to Mr Glover that these lines would not be unworthy of the then Speaker of the House of Commons. Perhaps the firebrands and stones of "iamque faces et saxa volant, furor arma ministrat"[6] would have been an exaggeration even with regard to the Mother of Parliaments, and so the Public Orator cautiously substituted for the first half of the line "dum studio utrimque peccatur et ira";[7] but those were the carefree days of mace-lifting and suspensions. The same speech ended on the note of "blessed are the peacemakers" ("beati enim pacifici").[8] Times have changed since then, even in the House, and the present Speaker is merely content to listen to infinite prolixity and to beat Theseus himself at sitting ("contentus. . . orationes infinitas audire, ipsum Thesea sedendo devincere").[9]

It is rarely possible to make an ancient quotation modern by a flash of genius so brilliant as the substitution of Chicago

[1] *Ibid.* 3. 3. 1.
[2] In 1928 Sir John Simon had not of course attained to this office, so that *tenacem* may be regarded as prophetic.
[3] *Evangelia*, 1. 422: "Simon steady as a rock, worthy to be called Peter."
[4] *Aeneid*, 1. 148–53.
[5] "He rules their passions and soothes their hearts with his words."
[6] "Now the firebrands and stones fly, for their madness lends them arms."
[7] "While party feeling and anger excite Government and Opposition to violence"—an adaptation of Horace, *Epistles*, 1. 2. 15–16.
[8] Matthew v. 9.
[9] *Aeneid*, 6. 617–18: *sedet, aeternumque sedebit, infelix Theseus* ("unhappy Theseus sits, and will go on sitting, for ever").

for Corinth; but before leaving Westminster we should note the alteration of one of Cicero's most famous hexameters to describe the University's late representative in Parliament. Sir John Withers, when an undergraduate, competed for the Porson Prize, and was *proxime accessit* to Walter Headlam; but when he left Cambridge, he took up a legal career ("Academiam deseruit; cessit Musa togae, concessit laurea iuri").[1]

For Lord Derby, who like Castor so greatly "gaudet equis",[2] the most appropriate author is certainly Pindar; nor did it surprise those of the Public Orator's pupils, who were accustomed to hear the enthusiastic exponent of the Theban eagle in C Second Court, that for the genial hero of a hundred racecourses there was chosen so apt a passage as αἰδοῖος μὲν ἦν ἀστοῖς ὁμιλεῖν, ἱπποτροφίας τε νομίζων ἐν Πανελλάνων νόμῳ,[3] which Sandys renders: "Right gracious was he in his townsmen's company, and he upheld the breeding of horses after the ordinance of all the Greeks."

If Johnians associate their old teacher with Virgil, Horace and Pindar, the outside world thinks of Mr Glover mainly as an interpreter of the wider aspects of New Testament studies. Yet quotations from this source were not common, and it is unusual to find, for instance, that the sound of the Edinburgh Medical School has gone (in the words of Paul of Tarsus) into all the earth, and their words unto the ends of the world.[4] Can this infrequency of Biblical illustration be explained by the fear that such passages might have been even less recognizable in the Senate House than those which were based upon the great pagans? This conclusion may possibly be inferred from the subtle irony of these words which once opened a speech: "Apud *auctorem quendam* legimus *antiquiorem*, beatius esse magis dare quam accipere."[5]

Perhaps no ancient author is more unpromising for citation or more barren in durable epigram than Julius Caesar, yet

[1] *De Officiis*, 1. 77: *cedant arma togae, concedat laurea laudi* ("let arms yield to civil life, and let the victor's laurel give way to a lawyer's laudations").
[2] Horace, *Satires*, 2. 1. 26.
[3] *Isthmians*, 2. 37–8.
[4] Romans x. 18.
[5] Acts xx. 35.

even he can be pressed into service when Belgian scholars await introduction. "Gallia est omnis divisa in partes tres, quarum unam incolunt Belgae.[1] Sic Latinitatis nostrae primus auctor." Yes, no longer have we to learn about the mural labours of Balbus, but Caesar and his Commentaries are still with us. "Manet Gallia divisa, manet pars illa tertia, manent Belgae", too. So more than once spoke the Public Orator, who found even a Japanese astronomer as easy to describe as a Belgian: he was "Garamantas ultra natus et Indos".[2]

If successful illustrations from ancient literature require a scholar's taste and experience, modern quotations make demands upon the native genius of the translator. The schoolboy who rendered "We knew the jolly world was round" by "Iucundum mundum cognovimus esse rotundum" deserved a wider public for a "versum memorabilem, veraciorem quam numerosiorem", and had it in the Senate House. After all, did not Cicero himself write "O fortunatam natam me consule Romam"?

Classical and post-classical metres alike flashed easily into the Public Orator's mind. "What do they know of England...?" made a hexameter and a half:

Num nota Britannia cuiquam
Cui nihil est aliud nisi sola Britannia notum?

The Sapphic stanza which rendered Stevenson's ode to "the friendly cow all red and white" deserves to be quoted again:[3]

Vacca quae tergum varias colore
Candidum rubro, pueris amata,
Spumeum donas operosa potum,
Mente benigna.

In the words of Gilbert, Viscount Bridgeman when First

[1] *De Bello Gallico*, 1. 1.
[2] Though based originally on Virgil, *Aeneid*, 6. 794, this is an abridgement of Mr Glover's own version of R. L. Stevenson's "Little Japanee":

Tuque infans Garamantas ultra
Natus et Indos.

See *A Child's Garden of Verses* translated as *Carmina Non Prius Audita* DE LUDIS ET HORTIS *Virginibus Puerisque* (Heffer, 1922), p. 30.
[3] *Op. cit.* p. 24.

Lord of the Admiralty could be said to have "polished up the handle...":

> Poliebat iuvenis ansam tanta cura
> Ut daretur navium tandem praefectura;[1]

and on the same day, memorable because of the installation of the present Chancellor, an even greater hit was scored when "Every little boy or gal..." became

> Puellula, puerulus,
> Si nascitur in mundo vivus,
> Aut fato Liberalis fit,
> Aut fato fit Conservativus.

Mr Glover himself once commented upon the wisdom of the proverb "plus ça change, plus c'est la même chose" thus: "rectius ergo Gallus, qui quanto plus res mutari videantur tanto minus mutari dixit"; and he perpetually illustrated its truth by the ease with which he described in good Latin aspects and problems of our modern civilization. The query evoked by the Darwinian theory was as summarized by Disraeli at Oxford: "utrum simiis oriundi simus an angelis".[2] The Irish question in 1920 involved "dissensiones Ierne oriundas", the reform of the House of Lords was "magnatum camera reformanda", and income tax meant that "chartis continentur publicanorum iniquitates, civium lues", although one justification of it is to be found in the "senectutis solacia" of old-age pensions. A strike of "cessantes operarii" occurs when they "relictis machinis ut argentum extorqueant feriati sedent", and a former famous General Secretary of the N.U.R., who himself once drove "machinas vaporales", was "illius ordinis coryphaeus". The potters of Staffordshire were "figuli Staffordenses" and miners "carbonarii". Nor had modern inventions any terrors for the Public Orator. A bomber, topically enough, has altered the sky for us: "caelum

[1] The swing of these lines is more Gilbertian than the rejected Alcaic:

> *Ansam expolivit sollicita manu*
> *Tantaque cura sedulus, ut suis*
> *Regina maturum iuberet*
> *Navibus imperitare cunctis.*

[2] "Are we descended from apes or from angels?"

nostrum mutavit[1] machina volatilis, bombitans[2] in vacuo"; Big Bertha, which bombarded Paris from long range in the last war, "eminus Bertha Longa globos suos igneos quotidie in Lutetiam jactat"; cannon generally were "ballistae igni-vomae" and wireless "sine chorda". Motor cars and "talkies", as they used to be called, once provoked a rhetorical question in a speech addressed to a former Ambassador of the country of their origin: "Nonne per rura nostra strepunt currus sine equis, subitamque mortem passim adferunt? Nonne voluptates veteres et linguam antiquam expulit pictura loquax?" And last summer the present American Ambassador heard the query about moving pictures with their feminine stars (complete with lustrous nails), cowboys and gangsters again interjected: "Quid de vibrantibus illis picturis, quae nobis demonstrant heroidas ad unguem pictas,[3] armentarios equitantes, percussores coniuratos?"

The Public Orator was not to be taken too seriously when he complained now and then that his command of the Latin language was strained by the task before him. "If", cried he in describing the same Harvard Professor of Law who was not denied Chicago, "I were to tell you about his work and all his distinctions, my Latinity would be left in ruins" ("Latinitatem meam conquassatam relinquerem"); and, in the words of Milton,[4] Medicine personified in M. Jules Bordet, Director of the Institut Pasteur at Brussels, with its "rugged names would have made Quintilian stare and gasp": "inter toxica et antitoxica, inter haemolysin et bacteriolysin, titubat Latinitas, verba quae, ut ad poetam nostrum refugiam Cantabrigiensem, obtutu anhelantem defigerent Quintilianum". Quintilian[5] indeed once observed that his countrymen had recourse to Greek words when their Latin vocabulary failed them, and similarly English words now and then served

[1] Horace, *Epistles*, 1. 11. 27: *caelum non animum mutant, qui trans mare currunt* ("they who speed across the sea change their surroundings, but not their character").

[2] Literally "buzzing", but Mr Glover will forgive the translation.

[3] Horace, *Satires*, 1. 5. 32–3: *ad unguem factus homo.*

[4] *Sonnet XI.*

[5] 1. 5. 58: *et confessis quoque Graecis utimur verbis, ubi nostra desunt.*

Mr Glover's purpose when they obligingly classified themselves automatically in the third declension. The reluctance to use one of these coinages without an apology, as in the speech for the Prince of Wales, who "*bronchone* vectus (sit verbo venia!) vaccas glomerat, verus Canadensis", later disappeared; and Professor G. M. Trevelyan was complimented for his generosity which helped to keep the Gogs clear from the bricks and mortar of the jerry-builder, "ne omnia caementis lateribus *bungalonibus* obruantur". But when the English is not declinable, it is some comfort to know that the Latin for Whitehall is "Aula Candida", for the publishing house of Blackwell "domus Atri Putei", for the Old Adam that is in us "vetus Adamus" and for Charles Lamb his own rendering of his name "Carolus Agnus".

In his cautious and infrequent use of word-play the Public Orator was at one with Quintilian in recognizing the efficacy of Greek. Wishing to say that grain is the first letter in the alphabet of the vegetable kingdom, he remarked "ut ἄλφα litteris praestat ceteris, ita herbis ἄλφιτα". Professor Samuel Alexander, formerly of the Chair of Philosophy in the Victoria University of Manchester, spread the light of his teaching on Space, Time and Deity in the darkness of the city's smoke, and investigated Finality and Universal Nature amid the looms and spindles of Cottonopolis: "adest ergo qui e fumo voluit dare lucem, inter telas τὸ τέλος, inter fusos τὴν φύσιν indagare". And, unlike the swift arrows of Pindar previously mentioned, the author of Peter Pan needed no interpreters for the crowd: ἐς τὸ ΠΑΝ ἑρμηνέων οὐ χατίζει.[1] These three examples are sufficient to show Mr Glover's belief that language nicely compounded of Greek and Latin gains in flavour.[2]

At magnum fecit quod verbis Graeca Latinis miscuit.[3]

St Jerome[4] once dreamed that on the day of his final judgement he was asked what his condition was, and when he replied in terror that he was a Christian, the reply came: "It

[1] *Olympians*, 2. 85–6.
[2] Horace, *Satires*, 1. 10. 23–4: *at sermo lingua concinnus utraque suavior.*
[3] *Ibid.* 20–1.
[4] *Epistles*, 22. 30.

is false, thou art no Christian, thou art a Ciceronian, *where your treasure is, there will your heart be also.*"[1] Were Mr Glover asked "Ciceronianusne es?", he might be a little hesitant to denounce, like Politian, his Ciceronian critics, if any there be, as mere "apes of Cicero", though he would certainly reply in the same scholar's words: "I am not Cicero; what I really express is myself".[2] Neither Latin nor any other language will die, so long as its users refuse to restrict themselves to one model, deriving instead their inspiration from the continuous development of the living tongue. A Public Orator cannot live for twenty years in the Senate House on Cicero alone: apart from features peculiar to modern civilization, to describe which he must rely on his own native genius and his mastery of the language, he cannot for instance discuss the English clergy without going to Tertullian and saying "clerus Anglicanus". If Tertullian, who can end a sentence with *quoque*, is re-echoed in a modern composition, the Ciceronians may cry "o rem inauditam!" But both Tertullian and Cicero have long been dear to Mr Glover.

The mention of the English clergy recalls some anonymous lines which were contributed to *The Eagle* in 1920 to salute the Proctor turned Public Orator:

> But what I'm *really* for
> Is to make little Bishops toe the line.

Bishops, however, can seldom be natural magnets for an Orator's humour. In themselves they are not provokers of wit; yet a Bishop, who himself was once a Proctor, was the occasion of the most brilliant description ever composed of the custodians of academic discipline:[3] "nec posthac vide-

[1] Matthew vi. 21.
[2] *Epistle* 5; cf. Erasmus, *Epistle* 351 (Allen, vol. II, p. 471): *inter tot scriptorum species nullos minus fero, quam istos quosdam Ciceronis simios.*
[3] "Henceforth we shall not see our honorary graduate walking between his two Bull-dogs, a thoroughbred pair, and bringing peace of a sudden into noisy undergraduate rags. The Proctors have something of the Roman character; for, by the terror which their name inspires, they create a solitude and call it peace."

bimus, dum stipant lictores[1] ut par nobile canum,[2] in turbas et tumultus studentium pacem secum inferentem nec opinatam. Moris enim Romani habent aliquid procuratores, ipso nominis terrore solitudinem faciunt, pacem vocant".[3] Nor were the Proctors the only Cambridge institution to merit the Public Orator's fun. Returning from the University Library on the day when it was opened, Mr Glover entered the Senate House and blandly remarked: "nihil intactum relinquunt. Immo bibliothecam nostram, ut olim Aladdini palatium daemon Arabicus, viam trium dierum in solitudinem transtulerunt."[4] But to find a passage which deserves to be included in any future anthology entitled "In Praise of Cambridge", the compiler must betake himself without fail to the noble words in the Address delivered to the new Chancellor on 5 June 1930:

Verum Paradisum nobis tradiderunt illi, qui Academiam ad ripas Grantae transtulerunt, qui collegia fundaverunt, ut hic inter aquas et arbores caelestia, inter fugitivas pulcritudines aeterna contemplaremur. Ubique per terras nomen oppidi nostri, nomen Academiae, hortorum amoenitatem significat et disciplinarum tranquillitatem, vitam beatam cum sapientia coniunctam. Huc splendor litterarum, huc scientiarum ardor, huc ipsa domorum antiquarum species, omnibus ex terris homines allexerunt; allectos seniorum gravitas, iuniorum levitas (semel insanivimus omnes),[5] studiorum communitas, amicitiarum dulcedo, veritatis amor, Almae Matris alumnos inter se ligaverunt artioribus usque vinculis felicitatis et memoriae. Hinc ut civibus patriaeque, ut imperio transmarino, patriae ampliori, hinc ut humano generi universo auxiliarentur, servirent, toto animo se consecrarent, exierunt, docti, instituti, animo divino instincti.[6]

[1] Even Verres, the infamous governor of Sicily, had his Bull-dogs, for in his *Verrines* (II. 4. 86) Cicero described him as *stipatum lictoribus*.

[2] Horace, *Satires*, 2. 3. 243: *par nobile fratrum*.

[3] Tacitus, *Agricola*, 30: *ubi solitudinem faciunt, pacem appellant*.

[4] "They leave nothing untouched. Why, they have been as clever as the Genie in dealing with Aladdin's palace, and shifted our Library a three days' journey into the wilderness!"

[5] Baptista Mantuanus, *Eclogues*, 1. 118. This poet (1448–1516) was Shakespeare's "good old Mantuan" (*Love's Labour's Lost*, 4. 2. 97). See for the quotation *semel insanivimus omnes*, Boswell's *Life of Johnson*, ed. G. Birkbeck Hill (revised by L. F. Powell, Oxford, 1934), vol. IV, p. 182.

[6] "They who brought a University to the banks of the Granta and founded colleges have left us a true Paradise, so that among the trees by the riverside we can contemplate the divine and amid our fleeting pleasures consider the eternal. All over the world the name of our town and University stands for lovely gardens, peaceful studies and a life wherein happiness and wisdom are united. Here men of every land have been attracted by the brightness and the glow which animate literature and science, as well as by the sight of ancient buildings; and when they have come, they are bound to one another as children of their Alma Mater more firmly in lasting chains of memory and contentment, thanks to the grave deportment of the older and the frivolous behaviour of the younger men (yes, we all have been mad once!), to common interests and agreeable friendships, and to the love of truth. And they have gone out from here to help their fellow-citizens and their country, the empire over the seas which is their wider country, and indeed the whole human race, for they were trained and taught and imbued with a divine impulse."

Nor did the Public Orator forget the other Cambridge, the one and only "Cantabrigia transmarina", the famous colony of a famous metropolis. "Cantabrigiam alteram quis nescit?" he exclaimed in introducing one Harvard professor, and in the presence of another he narrated how it was founded by men from the older University: "cum enim olim inter Puritanos Americam peterent Cantabrigienses sexaginta, fundata Academia, nomen urbi novae dederunt nostrum, Matris antiquae memores. Multae sunt transmarinae Oxoniae, una Cantabrigia."[1] But of Yale he said simply that it was founded on the "litora severiora" of Connecticut: "illic in deserto Collegia fundaverunt exules Christiani".

On the day, too, when Lord Baldwin first donned the Chancellor's robes, rejoicing according to the Orator "antiquam exquirere Matrem",[2] there was pronounced an equally sincere tribute to the little grey town on the coast of the North Sea, where the Scot has learned philosophy and the Englishman golf,[3] each "according to his several ability", where for more than five hundred years its University has given poets and men of letters to the world from its students in the scarlet toga, and where the Reformed Church was born with John Knox. Speaking as an honorary graduate of

[1] "When sixty Cambridge men joined the Pilgrim Fathers and reached America, they founded a College, and gave the new town the name of our own Cambridge, in memory of their ancient mother. There are many Oxfords across the Atlantic, but only one Cambridge."

[2] Virgil, *Aeneid*, 3. 96: *antiquam exquirite matrem* ("seek out your ancient mother").

[3] Called *pila volatica* elsewhere.

St Andrews, Mr Glover thus introduced Principal Sir James Irvine to a Chancellor shared by both Universities:

Urbs antiqua,[1] super maria fundata,[2] opacam versa ad Arcton,[3] tribus collegiis insignis, quingentos iam per annos Academiarum exemplar et metropolis Scoticarum et Canadensium, glauca iuventutis cocco splendidae mater, poetarum nutrix Willelmi Dunbar, Georgii Buchanani, Roberti Fergusson (nec hilarem Robertum Murray dilectumque Andream Lang omittendos censebitis), nutrix Ecclesiae Reformatae, cuius in sinu *Knox nocti* indicavit scientiam[4] (ne τροφεῖα patribus recusem),[5] quae Scotos artem cogitandi docuisti, Anglos artem ludendi, largita unicuique secundum propriam facultatem,[6] quibus laudibus te celebrare debet filius adoptivus, qua voce Cancellario tuo nostroque Praesidem tuum meumque commendare?

There was recurring appreciation of the "perfervidum ingenium Scotorum" (George Buchanan's phrase was in fact applied by the Public Orator to Sir Herbert Grierson, formerly Professor of English Literature in the University of Edinburgh). Sir William Craigie, Professor of English in the University of Chicago, was told that Scotsmen are scattered all over the world, yet even if they never return, their attachment to their clan or country unites them and makes them think of home; and their home is where they keep their language, their songs and their own Bacchus. An address to St Bartholomew's thus speculated on the condition of England eight hundred years ago, when the now dominant partner lacked the stimulus of Welsh sharpness and Scottish ability: "octingentis abhinc annis quae fuerit Anglorum conditio, difficile est animo concipere. Vitam incultam fuisse

[1] Virgil, *Aeneid*, 1. 12, of Carthage.
[2] Psalm xxiv. 2.
[3] Horace, *Odes*, 2. 15. 15–16.
[4] Psalm xix. 2.
[5] "There is an old town founded upon the seas and looking towards the gloomy North. She is famous for her three colleges, and for five hundred years she has been the model and the parent city of Scottish and Canadian universities. She is the sea-grey mother of youth resplendent in scarlet, and the nurse of poets, of William Dunbar, George Buchanan and Robert Fergusson (and please do not think I am going to forget the blithe Robert Murray and the beloved Andrew Lang). She is the nurse too of the Church of Scotland, and in her bosom hath Knox unto nocturnal darkness shewn knowledge, for I must give our forefathers their due. . . ."
[6] Matthew xxv. 15.

credimus, Walliae acumine Scotorum ingenio carentem." And Mr Lloyd George was congratulated upon the lively genius which bestows upon the Celtic race eloquence rich in charm and imagery, while Anglo-Saxons have other virtues, more lowly perhaps, but still not without their use: "natura quae Celtis Saxonibusque hanc insulam dedit habitandam, ut sese invicem adiuvarent, dona sua variavit, dum Celtis mobile ingenium, lenocinia, eloquentiam, imagines largitur, Saxonibus virtutes alias quasdam, utiles sed humiliores." The Irish, however, were summarily dismissed as a prolific nation who swarm over Great Britain and throw our countrymen out of work, so as to make them demand state relief: "nonne Hiberniae prolem innumeram (ne ceteros enumerem, quos Cham, quos Sem, quos Japheth genuerunt, superfluam progeniem) ita in nos redundantem videmus ut nostratium multa milia negotio pecuniisque careant et a civitate nutriri seque suosque postulent, immo vehementer iubeant?"

But the Public Orator's enthusiasm for his *altera patria*, the great Dominion which first claimed his affection in youth, appeared as frequently in his speeches as in his lectures. Words which he employed of a former Professor of Anatomy might well be applied to himself: "constat e Britannis non ignavissimos quidem in colonias emigrare. . . . Ubique gens nostra Academias fundavit et professores ex his insulis vult arcessere. Sed semper abesse tales viros non patitur Britannia."[1] Canada may surely be grateful to the years which Mr Glover spent at "Regiodunum apud Canadensis"[2] for the following tribute which prefaced the speech for Mr Mackenzie King on 22 November 1926:

coloniarum omnium Britannicarum primaria, gentium duarum societate fortis, et bello et pace illustris, frugum magna parens, magna virum,[3] mira montium fluminum lacuum camporum

[1] "It is established that the British who emigrate to the colonies are not the most inert of their kind. . . . Our people have founded Universities everywhere, and like to send for professors from these islands; but Britain does not allow such men to stay abroad for ever."
[2] Kingston, Ontario.
[3] Virgil, *Georgics*, 2. 173–4: *salve, magna parens frugum, Saturnia tellus, magna virum.*

pulcritudine, omnibus et solium et nivium amoenitatibus amabilis.[1]

In the words of Lord Hewart, who had himself just seen this appreciation in the library of the Canadian Prime Minister at Ottawa: "Was ever a more admirable description so concisely expressed?"[2]

If a personal opinion may be given, Mr Glover's greatest speech was that which he pronounced for Marconi on 8 June 1933, and which merited the compliments paid to it by a leading article in *The New York Times* on 27 August of the same year. It indeed did worthy homage to the most wonderful of all modern scientific discoveries and to the inventor, thanks to whom the width of our happiness is enlarged and life is endowed with a greater humanity: "ita ab hospite nostro hominum augetur felicitas, et facta est vita humanior". Beginning with words reminiscent of many a cadence in the Vulgate: "domus mea cantu plena erat, et nesciebam", which rendered the remark of an old personal friend ("my house was full of music and I didn't know it"), the oration went on to declare that by turning a key ("contactu clavi minimo") we believe that we are listening to marvellous actors ("miros audire tragoedos")[3] from Berlin, hearing a political speech from Paris ("mox Lutetiae Francogallus incipit contionari"), or getting the clang of a Tuscan trumpet from Italy ("Tyrrhenusve tubae mugire per aethera clangor").[4] Then, returning to London, we follow the Boat Race with emotions that fluctuate in response to the commentator's words ("grande remorum certamen sequimur, Almae Matris gloriam palpitantibus cordibus secundantes ut alternare narrantur carinae"). Next, in the words of *The New York Times*:

The Public Orator recalled an experience of his own. Once he was sitting in a house "in Monte Claro Novae Caesareae"—which, being translated, means Montclair, New Jersey. There he heard Herbert Hoover make an address on the shore of the Pacific Ocean accepting the nomination for the Presidency. But that speech, alas, was "non ita festivam", or, as American slang would have it, "not so hot". Still, if you were tired of listening, all you had to do was to use your finger in order to bring back silence and tranquillity. The Public Orator then had a splendid sentence about the "camporum infinitorum Canadensium", where in the widely scattered little homes, once in the midst of waste and solitude, to-day out of the sky comes a human voice, singing, or speaking, or preaching the gospel. Thus it was that, by means of the University's guest that day, the happiness of men is increased, and life itself is made more humane. Verily, ancient magic is surpassed by modern science. How would it be, asked the Public Orator, if it had also given us an equal power of seeing? After that, there was nothing for him to do but to present the candidate for an honorary degree: Duco ad vos MARCHIONEM MARCONI.

[1] "First of all Britain's colonies, strong in the bond which allies two races, renowned in peace and war, noble mother of corn and men, possessor of mountains, rivers, lakes and prairies of rare beauty, lovely with all the loveliness of sun and snow."

[2] *The Times*, 30 September 1927.

[3] Horace, *Epistles*, 2. 2. 129.

[4] Virgil, *Aeneid*, 8. 526.

They who expect to find the speeches a rival to *Who's Who* will be disappointed. Mr Glover's reply would probably be that it is not a Public Orator's business to translate that work into equally meticulous Latin. Consequently distinguished visitors sometimes found that many of their past honours went without specific mention, and that the Orator instead preferred to entertain them and the rest of the audience to the train of thought suggested by what they had done. Hence, although biographical details were often absent, few speeches could be described as irrelevant. Most were indeed very much to the point, even if the speaker's personality superimposed itself upon the description of his subject; and, as the President of the College has observed: "Long ago I learnt from T. R. G. that it was the *spirit* and not the letter that counted."[1] The peculiar interest of the speeches to Johnians lies less in the eminence of the honorary graduates whom they present, or even in the distinctive wit of the Latin in which they were framed, than in the fact that they mirror the personality of their old friend and teacher. Much has already appeared from the "disiecta membra Oratoris" to show what manner of man he is, but there are many more personal

[1] *Cambridge Review*, 8 June 1939.

touches which expressly reflect the views, opinions and experience of a varied life.

His many-sided humour has been already illustrated several times from his skilful handling of the Latin language and apt quotation from its literature; but it appears again in the frank expression of his own feelings. The homely touch was felt no doubt by the Norwegian Professor of Marine Biology who heard the herring described as unknown in the ancient world, but now the cheapest and best of fish: "antiquis incognita et insperata, harenga quidem tota nostra est,[1] pretio piscium paene vilissimus, gustatu paene optimus. Sed vitam harengarum iamdiu expiscari voluerunt physici";[2] and perhaps in an even greater degree by the whole audience in the Senate House, when Lord Bradbury, whose signature was long familiar on the paper currency of the realm, was introduced with the reminder that to the golden, bronze and iron ages of which the poets of old sang there must be added the age of banknotes. Did not Thomas Carlyle say something of the kind—"nostram (aetatem) Thomas ille Ecclefechanius dixit esse papyraceam"? And of all autographs of famous men, none was more earnestly sought after even by curiosity hunters than that of the distinguished visitor: "sed cum papyrus omnigenus humano generi sit carissimus, cum chirographa virorum clariorum studiosissime quaerantur, nullum papyrum per annos quinque (1920–5) tam studiose quaesiverunt omnes homines, nulla chirographa ipsi curiositatum amatores, quam illam papyri et chirographi conjunctionem cui populariter datum est hospitis nostri nomen." Then to all the company: "Bene nota dico, et scientibus."[3]

Modern poetry with its frothing, babbling and vomiting forth of sounds discordant, shrill and unpleasant, as if it had been stricken with epilepsy, was surely not the "madness" of which Plato was thinking: "Musam quasi morbo comitiali

[1] Quintilian, *Institutio Oratoria*, 10. 1. 93: *Satura quidem tota nostra est.*

[2] "The herring was unknown to the ancients, who never dreamed of such a blessing, but it is at any rate completely ours: in price the cheapest of fish, in taste among the best. But natural historians have for a long time desired to fish out the life of the herring."

[3] "You can bank on what I say, and you don't need to make a note of it."

correptam malunt dissona stridula iniucunda spumare balbutire evomere. Non hanc, ut arbitror, μανίαν[1] poeticam imaginatus est Plato." Hardly less caustic was the description of a former European capital which has known better days: "quid urbem Petri quondam nomine florentem, nunc alio squalentem?", and Tsarist Russia was the "res publica Russica 'Priami dum regna manebant'[2]".

Two other allusions as typical as that to the squalor of the name Leningrad may be mentioned. In 1931 Ramsay MacDonald, when Prime Minister, entertained Charlie Chaplin; and Viscount Lee of Fareham, the donor of Chequers to the nation, heard how he "villam amoenam populo suo donavit, locum idoneum, ubi, post pugnas forenses, a pedariis suis lacessitus, Regis Primus Minister resipisceret in otio cum dignitate,[3] ubi etiam visitantem debitis honoribus et hospitio splendido acciperet Carolillum Chaplinum".[4] The refusal of the Royal Academy to accept Mr Wyndham Lewis's portrait of Mr T. S. Eliot is more modern history, and the latter was topically welcomed with the words: "si pictus Londiniensibus negatur, vobis praesentem et vivum datur videre".[5]

Even in these days the cause of international co-operation is by no means lost, and Mr Glover's words to the Cambridge Rotary Club on the significance of honorary degrees reveal how earnestly he strove towards this end:

> These degrees and these letters are a means of promoting friendship and showing courtesy among universities and internationally. Years after the war and years before this war a very

[1] This was the "madness" which, according to *Phaedrus*, 245 A, comes from the Muses, takes hold of a pure and tender soul, and inspires it to poetry. Plato here goes on to mention the failure of the would-be poet who lacks this divine frenzy. Compare *Ion*, 534 B–C.

[2] Virgil, *Aeneid*, 2. 22.

[3] Cicero, *De Oratore*, 1. 1. 1.

[4] "Gave it a pleasant country seat to serve the dignified ease of the Prime Minister when he wished to recover his sanity after his political fights and his troubles with his own followers. It proved useful for him too when he entertained with all due splendour a guest like Charlie Chaplin."

[5] "If Londoners can't see his picture, here he is in the flesh for you to look at."

distinguished German scholar came, and I began the speech with the words: "A German citizen." I paused, and the whole Senate House applauded, meaning that war is over. International courtesy, friendship and kindness are the essence of the whole thing. I have endeavoured to make speeches in that direction.[1]

In 1936, when pacific passions in this country were at their height, the sanity of one speech was refreshing. "The lower animals live for the present, and so do politicians and the Press, whose function it is to make the public so angry that at breakfast-time tables are thumped and coffee spilt in rage at German villainy and Italian treachery. Far better is it to reflect that Italians and Germans are after all human beings who have made and yet will make their contribution in the course of centuries to earthly beauty and happiness." The Latin is well worth adding:

Bestiarum est in praesenti vivere, sine praeteritorum memoria, sine spe futuri, bestiarum ut arbitror et politicorum, immo et illorum, qui omni nocte ea dant prelo, quae inter ientacula legamus de nequitia Germanorum, de dolis Italorum, et aliis huiusmodi terroribus. Legimus, tremit poculum, excutitur calda Arabica, tristioribus semper auguriis ad labores eximus, irati, indignati. Sed melius est aliquando reputare nobiscum quam humani sint Itali et Germani, quid vere contemplentur, quid denique felicitatis per saecula, quid pulcritudinis ceteris gentibus dederint, quid sint daturi.

In this speech it was shown clearly that his motto was that of all promoters of the comity of nations:

οὔ τοι συνέχθειν ἀλλὰ συμφιλεῖν ἔφυν.[2]

If, in 1934, little could be said to Mr Neville Chamberlain except by way of congratulation on the family to which he belongs, the reason was no doubt that Chancellors of the Exchequer when in office are not natural objects of laudation. But the Public Orator's tribute to the Prime Minister's long and partly successful struggle for peace came in November 1938, when the High Steward of the University received the

[1] *Cambridge Daily News*, Wednesday, 25 October 1939.
[2] Sophocles, *Antigone*, 523: "But I was born for friendship, not for hate."

degree of LL.D. and the audience were reminded simply: "vos etiam, qui prudentiae Primi Ministri pacem his diebus debetis". "Peace with honour" goes back to 1878, and even after twenty years the last survivor of the makers of the Versailles treaty and critic of other peacemakers may recall "quibus denique modis, quod eum[1] vel Beniamino Disraeli exaequaret, pacem Parisiis reduxerit non sine gloria".[2] Was there a hint of malice in this praise? There is a legend that the speech commended itself to Mr Asquith when he read it in *The Times*; and perhaps Mr Glover knewwhat *gloria* meant.

On at least two occasions visitors were reminded how published works for which they were responsible could solace travellers. One speech began as follows: "I am going to tell you a simple story from my own experience. Once I was sent Mr J. W. Mackail's verse translation of the *Odyssey* for review, and when I took it with me on a railway journey to Scotland, it solaced me as far as the Pass of Drumochter. And now I am glad to greet the translator in person":

Narro vobis simpliciter quod mihi accidit. Mittebat olim mihi quidam libros, ut, siquid mihi iudicii inesset, populo nostro indicarem quid censeret. Inter hos venit libellus qui libros ultimos Odysseae continebat Anglice redditos. Vox faucibus haesit;[3] a puero Homerum amaveram sed Graecum; quid mihi cum Anglico Homero? Nihilominus ad Scotos Septentrionales iter facturus librum illum, nec praeter illum alium, mecum fero. Tandem inspexi; pedetemptim legere incepi; subito ad urbem illam poetis caram Kilmarnoc perventum est; quid? cras, reputo, quid faciam, si hodie cetera perlegam? Postridie, Clutha relicta, librum iterum sumo, et inter montes Graupios, ad angustias de Drumochter, finiveram. Postea totum poema emi, legi, amicis commendavi. Poetam praesentem laetissimus saluto.

Have we not found, too, that many hours of tedium have been beguiled as a result of the munificence of James Loeb, the founder of the famous series of Greek and Latin classics with English translations? Let us picture, for instance, the scene

[1] Mr Lloyd George.
[2] Horace, *Odes*, 3. 26. 2: *et militavi non sine gloria*, which may mean "I won the war and everybody knows it".
[3] Virgil, *Aeneid*, 3. 48.

at New York when a liner arrives. A long delay in the Customs, while officials satisfy themselves about the health and wealth of immigrants and their views on polygamy, search trunks and attempt to detect persons who threaten the safety of the great Republic. So out comes the Loeb Herodotus to make the reader oblivious of the chatter of Irish voices. Or, thanks to the Loeb Livy, the discomforts of a railway strike can be mitigated:

> Quot horas taedio nobis liberavit! Novum Eboracum venimus; sed inter portitores longa fit mora, infinitae fiunt molestiae; investigantur omnia; quaeritur quam sano sis corpore, quid in arca celaveris, quantam attuleris pecuniam, quot velis uxores, si tandem ipsi reipublicae perniciem violentam miniteris. Quid ergo? E zona extrahitur liber Loebianus; et linguarum immemores Hibernicarum cum Herodoto fortunatius inter Persas versamur, mentiri nescios. Nec aliter domi; cessantibus ut fit necopinato operis, ignibus extinctis, in vehiculo ita sedemus publico ut ipse Theseus non magis aeternum.[1] Sed adest fortasse Livius Loebianus, et feliciter labuntur dies dum resipiscant operae, accendantur ignes, moveatur vehiculum.

A night journey by rail in the State of Missouri was the occasion of the following parable. In the morning the Public Orator, half awake, suddenly became aware that the train was rushing through a station which bore his name. He seized the time-table and found that Glover lies 100 miles south of St Louis between Arcadia and Chloride. In the same way human life lies poised between the Muses and the test-tubes. "Ye have the chemists always with you." And when we think of the horrors committed by women upon men in the name of fresh air, or remember the terror inspired by the thought of poison gas, we hardly know whether to call Science our mother or our cruel stepmother:[2]

> Ibam forte via ferrea[3] per terras Missourienses; noctem in vehiculo transegeram; et semisomnus nescioquid meditabar nugarum.[4] Subito meum ipsius nomen video in muro alto litteris immensis superscriptum. Erat ergo oppidum quoddam,

[1] Compare, p. 217, n. 9.
[2] Virgil, *Georgics*, 2. 128: *saevae novercae*.
[3] Horace, *Satires*, 1. 9. 1: *Ibam forte via Sacra*.
[4] *Ibid.* 2.

> quod celerrime praeteribamus, cui nomen meum inditum erat. Indigitamentum arripui, et inveni re vera tale esse oppidum et iacere inter Arcadiam et Chloridam. Parabola mihi videtur esse; sic iacet hodie vita humana inter Musas et tubulos, incerta, ambobus intenta, neutris contenta. "Semper enim chemicos habetis vobiscum."[1] Meditanti mihi quos horrores maribus in nomine oxygeni infligant feminae, recordanti etiam terrores quos inspirant vapores venenati, in incerto iudicium est matremne Scientiam appellemus an novercam.[2]

Were Mr Glover to follow the example of his predecessor and publish some or all of the speeches, they would furnish an interesting record of one of Cambridge's personalities, and would appeal to all those who have come to know him since the days of his youth—the youth to which he harked back in presenting one of his early friends, namely the late Astronomer Royal, Sir F. W. Dyson, recalling "quanto ardore iuvenes de poetis, de rebus humanis, de caelestibus disputaverimus, dum per agros Cantabrigienses ambulamus, dum ientaculum modestum partimur".[3] But the Orator Emeritus has not yet discharged all his debt to scholarship, even if he has said farewell to the Senate House; and all who knew him there and in the lecture-rooms of St John's will be glad that the playful despondency of a remark made in an oration as long ago as 1936, "sum paullo infirmior, animal sine pennis natum et tribus iam claudicans cruribus",[4] shows no sign of being fulfilled. Meanwhile the *Reporter* for the last twenty years remains the depository

> Quo fit, ut omnis
> Votiva pateat veluti descripta tabella
> Vita senis.[5]

[1] Matthew xxvi. 11.
[2] Pliny, *Natural History*, 7. 1. 1: *aestimare, (natura) parens melior homini an tristior noverca fuerit* ("to reckon whether man has found Nature a kind mother or a stern stepmother").
[3] "With what enthusiasm as young men we discussed poetry and problems human and divine, as we walked through the fields of Cambridgeshire or partook of a modest breakfast."
[4] "I am getting feebler than I used to be; I was born an animal and not a bird; and now I am hobbling about on three legs." But Mr Glover meant merely that he knew the answer to make to the Sphinx.
[5] Horace, *Satires*, 2. 1. 32–4, and Boswell.

The grave and thoughtful words which were his last in the Senate House may fittingly close this survey: in pronouncing them he perhaps allowed his mind to go back for a moment to his predecessor, teacher and friend who suddenly passed away in Third Court when walking to a Degree ceremony in full academical dress; and in their simplicity they are typical of an intellect ever conscious of the place of mankind in the world:

Mortales, ut suspicor, natura nos fecit.

R. J. GETTY

WINTER SIEGE

HOMER never told us
how the war went in winter when the bond was on Troy
of ice and the heavy sky of cold.
Then the flashing arms were frapped in cloth,
bound with coarse sacking against the vicious air,
or their jagged harsh edges were overlaid with rust.
Then the heroes shivered within their canvas tents
with the comfortless reflection of the pyre that was to come,
more of feats of treachery than feats of lusty arms
made the fighting on the frozen shore.
No loud trumpets in the alleys of the camp
cried to echoes of the many-eyed wall,
the horses unharnessed stamped and swung their heads;
ice was a weighted pack upon the Greeks encamped,
not like Vikings to pierce the blue fiord,
chill pavilions for feasting with the wind.

The tails of smoke were sluggish above the painted streets
where the seabirds gathered to scramble for crumbs;
these backcloths were faded with the limelight burnt out.
The dead were no colder fathom under sand,
having slipped off the frailty of flesh.
In Troy too beauty pined and sickened,
and fires were husbanded where fuel was scarce:

they made no warlike sallies but creeping forayed forth
for unsenneted encounter with the ragged hare;
too bitter for railing was the gauntness of the fighters,
who leant silent on their spears in the public streets.
The wind blew over Troy and carried them the smell of it,
smell of marshes, smell of failing war:
the spears were stuck in the sand point downward,
Mars too was keeping beneath his canvas tent.
Hail fell like arrow-flights, but that was Boreas,
scattering it at both sides with the tyranny of gods;
Vulcan forged no shield would turn the jagged Eurus
that stabbed at the short ribs with the broadsword of wind:
the sea bore a skim of ice to howl about the ships' sides
held at their anchorage on diet of thin storm
that groped at the paint and marred their puppet gods,
spittle in the teeth of proud Achilles
and brave Agamemnon, now the snow had come.

H. L. S.

LOVE AND THE SIREN

IT was Christmas Eve. For this may be considered, in some respects, an old-fashioned story.

Dr Aidie's Christmas Eve party was not very successful. It was a small gathering, and the guests, several of whom were in uniform, were all either related to the Aidies or old friends of the family. It was in fact a family gathering, and in consequence the feeling of tension rapidly communicated itself to all present.

It was distressingly obvious, as it usually is in these cases, that the Aidies were in the midst of a secret family crisis. Gwendolene, the Aidies' only daughter, looked as if she might burst into tears at any moment; Peter, her young man, was morose. The Doctor was unaccustomedly jocular, and Mrs Aidie a little too animated. All the Aidies, including old Mrs Aidie and the two aunts, kept their eyes as closely as the demands of politeness would allow on Gwendolene and

Peter. For it was Christmas Eve; and elopement was, they feared, in the air. They unconsciously organized themselves into a family of watchdogs.

A week ago Dr Aidie had refused to agree to his daughter's marriage. "After all, my boy," he told Peter, "it will be so much better to wait until it's all over."

Mrs Aidie and the two aunts were very nice to Gwendolene to-night, but their affection was somehow exaggerated and oversweet. They were all rather offhand towards Peter, although Dr Aidie slapped him on the shoulder, and gave him a whiskey and soda with his own hands. Dr Aidie was not usually a hearty man.

Peter had been standing at the foot of the staircase watching the couples waltzing rather languidly in the spacious hall. The Aidies were watching him. They interrupted a sudden look between him and Gwendolene. Peter moved to the middle of the floor and whispered something to her partner, a friend of his, who nodded and hurried away. Peter and Gwendolene danced together, and talked seriously. This was ominous. Mrs Aidie's hospitality flagged considerably; in fact she left the group of elderly people with whom she was chatting very abruptly. She hurried over to the Doctor and touched him on the arm. He too abruptly turned away from his guests. Old Mrs Aidie and the two elderly aunts, who were seated in an alcove to the right of the staircase, were volubly agitated. Dr Aidie pushed his way through the dancers, and came upon the couple, dancing suspiciously near the door.

"Gwen, my dear," he said, "do you know you haven't danced with your poor old father all night? You don't mind, do you, Peter?"

Gwendolene did not seem particularly impressed by the pose of whimsical and slightly jealous fatherhood. She left the young man unwillingly. As the Doctor danced off with her, he said to Peter, "Oh, by the way! did you know you had left your car in the drive, Peter? It's snowing a little, so I put it in the garage at the back."

The dance over, her father led her over to the alcove, where

his wife had now joined the old ladies. Gwendolene sat down and said nothing. Old Mrs Aidie hobbled off, and seated herself next to Peter.

"How nice your young man looks to-night!" said one of the aunts, after an uncomfortable pause. She decided to venture even farther—"Just think, dear, how nice it will be when the war's over, and you two will be able to marry and have a nice little cosy home of your own."

"What's the good of talking about a nice cosy future to us?" replied Gwendolene with some heat. "We want to get married now!"

"But, my dear Gwen," interposed her father, "it will be so much less strain for both of you when the war is over, and everything's ship-shape again."

"But we want to marry before Peter has to go in the army!" cried Gwendolene, "perhaps we feel we should like to get married before we have other things to face! and whoever told you that everything was going to be just the same afterwards?"

"My goodness, you are a pessimist!" cried the aunt.

Gwendolene jumped to her feet and made for the staircase. Mrs Aidie smiled significantly to her sisters, who nodded solemnly; she drew herself together, and heaving a deep sigh, prepared herself for the inevitable but not unpleasant expenditure of maternal comfort. At any rate this would separate the two for the night. The danger was over. Poor Grannie needn't keep on talking to Peter any more—the old lady really couldn't hold out much longer.

But Gwendolene never reached her bedroom, there to throw herself weeping on her bed, and in consequence she did not have to endure the lavish display of her mother's sympathy. For just as she placed her foot on the second step, a curious noise suddenly rose above the sound of the music. It gradually rose higher and higher, until the intermittent wail was almost deafening. It was an air-raid warning!

For a moment everyone stood still, then hurried downstairs towards the cellars, which had already been prepared for such an eventuality. They crowded in, talking excitedly. Dr Aidie

opened a trunk and took out rugs for the older members of the party.

The Doctor and Mrs Aidie suddenly looked at each other. Everyone stopped talking, and peered about them.

"Where's Gwendolene?" cried Mrs Aidie. "And where's Peter?" echoed the Doctor.

G. H. P.

THE GAUGE OF BRITISH RAILWAYS

THE British standard railway gauge, or the distance between the insides of the rails, is 4 ft. 8½ in. This dimension, standardized by the Railway Regulation Gauge Act of 1846, has probably been the subject of more acrimonious discussion than any other railway feature since the new method of transport was developed in the early nineteenth century.

The chief criticism of the gauge has always been that it is too narrow, and this was especially the case with the first railways. The railway wagons in use at this time had been developed from the ordinary horse-drawn carts of the previous century, and it was characteristic of these that the bodies were mounted between the wheels. This arrangement, shown in Fig. 1, was continued in the early railway rolling stock, but with a rail-gauge of about 5 ft. it was soon found that the wagons were too narrow both for the carriage of goods and the comfort of passengers, and the overhanging type shown in Fig. 2 was evolved and used for the first time on the Liverpool and Manchester Railway opened in 1830.

This arrangement certainly gave more room, but to I. K. Brunel such wagons appeared to lack stability, and when he was commissioned to design the Great Western Railway in 1835, he recommended a 7 ft. gauge for use with wagons of the old-fashioned type. This was adopted, but when, later, the railways covered the whole country, the existence of different gauges caused much inconvenience, and it became

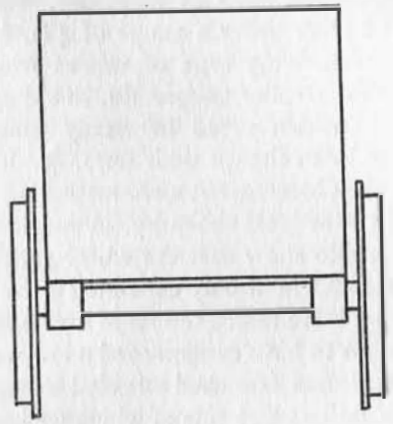


Fig. 1.

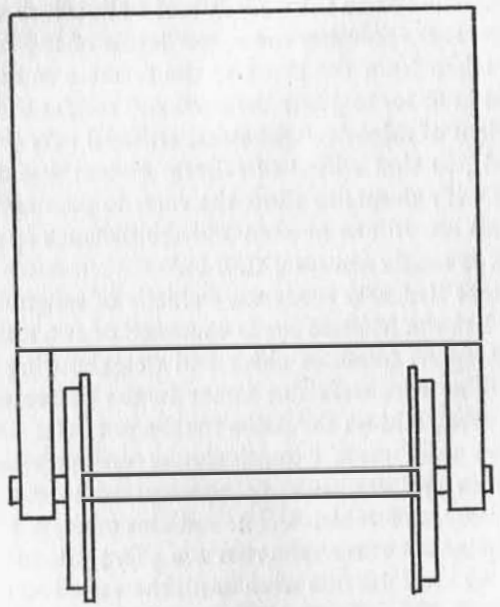


Fig. 2.

clear that standardization was necessary. The rest of the railway systems were using a gauge of 4 ft. 8½ in. and had adopted the overhanging type of wagon which was quite stable even on the smaller gauge. So, in spite of opposition and controversy which raged for many years, Parliament forced the G.W.R. to change their lines.

In so doing the Government were respecting what appears to be a natural law of great antiquity. A considerable amount of evidence exists to show that the wheel-gauge in use from very early times and in widely separated parts of the world does not differ by more than a couple of inches from 4 ft. 8 in. Brunel thus seems to have contravened a law which has been in existence since man first used wheeled transport.

Probably the earliest cart-ruts of which we have knowledge to-day are in Malta. The inhabitants of 2000 B.C., finding the soil on the lower parts of the island insufficient to supply their needs, imported earth from Sicily and built it into terraces on the barren rocks forming the upper levels of the island. The soil was taken from the shore to the terraces in man-hauled carts, and in order to guide the carts and render their passage independent of minor roughnesses, artificial ruts were cut for the wheels, so that a kind of railway system was developed, complete with shunts to allow the carts to pass each other.

The ruts are still to be seen and the distance apart, centre to centre, is nearly always 4 ft. 6 in.

In Greece the early roads were chiefly of religious importance and like the Maltese roads consisted of two artificial ruts to carry wagons between cities and neighbouring places of worship. The ruts were cut either in the native rock or in blocks of stone laid on the paths for the purpose. Later these roads were used more extensively for ordinary traffic, and double lines and shunts were constructed to carry the increased number of vehicles. The remains of these roads show that the distance between the ruts was 4 ft. 7½ in. to 4 ft. 8½ in.

Wherever artificial ruts were used, the carts had to be built to a standard wheel-gauge to fit them, and with a developing system of wheeled transport the carts would be expected to travel in more than one road. Thus all the roads in a district

would have to be of one gauge, and it would ensure the continuance of that gauge as long as the roads were used in their original form. The same would be true of countries where the ruts were natural. Primitive roads, unless paved with stone, soon develop cart-ruts in the soft earth surface, and when using these roads the traveller would find it more convenient to adopt the standard wheel-gauge than to use a dimension which would oblige him to cut his own track over the irregularities of the remainder of the highway. In view of this it seems almost certain that the 4 ft. 8 in. gauge would remain the standard over a long period of time in any country where it was used, and it is possible that our own carts of the eighteenth century were following the practice laid down many centuries previously.

The gauge used by the Romans is of interest, for the standard practice in Roman Britain would have great influence on the development of British carts in the succeeding centuries. The Roman gauge was generally about 4 ft. 8½ in. between centres and is possibly related to the Roman pace of 4 ft. 10¼ in. If the outsides of the wheels were made this distance apart, then that between the centres would be roughly 4 ft. 8½ in., allowing about 2 in. as the width of the rim. Natural wheel-ruts are found in many Roman roads in North Africa, France, England and elsewhere, and seldom does the distance between the centres differ from 4 ft. 8 in. to 5 ft. The use of artificial ruts was not popular with the Romans except in mountainous districts where they were useful in preventing the carts from sliding off the road. An example of such a road in the Alps has artificial ruts of width 4 ft. 8½ in., and in England artificial ruts in Watling Street near Abbeydore have a spacing of 4 ft. 8 in. In spite of the popularity of this gauge it was not accepted everywhere in the Roman Empire. The stepping-stones on the roads of Pompeii, for instance, are too close together to permit more than a 3 ft. gauge to be used, but the chariots in this city were chiefly of a sporting character and did not reflect the practice in more serious transport.

One further example of the gauge is found in India, where,

prior to the British occupation, the chief unit of land measurement was the distance covered by two forward steps—about 5 ft.—and this was also the standard gauge of the wheel-track of the ordinary ox-drawn farm-carts of the country. Thus the dimension adopted in the present railway gauge in this country is certainly of great antiquity, and has probably been in constant use here since Roman times, although evidence covering the intervening period is difficult to find.

The first traces of carts found in Britain are at Verulamium, where in 1930 two pre-Roman cart-ruts were excavated. They are parallel, 8 in. deep and 4 ft. 7 in. to 4 ft. 9 in. between centres, and so the Britons were also acquainted with the advantages of the dimension. From the Roman period to the seventeenth century is a long time, but the gauge was in existence at the end of this period as well as at the beginning, and it seems probable that its use was uninterrupted and was responsible for the gauge of the early railways.

Railways had their origin in the tramways or wagon-ways which, at least as early as the middle of the sixteenth century, were used in the neighbourhood of Newcastle for the conveyance of coal from the pits to the Tyne for shipment. Originally the public roads, when worn by the constant stream of carts, were repaired by laying planks of timber at the bottom of the ruts, and afterwards the planks were laid on the surface of special roads formed between the collieries and the river. The planks were of wood, a few inches wide, and were fastened end to end on logs of wood or sleepers. In time it became common practice to cover them with a thin plating of iron in order to add to their life. Towards the middle of the eighteenth century iron wheels were used as well as larger carts, and when it was found that the iron sheathing was not strong enough to resist buckling under the passage of the loaded wagons, the rails were made wholly of iron. Up to this time the rails had been flat, and in order to prevent the wheels from running off, a ledge was cast integral with the rail on its inner side—the resulting shape being like the letter L. This type of rail was called the "plate-rail" or just the "plate"—a name which is preserved in the

modern term "plate-layer" applied to the men who lay and maintain the permanent way. There were several variations in the shape of the plate-rail until in about 1800 William Jessop adopted the "edge-rail". In this type the wheel face ran on top of the L, and was kept in position by a flange cast on the inside of the wheel. A great saving in the weight of the rails resulted from this change, since the horizontal part of the rail could be made much smaller than previously. Jessop was thus the first to introduce the modern type of rail. Wooden edge-rails and flanged wheels had been used before, but he was the first to make a real success of the method. The rails were laid with their outsides 5 ft. apart, which gave about 4 ft. 8 in. between the insides.

The chief traffic on the railways while the evolution of the rail was taking place was composed of strings of horse-drawn coal-wagons or "chaldrons". Since there were large numbers of these wagons and they had quite a long life, all the railways in a district were made to suit their gauge and they provided for the continuity of the original gauge. The chaldrons probably grew from the common horse-drawn cart and thus the cart wheel-gauge determined the subsequent rail-gauge.

Many small railways and plate-ways were built at the end of the eighteenth and the beginning of the nineteenth centuries, and were devoted almost entirely to the haulage of coal and goods, the gauges varying from about 3 ft. to 5 ft., but most of the lines were of the larger dimension. For instance, the Springwell Colliery Railway, one of the oldest in England, was laid to 4 ft. 8 in. gauge and this was altered only in 1854 when the Springwell line was connected with the North Eastern Railway. The existence of these small systems must have had a great influence on Stephenson when he was called upon to construct the Stockton and Darlington Railway. He would naturally adopt a gauge on which he could use the maximum of existing stock—especially as the line was originally intended to carry goods only. The gauge of this railway—4 ft. 8 in. subsequently modified to 4 ft. 8½ in. on the Liverpool and Manchester Railway—set the standard

for the whole country. The 4 ft. 8 in. gauge of the Stockton and Darlington line was in use for fifteen years before it was altered to 4 ft. 8½ in. in consequence of the adoption of the latter figure for the York to Darlington line in 1840. The rails were made 5 ft. apart at the outsides and were 2 in. wide, leaving 4 ft. 8 in. between the rails. In the Act of 1828 for extending the line from Stockton to Middlesbrough, it was provided "that the distance between the inside edges of the rails shall not be less than four feet eight inches, and the distance between the outside edges of the rails shall not be more than five feet one inch". This is the earliest case known of a railway gauge being fixed by Act of Parliament.

The odd half-inch was given to our standard by the Liverpool and Manchester Railway, opened in 1830. It was built by plate-layers taken from the Stockton and Darlington Railway, who used their old 4 ft. 8 in. gauges as part of their stock of tools. During the progress of the line, however, it was finally agreed that the gauge should be 4 ft. 8½ in., and the cause of the change was the introduction of the conical tyre. The following is the testimony of Mr Thomas Gooch who was engaged in the construction of the Liverpool end of the line under George Stephenson:

> There was much discussion during the construction of the line about curves and the self-acting value of the conical tyre in relieving the pressure of the flange against the rail, and the consequent need of a certain amount of play in the gauges of wheels and rails; especially as considerably higher speed was contemplated than that on the S. and D. Railway. I venture to think, therefore, that the extra ½ in. was given to meet these considerations, and that this was the true origin of the 4 ft. 8½ in. gauge.

Furthermore, the original engine, the "Rocket", supplied for the L. and M. Railway, had Stephenson's gauge for the wheels in conformity with the cylindrical tyre practice. Some later lines were built with a 4 ft. 9 in. gauge, but the importance of the L. and M. Railway made most of the neighbouring systems adopt its measurement, and the 4 ft. 8½ in. gauge became the most common, until in 1846 the Government made it compulsory.

In the modern world this gauge is common in many countries, having been determined at the outset of their railway development by the importation of early British locomotives and rolling-stock.

The wide distribution both in time and space of the same measurement seems to indicate that it must have been settled by some constant factor which was inherent in early transport. Such a factor might be the width of a horse, for the gauge is very suitable for the type of construction where the main cart frames are extended to form shafts for a single horse. But horses in pairs and teams of oxen do not require this arrangement, and the width of the wheel base does not depend on their use. Also the gauge was in use in places such as Malta where no horses were used and the hauling was done by man-power.

It may be that the size was gradually evolved after a long period of "trial and error", during which all the factors governing the dimensions of the carts came in play. The owners of the carts would want the maximum return for their expenditure and trouble in securing both the means of haulage and the carts themselves, and this meant that the loads were to be as large as possible with a minimum number of horses or men working as hard as they could. Also the maximum load that could be carried depended on the size that it was possible to make the components of the carts as well as the strength of the materials of construction and the stability, and thus an upper limit was set by these considerations. No doubt every combination of size, load and hauling power was used and eventually experience showed that the most suitable gauge to satisfy all but very special requirements was about 5 ft. In some cases it may have been established immediately by the unit of measurement given by two forward paces, and if this is true then the owners were fortunate, for they eliminated the evolution period.

In the last century the 7 ft. gauge used by the Great Western Railway was certainly too large for many industrial purposes, and was considered by many to be uneconomical at the time it was in use. On the other hand in countries where small gauges of the order 3 ft. are used, the need is felt for

something larger to provide more stability and carriage space. In a modern British railway system a larger gauge could certainly be used economically and would probably have advantages over the present size, but the expense involved in altering tunnels, bridges, rolling stock and the permanent way would be so great that the British Railway Regulation Gauge will certainly continue to be 4 ft. 8½ in.

J. DIAMOND

JOHNIANA

I. The following story of James Atlay (1817–94), Fellow 1842–60, tutor and Bishop of Hereford 1868–94, appears in volume 1 of *Kilvert's Diary*, edited by William Plomer, London, 1938. The Reverend Francis Kilvert was curate of Clyro, Breconshire, and the incident took place in April 1870.

"In Hadley's shop I met Dewing who told me of a most extraordinary misfortune that befell Pope the curate of Cusop yesterday at the Whitney Confirmation. He had one candidate Miss Stokes a farmer's daughter and they went together by train. Pope went in a cutaway coat very short, with his dog, and took no gown. The train was very late. He came very late into the church and sat down on a bench with the girl cheek by jowl. When it came to his turn to present his candidate he was told by the Rector (Henry Dew) or someone in authority to explain why he came so late. The Bishop of Hereford (Atlay) has a new fashion of confirming only two persons at a time, kneeling at the rails. The Bishop had marked two young people come in very late and when they came up to the rails thinking from Pope's youthful appearance and from his having no gown that he was a young farmer candidate and brother of the girl. He spoke to them severely and told them to come on and kneel down for they were extremely late. Pope tried to explain that he was a clergyman and that the girl was his candidate but the Bishop was overbearing and imperious and either did not hear or did not attend, seeming to think he was dealing with a refractory ill-conditioned

youth. 'I know, I know,' he said. 'Come at once, kneel down, kneel down.' Poor Pope resisted a long time and had a long battle with the Bishop, but at last unhappily he was overborne in the struggle, lost his head, gave way, knelt down and was *confirmed* there and then, and no one seems to have interfered to save him, though Mr Palmer of Eardesley and others were sitting close by and the whole Church was in a titter. It is a most unfortunate thing and will never be forgotten and it will be unhappily a joke against Pope all his life. The Bishop was told of his mistake afterwards and apologized to Pope, though rather shortly and cavalierly. He said, what was quite true, that Pope ought to have come in his gown. But there was a little fault on all sides for if the Bishop had been a little less hasty, rough and overbearing in his manner things might have been explained, and the by-standing clergy were certainly very much to blame for not stepping forward and preventing such a farce. I fear poor Pope will be very vexed, hurt and dispirited about it."

II. "I went to Whitney (Herefordshire)....Miss Hutchinson was at home at the Rectory. She is the niece of Mary Hutchinson, the wife of William Wordsworth the poet. She showed me first a large brooch she was wearing containing on one side a beautiful coloured photograph of the poet....This photograph is far the best and most pleasing likeness I have seen of the poet. It was taken from a picture painted by H—— [editor's note: presumably Haydon] almost entirely from memory. The poet had written to the painter telling him with pride that he had ascended Helvellyn when he was 70 years old, and sending him a sonnet on the occasion. The painter was extremely pleased with the letter and the sonnet and immediately drew Wordsworth in a meditative mood composing the sonnet."

(From *Kilvert's Diary*, ed. W. Plomer, vol. 1, London, Cape, 1938, pp. 317 ff.)

BOOK REVIEW

Arctic and Antarctic: The Technique of Polar Travel. By COLIN BERTRAM. Cambridge: W. Heffer and Sons, Ltd. 7*s.* 6*d.*

Side by side on many shelves lie the numerous accounts of polar explorations. These may be read as adventure books, as the chronicles of human endeavour in polar lands, or for the bare facts of discovered knowledge they contain. This book, however, is not an account of the author's travels in the Arctic or those in Antarctic regions as zoologist with the British Graham Land Expedition, 1934–37. He who wishes to read of escape from danger will be disappointed, though if he searches carefully he will find a brief reference to a memory of "the troubles of a night spent on the ice of a polar sea". "As the evening passes, shocks and jars in the ice are perceptible, rather to hips and shoulders as the men lie upon the floorskins than to ears pressed listening to the ground." No, it is the lucid explanation of the principles, physical, physiological and psychological, which govern the life of men in polar lands, presented in a setting that depicts the life itself, that at once makes this book stand out as one to be read and enjoyed by all who would intelligently appreciate those written narratives of polar exploration and have greater insight of the ideals and feelings of those who take part in it.

Chapters on Clothing, Food for Sledgers, Dogs and Transport might all too readily provide dull reading, but all dullness has been avoided by the unexpected comparisons and contrasts that enliven the whole book and by the quite delightful descriptions of so much that is familiar to the author. The contrast may be of polar peace with that of a desert shore where "The nimble shore crabs with stalked eyes upraised patter in platoons along the tide line", or the footwear of a tribe of Patagonian Indians with that sometimes worn by Central European geese and turkeys where the birds are first marched "through alternate pans of liquid tar and sand, so sending them off to market each with a pair of fine strong boots". In the excellent plates a similar method has been adopted, for in many cases an old print and a modern photograph are set one above the other, inviting detailed comparison. There are numerous drawings by Miss Pickering that show details of equipment, and some of those by Miss Bertram in a bolder style more suited to the rough paper in which the book is printed are truly excellent.

The author's careful weighing of the merits of dogs and men for haulage, his analysis of the basic efficiency of sledging equipment and exposition of the finer points and principles involved in polar rationing are among the features that may well prove of value to future expeditions, but for those of us at home there is another aspect of the book that calls for special thought. Men who have lived a while in Arctic or Antarctic lands where "The pervading sense of wonder is all-satisfying as they absorb the elemental beauty of the ice-cloaked earth" may on their return experience "a feeling of peculiar loss, or perhaps a realization of all the ugliness that the world contains, the cruelty of its people, the poverty, the stupidity and the lack of opportunity". Thus here and there amongst the text are to be found impressions of one's fellow-men from the poor natives of Tierra del Fuego, "with a guanaco skin flung across their shoulders" shivering "at the foot of the evolutionary ladder of insulation from the cold", to the rich citizen, "the brawnless brain", who smiles down on them from the summit. The mirror may show a sight "quite pathetic", "adults and children at the seaside, planting their feet with the greatest care in an attempt to avoid even the flattest and smoothest of pebbles", or on another occasion, quite unexpectedly when considering polar animals, the more kindly picture of "a crowd of adult males, in sombre bowler hats, rotund dark figures with spread umbrellas trotting gently down an incline to the railway station". For these and all an attempt is made to convey something of the unutterable fascination, the peace, beauty and solitude of polar lands.

In the College Notes it is reported that the King has approved the award to Dr Bertram of the Polar Medal. Congratulations, and good fortune that the wish may be realized "to go back to north or south, to live again to the full in a place unspoilt, to see men more nearly at their best, away from the greed and cruelty of warring nations, the lust for money and the lying tongues" and to return again having further satisfied man's "mounting desire to know".

COLLEGE CHRONICLE

THE ADAMS SOCIETY

President: E. P. HICKS. *Vice-President:* D. D. FILTNESS. *Hon. Secretary:* G. WHITEHOUSE. *Hon. Treasurer:* P. P. AGARWAL.

THE meetings this term have been very well attended, especially as a large number of last year's members have gone down. The number of freshmen and visitors at our meetings has been re-

markable, but there has been a very noticeable scarcity of second-year men, and we hope that they will attend in larger numbers during the next two terms.

The first meeting of the term was held on 26 October, when Mr White read a paper on "Eggs". After discussing the properties of convex surfaces, he went on to consider constructions for curves of equal breadth. After this meeting a Special Business Meeting elected E. P. Hicks as President in place of R. Turner, who is serving with the Forces.

On 9 November P. E. Montagnon spoke on "The Bending of a Thin Plate". After proving some general results for the displacements of a thin plate under a system of forces, he then considered in detail the rigidity in the corner of a plate clamped along two edges.

Dr Smithies spoke to the Society on 23 November. His subject was "Principal Axes". Using matrices, he reduced the equation of an ellipsoid to a sum of squares and showed how the idea of principal axes could be interpreted in n dimensions. He then transferred the results into the space of functions.

At the last meeting of the term on 30 November, D. D. Filtness read a paper on "Some Theories of the Origin of the Solar System". He outlined some of the classical theories, and showed how far they explained the characteristics of the Solar System and finally described some of the recent work in this field.

THE CLASSICAL SOCIETY

President: A. G. LEE. *Hon. Secretary:* J. H. SWINGLER.
Hon. Treasurer: D. CAMPBELL.

OUR President was unfortunately called up before the end of term, and left us on 1 December. He has our very best wishes. R. D. Williams has been elected to succeed him.

Four meetings have been held this term. On 19 October Mr Angus of Trinity Hall read us a most entertaining paper on "Alexander", which was heard by a small but appreciative audience. On 16 November we enjoyed the luxury of Mr Charlesworth's rooms to welcome Mr Sinker of Jesus College, who came to talk to us on "Virgil's Hexameter". The meeting was of an informal character, and we had some interesting discussions on the balance between accentual stress and metrical ictus, as well as other aspects of the great man and his work.

The other two meetings took the form of play readings. On 3 November we read the *Menaechmi* of Plautus, and on the 30th the *Medea* of Euripides. Several members of the Society have formed themselves into a play-reading group, and we have read a number of English plays during the term, with great success. Support from other sources would be welcome, with a view to creating a definite society.

THE HISTORICAL SOCIETY

President: PROFESSOR PREVITÉ-ORTON. *Hon. Secretary:* K. SCOTT.
Hon. Treasurer: F. H. HINSLEY.

THIS term's report upon the activities of the Society in difficult times is not unsatisfactory, for while certain valuable members have gone down, membership numbers generally have been maintained and a number of meetings arranged. Unfortunately, the Master felt that his onerous duties as Vice-Chancellor of the University would prevent his acting as President of the Society this year. His resignation brings to mind his unique record of office-holding in the Society—Foundation Secretary 1905, President 1919–39, a service to which the Society owes to a large degree its existence and present flourishing state. The Society welcomed Professor Previté-Orton as his successor in the Presidency.

J. W. Davidson opened the term's programme on 25 October with a paper on "The Exploration of the Pacific". The subject provided the reader with a splendid background upon which to trace his narrative of the courage, motives and misfortunes of Magellan and his successors to the time of Cook. On 7 November, Mr W. R. Brock, of Trinity College, read a paper on "Government and Public Opinion in 1820". By an acute analysis of the sources of strength of Lord Liverpool's government, Mr Brock demonstrated how responsive was the unreformed Parliament to certain elements of opinion in the country, in the transitional period between the managed Parliaments of the eighteenth century and the party caucuses of the later nineteenth century. The next meeting of the Society was one held conjointly with the Law Society, at which Mr Barraclough read a paper on "Law and Legislation in Medieval England". The speaker traced, in a very lucid and authoritative manner, the development of the law-making functions of Crown and Parliament from the Saxon period to the Lancastrian Revolution. Lastly, on 22 November,

the Society welcomed Dr Daniel, who read a paper which excited great interest and discussion on "The Origins of British Agriculture", a very clear exposition of the changing technique, disposition and organization of agriculture in this country. Among the many points of interest in this paper, Dr Daniel had much to say about the nature and influence of the various types of plough, and concluded with a survey of the Anglo-Saxon invasions. This meeting was a fitting conclusion to a successful term's activities.

THE LAW SOCIETY

President: K. SCOTT. *Vice-Presidents:* PROFESSOR P. H. WINFIELD, DR E. C. S. WADE, MR S. J. BAILEY, DR R. M. JACKSON, MR D. SEABORNE DAVIES. *Hon. Secretary:* H. M. WILMERSDOERFFER. *Hon. Treasurer:* A. K. ALLEN.

A MOOT was set by Mr Seaborne Davies, formerly of St John's and now a lecturer at the London School of Economics, in conjunction with the L.S.E. Law Society. Its main points were assault, robbery, larceny and blackmail. The judges were O. E. A. Koch and P. M. Carroll, presided over by Mr Seaborne Davies who promised us a written judgment in which he hoped to reply to J. W. C. Turner in the *Cambridge Law Journal* on the question of assault. Counsel for the Appellant were I. R. Galbraith and J. S. Martin. Counsel for the Crown were members of the L.S.E. Law Society.

Mr Barraclough, at our second meeting, read a very interesting and learned paper on "Law and Legislation in Medieval England". He traced the development of royal and parliamentary legislature, the difference in England between Volkrecht and Königsrecht, and their eventual merger into a third factor peculiar to England, Common Law. On this occasion members of the College Historical Society were our guests.

At our third and last meeting, His Honour Judge Lawson Campbell, of the Local County Court, came to read a paper on "Forensic Wit and Humour". His stories and anecdotes made a very amusing and instructive evening. At this meeting also Mr Seaborne Davies was elected a Vice-President of the Society, and we are glad to say he has since accepted this office and thus returns to the Society, a former member now a distinguished teacher of law.

THE MEDICAL SOCIETY

Undergraduate Vice-President: I. M. SMITH. *Hon. Secretary:* R. N. JONES. *Hon. Treasurer:* C. S. MCKENDRICK. *Committee:* A. R. H. HICKS, T. C. BEARD, N. T. WELFORD.

THE first meeting was held in Dr Barron's rooms, when Dr Banister, of the Psychology Department, gave a talk on "Suggestion". The lecturer showed how important a role suggestion plays in everyday life, and made us look very foolish in some simple experiments to illustrate his remarks. The Society departed filled with admiration for psychologists.

At the next meeting, on 5 December, Mr Brindley gave a fascinating lantern lecture on "The Development of the Ship". A lecture on ships may seem irregular for a Medical Society, but it was thought that subjects less closely related to our course of instruction might prove a suitable form of relaxation.

It is hoped to have another meeting after term ends, for those who are staying up for the Qualifying Examination.

THE MUSICAL SOCIETY

President: THE PRESIDENT. *Senior Treasurer:* MR NEWMAN. *Musical Director:* MR ORR. *Librarian:* DR HOLLICK. *Junior Treasurer:* E. L. HART. *Hon. Secretary:* K. J. S. RITCHIE.

As is the case with most College societies, we have suffered rather badly from the effects of recruiting and conscription this year. The Secretary was called up about half-way through the Michaelmas Term, and we lost also R. B. Marchant and A. G. Lee, both of whom had contributed enormously to the Society's activities during the last few years.

The May Concert held in the College Hall on Monday, 12 June, was successful, all the items showing ample results of careful practice. The concert began with the Variations on a Theme of Haydn by Brahms, played on two pianofortes by A. G. Lee and R. B. Marchant. This was followed by three vocal duets with pianoforte; K. J. S. Ritchie and R. D. Price-Smith sang "Let us wander", "Lost is my quiet" and "Sound the trumpet", all by Purcell, with accompaniment played by E. L. Hart. Then Mr Newman, H. C. Rackham and J. C. Gunn played the Haydn trio, No. 6, in D major for pianoforte, violin and violoncello, and the first half of the concert was finished by the College Chorus, conducted by Mr Orr, singing three delightful Elizabethan songs by Vaughan Williams: "Sweet day so cool", "The Willow Song"

and "O Mistress Mine". After the large audience had had refreshments in the Combination Room and marquee, R. B. Marchant began the second half of the programme with a Barcarolle by Chopin on the pianoforte. If one were singling out individual performances for especial praise, one might mention this item and also the following one in which R. D. Price-Smith sang songs accompanied by A. G. Lee. The songs were "Come calm content" by Thomas Arne arranged by Adam Carse, "The Wild Flower's Song" by Roger Quilter and three by Peter Warlock, "Fair and True", "The Bayly berith the bell away" and the magnificent "Yarmouth Fair". Next came "Roundelay" by Alan Richardson, the solo hautbois part being played by I. R. Fraser and the pianoforte accompaniment by H. C. Kelynack. Mr Orr conducted the next item, consisting of three pieces by the College Chorus in which R. D. Price-Smith sang the solo part in the last two. They were "Come let's be merry" (Anonymous, seventeenth century), "The Cricketers of Hambledon" by Peter Warlock, and an arrangement of the "Camptown Races" by Ralph Greaves. H. C. Kelynack played the pianoforte accompaniment. The concert finished as usual with the College Boat Song, of which the First May Boat and Mr Orr gave a spirited performance strongly and enthusiastically backed up by the audience.

The Society has been particularly anxious in the Michaelmas Term to give plenty of opportunity to members, both of the Society and of the University and Town, to listen to and make music. Mr Orr arranged and rehearsed four excellent recitals given in the College Chapel during the term. He himself gave a performance at the organ on 26 October of works by Buxtehude, Handel and Bach. On 2 November the choir sang motets and anthems by Tallis, Byrd, Purcell, Gibbons and others. A recital by strings, organ and singers on 11 November gave us the opportunity of hearing three Latin psalms set to music this year by Mr Orr. Margaret Orr, mezzo-soprano, was accompanied by strings led by Mrs Nicholas. We hope we may have another opportunity of hearing this work, which greatly impressed the audience even at a first hearing. The Weiland and Schütz works which opened the recital were played by the strings with Guy Lee at the organ and sung by Margaret Orr, Kenneth Ritchie and Walter Todds. The last recital was on 18 November at 3.15 p.m. when the choir, conducted by Mr Orr, sang anthems by, among others, Bach, Palestrina and Battishill, as well as a setting of "A Prayer to the Trinity" (1938) by Orr.

The new Music Room has been a source of great enjoyment to the Society this year. It is used uninterruptedly for practice during

all the hours of music, and Thursday evening has become a time when members of the Society can be sure of finding some music of an informal kind going on there after Hall. Mr Newman, behind the scenes, has made sure that there was about three-quarters of an hour's informal music on Thursdays which members could hear without feeling that they were being prevented from spending the evening in other ways. Mr Orr, Mr Gatty, Mr Newman, Marchant, Lee and Koch have been among those who provided music on these occasions. Mrs J. F. Allen played violin works on the last Thursday of term.

There have been as usual four Smoking Concerts in the Michaelmas Term. This year they were arranged by various members of the committee, as had been the custom until a few years ago. The programmes were as follows:

Sunday, 29 October 1939

1.	TWO PIANOS	Concerto in C minor Allegro Moderato. Larghetto. Allegro R. B. MARCHANT, A. G. LEE	*J. S. Bach*
2.	SONGS	"Morgen" "Du, meines Herzens Krönelein" "Die Nacht" "Zueignung" K. J. S. RITCHIE, R. B. MARCHANT	*Richard Strauss*
		Interval	
3.	PIANO SOLO	"Seguidillas" Rhapsodie Hongroise No. 12 L. S. GROVE	*Albéniz* *Liszt*
4.	SONGS	"Fairest Isle" "I attempt from love's sickness to fly" G. M. HOMAN, E. L. HART	*Purcell*
5.	SONATA A TRE: OBOE, CLARINET, 'CELLO AND PIANO	Adagio. Allegro. Largo. Allegro I. R. FRASER, J. C. GUNN J. A. CROOK, A. G. LEE	*Handel*

Monday, 6 *November* 1939

1.	PIANO DUETS	Dance Tune Piece J. R. WILLIAMS, S. P. STARNES	*York Bowen* *Grieg*
2.	SONGS	"Drake's Drum" "The Old Superb" "Captain Stratton's Fancy" A. W. CHESHIRE, R. A. L. ROPER	*Stanford* *Warlock*
3.	CONCERTINO FOR CLARINET AND PIANO	J. A. CROOK, S. P. STARNES	*Weber*
		Interval	

4. Songs — "O Mistress Mine" / "Come away, death" — *Quilter*
J. R. WILLIAMS, R. J. E. BERTIN

5. Piano Solo — French Suite, No. 6, in E Major — *J. S. Bach*
R. A. L. ROPER

6. Part Song — "The Baby on the Shore" — *Grossmith*
R. C. FENTON, I. G. C. COCKBURN
J. R. WILLIAMS, A. W. CHESHIRE

The Combination Room Concert

Monday, 20 November 1939

1. Italian Concerto for Harpsichord — *Bach*
MR ORR

2. Airs or Fantastic Spirits to Three Voices — *Weelkes*
(*a*) "The ape, the monkey and baboon"
(*b*) "Upon a hill the bonny boy"
(*c*) "Since Robin Hood"
R. C. FENTON, P. H. STARNES
I. R. FRASER, J. R. WILLIAMS

3. Sonata, No. 2, in D Major for Two Oboes and Continuo *Handel*
I. R. FRASER, A. E. CAVE
J. C. GUNN, MR GATTY

Interval

4. Valses Nobles et Sentimentales — *Ravel*
MR NEWMAN

5. Sonata in E flat Op. 120, No. 2, for Clarinet and Piano *Brahms*
J. A. CROOK, A. G. LEE

Sunday, 3 December 1939

1. Two Pianoforte Duets — *J. S. Bach*
"Thy birthday is come"
"Sheep may safely graze"
MR CHARLESWORTH, MR NEWMAN

2. Sonata in F for 'Cello and Pianoforte — *Grazioli* (1755–1820)
J. C. GUNN, MR NEWMAN

3. Carols
"Lute-Book Lullaby"
William Ballet, 17th cent., arr. *Geoffrey Shaw*
"The Garden of Jesus"
Dutch 1633, arr. *Geoffrey Shaw*
"O Little One"
German 1650, harm. *J. S. Bach and Martin Shaw*
"This Endris Night"
15th cent., harm. *Vaughan Williams and Martin Shaw*
GRISELL ROY, MARY PRIESTLEY
J. R. WILLIAMS, I. R. FRASER

Interval

4. Roundelay for Oboe — *Alan Richardson*
I. R. FRASER, J. R. WILLIAMS

5. Trio Op. 11 No. 3 for Violin, 'Cello and Pianoforte — *Beethoven*
Allegro con Brio. Adagio. Allegretto and Variations
O. E. A. KOCH, J. C. GUNN, J. R. WILLIAMS

The freshmen J. R. Williams and J. A. Crook have contributed greatly to the concerts this term.

We were very fortunate indeed in being allowed to hear Mr Gatty's harpsichord at the Combination Concert. All who heard it were impressed by the aptness of the setting in the Combination Room, and felt a strong sense of gratitude to Mr Gatty for allowing his magnificent instrument to be heard by everybody.

The last concert was unusual in that it was the first time on record that ladies had taken part in a Smoking Concert at this College. The experiment was deemed a success.

I. R. Fraser has agreed to take over the Secretaryship which was left vacant when K. J. S. Ritchie was called up.

THE NATURAL SCIENCE CLUB

President: C. I. RUTHERFORD. *Vice-president:* DR HOLLICK. *Hon. Secretary:* L. A. LICKERISH. *Hon. Treasurer:* R. G. SCHARDT. *Committee:* G. C. CURTIS, F. V. LEWIS.

The first meeting of term, 11 October, was the occasion of the tenth birthday of the Club. The Club regretted that Dr Evans, who last year had planned to be present at this meeting, was unable to be with us. There was no formal address, the meeting being given up to informal discussion. Dr Hollick and Mr Welford were present.

At the second meeting of the term, Mr Welford set out to fulfil the aim of the Club, viz. "to broaden the outlook of Undergraduates reading Natural Sciences in an age of increasing specialization", by giving a film show. The programme included films of general and scientific interest, and also a cartoon and a "Wild West" film, which created considerable amusement.

At the third meeting of the term, Dr Hammond of the School of Agriculture gave a paper on "Growth". He dealt mainly with the growth of domestic animals, especially pigs. He explained how growth consisted of two separate processes, "increase in weight" and "development", and how by altering the relative

rates of these two processes at different stages of development, by varying the feeding methods, different types of carcasses and different qualities of meat could be produced. A number of pamphlets illustrating the subject were distributed.

At the fourth meeting of the term Dr Daniel, of this College, gave a very interesting paper entitled "Giants' Graves". "Giants' graves" is the name given by peasants to a type of Megalithic tomb found widely distributed in Western and Northern Europe. Evidence indicates that these tombs were built by a race speaking a Hamitic language which migrated from the Western shores of the Mediterranean to this country. Dr Daniel illustrated his paper with a very large number of lantern slides, which showed the skilful but puzzling carvings found on the rocks composing the tomb, and also the pottery, domestic instruments, and human bones found in these "graves".

THE THEOLOGICAL SOCIETY

President: G. C. T. RICHARDS. *Hon. Secretary and Treasurer:* G. A. POTTER. *Committee:* REV. J. S. BOYS SMITH, P. J. ROSS.

WE have not been able to hold any meetings this term owing to the fact that the Secretary was called up unexpectedly and new officers had to be appointed. It is hoped that some interesting papers will be read next term. The Secretary would be very pleased to get in touch with any member of the College who is interested in the Society.

ASSOCIATION FOOTBALL

President: MR BOYS SMITH. *Captain:* T. C. G. JAMES. *Hon. Secretary:* C. PLUMPTON. *Hon. Secretary Second XI:* L. D. BONSALL.

SO far, this season has been the most successful in the history of St John's "soccer", and for the first time the First XI has won the League Championship. All seven league games were won, with the remarkable goal total of 37 goals to 8. Perhaps the most difficult game was that against St Catharine's who, with all their University players, were at full strength. The play in the first half was fairly even and the score 1–1, but in the second half the opposing forwards were attacking persistently and it is a sufficient indication of the competence of our defence that they could score only one goal. The climax came when, with the score

at 2–2, Bullock headed a corner from Foxall into the corner of the net. This victory by 3–2 was probably the turning-point of the season for, inspired by this success, in the next week, we went on to beat another strong side—Downing—by 4–1. The outstanding features of this match were the fast and clever movements of the forward line and the exemplary support given by the half-backs to both attack and defence; these two factors also account for the heavy defeats of Clare (6–1), Magdalene (8–1) and Queens' (9–0). Trinity were the only team which looked like cheating us of the championship, for, after being three goals down at half-time, they recovered and were only beaten 4–3. In addition to these league matches we have also played and won four friendly games. With such a record behind it, the First XI is anticipating with confidence and enthusiasm the "cuppers" of next term—a confidence which will not be found unwarranted, because our achievements have been due to sound team work rather than to the individual brilliance of one or two players.

It does not seem likely that the success of this season will be a mere flash in the pan, because the extraordinary number of five freshmen have secured regular places in the first team. This fact guarantees further successes for the future.

Lastly the strength of the team was officially recognized when six of our men were selected to play for the Falcons and three of them have subsequently played for the University.

First XI Colours have been awarded to R. E. Robinson and Second XI Colours to L. D. Bonsall, R. G. Woodwark, A. H. Bullock, D. A. Foxall, D. G. Davidson and G. C. M. M. Cave.

Owing to emergency conditions the Second XI were unable to take up the position they earned last season in the Third Division, and L. D. Bonsall has had considerable difficulty in finding suitable opposition. But in spite of these difficulties the team has had some enjoyable and successful matches.

The conclusion to be drawn from this report is obviously that John's "soccer" is at the peak of its success. Let there be no falling off from this high standard.

THE ATHLETIC CLUB

President: M. RICKETTS. *Vice-President:* SIR HENRY HOWARD. *Hon. Secretary:* R. N. POSNETT.

THIS season has been fairly normal, and it is good to see that we have several promising athletes amongst the freshmen. In the relays we had some bad luck. Good running by Spooncer in the

440 was nullified by a dropped baton. Ricketts, the President, sprained his ankle before the hurdles, in spite of which we came second to Clare in the Final. In the Medley, both Cheshire and Daniels did well, and Curly Still, without much strain, held fourth place to the end.

In the Freshmen's Sports, Hutton won the Shot, and Wootton the Pole Vault. Cheshire was second to Hope-Jones in fast time in the Half Mile, whilst Seale was easily the best freshman over 3 Miles. Posnett won the Seniors' Hurdles, and MacBean the Pole Vault. All these took part in the match between Seniors and Freshmen.

In the Inter-college Cross-Country, we came second on the aggregate. Curly Still ran a fine race for second place, and Seale again distinguished himself by coming seventh. It has thus been altogether a successful term.

THE CHESS CLUB

AT the General Meeting, held on 19 October, it was decided to continue the Club's activities, especially as a large number of freshmen were prepared to become members. Officers were elected as follows:

President: PROFESSOR DIRAC (re-elected).
Vice-President: H. S. PEISER.
Hon. Secretary: J. D. GWYN.
Hon. Treasurer: W. J. MARMION.
Committee: J. C. GUNN; E. P. HICKS; THE VICE-PRESIDENT.

The Club has played five matches, against Sidney Sussex, Queens', Newnham, Trinity and Christ's. Although only one match was won, and another drawn, the more experienced players have not taken part except on occasion, so there is a fairly good prospect for the League matches next term, in which the teams will be at full strength.

A knock-out competition has been staged successfully, and two freshmen, K. Petschek and A. H. Read, will take part in the final during the Lent Term.

THE CRICKET CLUB

Long Vacation Team: T. S. Ringrose, R. M. Argyle, A. G. Wolstenholme, A. J. Briggs, F. Cheers, R. C. Spooncer, H. M. Parry, K. Fearnside, J. Diamond, R. D. Williams, P. M. Carroll, M. V. Bates, A. N. Baligh.

During the Long Vacation we had several very enjoyable games of village cricket, against such teams as Grantchester, Girton, Engineering Labs., and a few College sides.

Perhaps the high-light of the series was a match against Newnham College, in which 26 runs left-handed brought us a last-over victory. R. M. Argyle gave a fine display of left-handed hooking into the surrounding meadows. Another feature of the game was the one-handed catching of the side.

There can be no doubt that all the players enjoyed playing this type of cricket; if runs were scarce, wickets were plentiful.

THE HOCKEY CLUB

President: THE PRESIDENT. *Captain:* T. S. RINGROSE. *Hon. Secretary:* T. W. ATKINSON. *Hon. Secretary, Third XI:* J. P. MYERS.

THE Hockey Club has had rather a disappointing term. There are several factors which have accounted for this; in the first place the weather has been unbelievably bad, resulting in the cancellation of about threequarters of all our fixtures, and the First XI alone have had 21 matches scratched. We have also had to lend our ground to the R.A.F., which has been especially hard on the Second and Third XIs.

This term we have had a College league system; we started well, winning the first two matches easily, but the call of the Army and O.T.C. parades depleted our team, and we finished rather low in the League. All told, the First XI have played 12 matches, with the following results: Won 5, Lost 5, Drawn 2. We started the term with four old Colours, and the following have represented the College fairly consistently during the term: T. S. Ringrose, T. W. Atkinson, A. G. Lee, T. W. French, P. J. Dickinson, K. A. Scott, J. G. Dudley, A. K. Allen, G. de V. Merriman, G. H. Seale, J. R. Morgan, L. H. Roper, M. A. Benians, C. I. Rutherford, P. J. Ross and J. Ferguson.

Seniors' Trials were given to T. S. Ringrose and P. J. Dickinson, whilst J. G. Dudley, J. R. Morgan and J. Ferguson played in the Freshers' Trial. Dudley is to be congratulated also on playing in the Final Trial. Our thanks are due to Len Baker and to J. Diamond, Esq., a former Secretary of the Club, for their readiness to umpire our games.

We hope that it will be possible to have our annual tour of schools in Kent and Sussex at the end of next term.

L.M.B.C.

President: THE MASTER. *Senior Treasurer:* PROFESSOR WALKER. *First Boat Captain:* A. J. THOMSON. *Hon. Secretary:* R. M. DOHOO. *Committee:* G. A. POTTER, J. F. RUSSELL-SMITH.

Henley 1939

THE First Boat was entered for the Ladies' Plate, with Boyce, Holley and Mallender rowing in place of three members of the May Boat who were unable to go.

We started unluckily, for Sturge pulled a muscle during the first week of training. He tried to carry on with his torso swathed in adhesive plaster, but finally had to give up rowing, though he was able to help with the coaching.

Roy Meldrum very kindly came to coach during the whole period of training, and under his supervision we developed into a fast crew. Some of our practice times compared well with those of the Grand crews.

In the races we were not able to carry out the tactics we had used in practice, and we did not do so well. In spite of the persuasive efforts of our captain, Balliol could not reconsider their decision to scratch, so we rowed over by ourselves on the first morning. In the afternoon we beat Christ's by a length, and on the second day we went down to Eton.

The crew was as follows:

	st.	lb.
Bow N. M. Lawrance	11	8
2 P. F. Mallender	12	3
3 J. R. R. Dunlop	12	5
4 P. M. Boyce ...	12	6
5 G. E. W. Holley	13	9
6 I. R. Fraser ...	12	6
7 A. J. Thomson	11	7
Str. J. P. Webber ...	10	10
Cox C. J. G. Stanley	9	3

Light IVs

We only decided to enter a boat three weeks before the races, so with rowing limited to three outings a week we had just nine outings practice. The race was rowed over the usual course, but it was on a time basis. We finished third out of five. Since the other four crews had been practising for the whole term, this was a creditable performance.

The crew was:

Bow A. J. Thomson (*Steers*)
2 J. R. R. Dunlop
3 J. F. Russell-Smith
Str. G. E. W. Holley

December VIIIs

These races were held in place of the Fairbairn Cup over a course from Morley's Holt to the Little Bridge. The members of the Light IV were not allowed to compete, so the First Boat consisted of men from last year's Second and Third Boats and freshmen. They finished seventeenth. The Crock Pots were awarded to the Second Boat who finished twenty-sixth. The Third and Fourth crews were almost entirely freshmen, and they did well, when one takes into consideration how few were the outings they had been able to make.

The Andrews and Maples Freshmen's Sculls were won by D. K. Johnston.

The exceptional conditions of this term made rowing very difficult. We lost our hard-working captain, Stanley, in the middle of the term after he had managed to set the Club on its feet, and it is to him that we owe our large membership this term. He is now in the Armoured Cars.

Later we had another misfortune when our Senior Treasurer, Mr Gatty, was called away. We welcome Professor Walker who has very kindly agreed to take on the office.

RUGBY FOOTBALL

President: PROFESSOR WINFIELD. *Captain:* V. E. COLLISON. *Hon. Secretary:* H. M. WILMERSDOERFFER.

DESPITE everything, we have had a fairly successful season. It was decided to have an Inter-college League this term, and we have taken second place in Division A. We have been handicapped by injuries, doubly felt owing to the absence of many, on whom we should otherwise have relied, and yet we have all enjoyed our games even when played in mud and at the other end of Cambridge.

Success was due mainly to our captain, Victor Collison, whose untiring energy and work has been an example to all. Tim Beevers, our secretary, had to leave us in the middle of the term, but not before he had shown himself to be a man of many sides, capable ever of springing surprises both on and off the field. Our main strength was our forwards. Their packing was weak, but their line-out work and their loose rushes saved many a situation. Bower adapted himself well to hooking and Bratherton can always be relied on in the open. Congratulations to these two on getting

their Colours. Of the freshmen Moore and Goldie-Scott are outstanding, and have surely come to stay. Both have played good games for the 'Varsity, and Patten also is a promising player. Of the old Colours Dupont played well till he was injured, and Wilmersdoerffer has led the pack throughout the season, and Moxon gave his worthy support. Ricketts, when available, has played some excellent games at full-back, and Melville has shown great keenness. These two and many other seniors have stepped into the breach worthily.

The Second XV have played some good games, and have from time to time supplied good reserves for the First. The Cygnets, on the other hand, despite their energetic secretary, have had to go into liquidation, but it is hoped only temporarily.

THE SQUASH CLUB

Captain: P. J. DICKINSON. *Hon. Secretary:* A. J. BRIGGS.

First Team: J. T. Brockbank, A. J. Briggs, E. L. Hart, A. J. Bower, R. C. Fenton.

Owing to the shortening of the leagues this year, the First Team was not promoted to the First League. However, it has done well in the Second League, in spite of P. J. Dickinson and T. Beevers being called up to serve in H.M. Forces. Only two matches were lost, and the side finished second in the League—only one point behind the winners.

Second Team: R. D. Williams, R. J. Borchardt, G. Hudson, H. J. Butcher, C. E. Malloch.

Was also handicapped by people having to fill gaps in the First Team—but in spite of this it managed to keep a respectable average, and it finished in the upper half of the Third League.

Both sides were handicapped by having to play in the afternoon, as few courts have been "blacked out". This meant that full sides were not always available, as people were playing other games.

COLLEGE NOTES

A ROYAL MEDAL of the Royal Society has been awarded to Professor P. A. M. DIRAC (Ph.D. 1926), Fellow.

The Rev. Professor J. M. CREED (B.A. 1911), Fellow, has been elected a Fellow of the British Academy.

Mr JOHN ADAMS HUNTER (B.A. 1913), Lieutenant-Governor of Malta, has been appointed Governor and Commander-in-Chief of British Honduras.

The honorary degree of LL.D. has been conferred *in absentia* by the University of St Andrews upon Sir A. C. SEWARD (B.A. 1886), Honorary Fellow, President of the British Association for the Advancement of Science.

Mr B. L. GOODLET (B.A. 1932), Professor of Electrical Engineering in the University of Capetown, has been appointed Professor of Electrical Engineering in the University of Birmingham.

The title of Reader in Political Science in the University of London has been conferred upon Mr K. B. S. SMELLIE (B.A. 1920), in respect of the post held by him at the London School of Economics.

Mr R. J. GETTY (B.A. 1930), Fellow, has been appointed Faculty Assistant Lecturer in Classics in the University.

Mr HARTLEY WITHERS, of Christ Church, Oxford, admitted a member of the College in 1938, took the B.A. degree at Cambridge by incorporation on 4 November 1939, and proceeded to the M.A. degree on 9 December 1939.

Mr WILLIAM TAYLOR (B.A. 1925), lecturer in Mathematics at Edinburgh Provincial Training College, has been appointed Headmaster of Wigan Grammar School.

Mr E. C. AXFORD (B.A. 1925), Master at Darlington Grammar School, has been appointed Headmaster of Callington County School, Cornwall.

Mr D. L. L. CLARKE (B.A. 1938) has been appointed Classics Master at the Grammar School, Steyning, Sussex.

Mr W. N. C. BELGRAVE (B.A. 1913) has been appointed Director of Agriculture, Straits Settlements, and Adviser on Agriculture, Malay Straits.

Mr L. J. LINCOLN (B.A. 1928), Law and Assize Clerk, has been appointed second additional substitute Procureur and Advocate-General, Mauritius.

Mr J. R. TREVALDWYN (B.A. 1935) has been appointed private secretary to Sir Victor Warrender, Financial Secretary to the War Office.

Mr F. PICKFORD (B.A. 1939), Mr R. J. GUPPY (B.A. 1938) and Mr J. V. ROB (B.A. 1937) were successful in the Open Competition for the Civil Service, July 1939.

Mr T. A. A. FAIRLESS (B.A. 1939) has been appointed tutor organizer under the Workers' Educational Association in the Tyneside and Durham area.

Mr G. H. PHELPS (B.A. 1937) has been appointed Tutor under the Board of Extra-Mural Studies.

A Gladstone Studentship at St Deiniol's Library, Hawarden, has been awarded to Mr C. H. BUTLER (B.A. 1935).

The Hamilton Prize for research on radio communication has been awarded to Mr K. G. BUDDEN (B.A. 1936).

The King has approved the award to Dr G. C. L. BERTRAM (B.A. 1932), a member of the British Graham Land Expedition, 1934–37, of the Polar Medal, in silver, with clasp inscribed "Antarctic 1935–1937".

A bell, in memory of the late Sir Lewis and Lady Dibdin, has been given to Dormansland Church, Surrey, where Sir Lewis Dibdin worshipped for forty years and was vice-chairman of the Parochial Church Council from its formation until his last illness.

The Bilton Pollard Fellowship at University College Hospital Medical School has been awarded to Dr M. L. Rosenheim (B.A. 1929).

Diplomas of Fellowship of the Royal College of Surgeons have been conferred on Mr G. H. BAINES (B.A. 1933), St Thomas's Hospital, on 13 July 1939, and on Mr C. G. ROB (B.A. 1934), St Thomas's Hospital, on 13 December 1939.

Licences to practice were conferred by the Royal College of Physicians on 26 October 1939 upon Mr R. CRAWFORD (B.A. 1935) and Mr E. E. PHILIPP (B.A. 1936), both of Middlesex Hospital.

A Price University Entrance Scholarship at London Hospital Medical School has been awarded to Mr J. B. STANTON (B.A. 1939).

The following ecclesiastical appointments are announced:

The Rev. CHARLES HENRY RITCHIE (B.A. 1910), rector of St John the Evangelist, Edinburgh, to be Archdeacon of Northumberland and canon of Newcastle Cathedral.

The Rev. Canon F. P. CHEETHAM (B.A. 1912), who is leaving the diocese of Manchester, to be a canon emeritus of the Cathedral Church.

The Rev. HERBERT WHEWELL (B.A. 1909), rector of Ashton-under-Lyne, to be an honorary canon in the Cathedral Church of Manchester.

The Rev. R. D. COOKE (B.A. 1883), for forty-two years rector of Ipplepen, Devon, to a prebendal stall in Exeter Cathedral.

The Rev. P. N. F. YOUNG (B.A. 1906), chaplain at New Delhi, India, to be vicar of St Augustine, Bournemouth.

The Rev. R. S. CRIPPS (B.A. 1907), vicar of Holy Trinity, Anerley, S.E., to be vicar of Priors Marston with Priors Hardwick, Warwickshire.

The Rev. R. S. C. H. WOOD (B.A. 1900), vicar of Stoke Row, Henley-on-Thames, to be vicar of Thorpe Arnold, Leicestershire.

The Rev. R. S. MAXWELL (B.A. 1924), curate of St Cyprian, Marylebone, to be a Commissary of the Bishop of Antigua in England.

The Rev. H. W. TODD (B.A. 1911), chaplain to the forces, second class, serving at Singapore, to be chaplain to the forces, first class, and Assistant Chaplain-General in the Far East.

The following resignations are announced:

The Rev. R. F. PEARCE (B.A. 1897), vicar of Rodmersham, Kent.

The Rev. G. H. HARRIES (B.A. 1893), vicar of St Martin, Lincoln.

The Rev. Canon W. H. AINGER (B.A. 1888), vicar of Eglingham, Northumberland.

The Rev. A. E. BUCHANAN (B.A. 1893), rector of Pedmore, Stourbridge.

The Rev. J. H. MITCHELL (B.A. 1887), vicar of St Osyth, Essex.

On 24 September 1939, Mr P. D. MAY (B.A. 1934), Ripon Hall, Oxford, was ordained deacon by the Bishop of Birmingham in the chapel at Bishop's Croft, Harborne, and was licensed to All Saints, Gravelly Hill, Warwickshire.

The following were ordained deacon on 17 December 1939:

Mr T. C. LEDGARD (B.A. 1938), Westcott House, Cambridge, by the Bishop of Durham; licensed to Bishopwearmouth.

Mr J. R. G. RAGG (B.A. 1938), Westcott House, Cambridge, by the Bishop of St Albans; licensed to Bishop Hatfield.

The Rev. B. W. GREENUP (B.A. 1930) was ordained priest by the Bishop of Southwark on 17 December 1939.

Marriages

Lieutenant NORMAN BEWSEY BEALE, R.N.V.R. (B.A. 1936), son of Mr and Mrs H. H. Beale of Bournemouth, to INA ELAINE NELSON-RICHARDSON, only daughter of Mr and Mrs Nelson-Richardson of Eastbourne—on 30 September 1939, at Eastbourne.

OSCAR KEITH DE LA TOUR DE BERRY (B.A. 1929), vicar of Immanuel, Streatham, to SABINA ELIZABETH EDDISON, daughter of the Rev. F. W. Eddison, of Frimley—on 17 June 1939, at St Peter's, Frimley.

GEORGE COLIN LAWDER BERTRAM (B.A. 1932), younger son of the late Mr F. G. L. Bertram, of Berkhamsted, to CICELY KATE RICARDO, eldest daughter of Mr H. R. Ricardo, of Small Dole, Sussex—on 28 September 1939, in Sussex.

DAVID JAMES BLAIKLEY (B.A. 1935), second son of Mr A. J. Blaikley, of Woodside Park, to MARGARET NANCY BERGIUS, younger daughter of Walter Bergius, of Glasgow—on 20 October 1939, at St Barnabas Church, Finchley.

JOHN VERNON BRAITHWAITE (*Matric.* 1931), son of Dr J. Braithwaite, of Nutgrove, Scalby, Scarborough, to NANCY PHYLLIS SCATCHARD, elder daughter of Mr R. E. Scatchard, of Holly Croft, Scalby, Scarborough—on 21 September 1939, at St Luke's Church, Bromley Common.

JOHN I'ANSON BROMWICH (B.A. 1937), only son of the late Dr T. J. I'a. Bromwich (B.A. 1895), to RACHEL AMOS, daughter of Sir Maurice Sheldon Amos, of Cranmer Road, Cambridge—on 28 August 1939, at Cambridge.

ROY RAINBIRD CLARKE (B.A. 1936), son of the late W. G. Clarke of Norwich, to SIBYL HASTINGS PYE, only daughter of Mr C. H. Pye of Greenford, Hardenhuish, Wiltshire—on 28 September 1939, at Bridgwater, Somerset.

EDWARD HALL FOOTTIT (B.A. 1931), eldest son of the Rev. E. H. Foottit, rector of Westborough, Newark, to ZOË RUTH WELCH, youngest daughter of the late H. R. Welch, of Woodlawn, Leicester—on 8 September 1939, at St Nicholas Church, Leicester.

JOHN CHRISTOPHER GAMBLE (*Matric.* 1929), third son of Sir David Gamble, Bart., of White Lodge, Purton, Wiltshire, to PAMELA MARGARET GRACE HEWAT, only child of Mr A. Grayhurst Hewat, of Poplar Cottage, Woolhampton, Berkshire—on 21 October 1939, at St Peter's Church, Woolhampton.

RAYMOND ORMESHER GERRARD (B.A. 1938), son of Mr Clement Gerrard, of Four Stacks, Worsley, to JOAN LILIAN CHAMBERLAIN, daughter of Mr C. E. Chamberlain, of 246 Milton Road, Cambridge—on 12 September 1939, at St George's Church, Cambridge.

DENNIS NEVE GRICE (B.A. 1933), Flying Officer, R.A.F., to MARGARET ADLON PEAL—on 2 November 1939, at St Peter's Church, Ealing.

JAMES FOULIS HAY (B.A. 1932), son of Sir David Allan Hay, of Glasgow, to ANN WILDING, daughter of the late E. H. Wilding, of Wexham Place, Stoke Poges—on 13 December 1939, at Holy Trinity, Lower Beeding, Sussex.

FRANK HORTON (B.A. 1903), formerly Fellow, Professor of Physics at the Royal Holloway College, to ANN CATHERINE DAVIES, Vice-principal of Newnham College, Cambridge—on 16 August 1939, in London.

JOHN OTTO MAY (B.A. 1936), elder son of Dr Otto May (B.A. 1900), of Wellside, Well Walk, Hampstead, to MAUREEN MCNALLY, elder daughter of the late Joseph McNally, of Rusheen, Raheny, co. Dublin—on 7 October 1939, at the Church of the Assumption, Howth, co. Dublin.

RICHARD BRÈS MORLEY (B.A. 1939), Second Lieutenant, to IRÈNE FRANÇOISE META MARIA OPOLSKI—on 6 September 1939, at Colchester.

THOMAS LEONARD HALL SHORE (B.A. 1931), only son of Dr L. E. Shore (B.A. 1885), Fellow, to MADELEINE ELSIE PEARCE—on 26 August 1939, at Holy Trinity Church, Kingsway.

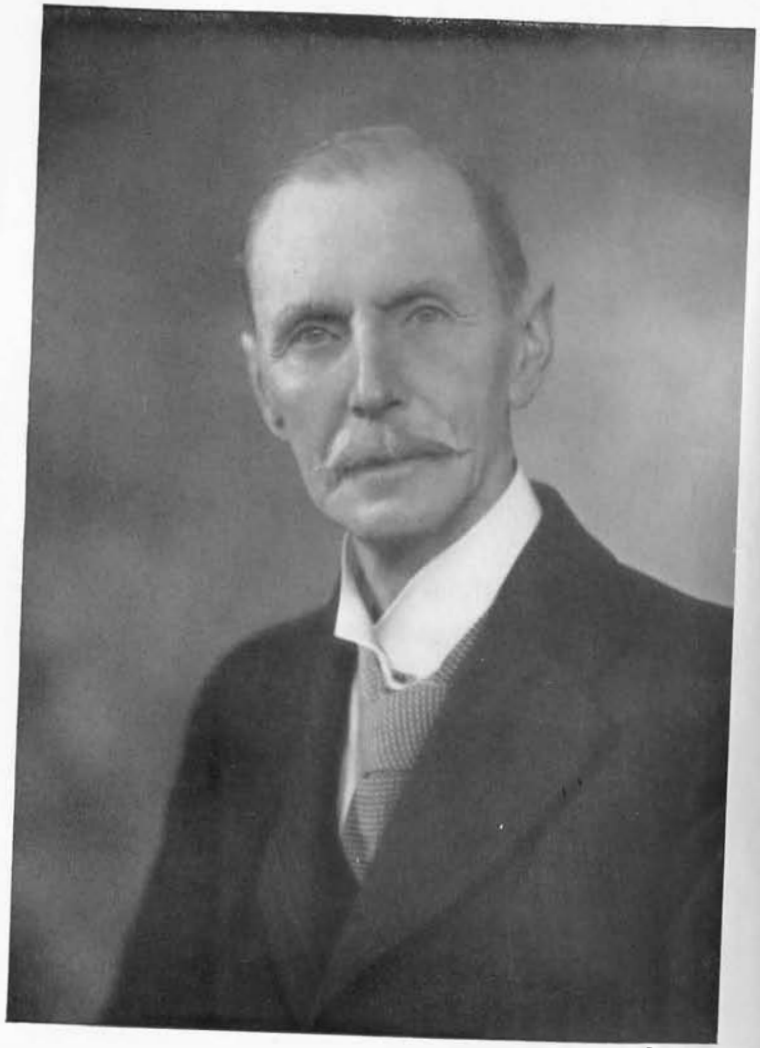
RONALD WILLIAM SILLARS (B.A. 1932), son of Mr Daniel Sillars, of Bidston, Saltburn, to JOAN MACKENZIE KEITH, elder daughter of Mr J. G. Keith, of Glasgow—on 6 September 1939, at Claremont Church, Glasgow.

JAMES ARTHUR WILSON SMITH (B.A. 1929), third son of Mr T. W. Smith, of Barcroft, Yeadon, to FRANCES ELIZABETH SMITH, elder daughter of Paymaster Captain R. E. Smith, R.N., of Edinburgh—on 13 September 1939, at St John's Church, Yeadon.

EDWARD ALAN STROUTS (B.A. 1922), to WINIFRED URSULA ELIZABETH GERCKE, on 18 November 1939, at the Parish Church, Benenden, Kent.

CHARLES RANDALL MALLET WARNER (B.A. 1939), son of Dr C. H. Warner, of Southwell, Nottinghamshire, to HELEN CHRISTINE CHURCH, daughter of Canon E. J. Church, of Limpsfield, Surrey—on 3 September 1939, at St Andrew's Church, Limpsfield Chart.

GLANVILLE LLEWELYN WILLIAMS (B.A. 1933), Fellow, only son of Mr B. E. Williams, of Bridgend, Glamorganshire, to LORNA MARGARET LAWFIELD, only daughter of Mr F. W. Lawfield, of Cambridge—on 19 October 1939.



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.

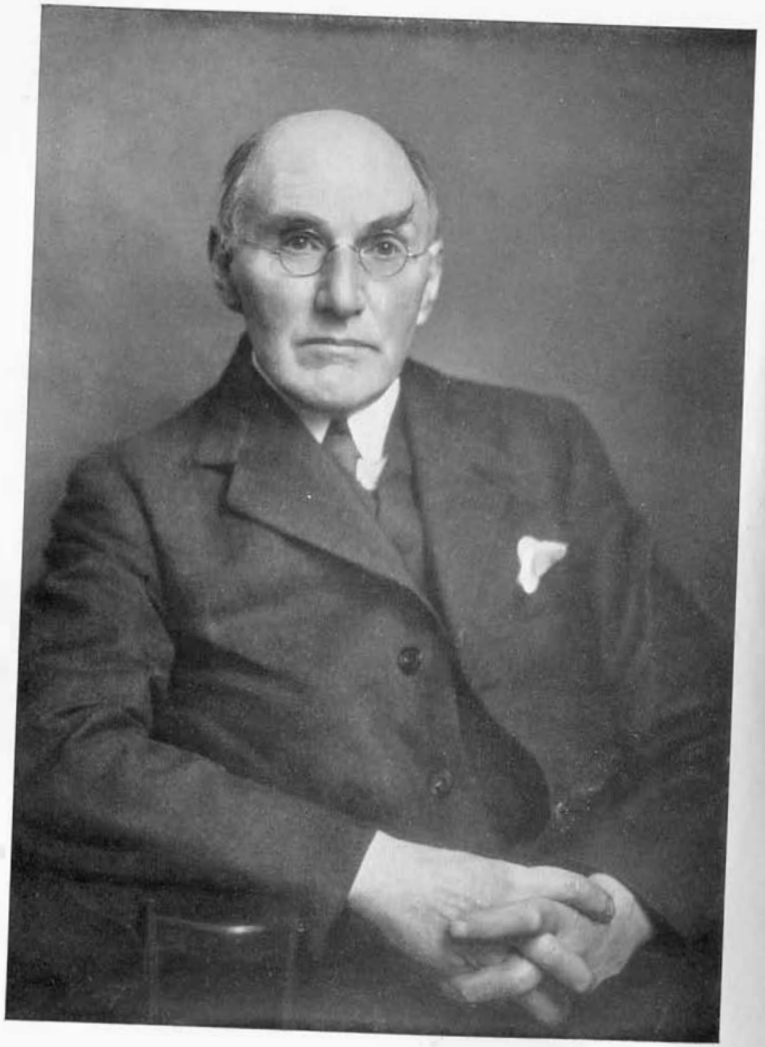
Let us now turn to the non-scientific and human side of Harker's life; and here a personal note is perhaps permissible. It was my good fortune to spend the first years of my residence in college on Harker's staircase (F, Third Court). Soon after coming up in 1883 I attended his elementary lectures on 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).

THE LIBRARY

Donations and other additions to the Library during the half-year ending Michaelmas 1939.

DONATIONS

(* The asterisk denotes a past or present Member of the College.)

From J. G. W. Allen, Esq.

*Brockhurst (C. S.). Autog. letter, signed, to G. Sykes, dated 17 Dec. 1824, relating to the College Examination of that month.

From B. K. Booty, B.A.

Aristotle. *Opera omnia.* Per D. Erasmum Roterodamum. [Ed. by S. Grynaeus.] Basileae, 1539.

From Mr Brindley.

Dickson (Capt. R. K.), R.N. *Greenwich Palace. A history of what is now the Royal Naval College and the National Maritime Museum . . . to* 1939. 1939.

Lubbock (S. G.) *A memoir of Montague Rhodes James.* 1939.

From Dr Coulton.

*Coulton (G. G.), Litt.D., F.B.A. *A premium upon falsehood (A postscript to the scandal of Cardinal Gasquet).* Taunton, 1939.

From the Misses E. A. and L. E. Cumming.

*Landscape illustrations of the Bible, from original sketches engraved by W. and E. Finden. With descriptions by the Rev. T. H. Horne.** 2 vols. 1836.

From Mr Gatty.

*Brockhurst (C. S.). Autog. letter, signed, to W. Metcalfe the printer, 1831.

*Fisher (John), Bp. *Psalmi seu precationes (+Petrarchae Psalmi penitentiales).* MS., on vellum, dated 1580.

Hobson (G. D.) *Thirty bindings. Selected from the First Edition Club's Seventh Exhibition.* 1926.

Malton (T.). *A compleat treatise on perspective in theory and practice on the true principles of Dr Brook Taylor.** 1776.

*Redman (John), D.D. *De justificatione opus. Huic accessit Hymnus eiusdem argumenti per eundem authorem.* [Ed. by C. Tunstall, Bp.] 1555.

Spenser (Edmund). *The Fairy Queen.* 2 vols. 1758.

[A College prize gained in 1776 by Thomas Jones of St John's College, later of Trinity College.]

Walpole (Horace), Fourth Earl of Orford. *Notes on the Exhibitions of the Society of Artists and the Free Society of Artists, 1760–91.* Transcribed and edited by Hugh Gatty.* Reprinted from the Walpole Society's Twenty-seventh Volume, 1938–9.

*Wentworth (Thomas), Earl of Strafford. *A description of the passage of Thomas, late Earle of Strafford, over the river of Styx, with the conference between him, Charon, and William Noy.* 1641.

*White (Henry Kirke). Holograph translation of a poem of Bion, with remarks, submitted to the editors of the Monthly Mirror, 25 April 1801. (Also engraved portrait of H. K. W.)

From the Rev. A. W. Greenup, M.A.

Judaism and Christianity. Essays presented to the Rev. P. P. Levertoff, D.D. [Essays by the Rev. A. W. Greenup* and others.] 1939.

From Ralph Griffin, Esq., F.S.A.

*Griffin (Ralph). *A brass once at Staplehurst in Kent.* (A reprint.) 1939.

Bequeathed by Mr Harker.

The Murchison (1907), Wollaston (1922), and Royal (1935) medals awarded to the late Mr Harker.

From Sir Percival Horton-Smith Hartley, C.V.O.

*Horton-Smith Hartley (Sir P.) and Llewellyn (G. F.). *The longevity of oarsmen. A study of those who rowed in the Oxford and Cambridge boat race from* 1829 *to* 1928. (A reprint.) 1939.

From Professor Jopson.

Boyanus (S. C.) and Jopson* (Professor N. B.). *Spoken Russian; a practical course.* 1939.

From Sir Joseph Larmor.

*Larmor (Sir Joseph), F.R.S. *Obituary notice: Lord Kelvin.* Repr. from *Proc. Roy. Soc.*, 1908, with additional note written 1939.

From Paul Mellon, Esq.

Jones (E. Alfred). *Catalogue of the plate of Clare College, Cambridge.* 1939.

From Mr Newman.

*Newman (M. H. A.), F.R.S. *Elements of the topology of plane sets of points.* 1939.

From J. J. Nicholls, Esq.

VERRALL (A. W.). Autog. letter, signed, to W. E. Heitland,* dated 20 June 1907.

From Professor Previté-Orton.

CROWFOOT (J. W.) and (G. M.). *Early ivories from Samaria.* (Palestine Exploration Fund publn.) 1938.

Medium Aevum. Vols. I–VII. 1932–8.

[The Library now subscribes to this journal.]

PASSERIN d'ENTRÈVES (A.). *The medieval contribution to political thought.* 1939.

PEET (T. E.). *A comparative study of the literatures of Egypt, Palestine, and Mesopotamia.* (Schweich lectures, British Academy, 1929.) 1931.

SCHAEFFER (C. F. A.). *The Cuneiform texts of Ras Shamra-Ugarit.* (*Idem* 1936.) 1939.

TURVILLE-PETRE (F.) and others. *Researches in prehistoric Galilee,* 1925–6. (Brit. School of Archaeol. in Jerusalem.) 1927.

[Also papers published by the British Academy.]

From Dr Sanders.

*SANDERS (H. G.), Ph.D. *An outline of British crop husbandry.* 1939.

From the Rev. Canon W. R. Shepherd.

*SHEPHERD (Rev. Canon W. R.). *The history of Kirby Underdale.* Second appendix. 1939.

From G. E. Walker, B.A.

*WALKER (G. E.). *Reproof in rhyme.* Madras [1938].

From Mr White.

[BURNET (GILBERT).] *A relation of a conference held about religion, at London, by Edward Stillingfleet,* D.D., with some gentlemen of the Church of Rome.* [2nd edn.] 1687.

FLETT (Sir J. S.). *The first hundred years of the Geological Survey of Great Britain.* 1937.

FOUCHÉ (L.) ed. *Mapungubwe. Ancient Bantu civilization on the Limpopo. Reports on excavations...* 1933–5. 1937.

HEURTLEY (W. A.). *Prehistoric Macedonia. An archaeological reconnaissance of Greek Macedonia (West of the Struma).* 1939.

KLEMPERER (O.). *Electron optics.* (Cambridge Physical Tracts.) 1939.

*MADDY (W.). *The elements of the theory of astronomy.* New edn. revised...by J. Hymers.* 1832.

MILTON (Viscount) and CHEADLE (W. B.). *The North-west passage by land.* 7th edn. 1867.

[Contains references to E. F. O'Beirne, a member of St John's, and later of Clare College.]

MILWARD (JOHN). *The diary of John Milward, M.P. for Derbyshire, September* 1666 *to May* 1668. Ed. by C. ROBBINS. 1938.

OTWAY-RUTHVEN (Miss J.) *The King's Secretary and the Signet Office in the XV century.* (Thirlwall Prize essay, 1937.) 1939.

WILSON (A. H.). *Semi-conductors and metals.* (Cambridge Physical Tracts.) 1939.

From Dr Williams.

*WILLIAMS (GLANVILLE L.), Ph.D. *Liability for animals. An account of the development and present law of tortious liability for animals, etc.* 1939.

From Mr Yule.

*WILBERFORCE (WILLIAM). Autog. letter, signed, to Sir Samuel Romilly. [post 1814.]

Mr Yule has also presented a collection of about fifty MSS. and early printed books by and about Thomas à Kempis. It is hoped to publish a detailed list later.

Periodicals were received from the following: *The President, Mr Bailey, Mr Boys Smith, Professor Cockcroft, Mr Gatty, Professor Jopson, Sir Joseph Larmor, Dr Palmer, Professor Previté-Orton, Mr White, Mr Yule, Royal Astronomical Society, etc.*

ADDITIONS

GENERAL

Annual Register...for the year 1938.

Student's Handbook to the University and Colleges of Cambridge. 38th edn., revised to 30 June 1939.

ANTHROPOLOGY

EVANS-PRITCHARD (E. E.). *Witchcraft, oracles, and magic among the Azande.* 1937.

ARCHAEOLOGY AND ART

Catalogue of engraved British portraits in...the British Museum. By F. O'DONOGHUE. Vols. I–V. 1908–22.

SCHLESINGER (K.). *The Greek aulos. A study of its mechanism and of its relation to the modal system of ancient Greek music.* 1939.

CLASSICS, ANCIENT HISTORY AND BIOGRAPHY

Cambridge Ancient History. Vol. XII. *The Imperial crisis and recovery*, A.D. 193–324. Ed. by S. A. COOK, F. E. ADCOCK, M. P. CHARLESWORTH,* N. H. BAYNES. 1939.

—— Plates, Vol. IV. 1939.

Loeb Classical Library:

AMMIANUS MARCELLINUS, vol. III. *Greek mathematical works*, vol. I. PHILO, vol. III (transl. by F. H. COLSON.*) 3 vols. 1939.

PLUTARCH. *Vitae parallelae*. Recog. C. LINDSKOG et K. ZIEGLER. Vol. IV, 1 and 2. (Teubner.) 1935–9.

Roma, Storia di. Vol. XVIII. *La religione di Roma antica*. Vol. XXIV. *La letteratura di Roma repubblicana ed augustea*. (Istituto di studi Romani.) 1939.

Roman Empire, International map of the. Sheet NL. 31 (Lugdunum).

Thesaurus linguae Latinae. Vol. V, 2, IX (excoquo–exhorresco). Vol. VII, 1, VI (in—inclutus). 1939.

ECONOMICS AND ECONOMIC HISTORY

BEVERIDGE (Sir WILLIAM) and others. *Prices and wages in England from the twelfth to the nineteenth century*. Vol. I. 1939.

HISTORY AND BIOGRAPHY

Anglo-Saxon charters. Ed. with transl. by A. J. ROBERTSON. 1939.

Biographie française, Dictionnaire de. Fasc. XVIII (Asse–Aubermesnil). 1939.

GIERKE (O. von). *The development of political theory*. Transl. by B. FREYD. 1939.

GLOTZ (G.). ed. *Histoire générale*. Sect. II. *Histoire du moyen âge*. Tomes IV, pt. 1 and VII, pt. 2. 1939.

Historical Society (Royal). Camden 3rd series. Vol. LXI. *The letters of Arnulf of Lisieux*. Ed. by F. BARLOW. 1939.

HUIZINGA (J.). *The waning of the Middle Ages*. 1924: repr. 1937.

KIRKPATRICK (F. A.). *Latin America; a brief history*. (Camb. Historical Series.) 1939.

PARES (Sir BERNARD). *The fall of the Russian monarchy*. 1939.

Public Record Office publns: 6 vols. 1938–9.

Calendar of the Fine Rolls. Henry VI. A.D. 1445–52.

Calendar of the Patent Rolls, A.D. 1557–60.

Calendar of State Papers, Colonial series, America and West Indies, 1732.

Calendar of State Papers, Venetian, 1671–2.

Calendar of Treasury Books, Jan. 1704–March 1705.

VILLIERS (G.). *A vanished Victorian, being the life of George Villiers,* Fourth Earl of Clarendon*, 1800–70. 1938.

WAGNER (A. R.). *Historic heraldry of Britain*. 1939.

WILLIAMS (BASIL). *The Whig supremacy*, 1714–60. (Oxford Hist. of England, XI.) 1939.

Wynn (of Gwydir) papers, 1515–1690, *in the National Library of Wales and elsewhere, Calendar of*. 1926.

LAW

British Year Book of International Law, 1939.

BUCKLAND (W. W.). *A text-book of Roman Law from Augustus to Justinian*. 2nd edn. 1932.

Halsbury's Laws of England. 2nd edn., ed. by Viscount HAILSHAM. Vols. XXXII and XXXIII. 1939.

Selden Society. Vol. LVIII. *Select cases in the Court of King's Bench under Edward I*. Vol. III. Ed. by G. O. SAYLES. 1939.

MATHEMATICS AND NATURAL SCIENCES

Chemistry, Annual reports on the progress of, 1938.

Enzyklopädie der mathematischen Wissenschaften. Bd. I (*Algebra und Zahlentheorie*). 2te Auflage. Heft 2. 1939.

HILBERT (D.) und ACKERMANN (W.). *Grundzüge der theoretischen Logik*. 2te Auflage. (Die Grundlehren der math. Wissensch., XXVII.) 1938.

HILBERT (D.) und BERNAYS (P.). *Grundlagen der Mathematik*. Bd. II. (*Idem*, L.) 1939.

WAERDEN (B. L. van der). *Einführung in die algebräische Geometrie*. (*Idem*, LI.) 1939.

Nautical almanac and astronomical ephemeris for 1940.

MODERN LANGUAGES AND ENGLISH LITERATURE

BEATTY (FREDERIKA). *William Wordsworth* of Rydal Mount.* 1939.

English language and literature, Annual bibliography of, 1937.

English Place-Name Society. Vol. XVI. *The place-names of Wiltshire.* 1939.

English studies, The year's work in, 1937.

GRIMM. *Deutsches Wörterbuch.* [Three parts of various vols.] 1939.

LUICK (K.). *Historische Grammatik der Englischen Sprache.* Bd. 1, 2. Lief. 10, 11. 1939.

La Petite Philosophie. An Anglo-Norman poem of the 13th century. Ed. by W. H. TRETHEWEY. (Anglo-Norman Text Society, 1.) 1939.

THEOLOGY AND CHURCH HISTORY

ATTWATER (D.). *A dictionary of Saints.* 1938.

Bradshaw Society. Vol. LXXVII. *English Benedictine Kalendars after* A.D. 1100. Ed. by F. WORMALD. Vol. 1. 1939.

CABROL (F.) and others. *Dictionnaire d'archéologie chrétienne et de liturgie.* Fasc. 156–7 (Pie Zeses-Porter). 1939.

Canterbury and York Society. *Diocesis Cantuariensis. Registrum Roberti Winchelsey.* Pt. VIII. *Diocesis Roffensis. Registrum Hamonis Hethe.* Pt. VIII. *Diocesis Wintoniensis. Registrum Henrici Woodlock.* Pt. IV. 1938–9.

HOLTZMANN (W.). *Papsturkunden in England.* Bde I, II. 1930–36.

Tertullian. *Apologeticum.* Edidit H. HOPPE. (Corpus script. eccles. Latinorum, LXIX.) 1939.

Theologisches Wörterbuch zum Neuen Testament. Herausg. von G. KITTEL. Bd. IV, 7–9. 1939.

The following books have been bought for the Reading Room

BAKER (J. N. L.). *A history of geographical discovery and exploration.* New edn. 1937.

BRITTON (H. T. S.). *Hydrogen ions, their determination and importance in pure and industrial chemistry.* 2nd edn. 1932.

BRUNHES (J.). *Human geography.* 1920.

ERLANGER (J.) and GASSER (H. S.). *Electrical signs of nervous activity.* 1937.

EVANS (R. C.). *An introduction to crystal chemistry.* 1939.

FINDLAY (A.) and CAMPBELL (A. N.). *The phase rule and its applications.* 8th edn. 1938.

FULTON (J. F.). *Physiology of the nervous system.* 1938.

GRANT (J. C. B.). *A method of anatomy, descriptive and deductive.* 1938.

GURNEY (R. W.). *Elementary quantum mechanics.* 1934.

JUDGE (A. W.). *Automobile and aircraft engines.* 3rd edn. repr. 1938.

MARTONNE (E. de). *A shorter physical geography.* 1927: repr. 1937.

MILLER (A. A.). *Climatology.* 1931: repr. 1938.

MILLER (G. J.) and PARKINS (A. E.). *Geography of North America.* 2nd edn. 1934.

OGILVIE (A. G.) *ed. Great Britain: essays in regional geography.* 2nd edn. 1930: repr. 1937.

ROSENHAIN (W.) and HAUGHTON (J. L.). *An introduction to the study of physical metallurgy.* 3rd edn. 1935.

SHANAHAN (E. W.). *South America.* 3rd edn. 1934.

SIMPSON (C. A.). *Rediscovering England.* 1930.

SVEDBERG (T.) and TISELIUS (A.). *Colloid chemistry.* 2nd edn. 1928.

THOMPSON (H. W.). *A course in chemical spectroscopy.* 1938.

*TOPLEY (W. W. C.). *An outline of immunity.* 1933: repr. 1935.

COLLEGE AWARDS

The following awards were made on the results of the Annual Entrance Scholarships Examination, December 1939:

Major Scholarships:

DAIN, J., Merchant Taylors' School, for Mathematics (Baylis Scholarship).
HARRISON, E., Doncaster Grammar School, for Mathematics.
TURNBULL, D. G., Rugby School, for Mathematics.
SMITH, N. J., King's School, Macclesfield, for Mathematics.
GARNER, H. C., Westminster School, for Mathematics.
PLATT, F. K., Denstone College, for Classics.
NICHOLLS, C. G. W., Whitgift School, Croydon, for Classics.
PITT, G. J., Cotham Secondary School, Bristol, for Natural Sciences.
LITTLEWOOD, J., Manchester Grammar School, for Modern Languages.

Minor Scholarships:

REDFERN, P., Bemrose School, Derby, for Mathematics.
HANSFORD, J. T., Christ's Hospital, for Mathematics.
MORGAN, J. C., King Edward VI School, Stourbridge, for Classics.
WILLAN, R. L., Cheltenham College, for Classics.
SADLER, J. J. G., King Edward VI School, Birmingham, for Classics.
TURNER, R., Sir Joseph Williamson's School, Rochester, for Natural Sciences.
PARLOW, J. T. M., West Hartlepool Secondary School, for English.
KERROD, N., King James's Grammar School, Almondbury, for Modern Languages.

Exhibitions:

VAUGHAN, J. R. M., Aldenham School, for Mathematics.
JACKSON, R., Pocklington School, for Classics.
WHITTINGHAM, C. P., Owen's School, Islington, for Natural Sciences.
RICHARDSON, J. B., Bury Grammar School, for History.
ROYDS, G. H. A., Haileybury College, for History.
SHARMAN, J. C., King Edward VI School, Birmingham, for Modern Languages.
BRUCE LOCKHART, L., Sedbergh School, for Modern Languages.
RATTENBURY, A. F., Kingswood School, for English.

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