

St. Joh
Coll. Lib.
Camb.

COLL. DIV. JOH.



MDXI—MCMLXI

April 1961 No. 257

The Eagle

A MAGAZINE SUPPORTED BY MEMBERS OF
ST JOHN'S COLLEGE, CAMBRIDGE
FOR SUBSCRIBERS ONLY

Editorial	page 145
The College and Its Future	147
The College in 1911	155
Poems	166
Undergraduate Life at St John's in the Early Thirties	168
The Humber Creation	172
On the Threshold of the Sixties	175
A Visitor's Guide to Prouge-super-Boghs	181
College Recruitment	187
College Notes	198
Obituary	205
Book Reviews	207

Editorial Committee

Mr LEE (*Senior Editor*), Mr HINSLEY (*Treasurer*), W. M. NEWMAN
(*Junior Editor*), Dr STERN, N. WOOD, C. ADAM, D. N. L. RALPHS,
D. I. MORPHET, R. L. NOBBS.

All contributions for the next issue of the Magazine should be sent to The Editors, *The Eagle*, St. John's College. The Editors will welcome assistance in making the College Notes, and the Magazine generally, as complete a record as possible of the careers of members of the College. They will welcome books or articles dealing with the College and its members for review; and books published by members of the College for shorter notice.



MARY, COUNTESS OF SHREWSBURY

VOL. LIX

APRIL 1961

NO. 257

Editorial

JOHN Fisher laid more durable foundations than Caesar Augustus. The College has lasted longer than the Roman Empire from the Principate to the withdrawal of the Legions from Britain. It can congratulate itself on its power of survival and on the intelligence of the human animals who since its foundation have adapted it to a changing world—or should we say on their ‘quiet unassuming competence’?*

The conversation of Fellows and Scholars is no longer carried on exclusively in Latin, Hebrew, Chaldee, Arabic or Greek. Nor is the tonsure obligatory. There are two beds in many sets of rooms, but they are not a high bed and a low bed, occupied respectively by a Fellow and by two Scholars. The Master’s salary is larger than £6 3s. 4d.

But the College remains a charitable institution—active and passive. The Poor’s Soup is ritually distributed on the customary Thursdays. And paradoxically the College has more private benefactors in our State-aided times than ever before.

No one could have foretold that time would metamorphose *Subinde mihi subvenit* ‘it often occurs to me’ into *Souvent me souvient* ‘I often remember’—the Beaufort motto. And the change was not the work of a single individual or even of a number of known individuals. But looking back we can see roughly how it happened—the sameness in the difference.

* *The Eagle*, LVIII, p. 1.

Edward Miller's forthcoming history will record the process of the College's transformation. This number of the *Eagle* is a souvenir. We have lit another fifty candles in honour of the Lady Margaret. But we also look forward—with quiet unassuming confidence.

The College and Its Future

To look back over a past of four centuries and a half is to be reminded that, in human affairs, no man can foresee the future. Yet it may also be to find justification for confidence that what, as time unfolds, the future will bring forth will not show less achievement than what has gone before.

Such will be the reflections aroused by the four hundred and fiftieth anniversary of the foundation of the College. The changes have been great, always more or less unforeseen, and sometimes not altogether in accord with the trend of the times. Personal influence has always powerfully affected College history. After the difficulties and setbacks of the beginning, overcome only by the resource and the resolve of John Fisher, came the rapid rise of the Renaissance College. Admissions, only half a century after the completion of the first buildings, were already larger than at any other College, and larger than they were to be again, in spite of the building of the Second Court and later of the Third Court, until the sudden growth that followed the wars of Napoleon and led directly to the building of the New Court. The long period of religious conflict, with its theological controversies, its problems of loyalty to Church and King, which the Restoration did not end, was followed by the ease of the eighteenth century; an ease, however, not unrelieved by great figures, or even by financial and educational reform, in which St John's set a standard greatly needed by the University. In the nineteenth century the stream of knowledge broadened and the pace of social change quickened; there were the movements for reform, the Royal Commissions, the abolition of religious tests, new subjects of examination, the end of the College as a celibate society. Having by the middle of the sixteenth century become the largest College, St John's so remained until, at the end of the eighteenth century, Trinity, its only rival, finally surpassed it. But, as the last quarter of the nineteenth century arrived, whilst Trinity continued to grow rapidly, St John's steadily declined, and was overtaken by several other Colleges shortly before the first World War. With the return of peace it expanded rapidly again and once more became, as it has since remained, the second College in size. With the ending of the first World War came too the modern University: a further variety of studies, the growth of scientific laboratories, the passing of formal lecturing from the Colleges to the University, the organization of the Faculties, and, behind all these changes, the Treasury Grant to Universities.

The Colleges have remained dependent upon their own endowments and the fees they charge, and indeed have clung to their financial independence. But they too have been assisted indirectly by the public funds now available to all who can profit by a University education. Yet, in the case of St John's, there is an important respect in which this last change—one of the major changes since the second World War—has made possible the perpetuation of a long tradition. St John's, though, until displaced by Trinity in this respect, it received the sons of the aristocracy of the land, had always been, more perhaps than any other College in either University, the College of the poor scholar. Able boys like Richard Bentley, William Wordsworth, and John Couch Adams, assisted often by Sizarships, found their way here, especially from the northern counties, and afterwards made their mark in Church or State, in learning or literature. The present College, open to all the talents, preserves in a changed and changing society this ancient and proud tradition.

To recall the course of College history over these four centuries and a half is to be impressed by the survival of these corporate societies, by the tenacity with which they have preserved their system of life and education, and by the success with which they have adapted it, even if sometimes only under pressure of necessity, to changing needs and conditions. No doubt they owe their independence, and in a measure their power, partly to their possessions. No College has failed financially. Financial stability has been one of the causes of their success. Possessions are no longer the safeguard that once they were: society has found means to take what it regards as its own. Yet the possessions of the Colleges, if often increased by social and economic change, and in a fortunate College by good management, have their origin wholly in benefactions. 'It is the greatest tribute to the Collegiate life that those who lived it believed in it and sought to ensure its perpetuity.* Never perhaps in the history of the College have benefactions been more numerous than during the past half-century; and at the present time many hundreds of its members, a larger body of benefactors than any previous age has seen, are contributing to preserve the fabric of its ancient buildings and to provide the further buildings that the modern age and enlarged numbers pressingly demand. The ultimate cause of the survival of the Colleges, as of their foundation, has been belief in their purpose as homes of learning and of education. By the combination of these two functions, the success of each has been made possible; and because their conscious purpose has been to educate men, not only for learning, but for all the walks

* *The Eagle*, LIII, p. 2.

of life, they have retained their contact with the changing needs of each succeeding age.

Indeed the modern age has given new significance to the ancient Colleges. The widening extent, yet increasing specialization, of knowledge enhance the value of a system whereby both teachers and students of all the faculties live together as a corporate society; and the combination in one society of social and athletic activity with academic interest achieves already in a limited sphere the advantages of a training intended to equip for all the walks of life. Moreover, a modern College, drawing its undergraduates and its Fellows from the length and breadth of the country, from overseas, and from every type of home and school, is a grouping of society more representative than is to be met with elsewhere; and this too has its educational effect.

The Hall of Residence in the modern University is not the equivalent of a College. Yet, within its context of the newer and more centralized University, it is designed to meet a comparable need. The increasing emphasis upon the residential University, with its Halls of Residence, is further evidence of the value in the modern academic world of the collegiate idea.

Moreover, the value to a University of fine surroundings is increasingly felt. The ancient buildings of the Colleges and their grounds, which give to Cambridge most of its beauty, are costly to maintain and may even become a principal charge upon College revenues. But, as ancient buildings, they have a value more than architectural. They afford a time-perspective. And this may promote the forward look no less than the backward. It may be doubted how far, without consciousness of the past, there is recognition of the future and of the obligations it imposes. Who, in Edwardian days, could foresee the half-century from 1911 to 1961, and who can suppose that in 1961 change has lost its momentum? But to be conscious of a more distant past, though it leaves the future still inscrutable, affords a longer, and perhaps a steadier, sight with which to view the unforeseen when it arrives. 'An object or mark', wrote Thomas Hardy*, 'raised or made by man on a scene is worth ten times any such formed by unconscious Nature. Hence clouds, mists, and mountains are unimportant beside the wear on a threshold, or the print of a hand.' Wordsworth would not have formulated the comparison thus; but he too was not unmoved by the presences of 'generations of illustrious men' as he passed through the courts, the gateways, and the grounds of St John's.

The Colleges have never been more active or more alive to the needs of the time than they are today. Contacts with other

* *Early Life*, I, p. 153.

Universities, at home and throughout the English-speaking world, become more frequent and closer as travel increases. Connexions with the outside world, with industry, with public administration, with broadcasting, were promoted by the national use of the Universities in war-time, and have since continued to be close. They are often increased by technical developments.

But new circumstances bring new problems. Today, in academic Cambridge, the chief is that of the relation between the Colleges and the University. When the last Royal Commission on the University issued its report in 1922 the resources, both in money and in men, were with the Colleges, not with the University. The University was in need of funds, especially for its scientific developments, and of more lecturers for its teaching. Today, though College incomes have increased in a degree which has gone far towards maintaining their real value through an inflationary period, the Treasury Grant to the University, which had its origin in the recommendations of the Royal Commission and now supplies by far the greater part of the income of the University, far exceeds the total of the incomes of all the Colleges. Over the same period, though Colleges have increased the numbers of their Fellows, and though a higher proportion of Fellows now hold office in the University, the proportion of University teaching officers who hold Fellowships has steadily declined and is now not much more than one-half. Thus the University tends to outgrow the Colleges, and amongst teachers of the University there is distinction, inevitable yet hard to justify, between those who are Fellows and those who are not. This is harmful to the Colleges and dangerous to the character of Cambridge as a collegiate University. To find a solution of this problem is one of the pressing needs of the day and demands a reconsideration of the relations between the Colleges and the University.

Another problem, which affects all the Universities of the country, but raises special questions for the Colleges of Cambridge and of Oxford, is that of the selection of students for admission. The great expansion of University education in the country, the foundation of new Universities, and the intense competition for admission to the two ancient Universities of Cambridge and Oxford has created great difficulties for the Universities and Colleges themselves, for the candidates, and for the schools, and some further organization and simplification has become essential. Admissions to Cambridge and to Oxford are in the control of the several Colleges. The conditions imposed by these two Universities form in practice a minimum standard, far exceeded in the actual entry in consequence of the intensity of the competition. There is no fully comparable problem in other Universities, though there too, in varying degrees,

entry is becoming competitive. The problem for the Colleges is so to adapt their procedure that it remains workable, is fair to the candidates, to other Universities, and to the schools, yet preserves to the Colleges the right of selection and the opportunity of individual consideration.

The present is an age of academic building, in the country as a whole as Universities increase in number and rapidly expand in size, but also in the two ancient Universities, where the expansion is less. In Cambridge there is more building in progress, both for the University and for the Colleges, than any previous age has witnessed. It raises problems both of finance and of style. Financial efficiency can be assessed. The judgment of style lies with the future. But responsibility for design rests upon the present, and when the building is for a Cambridge College the responsibility is great. Most of the Colleges have undertaken some extension of their buildings in the post-war years or have plans in preparation.

St John's, like most other Cambridge Colleges, has increased its numbers since the second World War. In the years before that war the number of junior members of the College in residence, including undergraduates reading for a first degree, Bachelors of Arts, Research Students from other Universities, and others taking Diplomas or advanced courses, was about four hundred and fifty. In 1944 the College decided that during the period of exceptional pressure which was expected in the years immediately after the war they would be willing to increase their number to six hundred or a little more, provided lodgings were available. The number rose to that level, and even somewhat above it, over the period from 1948 to 1953. This was possible only because the College had built North and Chapel Courts (to the designs of Edward Maufe) just before the outbreak of war in 1939 and because, when the post-war rise in numbers began, a large number of College rooms were occupied by two or even three, men—an arrangement that has continued since. In 1955 it was decided to maintain the number of junior members in residence at about six hundred permanently. Since the end of the war a large part of those accepted for admission had undertaken their compulsory national service before coming into residence. In consequence, when in the spring of 1957 compulsory national service was virtually abolished, almost two generations of undergraduates, who had been accepted but had been expected to come into residence in later years, were available for immediate admission. The College decided not substantially to reduce the intake from the immediately succeeding age-groups, which would have been a hardship to them, but to allow the size of the College to rise temporarily until those who, in consequence of the abolition

tion of national service, wished to come into residence earlier than had been expected had passed through. The effect of this decision, as was foreseen, has been that the total number of junior members has been allowed to rise to seven hundred or slightly more, of whom about six hundred have been undergraduates reading for a first degree and rather more than one hundred Bachelors of Arts, Research Students from other Universities, or other more senior men. A College of about five hundred undergraduates and about one hundred Bachelors and Research Students, making a total of about six hundred junior members, continues to be the long-term policy; and the number in residence will fall back to about that figure in the near future.

The large proportion of Bachelors of Arts and Research Students, about one in six in the College, emphasizes a further problem with which the College has to deal. They form an increasingly important element in Cambridge, and the College system must adapt itself to afford them a place in it corresponding to their importance.

The College has not grown only in the number of its junior members. The number of its Fellows has also increased and by a very similar proportion and now approaches eighty.

In an Appeal issued to all members of the College in January, 1958, it was made known that the College urgently desired additional buildings. The provision of more accommodation, principally undergraduates' rooms, has been part of the policy for the increase in the size of the College which the national need and the traditional place of St John's as one of the two largest Colleges had led the College deliberately to accept. The purpose of the further buildings now in view is not to enable a further increase in size, but to make proper provision for a College of about six hundred junior members. Lodgings in the town are less easily available than they once were, and they are more distant. Pressure on accommodation has remained severe in Cambridge, in spite of much building by the City Corporation; the rising level of prosperity has reduced the incentive to let rooms; and many houses in the central areas of Cambridge have been converted to other uses. Moreover a large proportion of the sets of rooms in the College are now shared by two, or even three, occupants, and they are not all well suited to such use. A freshman, if he has rooms in College, has a set of his own; but in a second year he has ordinarily the choice of moving out into lodgings or sharing a set in College with a companion of his own choice. The great majority elect to share and to remain in College. But the College, in the interest of the undergraduates, would like to see the amount of this sharing reduced. The purpose of the new buildings proposed is to make possible the accommoda-

tion of a larger proportion of the College within its walls and at the same time to reduce the number of sets of rooms that are shared by two men and to confine it to those sets which are suited to it.

In a second Appeal document, issued in the spring of this year and sent to all members of the College whose addresses are known to us, I have been able to announce the promise of a great benefaction, a large part of which has already been received, which will make possible the new buildings the College needs. This benefaction is a direct response to the appeal the College felt justified in making to the generosity and affection of its members. I have there compared it, in its scale and in the benefit it will confer upon the College, to the earlier benefaction of Mary, Countess of Shrewsbury, which enabled the College to build the Second Court more than three centuries and a half ago. This great gift, which should make possible the fulfilment of our plans, has already made memorable the four hundred and fiftieth anniversary, in 1961, of the founding of the College in 1511. The donors have asked that, for the time being, anonymity should be preserved; but they allow it to be made known that they are the Trustees of a Family Charitable Trust, and that one of the Trustees is a member of the College.

The moment has not yet arrived to appoint the architect for the new buildings, but the area within which they will be built has been chosen. It comprises land to the north of the New Court and part of the land further west recently purchased from Merton College, Oxford*. This site has great potentialities and is perhaps the only site, short of encroachment upon the Backs, fully adequate to the needs the College has in view.

The benefaction referred to has made it possible for the College to proceed with plans for new buildings whilst still engaged upon the work of restoring the Second and Third Courts. This is the other great task the College has undertaken in relation to its buildings, and it too was an object of the Appeal the College has made to its members. The response is providing a large part of the funds required for this task also. In the years preceding the second World War an important restoration of the First Court was completed. In 1957 it became possible to take up the still more extensive work required in the Second and Third Courts. The work is being carried out under the direction of the Department of Estate Management in the University, Mr A. C. Crook being the architect immediately in charge, and in consultation with the Ancient Monuments Branch of the Ministry of Works.† This

* *The Eagle*, LIX, pp. 3f.

† The work is being described in detail in *The Eagle* by Dr G. C. Evans, Bursar in charge of the College Buildings, as it proceeds. See LIX, pp. 35ff., 91ff.

extensive and important restoration must inevitably proceed step by step; but, when completed, the whole of the ancient buildings of the College will be in sound structural condition.

J. S. B. S.

The College in 1911

I HAVE been asked to write some reminiscences of College personalities at the time of the four-hundredth anniversary in 1911. Naturally I turned to the volume which was presented to graduate members of the College in commemoration of that event. Tucked away in the volume was the invitation card to the dinner of celebration and the list of those present. Of the 178 who dined that night about forty were at some time resident fellows, a few were honorary fellows, some were ex-fellows non-resident. Of fellows resident then or now I alone remain. To scan the list of those departed calls up a multitude of memories.

Of the honorary fellows I recall Sir Ambrose Fleming. He was stone deaf as I remember him. He was an electrical pioneer. He supervised the introduction of electricity into the college to light the chapel, hall and kitchen. By 1911 this had been extended throughout the college. As an undergraduate I had lived and worked by candle and lamp-light. Another ex-fellow, still living and since elected Honorary Fellow, is Sir Thomas Havelock. Of him it is recorded that on the occasion of the conferring of an Honorary Degree on Lord Kitchener he, with others, was clinging to the railings of the Senate House when they collapsed and fell upon him. His injuries meant a spell of absence from Cambridge and a deferred Tripos. But he came out 10th Wrangler.

In the opening note to the memorial volume we find the names of those who took part in its production: a remarkable group of the fellows. The text was edited by A. C. Steward, who migrated to Emmanuel and back to St John's, was Professor of Botany and later Master of Downing. He and his wife were patrons of the Cambridge Drawing Society. The plates were prepared under the direction of F. F. Blackman, a distinguished plant physiologist, a man of great and delicate taste. The mazer in the Combination Room was made to his request and presented to the college. His widow is still with us.

Naturally the Master, Robert Forsyth Scott (1908—1933) had a part in producing the book. His series of notes on the history of the college were published over a number of years in *The Eagle*. He had been Senior Bursar and had seen the college through difficult times following the agricultural depression of the 1880's, leaving its finances in much better form. He was a great supporter of the L.M.B.C. I well remember a breakfast he gave to the Second Lent Boat in which I was rowing in 1902. It began with cod-steak. This was followed by a mutton chop and a beef-steak,

toast, marmalade and tea. We all went *down* in weight next day. Until his last years the Master was always down on the towpath at the races to fire the starting gun for the club. In his study he was rarely seen without a cigar.

Joseph Larmor, Lucasian Professor of Applied Mathematics, was knighted in the year of the quatercentenary. He contributed to the memorial volume a note on Gilbert, Fellow, who published a treatise on magnetism, in the year 1600 (see the plate in the Chapel). Sir Joseph was Secretary of the Royal Society for ten years, and was Member of Parliament for the University from 1911 to 1922. In 1900 his Essay which won the Adams Prize was published under the title "Aether and Matter". As it was really a presentation of an electromagnetic theory of matter it was humorously described by Horace Lamb at a meeting of the British Association as properly deserving the title "Aether and NO matter". Larmor was a reserved man with wide literary interest. He was not a conversationalist and his handwriting had been said to need the skill of the dispenser of prescriptions to decipher. About the year 1912 the Fellows' Meeting was discussing a project for introducing a bath-house into the college. Up to that time we had only a tin bath under the bed for which your gyp would fetch hot water from the kitchen. Larmor's comment was; "We have done without baths for four hundred years. Why should we begin them now?" But when, after the first war, the baths replaced the Chemical Laboratory behind the New Court, he became one of the most regular visitors to them. Clad in mackintosh and a cap which he never wore at other times he made his way from his rooms in K, Second Court over the Bridge of Sighs. I had the privilege of attending his lectures in 1901—1903. Nobody would have said that he was a good lecturer. He seemed to be going very slowly. I used to try to keep my attention by writing a whole lecture on half a sheet of paper in minute handwriting. But later I discovered what good stuff it was and I treasured my notes. I see him now, sitting back to his class on the edge of the table, looking at the black-board, leaning back even to the point of resting nearly horizontal on his elbow. His work, with that of Lorentz in Holland, was in fact the prelude to Einstein's theory of Relativity.

The initials J.R.T. and T.R.G. attached to notes in the volume remind us of two of our most lively fellows. Dr J. R. Tanner was an eminent historian, particularly learned in Naval History. He was a popular Tutor. His rotund figure and his never-failing fund of stories, which he enjoyed himself as much as those who heard them, are still fresh in memory. Still I see him at the table of the College Council, lighting his pipe, starting an anecdote, finding his pipe out, lighting another match, resuming the story,

and re-lighting again and again before the end. Once the Council had to deal with a complaint from bedmakers that the practice of frying sausages over gas-rings was a cause of much grease in gyprooms. But Tanner commented "I consider that this private house-keeping is one of the more valuable elements in university education". At a bump-supper in 1902 he was present with E. E. Sikes who was my tutor. It was the occasion for celebrating twelve bumps among three boats. Called upon for a speech, Sikes apologized for not wearing a blazer. "I have grown out of mine" he said, which was true as to girth. Tanner followed and with one of his merry twinkles began "I too must apologize for not wearing a blazer. *Mine has shrunk.*"

Tanner was responsible for a revolution in college administration. Up to the year 1910, each tutor had kept the accounts for his own pupils and kept a separate banking account for his own side. Caution Money was required as an insurance to each tutor against bad debts. Tanner was the first to employ a clerk to do his accounts. This developed into a College Office with Mr E. W. Lockhart as chief clerk. Only one Tutor held out against this bureaucratic development. This was Dr Donald MacAlister, a cheerful-looking but somewhat dominating personality. He had the distinction of being a Senior Wrangler who had taken up medicine with distinction. His gifts of administration took him to be Principal of Glasgow University.

Mr Lockhart was a remarkable servant of the college. First as Library Clerk, then as chief of the office, he became butler on the death of Mr Merry. Merry with his elegant double-pointed beard had adorned the Fellows' Buttery, standing at his desk just inside the door in frock-coat. But Lockhart became ubiquitous. Upstairs and downstairs, from the cellars in the basement to the office on the first floor he kept watch and ward over all things. Only his marvellous memory and devotion made it possible. He knew, and nobody else did, where to turn up any particular item of accounting, sometimes in an old desk diary hidden behind other books. There was no typewriter. The handwriting of Lockhart and the Bursar's clerk, Mr Turner, were familiar and may still be seen in old minute and account books and the library catalogue of days when people still practised calligraphy.

T. R. Glover was an historian of a different sort from Tanner. Specialist in Roman history he wrote much about "Religion in the early Roman Empire". Himself a much respected member of the Baptist denomination, a book of his which had a very wide circulation was "The Jesus of History", still widely read in spite of the rise of newer schools of theology. In some ways Glover was a disappointed man, but he was a welcome figure at the High Table where he generally led the conversation in his neighbour-

hood. Once, in pensive mood, he said to me "What a lot of rubbish we talk at dinner". He himself was not innocent of it. He could be rude, but always that was a token of friendship. In late 1911 I had just returned to the college as a green lecturer in mathematics, still living partly in London, with a minimum of furniture in my rooms on M, Second Court. One morning Glover dropped in, looked round the big bare room and said, "What a beastly life you live here". Often he complained of too much "para-rubber" in the crust of the apple pie which even then was on the side every evening. But we looked forward to his dining and enlivening the dulness of us dull mathematicians. To him the College owes the Lady Margaret Boat Song. Glover did not pride himself on the Latin but where would the May Concert be without it? He was Public Orator later and was adept in rendering quips into his Latin orations.

As Public Orator Glover followed another Johnian, J. E. Sandys. Dr John Edwin Sandys was knighted in the quater-centenary year. He was my first Tutor, and well I remember his dignified, somewhat pompous bearing. He was Public Orator from 1876—1919, in days when the Gallery of the Senate House was largely occupied by undergraduates less respectful to dignity than they are to-day. As the frock-coated, bearded orator rolled out his periods he took no note of derisive cheers and comment. "Say the naughty part again" followed a resounding "quiDAM", and roars of delight followed a grand "Napoleoneorum". Sir John built for himself a fine new house in Grange Road (now the St John's School). He called it St John's House, but quickly it was dubbed "SIR John's House". He was a figure of great dignity and the college was much shocked when he collapsed and died in the Third Court in 1922.

One evening in early January, I think it was in 1910, I dined in the Combination Room with a company of the veterans of the college. They were Professor Liveing, Professor Mayor, John Bass Mullinger, librarian of the college, Alfred Harker, geologist. Each in his way was a character.

Harker was a Yorkshireman from Hull. The advent of a Yorkshire pudding at Hall always evoked from him scornful remarks on the article produced by the kitchen. Mullinger we knew little. He had suffered all his life from one leg being shorter than the other, so that he had to wear an iron support under one boot. He was very helpful to students but had no use for small talk. Stopped one day in the courts by a student who remarked that it was a fine day he is reputed to have said: "If that was all you had to say you need not have stopped me". He had some difficulty in walking and always carried a stick. He told me once that his favourite place for a summer holiday was Cromer, because the

cracks between the boards on the pier were so narrow that his stick did not go down into them.

Liveing and Mayor were a pair. They matriculated in 1845 and 1844 respectively. Liveing was President, a silent watchful figure whose white beard rendered a tie unnecessary. We celebrated in 1920 the seventy-fifth year of his residence in the University. For him the first teaching chemical laboratory in Cambridge was built where the New Court baths now stand. He was in excellent health until in his ninety-sixth year he was knocked down in the street by a passing cyclist. A broken thigh sent him to bed and this was more than his robust health could stand. Up to that date he had walked regularly from his house, the Pightle, Newnham, to college for dinner, carrying a hurricane lamp in the dark evenings. Save for a speech of an hour and a quarter at the tea-party in 1920 I do not remember anything he said save for his conversation with Mayor at dinner that night in the Combination Room. He and Mayor were in reminiscent mood and began recalling the names of the Senior Wranglers from their undergraduate days in the 1840's. They both lost count after 1861.

J. E. B. Mayor was Professor of Latin. Having filled his rooms next to the Shrewsbury Tower with books he lived in lodgings over the tobacconist Wilson at the corner of Portugal Place. He became a vegetarian. I met him in the train from Kettering once, when he told me that he had been to Manchester to conduct a funeral for the member of a church of which membership was confined to vegetarians and non-smokers. He was reputed to have invented a new kind of marmalade which he had made in quantities and tried to sell in the shops until the makers of certain marmalades threatened him with legal action if he continued to use their jars. In his seventies he changed his pronunciation of Latin from the old English fashion to a more modern style, chiefly because of an International Esperanto Congress. He feared that the members would not follow the Latin grace at dinner. His picture hangs near Liveing's on the Combination Room staircase, an interesting contrast in beards.

Prominent among us in those days was William Bateson, whose father had been master from 1857 to 1881. He had re-discovered Mendel's theory of heredity and brought it to the notice of the scientific world. He gathered round him a body of researchers, confirming and developing the theory and applying it to important agricultural purposes. Foremost among these was Roland Biffen who isolated the famous Yeoman wheat. Following him Lawrence Balls, a year junior to me did great work in Egypt in improving the cotton crop. Later the college made Balls an honorary fellow. He died last year. Bateson was a live, eager man of the widest interests. He would keep the High Table

talking by drawing out the most junior members, often feigning ignorance for that purpose. Those were the early days of Cubist art. I had been with my senior colleague, H. F. Baker, to an exhibition in Albermarle St. On coming out Baker remarked, "I wish I had saved my shilling". Commenting on this at Hall I ventured to say that many of the pictures shewing in Bond St windows looked rather insipid after the Cubist. "Yes", said Bateson, "that is the worst of it. It is so insidious". What a grand head he had; we lost him all too soon.

R. P. Gregory was one of Bateson's nearest disciples. Tutor, sportsman and Botanist, we may still see in the Wilderness some of the primulas on which he worked; crossing and re-crossing them in search of confirmation of Bateson's re-discovered theory. We missed Peter badly when he died prematurely from the great influenza scourge that followed the 1914—1918 war. I suppose that his record in games has rarely been equalled. If I am right, he played for the college at cricket, rugger, soccer, hockey, tennis and even managed to find time for rowing. His widow is with us still.

Those of whom I have so far written were to me as a young fellow some of the great lights of the college in 1911. Let me turn to some with whom I was more intimate. First I must remember Ernest Alfred Benians, Master of the college from 1935 to 1952. His was the first name for which I looked in the list of those who dined at the quatercentenary dinner. At first I was surprised not to find it there. But, refreshing my memory from the pages of *The Eagle*, I recalled that he was then, as the holder of an Alfred Kahn travelling fellowship, spending a year in travel round the world. The thing I remember most about his travels was the way in which he had been impressed by the happy Chinese children.

Of the affection and respect with which E.A.B. came to be regarded in the college and university others have written in *The Eagle* after his death in 1952 (see Vol. LV, pp. 4-9). His election was unanimous and was abundantly justified. I knew him as a freshman, coming to the college in the same term that I did (October, 1899). He was a quiet country lad, coming from a small school in Kent, where his father was Headmaster. He came with a Scholarship in History with Classics, the first History Scholarship ever awarded by the college. His mind turned to Modern History and on it he left his mark. It was his greatest life-interest save perhaps for one even greater, his care for people. He had a great gift of friendship. I remember meeting Rupert Brooke in his rooms; one of his near friends was Hugh Russell-Smith, a brilliant young historian fellow of the college who, after a deep struggle in his mind as to what was right, volunteered for

the forces in 1914 and was one of the first members of the college to fall in the war. Benians had a great interest also in Indian students and became their friend as official adviser to those in Cambridge.

As undergraduates we walked a lot together and I was glad in the renewal of our friendship when I returned to the college in 1911 after seven years elsewhere. His whimsical humour and merry laugh come back to mind. Once we had lunch together in London at an A.B.C. restaurant. Just as we had put some money on the table for the waitress I spilled a small jug of milk over it. Out came the quip: "A land flowing with milk and money". When I told him over a frugal lunch in my rooms (G, New Court) that I had become engaged to be married his comment was: "Yes, it must be nice to have a *house* of your own". He himself had not yet arrived at that estate. It was the fortune of war that in 1916 he was asked to take the place of a history coach who had to give up his work at Girton. In the course of his coaching there he had the good fortune to meet with an able student, Miss Sylvia Dodd. So began a very happy marriage. His widow is with us still. Once on a walk together we noticed some object that had been dropped on the ground. Picking it up, Benians said to me; "You know, Cunningham, I once picked up a gold half-sovereign that someone had dropped. It has been a bane to me ever since. From that day I have walked with my eyes on the ground."

He loved his native weald of Kent. He enjoyed a swim in the river. But he was not a serious player of games. He did a very little rowing in his first year. For a time he played soccer with the Trinity Scythians (a team of dons from various colleges). He took over the accounts of the L.M.B.C. from me during the war when I was away from Cambridge. We did not know in those early days what a beloved and distinguished yet modest Master he would be.

While I was an undergraduate, Cyril Rootham was appointed Organist to the College. He held the post from 1901 to 1938, and during that time he was an outstanding figure in Cambridge music. This is not the place to speak of all that he did for music, in the college and in the university. This is but a collection of personal reminiscences. I see Cyril always on the run. To cross the court he had to run. He conducted the choir for the May concert, and chose for us some choruses in which it was hard to know whether the last chord was right or wrong. It was not his fault but the composer's. He was himself an untiring composer. He set to music words that his wife would choose. She was his never-failing helpmeet. Without her he would not have been entire. They were not always the most cheerful of words. At one

concert we sang a setting of a poem of which the refrain was "The world's more full of weeping than we can understand". The Master's wife whispered to me in the interval that followed: "The world's more full of Rootham than we can understand". Dr Rootham, as he became, was indeed a leader in the modern developments in music, which like those in painting, have given those of us who began as Victorians so much to wrestle with and accept. It was his life and it wore him out. Stricken with paralysis he bravely clung to his composing and left a symphony of which he was only able to correct the proofs by the aid of a patient and understanding collaborator. His wife Rosamund survived him until the end of last year. She had been in the thick of Cambridge social problems for fifty years. When my wife and I came as a young couple to settle in Cambridge in 1912 she was one of the first to call on us. She warned my wife of being sucked into "the slough of domesticity"; but she made a home with Cyril into which hundreds of students found a welcome. One may be pardoned for recalling the story that on one occasion a new-comer addressed the organist as Dr Roo-tham. He was corrected and told "My name is Root-ham, as in Beethoven". For a time he suffered from the perversion "Roothoven". How live he was, and how stern he could be. Many there are who found themselves shut out of the Guildhall, having arrived one minute after the advertised time for the beginning of a concert. Let us praise famous men, such as made musical tunes.

But now to another character of a quite different sort, famous among mathematicians in the early years of this century and the close of the nineteenth. Robert Rumsey Webb, always known as R. R. Webb, was another name that was missing from the list of those who dined on June 29, 1911. Indeed he had not dined in Hall for years. He had at one time taken offence at something that was said in Hall and he never dined again. He was well-known as the leading coach. In the days when all mathematical students were looking for a higher place in the order of merit in the Tripos, and when the teaching was on a college basis, there was competition between Colleges as well as between men. College lectures were regularly supplemented by coaching. This came to an end with the abolition of the order of merit in 1909. Before that date Webb was the most renowned coach. He boasted that in one year he coached 17 out of the first 18 Wranglers. I was one of the last to profit from his remarkable teaching. We were not coached individually. The men of my year, seven in number, went to him together and sat round his table. He sat in a chair by the side of his blackboard with a wet sponge for cleaning the board. On it, from time to time, he would draw a lightning outline of a rabbit, meaning one of us.

Or he would make a figure lying on his back with smoke coming out of a pipe as indicating his impression of our idea of work. He lived entirely by candlelight and wrote always with a quill-pen. He made fun of us and did not like a come-back. Once he told us, as a stimulus to hard work, how he had been to the Riviera for a vacation, and there, before coming down to breakfast, he had done his daily dose of learning Russian; "Seven days a week, gentlemen, not six, mind you". When one of the group murmured "Shame" he was quite put out of countenance. His kind does not exist now. Men are lectured to wholesale. Their hope now is not to be a high Wrangler, but to get a Ph.D. But the "Old Man" R. R. Webb, with his rather flattened nose, in his check brown suit, walking down the avenue with his hands behind his back clasping an umbrella could tackle problems of a kind that do not interest mathematicians to-day.

It was to fill the gap created by R. R. Webb's retirement that I was invited in 1911 to return to St John's as a College Lecturer. I became one of a team of three with H. F. Baker and T. J. I'a Bromwich. I missed J. G. Leathem whose first lecture I had attended in 1899, and who as Praelector presented me for my degree. He had been appointed as Senior Bursar on the election of Scott as Master in 1908. He was a good Bursar and helped to consolidate the work of Scott in stabilizing the college finances. His two sons both became President of the Union and are now both Headmasters of well-known schools. He died from a painful illness in 1922.

Of my colleagues Bromwich was a walking encyclopaedia of mathematics. He had a breakdown in health and was greatly missed. Baker went on for many years, becoming Lowndean Professor of Astronomy and Geometry and in that position building up a great school of geometry in the University. I owe him an inestimable debt as guide, philosopher and friend. He died in his ninetieth year in 1956. Of his work as a mathematician I have written elsewhere (*Eagle*, Vol. LVII, pp. 80-83). I need not repeat here anecdotes about him which I wrote there. When I returned to Cambridge our ways had diverged, his to Geometry, mine to Physics: but we were great friends until his death. My early memories of him are of his great speed in lecturing. This not only made it difficult to take notes, but for him it resulted often in the elision of vowels, in such words, for instance, as "differential equations". From the word "co-ordinates" the hyphen completely disappeared. Few would have guessed at his delicate sense of humour but to his death it remained with him. His speech was always forthright and direct, as for instance, when entertaining his colleagues to lunch before discussing the programme of lectures, he greeted us with the words, "Are any of you

people drinkers?" He had many sorrows in his lifetime, but he was from beginning to end a friend.

I have in my study a photograph of the group who took the Mathematical Tripos in 1913. Baker in the centre with Bromwich and me and twelve students, ten of whom were Wranglers. At the end of the front row is a rather lean and timid-looking youth named Harold Jeffreys. Few would recognize Sir Harold or suspect his budding eminence as a scientist. Next to him is Bernard Gilbert, a distinguished civil servant to be, knighted and an honorary fellow, but now recently deceased.

What other portraits come to mind? "Bushey", as we always called, Bushe-Fox, L. H. K. I see him now on his white horse on the tow-path, roaring instruction, rebuke and encouragement at the first boat. Under his care, L.M.B.C. was steadily among the first five boats on the river, although largely recruited by men who had not had the backing of Eton training. I see Bushey now on the grind (ferry) which used to convey us across the river at the Pike and Eel, while the horse, taking fright at something reared on its hind-legs on the scanty deck. Bushey was Tutor and for a time Lay Dean. St John's in 1911 would not have been itself without him.

Of another calibre was Dr L. E. Shore, for many years director of medical studies and Junior Bursar. He loved the college and its men. We loved him and often laughed at him. As Junior Bursar his favourite motto was "You leave it to me". This once provoked Glover into verse:

"There's a crack in my bedroom door",
"You leave it to me", said Shore
"But the rain comes in on my head",
"You leave it to me" Shore said.

But things did get done. Shore was asked by the fellows to have a yew hedge planted along the Queen's Road side of the Wilderness, to give more privacy from the road to the Fellows' Garden. When the hedge was planted we were surprised to find it along the avenue. When protest was made his reply was "Well, that is the only place where it would grow". We made fun of him but he always took it in good part and we liked him for it.

"Johnny" Marr was a jovial geologist, with a wicked twinkle in his one eye, one of those people of whom one is at once aware as part of the life of the society.

"Peter" Mason, one of the most senior members of the College was a great Hebrew scholar and had been president. A rather gnomish white beard flowed below two of the kindest eyes. A friend of a member of the college was once anxious to ascend the Chapel tower. She appealed to Peter Mason. "Alas" he said, "I cannot give you permission to go alone. I would have been

glad to conduct you myself, but I fear I cannot manage the stairs". Nevertheless it is recorded that he had walked to London in one day.

W. E. Heitland, we never gave him a Christian name, I only knew by sight and hearing. A Classic, already retired from office, he turned up often to Fellows' Meetings. Being very deaf, he heard very little of what had been said, and then would rise and make a speech largely about what used to be done. At a feast in Hall at which a microphone was used for the first time, specially provided for him, he entirely defeated its function by walking about from side to side. It is said of him that he was seen wheeling a garden barrow along King's Parade, returning books to the old University Library behind the Senate House.

I must draw this train of reminiscences to a close, but two more personalities come to mind, one dining, that night in June, the other waiting at the table. H. H. Brindley, zoologist, one of our most ready talkers, I did not yet know in person. Later I succeeded him as Steward. Edward Appleton (now Sir Edward), as a member of the audit committee, was led to enquire into the prevalence of cockroaches in the kitchen, sometimes in the vegetable dishes, sometimes even in the heart of a loaf of bread. Brindley, in his steward's swan-song apologized for these dark friends of his. "They are not the ordinary kind of cockroach" he said, "they are the Asiatic variety. They came over to this country in the time of Queen Elizabeth". (Perhaps I should add 'the First'). But this was long after 1911.

And now—the Head Waiter, SWAN. He was my gyp as well. I hear him now, slowly ascending the stairs to my rooms on M, Second Court, wheezing as he came with his asthmatic chest. As a warning to the new boy he told me how he had waited on my predecessor, W. H. Besant. "Thirty five years, I waited on the hold gentleman, and never had a *hangry* word from him". Courtesy and dignity adorned him. He came up to my new house, and saw our first baby, six months old, in her pram at the door. Having looked around the house, he came to the little one in the pram and with heartfelt tones said, "Sir, and that's the best piece of furniture of all." He wheezed and he waited, until he had to be pensioned off.

It was but three years later that the first great war descended upon us. We went down in June, 1914, a full college. We returned, but a small fraction of it in October. Some, like Hugh Russell-Smith, whom the college had looked to as the men for the future, never returned. They were taken from us by the "War to end War". But it was not the end of war. Neither was it the end of the college. It has gone on from strength to strength and we look forward to the five-hundredth anniversary believing that it will meet greatly all that the new age may bring.

NOVEMBER

Now at long last those stalwart gardeners
 Who once (as sang a quavering voice ten years agone)
 Did sweep and gather day by day and year by year
 The autumnal leaves, have in a measure respite.
 Now in their stead a single pair of hands
 Propels a little vehicle:
 And all is done.

S. J. B.

Poems

PAGEANT: NEW COURT

NIGHT. Dark vein of blood trickling through crevices of wall is silent now. In the space scooped out of lawn and flagstone, portico, they play. Kings, queens and knights, yeomen of England all. King, queen, archbishop, toffeeapple, dust and little girl, once brave but frightened now by the dark hour, by the haze and distances that melt into the green of lawn and trees. They play. Lords, ladies, fellow commoners, Lend me your memories to recall the crack of doom, the mallets' distant crack, the memory of the race. And underneath the tree, the tree of ages (it's this that frightened her), they make their last, their hasty camp. Horse, bugle, lamps—nay, torches: but you: why cannot you make good your exit with main force and grace.

Night, dark vein of blood trickling through crevices of wall is silent now.

J. P. S.

JOHNIAN HOURS

TWICE tolled the Johnian hours,
 Without — within,
 Action — reaction,
 Equal — opposite,
 Giving and getting,
 Loving and being loved,
 Obverse and reverse,
 The double currency of life;
 The poles round which we turn;
 The axes of our living,
 Getting and giving.
 The locus, thus referred,
 Is audibly expressed.
 Twice toll the Johnian hours,
 For they are doubly blessed.

DAVID RALPHS

QUADRUPLETS

"In the quad of St John's College, Cambridge"—*Sunday Paper*.

FOUR older courts hath Cambridge's St John's,
 Never forgotten by her loyal sons:
 Were they to Oxford wafted by the gods
 Mockers might call them Lady Margaret's quads.

E. J. L. GREAR

PYRRHA

Lines written on learning of the publication of a book of translations of Horace Odes I.5, selected from a grand total of no less than 451 assorted versions.

DEAR Pyrrha, in Horace's verses enshrined,
 What poet are you now deceiving,
 As he woos you to yield to translation, his mind
 Full of phrases? For whom are you weaving,
 Deceptively simple, your golden-haired wiles?
 How often will he be bewailing
 His shattered belief that your fair golden smiles
 Betoken the plainest of sailing;
 How oft will he stare at your hurricane seas
 Who thinks you are his for the wooing,
 Inexperienced novice to trust in your breeze—
 Your glitter the poet's undoing.

To the muse of translators, I publicly state,
 To the goddess of whom I did ask it,
 For my lucky escape I do now dedicate
 My pen and my waste-paper basket.

H. M. STEWART

Pyrrha is reprinted by kind permission of the Editor of *Greece & Rome*.

Undergraduate Life at St John's in the Early Thirties

IT was, in a way, a fairly sickening invitation. After one had got over the first flush of pleasure at having been asked to write such an article for this rather special issue of *The Eagle*, Time hit one, suddenly.

In the stomach.

It was thirty years ago, at a moment when one had only lived two fifths of the life so far vouchsafed to one.

And this made one (though one denies it vigorously to one's children and, less often, to one's wife) feel old.

So, starting with the melancholy slogan "Fogism begins at fifty" and proceeding to the equally gloomy truism that "Old Fogies Never Die, They Simply Fade Away", one took a deep breath, invoked Milton and ordered Time to roll back and fetch the Age of Gold.

I hope and believe that the magic is still strong. A dark blue sky, crackling with frost, and the stars over the Chapel Tower blazing and glittering with a magnesium whiteness; and as the eye came down from the heavens, the broad orange glow of the great bow windows of Hall, the clatter of plates and the buzz (or roar) of talk as a waiter, bringing fresh plates from the buttery, pushed open those infernally inconvenient doors with his shoulder. A November afternoon, with a coy Cambridge fog lifting just enough to enable Rugger to be played, the studs of one's football boots digging deep into the valuable turf at the sides of the long avenue as one trotted up to and walked back from the game on what I still maintain is one of the handsomest grounds in England. Looking out from the windows of one's room in Second Court in May and jeering at the Fellows of Trinity as, in their private garden, they addressed themselves, with all the seriousness befitting senior members of the second College in the University, to their idiosyncratic idea of the game of bowls.

Drake would have lost the battle, but let that pass.

The May Concert, with the First May Boat, some of them occasionally vertical in the way that a bullrush is in a light breeze, roaring out Dr Garrett's melody—easy to mock at, but difficult to forget—and in at least one year, a Trumpeter, on top of the Shrewsbury Tower, recalling the audience from their wandering in the Courts at the end of the interval.

The May Ball. A still, heavy summer night, with enough girlish beauty collected into a fairly small space to last most people a lifetime. The cheerful faces of those who were just enjoying themselves; the transfixed expressions of those who had just discovered that they agreed about one another; the John Swan, the Champagne, the punts, the lot.

And the agonies of unrequited love, never worse than at such a moment. (Her daughter recently won an open scholarship at, of all places, Oxford.)

Very well. So I am without recourse a Foggy, a sentimentalist and traditionalist who just to tap the last nail into his own coffin, quotes a Latin tag:

Laudator temporis acti se puer.

However, I am able triumphantly to turn the tables on those accusing me of Fogism by praying in aid a very modern Bard, Mr Lionel Bart, who (Horace's copyright having expired some time ago) has brilliantly, and practically word for word, lifted this line as the title for his *Fings Ain't Wot They Used T'Be*.

Are Fings Wot They Used T'Be?

I suspect that in many ways they are.

Of course, in the 'thirties there was virtually no sharing of rooms by undergraduates. Nor were the students of Newnham and Girton full members of the University, and I think that there was rather more of a bar between ordinary boy meets girl occasions than there is now. But it was by no means absolute. I remember hoisting a Newnhamite over the railings on Grange Road at three o'clock in the morning on our return from a bathe in the Ouse somewhere near Haddenham. The Fenland policeman on patrol who had seen the lights of my stationary car and come to investigate was quite decent about the fact that I had left my licence behind in my rooms, and did not interest himself at all in the proctorial aspects of the matter.

But the fundamentals, sound learning, true religion and love of the brethren were surely the same then as now. The word University carries its own connotation now, as it did then, and the pursuit of truth until we are ultimately able to define it remains a primary, and exalted, object.

Continuity is, in human terms, a great thing. As far as a College is concerned, the responsibility for this rests first of all on the governing body, the Master and Fellows.

So I think it right that even if I am supposed to be writing about the undergraduate life of my own time I should say something about the Dons.

We had a good Master, Sir Robert Scott, followed I would say by a great Master, E. A. Benians. Some people meeting Benians

for the first time might have thought that he was mild, even diffident; many called him "the gentle Ben". But I remember that my father, himself a Fellow for twenty four years, once said to me "Remember, he has red hair". And the quiet manner concealed a relentless, though controlled, energy and determination.

He was not the only red-haired one.

Perhaps the most explosive, certainly one of the most lovable of the dons was M. P. Charlesworth, to whom I was very close. Profound classical scholar, musician, comic, gourmet, later on a Clergyman, but always teacher and above all friend, I would rate him as one of the most lively influences in the College of my time.

I am afraid that we humanists did not realize that, in the world of Science, there were men like Cockcroft, Appleton, Jeffreys, Dirac sitting at the High Table who were in the absolute vanguard of those who at that time were pushing the frontiers of human knowledge out towards the immense distances that to-day are regarded more as Columbus regarded the Atlantic, that is to say, a human challenge: but which the ordinary man of those days simply thought of as being an uncomfortable question mark, over which it was easier to put the blotting paper.

The student body were not a bunch of deadbeats either. Without taxing my memory very hard, I can count among my contemporaries four members of the present High Table, the Professors of Celtic at Edinburgh, Latin at Birmingham and Biochemistry at London, the Archbishop designate of York, the chief architect of the Festival of Britain, a junior Minister of the Crown, a High Court Judge (who incidentally played Rugby for Ireland), the leader of the expedition which crossed Antarctica, one captain of Welsh Rugby, two English Rugby internationals and two Captains of University Cricket (one of them, Roger Winlaw, killed, alas, in the war), a well-known novelist and travel writer, and at least two Headmasters. I just missed a very famous Governor of Cyprus who is now an Honorary Fellow.

So I suppose it could fairly be said that at the turn of the 'twenties and 'thirties, the Lady Margaret was casting her net fairly wide.

And because I was a Classical student I must mention two men, in many ways antithetic, but both in their fashion carriers of the same torch.

E. E. Sikes, the President, was also the senior classical teacher. Mild, physically dumpy, with a wonderful head of silver hair and a fine cleanly drawn face which was easily discernible behind and between his double chins, he was in fact a tartar. He was a constant and untidy pipe-smoker, who patronized a tobacco so light and mild that it hardly smelt at all. But it burnt hot, and

transferred part of its heat to his tongue, as you discovered if your copy of Latin verses contained anything which indicated carelessness, which was a major sin, or a lapse of taste, which was a capital sin.

How different was T. R. Glover.

No smoking instrument, so far as I know, had ever rested on that formidable lower jaw: alcohol, if it had ever got so far, would have recoiled in terror from that Nonconformist throat. But the man was a poet with that combination of ruthlessness and tenderness which is the prerogative of the breed.

I could go on about the dons, but I won't.

I should like to try to define, if I can, what seems to me to be the chief difference between undergraduate life then and now.

We were, as the undergraduates of to-day are, out to find jobs when we went down.

We were, though it may sound hard to believe, just as convinced that the older generation, who had responsibility, were making a hash of things as our counterparts of to-day are about my generation. Perhaps we were right, and 1939-45 is an argument for that point of view.

I am not sure. But I do know this. If the things about which we felt strongly did in the end survive, it was partly because we were there, and felt as we did because we had been taught to do so, even though at the time we could not change the course of events.

There was one fairly large difference. Perhaps rather more of us came from the so-called Public Schools than come to-day. But of those who did not, I think that the parents were making a bigger sacrifice than they have to now.

The Community to-day pays for more University Education than it did then. And because, in one guise or another, the Community has come in with so much broader a hoof than it could thirty years ago, it seems to me that the responsibility of to-day's undergraduates to assert their existence as individuals in search of ascertained and objective truth is not only more difficult, but correspondingly more important than it was thirty years ago.

Not all the rockets which my generation put up failed at the first stage, as I hope to have shown. I am sure this is true, not only of the intervening years but of the present as well. The College must be, and must remain, a launching pad.

JASPER ROOTHAM

The Humbler Creation

"NOT a mouse stirring," wrote Shakespeare to let his audience feel the quiet of the early hour before dawn.

Out of tune with his surroundings, the distressed Hamlet muttered, "The cat will mew and dog will have his day."

The Prince of Denmark may not have been quite fair to dogs in general when he told the King that like a dog he would have his day. And it may be quite unjust for anyone to tell someone else in good Australian not to put on dog.

Of course there have always been people to swear that civilization is going to the dogs. Surely, as our distinguished Australian essayist, Professor Walter Murdoch, wisely suggests, it would have been better advice even to the sluggard if he had been told to go to the dogs, not to the fussy ant.

Literature is full of praise for the dog. Her Majesty's Poet Laureate, John Masefield, in his greatest work, "The Everlasting Mercy," puts strong words into the mouth of the wastrel, Saul Kane, shortly before his change of heart. Saul Kane tells the sanctimonious crowd of his home town about their—

"Flinging stones at all the Stephens,
Standing firm with all the evens,
Making hell for all the odd,
All the lonely ones of God,
Those poor lonely ones who find
Dogs more mild than human kind . . .
'I've known dogs to leave their dinner,
Nosing a kind heart in a sinner.
Poor old Crafty wagged his tail
The day I first came home from jail,
When all my folk, so primly clad,
Glowered back and thought me mad,
And muttered how they'd been respected,
While I was what they'd all expected'."

Dog-poetry reaches spiritual heights in Francis Thompson's unseen but ever-present Hound of Heaven.

Some people have perhaps been a little foolish about animals. Lady Richard Burton, whose husband brought "The Arabian Nights" to Europe, put her little dog to bed every evening in a cradle, tucked it up and had it called in the morning with a saucer of tea. Her Italian servants grumbled at these attentions to one who was not a Christian.—"No soul, no blankets," was, for them, the correct rule of life.

However many lives cats may have, they have generally, before Paul Gallico's day, been less respected than dogs in literature. Shakespeare meant nothing good by referring to someone as more and more a cat. Indeed, the best-known saying about cats refers to swinging them. We may try to appease them with saucers of milk in order to kindle a little love in those cold breasts and to catch even a gleam of response from beautiful critical green eyes. Yet Dr Johnson's cat, Hodge, must have been a fine animal, "for whom he himself used to go out and buy oysters, lest the servants, having that trouble, should take a dislike to the poor creature."

Many of our human virtues and perversities are embodied in what is sometimes called the humbler creation. It would, of course, be hard to see humility in a peacock or even in a sparrow—

"The viewpoint of the Sparrow
Is arrogant and narrow.
He *knows* that he excels,
He is selfishly obsessed;
He would not give an ostrich best.
His children leave the shells
Puffed to their very marrows
With pride at being sparrows."

Indeed Humbert Wolfe could not enjoy his visit to the London Zoo—

" . . . and then the hippopotamus
says: 'Who the blazes made me thus?'
And I observe the chimpanzee
Thanking his God he's not like me."

Nor is austerity suggested by the well-known limerick on the pelican—

"What a rummy old bird is the pelican!
His beak holds more than his belly can.
And you open your eyes
And say with surprise:
'What I wonder is how the hell he can!'"

But the old English poet, Geoffrey Chaucer, let his learned cock Chantecler quote Josephus and Cato with such pompous gravity that we almost come to share his sense of self-importance.

Ruth Pitter in our own day challenged variety by breaking into musical courtly verse on spiders, worms, mice, the watery swan, frog in the well, fleas and cockroaches; all symbolic, for she says she recognizes our humanity in the Church mouse, the caterpillar and earwig. Yet, can we altogether forgive her for leading us to see such reflections of our own odd and perverse natures?

By comparison, we detect the teeth-marks of reality in a Digger's rimes on the Rats of Tobruk and the Fighting Mice of Moresby, just as we may feel a happy touch in the Australian poet's one-line thumb-nail sketch of the insect Homer—

"Singing his Iliad on a blade of grass."

Moreover, in Frank Dalby Davison's "Man-Shy," that superb story of a red heifer, Australian literature has itself produced an animal classic, convincing by its imaginative realism in incidents as naturally dramatic as human happenings; a spacious evocation of scenes and backgrounds in which man and beast merge. On a smaller scale, we may notice Tasmanian author Nan Chauncey's "Tiger in the Bush".

Skylarks have inspired matchless lyrics, but what note is heard in F. W. Harvey's "Ducks"?—Like Chesterton's "Donkey", it gives us a great interpretation—

"When God had finished the stars and whirl of coloured suns
He turned His mind from big things to fashion little ones,
Beautiful, tiny things (like daisies) He made, and then
He made the comical ones in case the minds of men
Should stiffen and become
Dull, humourless and glum

All God's jokes are good—even the practical ones.
And as for the duck, I think God must have smiled a bit
Seeing those eyes blink on the day He fashioned it.
And He's laughing still at the sound that came out of its bill!"

L. A. TRIEBEL

On the Threshold of the Sixties

ANNIVERSARIES, traditionally, call for a backwards, often wistful, gaze; yet they are seen in better perspective when related to the present, with perhaps even a coy glance at the future. Moreover, whereas any chronicle of past College life usually takes the form of dispassionate historical record, by the same token a contemporaneous account—such as this one—invites comment as well as review. Nor would it be complete without it.

First, in retrospect. If Britain was—industrially—the first country to burst into the twentieth century, on our 400th anniversary in 1911 she was still—socially—living in the nineteenth; during that uneasy period before the first World War confirmed beyond doubt that the twentieth century had indeed arrived. Separated by the generation of the inter-war years, we are living today in what we hope future historians will still be able to call the post-war years. It is this period which forms the immediate background to undergraduate life as we enter the sixties.

For St John's, as indeed for many an institution, the decade of the fifties, Janus-like, witnessed a transition—the gradual emergence from the hangover of the war-economy which characterised the late forties, to the headlong rush for the affluent society of the sixties. In the ugly dawn of the brave new world of the immediate post-war years, rationing and controls had only just been thrown off by 1950. There was never time to return to 'normal' before the Universities were caught up in the urgent need for educational expansion, an expansion reflected in the growth of College numbers from under five to over seven hundred. Necessary or not, few can but deprecate the effect on the life of the College such an increase has had.

As the size of the College has increased, so has that sense of 'oneness' and unity diminished; a certain apathy amongst undergraduates today, met with by organisers in every field of activity has found some of its origins in St John's in this factor. Thanks ironically to this very size, and resulting excellent facilities, sport is perhaps the biggest single cohesive factor in College life today. Our record in the late fifties has been impressive, while the L.M.B.C., if not quite able to emulate the crews of the early fifties, have entered the sixties once again *caput fluminis*. In addition, those concerned lest the tutor/undergraduate relationship should tend to become more distant blame not so much any shortcomings on the part of tutors, as sheer weight of numbers. It is sincerely to be hoped that the present expansion programme

for the University population in the country will find its outlet in the promised new Universities before the present ones burst at the seams.

No chronicle of undergraduate life would be complete without reference to the College buildings. Their fabric, in particular that built at the end of the century of their foundation, was shown to be in serious need of repair. The sight of scaffolding, a metallic web around the walls of Second Court, has become, alas, no longer a source of astonishment on one's passage through the College, and had been provoked, not as one wondering American thought, by war-damage, but by the far subtler ravages of time. Slowly, the dust and the rubble progress towards the river. Most of the new rooms over the Kitchens have been resurrected as bed-sitters, in line with current fashion, and the occasion used to restore the Wordsworth Room. While the Appeal Fund will defray a proportion of this cost, a recent benefaction may provide for a new court for the College, an event which today represents an architectural challenge as well as material good fortune.

Together with its buildings, the routine of College life forms the framework within which the undergraduate existence is played out. To the outside observer, it has probably altered little; to an earlier generation, more familiar with the thirties, several outward features are worthy of attention. At least half the College rooms now have running hot water (with perhaps two to share it where one was there before) whilst the joys of antique plumbing are relished by fewer every term. 'Bedders' and 'Gyps' today perform a mere shadow of their former duties, having survived almost unnaturally into the welfare state; whilst the out-of-Hall service at one time provided by the Kitchens (and so, dining-clubs) has dwindled in a like manner.

College life attracts not only pupils but visitors. On the Backs on a summer's afternoon, one can reflect that official estimates of the increased tourist trade to this country are perhaps couched on the conservative side; certainly we seem to have our share. The West country undergraduate who wryly likened the Bridge of Sighs to the Honiton traffic bottleneck, flanked by the dual carriageways of Third Court and the New Court cloisters, will have found sympathy from a harassed chorus. Even the privacy of one's rooms is at times invaded while curious visitors seek the elixir of university life.

With the continuation of compulsory military service after the last war, those in College this past decade have become familiar with the idea of an older and more mature undergraduate, and the effect has, I believe, been salutary. With the ending of National Service, there exists at present the bizarre situation whereby a third year man of 24 is confronted by an 18 year

school-leaver, but the scene will soon return to that of the past 4½ centuries—the post-1918 interlude apart—with university residence a period of training interposed between boyhood and manhood, and this brief experience will have become but an interlude.

The structure of social life in College has reflected the nationwide tendency towards the levelling of society; but if the wind of change is blowing through College life, it hasn't yet become a tempest. If social distinctions are becoming blurred in the maelstrom of the Welfare State, they are still to be found if looked for—and sometimes in unexpected places. There are still those who can afford to treat Cambridge as the inevitable finishing-school, still those even among the now predominant first-generation men who can afford to 'read' rowing for 3 years, such remains the prestige of Cambridge today. The difference, of course, is that the rule has become the exception, and the vast majority of those now *in statu pupillari* put in a considerable amount of work.

There is in this connection a complaint voiced by some tutors that the work in fact done tends to be crammed into 6 months, and the Long Vacation, in particular, used less for mental preparation for the coming year, than for earning money—'something amusing, with a living wage, and temporary'. If economic necessity is as often as not the motive for this diversion, the end result should surely be welcomed, not deplored. Recreational employment, typified by the annual exodus to Canada in recent years, is educational in the widest sense; it is an adaptation to the modern environment of Cardinal Newman's idea of a Liberal Education: an education "in which the individual is cultivated, not as an instrument unto some ulterior end, but as an end unto himself alone". Moreover, scholastic standards do not appear to have been lowered as a result of the current practice.

Whatever the change of emphasis on work in post-war years, the essence—and the attraction—of daily life remains the same: the fact that one is free to choose one's hours of leisure, regulated only by Hall, supervision,—and lectures, for those less fortunate. I touched earlier upon the swollen size of our College, and the impending expansion of University capacity in the country—and with this in mind, it appears quite essential that the present tutorial and supervisory systems remain unharmed, because of the stimulation such interchange provides. As Newman put it, "an academical system without the personal influence of teacher upon pupils is an arctic winter; it will create an ice-bound, petrified, cast-iron University, and nothing else".

A concomitant of state-aided education is an underlying suspicion that while there is still no need to observe one's study at

University as exclusive preparation for a career, in the strictly utilitarian sense, nevertheless it should culminate in employment, when state provision is no longer at hand. For if Cambridge remains one of the least vocational of Europe's universities—or perhaps because of this—the Appointments Board, magnificently ignored during one's first years, is consulted like the oracle at Delphi as Tripos time approaches. Furthermore, in this age of careers open to talent and equality of opportunity, an age which while purporting to reject class consciousness and privilege, is supplanting it by a constant striving after the status-symbol, a degree is regarded in the search as but a further qualification, a passport into society. The myriad of jobs indulged in by men during the vacations finds partial reflection in the increased number of outlets served by graduates today. Due in part, of course, to the great increase in numbers, perhaps the most pronounced change, certainly since the war, has been the growing acceptance—even invitation—of graduates of all faculties, by commerce. The problem of the assimilation of the trained mind—otherwise unqualified and unorientated—into modern industry, has yet to be finally worked out.

Relations between town and gown are extended, if not always improved by the physical fact imposed upon undergraduates in the majority of Colleges, of spending at least one year out of three in lodgings. The annual Poppy Day Rag is perhaps exceptional in the harmony it promotes. But it remains on the whole town *and* gown, rather than town *versus* gown. If the University remains the dominating partner, it is because in Cambridge, unlike Oxford, it is the city's sole *raison d'être*. One of the joys of Cambridge, now as 50 years ago, is that it remains untrammelled by satanic mills or heavy industry. Indeed the only (and distinguished) exception within the city boundary to the otherwise undisturbed agricultural scene—Pye's—is itself leader in a field that is kindred to the scientific prowess displayed by the University.

Cambridge has become increasingly cosmopolitan of late, and perhaps no organ has done more to foster some kind of international understanding than the Cambridge University United Nations Association (perhaps more practical and less idealistic than the League) which has rapidly expanded to become the largest society of its kind in the University. There is plenty of fuel for the furnace; foreign-language schools, offering proficiency courses in English, have mushroomed, bringing a flood of Continental girls in their wake, whilst the Colleges themselves include nationals from practically every country in the world, not to mention a sprinkling of Hungarian refugees. The result of this collision of ideologies, is a broad-mindedness, where there isn't an interest,

that would certainly not be entertained in Notting Hill or the Deep South.

Contact with the outside world is probably more frequent than ever before: London is one, but only one, of the centres of attraction, and the weekend exodus (and influx, for that matter) is not inconsiderable. Ironically, a hazard of modern travel is that the train journey from Cambridge to London is no faster—and often a good deal slower—than that shown in a timetable of 1911. It is surely wise to get away for a while, to leaven the improbable life of a university with the mundane considerations of everyday life. Nor are dons any the worse on their return for sallying out into the unacademic scene. Here, mass-media have had their part to play, for quite one of the most important forces in modern society—the impact of television—has received its most recent recruit, at the time of writing, with the appearance of Anglia—drawing unashamedly upon University material.

To conclude: in an age which regards a University as a degree-factory, in a world of intensive specialization, it is perhaps comforting to find the ideals of a liberal education diluted, but not yet dissolved. It is true, we are confronted by prospects and forces which threaten to alter the whole tenor of University life; of which the assault on compulsory Latin, the building of the scientifically-slanted Churchill College, and the founding of an Institute of Criminology, are just surface manifestations. Nor is this surprising, with society changing at a rate of compound interest, but the University, and Colleges such as our own, have successfully remained constant by adapting their institutions before, and reconciliation appears no less likely today. Indeed, "In a higher world it is otherwise, but here below to live is to change, and to be perfect is to have changed often".

I. S. WORDSWORTH

A
 Visitor's Guide to
PROUGHE-super-BOGHS, Somerset
Including a Description of
PROUGHE GABLES MANOR HOUSE
AND MUNICIPAL KURHOUSE
 (and Working Man's Club)

*Ad Astra Per Artes Alque
 Industriam Commerciumque*

* * *

Price 3d.

(50 copies 1/6; 1000, 3/9)

BY WAY OF WELCOME . . .

I never tire of telling the story of the Transatlantic visitor who upon his first sight of the Town of Proughe-super-Boghs and its good, honest yeoman population of 2,628 Borugovians exclaimed: "Golly, I never did see nothing like this in East Overshoe!" Well, we get visitors to what we still wistfully call the Village from some pretty unlikely places, because discriminating holiday makers have learned of Proughe's unparalleled charms as both spa and watering place.

May I, however, also be quick to emphasize that alongside the pervading tranquillity and bucolic timelessness of Proughe-super-Boghs there dwell in harmony, one with another, enviable riches of scarcely explored avenues of trade. Proughe enjoys the reputation of being the fourth largest producer of hot water bottles in the West Country, boasts an exceptionally favourable potential of unspoiled labour, and envisages four excellent available factory sites. If you are curious, you may obtain our booklet "Locate in the Boghs" free at the Town Hall, Great Albert Lane.

And now, no matter where you come from—Welcome!

Derek A. T. Grunch, Mayor.

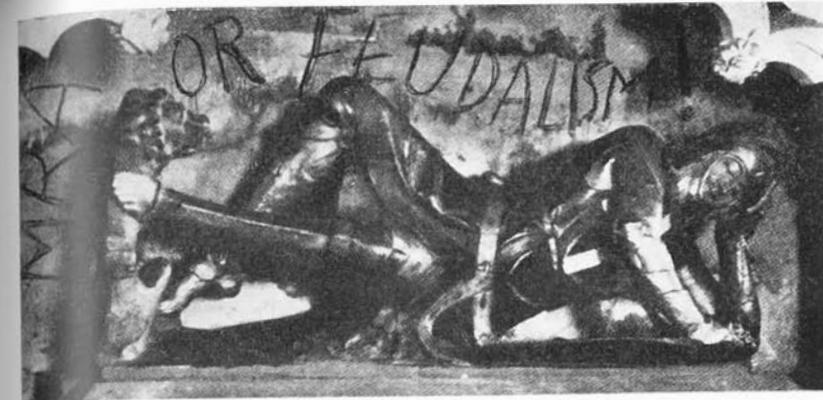
* * *

Hours of Admission to Proughe Gables Manor House:
 Daily and Sunday: 10 a.m. until rainfall
 Closed on Good Friday, Boxing Day, and Ember Days

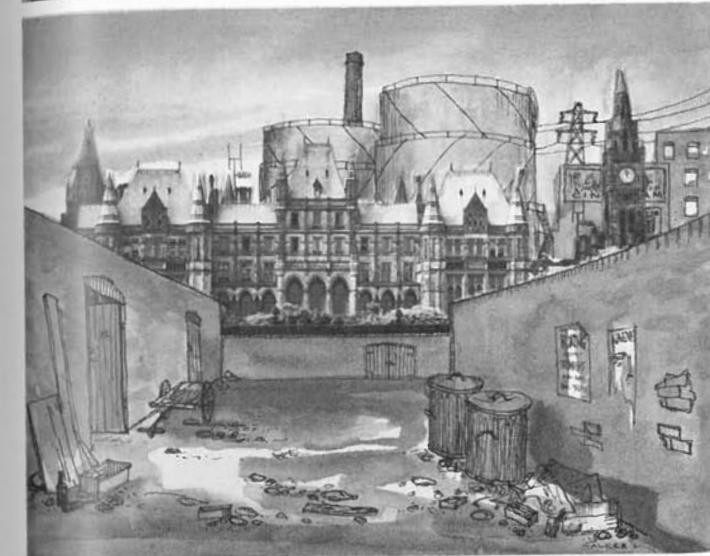
NOTICE!

Visitors are warned that littering up, spitting upon, or maliciously defacing the premises, no matter what the cause, is in violation of the byelaws and may render the offender liable to a fine of £5. Be warned!

* * *



The Tomb of Hugh de Proughe, thirteenth century, intermittently restored.



*Prospect of Proughe Gables Manor House from Commercial Junction Road
 (A. C. Walker)*



*Great Albert Lane prepares for Market Day!
 ("The Daily Mail")*

A Guide to the Town of Proughe-super-Boghs

MACAULEY once described Proughe-super-Boghs as "the village history never touched," but subsequent scholarship has proved this not to be quite the case! For the light of historical perspective shines back over some two thousand odd years of Vurocipian accomplishment and it is in the spirit of this singular heritage that its sons and daughters look, not backward, but forward!

Historical shrine, holiday centre, manufacturing citadel—Proughe likes to regard itself as peculiarly blessed. Nestled at the bottom of Great Floogle Boghs in Somersetshire, the village is watered in season by Nonny Brooke and because of its unique climate is the only place in the British Isles that will support the Giant Amazon Fern. Much wildlife is known to abound in its vicinity, in particular an unusual variety of saurians. It has been stated that, were it not for the vagaries of the law, its farmers could easily make themselves among the richest in the world.

Yet it shares with thousands of other villages and towns elsewhere a wholesome air of unpresumptuousness. After centuries of what is believed to have been a primarily agrarian existence, the arrival in 1821 of its factory brought a reasonably pulsating economy to the sleepy thorp tucked away on lithe marshland and to this day it retains a sharp air of commerce amidst its pastoral languor. The Town's position has, not to be denied, been greatly enhanced by proximity to Commercial Junction, only seven miles hence; a spur line connects the two hubs three times daily. According to the 1921 Census (latest taken), Proughe-super-Boghs boasts a population of 2,981 souls, but this may be inaccurate since at the time H.R.H. The Prince of Wales suffered a sudden attack of malaria whilst passing through the Village and could not be moved for several days. It is thus surmised that many visitors coming to pay their respects had swelled the ranks of the "locals", as they are often called. Shortly after the Royal Convalescence the hamlet was elevated to the dignity of Town with the right to brew its own cider again.

For centuries the life of the Town has been dominated by the family of Proughe (pronounced Proo), of whom there are today several descendants residing locally. One source (*The Family Proughe and How They Grew*, by Marmaduke Proughe, 1873) says that the name originally was that of an Ancient British

Tribe, a warlike and predatory clan known as the Borucii, who used to attack caravans of traders bringing stone from Wales to Salisbury Plain. Legend has it that they would craftily surprise their quarry by painting their faces kelly green, instead of the more customary blue. A few artifacts discovered in the sulphur pits (see below!) confirm the existence of an ancient civilisation. These include bronze stilettoes, barbed swords, and sacramental chastity belts. Traces of a Roman road cease less than a mile from the Village bounds. Ranke asserts that they did not bathe.

A captain of Queen Boadicea's Legions, O'Neill the Heal, is reputed to have led a foray against the Roman intruder in A.D. 61; a reference in the *Codex Sinister* records that the Roman 14th Legion under a primipilarius named Coriolanus Minimus Maximus f. went into full rout near the seat of the Forugii ('qui ipsorum lingua Bwrychyll appellantur').

Little, alas, is known of the tribe or village throughout the remainder of the Roman Occupation or indeed until Saxon days when it is mentioned several times, rather condescendingly, in the Anglo-Saxon Chronicles. By the seventh century the settlement had become known as "Pruðing" or "Bropig" or "Freaðbaec" or "Hþropucēoð". The exact name will forever remain uncertain since in all extant MSS the entries have been effaced by a pious monk named Garth the Beady in the late tenth century.

From fragmentary information, nonetheless, we gather that in the year 891 a swineherd of Prouge or Frêocanesheall, Aethelwulf the Awful, was slain at the order of King Alfred because:

'He wealde fela wergildes wöhlic wronge'

which evidently has to do with some misappropriation of funds. A descendant of his, Wulfobert the Werwulf, was dispatched in 1024 by Canute for counterfeiting Danegeld. A popular local legend has it that Queen Horsa the Hairy once trysted there with Aethelraed the Unready, but this is considered apocryphal. In the Domesday Book the Village is listed as having 837 swine, 47 cattle, 79 sheep, 9 horses, and 34 swine. The entry is confusing to scholars.

We hear very little of Prouge-super-Boghs until Norman times when in 1168 Hugh de Prouge and a band of twelve vassals set out on the Second Crusade, but never managed to get farther than the South of France, where they remained some thirty years before returning to their wives and families. However, when the band did turn back to England, they set about selling ornate chalices to various cathedrals and abbey churches, claiming to the unhappy, but guillible buyers that these were the true Holy Grail. Upon learning of this, Pope Innocent the Bloody

became so incensed that he ordered Prouge-super-Boghs to be sacked, razed, and ploughed under. But Richard I, then fast dying in France, begged of the Pope to spare this village of his realm. Innocent, in view of the sacredness of the request and in return for payment of 30,000 silverducats, acceded to Richard's plea.

Only scattered patches of history or legend survive to shed light on the progress of Prouge through medieval and early modern times. It is known that Edward I, while en route to Wales, stopped there to spend the night, but arose not long after retiring to move on to the next village. During the reigns of the Tudors it was frequently used as a place of banishment for petty courtesans in ill-favour. It is indeed unfortunate that the Bishops of Bath and Wells until 1808 did not see fit that parish records should be kept there, for otherwise we should know much more about what really went on.

But the Industrial Revolution was to change the sleepy indolence of Prouge-super-Boghs. When, at the general amnesty on the death of George III in 1820, Nathaniel Prouge was released from debtor's prison, he swore an oath upon his return to his ancestral demesne. He solemnly vowed that from henceforth he would start doing well. His resolve was soon to revive the depleted exchequer of the House of Prouge and to bring new liveliness and activity to the life of the Village. With a shrewd sense for the spirit of the times, he undertook to manufacture hot water bottles, which at that time were fast coming into public favour in preference to often dangerous and uncomfortable heated bricks. With his industry and frugality and also with an advantageous supply of women and children in the district, he flourished in his enterprise. By the time of his accidental death in 1843 the factory had risen to be the second largest producer of hot water bottles in the West of England. It was nationalised in 1946. Among the Villagers it is claimed that here the trade unionist movement was born in England, but this is possibly a distortion. Other local industries include the manufacture of the famous local cider, "Slivowidge", tanning, and some other things.

It was in 1903 that the Family of Prouge achieved the distinction of being awarded a hereditary baronetcy when King Edward VII knighted Humphrey Algernon Prouge for his many services and favours while his Majesty was Prince of Wales. The family, with its characteristic spirit of dash and adventure, are to be found today in many parts of Empire and world. Several variations in spelling the name exist since many colonial Prouges democratically have shunned riding on the reputation of the family. It is feared, however, that the title may disappear from the Village since the present incumbent and sole male, Sir Noel Prouge, 84 and a bachelor, has no legitimate issue.

ITS ATTRACTIONS

But what of its attractions? Doubtlessly foremost among the noteworthy sights of Proughe-super-Boghs is its own Stately Home, Proughe Gables Manor House (admission 6d.), which dominates the view of the hamlet from its lordly perch astride the gasworks (admission 6d.). The foundations for the present structure were laid in 1524 at the order of Cardinal Wolsey to "bee an huntinge lodge for y-saide paupered byshoppes ande impauverished abbottes," but with his decline from public life the project foundered. In 1603 the Proughe family erected a fortified manor on the site, but it took only the Blight of 1734 to complete the final course of decay. While portions were rebuilt so as to be habitable, it was not until 1885 that the estate was completely renovated and restored to the dimensions in which we see it today.

For the work the great architect, traveller, and poet Sir Ivanhoe Cromwell (1824-1886) was commissioned. The style chosen was that of Indian Gothic and indeed it is a veritable epigram in stone to the spirit of the day. Of note are the Great Hall, which combines the splendour of Classic elegance with the mystic warmth of Hohenstaufen Romanesque. A must is the Neo-Rococo Chapel (Wesleyan Methodist) with its memorable stained-glass. This depicts in the North, South and East Windows respectively "Art", "Commerce", and "Chastity Rewarded". Cromwell's untimely suicide unfortunately precluded the complete realization of his artistic vision, but his style and *Geist* are everywhere apparent.

In 1932 the family donated Proughe Gables to the Commercial Junction Labour Council, which—generously allowing the Proughe's to retain the Regency tool shed as a residence in perpetuity—converted it into the District Working Man's Social and Sporting House. Their patriotism led them in 1940 to yield the premises to the nation as an internment camp for captured other ranks of the Nazi SS.

One of the final acts of the retiring Conservative Government in 1945 was to place the estate in the hands of the Ministry of Works, over heated protests from all three parties. In 1949 at the recommendation of the Arts Committee of the Trades Union Council it was declared a National Beauty Spot to help defray increasing costs of maintenance.

Visitors will find that high teas are served in a canteen in the manor keep, known as "The Prougheerie" (unlicensed). This spacious and attractive room with its interesting appointments and imported music facilities may be hired for private purposes upon application to the manageress. Summer guests to Proughe

find much to comment about in the exciting spectacle on alternate Tuesdays of "Son et Lumière".

THE KURHOUSE

In the summer of 1910 a German visitor to Britain, Dr Magnus Kneipe-Bummel, travelling to Bath, had the misfortune to lose his edition of Baedeker and strayed into the Slough of Proughe. Powerless to move without a guide book, he frantically demanded another copy from the local newsagent and tobacconist. But since his representations apparently caused some alarm to the shop's mistress, who had no German, he was seized by nearby ruffians and cast into the Village sulphur pits. Little, at the time, could they have realized what a glorious thing they had done!

For Prof. Kneipe-Bummel was none other than Europe's foremost specialist in charged waters and medicinal mud. During his convalescence in Proughe he made certain furtive investigations and was able to announce to the Village Witan that the sulphur pits, so manifestly ignored throughout the centuries, possessed extraordinary healing qualities, as well as an underground spring of thermal *Sumpfwasser*, invaluable for the relief of divers disorders.

A charter for the Municipal Kurhouse was granted the following year and the Professor was able to continue as director until 1914. Since its founding, countless people have come seeking a cure for rheumatic disturbances, liver conditions, bronchitis, nervous tension, gastric troubles, and certain other diseases. An attractive feature of the Kurhouse is the Pumpe Roome, where guests may take the waters tastefully served to music of the Grand Hotel variety. A trained staff is now able to dispense the thermal elements with far greater precision than erstwhile owing to the advances of postwar physics.

Holiday makers will encounter much to do during their sojourn in Proughe—although many prefer simply to remain idle. The centre of resort social activity is the imposing Le Pavillon, adjoining the Kurhouse, where teas-dansants are held in season every afternoon save Sunday. Card-playing is permitted in the elegant Spiel Casino and betting-slips may be surrendered there. With the help of the British Travel Association, a Village Festival is being planned and it is expected that Morris Dancing will soon be introduced.

THE TOWN

If the visitor will walk through the streets and lanes and byways of Proughe-super-Boghs, he will soon gather an impression of the quality of its charms. Let him saunter down High Street—there at the corner of Commercial Junction Road is the parish

church, St Ethelreda's-Lesser, where the devout have worshipped for well nigh unto three-quarters of a century. John Betjeman has described it as "a landmark of its kind". Let the visitor relax and have his luncheon at the Great Western Railway Hotel or the Lamb's Head Chop House, where they serve up the food that has made Britain stalwart! Or walk down Great Albert Lane to take tea and Mrs Hutchin's Bide-a-Wea Tea Shoppe. Or have a pint at the Saracen and Griffin. Let him try a couple of widgins of Prouge's own cider "Slivowidge" and then test his skill with that of the locals at "Shove Ha'Crown"! And as he catches the next train, he cannot fail to notice the war memorial opposite the railway station. It is dedicated to those who served in the Home Guard during the Boer War; built by a Town Council whose sense of the appropriate was greater than their resources, it is inscribed with the motto of the House of Prouge:

'SI HANC INSCRIPTIONEM INTELLIGERE
POTES, AMICE, QVID HIC AGIS?'

G. H. K.

College Recruitment

by G. C. L. BERTRAM

OUR College is a self-perpetuating independent corporate body, and we hope that it is an immortal one. Now in our 450th year we are certainly larger than ever before, and perhaps more influential. Five former members of this College are now Masters of Cambridge Colleges (our own, together with Pembroke, Caius, Selwyn and Churchill). Yet these are difficult days in the evolution of the national system of University education: there are wild ideas based upon insufficient perspective as well as wise ponderings upon practicable improvements. The actual recruitment of Colleges is a topic upon which misapprehensions often prevail; and ignorance has stimulated assertions not favourable to the continuation of our present freedom to admit whomsoever we may wish—provided they achieve the rather humble matriculation requirements of the University.

The initial selective process, by which a College nourishes itself from year to year and from generation to generation, is the very core of its being. The details of that selective process properly change with the passage of time and with variations in the academic, social, and economic climate of the nation. This present contribution to *The Eagle* is concerned, not with the evolution of the College's selective system but mainly with the United Kingdom Schools from which our undergraduates are drawn.

In this whole matter there are three chief aspects for consideration; first, the objectives of selection; secondly, the mechanism of selection; and thirdly the results of selection as measured by the area of recruitment.

The objectives of selection

The necessity for selection continues in so far as freedom exists for the individual to seek to go wherever he may wish for his highest academic training and development, and in so far as there is public recognition that there is a variation of quality as between the Colleges and the Universities of the country. Parity of esteem is highly improbable though the order of esteem will and should change with time. St John's College stands very high in public esteem at present and, therefore, many able people compete, in their freedom, for the limited number of places which annually we can offer. No wonder that in fact there are varied concentrations of talent among the country's places of

University education. Past members of the College do not always appreciate how highly competitive is now our entry.

We ourselves, in our Collegiate capacity, seek to nourish the College by selecting the very 'best' of the young men who offer themselves to us in such gratifyingly (if inconveniently) large numbers. We recognise, too, that later on a large proportion of our Fellows will be people selected originally by our standard tutorial machine. We seek to select the 'best' whatever variations there may be in the total meaning of that word, which certainly includes academic ability, willingness to work, character, personality and vigour, this last factor often exemplified by skill in games. Apart from variations in meaning we can never strictly demonstrate, in the absence of controls, that our selections have been of the 'best'. On the other hand a group of Tutors, with varied personal backgrounds and a great width of personal contacts with the schools, all putting much effort into selecting the 'best' from among the many, are not likely to be altogether unsuccessful in a task which jointly they pursue almost continuously throughout the years.

The national propriety of competitive greed for the 'best', as between the Colleges and Universities of this country—with all the inevitable repercussions—is a matter to which commonly too little detailed thought is given. But that is a matter which should be argued at length elsewhere. Here there is need only to assert the conviction that competitive greed for the best is requisite for the well-being of a country which depends fundamentally upon expertise. To that end the best polishing of its most able young men is essential, a polishing which in considerable measure depends upon a high concentration of talent so that there is much mutual stimulation under residential conditions. The importance of the Open Scholarship system is but one aspect of the enforcement of high standards. This however is far from an assertion that all is entirely well with the further education of those who do not achieve a University, or indeed of those few per cent who do.

The Process of Selection

Mr C. W. Guillebaud*, a few years ago when Senior Tutor of the College, published in *The Eagle* some account of these matters. Here there is need for a few points only.

Variety, in the selective mechanism as between Colleges and between Universities, we believe to have fundamental worth because of the variety of the talents and of the needs of the young people concerned. Variety provides a lively elasticity within the system despite the heavy administrative burdens which inevitably ensue. Only thus can there be approach to equality

of opportunity, equality of freedom to try and, of course though often forgotten, equality of opportunity to fail. Competitive greed, which as already explained is believed to be worthy, may well foster variety in the detail of the selective process. Quite how great is the detailed variety between the selective mechanisms of the Colleges is a continuous surprise to us all when we begin to talk in detail, about the relative uses made of examination, report and interview. Here we tend to choose early: errors are not denied, but they are few.

St John's has long performed its whole selective effort with the aid of an Admissions Committee made up of Tutors. No admissions are the work of one man alone, a most desirable feature of our own system. Only thus can pressures be withstood: only thus can justice be seen to be done as well as be done. Relatively, the College takes considerable note of public examinations and sets no entrance examinations for pensioner (commoner) places, has much regard for school reports and little for special interview.

The Admissions Committee, from the many, chooses the few. In fact it chooses about four-fifths of the annual intake of 'schoolboy' freshmen. The other fifth chooses itself by means of the highly competitive Scholarship Examinations. These are, in this College's view, of immense importance, allowing the entry of able people by a different route. The young man of talent, of sufficient talent, may freely enter and is welcome, despite any personal awkwardness, any mischance in the public examinations, any dilletantism, any narrowness, any dislike by his headmaster and so on. There is freedom and equality of opportunity.

In fact in St John's we regularly find that about half of our Open Scholarships and Exhibitions are won by people to whom we have already promised pensioner places, the integration of their earlier-judged qualities having already placed them among the 'best' offered to us.

The sons of Johnian fathers sometimes do and sometimes do not have the talents which, on integration, place them among the 'best' for selection. The College is most happy where this happens and especially when they win Open Awards. In fact about one-seventh of all those in the College at this time are the sons of Johnian fathers. Other things being apparently equal, the Johnian father is certainly an asset. Our inability to promise a place in the College is no slur on an individual's fitness for University education. It means, simply, that even better people are seemingly available to this particular College at a particular date and in a particular subject.

The Schools of Recruitment

Whence then come the College's freshmen? Of the schools from which they come we can present the following analysis from the last 25 years.

* *The Eagle*, Vol. LVI, March 1955, No. 246, pp. 123—131.

This present analysis* concerns the many and varied United Kingdom schools alone, and includes those people who have come from them direct to the College as undergraduates—albeit of course often with an intervening period of National Service. Those educated overseas, and those who came to the College after a degree course in another University have been excluded. Those included make up about 80% of the College's total intake.

The number of schools, from which undergraduates might theoretically reach this and other Colleges, is enormous. In fact, the total is a good deal less, just under 600 in our case, though this figure is guessed to represent a considerably wider recruitment than many if not most or all Colleges. So far as is known none of them have published detailed figures of the extraordinary diversity of schools from which come the undergraduates of Cambridge. A familiar quip may well have much of truth—that St John's has the head boy of every minor school in the country.

Errors, both in the records and in this analysis, are not denied, but it is believed that the errors are insignificant. The commonest probable error is a misnaming in the records of schools with closely similar names.

The use of the term 'Public School' is deliberately avoided, both because it is not properly definable and because it has false connotations in the minds of many. A distinction is made between Head Masters' Conference Schools and the rest, a distinction which is enlarged upon later.

The College's Michaelmas freshmen lists have been scanned to give the schools of immediate origin in the United Kingdom for 19 separate years. These years include the last normal pre-war quinquennium, 1934-38, the first supposedly normal post-war decade, 1947-56, together with the last four years, 1957-60. The 'scholars'—open entrance scholars and exhibitioners together—have, additionally, been extracted from The Reporter and analysed separately. The total of junior members of the College has varied substantially within these periods.† The following are approximate average figures:—1934-8—440; 1947-51—630; 1952-6—595; 1957-60—710.

The Analysis

In order to obtain 2,958 United Kingdom freshmen (pensioners and scholars together) in 19 years, St John's has recruited from 583 schools. Of these schools 178 are H.M.C. schools providing

* Part of this analysis appeared in the *Cambridge Review* of 23 January, 1960, over the joint names of Colin and Kate Bertram. Many thanks are due to my wife for her further numerous hours of detailed labour in extraction and analysis for this present paper.

† Three factors are relevant here. First, the proportion of affiliated and research students has risen. Secondly, the proportion of men doing four year courses has risen. Thirdly, there are temporary increases resultant upon the ending of National Service.

2,020 men, while 405 other schools have provided 938 men. The H.M.C. schools (31% of the total schools of recruitment) have provided 68 per cent of the total men. A relevant feature here is that, usually in H.M.C. schools, the sixth form is proportionately a good deal larger than in many other schools.

Likewise for entrance scholars (including exhibitioners) separated from the pensioners, the figures are these. In order to obtain 600 scholars (i.e. 20 per cent of total freshmen) in the same 19 years, St John's has recruited from 266 schools. Of these schools 113 are H.M.C. schools providing 392 scholars while 153 other schools have provided 208 scholars. Thus, the H.M.C. schools (43 per cent of the scholar-providing schools) have provided 65 per cent of the total scholars. In fact, the H.M.C. schools regularly provide two-thirds of the St John's total scholars just as they do two-thirds of the total freshmen.

A further aspect of any College's recruitment is this. For reasons both of history and of personal knowledge, Colleges have special connections with particular schools, connections which are treasured on both sides, connections which may wax and wane with the coming and going of particular headmasters, housemasters and others. This is presumably in conformity with the Crowther Report's plea for 'getting to know the schools'. The connections between St John's and Shrewsbury and Sedbergh are well-known examples. Further, if the sons are sufficiently good academically, then a continuity from generation to generation within a College has real worth in terms of loyalty and indeed of stability in a changing world.

Set out below are the figures for the 10 schools which have in fact contributed the largest number of freshmen to St John's in the 19 years under present analysis:

	Total	Scholars
Shrewsbury ...	90	10
Marlborough ...	78	9
Sedbergh ...	69	8
Manchester Grammar	61	38
Oundle ...	54	8
Rugby ...	54	5
Durham ...	50	2
Uppingham ...	44	3
University College ...	36	9
Repton ...	36	5

Thus, 10 schools (all H.M.C. schools) have provided together 19 per cent of all men and 16 per cent of all scholars. Prominent is the special and remarkable part played by Manchester Grammar School, a body which itself skims highly selectively the 'best' from a very large population.

The Headmasters' Conference Schools

Some further comment may be useful upon these diverse H.M.C. schools which regularly provide so large a proportion of our men, and offer us so many more who must be disappointed. The H.M.C. schools certainly form a convenient list* (which includes most of the 'Public Schools' of popular parlance), but inclusion in this list indicates no necessarily substantial difference from many other schools not on the list.

There is in fact such immense diversity among our schools that their easy classification defies us. The H.M. Conference, for reasons of organizational convenience, includes a maximum of 200 schools; they are boarding and/or day; they are 'controlled in the public interest by a Governing Body created by some statute, scheme (etc.) . . .'; they all have a 'measure of independence'; and the 'number of resident undergraduates of Oxford and Cambridge or other British Universities educated at the school' is a desideratum for admission to the list. The H.M.C. schools vary in size from the 1,350 of Manchester Grammar School to the 250 of St Bees. Often there is powerful intellectual competition to get into these schools: Winchester and Manchester Grammar School are notable examples.

There is great variation in the cost to the parents of maintaining a boy at an H.M.C. school, depending of course, largely on whether it is tuition by day or full board and lodging in addition which is being paid. There are numerous further independent schools and direct grant grammar schools of good quality, though mostly of smaller size or co-educational, which are not included in the H.M.C. list, and all of which likewise require fees to be paid by the parents. The total population, and indeed popularity of these schools is greater than ever before.

Indubitably the parents who send their children to independent schools (including the H.M.C. schools) are of diverse type, and published estimates indicate that about half of the fathers were not themselves educated at such schools. They are at one in their fancy that such schools in general, though certainly not always, provide a better education and preparation for the University than they themselves as taxpayers at present provide through the State system. Often they back their belief at substantial economic sacrifice, exercising an important freedom within the educational system, and following the natural urge to do the best for one's children. Incidentally, it is the independent boarding schools of the United Kingdom which allow oversea service by Britons to be relatively so much less of an undertaking than it is for citizens of the United States.

* In this article the 1957 Edition of the Public Schools Yearbook has been used.

Opportunity

All schools, of course, have freedom to attempt to get men into a Cambridge College, either through the tutorial (or admissions committee) sieve, or by the Open Scholarship examinations. Of scholarship candidates roughly one in 10 wins an award, and about the same factor applies in the selection of pensioners. It is worthy of repetition that in recent years in St John's about 50 per cent of the open scholars and exhibitioners have already been promised places as pensioners upon the evidence of quality earlier available.

A College must in fact select from the candidates offered and, with rare exceptions, only the good are offered—good in the sense of intellectual calibre and/or of other abilities commonly grouped under 'leadership quality'. A College, too, must seek to contain a 'proper' balance as between subjects, both so that undergraduates individually may mature in a wide intellectual environment and educate each other, and so that there may be disciples in every form of scholarship. A College must contain, for example, able archaeologists and theologians though the number of freshmen per year, even in a very large College, in such subjects will be no more than three or four. However, not many able boys will be on offer in such subjects in comparison with the seeming flood of natural and mechanical scientists struggling for places. It is in these subjects that the State Scholar, in his penultimate year at school and headboy in addition, has quite often found himself turned down so disappointingly for a pensioner place and advised to select himself by winning an Open Award. In this connection, would that the actual technique of Open Scholarship examining might be improved so that great inherent ability could be more surely judged at a lower standard of actual attainment.

Uninformed critics sometimes accuse the Colleges of class bias in the selection of undergraduates. We refute that accusation, at any rate for this College in recent times. For the unmindful it is appropriate to stress that inherent ability, though fortunately widespread, is not equally spread over the 'social classes' as defined by the Registrar General*: expectedly therefore the sons from particular 'classes' are more highly represented in Cambridge Colleges as a direct corollary of attempting to choose

* Registrar General's classification of Social Class and the distribution in the general population of men aged 45–64 years old:

		Per cent
I.	Major professions and large employers	3
II.	Minor professions and small employers	18
III.	Clerical workers and skilled manual	47
IV.	Semi-skilled manual	17
V.	Unskilled manual	15

those of highest calibre. Whatever the difficulties of precise assessment, and whatever the happy exceptions, the relationships between 'social class', monetary income, ability of parents and ability of children are all positive correlations. This in no way invalidates the attempt to offer equality of opportunity wherever ability appears, nor is it a denial of the importance of favourable environmental factors in the development of the individual.

APPENDIX I

Summary of Analyses

The following summarized points emerge from the main analysis of the College's 583 schools of recruitment for the most recent 19 non-war years.

1. Nearly one-third of the total schools listed are Head Masters' Conference Schools and these have provided over two-thirds of the freshmen admitted. The average number provided by each H.M.C. school is 5 times that of the other schools.
2. Nearly half of the 583 schools on the list, including two-thirds of the H.M.C. schools and over one-third of the other schools, have produced scholars.
3. About one-fifth of all freshmen are scholars and almost two-thirds of these come from H.M.C. schools. The average number of scholars provided by each H.M.C. school is just more than twice that of other schools. Thus the ratio of scholars to freshmen is about the same in both types of school, though very slightly lower in H.M.C. schools.
4. The number of schools providing freshmen increased by over one-third after the war and at the same time there was a fall in the proportion of H.M.C. schools represented. Similarly there was a marked increase in the number of freshmen admitted after the war, but only a slight fall in the proportion of those coming from H.M.C. schools. Consequently the average number of men provided by each H.M.C. school increased.
5. The 10 schools, all H.M.C., which have provided the largest numbers of freshmen during the period have contributed 19% of all men admitted and 16% of all scholars. The total number coming from these schools about doubled after the war, but there was only a slight increase in the number of scholars.
6. About half of the schools provide only 1 man in a quinquennium and about four-fifths produce less than 6, this proportion falling slightly in later years. Among H.M.C. schools less than one-third produce only 1 man in a quinquennium and about one-fifth contribute more than 5, whereas in the other schools more than two-thirds provide

one man and only 1% of them produce more than 5 in a five year period.

7. At Michaelmas 1960, the College welcomed freshmen from 23 further schools not previously listed in the 19 years under analysis. There are now less than a score of the nearly 200 H.M.C. schools which have not provided recruits to the College in those years.

APPENDIX II

The monthly distribution of birth dates of undergraduates of St John's College

In seeking to be fair in further selection, it is desirable to check where possible upon the fairness of selections already made. This is an attempted assessment relative to a particular variable factor.

For more than a decade the College's Admissions Committee has had a particular care to attempt fairness to each successive year-group of young men. It has had this particularly in mind because of the fluctuating and varied incidence of National Service. It has, therefore, selected what it regarded as the proper number of the best men out of each year-group in turn, and has done this irrespective of the year in which the men might in fact come into residence. It has not, as some other Colleges appear to have done, selected men for admission at particular dates. This regularity in policy, and its observable fairness, has certainly not damaged the College's prestige with the schools. With the ending of National Service the Admissions Committee may perhaps now modify its system.

The agreed minimal age for admission to the College being 18 years and no less, an age group has been defined as those born between 1st October in one year and the 1st October in the next, plus a marginal group consisting of those born in July, August and September who have been regarded as possible members of two succeeding year groups, rather young candidates for the first, rather old for the second.

We have a school academic year which provides examination evidence about young men only once in the twelve months (June or July), and a University academic year which starts in a different month. Yet the people in question are born throughout the year, a biological inconvenience well known to educational administrators and others.

An interesting feature is that there is evidence that the average I.Q. of children born in particular months varies by a little.*

* In Fraser-Roberts' Bristol Survey (*British Medical Journal* 1944 (i) p. 320) those born in May to October were, by a little, superior to those born from November to April (a difference of 1.7 points), while in the *Trend of Scottish Intelligence* (1947 Table III p. 58) the 1936 spring-born children were superior (by a possible 4.2 points as between April and December).

However, allowance for this factor would have been a refinement beyond the selective powers of the Johnian Tutors.

It is sometimes said (perhaps with dubious truth) that, for academic advantage, children should be spring-born. Indeed perhaps some people make their arrangements to this end, possible academic and real climatic advantage seeming to run together. Spring birth fits well, in addition, with the Open Scholarship system where the age of 19 must not have been exceeded on 1st December. The annual incidence of the 11+ examination (often held in March) is now a new complicating factor. The long term planning required, to achieve the maximum academic advantage for one's future children, is likely to be more frequent among the Registrar-General's first two Social Classes,* from which in fact so many of our undergraduates are drawn, than among the majority of the population. The actual spring rise, in the national month of birth figures, is much more likely to result from deep-seated biological influences together with the incidence of bank holidays.

The College Tutors are not unaware of these interesting complexities which, they hope, are smoothed away by their joint wise judgment.

Yet, in selecting from each year-group there is clearly danger (both in Headmaster's assessments, and in Tutor's interpretation of the evidence available) in fancying that the boy who takes his A levels for the first time at 17.11 is necessarily of markedly lower calibre than one who takes these examinations at say 17.3. At age 17 development is rapid. The boy born in April may easily take A levels at 17.3 whereas his cousin, of equal fundamental ability but born in the following August, will be obviously too young at 16.11 yet may look rather elderly taking the same examination at 17.11.

In all these circumstances there is worth in analysing the work of the College Admissions Committee to see how the distribution of birth dates of undergraduates compares with the national distribution of birth dates throughout the year. The national distribution is by no means entirely uniform. There is, roughly speaking, a regular national spring rise of births culminating in May, with minima in February (shortest month too) and November, though the variations are quite small. It could be unfortunate, not to say unfair, if the birth dates of undergraduates were much differently spread throughout the year.

To test this matter the College Register was studied. The dates of birth, month by month, were extracted for all men admitted to the College who had been born in England and Wales in the

years 1932 to 1939. These years included a total of 1,209 such men* who came into residence after 1950.

Thus, the monthly percentages (of total annual births) could be compared of Johnian freshmen and the nation (England and Wales).

In fact there seemed to be some degree of discrepancy, with a peak of Johnian births in August and a low in January. The total figures for the College, however, were not as great as might have been welcomed statistically. Nevertheless Mr R. C. Carpenter (of the Department of Human Ecology) has kindly worked upon them, and his conclusions, in essence are these.

Boys born in August have a 30% greater chance than the rest of being admitted because some of them get two opportunities for selection—i.e. they are included in two successive year groups. He added that it was most unlikely that being born in August gave more than a 60% increase in the chance of admission. The departure from expectation (the low) in January may have been real but it could possibly have been a chance effect.

The general conclusion is then that nothing had gone extremely wrong with the Admission Committee's desire to be quite fair to all in selecting for admission, but that there was some evidence of excessive kindness to those born in August, and harshness to those born in January.

These are fascinating by-ways in undergraduate selection: possibly others may be stimulated to pursue them. The difficulties of advising young men about to marry may be greater than some Tutors realize.

* Extraction from the Register in this way unfortunately makes it impossible to distinguish between normal Pensioners (i.e. Tutors' selection), Scholars (i.e. self-selection with the aid of examiners) and 'Nominees' (i.e. people sent by the Colonial Office, etc., for whom there is really no selection). The Scholars and the 'Nominees' dilute the Pensioners with whose selection this little investigation is primarily intended to be concerned.

Work upon the Register impresses the reader with the fewness of Scottish-born undergraduates and the frequency with which undergraduates have been born overseas.

* See footnote on page 193.

College Notes

Honours List

New Year Honours, 1961:

K.C.V.O.: ROBERT SOMERVILLE (B.A. 1929).

C.B.: Mr J. A. C. ROBERTSON (B.A. 1934), Under Secretary, H.M. Treasury.

C.B.E.: Mr W. A. B. HOPKIN (B.A. 1936), Deputy Director, Economic Section, H.M. Treasury.

C.B.E.: Dr A. W. WILLIAMS (B.A. 1926), Professor of Medicine, Makerere College, Uganda.

Elected into Fellowships

Dr F. G. FRIEDLANDER, of Trinity College (B.A. 1939), University Lecturer in Mathematics, has been appointed a College Lecturer in Mathematics and elected into a Fellowship from 1 October, 1961.

Mr DAVID LOCKWOOD, University Lecturer in the Faculty of Economics and Politics, and supervisor in Sociology in the College, has been elected into a Fellowship.

Dr W. A. DEER (Ph.D. 1937), formerly Fellow, has been re-elected into a Fellowship from 1 October, 1961, on his election into the Professorship of Mineralogy and Petrology.

Sir HUGH MACKINTOSH FOOT (B.A. 1929), G.C.M.G., K.C.V.O., formerly Governor of Cyprus, has been elected into an Honorary Fellowship.

The Right Reverend FREDERICK DONALD COGGAN (B.A. 1931), Lord Bishop of Bradford, and Archbishop-designate of York, has been elected into an Honorary Fellowship.

Prizes, Awards, and other Honours

Members' English Essay Prize: C. VITA-FINZI.

Carus Greek Testament Prize: S. W. SYKES.

David Richards Travel Scholarships: N. F. LARGE, E. G. MOORE.

Henry Arthur Thomas Travel Exhibitions: A. J. BRIDGE, J. J. COULTON, J. G. F. HIND, J. MILLER.

Grant from the William George Collins Endowment Fund of the Engineering Laboratory: R. BUCHANAN.

The John Mackrell Prize, on the Law Society Final Examination of June 1960, has been awarded to Mr T. M. ALDRIDGE (B.A. 1955).

Sir JOHN COCKCROFT (B.A. 1921), Honorary Fellow, has received the Atoms-for-Peace award for 1961.

The Copley Medal of the Royal Society has been awarded to Sir HAROLD JEFFREYS (B.A. 1913), Fellow.

Mr T. C. WHITMORE (B.A. 1956), Fellow, has been awarded the Rolleston Memorial Prize of the University of Oxford.

Sir JOHN COCKCROFT, Honorary Fellow, has been elected an Honorary Fellow of the National Institute of Sciences of India.

The Institute of Classical Studies of the University of London has made an award from the Michael Ventris Memorial Fund for Mycenean Studies to J. T. KILLEN (Matric. 1959).

The Gunning Victoria Jubilee Prize of the Royal Society of Edinburgh has been awarded to Sir EDWARD APPLETON (B.A. 1914), Honorary Fellow.

Mr J. N. BHAGWATI (B.A. 1956), has been elected into a Fellowship in Nuffield College, Oxford.

On 2 October, 1960, the honorary degree of Doctor of Divinity was conferred by the University of Edinburgh upon the Rev. W. O. CHADWICK (B.A. 1939), Master of Selwyn College, Cambridge.

Academic Appointments

Dr M. D. COWLEY (B.A. 1955), Fellow, to be Senior Assistant in Research in Engineering.

Mr J. C. HALL (B.A. 1948), Fellow, to be a University Lecturer in Law.

Dr J. R. SHAKESHAFT (B.A. 1952), formerly Fellow, to be a University Demonstrator in Physics.

Dr O. M. PHILLIPS (Ph.D. 1955), formerly Fellow, to be Assistant Director of Research in Dynamic Oceanography.

Mr J. G. ROBSON (B.A. 1957), to be a University Demonstrator in Physiology.

Mr G. M. BLACKBURN (B.A. 1956), to be a University Demonstrator in Organic and Inorganic Chemistry.

Mr R. G. CARPENTER (M.A. inc. 1955), to be Assistant Director of Research in Human Ecology.

Dr J. W. CRAGGS (Ph.D. 1955), has been appointed Reader in Applied Mathematics, and Mr A. W. GOLDIE (B.A. 1942), Reader in Algebra, at King's College, Newcastle upon Tyne.

Dr M. L. ROSENHEIM (B.A. 1929), Professor of Medicine, University College Hospital Medical School, London, has been appointed a member of the newly established Tropical Medicine Research Board.

Mr I. S. STEPHENSON (B.A. 1952), has been appointed Lecturer in Law in the University of Durham.

The Rev. A. T. WELFORD (B.A. 1935), Fellow and Tutor, has been appointed to give the F. E. Williams Lecture of the Royal College of Physicians in July 1961.

Mr H. A. RYDINGS (B.A. 1948), sub-librarian of the University College of Ghana, has been appointed librarian of Hong Kong University.

Mr R. HYAM (B.A. 1959), has been appointed College Lecturer in History at Magdalene College.

Dr R. N. ROBERTSON (Ph.D. 1939), has been appointed Professor of Botany in the University of Adelaide.

Mr D. A. FOXALL (B.A. 1942), assistant master at Brentwood School, has been appointed headmaster of Forest School, Snaresbrook, Essex.

Mr D. R. COX (B.A. 1946), has been appointed Professor of Statistics at Birkbeck College, University of London.

Ecclesiastical Appointments

The Rev. J. N. DUCKWORTH (B.A., from Jesus, 1935), Chaplain of St John's College from 1946 to 1948, and now Chaplain to Pockington School, has been appointed Chaplain of Churchill College, Cambridge from October, 1961.

The Rev. S. ROBERTSON (B.A. 1930), vicar of Wroxton, Oxfordshire, to be rector of St Creed, Cornwall.

The Rev. D. A. REED (B.A. 1948), formerly principal of Schlenker Secondary School, Port Loko, Sierra Leone, to be rector of Berrynarbor, Devon.

The Rev. H. T. MOGRIDGE (B.A. 1913), rector of Thakeham, Sussex, and prebendary of Chichester Cathedral, to be rural dean of Storrington.

The Rev. W. H. DEW (B.A. 1924), vicar of Barrow on Soar, has been appointed an Honorary Canon of Leicester Cathedral.

Resignations:

The Rev. W. BYRON-SCOTT (B.A. 1908), vicar of Masham, Yorkshire, since 1940.

Ordinations:

Mr P. C. DODD (B.A. 1957), of William Temple College, Rugby, was ordained deacon by the Bishop of Sheffield on 25 September, 1960, to the curacy of St Stephen, Eastwood, Rotherham.

The Rev. M. A. BENIANS (B.A. 1941), was ordained priest by the Bishop of London on 29 September, 1960.

Legal Appointments

Mr JOHN MEGAW (B.A. 1931), Q.C., has been appointed a Judge of the High Court, and has received the honour of Knighthood.

Mr P. QUASS (B.A. 1913), Q.C., has been elected a Master of the Bench of the Inner Temple, and Mr E. R. BOWEN (B.A. 1935), Q.C., M.P., a Master of the Bench of the Middle Temple.

On 22 November, 1960, Mr R. H. J. JONES (B.A. 1953), and Mr G. D. MERCER (B.A. 1957), were called to the Bar by Gray's Inn.

In February, 1961, Mr P. G. CONSTANTINIDES (B.A. 1960), was called to the Bar by Gray's Inn, and Mr T. M. L. LEE (B.A. 1959), by Lincoln's Inn.

Mr J. S. SNOWDEN (B.A. 1923), Recorder of Scarborough, has been appointed deputy chairman of the West Riding Quarter Sessions.

Public and Other Appointments

Group Captain P. H. BALDWIN (B.A. 1939), R.A.F., has been appointed naval, military and air attache at the British Embassy, Rio de Janeiro, Brazil.

Mr R. W. SHEPHERD (B.A. 1948), has been appointed farm director at High Mowthorpe Experimental Husbandry Farm, Duggleby, Malton, Yorkshire.

Mr J. A. L. GORRINGE (B.A. 1940), has been appointed director of the clinical investigation department of Parke, Davis and Company.

Mr D. A. OGILVIE (B.A. 1950), has been appointed a director of Baker Perkins (Exports), Limited, engineers, of Swallow Street, London, W.

Mr H. BOWDEN (B.A. 1953), has been appointed a Probation Officer for Macclesfield.

Mr K. H. HEAD (B.A. 1948), has been appointed engineer in charge of the Soil Mechanics Laboratory on the Mangla Dam Project, West Pakistan.

Mr G. R. BELL (B.A. 1937), has been promoted Under Secretary in H.M. Treasury.

Mr P. LAMARTINE YATES (B.A. 1930), has been appointed Director of the joint agriculture division of the Economic Commission for Europe.

Mr J. T. BROCKBANK (B.A. 1942), has been appointed Clerk to the Durham County Council.

Mr W. D. MORTON (B.A. 1945), has been appointed assistant general manager of the Witton works of General Electric Company, Limited.

Mr J. S. HOLLINGS (B.A. 1944), has been appointed a director of Rolls Royce and Associates, Limited.

Mr R. H. DEL MAR (B.A. 1936), has been appointed Chairman of Lever Brothers, South Africa.

Marriages

WILLIAM JOHN DENBIGH DOWN (B.A. 1957) to SYLVIA MARY AVES (of Newnham College, B.A. 1959), daughter of M. J. Aves of Great Shelford—on 29 July, 1960, at Trumpington Parish Church.

DENNIS HOWARD FORD (B.A. 1952) to ELIZABETH MARY WALLIS, daughter of E. J. N. Wallis, of Topsham, Devon—on 18 August, 1960, at St Margaret's Church, Topsham.

EDWARD WILLIAM SAWNEY (B.A. 1957) to JENNIFER MURRAY, only daughter of Stuart Murray, of Grange Park, Middlesex—on 3 September, 1960, at St Thomas a Becket Church, Northaw, Hertfordshire.

PHILIP HAROLD ERNEST GOODRICH (B.A. 1952), Chaplain of the College, to MARGARET BENNETT, second daughter of R. L. Bennett—on 10 September, 1960, at Christ Church, Hampstead.

JOHN MALCOLM NICOLL (Matric. 1943) to CATHERINE LINDEN HOPKIN, daughter of N. Hopkin, of Hampstead—on 17 September, 1960, in London.

PETER ARTHUR JACKSON (B.A. 1960) to JOAN ELIZABETH DIMOCK, elder daughter of Eric John Dimock (B.A. 1929), of Cambridge—on 1 October, 1960, in the College Chapel.

WILLIAM REX SLATER (B.A. 1944) to ELIZABETH JEAN MILLIKEN-SMITH, daughter of K. Milliken-Smith, of Blackwell, Worcestershire—on 3 September, 1960, at St Catherine's Church, Blackwell.

CLIVE JAMES FORGIE TURNER (B.A. 1960) to JILL MATTHEWS, daughter of E. M. T. Matthews, of Johannesburg—on 8 October, 1960, at St Martin's in the Veld, Dunkeld, Johannesburg.

ALAN JAMES FOX (B.A. 1956) to MARY VALERIE HAWKINGS—on 17 August, 1960, at St Mary's Church, Berrow, Somerset.

VINCENT WHITEHEAD (B.A. 1953) to CHRISTIN CONNOLLY, youngest daughter of O. Connolly, of Palmers Green, London—on 12 November, 1960, in St Patrick's Cathedral, New York City.

JONATHAN MOSTYN MURRAY (B.A. 1959) to JILL SCOGGINS, only daughter of Air Vice-Marshal R. Scoggins, of Hadley Wood—on 5 November, 1960, at Monken Hadley Parish Church.

JONATHAN STEINBERG (Matric. 1957) to JILL PENELOPE MEIER, daughter of Oscar A. Meier, of Amersham—on 13 November, 1960, in London.

IAN DONALD COCKERELL (Matric. 1953) to FELICITY ANNE CHAPMAN—on 1 December, 1960, at Holy Trinity, Sloane Street, London.

JOHN GORDON BUCKLEY (B.A. 1959) to DEIDRE ANGELA OSBORN, music mistress at Portsmouth High School—on 28 November, 1960, at Fareham, Hampshire.

TIMOTHY WILSON GUNTER (Matric. 1960) to ROSEMARY JOY HOLDEN, only daughter of A. P. T. Holden of Bingley, Yorkshire—on 6 August, 1960, at Bingley Parish Church.

DONALD DOUGLAS FOX (B.A. 1948) to JOAN MARY WEEDON—on 3 March, 1961, at St James's, Piccadilly.

Deaths

CHARLES HENRY HOSKYN (B.A. 1935), M.D., O.B.E., medical practitioner, died at St Bartholomew's Hospital, London, 17 December, 1960, aged 48.

DUDLEY STEWART REDMAN (Matric. 1922), of Home Farm, Great Gransden, Cambridgeshire, formerly chairman of Wells and Winch, Limited, brewers of Biggleswade, died in Cambridge, 15 December, 1960, aged 57.

WILLIAM JOHN RAMSAY CONNELL (Matric. 1925), died 27 December, 1960, at Vence, France, aged 53.

RAYMOND HERBERT D'ELBOUX (B.A. 1921), F.S.A., of White-lands, Battle, Sussex, died at Machynlleth, Montgomeryshire, 5 January, 1961, aged 66.

HARVEY ANTROBUS (B.A. 1913), formerly in the Colonial Service in Cyprus, and latterly secretary of the Wellcome Research Laboratories, died 9 April, 1959, aged 67.

HERBERT CLIFTON FAIRFAX HARWOOD (B.A. 1930), died at Wye, Kent, 31 January, 1961, aged 53.

LEONARD DAY WAKELY (B.A. 1901), K.C.I.E., C.B., Deputy Under Secretary of State for India from 1934 to 1941, died in London, 27 February, 1961, aged 80.

ALAN THATCHER (B.A. 1897), solicitor, of Carshalton, Surrey, died 18 October, 1960, aged 90.

CHARLES HOOPER JARVIS (B.A. 1906), sometime Director of Education for the Borough of Wood Green, died at Clacton-on-Sea, Essex, 24 October, 1960, aged 78.

ROBERT FRANCIS JONES (B.A. 1907), M.B., formerly in medical practice at Tamworth, Staffordshire, died at Meifod, Montgomeryshire, 3 November, 1960, aged 74.

JOHN ANDREW BALLANTYNE (B.A. 1936), formerly headmaster of St Bartholomew's Grammar School, Newbury, and recently appointed headmaster of Cranbrook School, Kent, died in Eastbourne, 7 November, 1960, aged 48.

CHARLES ELSEE (B.A. 1898), honorary canon of Ripon, and sometime vicar of St Cuthbert, Hunslet, Leeds, died 2 November, 1960, aged 84. His father and two brothers were members of the College.

WILLIAM HENRY WILLIAMS (Matric. 1913), M.B.E., M.C., Lieutenant-Colonel R.A.S.C., of Ireby, Cumberland, died 15 December, 1960, aged 66.

JOHN LEONARD PATCHETT CORT (B.A. 1907), sometime headmaster of Mostyn House Preparatory School, Parkgate, Cheshire, died at Sheffield, 14 September, 1960, aged 77. His father, JOHN PATCHETT CORT (B.A. 1880), and both his grandfathers, JOHNATHAN JOHNSON CORT (B.A. 1850) and JAMES RUSSELL (B.A. 1853), were members of the College.

BERNARD HALL LEES (B.A. 1888), formerly in medical practice in Worthing, died at Worthing, 3 October, 1960, aged 92.

HENRY FITZHERBERT (Matric. 1927), planter, died at Kitale, Kenya, 28 June, 1960, aged 51.

IVOR STEWART JEHU (B.A. 1931), C.I.E., Chief Information Officer, Ministry of Aviation, formerly of *The Times of India*, died in London, 7 October, 1960, aged 51.

CLIFFORD BROTHERTON (B.A. 1922), hydraulic engineer, died 31 August, 1960, aged 59.

HERBERT WALKER SWIFT (B.A. 1920), formerly Professor of Engineering in the University of Sheffield, died at Braithwaite, Keswick, 14 October, 1960, aged 65.

THOMAS BEDFORD FRANKLIN (B.A. 1904), a master at Fettes College from 1907 to 1921, and joint headmaster of Stancliffe Hall School, Matlock from 1921 to 1933, died at Edinburgh, 11 August, 1960, aged 77.

GERHARD HERMAN ARNOLD GRAETZ (B.A. 1926), in medical practice at Huddersfield, died there 16 August, 1960, aged 56.

JOSEPH CONYBEARE McCORMICK (B.A. 1929), rector of Willersey, Gloucestershire, canon emeritus of Manchester Cathedral, a former choral student of the College, died 26 August, 1960, aged 53. His grandfather, father and two uncles were members of the College, as is his brother, MICHAEL EDWARD McCORMICK (B.A. 1930).

AUGUSTUS POUNTNEY CULLEN (B.A. 1911), for many years an educational missionary at the Tientsin Anglo-Chinese College, died at Sevenoaks, Kent, 4 September, 1960, aged 70.

CHARLES EDWARD HUDSON (B.A. 1895), headmaster of Keswick School from 1906 to 1922, died at Alverstoke, Hampshire, 7 September, 1960, aged 86.

WILLIAM GILES RAGG (Matric. 1955), Scholar of the College, who obtained a first class in the Classical Tripos, Part I, in 1957, and won the Hallam and Montagu Butler Prizes in the University, died in College, 15 October, 1960, aged 23.



WILLIAM LAWRENCE BALLS

Obituary

WILLIAM LAWRENCE BALLS, 1882—1960

WILLIAM Lawrence Balls was a Norfolk man, born at Garboldisham on September 3, 1882, and educated at King Edward VI School, Norwich before coming up to St John's College. He matriculated in the Easter Term, 1900, and was elected a Scholar in June 1901. He obtained a First in the Natural Sciences Tripos, Part I in 1902, and a First in Part II (Botany) in 1904. He was awarded the Walsingham Medal in 1906 for an essay embodying the results of original research in science. He took his B.A. in 1903, M.A. in 1907, and Sc.D. in 1916. He was elected Fellow in 1908 and held his Fellowship for six years. In 1955 he was elected Honorary Fellow.

Balls had a distinguished career in applied botany. He was appointed Botanist to the Khedivial Agricultural Society in Egypt in 1904, and worked for the Society until 1910, continuing in Egypt under the Egyptian Department of Agriculture until 1913. These nine years were formative, not only for Balls himself, but for agricultural botany both in Egypt and over a far wider field. His work on the physiology of the cotton plant in Egypt, and on its reactions to soil and water supply and climate, was the beginning of modern crop physiology. I remember in my first postgraduate year a discussion on the possibility that techniques devised by Balls for the study of the cotton plant in Egypt could be adapted for the study of the wheat plant in England.

Balls left Egypt in 1913 and turned his versatile mind to the problems of cotton technology. He designed, built and directed the Experimental Department of the Fine Spinners at Bollington. He had early developed an interest in cotton technology, and at Bollington he played an important part in developing textile research, and particularly in forging a link between the grower who had no idea what happened to his cotton after he pressed it into a bale, and the spinner who did not know how it got into the bales that came to him from Liverpool. Nowadays cotton growers and cotton spinners meet and discuss their common problems with a great deal of mutual respect and understanding. It was Balls who saw the need and who largely devised the means of creating that understanding.

Balls returned to Egypt in 1927 and remained there with the Ministry of Agriculture for the following 20 years. In that time he drew together the two sides of his interest in cotton. He pursued his study of the causes of deterioration in Egyptian cotton

varieties. He developed a breeding system that produced numerous new, high yielding varieties and devised a seed multiplication system that ensured a pure seed supply. And he planned and developed a testing laboratory that made it possible to distribute in bulk, seed of strains that had been tested and verified for spinning quality.

During the war he served as Chairman of the Scientific Advisory Committee to the C. in C., G.H.Q., Middle East, and put his scientific and technical ingenuity to such problems as the design of mine detectors, and the making good, from local resources, of deficiencies and omissions in Army supplies.

Balls played a great part in the planning of research on cotton. He was a member of the committee set up in 1917 that brought the Empire Cotton Growing Corporation into being. He served on its Administrative Council from 1921 to 1935, and on many of its committees. I met him first on the Corporation's Studentship Selection Committee, when I was a young and frightened applicant up for interview. Some months later he devoted a day of his time at Bollington to two of us during our studentship year, and he and Mrs Balls gave us lunch—Balls continuing uninterrupted the instruction on cotton matters begun earlier in the labs.

Many years later, during the war, he found the time to write from Egypt to Trinidad to warn me of the probable consequences for the West Indian Sea Island industry of his cotton breeding successes in Egypt. Then in 1945 I had the good fortune to visit him at Giza, and to see him at work in the breeding plots and the experimental spinning mill, and relaxing at the Gezira Club, where he was engaged on a study of the effect on the bowling green of the curious morphology of the *Cynodon* species used as a lawn grass.

Balls was extraordinarily versatile. The inventive capacity of his mind was matched by his technical skill with his hands. He not only designed his own instruments. He made them. He wrote with authority on his subject, and no one can claim to be educated in tropical agriculture who is not acquainted with "The Cotton Plant in Egypt", "The Development of Raw Cotton", and "The Yields of a Crop", to name three out of a long list of his publications.

He retired to Fulbourn, where he led an active life, writing, making bits of apparatus, reading widely, and even trying his skill at landscape painting in oils. He was always ready to talk on any of his many interests, and his wide knowledge was available to all both at his home and in the Combination Room.

He was elected F.R.S. in 1923, and was awarded the C.B.E. in 1934 and the C.M.G. in 1944.

He died on 13 July, 1960, leaving a widow and one son, to whom we extend our sympathy.

J. B. H.

Book Reviews

GLYN DANIEL. *The Megalith Builders of Western Europe*. (London, 1958, Hutchinson and Co., pp. 142, 8 plates, 25 text figs., 18s.)

"Once as Patrick was travelling in the plains of the son of Erc, namely in Dichuil and Erchuil, he beheld therein a huge grave, to wit, a hundred and twenty feet in length. The brethren asking 'ut suscitaretur', Patrick then brought to life the dead man who was biding in the grave and asked tidings of him, namely, when and how [he got there], and of what race and what name he was. He answered Patrick, saying, 'I am Cass, son of Glass, and I was the swineherd of Lugar, King of Imata, and Macc Con's soldiery slew me in the reign of Coirpre Niafer. A hundred years I have been here today'. Patrick baptised him and he went again to his grave". (Life of St Patrick).

The Saint was a shrewd man. The questions he asked are precisely those which a modern archaeologist must ask—although the latter, with more science but perhaps less faith, would bewilder the poor corpse by addressing him in those weighty technical terms which cost Dr Daniel some twenty pages of explanation. Patrick was fortunate, too, in obtaining such unambiguous answers to his questions. More recent students have fared less well, and during the past fifty years, the problem of megalithic monuments has grown more complicated as our knowledge has increased.

No general study of the question has appeared in English since 1912 when T. E. Peet published his "Rough Stone Monuments and their Builders". The time has come to pause again and to consider for a moment what has been achieved during the intervening period, and to wonder what direction future researches should take.

This is what Dr Daniel's book sets out to do. It is not primarily a work of research—although much scholarship has gone into it—but is intended rather as "a short summary of some of the facts and ideas about megaliths in western Europe".

The first section of the book describes the different types of megalithic monument and explains the various classifications which scholars have applied to them. The next four chapters consider in greater detail the collective tombs of Northern Europe and Iberia, the Western Mediterranean, France, and the British Isles. In each of these chapters Dr Daniel begins by describing the tombs and their contents, then summarises the views held by other writers before finally revealing his own preference.

It is in this part of the book that the expert will find most to criticise. The work first appeared in 1958, and in the past two years, new evidence has been accumulating. For example, few scholars, and Dr Daniel least of all, would still maintain the low dating given in this book to the British Neolithic cultures.

In a book of this length, compression is unavoidable—contrast, for instance, the 220 pages of argument in the same author's recent work on the French tombs with the meagre 16 pages allowed to him in this little book. In presenting a general outline, Dr Daniel is forced to state his conclusions baldly because the full intricacy of the argument is beyond the scope of his book. Many experts will disagree with him on points of detail, but this book is for the non-specialist as well, and he will welcome the uncluttered treatment of the subject.

Perhaps the most interesting and valuable section is the last one which contains Dr Daniel's own personal credo. The regional studies provide the groundwork for his analysis of the whole question of the arrival and diffusion of megalithic tombs in Western Europe.

It has been recognised for a long time that a family relationship exists between the regional groups of megalithic tombs in Europe. The tombs are all communal ossuaries, and share so many features of construction that Fergusson, in 1872, could write, "the style of architecture to which these monuments belong is a style, like Gothic, Grecian, Egyptian, Buddhist or any other". Peet in 1902 thought that the style was carried to different parts of the world "by a single race in an immense migration or series of migrations". Today the idea of a "megalithic race" is out of favour. Hyper-diffusionist theories are regarded with suspicion, and the part played by the native peoples is more fully realised. The problem is now considered in terms of stimulus and response, the stimulus coming from the more advanced cultures of the Aegean and Near East.

Dr Daniel's conclusions may be briefly summarised. Collective-tomb burial was practised in the Aegean in the third millennium, in contexts earlier than can be proved for collective burial in artificial tombs elsewhere in the Mediterranean and European world. From this area the burial rite diffused throughout the West. Most of the early Aegean tombs were artificial caves cut into the rock, whereas in the West the tombs were made of large stones and stood on the ground surface. The author argues that the transformation from rock-cut to megalithic tomb architecture was made independently in Malta, Southern France and Iberia. In each of these areas the development followed slightly different lines. In turn, these groups acted as secondary foci, responsible for the spread of the burial rite and tomb-type to the more distant parts of Europe where further local development took place. Due credit is given to the ingenuity of the various native European peoples, but Dr Daniel stresses that the ultimate inspiration was Aegean and Eastern.

It is a pity that there was not space in this book for a more detailed consideration of this Aegean material, perhaps at the expense of the detailed classification of monuments (some of which, like stone circles, menhirs, and henges, do not reappear in the chapters of discussion).

The value of this short book lies in its attempt to interpret the problem as a whole. Of necessity, detailed arguments have been simplified—although not distorted—and the worth of the book depends on the validity of its general conclusions. Dr Daniel has put forward his interpretation: the onus is now on other scholars to prove him wrong if they can. Two years after the writing of this book, no challenger has yet stepped forward.

W. M. B.

N. R. HANSON. *Patterns of Discovery*. (Cambridge University Press, 1958, 30s.)

The rapid growth of scientific knowledge and the power of the "scientific method" have provided much stimulation for philosophers interested in the nature of learning and knowledge, and its relation to language. Such studies have used what may be called "philosophical" methods of analysis and investigation in the consideration of such concepts as fact, and hypothesis, and their integration into the corpus of scientific knowledge. For the most part the emphasis in this work has been on determining how these concepts are used, or their relationships once they have been formulated; little attention has been paid to the difficulties of discovering or inventing these hypotheses. This problem of discovery is one that can be investigated either with an emphasis on the mechanism that produces the hypotheses,

when, for want of a name, it might be called physiology or psychology, or with an emphasis in the products, i.e. the theories or hypotheses, when it is usually called philosophy. Hanson's book uses this second method to make some interesting suggestions on the limitations that make scientific discovery so slow a process.

The first part of the book is a useful account of the usage of such terms as fact, theory, causality, and their relation to observation and language. Like the rest of the book it is informative, instructive and simply and clearly written. It contains two extremely good essays, one on Galileo's contribution to the laws of motion, and another on Kepler's work on the orbit of Mars. These two accounts show how much science can be learnt from a study of the history of a concept, and that there is no clear-cut distinction between "History" and "Philosophy" of science. This part of the book acts as a preparation for the discussion of the present status of "microphysics" and a consideration of the nature of the discoveries that have been made in this field. It is in this second part that Hanson shows how much discovery is limited by the creation of new concepts and not entirely by experimental techniques or present theory. One attraction of Hanson's suggestions is that they apply equally well to such subjects as genetics or the discovery of bacteria. In each field some new concept was created, that was not contained in the language and experience of the time; one can feel the same sympathy for Mendel or Pasteur, as Hanson's book arouses for Kepler and Galileo.

This book can be recommended for anyone who wants to understand something of the nature of scientific research; for philosophers who want to analyse science, and for anyone who wants to improve an elementary knowledge of physics, the style is refreshingly simple, and in many places is a reminder of Hanson's style of lecturing, particularly in one passage describing the possible conversation between two philosophers:—

"The resultant discussion might run:

'Yes, they do.'

'No, they don't.'

'Yes, they do!'

'No, they don't!'

Though this is not the argument of the book!

M. G. P.

GEORGE MAXCY and AUBREY SILBERSTON. *The Motor Industry*. (Allen and Unwin, 1959, 25s.)

Mr Silberston and his collaborator have given us a book which is likely not only to become a standard work in its field but also to serve as a model for other industry studies. A very large amount of information is compactly and readably presented and analysed in such a way as to cast light on the subjects that economists are interested in: demand, costs, competition, distribution, finance, and profits.

The central part of the book is that which deals with the structure of costs in the industry and the nature of competition in it. It is shown that, contrary to common belief, overheads are not a particularly high proportion of costs in the motor industry. This helps to explain the absence of any intense short-period price competition, since the gain achieved by working nearer to full capacity would not be enough to compensate for the reduction in profit margins that a price-cut would involve. The authors provide an interesting analysis of the reasons why the dominant form of competition between motor manufacturers is "price-model" competition, meaning by this a state of affairs in which the manufacturer's aim is usually to produce a better-selling model than his rivals at a price within the range accepted

as appropriate for that class of car. Less frequently, he may decide to launch into an entirely new price-quality range. The theoretical tools used by the authors to analyse these problems of cost and competition are mostly of the traditional type, and might be criticised by some as too static; but their use is vindicated by the convincing answers they yield to the questions at issue.

One of the difficulties experienced by the authors in drawing inferences about likely future developments in the British motor industry was that the period they covered (up to the middle of 1957) included only a comparatively small number of post-war years in which trading conditions were in any sense normal. The early post-war years were dominated by extreme scarcity conditions, and the experience of the inter-war period, though by no means irrelevant, is now too remote to provide a firm basis for predictions. Since the book was written, there has been an increase in car sales far larger than the authors (in company with other informed opinion at that time) forecast. This has been followed by a severe falling off, so that we are as much in the dark as ever about the rate of expansion that the industry will be able to maintain. It seems plain that its growth will be rapid, but it also seems likely that this growth will be punctuated by substantial fluctuations, even if the economy as a whole is reasonably stable. It remains to be seen what effect this will have on prices and on the structure of competition in the industry.

R. C. O. M.

P. Vergili Maronis Aeneidos liber quintus edited with a commentary by R. D. WILLIAMS, Oxford, 1960.

This edition is a neat and careful piece of work, based on good sense and wide learning. Mr Williams has collected for the benefit of students of Virgil a body of information on Aeneid 5, on Virgil's style, language and metre, and on Latin usage, which, though for the most part to be found elsewhere, is not readily to be found in any one place or in so concise and lucid a form. Most of what Williams has to say is to the point and helpful. He shows a thorough, but discriminating, knowledge of earlier work, a precise understanding of Latin, and a sober appreciation of Roman poetry. His commentary is certainly the best available on this book of the Aeneid.

The introduction, which seems to me sensible and judicious, is concerned with the purpose of bk 5 within the whole poem, the description of the games, the character of Aeneas, the composition of the book, and its discrepancies with other parts of the Aeneid. The text printed is that of Hirtzel's edition, but Williams would prefer a different reading or punctuation at 112, 238, 279, 317, 326, 349, 486, 512, 768 and 776. In 112, 279, 317, 326 and 768 I think he is certainly right against Hirtzel, in 238, 349, 512 and 776 probably right, in 486 probably wrong.

The commentary as a whole is a model of precision and accuracy. The treatment of metre is particularly good, though I think that Williams is inclined to attach too much importance to effects of metre and sound. The notes on syntax, idiom and vocabulary are usually very instructive. In a few (e.g. 56 *equidem*, 87 *terga*, 406 *longeque recusat*) fuller or clearer information might have been given. The value of citing Servius merely to "give a picture of his merits and defects" seems questionable and such a note as that on 1.258 *virtute* could well be dispensed with. Those interested in the merits and defects of Servius may read Servius. At 1.15 we should be better able to judge whether Stat., Th. 7 88f. is a "decisive parallel for Servius' interpretation," if Williams had explained what the passage means. At 1.206 *inlisaque prora pendit* does not mean "the prow, stove in, hung

out of the water". At ll.317-8 the new punctuation of Sandbach and Williams is a great improvement, but *simul ultima signant* remains difficult. Neither interpretation is supported by a precise parallel for the use of *signare*. Williams' judgement of textual problems seems to me sane and justifiably cautious. As an interpreter he is acute and discerning, not inclined to read into the text more than the text justified or to see hidden significance or allusion.

There is little in this book which merits criticism. I hope that Mr Williams will produce other similar editions of books of the Aeneid which are still in need of a reliable commentary.

F. R. D. G.