

A chapter in the life history of an old university : being the introductory lecture of the session 1881-2, delivered to the students of University College, London, on Tuesday, October 4th, 1881 / by T. George Bonney.

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A CHAPTER IN THE
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T. GEORGE

M.A., F.R.S.

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A CHAPTER IN THE LIFE HISTORY OF AN OLD UNIVERSITY:

BEING THE
INTRODUCTORY LECTURE OF THE SESSION 1881-2,
DELIVERED TO THE STUDENTS OF UNIVERSITY COLLEGE, LONDON,
ON TUESDAY, OCTOBER 4TH, 1881.

BY
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M.A., F.R.S., F.S.A.,

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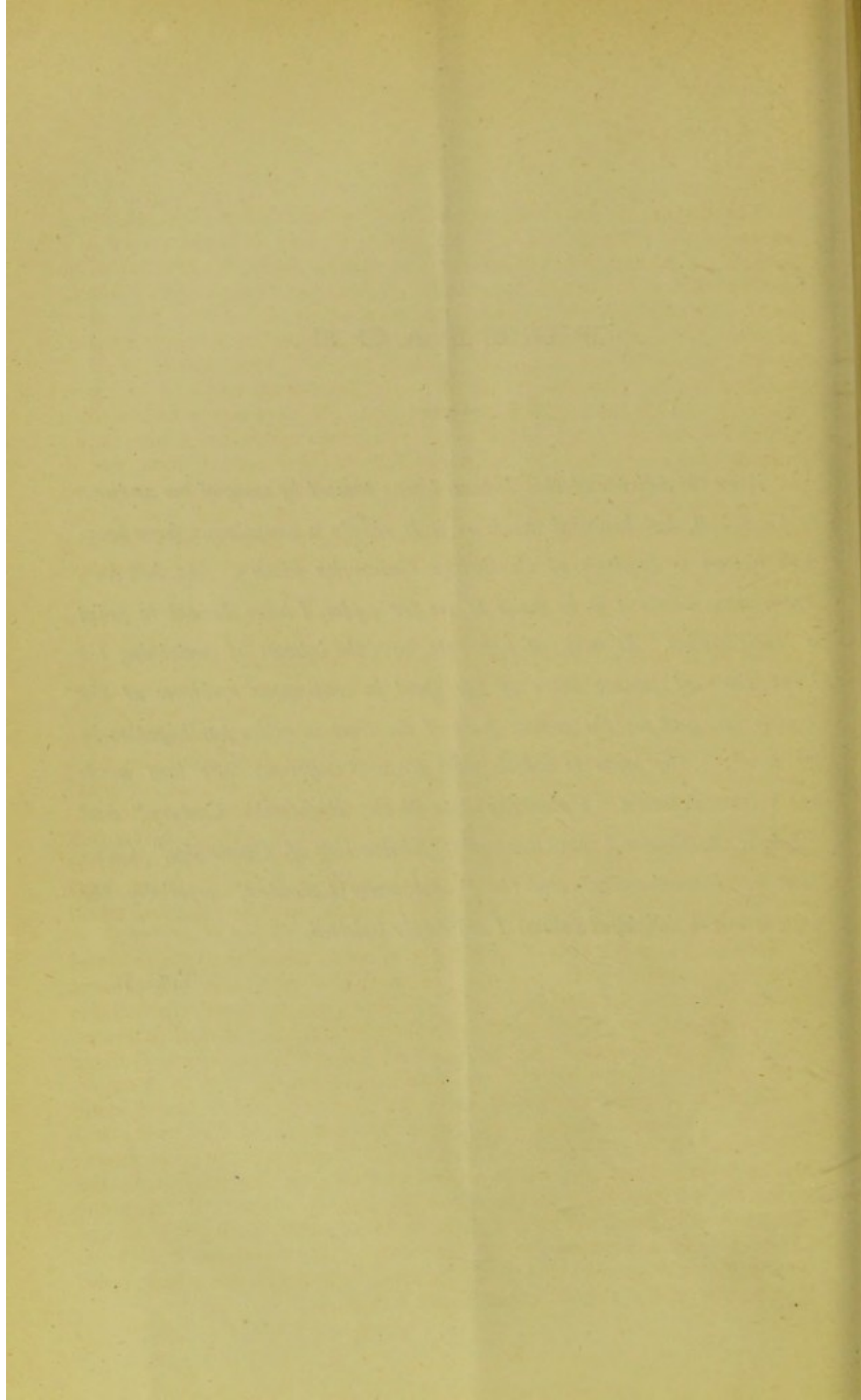
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NEW YORK

P R E F A C E .

After the delivery of this lecture I was pressed by some of my audience to publish it, but hesitated much as it is chiefly a compilation from books well known to Students of Cambridge University history. As, however, applications continue to be made to me for copies, I have decided to print a small edition. It may, at any rate, have the interest of containing the impressions of twenty years of life spent in continuous residence at the University, and for the greater part of the time in active participation in its work. The books to which most frequent reference has been made are WORDSWORTH'S "University Life in the Eighteenth Century" and "Scholæ Academicæ," MULLINGER'S "University of Cambridge," GUNNING'S "Reminiscences," and the "University Calendar," especially the first, to which delightful volume I am deeply indebted.

T. G. B.



On receiving the flattering request that I would deliver the inaugural lecture of the present session, I felt some difficulty as to the choice of a subject. Geology, which forms my own special study, is attractive to so small a number of persons that, had I selected any branch of it, I should have only succeeded in wearying the bulk of my audience. The more general topics of science and literature have doubtless been frequently chosen on these occasions and possibly worn a little threadbare. It occurred to me then—and the idea was favourably received by those who had asked me to discharge this duty—that perhaps a brief sketch of the life history of one of our old Universities might be of interest, as turning your thoughts to an institution with similar ends in view, yet, in many respects, so entirely different that something might be learnt by very contrast. At any rate it is often well to realize that men of like purposes with ourselves, pursue or have pursued them in very different ways, and that the mode of life which is perfectly normal to us would seem strange indeed to them.

Further, the Universities of Oxford and Cambridge are in many respects almost unique. They lie in another hemisphere, if I may so call it, of the scholastic globe to that with which most of us are familiar—the University of London. The latter began its existence simply to test the results of study. The former appear to have originated us places of study without immediate regard to results. Do not suppose that I intend any censure by this remark. Each purpose is entirely legitimate, each method in its time and plan may be of value. I merely state an historical fact. At Oxford and Cambridge in ancient days conferring a degree was generally, except as a license to teach, as it still is in some Universities, a comparatively subordinate matter. The definition of a University as “a Corporation for the cultivation of learning formed under legal sanction,” if not quite applicable to every case, may be regarded as on the whole substantially accurate.

But there is another point of difference more peculiar to Oxford and Cambridge, which will come into more special notice in the present sketch. I mean the Collegiate life. In this respect, these Universities are nearly unique. I do not of course forget that the idea of federated Colleges, as at Aberdeen and St. Andrews, or residence within College walls as at Dublin and to some extent at Bologna, not to mention Universities of more modern date, is far from unfamiliar: but in none have the Colleges become such important features in the social and intellectual life as at Oxford and Cambridge. Generally the greater part, and at times almost the whole of the education of the student, in the widest sense, has been in their hands; and at almost all times the University has been rather a federation of separate Colleges than the Colleges mere departments in the University. Their position in fact has been more analogous to that of the several Cantons in the Swiss Bund than to that of the various states in one kingdom.

Further, I intend in this sketch to impose upon myself two limitations; for without these it would be impossible in the time at my disposal to give even the most meagre sketch of University Life and Studies; the one to restrict myself to the University of Cambridge in which I have spent as a resident fellow a period (now just ended) of twenty years; the other to confine my remarks after a brief preliminary notice to about the last century of its life history. The latter course is followed not only because some further limitation is absolutely necessary, but also because it forms a rather marked epoch in our University annals.

The reign of the first two kings of the House of Hanover, notwithstanding many eminent individual exceptions, cannot be called a golden age in our national history, socially or intellectually. The outburst of profligacy which had accompanied the return of the Stuarts and celebrated the triumph of Cavalier over Puritan, had lost such splendour as it possessed at first and had degenerated into coarse sensuality. The Squire Western of Fielding, the Chaplain Sampson of Thackeray, are scarcely overcharged portraits of the country gentleman and the parson in the days of a monarch of whom a future bishop could write

No further blessing could on earth be given,
The next degree of happiness was heaven.

Naturally the Universities suffered from the general corruption. Few pictures can be more gloomy than that which we draw from contemporary writers of the general state of Cambridge about the time when the monarch just mentioned left his Walmoden for celestial bliss. Thus the period comprised between the beginning of the last twenty or thirty years of the eighteenth century and the present time forms a rather well marked epoch in the history of our older Universities, especially as changes are now impending more important even than those which were introduced by the Statutes of 1858 and the years immediately following.

But it is time to turn to the details of my subject. As I have said, Oxford and Cambridge are unique in the prominence given to the College system. It is true that at other Universities, such as Paris and Bologna—the models in many respects of our own—Colleges were founded, but they never attained to a position such that a student unattached to a College was regarded for some centuries as an anomaly; and a special statute, granted in 1869, was required before such could be admitted. In order, then, to understand the social life of our University—and be good enough to regard me henceforth as speaking of Cambridge, though *mutatis mutandis* much of what I say will also be true of Oxford—we must bear clearly in mind their origin. They are a development of a past generation of the English public schools, and once occupied almost the same position in our social system as do Eton, Harrow, and similar institutions at the present day. Moreover, though their founders in the Reformation times intended them to operate indirectly against the monasteries, and especially those belonging to the Mendicant Orders, to be a bulwark of the secular as opposed to the regular clergy, they were largely modelled upon these institutions, and might at first be regarded as mere developments of the schools which

were so often an important part of one of the great Benedictine monasteries. This, however, is not the case; in some of the foundations—notably in that of Walter de Merton at Oxford, whose statutes formed the model on which most of those in the Pre-reformation Colleges were framed—no “religious person,” that is, no monk, could be a member of the foundation. Still, the social life of these schools, as we should now call them, was modelled on that of the monastery. They were from the first boarding schools, to use the common phrase, as Eton is and, I believe, always has been—not day schools, as was the primary design of most of the Edwardian Grammar Schools, and of University College School, with many others, at the present time. Further, their connexion with the Established Church was exceedingly close, and a distinctive religious teaching was an integral part of their system. Attendance at daily prayer in the College chapel was rigorously enforced, the admission to a scholarship or fellowship, the conferring of a degree, was a religious ceremony, and a distinct profession of membership of the established church was essential. It was not until the year 1858 that Nonconformists were admitted to degrees; it was not till 1871 that the Universities Tests Act opened fellowships and almost every other position to them. May I be permitted to mention with some little pride that the important meeting by which the last impulse was given to this movement for religious freedom was held in the lodge of my own College, under the presidency of the late master, my lamented friend William Henry Bateson.

In early days the life and discipline of a College had many points in common with that of our public schools. The students were for the most part boys rather than men. It was not unusual for a promising lad to commence his university life at the age of thirteen, or even earlier. George Greville, afterwards Lord Landsdowne, was entered at Trinity in 1667 before he was ten years old, and William Wotton at Catharine Hall about the same age. Gibbon entered Magdalene College, Oxford, in 1752, while yet in his fifteenth year, and even Keble, in 1806, entered Corpus Christi at fourteen years and a half. In the Elizabethan statutes of St. John's College, Cambridge, students under fourteen are distinctly mentioned as being allowed to sleep two in a bed.

The boys, then, as we see from this ordinance, occupied chambers in common, sometimes two, sometimes four or five, sharing the same room. Portions of it by the windows, mere dens, were partitioned off—like the porter's lodge in our corridor—for the *musæa*, or studies. Some of these remained (unused), as I can testify, until a few years since in Caius College. The beds took up the remaining space—in most cases mere pallets. If possible a fellow was to be one of the occupants of each chamber in order to maintain order. For him was reserved the dignity of a four-poster,—the lads lay in “trundle beds,” which in the day time were wheeled beneath it. With such young scholars, and under the more Spartan rule of our forefathers, a discipline wholly different from the present prevailed. Minute sumptuary laws existed; certain games were allowed, others prohibited. It is commonly said

that the students were forbidden to play at marbles in such and such places. Certainly, swimming was forbidden under severe penalties in the sixteenth century, whether because our forefathers were hydrophobic, or of the same mind as the author of the nursery rhyme about the three children, I do not know. Offenders were promptly chastised in the manner approved by Busby. The ordinary executioner was the College dean and the delinquent was horsed across a barrel at the buttery, or sometimes, it is said, across the hatch. In yet graver cases the discipline was administered *coram populo* in the College Hall. In the statutes of Trinity College (1536) there is an express statement that this penalty may be inflicted up to the twentieth year. Corporal punishment was discontinued during the seventeenth century. There is a tradition—in all respects of dubious value—that Milton was the last to suffer the rod. It is, however, mentioned, as if not obsolete, in a play of the date 1662. Other penalties were expulsion, rustication, suspension from degrees, discommoning or depriving of certain College allowances, gating or confining more or less completely to the College precincts, fining and setting impositions,—all which still survive, though the last within my own memory has become obsolete. Public reprimand and public acknowledgement of a fault were also in use. In 1652, at Trinity College, one Dryden, supposed to be the poet, is ordered to be put out of commons for a fortnight, to be confined for the same time to the College walls—except for hearing sermons—and at the end of it to read a confession of his crime in the hall at dinner. A considerable part of the day, beginning at an early hour, was devoted to attendance at lectures or at the public exercises, and apparently each student was under the general direction of a fellow considered more especially responsible for him. The system was accordingly very similar to that at many public schools where, in addition to his form-master, each boy has his especial tutor. From this in process of time grew up the system, in some respects peculiar to Cambridge, of College Tutors as distinct from lecturers. At present each College, according to its size, has from one to four of such officials. The tutor occupies a position in some respects analogous to that of a house-master in a public school. He is *in loco parentis*—the intermediary between the College or University on the one hand and the student or parent on the other. All payments are made through him. From him the student receives all information concerning the rules he must obey and the formalities he must observe, to him he should resort for advice in every difficulty, whether as to his course of study, his expenses, or his future prospects. He is the adviser, the monitor, as far as possible friendly, in all scrapes; in short, he is in theory, and, I rejoice to say, often in practice too, the friend to whom the student naturally turns in every trouble. Were not my lips sealed it would amuse you to learn the nature of some of the questions which have been referred to me; suffice it to say they range from the choice of a teacup to the choice of a wife.

During the earlier part of the last century the more intimate tie mentioned as existing in the previous one between student and teacher was gradually relaxed. First, it became usual for Fellows to have their

private apartments, a change which we should consider almost essential if much real study was to be prosecuted; then, a worse change, attention to learning became perfunctory on both sides; the Fellows in the majority of cases ceased to set a good example, the students were not slow to follow that of their elders. The middle of the last century saw the University, socially and intellectually, at its lowest ebb. Charges of favouritism in the public examinations were believed to be not unfounded, they were certainly well grounded in the distribution of rewards. Drunkenness, or at any rate boozing, was common: many of these high in authority were not above suspicion as to other vices. The College Fellow—chiefly keen after animal comforts—took little heed of the young men around him, and attempted to look down on them while they made a jest of him. The College Don became a byword for a pompous ill-bred fellow, with brains sometimes only furnished with remnants of youthful learning, sometimes stuffed with an undigested mass of often useless matter, scraps of which were pedantically displayed—a variety, in fact, of the genus *homo*, whose gaucheries offended the ladies, disgusted young men, and diverted the play-going world.

If these words appear too strong I would refer my hearers to Mr. Gunning's autobiography. Two anecdotes from it will suffice to illustrate the manners and customs of his early days. The Professor of Anatomy, a man who lived freely as they say, had made a collection of the portraits of his friends. The Public Orator (a high functionary in the University), who hated the Professor, "availed himself of the opportunity of showing his dislike by a very lively, but very obscene, epigram, which bore hard on the persons of whose portraits Harwood was in possession. The Professor retorted by an epigram not so lively but equally obscene." Or take another instance. It was the custom for the Vice Chancellor to go in state on a certain Sunday annually to a place called Burwell, about ten miles from Cambridge, to preach a sermon, after which the party dined with one of the principal farmers. His port wine was excellent, and when the bell rang for afternoon service the bottle was preferred to the vicar's sermon. The result of this was that the whole party had got "rather forward" when they started homeward, and as will sometimes happen in these cases, a violent quarrel broke out between the Vice Chancellor and a subordinate functionary, which at one time seemed likely to lead to blows; fortunately sleep intervened during a lull in the storm.

Still, in this day of slothful drones in the hive of learning, of non-teaching tutors and non-lecturing professors, it is only right to remember that not a few were still left who were "salt of the earth." This seems especially to have been the case at the two larger Colleges, Trinity and St. John's. In the former considerable care was already exercised in the selection of scholars and fellows; in the latter a regular system of College examinations was instituted by the Master, Dr. Powell, about the year 1764. Unfortunately, the latter proved indirectly an impediment to the advocates of improved University examinations, for when, in 1772, the erratic Dr. Jebb brought forward a scheme for an annual University examination, Dr. Powell was among its most vigorous

opponents. The heterodoxy of the originator was, of course, also unfavourable to the success of the scheme, so that it had no chance of being accepted. An examination, however, was held prior to the conferring of a degree, but except in the case of honours, this had been reduced to little more than a form. Of this examination, as it existed about a century since, I will now attempt a brief sketch. The earliest mode of examination was mainly *viva voce*, and to a large extent in the form of disputations, the aspirant for academic distinctions maintaining one or more theses against his fellows and his seniors, and being questioned by the latter as to his knowledge generally. Elaborate formalities accompanied these exercises in the earlier part of the sixteenth century, descriptions of which have been handed down to us. Examinations, both written and oral, of a more systematic form were gradually added: the candidates for honours, and for an ordinary degree, in practice, if not in theory, were separated one from another: and towards the close of the last century the examination of the former in the University of Cambridge was conducted as follows: (it will be remembered that distinction was only awarded for proficiency in mathematics, though some knowledge of Latin and of Moral Philosophy was expected.) The public exercises of the Schools formed the first stage, which were conducted in Latin under the superintendence of two graduates called Moderators, men who, in some previous examination, had attained one of the highest distinctions. To them the College authorities sent lists of students in their third year of residence, together, frequently, with brief notes on the character of each. These students were separately summoned before one of the Moderators, and ordered to bring a list of subjects on which they were prepared to dispute. The propositions were generally expected to be affirmative rather than negative. For example, these are given as specimens by Dr. Jebb in the year 1772:—

QUÆSTIONES SUNT.

Planetæ primariæ retinentur in orbitis suis vi gravitatis et motu projectili.
Iridis primariæ et secundariæ phenomena solvi possunt ex principiis opticis.
Non licet magistratui civem morti tradere nisi ob crimen homicidii.

These accepted, the moderator selected three opponents from the list before him, to whom a copy of the theses was sent. Their business was to play the part of Devil's advocate and to say all that could be said on the other, generally the unorthodox side. The Respondent, as the first student was called and the opponents commonly met two or three times at a social meal before the duel so as to obtain some notion of the line of argument which each would follow. At the fixed hour the Moderator entered the School and mounting a kind of pulpit, summoned the respondent to deliver his thesis from the rostrum opposite. This done, the Moderator said "*ascendat opponentium primus*," and the person thus designated entered a sort of clerk's desk below his pulpit and commenced the attack. The discussion was conducted in syllogistic form, and as the respondent commonly, if not always, maintained an orthodox view, the opponent was obliged to content himself either with

technical objections to his adversary's arguments or ingeniously veiled fallacies. The opponents were in turn dismissed, and then the Moderator himself questioned the respondent on his mathematical knowledge, after which he was released with some such phrase as "*satis et optiomè quidem et in thesi et in disputationibus tuo officio functus es.*" Occasionally yet higher terms of praise were employed, sometimes, of course, the reverse. The phrase used has given rise to the names *senior* and *junior optime*, which designate the second and third class in the Cambridge Mathematical Tripos, the first being called *wranglers*.

The Latin employed in these discussions was not Ciceronian, and many anecdotes are current concerning the worse than barbarisms that passed muster in a disputation. Perhaps the most notorious (I vouch not for the truth though a name is given) is the Moderator's indignant exclamation on seeing that an opponent's dog had followed his master into the Schools. *Verte canem ex!*

When all the acts had been kept, a list was issued by the Moderators in which the candidates were grouped in about 6 or 8 classes, the names in each being in alphabetical order. Then began the next stage in the examination: the classes were now examined in the Senate House and elsewhere by the Moderators and others, the answers being written and the questions dictated one by one. In the year 1779 this examination lasted for three days, and after this another list was issued on which the names were arranged, still alphabetically, in smaller groups called brackets. Those in each bracket were then examined *viva voce* by the Moderators and others who either volunteered or were invited to give their assistance; after this, and a general discussion of the work done, the examiners issued the final list, in which the names were divided into wranglers, senior and junior optimes and arranged in order of merit.

The name tripos appears to have originated as follows:—In the sixteenth century a disputation was held in the Philosophy School on Ash Wednesday by a B.A. He was seated upon a three legged stool and from this was addressed as Mr. Tripos. It became customary for him to conclude by delivering a speech more or less witty. In the seventeenth century the wit degenerated into buffoonery and scurrility, and the occasion became regarded as a Saturnalia when for once the foibles of the elders were lashed often with more than plainness of speech. His monologue was in verse—sometimes Latin, sometimes English, which after a time it became a custom to print and distribute. In the eighteenth century the office of Tripos became obsolete, but the custom of distributing copies of verses survived, and a list of the successful students, after the year 1748, was printed at the back of the so-called Tripos paper. From this the name passed to the Mathematical classes and so to all the other classes in the examinations for honours. The name and the verses still survive, and the latter are occasionally satirical, but in this more refined age the censorship of the press is rigid, and even Greek worthy of Aristophanes or Latin of Horace would not cover the sins of a too bold jester.

Thus the licence accorded to undergraduates on degree day, may be regarded as a survival of this ancient Ash Wednesday Saturnalia and the

familiar name given to our Honour Classes is a remnant of the ancient method of disputation.

Keeping an Act became less valuable as a test as the area of mathematical knowledge rapidly expanded, and more and more a formality, and it was finally discontinued after the year 1840. It remains however in the faculties of Law, Physics and Divinity, but with modifications which it is needless to discuss. The Latin language also has been abandoned for the disputation, which is now rather a *viva voce* examination of the candidate by the Professor, and almost abandoned for the thesis.

This will be a convenient place for tracing the changes in the more important University examinations. At first, as we have said, the sole distinctions were for mathematical proficiency combined with some knowledge of philosophy and of Latin—but in 1752 two medals for Classics (restricted to candidates who had been previously placed among the wranglers or senior optimes) were given by the Duke of Newcastle, then Chancellor. This restriction was removed after 1871. Classical Scholarships however have long existed; such as the Craven founded in 1647, the Battie in 1747, the Browne in 1774, besides other rewards subsequently increased in number. In 1824 the Classical Tripos was instituted, but until 1850 the examination was only open to those who had obtained a class in mathematical honours: this rule was then extended to include the first class of the ordinary degree, and in 1858 every restriction was abandoned. In 1815 a class list was published in Civil Law, conferring a degree in that faculty. This examination was modified in 1858, combined with History in 1870 and separated from it in 1875, when a distinct Tripos was formed for the latter. Both these are now avenues to the degree in Arts. In 1851 Triposes in the Moral and the Natural Sciences were instituted, to a great extent through the influence of the late Dr. Whewell, but these did not at first give the right to a degree. This was conceded and other important changes were made in 1861. An "honour" examination in Theology was instituted in 1856; it became a Tripos conferring a degree in 1874. During the last few years a Tripos in the Semitic and the Indian Languages has been instituted. Thus there are at the present time no less than nine paths of distinction to the first degree, with many possible combinations. For an ordinary degree there are three examinations—first, the Previous or "little-go," common to all students, to which in the case of intending candidates for honours, a modicum of algebra, trigonometry, and mechanics is added to the arithmetic, the portions of Euclid, and the elementary algebra required from all; second, the General examination, a slightly more difficult examination in classics, with a little more algebra, some elementary mechanics, hydrostatics and heat; and thirdly, the Special, an examination in one of the following branches of study:—chemistry, geology, zoology, botany, applied mechanics, moral sciences, law, modern history, and theology. This variety of examinations, though somewhat complicated, is doubtless a great improvement on the state of things less than a century since; for in the year 1800 a knowledge of two books of Euclid's Geometry, Simple and Quadratic

Equations, and the early parts of Paley's Moral Philosophy, was deemed amply sufficient for an ordinary degree. It may be interesting to compare the number of graduates in honours at the interval of a century. In the year 1781 there are 42 names in the Mathematical Tripos. In 1881 there are 96 in the same, 83 in the Classical Tripos, 4 in the Moral Sciences, 31 in the Natural Sciences, 19 in the Theological, 38 in the Law, 11 in the Historical, 2 in the Semitic Languages, and 2 in the Indian Languages. This gives a total of 286 names, but then several appear in more than one tripos, or have appeared in a tripos of a previous year. The number of these, however, would probably not exceed ten per cent. of the whole. In the year 1880 (of which the complete returns are before me) the total number of graduates in honours was 251, and those who proceeded to the ordinary degree 353 respectively: as nearly as possible $\frac{5}{12}$ and $\frac{7}{12}$ of the whole.

As regards the standard of these examinations, I do not think that the University need be concerned to defend itself so far as regards those in honours, except that perhaps in one or two instances rather too wide a range of subjects is attempted and too severe a strain thrown upon the ablest students. The same, however, cannot be said of the ordinary, or "Poll," examinations. It is undeniable that the standards here are not high—are considerably lower, for example, than that required at the University of London. At the same time it must be remembered that Cambridge claims that its stamp is a proof of more than mere proficiency in examinations, and asserts that there is something gained by the three years residence within its precincts. The value of this is impossible to define or to prove by arguments, but after a long residence and considerable experience as a College tutor, after watching the development of many students, I may venture—I trust without prejudice—to affirm that it is very considerable. Who can define precisely what it is that a boy gains from his life in a great school where the general tone is high? Yet this is of the utmost value. Something of the same kind is obtained by very many during their University career.

Further, I may say that having regard to the present state of education in England, the standard for an ordinary degree at Oxford or Cambridge could not be suddenly and greatly raised without seriously diminishing the number of students. It may be said that it is the duty of the University to elevate the standard of school teaching, and that there would be no surer way than this. I reply that in such case the horse (if that be the right term) may not only decline to drink, but even to come to the stream of Cam or Isis; and I hold this possible, because in my opinion the blame does not in the main rest upon the masters in our public schools; the evil (for I hold it to be an evil) is much more deeply rooted. The English people as a whole—at any rate among the classes with which we are now concerned—have but little real love for intellectual culture. Where the parents are immersed in frivolous amusements, or absorbed in money getting, the unfortunate children are left without the early influences to learning and the kindly interests in their progress which would more than anything else nerve them to "shun delights and live laborious days"; and so they regard their lessons simply as tasks,

and books as the "childish things" which they will cast joyfully aside when beyond the reach of the master's ferule. Perhaps, also the frequent and indiscriminate use of the latter in so many of our schools does not make the path of learning more attractive to the young scholar. Thus the task of progress must be slow. Still, when I look back over the period during which I have known the University of Cambridge, as student or resident teacher, I can truly affirm that much advance has been made and a corresponding improvement taken place in the character of the undergraduates.

In connection with this it may be worth while to call attention to some other changes in the University studies. Although, as has been said, Cambridge was devoted to Mathematics, yet formerly little preparation in this subject was made by students prior to commencing residence. At school they were chiefly taught classics, so that they often came up to Cambridge with little more than a knowledge of Arithmetic. Gunning, who was fifth wrangler in 1788, says that on entering Christ College he "was ignorant of the first proposition in Euclid," and speaks thus of the commencement of his second term:—"On the 20th of January I returned to College, and as it was not usual to begin lectures until after the division of term, I had abundant time to perfect myself in the first six books of Euclid. I also made considerable progress in algebra." But at this time the questions proposed do not appear to have gone beyond the rather elementary parts of mechanics, hydrostatics, optics and astronomy, with the Principia of Newton, and some questions in fluxions. Gunning's case was by no means rare. At a much later date—so recently as thirty years since—it was not uncommon for men who ultimately obtained the very highest places among the Wranglers to enter the University with very little more than a knowledge of Euclid and algebra. It was commonly said that the Senior Wrangler in 1859 entered St. John's College unacquainted with the Differential Calculus. The area covered by the Tripos examination papers has, however, largely extended even in the last quarter of a century. At its beginning any one who had mastered the ordinary subjects up to the end of integral calculus, finite differences, solid geometry, with the mechanical subjects inclusive of rigid dynamics, hydrodynamics, optics, geometrical, with a little physical, astronomy and the lunar theory, could obtain (supposing he had a sufficient grasp of these to be a fair hand at problems) a good place among the Wranglers, and in a few instances a man with a very decided mathematical ability has done this with a yet more restricted range of knowledge. I believe this would be practically impossible at the present day. I am, however, by no means sure that the wide range of subjects now covered by the examination papers is not seriously detrimental to all but the very ablest students (and sometimes detrimental to the future mental vigour even of these), by alluring them to attempt too much and to read many subjects without thoroughly mastering any of them. In fact, during the last few years I venture to think that there has been a tendency to adapt our examinations in general to testing what I may call the exceptional cases, rather than the bulk of the abler students.

For myself I do not think the attempt to make a walking encyclopedia of a student of two and twenty is likely to be successful, and I see no disgrace in his being obliged to confess that there are many things of which he has not even a smattering. The sooner, and the more clearly, we can get into our heads the conviction that we must be learners all our lives, and that leaving School and leaving the University are but early steps in our education, the better will it be for our mental progress.

This rapid extension in every branch of study during the period just mentioned has certainly had the result of diminishing the number of "double men," *i.e.*, of those who have taken honours in more than one tripos. In 1856—by no means an exceptional year—out of thirty-five Wranglers, one obtained a first class and four a second class in classics. In 1881, out of thirty Wranglers (a number rather below the average) one obtained a third class, and this, too, is the only classical distinction which I find in the whole list. It is hardly possible to compare the other distinctions, as the number of Triposes has been considerably augmented. This result, I think, is to be regretted, and the latest alterations made in the scheme of University examinations are intended to favour "double reading." There was, however, a many-sided man, the most remarkable in this respect I have ever known, who obtained in 1867—8 a first class in mathematics, in classics, in moral science, and in theology, and I think it possible that, if he could have had another year for special study, he might also have gained one in natural science.

Prior to the year 1770 there were eighteen professorships in Cambridge, since that date thirteen have been founded. During the last thirty years the number of College lecturers has increased, and still more the variety of subjects handled. When I was a freshman there was hardly any instruction given in Colleges other than in classics and mathematics; now, by an arrangement between different Colleges, opportunities of instruction in almost every branch of study can be obtained, while the Professors are aided by Demonstrators, and their laboratories and museums have been vastly improved. Conspicuous among these are the Physical Laboratory, the munificent gift of the Duke of Devonshire, our Chancellor, and the Geological Collection, a monument in the main of the last Professor—Adam Sedgwick. The Cambridge Philosophical Society, of which the latter was the Father, has also done good work.

As a result of this, real life has been infused into the study of the natural sciences, and the names of Cambridge students are no longer conspicuous by their absence in the various Journals, Transactions and Proceedings, and in the lists of societies. Our medical school has revived; impulse also has been given to the study of law, that of metaphysics has been awakened from a long slumber, that of history is obtaining a footing.

A few words may be said here upon the hours of study, and the habits of life of students during the last century. As regards the time devoted to reading I cannot ascertain that much change has taken place. From seven to nine hours a day, according to the constitution of the student, was and is regarded as much as can be maintained by most men during

a whole term. Something, of course, depends on the character of the work. Attendance, for example, in a laboratory would not be regarded as equivalent to time spent in solving problems. In the long vacation, for instance, when there were no College lectures, a mathematician generally found eight hours a day quite as much as he could manage to keep up. During the period of which I speak the parts of the day devoted to study have not much changed except, perhaps, that the habit of reading late at night is now becoming less usual. In the middle of the last century men dined at twelve or one and supped at about seven, seldom, it would seem, devoting much time to study after the latter meal. Subsequently the hour of dinner became later and the supper in the hall was discontinued. In 1852 the dinner hour at the Colleges varied from four to five, and it was usual to read for three hours, or even more, in the evening. The adoption of more modern habits has again brought in the fashion of afternoon work, some portion, however, of that period being always devoted to exercise.

It would, I fear, be regarded as beneath the dignity of the occasion did I discuss games and amusements. I will therefore merely say that a century since "athletics," in the modern sense, were nearly unknown. Walking was almost the only exercise sought by the ordinary student, with an occasional excursion on the river or a day's fishing; rowing races was unknown. Shooting, also, was easily obtained and a frequent pastime in season; cricket, though known, was not often played, nor was the more familiar game of football. Tennis and other games of ball appear to have become comparatively rare. The richer students took their out-door exercise on horse-back. Of the present time I need hardly speak. Athletic exercises are not neglected—some would say are carried to a pernicious excess. Speaking from some experience, I venture to assert that, while admitting they often cause a waste of time and waste of money, they are also productive of much good. The task of putting old heads on young shoulders is proverbially difficult, and there are many worse ways of wasting time than on the cricket-field and the river. Vice and athletics do not find it easy to run in couples.

A word in addition to the allusions already made may be said here as to University and College lectures. In the latter part of the last century a considerable number of the Professors had ceased to deliver lectures; some, however, of those who were silent in public were ready to help students in private; still, the dumbness of the Professoriate was an undoubted scandal, for it could not be alleged in excuse that its members were entirely engrossed in research. No such reproach can be uttered in the present day, though within my own memory professors have existed whose lectures had in one sense a claim to the title "Golden." At the former epoch the teaching in Colleges was too often very perfunctory, though such books as the autobiographies of Mr. Gunning and Professor Pryme show us that there were many bright exceptions to this rule. This reproach also has been removed. As an undergraduate I found the majority of the College lectures very beneficial, and attendance upon them exacted with all reasonable strictness. There were, however, two defects, that students were not sufficiently classified,

and that the time of some was wasted by their being compelled to attend lectures which were to them of little value. The latter was obviously the result of a reaction from former negligence and laxity, which led the authorities into insisting on carrying out a system not sufficiently elastic. It was not without many efforts and much vaticination of evil on the part of some of the older fellows, that after I became a member of the tutorial body the requisite concessions were made. The students also were sub-divided and a greater variety of lectures delivered. This, I may say, was done at the expense of the corporate funds.

The decadence of University and College lectures in the earlier half of the last century gave rise to the custom of private tuition. This at one time led to grave abuses, through the employment as examiners of persons who had acted as private tutors. Gunning asserts in the most measured terms that this was the case, but adds gladly that during his long life all grounds for the suspicion had been so entirely removed that he hardly expected to be believed when he asserted that it was once reasonable. The feeling against the practice culminated in 1781, when a grace was passed forbidding any candidate for the degree of B.A. to read with any private tutor in the course of the two years previous to his final examination. "The period of two years was gradually reduced in 1867 and 1815, till in 1824 it dwindled down to six months. Dr. Whewell in 1843 conceived it still possible and desirable to enforce it." The grace, however, had first become obsolete and then been repealed before that date. Still, it has continued to be a point of etiquette, on being appointed an examiner, to give up any pupils who may be among the candidates.

The practice of private tuition has been, and perhaps still is, carried to an excess, but the best remedy will be found in the improvement of College lectures. The alteration which has taken place of late years in this respect, has certainly diminished the practice, and I trust that one of the results of the coming changes may be to render it still more exceptional. The advantages and disadvantages of private tuition, and the modifications of the lecture system required to counteract it, are, however, too wide questions for my present limits.

Not much alteration has taken place in the social rank of undergraduates during the time of which I speak. Besides the ordinary pensioners (as they were called), there were then (as always) scholars, selected from among them either by merit or favour, commonly the former, together with fellow commoners and sizars. The former were young men of wealth who might be described as parlour boarders. They wore a distinctive dress, the gown being generally embroidered with gold or silver, dined at the fellows' table in hall, and paid much higher fees than the rest. Not seldom, also, they were under discipline which was not only less strict but even discredibly lax. There is much to be said in defence of the institution in the case of men of more mature age, who are more at home with the fellows than with the younger students, but little for and much against it in any other case. The practice has the look of "flunkeyism," and sometimes does not belie its appearance. Within the walls of a college distinctions of rank should as far as possible be forgotten. At the present day, however, young

fellow commoners are rare, many of the Colleges either virtually or actually refusing to receive them. Sizars were at the nadir of the social sphere. They paid merely nominal fees, and generally received their commons (or food), in part at least, free of expense. In return for this, originally, they waited upon the fellows, and especially upon the one to whom they were indebted for their appointment. Their social position, however, seems to have always been rather better at Cambridge than at Oxford; still, so late as the year 1765, they waited at the high table, and, within my memory, what was left from the dinner thereat formed a part of their meal. In like way the chorister boys at King's College used to wait upon the fellows, but I believe the custom has been lately discontinued, and of course the fagging at public schools—greatly modified within my memory—is a survival of similar habits. I cannot find that a distinctive dress was ever worn by sizars at Cambridge,—if so, it has not been the case for many years. Since most of them were the sons of parents in a very humble rank of life, they were not seldom somewhat uncouth of manners, and this of course entailed a certain social drawback in the position; at the same time during the period of which I speak a sizar was in no case regarded as a pariah, only he had to prove that he possessed those qualities which would make him agreeable as a companion before he was accepted. There is no doubt much to be said against any social distinctions in the republic of letters, at the same time it must be remembered that, as Christ's Hospital and other institutions have found, it is no easy task to debar the richer classes from availing themselves of emoluments designed for the poorer, and that a definite profession of poverty makes it perfectly easy for a student to avoid many expenses which, otherwise, would require considerable moral courage. From the rank of sizar have sprung many of the men afterwards most eminent in literature and science; for example, Dawes and Bentley and Newton. The late Dr. Wood, who died Dean of Ely and master of St. John's College, a benefactor no less liberal to that College than was Dr. Whewell to Trinity, thus began his life. A little octagonal chamber at the top of a turret in one of the courts is still pointed out as his room when an undergraduate, and the story goes that he used to wrap his legs in hay bands and read by the light of the staircase lamp in order to save firing and candles. Even with this economy it is said that he found it impossible to pay his way, and was on the point of quitting the University, when one of the Senior Fellows, who had marked his ability, generously advanced the sum needed to complete his career. College Fellows are often charged with selfishness. I am glad to say that, did not delicacy to the living forbid, I could mention not a few instances of like generosity.

While on this topic I may venture to assert that Colleges as a rule have been remarkably free from those attempts to enrich the existing members at the expense of their successors, which in the past were among the most crying sins of many corporate bodies. A contrary spirit commonly prevailed. For instance, in 1851 the governing body in my own College, not to mention others, decided to abandon the system of granting beneficial leases and receiving fines on renewal—a

change which, for several years, most seriously diminished the incomes of those who made it.

The institution of minor Scholarships, that is, of Scholarships open to competition before the commencement of residence, has since 1859 rendered sizarships less necessary, but, as even in this race the long purse gives an advantage, I should be sorry to see the door, open to the poor man's son, entirely walled up. While these minor Scholarships have been in many respects very beneficial, they have, I think, done some harm by encouraging "specialization" too early in life, and causing learning to be valued more for its rewards than for itself. The youth of one talent, who devotes that to intellectual "pot-hunting," is not a very satisfactory product of any system.

But it is time to bring this rather desultory sketch to an end. I will conclude by a few remarks upon the existing constitution of the University, drawing attention especially to those points in which it most differs from those which are more familiar to you. Easy communication has made the life of the younger students so familiar to their equals in age, that I need not speak of this, and you have had ample opportunity of forming your opinions even upon the peculiarities, if such there be, of the College Don; but I will touch upon a few points in the existing University and College system which without personal experience it is more difficult to apprehend. I speak now mainly of the graduates. The graver defects in our University constitution are its complexity and its want of adaptation to the present mode of life. Both University and Colleges are under the control of statutes or codes of laws sanctioned by the Sovereign in Council. Up to the year 1858 the statutes granted by Queen Elizabeth remained in not a few cases still in force, but a new code was then issued as the result of the reports of two commissions. The general effect of this was simplification. As regards the Colleges the more important changes were the abolition of the great bulk of "close" fellowships and scholarships, that is, limited to particular counties, schools, or families: introducing the lay element more largely among the fellows with many other alterations, the bulk of which have been most salutary. As you are aware, a Commission is now sitting, and fresh statutes have been proposed which—though in my opinion points of detail might be modified with advantage—are likely to be beneficial. To the University they will give, as is much needed, more freedom of action by diminishing the amount of statute matter.

Its legislative body is called the Senate, and this is constituted of all persons of the degree of Master of Arts at least who choose to pay a small annual fee. No change, except in the most minute details, can be made in examinations or anything else except it receive the sanction of the Senate. This body also has the right of election to some of the University offices. Further, all Masters of Arts, resident within a certain distance of the centre of the University, form a body called the Electoral Roll. In this is vested the election to many of the Professorships and to the Council. The latter is a body which is to some extent executive, and has the chief initiatory functions; perhaps it is more analogous to the Senate in this College than to any other of its institutions. The

various departments of study, and the consideration of all new propositions, are referred to Syndicates (committees), or Boards of Management. From this complexity of system two evils result. The one is an enormous waste of time. As every scheme and report is subjected to so many critics, and as among so large a body there are sure to be not a few to whom, for want of better occupation, the task of looking for knots in a bullrush is a pleasing diversion, hours will be spent in battling over the most minute details, and even niceties of phrase. At your Senate here I have frequently seen work thoroughly done in one hour, which would have taken a corresponding body at Cambridge a dozen at least. A worse evil still—and one to some extent at the root of the other—is the excessive power of the Senate. In former days, when communication was difficult, the control of this body meant little more than the control of those who were more or less engaged in the actual work of the University. Now it gives far too great preponderance to persons quite unqualified to form an opinion. The most ignorant Poll-man, whose only knowledge of the University system is the remembrance of his crude undergraduate fancies, has an equal authority with the most energetic and learned resident teacher. What would be said if the studies at Eton were practically regulated by the Guardsmen of London? Again, this system gives an undue influence to one class among the Masters of Arts. Cambridge has become a rather important railway centre, and is very easily accessible from many quarters within a radius of at least sixty miles. Now, from the nature of their work, no class among the graduates can more readily arrange for a day's absence (Sunday excepted) than the clergy, especially those in the rural districts. You will thus easily understand that in almost any question we are liable to hear the beat of the "drum ecclesiastic," and it is really surprising how some guardians of the Church in the University detect a snake in the herbage where others see no more than a harmless worm on a green leaf. One instance may suffice as an illustration. Some few years before the passing of the Universities Tests Act, an offer was made to found an annual lectureship, to be filled by an American, who should take as his subject some topic connected with the history and economics of his own country. To the majority of the residents the proposal seemed unobjectionable, though some were not sanguine as to the size of his class. It occurred, however, to others that the lecturer might come from a University which was reputed unorthodox, it was assumed that he would act as a propagandist. The note of alarm was sounded, and when I entered the crowded Senate House, though I knew the face of almost every resident, I felt as strange as I should do were I at a gathering of graduates at Burlington House. It is needless to add that the grace did not pass.

The qualification also for the Electoral Roll is too wide. A body numbering more than three hundred members, and including many not engaged in University work, is sure to be over much influenced by political or personal considerations and unfit for such a task as the election of a Professor. I regard then the appointment of well selected boards for purposes of election and a great limitation of the powers of

the Senate as of the utmost importance. The former will, I trust, be one result of the impending changes; the latter, I fear, will be a Utopian dream for at least all my life, however it be prolonged.

A few words next upon the Collegiate system. As I have implied, the original theory was that all Fellows should be engaged in the work of the place, but as their number was increased by the liberality of benefactors, non-residence became a common practice. To this under certain limitations I see no objection; a fellowship is, in my opinion, well employed either in aiding a poor man to enter a profession, non-lucrative in its earlier stages, or in enabling an older man to undertake unremunerative work in literature or science. At any rate, by the correctness of this view I must myself stand or fall. I think, however, that the changes proposed by the University Commissioners are in this respect likely to be salutary. Fellows till very lately were necessarily unmarried, the obligation of celibacy implied in the prereformation statutes being expressed in the Elizabethan. The rule was relaxed in a few Colleges by the statutes of 1859, but it still holds, almost without exception, in the majority. Students and teachers accordingly dwelt side by side in the College, still in the ancient mode, though with sundry modifications. The College Hall and Combination Room are the survivals of the Refectory and Fraternity of the ancient monasteries. So far as an undergraduate member of the College is concerned, the result of the celibacy of the Fellows is at first sight an unmixed gain. At all reasonable times his lecturers are accessible; at unreasonable also, I had almost said, he can invoke the services of his College Tutor. This ready communication and consequent free intercourse with men of learning, and commonly of kindly sympathies, cannot, I think, but be of great advantage to the students. I shall never forget the kindnesses which I received from my College Tutor, the late Archdeacon France, and others of the Fellows, and among the brightest memories of my own life as a lecturer and a tutor, are those of the confidences reposed and the affection manifested by so many of my own pupils. It is obvious that when Fellows are married there cannot be quite the same ready intercourse. But I regard the change as inevitable, and the loss on the whole likely to be exceeded by the gain. A College tutor is, perhaps, at present too accessible; he also should be a student and a pioneer in science or in literature, and if he is never free from interruptions—welcome as the interruptions may be—either his work or his health will grievously suffer. I speak this from careful observation as well as from personal experience: the time came in my own life when the state of my health compelled me to choose between abandoning serious work in my favourite science or resigning my Tutorship. Further, "It is not good for man to live alone." Many quickly discover this. Hence the teaching staff of the College is constantly weakened by the loss of those who are almost invariably among its most energetic and valuable members. The attractions of a Fellowship, notwithstanding its increased value, for many reasons, are far less now than they were half a century since, and there is accordingly a constant drain of our very heart's blood. To the Fellows themselves there will be both loss and gain in the coming

changes—loss certainly to the younger men, for perhaps no life is for a student more pleasant than the first few years of residence as a Fellow, but after that there will be, I think, a gain. Long residence in the University has at present some serious disadvantages—one, that there is no place where the solitude of old age seems to come on so quickly; even the man not yet fifty finds himself almost alone among a younger generation, sitting in solitude by his fireside with memories of departed friends. Hence, if there be any latent eccentricity in his disposition—any screw loose in his mental organization—College life will bring it out, and there, if anywhere, one is likely to become

*Difficilis, querulus, laudator temporis acti
Se puero,*

and to decline from the active worker to the inert grumbler, from the advocate of progress to its opponent. Another disadvantage, and a most serious one, is this. The College life throws men engaged upon the same work rather too much together. You are compelled to be always meeting a man who may be socially disagreeable to you, and there is something in the mode of life which, while it rubs off the angles in a tractable character, seems to accentuate them in one that is of opposite nature. In a place constituted like this in which I now speak, if disputants did chance to become warm, the heat would be quickly radiated away in the free outer air. Dissension grows up in a College as it is apt to do in a family, the rift in the lute widening one knows not how in the constant daily intercourse and daily friction. Prejudices are thus engendered, and men form the habit of looking with jaundiced eyes upon their fellows, from whom, while they are one in zeal for the College, they differ slightly upon questions political or theological. There is, believe me, nothing more depressing to a worker than to know that he will be judged, not by his endeavours, but by his supposed opinions on some points which lie quite outside his task.

I look forward, therefore, with hope—notwithstanding disadvantages to which I have alluded, and others which I clearly foresee—to the result of the coming changes, though it is but a Pisgah glance that I can cast over a promised land reserved for a younger generation.

One advantage—though I may not longer tax your patience—possessed by such a place as Cambridge must not be passed over in silence; it is best described in Wordsworth's lines referring to our ancient Colleges and their former occupants:—

*I could not always lightly pass
Through the same gateways, sleep where they had slept,
Wake where they waked; I could not always print
Ground when the grass had yielded to the steps
Of generations of illustrious men
Unmoved.*

But if in this place we are only beginning to gather around us the memories of an illustrious past, we may feel a compensation in the freedom from the fetters which are apt to be among its legacies; and if to

higher natures the *genius loci* is among the best incentives to exertion, there is something also exceptionally invigorating in the thought of making the history whether of an institution or of a nation. Thus, while our mode of life here preserves us from all that is narrowing in the contracted circle of Collegiate life in an ancient University, we may recognize the possibility of our bonds of union becoming too loose, and seek to imitate the best features of these older Academic bodies, by fostering as far as in us lies the spirit of patriotic devotion to our Alma Mater, and the spirit of brotherhood, student with student, teacher with teacher, and last, but certainly not least, of student with teacher.

FINIS.

THE HISTORY OF THE
CITY OF LONDON
FROM THE FOUNDATION
TO THE PRESENT
BY JOHN STOW
1618



