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AMERICA AT COLLEGE



AMERICA AT COLLEGE

AS SEEN BY A SCOTS GRADUATE

BY

ROBERT K. RISK, M.A.

WITH A PREFACE BY

DONALD MACALISTER, M.A., M.D., D.C.L. PRINCIPAL OF GLASGOW UNIVERSITY



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Sun. R. TO

Milton Haight Turk, Ph.D.

HOBART COLLEGE, GENEVA, N.Y., U.S.A.,

WHO, HAVING SUGGESTED THIS BOOK,

MUST SHARE THE BURDEN OF ITS NUMEROUS

SHORTCOMINGS



AUTHOR'S NOTE

This book is the product of a recent survey of some dozen representative Universities and Colleges of the United States. It does not pretend to the authority of the educational expert; but it may be of some service to him, as well as of interest to the general reader. I desire here to express my indebtedness to Principal MacAlister, of Glasgow University, for his kindness in suggesting many lines of useful inquiry, as well as in providing a Preface; to Dr. Thwing's Higher Education in America; to Mr. Clarence Birdseye's Individual Training in Our Colleges; to pamphlets, articles, and proof corrections by Dr. R. M. Wenley of Michigan University; and to the proprietors of the Glasgow Herald for courteous permission to reprint these papers.





PREFACE

LAST year Mr. Risk, a graduate of this University and a practised writer, before proceeding on a short journey through the United States, did me the honour to consult me as to the Universities he might visit, and the matters relating to higher education into which he might inquire. appeared to me that he would more usefully employ his time by ascertaining facts and forming opinions concerning a few institutions, of diverse type and aim, than by attempting a cursory survey of many. His purpose was not merely to describe American colleges, with a view to entertainment, but to compare and appraise their methods, in order to throw some light upon University problems at home. His brightly-written chapters show that he brought to the task an open mind and an observant eye. These papers attracted attention in the city when they were published in the

Glasgow Herald; in their present form they will, I doubt not, be read with pleasure and profit by a wider circle. In the United States and in our Colonies great academic experiments are in progress among men of our own race and speech and intellectual traditions. The local conditions may differ from ours, but the end proposed is the same -"that there never may be wanting a supply of men qualified to serve God in Church and State." In the old country we have less freedom than they have to make bold experiments in education. It is all the more desirable that we should ponder and adapt to our uses the lessons to be drawn from the adventures of our kinsmen abroad. These lessons are likely to be more suggestive and serviceable than any that alien peoples can offer us. And Mr. Risk has set forth not a few of them that are profitable alike for example and for warning. His book is worthy of careful consideration by all who desire the improvement of University organisation in the United Kingdom.

DONALD MACALISTER.

THE UNIVERSITY OF GLASGOW, July 1908.

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CHAPTER I

INTRODUCTORY

THE importance of Scottish University Reform, and the keen interest evoked by recent controversy on this perennial topic, suggested to the present writer that a few notes upon the University system of the United States might be of some value to the educational reformer who has had no opportunity of coming into direct touch with any American college, and might at the same time interest the general public, even that section of it whose contact with academic affairs becomes very close only at the season of rectorial elections or graduation "scenes." One is the more inclined to this belief because University Reformers are not apt to draw special

lessons from the complex institutions, old and new, which provide the future citizens of the United States with the means of higher education. Germany is cited to emphasise certain necessities, such as a wider application of the seminar system, which secures close personal contact between the student and his teacher; the establishment of the group system, in restraint of indiscriminate options; a larger teaching staff, or alternatively, the supplementing of the present staff, as in the medical schools, by extramural teaching; and the giving of greater encouragement to original investigation, in the humanities as well as on the side of science.

Now, while many features of the American Universities are modelled upon Germany, some of them have been modified in adoption, with such results as the evolution of the highly successful Preceptorial system of Princeton, which will be dealt with hereafter in its own place. The social side of University life, whose importance has only begun to be appreciated in Scotland during the last twelve or fifteen years, is in the States at least as highly developed as that

of Germany, though less notably, perhaps, in the direction of strenuous conviviality. And the residential system—that of Oxford and Cambridge, with certain modifications—is worthy of special attention, as it affects the whole fabric of University life and work so multifariously. The limitations imposed upon the actual work of Glasgow University by the fact that its students are scattered all over the town-and may travel distances of ten or twenty miles to their day's work—are perhaps less fully appreciated than they might be, simply because non-residence is part of the old-established order of things. For example, it places an obstacle in the way of the upbuilding of the seminar or tutorial system, of which so much has been written lately by educational experts. It is a hindrance to the serious student, who would otherwise have time, as he now has energy, for optional courses outside of his necessary work. It presents his less earnest brother with a sound excuse for going through the University on the minimum of requirements. One need say nothing about the dependence of the social life of a University—so

amply developed, in many of the larger American institutions, that a daily paper is required to record its manifestations—upon residence within or close to the college itself.

Before considering some salient general features of the American Universities, it may be useful to summarise briefly the more definite conclusions reached by the Parliament of University Reformers-men of high repute and varied academic experience—recently in session, in the columns of the Glasgow Herald. Necessarily, where so many experts were convened, one found acute differences of opinion upon such points of detail, for example, as whether the Arts curriculum should be one of seven or of five subjects, and whether the Scottish Universities are in need of a wider individual liberty; and if so, what degree of autonomy can and should be accorded them, without prejudice to their duty of "ministering to a homogeneous constituency with one educational system"or, in other words, without confounding and perplexing those who control and administer our secondary education. It may be set down as one

general conclusion that the Scottish Universities can never attain their full usefulness until the session is materially extended; and that the halfmeasure of a summer session does little to bridge the gulf, seeing that it has to a large extent been neglected by the student. A second point is the general dissatisfaction with the Arts degree on its present footing. It "may imply honest enough labour and be difficult enough to obtain, but it may be a featureless amalgam." To quote Professor Burnet:- "So far as I know, not a single teacher in any of our four Arts Faculties can be found who is satisfied with the degree as it stands. Some may be more venturesome, and some may be more timorous than others in their views of what should be done, but the existing regulations have apparently no one to say a word for them among those who know their working most intimately." One segment of this complaint, whose core is the present welter of options, is that the graduation ordinance of 1892 permits, and even encourages, a fragmentary and discontinuous course, in which subject after subject

may be finally dismissed at the close of a session of five months.

A further grievance against the system is that it takes the guidance of students, at the beginning of their College life, out of the hands of the University. This defect can be remedied only partially by the setting up of an Advisory Board of Studies. Another plea is for a less complicated preliminary examination, uniform throughout the four Scottish Universities; and it is further maintained that this test is too narrow and intensive, and subjects the secondary school to a strain too severe. The result is that "teacher and pupil devote themselves together to cramming for the examination, to the injury of both school and scholar"—and hardly, one may suppose, to the benefit of the instructor. To the need of more tutorial facilities reference has already been made incidentally. One reformer reminded his readers, almost plaintively, that in Oxford and Cambridge the tutor is bestowed in "a quite ordinary inhabited room, normally furnished, and with shelves of books to hand" -instead of a cell. Another point emphasised was the calamitous effect upon the higher teaching of our Universities of the reversal of the Carnegie Trust's former policy of paying the fees for advanced classes. But the main objectives of the University reformer have been outlined above. We may here bring them into relation with the general practice on the other side of the Atlantic, in so far as it is possible to generalise about institutions which display so high a degree of diversity.

To take the length of session first, one of nine months, divided into two semesters or terms, is all but universal. It runs from a date about the middle of September to a date about the middle of June, when Commencement, with its various ceremonies and festivities, brings the academic year to its conclusion. That a college year should end with Commencement is one of those apparent inversions with which even the briefest visit to the United States makes one familiar. But the appropriateness of the word, to the setting out in life of the annual batch of graduates, is undeniable. Sixty years ago Commencement did mark

the beginning of the year's work; so the old name is preserved with a modified meaning. There is a break of about a fortnight at Christmas, a rather briefer recess at Easter, and, while public holidays are observed, it is usual to spend one day also in honouring the birthday of George Washington and another in commemorating the founding of the university. There is one striking exception to this nine months' session, of which the second term begins in February. Chicago runs its University all the year—save for a recess in September—thereby insuring itself against the depreciation of the plant through disuse. And in that respect Chicago reflects the spirit of the city which has given it birth. It is one of the stock objections to the extension of the session, that it limits the opportunities of the poorer student, during vacation, who has to earn his living, in whole or part, throughout his College course. But the American Universities, with their nine months' session, are nothing if not democratic. Even at Harvard and Yale, commonly regarded as seminaries for the sons of the rich, many poor men work their way through College, which provides them with special facilities for earning money during both term-time and recess.

To come to the question of Electives, in the Arts course, the American Universities appear to be recovering themselves gradually from an uncontrolled debauch of options. In one great University of the middle West 666 courses were recently offered in the two terms to the bewildered student. There is recorded the case of one youth, by no means an isolated victim of extravagant liberty of choice, who took his A.B. degree with four-fifths of his entire undergraduate course in chemistry. The inevitable result, as a professor of that subject remarked after teaching him, was that "he did not know chemistry." At another very large University, especially developed on the scientific and technical side, a student may elect almost anything he pleases after satisfying the entrance requirements. But these are extreme cases; and while Harvard, whose president is so closely identified with the growth of the elective system, has an omnibus A.B. degree of great

variety, one finds an increasing tendency towards the prescribing of work in the first, or first and second years of the Arts course, and to the rational grouping and co-ordination of subjects, under the guidance of the Faculty, during the latter part of the student's career. Naturally one would expect Harvard to supply a stout defence of free options; and Mr. J. D. Greene, the secretary to the Corporation, informed me that upon analysing the records of 400 students only 4 per cent appeared to have made an eccentric choice, while a closer examination of this residue showed that the majority of the apparently abnormal courses were rational enough in relation to the career which the student had mapped out for himself.

The preliminary or entrance examination may be briefly disposed of in the case of a State University, such as Michigan. There is none. The student enters upon the presentation of a diploma from certain approved schools, whose certificates are subject to renewal periodically, and to withdrawal if the work done is not of the required standard. But the free elective or point system of admission by examination is widely adopted, the College issuing a list of from twenty to thirty subjects, to each of which a value is attached, and the candidate being required to secure a certain number of points, usually fifteen. English is the one indispensable subject. Latin and Greek are now optional entrance subjects in the majority of colleges, and in some of them the entrant's choice may range from these branches of learning, which used to be compulsory, through modern languages, history, physics, and chemistry, down to "freehand drawing, mechanical drawing, forge work, foundry work, and machine shop work," each of which at Leland Stanford will yield him half a point out of the required fifteen. The opinion frequently expressed about American courses of study, that Greek is all but gone, and Latin going, may be roughly tested by reference to the entrance subjects of Freshmen at Columbia recently. Of the 168 youths admitted, 37 offered both Greek and Latin, 105 offered Latin but not Greek, and 26 offered neither Greek nor Latin.

The seminar system for advanced or graduate

students has naturally been brought to a high degree of development in Universities whose financial resources compared with ours are practically unlimited. The "quite ordinary inhabited room," with rows of books to hand, is provided. At Columbia they have a range of seminar rooms opening off the library. Each room has direct access to a stack of books, selected by the tutor for the work of his small class, and the volumes thus brought together are accessible for general library purposes from the other end of the stack without disturbance to the work of the seminar.

The question, "What do you think of the American Universities?" is almost as awkward in its comprehensiveness as the query which American patriots are supposed to launch at the stranger as soon as he is clear of the New York Custom - house — "What do you think of our country?" The safe answer to both questions is "Immense!" enunciated in tones which convey a mingled sense of amazement and gratification. There are at least thirteen great Universities in the United States—Harvard, Yale, Johns Hop-

kins, Columbia, Cornell, Michigan, Pennsylvania, Princeton, Chicago, Wisconsin, California, Leland Stanford, and Illinois-with several others, such as Colorado and Texas, advancing towards the first rank. Any one of the thirteen conveys at once an idea of great size, physical and numerical. It makes very little difference whether you select Harvard, some three miles from the heart of Boston, or Chicago, seven miles from the centre of that wilderness of mean streets and shabby architecture, or Cornell and Princeton, which have secluded themselves in country seats—the effect of spaciousness is the same. One gets clear away from the idea of a University as a place of cramped quadrangularity. The ordinary area of the ground upon which the main buildings stand -officially known as the campus, and more familiarly as the "lay-out"-seems to be about seventy acres. And if you add other seventy acres for the athletic enclosure, you will not be beside the mark, save in the case of one or two urban institutions. The campus is a place of wide avenues, of noble trees, and sunny grass-plots. The avenues separate blocks of buildings of which

many are none the less pleasing individually, although the general architectural effect is heterogeneous. The student may have to walk nearly half a mile between two classes without leaving the campus. And in the forenoon, as the turretclock strikes the hours, the place hums like a hive, and it is not difficult to believe that the students on the roll of the thirteen great Universities number over 40,000—a figure which has doubled itself within the past ten years—or that Harvard, Michigan, and Chicago each carry some 5000 students on their books every year. When you take into account that there are over seventy State universities and innumerable colleges of all kinds and grades, the impression that everybody in America goes to College, for some period at least, does not seem extravagant.

The American University is in a constant state of expansion. In this country the opening of a new set of laboratories is an occasion. There it is a commonplace, almost an every-day event. In a letter which I received, some three weeks after visiting its place of origin, occurred the following

illuminating sentence :- "Nothing much new here, though they have torn up the entire corner of the campus next my house since your visit for a huge new building." Now during my visit a large section of the campus was being excavated for the foundations of a £40,000 art gallery and hall, to be provided by the alumni in memory of their predecessors who fell in the Civil War. At the same time preparations were being made to remove one building, as it stood, to a more convenient site, to make room for still another building. hind these manifestations of restless energy and change there lies the knowledge of resources to be tapped which are limitless compared with ours. A public University will sometimes receive from the State, in one year, a grant for some special purpose, hardly smaller than the annual income of Glasgow University, which is in round figures £70,000. A private University, such as Yale or Harvard, would have little difficulty in obtaining a similar sum in a couple of years from her graduates, organised for the raising of money as well as for other purposes, if she showed them the need of it. Wealth exhibits itself also in the multiplication of courses of study, the maintenance of a staff of 400 teachers for 3000 students; but not in the salaries paid, which range with Scottish stipends, though the purchasing power of the dollar in the cities hardly exceeds half-a-crown.

CHAPTER II

HARVARD

At Harvard they do not talk about the Campus. They call it the Yard, and that is significant. It "places" Harvard at once as a college with a history. The Yard to-day encloses some score of buildings of varying size and age. The original Yard formed the back premises of Harvard circa 1650. It had a certain sanctity then, so far as Freshmen were concerned; for one of many quaint Ancient Customs of the time ordained that "no Freshman shall wear his hat in the College Yard unless it rains, hails, or snows, provided he be on foot and have not both hands full." Further evidence of the sacredness of the Yard is indicated in the rule that "no scholar

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shall play football or any other game in the College Yard, or throw anything across the Yard." The modern Harvard has outgrown its extended Yard, where space is ample for several games of football if it were the habit to play there. Its Divinity Hall and Library, its Museum, its Jefferson Physical Laboratory, and many halls of residence, have pushed their way northward across a street, and occupy an area considerably larger than that of the University proper. And Harvard's latest glory, her new Medical School, is not up here, in the ancient city of Cambridge, but some two miles away, as the crow flies, down across the Charles River, in Brookline.

Harvard's famous Medical School had its beginnings about 120 years ago. Its earliest degrees were conferred in 1788. Its first Medical College was built in Boston in the year of Waterloo. Its latest was opened little more than a year ago, and occupies eleven acres of the twenty-five available in the commodious site on Longwood Avenue, which is distant about a mile from the old premises in Boylston Street. The remaining space is reserved for the forthcoming

Bingham General Hospital, a large infirmary for treating diseases of children, and one for infants, with special reference to mal-nutrition. Adjacent is the Nutrition Laboratory, established by the Carnegie Institute of Washington, whose purpose here is to measure human energy, mental and physical, and incidentally, perhaps, to find the ideal diet for every form of manual and intellectual labour. For the Bingham General Hospital the sum of £1,200,000 is given or promised. The Medical School itself, which counted among its financial sponsors Messrs. J. Pierpont Morgan and John D. Rockefeller, represents the last word in modernity, completeness of equipment, and convenience of arrangement. Externally the buildings, of grey marble from Vermont, display a massive simplicity of design, which has secured dignity without attempting ornateness.

The administrative building which faces you as you enter the quadrangle of which Longwood Avenue forms the fourth side, contains the Warren Anatomical Museum and several lecture-rooms, as well as the offices of the school. Among portraits in the Faculty Room is one of

Oliver Wendell Holmes, who once complained that his professorial work at Harvard was so diverse that he occupied, not a Chair, but a Settee. The departments in the laboratory buildings, which form the other two sides of the square, are grouped thus:—(1) Anatomy, Comparative Anatomy, Histology, and Embryology; (2) Physiology, Comparative Physiology, and Biological Chemistry; (3) Pathology, Bacteriology, Neuropathy, and Surgical Pathology; (4) Hygiene, Pharmacology, Comparative Pathology, and Surgical Research. These blocks are each erected on the general plan of two wings connected by an amphitheatre, above which is a large departmental library. The rooms are arranged on the unit system, which simplifies any changes which may be required, and substantial allowance is made at the rear of each building for future extension. What is said to be a unique feature of the Anatomy Department is a collection of over 1100 series of sections of carefully selected typical vertebrate embryos, including 51 series of sections from human embryos, among these being one of the very youngest of the stages of man yet known.

The Harvard School is admitted to be one of the severest mills which the medical student can select in any part of the world. To get in, he must present a degree in Arts, Literature, Philosophy, or Science. There are exceptions. As it was put to me by a member of the staff, a man might be accepted who had done original research in a textile institute, and who was thoroughly equipped in chemistry and physics, although he had never graduated. But these are single instances; and the requirement of an approved degree, or an examination equivalent to it, applies also to the schools of Law and Divinity. When this test was established its immediate effect was to cut down the number of students in some departments from a couple of hundred to fifty or less. But Harvard has found that grading-up, even regarded solely as a business proposition, pays in the long-run.

The Medical School grants one degree only, according to the custom of nearly a hundred years. That is the M.D., given cum laude to the student who makes 80 per cent at least in all examinations. The course is one of four years—

three of required studies and a final year of approved electives, chosen with reference to the student's proposed career as a general practitioner or a specialist. Some seven years ago the work of the earlier part of the course was rearranged, with a view to securing concentration of energy upon subjects grouped in a logical sequence. Thus the student on entering gives half a year solely to Anatomy and Histology, and the second half to Physiology and Biological Chemistry. The first half of the second year is allotted to Pathology and Bacteriology, and the second half to Hygiene and Pharmacology, and other subjects leading up to the clinical work of the third and fourth years. The elective curriculum of the fourth year is a creation of 1905. There are twenty-seven electives offered, in half-courses which occupy either the whole day for one month or the half-day for two months, several of the courses more generally taken being offered on both plans. The minimum requirement in the fourth year, 1000 hours, is equal to eight of these half-courses. In addition to what we would call degree examinations, there are in some classes weekly examinations of an hour and daily written tests of fifteen minutes. The work of instruction proceeds not only by lecture and demonstration and laboratory drill, but by "conference." In physiology, for example, there are fifty informal half-hour exercises, which combine recitation and lecture. It is quite evident that the man who comes through the Harvard medical course successfully ought to be fully equipped and need never be afraid of hard work. For his instruction there is maintained a Faculty numbering some thirty professors, and at least a hundred assistants and instructors of various grades. As I was coming away from the Medical School I noticed on the Laboratory of Hygiene and Pharmacology-a block of buildings which makes up onefifth of the whole establishment—a simple yet eloquent proof of the continuity of the Harvard spirit and its loyal generosity. A tablet in the wall records that the building was given "in memory of David Sears, Harvard A.B. 1807; David Sears, Harvard A.B. 1842; and David Sears, Harvard A.B. 1874."

Back at Cambridge again, I had a look through

Langdell Hall, which is shortly to supplement and complete Austin Hall, for nearly a quarter of a century the home of the oldest Law School in the United States, and the greatest. One could have no better proof of the reputation of this school abroad than the fact that two very eminent English Judges have sent their sons to Harvard to study English Law. The design of the school, as described in the reticent and unassuming phraseology of its official register, is "to afford such a training in the fundamental principles of English and American Law as will constitute the best preparation for the practice of the profession in any place where that system of law prevails." The chief feature of the Harvard method is what is known as the case system, which was established by Professors Langdell and Ames. The student does not take his law, cut and dried, from text-books and commentaries and reports. It is studied as it reveals itself when the history of the legal practice of successive centuries is unrolled. As a law graduate put it to me, "You get your cases and the law with them. We get our cases and have to discover the law for ourselves." The Harvard system has made many converts. Yale still holds out—at the expense of seeing a considerable number of her graduates desert to Harvard for their law course.

In the first of his three years the student must take five courses averaging each two hours a week. These are Contracts, Criminal Law and Procedure, Property, Torts, and Civil Procedure at Common Law. In his second year he selects ten hours a week from courses on Agency, Bills of Exchange, Evidence, Jurisdiction and Procedure in Equity, Property, Sales, Trusts, Admiralty, Bankruptcy, Carriers, Damages, and the Law of Persons. In the third year he selects from other ten courses, including Constitutional Law, Corporation, Insurance, and International Law. The tuition fee in the Law School is £30 a year, which may be taken as the uniform charge for the various departments of the University, excepting the Medical School, where the fee is £40 a year, with some small extras.

The necessary expenses of a Harvard student, including tuition, room rent, hire of furniture, board in hall for thirty-nine weeks, fuel and

light, infirmary fee, and sundries, are officially tabulated upon four scales - Low, Moderate, Liberal, and Very Liberal. The rent of a room may thus vary between £6 and £40, the former charge applying to a half-share of a single room. The extremes for board are £25 and £80, and for sundries £8 to £40-an item which in no case includes books, laundry, or subscriptions to clubs or societies. Accordingly the total annual cost of going through Harvard upon these four scales works out in round figures at £70, £90, £110, and £210—the "Very Liberal" mark, which is, of course, very liberally exceeded by the sons of railway and other "Kings," who keep motor cars during their College course. The system of charging an infirmary fee for each student seems an excellent one. The Stillman Infirmary is maintained by a levy of 16s. per annum. In case of sickness the student obtains for this payment a bed in a ward, board, and medical and nursing attendance for a period not exceeding two weeks in any academic year, as well as the services of a medical adviser in minor ailments.

At Harvard you may see, in Memorial Hall,

a thousand students feeding not like one, for there are various scales of dietary, but at one time. This dining-room is run upon a combination of table d'hôte and à la carte principles. Under general board, at a fixed charge per week, are included milk, vegetables, butter, bread, cereals, desserts, fruit, tea, coffee, and cocoa. Meat, fish, and eggs are extras, to be paid for separately as ordered. The general board costs 12s. a week. The other items run from 6s. to 10s., according to taste and pocket. One obvious advantage of this system is that it prevents the waste which would be entailed if students were permitted to order, taste, and reject a variety of meats offered at a fixed price. At Randall Hall, where the student pays for everything by the plate, he can mess comfortably for 12s. per week.

A good deal is done to lessen the expenses of the student by the Harvard Co-operative Society, managed by a joint board of instructors and students. It exists solely to reduce the cost of living. Necessary things, such as text-books, note-books, and furniture, are sold at a slight advance upon cost, and almost everything else that a student requires can be bought on favourable terms, from architects' and engineers' instruments to boots and shoes, and from cameras to clothes and stationery. There is also a loan furniture association, which offers to the student who is not a capitalist a complete set of furniture for his one room, which would cost him outright £10, at a rent of £1 a year, with a deposit of 10s. to ensure its return in good condition.

CHAPTER III

HARVARD (continued)

The essentially democratic character of Harvard was repeatedly impressed upon me, and one feature of the dining halls suggests it. There are comparatively few bursaries or scholarships open to the Freshman. He has more opportunity of obtaining such support in the later years of his course. A number of necessitous students, who have not obtained other aid in their first year, are put upon the Price Greenleaf Fund, which divides an annual income of £3000 into grants of from £20 to £50 per annum. Students who are not beneficed in any of these ways support themselves by a great variety of work—and one of the ways is by waiting at table in hall. Under

this American adaptation of the ancient servitor system of Oxford and Cambridge, a student may earn 10s. a week or more without any loss of academic caste. The following excerpt from the letter of a student, explaining how he worked his way through Harvard, suggests that there is no sentiment about "menial labour" or desire to be rid of it at the earliest. After explaining that he made from £20 to £25 as a waiter in his first and second years, the writer adds:-" The third year resulted still better. was elected secretary and treasurer of — — , which position paid me 100 dollars yearly. I still worked in the Hall as a slide man (advanced two places over the waiter's position)." A "slide man" is presumably one who officiates at the service bar; and to do so spells promotion and more money.

Of course there are other ways of keeping the pot boiling. One energetic youth made in his Freshman year £5 by looking after a Settlement Library, other £5 by going into Boston on Sundays to superintend a boys' club, and £20 by "the care of boys in Boston." Another saved £15 from

summer work on a farm, finding that "the health acquired is of great practical value during the College year." He had need of it, for on coming back to College he "tried reading gas meters for the Cambridge Gas Light Company, to see how it compared with work as a waiter, and found that the pay averaged the same, but that reading meters was harder and more disagreeable work than carrying trays in Randall Hall, which frequently leads to good positions at summer hotels." Student work, like almost every other department of an American University, is thoroughly organised. An Appointments Office attends to the double task of helping students to pay their way at College and assisting them to employment, educational or commercial, when they leave.

As a guide to the scope of the former department, and to the variety of employment offered, the Appointments Office publishes a list tabulating the work actually being done by students at present. In it one finds 150 engaged as clerks, 130 as special tutors, 50 as guides—there is a steady demand for guides to Cambridge during the tourist season—an equal number as ticket-

takers, 30 guards and almost as many storeclerks, and over 70 as special proctors. The unexpected directions in which some students apply their energies is suggested by the inclusion in this list of stereopticon operators, musicians, furnace tenders, elevator men, snow shovellers, and chair caners. The Harvard student who works his passage thus typifies triumphant democracy. The official suggestion, that the man who waits at table and the man who has £500 a year to play with are on a social equality at Harvard, must be regarded with some suspicion; but, at least, it may be said that the former is at less disadvantage in America than he would be if the same conditions obtained here.

Harvard is residential, save for those students who live in Boston. Those who fail to find accommodation in the dormitories betake themselves to private lodgings, of which a list is kept at the College Office. The dormitory system is twofold. The Corporation of the University maintains so many halls of residence. Private enterprise provides the others, and a University

proctor, a don or senior student, resides in each private dormitory. His duties are almost nominal, for unrestricted individual liberty is one of the tenets of the Harvard tradition.

There are many clubs, managed by students for students. I visited one of the most famous of these, the Hasty Pudding Club, which cultivates amateur theatricals among other things. premises include a well-appointed theatre. The "Pudding" is open to senior students, and the Institute of 1770 to juniors. These terms are used here in their British sense, for the American four-year classification of undergraduates as Freshmen, Sophomores, Juniors, and Seniors conflicts with our own. These clubs are elective bodies, and include only a small fraction of the undergraduate community. For those who are not socially ambitious there is the Union, magnificently equipped, with a large library, and open to all students at an annual fee of £2. They have free access also to the University's thirty-nine libraries, which contain 670,000 books and close on 400,000 pamphlets. In the main College library copies of all reference books used in

each course are reserved, so that every student has an equal opportunity of consulting necessary volumes. This department contains 22,000 books, and the reading-room is open twelve hours per day.

At Cambridge I had a glimpse of the two chief departments of Harvard sport. On the way down to the main playground, known as the Soldier's Field, which is within easy reach of the College yard, one crosses the Charles River, where the practice of eights and of "tubbing" occupies the afternoons. Here is the new University boat-house, the gift of the Harvard Club of New York City-which, by the way, is one of the most stately buildings on Fifth Avenue. The boat-house has locker accommodation and boatroom for 500 students, rowing machines, and even a rowing tank for winter use. There is a second boat-house, for students not rowing in regular crews, which was constructed at a cost of £20,000. Beyond the river, on Soldier's Field, is one of the sights of Cambridge—the New Stadium, a lofty and imposing erection of terraced concrete, provided largely by the Class

of 1879, and capable of accommodating 22,000 spectators.

Within this enclosure the football team, in all its leathered panoply of glorious war, was hard at practice, under the approving gaze of some hundreds of students, and the more critical inspection of a group of coaches. One of these was a professional man-not a professional coach—from Boston. His ambition in life is to beat Yale, which has been on the top at football too long. His pupils were splendid animals, the forward line averaging fifteen stone, and he trotted about after them under a warm sun, with a single-hearted devotion to the work in hand, which presented an admirable as well as a humorous side. There is need of special drill in American college football. While it resembles our Rugby in general outline, it is more scientific, and calls for a higher degree of mental alertness, so far as the forwards are concerned. The direction of the ball from a "play"-which is our "scrum," with the difference that the opposing forwards are not interlocked—is governed by a set of numerical signals. A shout of "Twelve,

Seven, Nine, Two!" indicates four previously rehearsed passes—and so forth. And, of course, the code has to be changed, and practised before every important match.

To come back to the first business of a University, the provision of general culture, it is an admitted fact that just as Harvard sets the highest American standard in professional and graduate courses, her entrance requirements for the Arts Faculty are the most exacting. No secondary school certificates are accepted. The Freshman must have passed the tests of the College Entrance Examination Board, or those of the University itself. The required subjects are English, Latin or Greek, French or German, history, algebra, geometry, and two departments of elementary science. These make up eighteen points. Other six points—which is to say, at least other three subjects-must be taken on an advanced grade. The requirements are wider than our own, but not so stringent.

Upon the quality of the work done by Arts students during their course an official report was published three years ago, interesting not only in its matter, but on account of the manner in which it was obtained. The Faculty of Arts and Sciences desired to improve the quality of the work done in the Arts degree course. So it secured, in response to circulars, the opinions of 245 instructors and over 1700 students, dealing with the undergraduate replies in such a way that the writers, relieved of any fear of identification, could express themselves with the utmost freedom. It may be premised that the level of work required of the Harvard passman is not high, even now. He has to make 50 per cent to pass an examination and complete his subject, and even that demand refers only to two-thirds of the work done in the first, second, and third years, and to one-half in the senior year. To make things easier, the mid-term and final examinations are pretty handsomely spread out, which gives the student who depends upon cramming ampler scope. One finding of the Briggs Report was that the average of private study by the undergraduate (and the majority of those who gave testimony were students who had done well in their classes) was no more than 31/2

hours per week per course. Even those students who took six courses per session—a usual number and one obviously excessive—studied only about twenty hours per week.

The report accordingly concluded that there was too much teaching at Harvard and too little studying, and that to promote intellectual vigour there should be twice as much study as lecturing. The majority of the students cited bore testimony to the value of teaching by "conference" in sections of about twenty men per instructor. A few years ago there were at Harvard fourteen courses attended by an average of 200 students. Such lecture courses were defended on the ground that they open large subjects of thought and introduce the undergraduate to "big men" on the Faculty. The report also stated the conclusion that there is not enough incentive for the Arts student to take honours, this being described as "one of the glaring failures of our system." One remedy proposed was to make the requirements for honours less professional and the courses of wider human interest. The defects of Harvard undergraduate work appear to have been largely due to the multiplication of electives. This leads to the taking of too many courses at once, which in its turn prevents the student from giving his subjects proper attention and at the same time makes it difficult to raise the standard of examination.

The multifarious life of a University which teaches all the arts and sciences, and has professional schools, many of the first class, in law, medicine, dentistry, agriculture, and architecture, mining, engineering, and forestry, is difficult to grasp. There are over 300 professors and instructors in the Faculty of Arts and Sciences alone. A brief excerpt from a pamphlet by the Dean of that Faculty, Dr. Briggs, is suggestive. On the evening of a mass meeting of students, in Massachusetts Hall, to discuss some burning question of athletic relations with Yale, Professor Palmer set out to hear a lecture on banking in another University Hall. As he went he was troubled by the thought that all the University would be in Massachusetts Hall, and that the banker would have no audience. He found

standing room only in a hall which held 400 people. The audience was one of students-not of citizens from Cambridge or Boston. After the lecture the Professor went up to the Classical Club. at the top of Stoughton Hall, where he found some thirty men, "oblivious alike of banking and Yale, who had spent the evening in a discussion of Homeric philosophy." The Harvard University Gazette is a four-page weekly index to what is going on. Some copies which lie before me indicate that the members of the University are provided with two or three public lectures almost every day during term. The list of publications by members of the University, which is issued monthly, runs to over sixty items for the period from June to September. Harvard's total property is close upon five millions sterling; its regular income is over £300,000. Some indication of its strength has been given. Its weakness lies in the multiplicity of courses offered to the undergraduate who comes up for general culture, which is apt to be scrappy, and in the consequent tendency to regard all subjects as of equal value. To come back to our starting-point, Harvard is

"immense." But one of the consolations which she offers to less wealthy British Universities is that the financial possibility of teaching everything may not be an unmixed blessing to the undergraduate student.

CHAPTER IV

YALE

A SUPERFICIAL observation about American Universities is that to the stranger most of them appear to be in the wrong place. The University of Massachusetts is not at Boston but at Cambridge. It is no longer called Cambridge, as it might have been, out of compliment to the ancient British seat of learning whence it derived its origin. The University of Connecticut is at New Haven properly enough, since that is the capital of the Nutmeg State. But it is now called, not New Haven, but Yale. The University of Baltimore does not favour that city, which possesses one of the most dignified, sonorous, and poetic of all American place-names. Instead we have

Johns Hopkins—hardly a more stately name for a University than Higginsville for a thriving commercial city. The University of Cornell is to be sought out in the inconspicuous town of Ithaca, in New York State. The University of Michigan is not at Detroit, where one might expect to find it—seeing that the University of Pennsylvania is at Philadelphia—but at another inconsiderable township called Ann Arbor. Vassar College is at Poughkeepsie, N.Y., and so on.

John Harvard and Ezra Cornell and Elihu Yale obtained their immortality by generosity to the struggling schools of their era upon much easier terms than a Johns Hopkins of thirty years ago or a John D. Rockefeller of to-day. Elihu Yale—Old Eli of a popular College song—appears to have built himself a monument more enduring than brass upon the easiest terms of all. His gift was some £400 and about as many books. He was a Boston man who lived thirty years in India, where he was Governor of Fort St. George, Madras, and made a large fortune. After returning to England in 1699, he assisted in collecting funds for the New Haven College. He also



bequeathed it £500 by will, and prepared to ship goods to that amount. But before this was done he died, and the College at New Haven benefited neither by the goods nor the testament. But it took the will for the deed, and retained the name bestowed on account of the Governor's earlier liberality. It is not always easy to fix the exact date of the founding of primitive New England colleges, which in their origin were Church schools, subject to factious clerical influences and the local jealousies of small communities, four or five of which contested with New Haven the right to become a collegiate town. These antagonisms were so keen that even when the New Haven College was seventeen years old, and held a graduation ceremony proudly described as "a splendid commencement," Wethersfield, one of the rival communities, held its own ceremony, and ostentatiously conferred degrees upon five students. Saybrook, another rival burgh, would not give up the College library except under a sheriff's warrant. Even then the books had to be removed under a strong escort, which was unable to prevent the loss of about a quarter of them.

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However, Yale celebrated her 200th birthday, by an interesting coincidence, two or three months after Glasgow University, in 1901, commemorated the close of her 450th year. Naturally the academic growth during Yale's history of two centuries was emphasised by orators at commemoration. Her library in 1701 had forty volumes. Now it holds over 350,000. Her instructors were then a rector and one or two tutors, and are now a president and over 270 professors and teachers; her students, then a handful, are now over 2500. Of buildings and grounds she then had none; now her magnificent structures cover block after block in the City of the Elms. "Then she was little more than a name; now a stupendous fact. Then with little touch or influence upon the community; now a mighty power in the world."

That last sentence suggests a distinction between Yale and other Eastern Universities, of which her sons are proud. The others began life as Church colleges. Yale, the third college in point of time—for William and Mary, in Virginia, ranks second to Harvard in that respect—set out

with the avowed purpose of fitting youths for the public service. Yale asserts her rank as the first educational institution in the world to make training for the service of the public the supreme object of her life and work, and we need not stop to quarrel with the distinction between "service of a monarch" and service of the public, whereby the claims of British Universities are here excluded. Yale also was always Catholic in the broadest sense. As early as 1765 President Clap could affirm that in his University, founded by Congregational ministers, no inquiry was made, on the admission of a student or afterwards, about his particular sentiments in religion.

In its physical contour Yale bears a general resemblance to Harvard. That is to say, there is a main quadrangle—known here as the campus—with additional buildings grouped irregularly in relation to it. The main campus includes the Alumni Hall, used for examinations; Dwight Hall, the abode of the Y.M.C.A., which, by the way, has a firm footing in all the large Universities; the Library, whose scope has already been mentioned; the School of Fine Arts with a

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notable collection of Italian masters; Phelps Hall, the classical department, and half a dozen dormitories. One of these, the Vanderbilt—which, as the name suggests, is one of the most luxurious of all the halls of residence—is piquantly contrasted with South Middle College, the only surviving building of the original Old Brick Row, dating back to 1750. This block, which presents the familiar features, or the lack of feature, of nursery architecture, is used now as a dormitory by students who wish to combine plain living with high thinking.

A conspicuous feature of the campus is The Fence, divided, according to an official description which does not lack unconscious humour, "into three sections, for the use of Sophomores, Juniors, and Seniors respectively." The meaning of this might be obvious if these were political and not academic divisions. Few statesmen are able to dispense throughout their whole career with "the use of a fence." But The Fence at Yale is used merely to lean against, and the unwritten laws of generations decree its division between the three senior years. One can only guess at what would

happen to a Sophomore who was found leaning against the Senior fence. Apparently a Freshman who wants the use of a fence must go out of College to find one. The rules which senior students invent for the discipline of their juniors would make an amusing chapter in the history of Universities. At one institution the first thing that a student does on quitting the examination hall at the end of his second year is to fill his pipe, which is lit for him, with pretended obsequiousness, by the nearest junior or senior. This mock ceremony preserves the ordinance that Freshmen and Sophomores are not allowed to smoke on the campus.

Of interest as an illustration of the practical business lines upon which American Universities are run is the fact that Yale, in common with many other institutions, sent an exhibit to the St. Louis Exhibition of 1904. It included an exact model of the main campus, on the scale of twelve feet to the inch. The elm trees, which are one of Yale's glories, had to be omitted that the buildings might be seen. The Peabody Museum, noted for its mineralogical collection, sent its still

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more famous pterodactyl, dug out of chalk in Western Kansas—the only mounted fossil of its kind in the world. And to show the visitor at St. Louis what kind of men Yale has produced, there were exhibited portraits of Jonathan Edwards, America's greatest metaphysician, who graduated at New Haven in 1720; William Samuel Johnson, the chairman of the Committee which drafted the United States Constitution; eminent Presidents such as Timothy Dwight, T. D. Woolsey, and Noah Porter; Nathan Hale, the patriot spy of the Revolution—his execution was re-enacted, up to a point, at the bicentenary in 1901; Noah Webster, lexicographer; Eli Whitney, the inventor of the cotton gin; Morse, of telegraphic fame; Theodore Winthrop, author, the first man killed in action on the Union side in the Civil War; and many men of historic distinction in the public and academic services.

Yale's professional schools are old established, according to American standards. The departments of Medicine, Theology, and Law came into being almost a hundred years ago. The Law School, as mentioned in a previous chapter, still

holds to the "practical" as distinguished from the scientific system of teaching established first at Harvard. The Medical School's matriculation examination was established so recently as 1879, and it is only ten years since the course was extended from three years to four. But this department, as tested by the number of graduates who pass into military and hospital service after competitive examination, now stands high. In the Law School, by the way, doubling-up is permitted, with the result that a student, counting part of his Law Course as Arts subjects, may complete his work for A.B. and LL.B. in five years. He may thus begin professional life about the age of twentythree, the average matriculation age being rather over eighteen than under. While Yale is proud of her Schools of Art and Music, she is largely an Engineering College. Including in that term mechanics and forestry, some 1000 students, fully a third of her total population, are in this department, taking a three years' course, which makes them Bachelors of Philosophy as a step towards such degrees as M.E. and other professional hallmarks. In Arts the curriculum is fixed for the YALE 51

first year, and some degree of choice in the second year is extended in the third and fourth.

Yale's annual income is round about £160,000. She might be described—at the safe distance of 3000 miles—as a smaller Harvard, ranking all but equal in the social prestige which she confers upon her graduates, and perhaps a shade more exuberant in academic spirit. Yale claims officially as characteristics that no other University represents all national sections so broadly, that less than a third of her men come from any one State, and that she enrols more Westerners than any other Eastern University. The number of men working their way is large, and they play an important part in College life. The moral force of the student leaders of public opinion is emphasised, along with the standard value of undergraduate degrees, the research work done in post-graduate courses, and the advancement of requirements in professional departments.

What has already been written about the work done by students who maintain themselves at Harvard applies to Yale, with some slight

¹ Appendix, p. 213.

differences. There are no student servitors in Hall, because "the hours are long and the discipline irksome." But next to private tutoring, more money is earned at Yale by men who wait upon their fellow-students, in small dining clubs of ten or fifteen members, than in any other way. Mr. Carnegie might ponder, if he has not already considered, some remarks of President Hadley on the occasion of his inauguration at Yale: "We need not so much an increase in beneficiary funds as an increase in the opportunities for students to earn their living. Aid in education, if given without exacting a corresponding return, becomes demoralising. If it is earned by the student as he goes it has just the opposite effect." A few secondary items on the list of student employments at Yale are delivering College papers, doing police duty at football games, "soliciting for railroad companies and trucking firms," driving milk waggons, letting tennis-courts, and even "selling violets at Junior Promenade and other festive occasions."

I have mentioned the exuberance of College spirit at Yale. It was naturally at its height at

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the Bicentennial, when, on Campus Night, 9000 people gathered in the main quadrangle, fitted up as an open-air theatre and concert hall. Of this number at least 5000 were graduates, from all parts of the world, ranging in age from twenty to ninety. There were tableaux depicting the history of Yale, but the singing was the thing. It was led by a chorus of 600 students, who had made themselves word-perfect — a rare condition of student-singing. And some 8000 undergraduates and alumni let themselves go in such song as this, which had to be given six times:—

Show me the Scotchman who doesn't love the thistle, Show me the Englishman who doesn't love the rose, Show me the true-hearted son of old Eli, Who doesn't love the spot—

(Stop here and hit the left breast three hard slaps)

—Where the Elm-tree grows.

Of course, the clan spirit sometimes drops into unconscious humour. There is a College song containing the line—

For God, for Country, and for Yale.

It is alleged that a Harvard Freshman, being asked in the class of Literature for a striking example

of anti-climax, quoted this line, to terrific applause. But the admirable side of the clan spirit meets you at every turn. In the main campus there are two gateways, one erected by the Class of 1896 in memory of two of their number who died in the Spanish War, and the other by the Class of 1897 to celebrate a graduate of that year killed in action in Cuba. As you enter Woodbridge Hall, where students meet daily at Commons, there are memorial tablets to a Yale missionaryvictim of the Boxer rising and to a Surgeon-Major who died in Manila, April 1902, fighting cholera and plague. "Saving life he glorified his uniform. In honour of service and sacrifice this memorial is placed for the strengthening of hearts." That is the spirit of Yale, chastened and exalted.

CHAPTER V

CORNELL

Cornell announces itself from afar. A city that is set upon a hill cannot be hid; and Cornell, judged by the American standard which makes a village a town, and any community over the 3000 population-mark a city, deserves the title. The first thing to be noted about Cornell is that it has the most picturesque situation of all American Universities. If you look pretty closely at a large map of the United States, you will find, in the north-west corner of New York State, and not far from the south-eastern extremity of Lake Ontario, a number of parallel scratches running nearly north and south. A nearer examination will reveal the fact that there are names attached to

these scratches. When you reach them, at the end of some eight hours in the train, from New York, they disclose themselves as lakes, about forty miles long, and from one to four miles broad. Individually they would dwarf Loch Lomond. Even when grouped they shrink together into a corner, away from their huge neighbours. One of these lakelets is called Cayuga. At the foot of it lies Ithaca, a flourishing "city" of 15,000 inhabitants. Cornell looks down upon Ithaca and over the lake, from a sheer hillside 400 ft, high. From the clocktower of the University the view of lake and the woodlands that frame it, in all the glory of autumn foliage, is of unsurpassable beauty. The roofs and chimneys of Ithaca, almost hidden by her trees, climb towards the foot of the hill upon a regular and unbroken curve. It is as if a giant had taken up a huge chess-board, inlaid in delicate white and grey and green, and bent it symmetrically before laying it down again. Many of the beauties of Cornell have to be sought out. The hill lies between two deep gorges, which hold a larger number of cascades and waterfalls than is to be found anywhere within an equal space. The

student may forget much that he learned here, after he has gone out into the world, but Cornell itself he will always remember.

Cornell was in its origin largely a one-man University. Local patriotism and a staunch belief in the value of higher education laid the foundations of Cornell by importuning the National Government and the rulers of New York State. In the Spring of 1907 the Cornell Centennial Day was duly celebrated, with Mr. Andrew Carnegie as orator-in-chief. But it was Ezra Cornell's birthday that was commemorated. The University opened its doors only forty years ago. To give £100,000 of his own substance, in order to obtain half of the land grant voted by Congress for agricultural and mechanical colleges, was the least of Ezra Cornell's sacrifices. The small sectarian institutions, naturally desiring that the land grant should be spread out thinly for their benefit, made a dead set against him. He was represented, in Committee of Congress and outside, as a swindler and money-grabber, as an atheist who would "establish a Godless University to corrupt the youth of the State." He had even to pay £5000

to one College for its consent to his scheme. This sum the State afterwards refunded to the University, at its founder's wish. From the small beginnings of forty years ago, when the College drew together a handful of farmers' sons, many of them ill-equipped for any kind of study, Cornell has climbed to an honourable place among American Universities, and to the first rank as a technical college.

That is the second point to be noted about Cornell. The sharpest impression one carries away from it is of a highly-developed technical school, with a College of Arts as appendix, which might almost be removed without serious danger to the body to which it belongs. My guide, a graduate engaged in the administrative work of the University, said he supposed I would like to see what was most characteristic of the place. So we looked down the hill upon rolling and broken ground some two hundred feet below, and there were squads of future civil engineers engaged in field work—well within the College campus, of course, for it extends to some 200 acres. We went through several ranges of

"shops," where aproned undergraduates were busy over blacksmith work and iron moulding. These courses must be more attractive in mid-winter than they appeared to be on a blazing autumn day. We saw the veterinary department, to whose clinics local farmers and others may bring their beasts, free of charge, except for medicines. The new Agricultural College is an enormous building, with which the joiners were not quite finished, in places. But the department of dairy bacteriology was in full work, investigating, among other things, the life-history of the bacteria to which milk owes its variegated flavours, with a view to eliminating the undesirable. In one crowded laboratory a class of men and women was mysteriously busy milk-testing for fat. A farmer who had been shown the prodigious vessels of the dairy department remarked, with the usual preface of "Gee-whiz," that he guessed they would not need to churn more than once a month. As a matter of fact, the dairy uses up 12,000 lb. of milk per week. The Colleges of Agriculture and Veterinary Science are supported by the State of New York, which appropriated £50,000 for the

former three years ago, and are managed by the University. The course is one of four years, with entrance requirements as high as in the Arts Faculty. But the unlettered applicant for "practical" work is not shut out. He can take a three months' course in winter without passing any entrance examination. Scientific stock-raising is studied at a farm belonging to the College, and there is even a department of poultry husbandry. Working round the hill we came upon the hydraulic laboratory, situated picturesquely as well as conveniently upon the bank of a river, and overhung with a practicable dam of imposing dimensions.

The impression obtained in the course of a walk round the hill is confirmed by a glance at the University statistics. Cornell's student population is, roundly, 3500. Of that number the Sibley College of Mechanical Engineering, which includes naval architecture and the department of electrical engineering first established in the United States, rounds in over 1000. The departments of agriculture and civil engineering, with such allied branches as architecture, absorb

another third. The Colleges of Law and of Medicine-whose senior students take their clinical work in New York-account for 500 students, and thus less than a quarter of the community is pursuing a liberal education. Cornell lives up to its early reputation for "godlessness" by having no school of divinity. The departments of law and medicine do not demand a degree in Arts or Science, and their diplomas cannot rank with those of Harvard or Yale. Inevitably this reacts unfavourably upon the College of Arts and Sciences, which, by the way, is magnificently housed in the Goldwin Smith Hall, one of the stateliest of American University buildings. But if Cornell has sacrificed a good deal to applied science, at least she has gained by concentration the repute of ranking equally with the Institute of Technology (Boston).

Cornell, as mentioned in a previous chapter, is one of the Universities conspicuously thirled to the Harvard doctrine of free electives. But within recent years some restrictions have been made which may interest the educational reformer, whether he does or does not think Cornell's

example of value. The Freshman is now confronted with certain fixed groups, arranged by the Faculty of Arts and Sciences. From these groups he must select nearly the half of his work, during the first and second year, or nearly the whole of his first year's work. Specimen groups are Ancient Languages, Modern Languages, History and Oratory, Philosophy and Education, History and Political Science, Mathematics and Astronomy, and so on. The Freshman must take some English, some languages other than English -not necessarily either Latin or Greek-some Philosophy, Mathematics, and Science. At the beginning of his third year he selects a Professor to advise him about the remainder of his work, "one-third of which must be approved in proper form by the Professor." It would hardly be possible to limit free options less while restricting them at all. A novel feature of Goldwin Smith Hall is a series of common rooms for the use of professors and students jointly, where they can meet and discuss electives and other more stimulating topics.

Cornell gave me my first introduction in the

States to what, in academic slang, is described as "a co-ed. shop." On the average there are some 350 women students on the books of the University—about a tenth of the whole population. Some 200 are accommodated on the campus itself, in Sage Hall. Perhaps this may be one reason for the Cornell man's attitude of aloofness and indifference towards the woman student, in this respect more highly favoured. The male student who does not obtain election to a Fraternity has to lodge in Ithaca and climb the hill daily. But the feeling of antipathy has much deeper roots. Probably if there were more women students the sexes might be on more cordial terms. But the men feel that the intrusion of a mere handful of women has the effect of sinking Cornell below the status of other great Eastern Universities which have not lowered their flag to co-education.

This attitude of the male student is sufficiently notorious to be the subject of comment in a recent report by President Schurman. "At Cornell women have occasionally complained of a certain frigidity in the atmosphere which is

created by and which envelops the undergraduate community. It is not pretended, however, that the lack of cordiality or of welcome on the part of some of the men students interferes with the educational purpose, for the sake of which the women have come to Cornell. To the fulfilment of that purpose they have, as a body, always devoted themselves with a zeal and a diligence altogether admirable, were they not at times pushed to the verge of overwork and collapse. Meanwhile the authorities of the University have always acted on the principle that the rights of women are at least equal to the rights of men."

This official declaration softens down the real facts of the situation. It is not "some of the men students" who show a lack of cordiality. As a body they treat the women with civility during business hours, and disregard their existence at other times. The women have their own amusements and their own clubs. These, in imitation of masculine example, are known as Sororities. The elections to these bodies are a cause of great excitement, and sometimes even of public tears

when the results are made known. Apparently many of the women who enter Cornell do so at serious sacrifice of health through overwork; for a medical report avers that the average girl undergraduate "is not in good physical condition to take up vigorous mental work, while the vast majority need constant medical supervision."

Cornell's chief distinction in athletics is supremacy in rowing. In that department it stands even higher than Yale does in football. This fact is apt to be hidden from the Briton by the appearance of Harvard on the Thames against the winner of the University boat-race. But Cornell has ceased to compete with the two older American Universities, only after beating them conclusively on the water. One highly significant fact, in relation to University athletics as a whole, is that the first playground at Cornell, for the use of students who are not members of the University teams, has recently been completed largely at the cost of former students. This means that heretofore only the merest fraction of the student community has had a direct personal interest in athletics. One might put

it in this way, that out of 3000 men students 120 have specialised in athletics, have become semiprofessionals, and have taken possession of the athletic grounds and equipment, including trainers and coaches, while the student population as a whole has been content to watch this little group of men and applaud their prowess. The reaction against a system manifestly vicious has begun, and the Cornell undergraduate who does not regard games as the chief end of University life will shortly be in possession of a twenty-acre playground. Apart from games, however, Freshmen and Sophomores are required to take systematic physical and military training, while older students "may elect it"—which sounds as if gymnastics might be taken as a soft option.

Cornell is no exception to the general observation that the library equipment of American Universities is on a much more liberal scale than with us, while every possible means is taken, by free access to large sections of the shelving, by the establishment of departmental libraries and commodious and comfortable reading-rooms, open during the evening as well as through the day, to make books accessible and encourage students to use them. One feature in the construction of the library, which contains some 400,000 volumes, and includes the Fisk Collection of Dante, struck me as an example of American ingenuity. Advantage has been taken of hilly ground to place the entrance to the library and the reading-rooms in the middle story of the buildings. Accordingly, the most distant stacks are no more than three floors up, or as many down, from the department where books are handed out.

Cornell prides itself upon its cosmopolitan character. Not much more than half of the students enter from the State of New York. Every other State in the Union is represented. In September last, when the number of first year students stood 200 above the previous record, eleven Chinese Freshmen were enrolled.

At Ithaca Station I dropped into talk with a business man from a neighbouring city, who mentioned casually that he used up a 1000-mile railway ticket every fortnight. He reckoned that I had been "up the hill," and guessed that I had found Cornell "an almighty complete plant."

This description I heartily endorsed, adding that we had nothing at all like Cornell in our own country—a useful form of words which conveys hearty compliment, and yet leaves room for mental reservations.

CHAPTER VI

MICHIGAN

HITHERTO we have been dealing with what, for lack of a better word, are usually described as "Private" Universities. The term seems hardly satisfactory, as applied to huge educational institutions such as Harvard, Yale, and Cornell. It must not be taken as excluding Universities which have been the beneficiaries of the National or a State Government at their origin, or during their career. Cornell, as we have seen, was State-dowered at birth, and has been similarly provided with an Agricultural College. But now we come to a typical University founded by a State, in response to the demand of its people for an institution of the higher learning, to carry

on and complete the work of the public schools, and maintained at the public charges. The University had its origin in 1837, when Michigan entered the Union. Ten years earlier seventy-two sections of land had been set apart and reserved for the use and support of a University. But it was not until 1841 that the University opened its doors. One should rather say its door, seeing that a Faculty of two members enrolled six students, who must have been highly favoured in respect of that individual training which is one ideal of many University reformers to-day.

As part of the educational system of the State the University is governed by a Board of Regents, elected by popular vote for terms of eight years, retiring in pairs, and eligible for re-election. It is an obvious disadvantage of this system that a University may become the shuttle-cock of political partisans. Speaking in general, there is a growing recognition of the disadvantages and positive dangers of this situation, and State Universities are now fairly free from the domination of the caucus. In this respect Michigan is highly favoured. The University Regents and



also the judges are chosen at a special election. Furthermore, the State constitution provides. whether by a happy accident or the interposition of some far-sighted and long-headed legislator, that the Regents shall be an independent body, co-ordinated with the other State Departments. The wide extent of the Regents' liberty and privileges is suggested by the fact that the Government auditor, on one occasion dissatisfied with the University's system of accounting, failed to obtain any encouragement from the Law Officers, who held that he had no title to dictate University finance, though he might approve of it. At present one-half of the Michigan Regents are serving a second term, and two-thirds of them are graduates of the University which they govern. Thus continuity of policy and a firsthand familiarity with University problems and requirements are secured. What the State does for the University may be briefly stated in cash terms. The income of Michigan University is £210,000. In June 1907 the State made a permanent annual addition of more than £50,000 for certain specific purposes.

There was once an actor, drawing a salary of £100 a week, who was asked what he did with all that money. To this he replied, without any ironic intention, "With what money?" The University of Michigan does many things with its money, but it is always asking for more. For the education of some 4500 students—exclusive of the Summer School—it maintains a staff of seventy-eight full professors, fifty junior or associate and assistant professors, and instructors and demonstrators enough to bring the total number of teachers up to 360, who provide the student with the embarrassing choice of 666 The School of Engineering ranks as high as any in the country, and is attended by fully 1300 students-more than a fourth of the total population. The Law School is the largest in the United States, and has borrowed the case system from Harvard. The Medical School of 350 students is subject to the disabilities of its situation in a small town. Per contra, it claims the advantage of possessing its own hospital, instituted primarily for teaching purposes, with 200 beds, whose occupants "are utilised freely for instruction. There are few hospitals where this is carried so far, the only restriction being the possibility of doing the patient harm."

The School of Pharmacy and the Homceopathic Medical College are of less importance than the College of Dental Surgery, which is of the best standing in a country where dental science has been developed to a very high pitch. The junior students are nearly 400 hours in the clinical rooms, and the senior students over 900 hours, including the time spent on "100 gold fillings during the year." The dental operating room, even when its fifty chairs are unoccupied, is an awe-inspiring and gruesome sight. The University School of Music, which has a staff of thirty instructors, possesses the great organ built for the Columbian Exposition of 1894, brought to Ann Arbor and set up in University Hall as a memorial to a former professor of music. It also owns the Stearns collection of musical instruments, brought together to illustrate the different forms of percussion, wind, and strings, to show the development of types from simple to complex forms. This

collection occupies the whole of one floor in the north wing of the Museum, and contains over a thousand instruments.

At Ann Arbor, as at Cornell, one finds the technical and professional schools very highly developed, and also less exacting in their entrance requirements than the older Universities of the Eastern States. And the same observation is true of the Arts Faculty—the Department of Literature, Science, and the Arts, as its official description runs. A State which maintains a University requires it to make the best of the material which the High Schools provide, and apparently the quality of the material falls in the ratio of the distance of its place of origin from New York and Boston. Speaking generally of the Middle West, practically all the teaching in the primary schools and 60 per cent of the work of High Schools is done by women. In Ann Arbor itself, for example, a High School for some 600 to 800 students is taught by ten men and thirty women. The vast majority of undergraduates are admitted on presentation of diplomas from schools which have been placed by the

Faculty of the University on its approved list. The schools thus recognised by the University are kept up to the mark by periodic inspection, and the necessity of having their certificates renewed after the lapse of three years. But this is manifestly a method of admission which may develop very considerable elasticity.

The requirements at entrance are fifteen units, a unit meaning a subject of study pursued during a school year, "with not less than four recitation periods each week." Of these units three must be in English Composition and Literature, three in Mathematics, one in Physics, and two in Latin, or French, or German. The other six units are elective. It is possible to suggest the scope of the work required of the approved schools without going closely into detail. A student who offers two units in Latin is expected to have completed a first Latin book, and should have read four books of Cæsar's Gallic War, and possess some knowledge of prose composition. A student who offers a third unit should have read also not less than six orations of Cicero or six books of the *Æneid*, and must offer more prose composition. This gives him an advanced standing. The three mathematical units include Algebra through quadratics, and Geometry, plane and solid. In Greek the reading consists of three books of the *Anabasis* and two books of Homer. If the preliminary examination of Glasgow University were applied to Michigan it would exclude about 65 per cent of those who matriculate there under the present conditions.

In the Arts Faculty last session over 1700 students were enrolled. The scale upon which instruction is provided may be illustrated in an outline of the Department of Philosophy, at the head of which is Dr. R. M. Wenley, formerly of Glasgow, whose capacity as a teacher and organiser is highly appreciated at Ann Arbor. The department maintains three "full Professors"—a description which provokes irreverence—and six assistant Professors and instructors. In the first term of each session the staff gives twenty-one courses, each of two or three hours per week. There are six introductory courses, including the Principles of Ethical, Social, and Æsthetic Evolution, the Place of Doubt in Experience, the

Fundamental Conceptions of Modern Science in their Development and Implications, and Introductory Physiological and Experimental Psychology. In the second term there are almost as many courses offered. Some of these are Hegel's System, the Development of American Ideals, Aristotle's Ethics, Political Philosophy, Problems of Human Conduct, and Genetic Psychology, a teachers' course, "treating consciousness in its development both in the animal series and in the child, and offering an opportunity, from the theoretical side, to prepare for the practical phases of child study in its relation to education." At the same time the staff conducts, in both terms of the session, seminaries arranged so as to give flexibility to the work of graduate students. The work of the Graduate Seminaries is classified thus:-Ancient Philosophy, History of Philosophy, Philosophy of Religion, Modern Philosophy, Ethics, Epistemology and Metaphysics, Logic and Æsthetics, Advanced General Systematic and Experimental Psychology. This course includes laboratory investigation of the problems of sensation, perception, attention, and so on. There is no doubt about the completeness of equipment in the Department of Philosophy, or of the ample facilities which it affords for the graduate student.

The Engineering Department offers courses in Civil, Mechanical, Electrical, and Chemical Engineering, Naval Architecture, Marine Engineering, Architecture, and Architectural Engineering. The technical branches are under the direct care of those who have had professional experience as well as a full scientific training. A notable feature of the Engineering Department is that much of the plant contrives a double debt to pay. The heating apparatus for the whole University is arranged so that it can be used for experiment and instruction. So with the system of ventilation, and even the University's telephone exchange can be used in this way. Glasgow University is represented in this department also. Professor H. C. Sadler, formerly assistant to Professor Biles, is the proud possessor of one of the two or three experimental tanks to be found anywhere in the world, outside

of shipyards. "Sadler's bath-tub," as it is locally known, is no toy. It is 300 feet long, 22 feet wide, and 10 deep. The electrically-driven travelling truck, which tows the wax models of liners and freighters, is like a section of spacious tramway car, and can be run at speeds varying from 15 to 800 feet per minute. The size of model used is from ten to twelve feet, and the combination of pantograph and high-speed cutting tools with which the models are produced is a device whose ingenuity is obvious even to the inexpert. To find a naval tank in a University some 600 miles from tide water is rather remarkable, when one bears in mind that Glasgow University still lacks this equipment. But Michigan has not established this department "for its health" or in sheer extravagance. Detroit is close at hand, and through Detroit, during the seven months when navigation is possible, there passes a Great Lakes traffic of some 60,000 vessels, carrying over 50,000,000 tons of freight.

Probably nobody at Ann Arbor, except the directors of the Medical School, regrets that the University is not in Detroit. It is beautifully

situated, with the customary regard for spaciousness, above this quaintly-named city of South-Eastern Michigan. The University looks down over the picturesque valley of the Huron River. One naturally expected that Michigan would have been residential. It stands in the country, and it has the resources of a wealthy State behind it. But a former President, of some forty years ago, cherished the eccentric idea that "diggings" provide an acceptable substitute for home life, a notion whose broad humour will be fully appreciated by the Glasgow student, past and present. So the funds which might have been allocated to the provision of dormitories were devoted to other University purposes, and Ann Arbor city to-day exists chiefly to provide lodgings for some 4000 young men and women, who are boarded at rates varying from 12s. to £1 a week. One can easily imagine the difficulties which will have to be overcome by any future President who is determined to make the University residential. At present the Fraternities, of which there are over thirty, and a dozen Sororities, do something to supply

this deficiency. They house about a sixth of the student body.

At Ann Arbor the Freshman Rush for 1907 was just over when I arrived, and its echoes were still reverberating in the campus and in the columns of the Michigan Daily, a fourpage paper devoted to University affairs. The Freshman Rush is an old-established institution, whose object is to teach Freshmen their proper place in the community which they have newly entered. There is an organised fight between Freshmen and Sophomores for the possession of some such trophy as a flag floating from a substantial and scansible pole—as a classical student described it. On this occasion the Freshmen won, through the gallantry of "a fresh medic., George W. Khran, of Kankanna, Wis.," who secured the coveted trophy. The kind of horse-play which prevails on these occasions is suggested by a brief chronicle, in the journal above mentioned, of a practice rush which preceded the real thing. Some Freshmen were captured by an overwhelming force of Sophomores, who waited for

their "guests" outside a hall where an entertainment had been going on. As the Freshmen emerged "willing hands assisted them into nearby trees. It was the same old story, save for one innovation. Fertile minds conceived the idea of pelting the treed Freshmen with eggs. Some of those entertained were: E. B. Dill, who proved a gallant lover. His proposals of marriage, ardently made to Miss Bessie Millar of Ann Arbor, greatly pleased his hosts. Ralph Norrington, of Bay City, was made to climb a tree and give his high school yell. . . . Was given a milk shampoo and sent on his way rejoicing." . . . Student nature does not vary much the world over.

CHAPTER VII

THE SMALL COLLEGE

No review of American University conditions can be complete unless some attention is given to the small college. There are in the States 622 Universities, colleges, and technical schools. We have already noted that there are only about a dozen Universities of the first rank, judged from a British standpoint. Of course there are many technical schools, large and small. But when full allowance has been made for technical schools, for Universities of secondary rank, and for large colleges on the way to become Universities, there is a residue of some 400 small colleges scattered all over the country. Of that total no fewer than 160 have

an average attendance of less than 150 students. So it is evident that the small colleges are an important factor in American higher education. Many of them are narrowly sectarian, and others resemble large boarding-schools, both in spirit and in educational standards. But a typical small college of good standing, free from sectarian influences and prejudices, presents many points of interest. I have chosen Hobart College, a very small establishment, because it seemed to be more characteristic of one phase of American education than Amherst or Williams; these, with their enrolment of some 500 students, are miniature Princetons rather than small colleges.

Hobart College, Geneva, N.Y., supplies a striking contrast to such elephantine "instituotions" as Cornell and Michigan and Chicago. There one is apt to be bewildered as well as impressed by physical greatness and complex energy. Here is something that can be grasped and understood—something that is simple and unpretentious, and at the same time something useful and vital. There are, I believe, thirty-

four Genevas in the United States—a fact which must gratify Switzerland, though it seems to discredit the resourcefulness of American invention. Cornell stands at the foot of Lake Cayuga, one of the chain of miniature Michigans and Ontarios which neighbour the Great Lakes. Our Geneva lies at the head of Lake Seneca, an hour's journey from Cornell, to the north-west. Geneva is a pretty little town of some 13,000 people. There are large nurseries for seeds and flowers round about it, and the Experimental Farm of the State of New York is close at hand. The town stands some 400 feet above sea-level, and the collegiate section of it overhangs the lake, from which it is separated only by a broad road lined by overarching elms, and a steep wooded bank, where stand the houses of those fortunate people whose windows look out over Seneca's broad expanse of blue water and the wide sweep of encircling mountains. Ranged along the street are the houses of the staff, the chapel, and some of the older college buildings. The newer erections are to the rear, set out in a campus of

some fifty acres, including the playing fields. The college had its beginnings in Geneva Hall, which fronts the street, more than eighty years ago. In point of antiquity Hobart can patronise Cornell and Michigan. It was originally an Episcopalian foundation, but only in the sense that it was left to that body to recognise the need of a college of liberal arts in Geneva and to establish one. There were no religious tests from the first, and there are none now. The trustees were convinced that the proper object of a college course, as distinguished from the studies pursued in the Universities and the technical schools, is the symmetrical and harmonious development of all the powers with which the student is endowed. "To give a sound general culture and train the mind of youth in the scientific method, to relate knowledge to life, without deviation into specialism and pedantry," is the sphere of work marked out for the small college.

Hobart was established under charter granted by the Regents of the State of New York in 1825. At that time its annual income was not much over £800. For twenty-five years the college struggled with adversity, one professor and two tutors subsisting upon "vanishing salaries paid by providential subscription." Since the 'fifties the endowment has been gradually built up by an occasional £10,000 and smaller sums collected by this or that President. To-day the college has endowments totalling nearly £200,000, and maintains a staff of seventeen professors and instructors for the education of some 100 to 120 students. The generosity of the man of wealth towards higher education is not lavished upon the great Universities only. A year ago a Geneva citizen made over to the Hobart Trustees property of the value of £90,000 for the foundation of a co-ordinate collegiate department for women, which will receive its first undergraduates in 1908. While I was in Geneva the librarian of the college, who has some 50,000 books under his care, was busy unpacking a collection of 4000 volumes illustrating Italian art and certain epochs of French history and Italian literature. This collection was made by John Safford Fiske, a Yale man, during many years' residence in Italy. He bequeathed

it to Hobart because he happened to visit the college a dozen years ago, and liked the place and the people.

The college offers three avenues to its Bachelor's Degree, which may be taken in Classics, Philosophy, or Science. Admission is obtained by examination, by the four-year academy diplomas granted by the Regents of the State of New York, or by certificate from certain private schools. Hobart was the first college in the United States to offer a degree in Science without Latin, which is compulsory for all who intend to graduate either in Classics or Philosophy. The classical curriculum may be summarised thus-Three hours a week of Greek, of Latin, and of English during two years; four hours a week of Mathematics for one year; four hours a week of a modern language for two years, of History for one year, and of Political Economy for a half-year; two years of Physics, Chemistry, or Biology, four hours a week in the first year and three in the second; and three hours a week for one year of Logic, Psychology, and Ethics. That covers the work up to the senior year, and provides a sound and comprehen-

sive course in general culture. As for the quality of the tuition, the Professor of Latin holds three Harvard degrees and doctorates of Hartford and The Professor of Mathematics is a Ph.D. of Johns Hopkins. So is the Professor of History. The Professor of English Language and Literature is a Ph.D. of Leipsic, has edited the Legal Code of Alfred the Great, and is a recognised American authority upon De Quincey. The other instructors are mainly honours graduates from Universities of the standing of Harvard and Columbia. The Professor of Astronomy, Dr. W. R. Brooks, is a scientist of European as well as American repute. He has been in charge of the Smith Observatory at Geneva since 1888, where he has discovered thirteen new comets-many of them with a telescope of his own construction—his total "bag" of twenty-four comets being heavier than that of any other living astronomer.

Thus the undergraduate of the small college, while he may rarely come under the influence of "big men," is provided with tuition of a quality which compares favourably with what the Universities have to offer, especially when credit is given

for the much closer individual attention which the instructor in a small college can devote to his men. At Hobart a large class is one of twenty-five or thirty students. A small class may contain only six or seven. Accordingly a student, throughout his course, obtains real and systematic guidance, based upon a direct, actual, and intimate knowledge of his needs and aims. It is easier for the instructor to arrive at an understanding of the average capacity of his class when it contains thirty members, instead of two hundred. The rich idler is not attracted to the small college, whose students are free from this disturbing and unsettling influence. Nor are they perplexed by the offer of hundreds of elective courses, whose very nature must be mysterious to the Freshman. During the latter years of his course the student comes into close personal relations with the members of the Faculty. The president has time to interest himself directly in each student. may, if he has the gifts of sagacity and sympathy and tact, exercise the influence upon the lives of his men that has been wielded by educators of the type of Jowett.

The student enjoys the advantages of a country life. He escapes the delusion, which affects so large a section of the undergraduate body in large Universities, that success in athletics is the chief end of man. Yet he finds plenty of scope for athletic tastes and college patriotism in meeting other institutions of like size at football, lacrosse, and baseball, and there is room for everybody, who has any knack of games at all, to cultivate it in a thoroughly enjoyable way. The small college, though it plays all games in season, seems to specialise in one form of athletics. Hobart rather fancies itself at lacrosse, meeting over a dozen Universities and colleges every season, including Harvard, Columbia, and Cornell. Four years ago the Hobart men gave the Oxford and Cambridge lacrosse team the hardest game they had in the United States. Obviously the small college escapes the taint of professionalism in athletics if only because the means to do ill deeds is lacking.

These are some of the advantages of the small college, and they may suffice to explain its continuance as an important factor in the educational system of the United States, and one that is certainly not diminishing. It may be noted further that the small college suits the purse of the youth of narrow means. He can go through college on about £70 a year, if he is in residence, and for about £25 if his home happens to be adjacent; and one hold which the small college has upon public support is that it serves a particular locality. Nor is the social side of life neglected. No fewer than five of the Greek Letter Societies have chapters at Geneva. The social institutions of the great Universities are reproduced on a smaller scale. Even the elective societies, to which the passport for a handful of men each year is eminence in work, or play, or good-fellowship, are represented in the small college. There it is impossible for the student who knows no one to start with, and who may not have the knack of making friends, to be totally lost in solitude. Dean Briggs of Harvard relates that one day a well-known professor, walking through the college yard when the autumn term was not long begun, met a young man whose aspect prompted him to ask, "Are you looking for

anybody?" The young man answered, "I don't know anybody this side of the Rocky Mountains."

The Freshman cannot be "up" in the small college many days without entering into the life of the place; and the houses of members of the Faculty, and of many citizens who take a warm interest in the college and its inhabitants, open to him hospitable doors. Geneva's reputation for friendliness to strangers has travelled far beyond the bounds of New York State. In Chicago, in New York, and in Baltimore the remark was made to me, in almost identical terms, "You were at Geneva, too. I guess you felt at home there, anyway." In acknowledging the correctness of the guess, one realised what the friendliness of the Hobart atmosphere must mean to the student, not only at the outset, but through the four years of his undergraduate life. There is a good deal to be said for the small college from the professorial point of view also. The teacher of English Literature, who may select his subjects from a wide field, session after session, would in a large University be tied down by the obligation to specialise in one or two narrow departments. He has more

leisure for study and for writing on the subjects which he has made his own, so he is not galled by the chaff of visitors from the great Universities at Commencement, who ask him if he ever knew a little college which did not want to be a bigger one, and whether his colleagues have refused many Chairs at Harvard recently.

It must be borne in mind that these notes apply to a small college of the highest type. There are, of course, many colleges which attempt to give a full Arts curriculum, including even laboratory courses and advanced classes, upon an income only sufficient to maintain half a dozen competent instructors. There are countless institutions, calling themselves colleges, and granting degrees, although their educational capacity is as limited as their spirit is narrow. Probably about a quarter of the colleges of the United States are doing work no higher than that of our secondary schools. You may find a college, whose charter - possibly one of forty years ago - is thoroughly authentic, which has a library of only 1000 volumes, laboratories whose equipment probably did not cost £200, and an income, from

all sources and for all purposes, of some £1500 a year. And there is the lower depth of the freak college, which perhaps calls itself a University on its notepaper. There are sectarian colleges, "where a man may not teach the difference between the subjunctive and the optative mood in the Greek language, if he is not sound as to the inspiration of the Book of Job or as to the government of the Church in New Padua." Many of the obscure little colleges are struggling vainly for an existence threatened by the State Universities. Witness the following advertisement from a recent number of the New York Outlook:—

College for Sale. — Whole or half interest presidency included. Annual net income \$5000. 8218 Outlook.

There are colleges where the "Faculty" is drawn entirely from the members of one family, and where one duty of the "President" is to inspect the trunks of students periodically in search of contraband. At some of the Western colleges there is an academic regulation which forbids Freshmen to carry bowie knives and revolvers. And here is an exact copy of the heading on the



notepaper used by one college president:-"Christian University. For Ladies and Gentlemen. College of Arts and Sciences. College of the Bible. Business College. Conservatory of Music. Correspondence Bible School. Faculty Strong. Instruction thorough. Curriculum Full. Expenses Light." In the case of another college the applicant for a "Professorship" has to answer these printed questions:—"On about how many days in the past year was unable to do full work? On about how many days in the past year was medicine taken? How long a Christian? Has taught in Sunday School? Has led prayer meetings? Uses wine or liquor? Uses tobacco? Belongs to a secret society? Who can testify as to success in Christian work?"... This glance at the freak college may instruct as well as amuse. It serves to illustrate the difficulty of defining "the democratic spirit," which is so often cited in the States as the explanation of what seems incredible, and the apology for what ought to be impossible.

CHAPTER VIII

CHICAGO

SAID a member of the Faculty of Chicago University to a member of the Faculty of Harvard, "I suppose you got a copy of our new Register all right?" To this the Harvard man replied, "Yep, I got it all right, but the blamed thing fell through my waste-paper basket." This story illustrates the attitude of a considerable section of academic opinion in the States towards the huge University, built out of some of the Rockefeller millions on the while-you-wait system. The Chicago Register—a word that shares with "catalogue" the burden which our Universities lay upon "calendar"—is a portly tome of some 400 closely printed pages; and the President's

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Annual Report, published as a separate volume, is its goodly companion. At one large Western University, with which Chicago has entered into competition, it is generally known as Harper's Bazaar. This nickname derives its sting from the very varied contents of that popular magazine and the name of the first President of Chicago University, who had a free hand and unlimited means for the establishing of multitudinous Chairs and the purchase of Professors. At this University, which looks down upon the new and raw Chicago institution from the summit of a history of seventy years, they told me that in the college chapel at Chicago I would find two pictures, one of the Founder of Christianity, and the other of the founder of the Standard Oil Trust. . . . No doubt Chicago accepts these jibes as the homage paid by envy to success; and the city was inured to such mockery long before it possessed a University.

It certainly presents an amazing example of what money can do. To consider its external appearance first, that alone must be a surprise to most visitors. I half expected to find the University situated between a large steel plant and a pork packery, running, like them, day and night, and presenting outwardly the same severely utilitarian appearance—a sky-scraping University, with express elevators to every tenth floor. But the real thing is situated as nearly in the country as any institution can be, which is only seven or eight miles from the centre of a city with an area of some 190 square miles, and a frontage on Lake Michigan almost equal to the coastal distance of Greenock from Troon. The University stands on its own ground, of 95 acres, sandwiched between two large public parks. On this campus, which cost up to April 1907 about £850,000, some thirty buildings have been erected, at a cost of close upon a million sterling. The disadvantages of newness carry some compensations. The more venerable American Universities present a jumble of old and new, and of mixed styles of architecture, varied with buildings which have no style of any kind. President Harper and his co-trustees were in a position to lay out the University upon a definite plan, and in one general style, which is residential Gothic. The architects were given a free hand, incidentally to set down reproductions

of sections of Oxford upon the Midway Pleasance of Chicago, as the central avenue of the campus is called. So the University Tower was copied from Magdalen, and the University Commons for the men students is an exact replica of the Hall of Christ Church. In a century or so Chicago will be able to challenge comparison, outwardly, with any American University. At present its newness is rather aggressive, and is aggravated by the evidences of prodigious wealth displayed in the magnificent interior of the Reynold's Club, which is the Students' Union.

What money and enterprise can do in the brief space of fifteen years, which makes up the history of the University of Chicago, is still more salient when one comes to look at the organisation of the various faculties. There are no schools of any of the branches of Engineering or Agriculture. This may seem a strange omission from the portentous Register. But probably President Harper, spending otherwise without stint, felt that it was not his business to enter immediately into competition with Universities like Michigan, Illinois, and Wisconsin, fully equipped in these

departments. And Chicago is prepared to teach everything else. There are Junior and Senior Colleges of Arts and Science, which last year enrolled 2600 students. The Graduate Schools in the same department attracted the remarkable number of 1170 students, and the University has reason to be satisfied with her young reputation as a place of post-graduate study. Medical courses are provided by co-operation with the adjacent Rush College, one of the largest schools in the States. The Law School was taken readymade from Harvard, and put under the control of one of its most eminent professors, only five years ago. Already it enrols over 200 students.

The Divinity School is twice as large, and, in spite of rumour to the contrary, is not a Baptist Seminary. There are Colleges of Education (with an attendance roll over 700), of Commerce and Administration, of Religious and Social Science. The University extension scheme, which includes departments of lecture study, with meetings weekly or fortnightly, and of correspondence study, is thoroughly appreciated. Last year there were 70,000 attendances marked at nearly 300



different courses, while over 1500 correspondence students were enrolled. Great stress is laid upon the cultivation of public speaking, There is a special department for this subject, in which four instructors give eight courses for students of the Senior College alone, including "Vocal Expression as Art" and "Artistic Reading." Of course, a University which covers so wide a field must run into freak courses and indulge in the subdivision of the apparently indivisible. But one can at least respect the enterprise of a polyglot University which conducts, as part of its Divinity Faculty, a Swedish Theological Seminary for some forty students and a Dano-Norwegian Theological Seminary for a smaller number.

What is perhaps the most remarkable feature of Chicago University, which presents so many, was mentioned casually in Chapter I. It conforms to the spirit of the place by running its plant all the year, thereby preventing depreciation through rust. This system is sufficiently extraordinary to demand some attention. It implies, first of all, that each course is limited to three months, at the close of which it begins de



novo. This is said to increase the freedom of student and teacher. The former can begin his College course at any of four points in the year, instead of at one fixed term. If he chooses, as he usually does choose, to take the ordinary nine months of continuous work per annum, he may do He can knock off for a period of three months if the state of his health or finances requires him to do so. (It can hardly be urged as an advantage of the system that one student spread his course over a dozen years, and brought his wife and family to see him capped.) On the other hand a youth of more than ordinary determination and endurance can take his degree in three years instead of four, by allowing himself only the few weeks of compulsory vacation in September.

Similarly the professor may teach for six consecutive quarters, or eighteen months, thereby earning six months' vacation. If he chooses to accept a lower salary, he need only teach for six months in each year. (One can almost hear the leisured Scotch professor smile at the citation of these "advantages.") The drawbacks of the

system were summed up for me thus by a member of the staff-That the repetition of courses is costly in time and in tutorial work; that instructors get run down, physically and mentally; that they are tempted to work throughout the year by the increasing cost of subsistence in Chicago; that the constant starting and stopping has an unsettling effect, not lessened by the occurrence of four Commencement ceremonies. All the same, in his view the pros and cons were pretty evenly balanced. One obvious disadvantage of this system is that it disorganises the class spirit—in the academic sense of the phrase which counts for so much in keeping alight the loyalty of students to their University after they have gone out into the world. Perhaps a great majority of the students work a nine months' session systematically for four years. But a great many must follow more devious routes to graduation, otherwise it would not be worth while, on the part of even a wealthy corporation, to add so largely to its tuition expenses.

The Commercial Department of the University, entitled the College of Commerce and Adminis-

tration, is worth attention on the score of its intrinsic interest and also as an illustration of the Chicago scale of equipment. There is a staff of twelve, including the President, Dr. Judson. He has more than the formal title to appear at the head of this college, as he is also Professor of Comparative Politics and Diplomacy. The college gives the degree of Ph.B. in commerce to men who have marked out for themselves careers in (1) banking; (2) transportation; (3) trades and industries; or (4) journalism. The department is not concerned with the counting-house aspect of business. Its aim is to provide a training on the economic, financial, and political sides. The entrance requirements and length of course are as in Arts and Science. Like the other departments, this one is divided into junior and senior colleges. In his first and second years the future railway manager or banker or political "boss" takes courses in Political Economy, Commercial Geography, English, Mathematics, or Science, and at least other five elective subjects. Public speaking is compulsory, and also physical culture—as in all the other departments of the University. On

passing into the senior college the student, with the advice and consent of the Dean, chooses one of the four departments mentioned above.

If his line is transportation, which offers, perhaps, the most spacious career to the young American, these are his recommended studies: Economic History, Law of Contracts, Modern Business Methods, Accounting, Railway Transportation, Comparative Railway Legislation, Railway Rates, Government Ownership, Tariffs, Reciprocity and Shipping, American Agriculture, Trusts, Labour and Capital, Finance, Economic Geography of North America, Law of Public Service, Companies and Carriers. The banking curriculum includes several of these courses, a number special to the department, and even one on Commercial Crises. The future journalist's required work is European History in the Nineteenth Century, English Constitutional History, the Study of Society, Municipal Government, Press Development and Organisation, and English -which comes last on the list, and quite appropriately so, in the case of many American journalists. There are other nine courses to be elected, so

there is plenty of scope for specialisation. Even the British business man, case-hardened in the belief that a University training unfits youth for an office, must be inclined to qualify his opinion in relation to college courses on such practical lines.

Another noteworthy feature is the Department of General Literature. The Department of English was modelled directly upon the Harvard plan. It offers some seventy courses, not all of them in every term, or even in every session. Studies in Eighteenth Century Comedy, English Drama from 1600-1642, the Critical Writings of Coleridge, Later Middle English, and Argumentation, are examples of Chicago's method of conquering the field of letters by division. But the aim of the Department of General Literature is something wholly different. Its purpose is, in conjunction with other departments of Language and Literature, "to afford facilities for the study of literature not limited by the divisions between particular languages and peoples." Its theoretic basis is the unity of all literatures. The work of the department falls

into three sections. The first is the Theory of Literature, including interpretation and criticism. Literature in translation is used "to obtain a sufficiently wide induction from literary phenomena to make such study scientific." In this section knowledge of the original languages may or may not be assumed. In the second section, Comparative Literature, a knowledge of the original languages of the principal literatures concerned is assumed. In the third section, General Literature, irrespective of divisions between particular languages, "is treated as a part of general culture rather than specialised study." In one of the courses the technique of the modern novel is studied in representative works of English, French, Russian, and Spanish fiction. In another the plays of Ibsen, Strindberg, Sudermann, Maeterlinck, D'Annunzio, Galdos, Shaw, Pinero, and others, are examined "with special reference to the treatment of social problems and the development of dramatic technique." These examples, out of the multitude proffered in the Register, show that there are few things that Chicago does not offer the student, from a

course on the History of the Baptists to one on Field-work in Palæontology.

One finds the Fraternity system at work in Chicago as elsewhere. There are over twenty chapters, housing some 450 students. There are also nine large residential halls, four for men and five for women, on the campus. A curious feature of the women's halls is that while any student who wishes may be allotted accommodation, she must spend three months on probation, and becomes a member thereafter only by the vote of the community. The various University Commons serve about 2200 meals a day at an average price of 8d.—and this department of collegiate enterprise is something more than self-supporting, though hardly a source of revenue. The University Press publishes some dozen journals, monthlies, and quarterlies, in addition to official documents. which are many and voluminous. In 1906 the deficit on this department was £1600. In that year, for the first time, the University budget exhibited a surplus—of not quite £60. The total income of almost 1,200,000 dols. was drawn

from fees, endowment, and "all other sources" in the respective proportions of 45, 30, and 25 per cent. The University is now tightening its purse-strings after the profligate expenditures of its initial period. The position that Chicago is destined to take, say fifty years hence, among the fiercely competitive Universities of the Middle-West is a problem much discussed. But even in the lack of "another Rockefeller every ten years," which some critics propound as essential to solvency, it seems highly improbable that Chicago would ever let its University shut down for lack of funds. And the announcement of the Oil King's New Year gift of over £400,000 indicated that Chicago University is not yet in need of another Rockefeller.

CHAPTER IX

JOHNS HOPKINS

The United States have been described as the Land of Contrasts, and the educational system of the country provides plenty of them. You are presented with one, of a sharp and memorable character, when you pass from a small college such as Hobart, with its six score of students, in the cloistral seclusion of a country town, to the huge plant, crammed with complex educational machinery, which Mr. Rockefeller has gifted to Chicago. And the difference is as clearly defined between the Universities of Chicago and of Baltimore as between the cities themselves. To say good-bye, with thankfulness, to the raw and tawdry splendours of State Street, Chicago, whose

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fis this a verb?

flaring lights soil and obscure the stars, and on the next evening to loiter down Charles Street, Baltimore, between old-world houses whose modest features are coyly revealed in the moonlight, to come upon a quiet little square, musical with the plash of fountains, where unobtrusive monuments are embowered in trees, to feel that you are in a city which has a history and a literature of its own, to hear the soft accents of Maryland—that is one unforgettable experience offered by the land of contrasts.

The Universities are as sharply differentiated. In Chicago there are some 5000 students; at Johns Hopkins there are hardly more than 700. Chicago provides multitudinous courses and grants innumerable and diversified degrees. Johns Hopkins is mainly interested in two only—the M.D. and the Ph.D., hall-marks of the highest professional and academic distinction in the United States. It was noted, to the credit of Chicago, that at the end of only fifteen years about a fifth of her men should be engaged in graduate study. At Johns Hopkins the graduates are not a fraction of the community; their pro-

portion to the undergraduate body is greater than five to two. Thus the popular conception of the University of Baltimore as an institution for postgraduate study and research exclusively is not very far wide of the truth. There is a Collegiate Department, with a couple of hundred students taking the A.B. course. But the business of Johns Hopkins is higher education in the most exacting sense of that elastic term.

The University began its work just thirty years ago, nearly ten years after its incorporation, which was made possible by the founder's gift of £700,000.¹ A sum not much smaller was left by Johns Hopkins for the establishment of an hospital, which was opened in 1889, and ranks with the foremost institutions of its kind in any part of the world. (An interesting feature of the training of nurses in this institution is that every probationer takes a full course of cookery in the Special Diet kitchens.) Thus the University preceded the hospital by more than a decade, and its influence upon the development of higher education throughout the United States is

¹ Appendix, p. 213.

immeasurable. The founder's ideal differed notably from those of the general run of benefactors whose sympathies are educational. It was to establish a system of fellowships for the encouragement of original research, and thus to provide a training school for the highest type of University instructor. Johns Hopkins foresaw the demand for men of high natural gifts, sound learning, and originality of mind. His University was created to supply it. Cornell thirty years ago represented, and still represents, along with the newer Chicago and many State Universities, the democracy of learning. Johns Hopkins was organised to promote "the higher and necessarily immediately narrow relationships of learning." The term of office of its first president, Gilman, extended over a quarter of a century. Then he passed to the Carnegie Institution at Washington, organised specifically for research. This fact suggests the close relationship of the Institution to the work done at Baltimore.

The University keeps alive the spirit of learning in a tenement narrow, cramped, and unattractive to the eye. It stands in the heart

of Baltimore. But it is now on tiptoe for flight to Homewood, which is neither in nor out of Baltimore—the most appropriate site, as it was the homestead of the founder. There the University will be spaciously housed in grounds of close on 200 acres, with plenty of scope for the expansion of its laboratories for physics, chemistry, geology, biology, and psychology, its seminaries and class-rooms, its library of 120,000 volumes and almost as many pamphlets. The departmental library system is established here. In addition to the general reference library, there are ten special collections, each of them appropriate to the work of the seminary to which it is attached. The Medical School buildings either form part of the hospital, or are adjacent to it, at no great distance from the University, in whose hall hangs a Sargent portrait of the four men called to the work of the hospital before the Faculty of Medicine was constituted-W. H. Welch, W. Osler, W. S. Halstead, and Howard A. Kelly. Of this canvas the Times remarked, with that insular condescension which endears the Briton to the younger nations, that the group of Baltimore

Professors would owe to Mr. Sargent any posthumous fame they might enjoy. Yet the Medical School of Baltimore ranks not only first in the States, but on a parity with any in Europe.

However, the most characteristic features of the work of Johns Hopkins are its Ph.D. degree, its innumerable scientific publications, and its close relationship to such State Departments of investigation as the Maryland Weather Bureau and Geological Survey. The degree of Doctor of Philosophy is offered to students who present a bachelor's degree from some University or College of good standing, and thereafter follow advanced courses of University study for a period of not less than three years, under qualified teachers, and "without serious distractions." Private study, or study pursued at a distance from libraries and laboratories, is not accepted as an equivalent. At least one of the three years must be spent at Johns Hopkins, and its Board reserves the right to accept or reject the advanced work done elsewhere. The candidate specialises, selecting one principal and two subordinate subjects, with the approval of the University Board of Studies. He has to pass certain examinations, both written and oral, and to present a satisfactory thesis. He must be able to translate French and German at sight, this test being satisfied by his familiarity with journals and monographs in these languages relating to his special department of study.

Speaking generally, the principal subject represents two years' work, the chief subordinate and the secondary subordinate subjects dividing the third year in the proportion of two-thirds and one-third. The scope of the degree may be indicated by a glance at some of the courses of students who graduated last June. One professed Mathematics, Physics, and Psychology, and presented a dissertation on "Curves with a Directrix." Another took Sanscrit, English, and German, and discussed "The Suffixes Mant and Vant in Sanscrit and Avestan." A third selected Political Economy, Political Science, and History, and wrote his thesis on "Jurisdictional Disputes of American Trades Unions." A fourth professed Greek, Latin, and Sanscrit, and offered a thesis on "The Moral Significance of Animals as indicated in Greek Proverbs." Of the thirty-three Doctorates conferred at last commencement, twenty were given for work in natural philosophy and kindred subjects, popularly included under the head of Science.

The Ph.D. degree, of course, implies original work in some department of research, a word which in the public mind is almost as indissolubly bound to the idea of a laboratory as a laboratory is associated with the mental picture of test-tubes and Bunsen burners, and all kinds of mysterious apparatus. As a matter of fact, there are at present about half as many graduates engaged in the "laboratory" of Literary Research at Johns Hopkins as there are employed similarly in the department of Chemistry. The Ph.D. represents special attainments, whose material aim is in the majority of cases a professorship. It implies general culture of some depth as well as width, and special proficiency in one department of the whole field of learning. It is also the symbol of the most serious endeavour and highest achievement of pure scholarship in America.

I have mentioned the co-operation of the University in the work of the Maryland Weather

Bureau, and the Geological Survey, which is under the direction of the Professor of Geology. Similarly the Maryland Oyster Commission, a few years ago, was directed by the Professor of Biology. One of the most notable of recent investigations was the solar spectrum research carried on over a long period of years by Professor Rowland and his associates. The results of research in scientific and clinical medicine, conducted at the medical college and in the hospital, are universally known through such publications as the Johns Hopkins Hospital Reports and the Journal of Experimental Medicine. The publication list of the University includes the American Journal of Mathematics, the American Chemical Journal, the American Journal of Philology, and journals dealing with Modern Languages and Terrestrial Magnetism.

At Washington I met Dr. Elmer E. Brown, who succeeded recently to the post of United States Commissioner of Education. This office was created forty years ago, not primarily for administrative purposes, but to collect information on all educational subjects, make reports, and

advise the Department of the Interior. There is a growing tendency, however, to lay administrative duties upon the Commissioner and his staff. Already he has been entrusted with such work as the education of the natives in Alaska, and he administers the national fund for the endowment of Agriculture and Mechanical Arts, which amounted to nearly £250,000 last year, and is steadily rising. The Commissioner is therefore in close relationship with many Universities, such as Cornell. At present the chief visible results of the Commissioner's labours are to be found in the annual reports upon education in all grades, which run to more than a couple of thousand closely printed pages, and present an enormous mass of carefully digested information, largely statistical. If the American Educational System is ever to be thoroughly consolidated under a central controlwhich is the dream of some reformers—this department may be expected to take a substantial share in bringing about that result.

From Dr. Woodward, the President of the Carnegie Institute of Washington, I obtained an outline of the work in the field of research which is being undertaken by this Corporation. It was instituted in 1902, and reorganised two years later, under Act of Congress, "to encourage in the broadest and most liberal manner investigation, research, and discovery, and the application of knowledge to the improvement of mankind." Its particular lines of energy are the conduct, endowment, and assistance of investigation in any department of science, literature, and art, in co-operation with Governments, universities, colleges, technical schools, learned societies, and individuals. The Institute appoints committees of experts to direct special lines of research, and publishes and distributes documents whose material would not otherwise be available. A typical and recent publication at the expense of the Institute is a General Catalogue of Double Stars within 121 degrees of the North Pole, in two quarto volumes, by S. W. Burnham. This embodies the results of thirty years' work, which are made available to students of astronomy at a price which cannot cover the cost of production. Another publication, in three volumes, heavily illustrated, deals with the topography, geology, zoology, and palæontology of China, and contains an atlas of fortytwo maps. The latest list of the Institute's publications includes work done in almost every department of investigation, from a guide to the Government archives at Washington to an examination of the heredity of hair lengths in guinea pigs, from Egyptological researches to spectrum analysis, and a statistical inquiry into the probability of causes of sex production in human offspring. The Institute has produced over forty volumes during the past year. It allots £20,000 a year to its publication department, and last year it supplied libraries with free copies to the face value of some £4000.

The research work of the Institute covers a very wide field. At present it is co-operating with about 100 institutions, through some 400 individual investigators, who are subsidised by grants ranging from £1000 to £20 per annum. The larger projects in hand at present are botanical research, in connection with which a desert laboratory was established three years ago at Tucson, Arizona; economics and sociology; experimental evolution, which has a station at

Cold Spring Harbour, New York; historical research; horticulture, under the control of Mr. Luther Burbank, who is established at Santa Rosa. California, with a subsidy of £2000 a year; marine biology, for which the laboratory is at Dry Tortugas, Florida; meridian astrometry, which is to employ seven trained observers at a station to be erected in Argentina; nutrition, with a laboratory adjoining the Harvard Medical School and Hospital; solar physics, whose station at Mount Wilson, California, has just been equipped with a sixty-inch reflecting telescope; terrestrial magnetism, including a magnetic survey of the Pacific by the observation ship Galilee; and geophysical investigation, for which a laboratory on an isolated hill in the district of Columbia is being established at a cost, for site and construction and equipment, of £30,000. These are only the main departments of the Institute's work. Some of the investigations touch matters which appeal directly to the most practical man—the examination of the chemical constitution of Portland cement, for example. But the pursuit of knowledge for its own sake is the central purpose of the Institution.

Mr. Carnegie has sought out many devices for ridding himself of part of the incubus of wealth. This institution is one scheme which disarms hostile criticism, because it promises substantial and permanent benefits to mankind.

CHAPTER X

BRYN MAWR AND WELLESLEY

Bryn Mawr, in the suburbs of Philadelphia, and Wellesley, half an hour by rail from Boston, are two of four typical women's colleges, all founded between the later seventies and earlier eighties of last century under deeds of gift almost identical in their main terms. The other two institutions were Vassar, at Poughkeepsie, New York, and Smith College at Northampton, Massachusetts. Between the establishment of the first academies for girls, in the New England States, about the beginning of last century, and the institution of women's colleges, the system of co-education in Universities supported by the State developed. Oberlin, in Ohio, may be said to have given the

lead. It was chartered in 1834, and its first circular emphasised, as one of the objects of the Oberlin institute, "the extending of the benefits of the most useful education to both sexes." In 1856 Iowa established a State University for men and women, and this example was followed by Kansas and Minnesota about ten years later and by Nebraska in 1871, at which date Michigan, Illinois, California, and Missouri had newly opened their doors to women. And now there are only three State Universities in America, those of Virginia, Georgia, and Louisiana, which are reserved for men only.

To return to the four typical women's colleges, the object of their founders is expressed in the words of Matthew Vassar, who hoped "to be the instrument, in the hands of Providence, of founding and perpetuating an institution which shall accomplish for young women what our colleges are accomplishing for young men." The first purpose of Sophia Smith was stated in almost identical terms, while the other cardinal principles of her bequest laid stress on religious culture, the establishment of cottage homes for the students, instead

of a mammoth central building, and the necessity of male instructors, since "it is a misfortune for young women or young men to be educated wholly by their own kind." (The founder of Bryn Mawr, Dr. Joseph W. Taylor, was impelled by unrequited love. Finding his offer of marriage declined by the woman of his choice, he decided to use his property to build a college for women. (Perhaps he felt that if the lady upon whom he had fixed his affections had enjoyed the benefits of higher education her answer would have been different.) In 1880, the year of his death, the college was incorporated, by the authority of the State of Pennsylvania, and invested with the power to grant degrees. In planning the curriculum and in other matters of organisation the experience of Vassar, Smith, and Wellesley Colleges was drawn upon, while from Johns Hopkins University was borrowed the system of major and minor electives in fixed combination, to which Bryn Mawr first gave the name of the Group System.

The required courses for the degree of B.A. are Latin, or Greek, or French, or German for five hours a week during one year, when such subject has not been included in the matriculation examination; English, five hours a week for two years; Philosophy and Science, five hours a week for one year; and the same amount of Science, or History, or Economics and Politics, or Law or Mathematics. At this point the group system comes in. The undergraduate must then take two major courses, of five hours a week during two years, to be selected out of a total of twenty-nine fixed groups. These may be summarised thusany Language with any Language; History with Economics and Politics or Law; Economics and Politics with Philosophy or Law; Philosophy with Greek, or English, or Mathematics, or Physics; Mathematics with Greek, or Latin, or Physics, or Chemistry, or Geology; any Science with any Science. That may be accepted as a rational and scientific compromise between a rigid Arts course and a welter of indiscriminate options. In addition the undergraduate chooses free elective courses equal to ten hours a week for one year.

The A.B. may proceed to the higher degree of M.A. at the end of another year of approved study, and after examinations which may be

written or oral, at the choice of her teachers. Bryn Mawr also grants the degree of Doctor of Philosophy to her own and other graduates. This title implies a three years' post-graduate course, of which two years at least must have been spent at Bryn Mawr, and the production of a thesis which shows satisfactory evidence of original research. A knowledge of French and German is an incidental requirement. In fact, the Bryn Mawr Ph.D. is the feminine counterpart of the Johns Hopkins degree upon which it has been modelled, and there is this further parallel between the two institutions, that at Bryn Mawr the proportion of graduate students is respectably large, amounting to nearly 20 per cent of the total of some 430 members. The best of these advanced students obtain scholarships and fellowships tenable at other colleges, including Johns Hopkins, Radcliffe (at Cambridge, Mass.), and Barnard, the Women's College of Columbia University. About half of the community at Bryn Mawr is preparing for educational work. Of the forty-six instructors more than half are men. There are two women scheduled as 'full professors," but the heads of departments are men.

To Bryn Mawr, as to Harvard and Yale, a section of the community is attracted by the desire to "have a good time." Popular opinion is, perhaps, inclined to exaggerate this phase of the higher education of women. The Bryn Mawr authorities place a check on the tendency to devote too much energy to athletics, social engagements, and college "politics." It is provided that no student who, at any time during her course, has received a grade below 70 per cent in as many as one-half of the hours that she has taken will be permitted to hold office in any of the organisations of the college, to take part in entertainments requiring preparation, or to undertake any paid work. The gymnasium, where attendance is compulsory four times a week, and a swimming pond, are features of athletic equipment. A French professor who visited Bryn Mawr not long ago amused its inhabitants by stating in print that the students played football. He made this deduction from a glance at a hockey-field, unoccupied. But the girls play almost everything else—tennis, hockey, water-polo, lacrosse, indoor baseball, basket-ball, and cricket. The tuition fee is £40 a year—£10 more than at Harvard and Yale—and the cost of board and residence in the college is £60 a year and upwards, according to accommodation. Bryn Mawr is laid out on the quadrangular system, and is entered through the picturesque Owl Gateway, the central part of Rockefeller Hall, one of the newest of the numerous student residences.

Wellesley, in respect of its "lay-out," offers one of several contrasts with Bryn Mawr. Just as on its educational side Bryn Mawr may be described as the University of Baltimore in little, Wellesley in outward appearance suggests Cornell on a small scale. Its buildings are scattered widely over a large park, undulating, magnificently timbered, and at one side sloping steeply to the banks of Lake Wanda, a pretty little sheet of water used by the students for rowing and ice sports. The scattered distribution of the buildings is all to the good in summer, no doubt; but when the raised footways of wood, conspicuous in summer along the avenues, come to be the only

means of distinguishing them from the surrounding snow, Wellesley must wish that its campus was rather less spacious. Another point of difference is that Wellesley enrols about three times as many students, or nearly 1200, of whom only about twenty in each year take graduate work for the degree of M.A. The others pursue a general culture course. The majority of the undergraduates enter by certificate from schools. The distinctive features of the curriculum for the B.A. degree seem to be that Physiology and Hygiene and Biblical History are among compulsory subjects, the former being taken in the Freshman year. Proximity to Boston enables Wellesley to maintain a large staff of teachers at smaller expense than other colleges less conveniently situated. There is a Faculty of about a hundred, or one teacher to every twelve students. Only about a tenth of the staff, however, is made up of men.

Each hall of residence houses sixty women on the average. The tuition fee is £35 per annum, and as all the rooms in the halls are the same price, the total expense of the student at

Wellesley may be stated exactly at £90 a year. I was told that a feature of Wellesley, and one worth looking into, was that all students had to take part in the domestic work of their dormitories. This shows how hard a tradition dies; for, as a matter of fact, compulsory domestic service was abolished at Wellesley about fifteen years ago. It was "a beautiful plan theoretically, but would not work in practice." All that remains of the system is that a few students do some housework in part payment of board. The undergraduates are allowed a large measure of individual liberty. They may go into Boston until 6.30 in the evening unchaperoned. Their hours of departure and return are registered, and the duty of investigating any irregularities rests with each house president, who is a member of the Faculty in charge of a dormitory. The government of the community is vested in the president, Dr. Caroline Hazard, a Lady Dean for the whole college, an Academic Council, which controls the curriculum of studies, a Director of Halls of Residence, a Health Officer, and behind, and also above all these officers, the Board of Trustees,

who control finance and make all appointments to the Faculty. Wellesley owns one of the largest libraries of all women's colleges, numbering 60,000 volumes. Two special features are a collection of 700 books on early Italian literature, and some 1400 works relating to the languages of the North American Indians. Wellesley specialises in music and art. The history of art is taught partly by the aid of a collection of 8000 photographs of classic architecture, sculpture, and paintings—a method which Mr. H. G. Wells, after visiting Wellesley, dismissed in a printed sneer at "canned culture."

The tastes of the Wellesley girl run strongly towards the drama. The Shakespeare Club, one of the most prominent of college societies, is affiliated to the Shakespeare Society of London, and gives a play annually in June on the campus, which provides an exquisite setting for A Midsummer Night's Dream. One Greek Letter Sorority gives a Christmas Masque; another, at Commencement, stage scenes from the Odyssey out of doors. On Tree Day, the only annual college festival from which guests are excluded,

the alumnæ come back in full force from all parts of the States to share in various junketings. The college procession of students past and present, the seniors in academic costume and the juniors in white muslins, includes some such pageant, organised by the Sophomore year, as the Feast of Pardons in a Breton village. It is unnecessary to mention more than a few college societies, such as the Philosophy Club, the History Club, the Scribblers, the Glee Club, and the Banjo Club. Athletics hold an established place in the scheme of things.

Undoubtedly the American college girl, even when she takes her work with the utmost seriousness, "has a good time," and gains in resource, in adaptability, and social graces as well as in knowledge. An enthusiastic admirer of her own sex summed her up thus in a recent number of the University Magazine:—"In practical as well as in spiritual dilemmas she is quick to find a solution of the difficulty. She can black shoes for the benefit of the library fund or address a mass meeting; she can entertain the leader of the Celtic revival or an Italian girl who works in a

candy shop in Boston; she can sit under a calcium light at a rehearsal of *Romeo and Juliet* and, oblivious of everything, write a paper on Spencer, leaving it at intervals when her cue comes and returning without loss of equanimity; she can sing in the choir at chapel service in the morning, and then rush off to the laboratory, to put on a gingham apron and dissect an earthworm. This is college life."

The effect of college life upon the inclination of women to marriage has been discussed by a variety of writers. Dr. Thwing, of Western Reserve University, has published some statistics on this point, both interesting and curious. His general conclusion is that about 50 per cent of women graduates marry. The curious fact is that the proportion should vary between such wide extremes as 61 per cent at Oberlin and 21 per cent at Smith College, Massachusetts, Wellesley coming second lowest on the list with 25 per cent. One must make allowance for the fuller opportunities of regular association with men which co-educational institutions such as Oberlin, Wisconsin, and Michigan afford—although it is

argued, per contra, that co-education destroys the illusion necessary to matrimony. However, the main reason of the disparity between the proportion of married women graduates in the Eastern and Western States appears to be that the movement of population is westward.

Obviously the capacity to earn a living which a college education confers must tend to reduce the marriage rate among women graduates, while the widening and deepening of the intellectual life inevitably makes women more exacting in their choice of a husband. I must not omit to record a really delightful slip of the tongue made by an eminent lady president, while addressing an audience of University presidents and other officers, male and female, on this subject. She grew eloquent about the inaccurate knowledge and loose statements of those writers who aver that the higher education of women is inimical to the interests of the home and the family. She appealed to her audience to look at facts-to weigh facts which had come under her own observation as president of a woman's college. She had carefully analysed statistics, as carefully

compiled, and this was her conclusion, uttered with a ringing note of defiance (and immediately drowned in shouts of laughter)—"That in the college which I have the honour to represent, during the past twenty years over 40 per cent of the women graduates have married, and over 60 per cent have had children."

CHAPTER XI

COLUMBIA AND THE CITY COLLEGE

AT Columbia the first thing I did was to go to chapel-service; which might suggest that I arrived there very early in the morning. But Columbia differs from most Universities and Colleges that I have heard of in the respect that its chapel service does not begin the day, but is a break in it for twenty minutes at noon. That it is not compulsory, or capable of treatment as a "soft option," was evident from the congregation. It numbered some 200 people, including a few strangers, and the population of the University, including the Barnard College for Women, Teachers College, etc., is round about 4000. We had a short address, of an eminently practical kind,

from a popular member of the Faculty. The gist of his exhortation was that the parable of the Prodigal Son was not intended to be applied either as a proof of the necessity of sowing wild oats or in extenuation of the practice. The chapel is a remarkable piece of architecture, externally and within. Its roof is everywhere vaulted, and it is built throughout of red brick. And yet it has both dignity and a curious exotic beauty. This building in its daily use preserves the continuity of a tradition of a century and a half. Since the foundation of Columbia University under Royal Charter as King's College in 1754 the daily chapel service has never been omitted, except possibly during twelve years in the end of the eighteenth century, when the college itself was suspended on political grounds.

King's College set out in 1754 "to instruct and perfect the Youth in the Learned Languages, and in the Arts of reasoning exactly, of writing correctly, and of speaking eloquently, and in the Arts of numbering and measuring, of Surveying and Navigation, of Geography and History, of Husbandry, Commerce, and Government, and in

the Knowledge of All Nature in the Heavens above us and in Air, Water, and Earth around us—in everything useful to the Comfort, the Convenience, and the Elegance of Life—and, finally, to lead them from the study of Nature to the knowledge of themselves and of the God of Nature . . . and everything that can contribute to their true Happiness both here and hereafter." The programme of even the modern Columbia can scarcely be said to be more comprehensive.

The reincorporation took place in 1784. Almost immediately thereafter the college was transferred to an independent board of trustees. Up to the middle of last century Columbia, like other important institutions in New York, was situated in the lower end of the island. In 1857 it moved up to 49th Street; and ten years ago it took a longer step in the same direction, and established itself permanently on Morningside Heights, on a plot of 35 acres immediately overlooking Riverside Park and the Hudson. The University consists of Columbia College, for the undergraduate course in Arts, with the six Faculties of Medicine, Law, Applied Science, Political Science,



Philosophy, and Pure Science. The medical school is the College of Physicians and Surgeons in West 59th Street, and has been substantially endowed by the Vanderbilt family. Barnard College for Women, which enrolled about 400 undergraduates in 1906, and Teachers College, with an attendance of nearly 900 students obtain a professional training in education, are independent bodies financially, but closely affiliated to the University.

An important step towards unification was recently taken. During the first six years of these institutions' existence the University exacted a fee at the rate of £2 an hour per week, throughout the academic year, for each student of Barnard or Teachers College taking University courses, and paid at the same rate for each University student who took courses in these colleges. Now there is a free interchange of facilities without any cross charges for tuition. The energies of the University are divided approximately thus:—The numbers of Arts undergraduates and of students of applied science are almost equal at 580; the law department holds 380; medicine, 430;

architecture, 100; pharmacy, 350; music, 30. Graduate students of philosophy, science, political science, and pure science number 860. Obviously the proportion of graduate students here is very high, and, according to an authority of Johns Hopkins, somewhat misleading, as at Columbia the term is not strictly construed, and includes students taking a professional course.

Admission to the undergraduate college is almost invariably obtained by way of the tests of the College Entrance Examination Board, of which President Butler is chairman. It consists of representatives from twenty-four universities and colleges, including Harvard, Johns Hopkins, Cornell, Columbia, Pennsylvania, and the chief colleges for women. There are also eight members representing secondary schools. This entrance test permits a wide choice of subjects. Out of 168 Freshmen admitted to Columbia in 1906, 37 offered both Greek and Latin, 105 offered Latin without Greek, and 26 offered neither. In that year 92 students were admitted provisionally with some entrance conditions unfulfilled. The cases of such students are considered first at the

end of the initial half-year, upon special reports made to the Dean by heads of departments. If their work has been thoroughly satisfactory they may then be admitted to full standing. Otherwise they may have their probation extended for another half-year, or they may be deleted from the books. Under these regulations, of the 92 men "conditioned," 13 were admitted to full standing at the end of one term, 31 were invited to retire, and the remainder were continued on probation. It may be mentioned here that in the States a student's progress depends far more upon his work from day to day and week to weekupon his standing in class—than upon the results of set examinations. Under this system the degree examination, as we know it, can hardly be said to exist. The student satisfies class requirements as they emerge, and thus moves on towards his A.B. degree.

A feature of Columbia impressed upon me is the close association of the University with other institutions in New York. For example, the work of the botany classes is done chiefly at the Botanic Gardens in the Bronx Park. In the department of engineering, which is one of the largest, the last two years of the course are divided between the "shops" and the University. In the organisation of Columbia the trustees are the ultimate court of appeal. The Faculties arrange the programmes of courses for the different degrees. The departments, which are interwoven with the Faculties, are responsible for instruction. In the department of Mining and Engineering, for example, the school of engineering plans out the courses for the whole department. In the case of a Faculty neglecting a department, the latter can appeal to the trustees. The members of the Faculties are largely relieved of administrative work by the secretary, the registrar, the superintendent of buildings and grounds, the treasurer to the trustees, and the librarian.

Some of the duties of the secretary are the supervision of the printing and distribution of announcements as to courses and regulations, the recording of appointments to the staff, which are numerous in a University with a Faculty of some 500 instructors, mostly young men, keeping the records of prizes and scholarships, supervising the details of University receptions and other

ceremonies, and arranging the prospectus of public lectures. A postage account of £200 a year is some indication of the extent of the secretary's correspondence. His annual report to the president touches upon such topics as the danger that the unit system of credits for work towards a degree may persuade the student that education is largely a matter of bookkeeping, and that the best courses are those which yield the most points for the least work; the advisability of Columbia now setting up its own printing plant, in imitation of Harvard, Chicago, and other Universities; the propriety of organising a corps of student guides to look after the increasing number of visitors; the average age of instructors and their duration of service—and so on.

These statistics, by the way, are interesting as an indication of the rate of promotion in American Universities. The average age of the assistant on appointment is just over twenty-four. Apparently if he is efficient he can count on his first step upwards as a Tutor or Lecturer, after a year's service. In this second grade the average length of service is almost four years. The Tutor

or Lecturer becomes an Instructor at twenty-nine, an Adjunct Professor at thirty-two or thereby, and attains the full status of a Chair at age thirty-six on the average.

The Library of Columbia calls for special notice. It is far and away the finest of the University buildings, a Greek temple, standing upon a high terrace reached by several broad flights of steps. It is splendidly equipped and houses nearly 400,000 volumes. The library has a staff of forty. One of the difficulties of administration is to obtain an adequate supply of efficient page-boys, who find library work less attractive than being "in an office," because they are more strictly disciplined, get no tips, and have to spend a month in learning the subject-locations of the books. In one month the librarian had to hire thirty-four lads in the effort to obtain three. To a limited extent Columbia serves the purpose of a public library, being open to officers of numerous educational institutions in New York, and to "other residents of the city, of mature years, desiring to engage in definite research which cannot be successfully conducted in public or other libraries."

Catalogue titles are printed directly by typewriter. The Avery Library is one of the largest architectural collections in the world. The 500 law students of Columbia have their special collection of 30,000 volumes; and in an earlier chapter I mentioned the Columbia system of placing seminar rooms for graduate instruction in direct communication with the stacks of books specially required, without withdrawing these books from the general body of the library. The average expenditure upon the library recently is just short of £10,000 per annum, which is nearly eight per cent of the total annual expenditure of the University, exclusive of the cost of permanent additions to plant. Of that sum of £10,000 a little more than half is spent upon the staff.

In point of wealth Columbia stands first among so-called "private" Universities. Its total property is \$27,000,000, as compared with Harvard's \$24,000,000 and Leland Stanford's \$23,000,000. In regular income Columbia ranks second to Harvard, and can count on £210,000 per annum. In 1906 she received a round sum of about £250,000 in special gifts. Even this

was considerably below the average of special donations during the past five years. The generosities of private individuals in that year included the endowing of Chairs in Politics and the History of Civilisation. The average salary paid to Professors at Columbia is £750. Adjunct Professors draw £420. The salary of the Professor is almost exactly half of what was declared, in a report by the Trustees thirty years ago, to be the sum necessary to the maintenance of a proper position in the community; and the cost of living has increased greatly since the time of the report. In the past ten years in New York food has gone up in price 30 per cent, clothing 22 per cent, fuel and light nearly 40 per cent. In other words, the purchasing power of the present salaries is only about 40 per cent as compared with thirty years ago, and the expansion of the University has been brought about partly at the expense of its teachers. One feature of the University is of special interest to Glasgow. Columbia is in the main non-residential, like most urban institutions. But she conducts two large dormitories, housing some 400 students;

and the financial return to the University is so satisfactory that more buildings are projected.

Not far from Columbia is the College of the City of New York, which has been succinctly described as the capstone of her free public school system. This institution began life as the Free Academy in the middle of last century. Within a few years the Legislature conferred collegiate powers, including the privilege of granting degrees. In 1866 the Free Academy became the College of the City of New York, and in 1882 the condition of previous attendance at public schools in the city was removed, and the college thereby opened to all young men of the city of proper age and qualified to enter. The trustees are nine in number, appointed by the Mayor, and serve for nine years. The President of the Board of Education of the City of New York is a member ex officio. There are no tuition fees, and even laboratories and text-books are provided free. The City College aims chiefly at the provision of higher education and technical training for the sons of the alien immigrant of the poorer class. It is largely an institution for the east side of New York, and therefore one is not surprised to find that fully 75 per cent of the students, who number about 4000, are Jews. The college grants degrees in Arts and Science. There is no post-graduate department, but at the end of their course many students pass to the universities and technical schools.

The classes are divided into sections, which usually do not exceed twenty-five men, and therefore the whole work of the college is in a sense tutorial. The prescribed number of hours per week, taken towards a degree, is eighteen. What is called an academic or sub-freshman department enables a youth who comes direct from his elementary school to prepare for college work in three years. The Arts degree may be taken in Classics, in Latin-French, or in Modern Languages, and the B.S. is given in General Science, Biology-Chemistry, or Mechanical Science. The college is newly and magnificently housed at Washington Heights, on a high bluff in the north-west of the city, overlooking it in every direction. The group of five large buildings, covering the space of four

city blocks, is designed in low-arch Gothic of dark gneiss, picked out in all its details in white terra cotta. The main building includes a hall which seats 2500 people. There are about fifty class-rooms, ample laboratory accommodation, and a large gymnasium and swimming-pond. All the buildings are connected by a sub-way, which serves not only as a means of communication, but for the transmission of steam-heat and electric light from the mechanical department to the whole college. Some idea of the money expended upon the building is conveyed by the fact that it is to be decorated externally with six hundred grotesque cornice figures, all of different design. A hint as to the class of student for which New York maintains the City College is given by the drinking fountains throughout the building. They have no cups. The thirsty undergraduate presses a button and holds his mouth above an upspringing jet of water. The new and enlarged City College has not been provided a day too soon. In fact, it was overcrowded even before all its ther colleges. hocadepartments were occupied.

CHAPTER XII

PRINCETON

Princeton's reputation as a college of athletics is not fully appreciated by those who are unaware that while it has a population of only 1300 students

to draw upon, as compared with Yale's 3200 and Harvard's 5300 men. Princeton, like its bigger brothers, confers some social distinction upon its graduates. In this respect Harvard, Yale, and Princeton are the Western counterparts of Oxford and Cambridge, and are maintained largely for the education of the sons of rich men. Members of the American aristocracy would send their boys to one or other of these three Universities if there were any aristocracy in the United States. But at this point Princeton parts company with the great Universities of Massachusetts and Connecticut.

The first and the fundamental point of difference is this, that Princeton is not a University in any general and adequate sense of the word as it is used to-day. There is no medical school, and the rural situation of the college, fifty miles distant from New York, makes it highly improbable that a medical faculty will ever be added. A law school was opened some years ago, and languished through a brief career to dissolution. The Princeton Theological Seminary is merely affiliated to the University, and is a

strictly denominational institution. There are no schools of agriculture, architecture, or music. Princeton is an Arts College, plus a department of Civil and Electrical Engineering and a graduate school. This includes only about a hundred students. Princeton does on a greater scale the same work as the small college, with the addition of the business of the one technical department mentioned. The main purpose of both is the provision of a general culture course. It is a debatable point whether Princeton, which assumed the style of a University only ten years ago, will ever become one. But if it should not, it will continue to be what it is now-perhaps the most interesting and certainly one of the most famous and picturesque of American colleges.

Princeton has a history of 150 years, and is descended in the direct line from the Log College, established at the Forks of Neshaminy by William Tennent in 1726. Tennent was a graduate of Edinburgh University, and a priest of the Church of Ireland. Coming to America, he became a member of the Synod of Philadelphia.

The College of New Jersey was founded by Royal Charter in 1748, the validity of a similar document granted two years earlier being in doubt on technical grounds. The second charter was confirmed, after the Revolution, by the State Legislature of New Jersey. Elizabethtown and Newark were early homes of the college, which took shape under the guidance of the Rev. Aaron Burr. The privilege of becoming a collegiate town was, in a sense, put up to auction in this as in many other New England instances. New Brunswick was the other offerer, but its bidding was somewhat languid; so Prince-Town, neighbour to the older village of Kings-Town, was favoured by the trustees, who voted "that the college be fixed at Princeton, upon condition that the inhabitants of said place secure to the trustees that two hundred acres of woodland, and that ten acres of cleared land, which Mr. Sergeant viewed; and also one thousand pounds proc. money."

That is practically the extent of the Princeton campus of to-day. It is probably unique in this respect, that it includes a railway station, the miniature terminus (within a stone-throw of the main college entrance) of the little branch line which keeps Princeton in touch with the Pennsylvania Railroad three miles away. The first thing they take you to see in the campus is Nassau Hall, the "Old Nassau" of the college songs. This building is the successor of the first college edifice, specified in the minutes of July 1754 as "three storey high and without any cellar." It was named to express "the honour we retain, in this remote part of the globe, to the immortal memory of the glorious King William the Third, who was a branch of the illustrious house of Nassau." In Nassau Hall Congress sat from June to November 1783, and it was here that Washington received the thanks of the nation for the part he bore in the Revolution.

This was appropriate, for the battle of Princeton was one of Washington's chief military triumphs, and one of the most important American victories in the early days of the war. Within four miles of Nassau Hall is the house where Washington wrote his farewell address to the army, and this building is now preserved as an

historical museum. Nassau Hall itself was under fire during the battle of Princeton, as part of one British regiment was quartered there; and, according to an ingenious tradition, the garrison surrendered immediately after a round shot from the American battery passed through the head of a portrait of King George the Second, which was hanging on the wall. Furthermore, the Hall was for a brief period the Capitol of the nation, for in 1783 a mutiny of soldiers at Philadelphia forced Congress to retire to Princeton. Nassau Hall was burnt out more than once. The present building dates from 1804, so it is of venerable antiquity, according to American standards, and provides a pleasant contrast to Blair Hall and other modern and magnificent examples of collegiate Gothic.

I have already mentioned the extent of the campus as being rather more than 200 acres. It is one of the finest as well as one of the largest in the States, rivalling Yale in the beauty and stateliness of its avenues of trees. It has not the commanding site of Cornell, nor so wide a view of lake and mountain. But Princeton is the ideal

University town in situation and general aspect. By the way, it has a lake, overhung by a mist of tragi-comedy. One of the comic elements of the Princeton lake is its artificiality. There is naturally something humorous, to the American mind, in the idea of adding to the number of lakes in the continent. It was Mr. Carnegie who made the Princeton lake. He visited the college a few years ago, when spelling reform and football atrocities were very much in the air. A student procession received him, displaying a banner with "Welkum to the Laird of Skeebo," while another was emblazoned with undergraduate profanity, "The Laird is our shepherd, we shall not want." Now, while Mr. Carnegie was moving about Princeton and wondering what he could do for it, some member of the University was, unfortunately, inspired to remark that if the Princeton stream were dammed at a certain point, a lake could easily be formed. Mr. Carnegie leapt at this opportunity of leading Princeton away from the brutalities of football to the gentler joys of aquatics. So the Carnegie Lake was made. The tragic element of the situation lies in this,

that while Princeton men have never been "wetbobs," and did not want a lake, and have enough to do to hold their own in the two national ball sports, the University authorities feel that the lake, being there by an act of special creation, ought to be used.

However, the Preceptorial System and what is known as the Princeton plan for reorganising the social side of University life are of more interest and importance than Princeton's aquatic problem, which will probably be solved by the efflux of time and the masterful inactivity of the student body. The Princeton plan was the burning question at the opening of a new session -so much so that in the Faculty Club at lunchtime I heard former students jauntily discussing the probability that President Woodrow Wilson would be forced to resign. At Princeton, where the dormitory system is, of course, all but universal, though a few students "dig" in the little town, the place which fraternities occupy in most of the other Universities is held by lunching and dining clubs. These bodies are elective, and to obtain entry to the Tiger Club, or the Ivy Club,

or the Cottage Club, open only to students of the third and fourth years, is to grasp social distinction. There are, of course, many other clubs of less eminence for senior students, and a number for men in their first and second years. Now, one result of the desire to gain admittance to senior clubs, whose membership is coveted as something higher than a degree with honours, is that in the past second-year men have devoted a great deal of time and energy to canvassing and pulling strings in the endeavour to enter the haven where they fain would be.

To adapt a well-worn Cambridge epigram, applied to a student who afterwards rose to eminence, the Princeton man, as a "Fresher" as well as a Sophomore, was apt to devote the time he could spare from the neglect of his studies to his social advancement. This is a suggestive side-light upon the democratic spirit working out in the direction of what we should describe, in our undemocratic Universities, as snobbery. I was told that the anxious strivings of the Princeton Freshman and Sophomore, as to where he shall lunch and dine in his later years, have

been limited of late by the prevention of canvassing, so far as prevention is possible. But that can hardly affect the inevitable result of the dining-club system—the splitting of the life of the place into exclusive cliques. It cannot be otherwise, when groups of twenty-five men spend the most sociable hours of the day in a private club. Now the Princeton plan aims at wiping out cliques and invidious social distinctions by establishing on the campus residential colleges, with "commons" as well as dormitories and living-rooms, each college giving accommodation to some 200 men. This is practically to import the Oxford system. The costliness of the process is a measure of the objectionable character of the club system, in the eyes of those who propose what is essentially a revolution. At the head of the movement is Dr. Woodrow Wilson, one of the shrewdest as well as the most distinguished of college presidents. It will be interesting to see whether the Princeton tradition of club-life can be broken down after so many years. One contrast between Princeton and our Scotch Universities

¹ Appendix, p. 213.

is that Princeton has far too much of what we have far too little—social life as a means of forming character.

The preceptorial system is more instructive, as well as more important, than the Princeton plan. Fundamentally it does not differ from the tutorial system as applied to small classes, and not to the teaching of individuals. But the important point is that at Princeton preceptorial work begins with the Freshman year, whereas with us and in most American colleges tutorials are reserved for senior and honours students. The Princeton preceptorial may contain only half a dozen men in the senior years. In the junior years a preceptorial class is one of about twentyfive students. The sole business of the preceptor, who ranks with assistant professors, is to confer with his group of students, to discuss their work, explain its difficulties, suggest lines of reading, and stimulate thought and inquiry. The preceptor does no lecturing and corrects no examination papers. He meets his students daily, and is able to get into close touch with their individual capacities, needs, intentions, and defects. From

the professorial point of view this system displays certain disadvantages. As the preceptor does not lecture, his chance of showing what he can do is limited. Nor is he permitted to specialise. For example, a preceptor in history must hold conferences also in political economy, politics, and social philosophy. From the point of view of the student, the system, now in operation for several years, has proved highly successful. "It has produced more and better work; it has systematised and vitalised study; it has begun to make reading men, and it has brought teachers and pupils into intimate relations of mutual interest and confidence. . . . Some preceptors have succeeded because they stimulated their men; some because they understood and helped them; some because they know how to hold them to strict and frequent reckonings; some because they interested; others because they had the gift of congenial conference." That is part of the official verdict upon the preceptorial system. It is confirmed by the convincing evidence of the library statistics. The library in 1906 issued 16,000 volumes to preceptees in the reading-room.

It was expected that the extra use of books recommended in the courses would diminish the general demand for ordinary reading. The contrary result followed. There was an increase in the number of books taken out by students as well as in the reading-room circulation. Being sent to the library for recommended books brought men into the habit of using other books more freely. "The best ideals of all modern thinkers, in the matter of training in reading and in the use of the library, have been realised overnight without special exertion, and as a sort of by-product of the preceptorial system."

There are many other aspects of Princeton upon which one would like to touch. One of the most remarkable of Princeton traditions is the practice of putting students on their honour not to cheat at examinations, and leaving it to the examinees themselves to see that the pledge is fulfilled, and also that order and quiet are maintained in the room. When the papers have been given out the professor leaves, and does not return till the end of the hour or hours appointed. Students may talk. They may even smoke, which

is no doubt an aid to the excogitation of the problems set. If any one is caught cheating he is reported to the Faculty, and expulsion follows as a matter of course—once a year on the average. The Princeton man carries plainness and even shabbiness of daily dress to the point at which it becomes almost as extravagant as dandyism, though it is cheaper. The charm of Princeton is hard to convey in words; but on leaving the place I realised, as in the case of no other University, something of the regret with which the departing Princetonian sings for the last time "Out in the Wide, Wide World."

CHAPTER XIII

THE SOCIAL SIDE

If one were asked, after a necessarily hurried survey of some dozen Universities and colleges in widely separated parts of the States, to select their chief point of contrast with Scottish Universities, the answer would be that the one characteristic of American college life most salient and individual and vital, is the intensity and strength of its multifarious social energies. Of course, the residential system is their basis, and the residential system is all but universal. I have already described Universities, such as Cornell and Michigan, where the majority of the undergraduates live in boarding-houses or lodgings. But even in these instances there is

more community of life than is possible in Glasgow or Edinburgh, Liverpool or Birmingham. Ithaca and Ann Arbor exist for, and live upon the students, who really form the town, whereas in Glasgow or Chicago they are scattered throughout the city and form an insignificant fraction of its population. It has to be noted also that even at Cornell and Michigan a substantial section of the students is to be found in the houses of the Greek Letter Fraternities, thereby enjoying the benefits—and incurring the disadvantages—of social intercourse still more habitual and familiar than the ordinary residential system affords.

To begin with, the Fraternity lodges the student and feeds him; but he is not one of some hundred or two hundred men, as in Oxford or Cambridge, sleeping and eating under his college roof, and restrained by its ordinances. The Fratman is one of a group of about fifteen students, a self-governing community, with power to select its own members, living in its own house, and being a law unto itself. The University may not even have the slight claim to intervene in the affairs of a Fraternity, which belongs

to a landlord in most civilised communities. The houses are not in the campus; most of them are not even built on ground belonging to the University. The Greek Letter Society combines club-life, in its most concentrated form, with certain elements of Freemasonry. The Frat-man is a Frat-man for life. If he moves from one University to another, or from college to University, he will find almost anywhere a Chapter of the society to which he belongs.

A recent census gives details of thirty-one Fraternities for men, with 970 active Chapters and nearly 400 dormant. Over 650 of these 970 active Chapters own or rent houses for the use of their members. The majority of the Chapters which do not own houses hope to do so, for the essence of the Fraternity system is the provision of a collegiate family life. The thirty-one Fraternities have on their books at least 180,000 graduate and undergraduate members, including a very large number of professors and other instructors. It is not by any mere co-incidence that the President, the Vice-President, and the Chief Justice of the United States are

members of Greek Letter Fraternities. They include the pick of American alumni in respect of influence and intellect as well as wealth. Obviously the Frat-man has a considerable "pull," by reason of his membership, when he goes out into the world. Unless his society happens to be a minor and struggling association, he will find some members of it in whatever part of the States his lot may be cast. And in this connection it is to be noted that the most characteristic feature of social bonds in American Universities is their permanence throughout life, and their regular and systematic strengthening and renewal at such occasions of reunion as Commencement.

For a full account of the Greek Letter Societies the reader may be recommended to Mr. Clarence Birdseye's thoughtful and suggestive book, *Individual Training in Our Colleges*, which treats this and still more important aspects of University life with originality and forcefulness. Here it is impossible to give more than a bare outline of the organisation. The first society, the Phi Beta Kappa, was founded at William and Mary College

in 1776. Its purpose was patriotic and literary. It foreshadowed the modern Fraternity in establishing Chapters at Yale and Harvard before 1800. Fifty years later the Chi Delta Theta was founded at Yale. Originally the Greek letters represented the initials of certain words adopted as a motto by the society. Thus, if a Fraternity were founded now, whose chief tenet was expressed in the Greek maxim that Water Is Best, its title would naturally be the Alpha Mu Upsilon. The Kappa Alpha, the Sigma Phi, and the Delta Phi were all founded at Union College, Schenectady, N.Y., eighty years ago. These were the basis of the present widely ramified system.

The Fraternity, in its modern evolution, appeals to men of all grades of social position and means. There are Frat-houses for the sons of the rich, bought outright by the society, perhaps at a cost of £10,000. (In such a transaction, of course, the alumni come in, as they do in so many other departments of University life. In fact, some of the societies have as large an endowment as many a fairly important college.) At the other end of the scale is the Frat-house leased at eight or ten

pounds a month, a low rent in even a minor "city." The Fraternity may elect its members from any year, and it admits men after graduation. But naturally there is keen competition to secure Freshmen who are regarded as eligible members; and those in that happy position find their first few days at college made exceedingly attractive. They are lunched and dined, and taken to the theatre by members of competing Fraternities. This process is known as the Freshman rush, and it must not be confused with the other kind of Freshman rush described in a previous chapter on Michigan. The Freshman may be rushed by being made to climb trees or submit to a milk shampoo at the hands of the Sophomores. He is also "rushed" when he is made to feel that he is a very important and necessary individual until he has made his choice of a Fraternity. When he has made it, or when he enters the Fraternity to which his father belonged, or where his friends are, he becomes a hewer of wood and a drawer of water

A Fraternity which I visited had established itself in an old Colonial house, with many-pillared

portico, and wide verandahs back and front, set in a spacious garden overlooking the valley of the Huron. Within, three large rooms had been thrown into one hall, with oak-panelled walls and lofty timbered roof. This series of halls provided the living-rooms for the twenty members of the Chapter. There was a dining-room to the rear, furnished and decorated with tasteful simplicity, and bedroom accommodation on the upper floors. The Frat-man remains one after he goes out into the world; so a feature of this house was a suite of rooms kept for the use of graduate members of the Chapter when they revisit Ann Arbor. A member so returning may even bring his wife to the Fraternity-house. Accommodation for Commencement is booked a year ahead. The two professors who introduced me to the lodge of Sigma Phi were both members. It was considered that a fire would add to the picturesqueness of the hall. So the Freshman who happened to be on duty that Sunday night came in to lay and light the fire. He wore knickerbockers and a sweater, and performed his task in a workmanlike fashion. We sat round the hearth, and the Dean of the Faculty

of Engineering, who had served in the war with Spain, yarned about it, explaining humorously how the benevolent neutrality of Great Britain sometimes enabled an American warship to coal where it ought not to coal. The scandalised British commander, whose duty it was to stop the process, would send an officer to find out if the American cruiser was really coaling, and the officer would be detained, by U.S. hospitality, a couple of hours or thereby. His commander would then think over the situation for another hour, and send the officer back to see if this highly irregular proceeding was still going on. And thus the formal intimation that the U.S. cruiser really must not continue coaling would arrive precisely when her bunkers were full.

The standard of living in the Frat-houses varies with the means of the members, but simplicity is the general rule, and even in the wealthiest of these clubs the student lives at a cost of no more than a pound a week for board, lodging, and attendance. I have said that there is an element of Freemasonry in the Fraternity. There is also an element of mummery—of private hand-grips,

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mysterious documents, and secret meetings at midnight. All this side of Fraternity life is quite harmless and absolutely unimportant. The admirable essence of the Fraternity system is that it provides, during college years, some substitute for family life. There are Universities where the Fraternities are negligible, or even non-existent. Harvard has very few, but there the senior clubs are notably strong in numbers and influence. There are no Fraternities at Princeton; but, as shown in Chapter XII., the elective clubs where students lunch and dine exercise so great an influence on the life of the place, by the formation of cliques, that an effort is being made to substitute a few large residential colleges for some dozens of small clubs. If you do not find the Fraternity everywhere in name, you do find it almost everywhere in essence; and it is not the least remarkable feature of Universities which claim rank as the most democratic in the world that exclusive clubs, and the struggle to secure entry to them, should be so conspicuous in the scheme of things.

Whatever may be urged against the multipli-

cation of such clubs and societies, it cannot be said that they impair the loyalty of the student to his University. On the contrary, club life seems to strengthen the affection with which the alumnus looks back on the place where he spent his undergraduate years. The loyalty of the American alumnus to his University is very striking; probably it is not excelled in depth and genuineness in any part of the world. Nowhere can it be more exuberantly expressed, at Commencement and on similar occasions. The formal business of Commencement is the conferring of degrees at the end of the session. Its real significance, however, lies in the proof that it gives of the continuity of the college spirit and of "class feeling." In relation to an American University the meaning of these words is totally unlike their common intent. Each year in Arts is regarded as a class, and spoken of as such, always with reference to its date of graduation of Freshman who entered college last October became thereby a member of the Class of 1911; and provided that he goes through his course and graduates, so he will always be known. His most intimate friends

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will probably be men of his own Class, and many of them will return with him to college for Commencement, perhaps not every year, but frequently, until about 1960 or thereby, when by survivance they climb to the honour of heading the Commencement procession and lining up in front of a grand stand or other saluting point to give the College yell, as it was taught them in 1911.

In the chapter on Yale I mentioned that some 5000 graduates attended the bicentennial in 1901. That was an extra-special occasion. It is perhaps more significant that Princeton Commencement in any year will recall to the haunts of their youth as many as 150 of the 250 men who graduated ten years before. I am taking Princeton merely as an example, for the Commencement reunion, with its extensive and spirited festivities and ceremonies, is common to all American Universities and colleges. In estimating the magnetic force of the University on these occasions one has to bear in mind that Commencement recalls old students from all parts of the States. A journey of a thousand miles is no obstacle. To Commence-

ment graduates bring their wives, and in course of time their sons, who walk with them in the procession, which is copiously punctuated with brass bands. Sometimes the coming Princetonian or Yale "man" is brought to see his future University before he is old enough to walk. Last summer at Princeton a conspicuous figure in the procession, headed by grey-haired graduates of fifty years ago, was a nurse wheeling a "real ullagant mail-cart." It contained an infant, the first son born to any member of one particular year. That year advertised its satisfaction on a banner which inquired, "How is this for the Class of 1901?" Immediately behind this conspicuous infant was the Class of 1902, which announced on a large placard, to all whom it might concern-

WE HAVE NO BABIES YET,

The first baby in each college year receives a silver cup from the members of its father's Class.

The class spirit and the college patriotism, of which it forms a part, would still be much more

potent and exuberant than the British graduate can readily conceive, or perhaps admire, even if their manifestations were not systematically fostered. The college years of so many young Americans mean so much more to them, looking back, than they ever can to men who are destined to live in a highly civilised community. The greater part of the work of breaking in new country, of building new railroads and bridges, and of founding new cities in the wilderness, is done by University men. Their lives, and surroundings, and companions, when they go out into the world, often are absolutely unlike those of their college years. Therefore, the desire to keep in touch with their University and the friends made there is all the keener. So Commencement is full of a peculiar significance, and exercises a perennial and unfailing charm. And the University takes excellent care that she is not forgotten by her children. The college spirit, like so many other things in the States, is organised.

At most of the Universities there is a special department whose business is to keep in touch

with the graduates. At Michigan, for example, the Alumni Society Office employs a secretary and three or four clerks. It has the addresses of 23,000 graduates carefully filed, by names and also by States. In this office is edited the Michigan Alumnus, a substantial monthly magazine published for the graduates. At present it has a circulation of nearly 7000 copies. One of its regular features is News of the Classes -"Albert L. Hayes, '96, is sales manager of the Hayes Pump and Planter Co., Galva., Ill."-"Born to John J. Brewer, '99, and wife, a son. Mr. Brewer is assistant cashier of the Romeo Savings Bank, Romeo, Mich. His wife will be remembered as Flora L. Goeschel, '00." Records of a more permanent character are also prepared. for each class, on its fifth and tenth birthdays. Obviously this is good business, from the University's point of view. Everywhere you see the fruits of this policy and of the organised practical loyalty which it stimulates. Here it may be a new laboratory, there a memorial hall, the gift of the Alumni Association. One class erects a new gateway, another, convinced that a larger swimming-pond is required, will provide it. A third class thinks a sun-dial would add to the picturesqueness of a quadrangle. Even the college class - in our more limited sense of the word - often sends a gift, of a clock or a bookcase, to the room of its former toil. At Yale the graduates are directly represented, as such, on the Corporation of the University. The Alumni Fund Association is instituted to advance the financial interests of the University. And from this source, to which relatively small individual donations are made, Yale derives a steady income of £8000 a year. And thus the development of social life and the systematic fostering of college loyalty and patriotism are closely bound up with the University's financial prosperity and its capacity for growth and expansion.

CHAPTER XIV

STAFF AND STUDENT

THE outstanding figure in the American University is the President; it is hardly an exaggeration to say that in many instances the President is the University. He is rarely a member of the staff, in so far as the work of teaching is concerned. He is something more than a member of the Faculty, for he has the power of appointment, promotion, and dismissal. The President was a student once—probably a distinguished student. Usually he has held one or more professorial posts. President Hadley, of Yale, was Professor of Political Science there for thirteen years before he came to the throne; and President Woodrow Wilson held the Chair of Jurisprudence and

Politics at Princeton for some dozen years. But when a man becomes President of an American University his interests lie no longer chiefly in educational matters. He must be an administrator, first and last and all the time. He is the manager of a plant considerably more complex than Armour's or the Homestead Works.

The President is the chief officer on the business side of the University. But that statement by no means delimits his sphere. He is in constant and close touch with the undergraduate body, not only as students, but as resident members of the University. Obviously the residential system adds heavily to the duties of a President and his assistants. There are room bills and bills for board to be adjusted, according to the number of days on which meals are taken. There is much complicated work in connection with fellowships and scholarships. Then the President, as the business manager, controls not only the appointments to the staff, which occur much more frequently than with us, but the departments managed by the auditor and the registrar, the publication department, the

University book store, the University bank, the co-operative society, the extension lecture department, a large staff of employees, including engineers, plumbers, and electricians, and the employment bureau for students and graduates. The employment bureau for graduates is only one of many points at which the President comes into close relations with the outside world.

He is the head also of what may be described as the Publicity Department, whose business it is to keep the University and its claims well in the foreground of local and national life. American Universities are keenly competitive institutions. A professor of mild aspect explained to me that when certain things happened, as they were bound to happen, in the case of a neighbouring and rival institution, "Then we shall have X- by the throat." Athletics are a branch of the Publicity Department. The President must take an interest in athletics. That does not mean that he must now and then recommend the gymnasium to the support of the students; he must consider and advise upon the question whether the University should send the football

team to the Pacific Coast, at a cost of £1000 or so, to play a match which will obtain a great deal of attention in the press. This was done a few years ago by an institution of the Middle-West, the team making a round trip of about 4000 miles, in a special train, one car of which was fitted as a gymnasium. Finance is one of the President's chief concerns, and he is the connecting link or intermediary between the Trustees and the Faculty. He is also the medium of communication between the University and its patrons. His task, in this respect, is light compared with that of a Scottish Principal, because educational generosity appears to be a national instinct. Enough has been said to indicate that the University President must be a business man, prepared to lead a life of Rooseveltian energy.

The President is appointed by the University Governors, whose descriptive title varies in a somewhat confusing degree. Harvard is ruled by the "Corporation"; Yale by the "Fellows"; State Universities by "Regents"; and the majority of non-State institutions by

"Trustees." It is a superficial objection to this form of government, by a board external to the University, that its members may not be alive to the importance of education, and may be quite out of tune with the academic spirit. That is true, in a degree more than superficial, of some Western and Southern institutions. A Professor of Science in a Dakota college was once taken sharply to task by a Trustee, who had made the remarkable discovery that the Professor lectured and demonstrated only in the forenoon, five days a week. The Trustee wanted to know what in thunder the Professor did with his afternoons. The Professor explained that the afternoons were given to preparing for the work of next day. To this the Trustee replied that the University had no use for teachers who didn't know their work, and that the Professor might be looking out for another job. But in the Universities which represent higher education the Board of Trustees is substantially leavened with graduates; and the University man, who has a knowledge of affairs and experience in finance and administration, makes the most competent governor.

The alumni exercise great influence in University politics; sometimes, as in the case of Yale ten years ago, they choose and succeed in electing the President.1 There is a body of academic opinion in the States which holds that the University President, especially on account of his autocratic power, ought to be elected by the Faculty and not by the Governors. This view was set forth with moderation and persuasiveness last autumn in the Atlantic Monthly, under the heading of "Externalism in American Universities." The status of the President is defined thus:- "He is a ruler responsible to no one whom he governs, and he holds for an indefinite term the powers of academic life and death. Subject to the formal approval of the Trustees, he selects new members of the Faculty, promotes, dismisses them. To the Faculty, it is true, there seems to be left the important power to define the requirements for admission to the University and to its degrees; and yet these activities are in a fundamental way directed by the President, since by his word

¹ Appendix, p. 214.

comes growth to this department and atrophy to that. While his sway is subject to a constitution . . . his restrictions are perhaps less serious than those which often in the larger world bind men who bear the name of Emperor."

It is easy to understand the temptations which such power holds for a man subject to the American passion for visible accomplishment, for bigness, and the national worship of alert administration and forceful public utterance. Undue attention to things "which can be expressed in statistics" may prompt a President to "hurry and harry the college with original ideas." The claims of scholarship and of learning for its own sake are apt to be slighted. On the other hand, granted that the right man is in the right place, the University President has a unique opportunity of usefulness. President Eliot, who is by general consent not only the doyen of University officers, but "one of the most remarkable men in These States," has made Harvard. He became President almost forty years ago. Oliver Wendell Holmes describes how Eliot took command and asserted in a sentence the

authority which he has never relaxed. At that time Harvard was moving contentedly along in well-worn grooves, much as our own Universities did in the days when they existed for the benefit of the Professor rather than that of the student. Eliot, then a man of thirty-five, harried his seniors so severely with "new ideas" that one of them was provoked into asking, at a Faculty meeting, how it happened that the orderly methods of conducting the college, which had been found satisfactory during eighty years, were now upset within a few months. "That question can be answered very easily," was Eliot's response. "There is a new President."

The impression that the President's autocracy implies insecurity of tenure for the staff is erroneous. One may compare it, in point of accuracy, with the belief that Trustees dictate the lines of lectures on political and social economy in accordance with their private opinions and business necessities. That idea seems to have been largely founded upon the fact that a Professor at one Western University got into trouble by selecting as an example of nefarious com-

Prof Rose at Stanford

mercialism the business conducted by the founder of the University—a choice of illustration which was neither compulsory nor tactful. As a matter of fact, the Professor's tenure is as firm as he can desire, granted that he is competent. There may be colleges where it is possible for the President to dismiss a Professor by casually addressing the learned man as he is digging his garden-"I jest stopped to ob-serve, Professor, that you are going to resign at the end of this semester." But then, as a former chapter showed, there are "Colleges," and even "Universities," in the States where strange things happen, such as a "Faculty" composed wholly of the members of one family. I had an opportunity of discussing the question of tenure with a large number of Professors, and no one of them expressed any dissatisfaction. One stated emphatically that as long as he wanted to stay at ----, and did his work, he could not be removed except by Act of God. On the other hand, the slack, or incompetent, or senile instructor is not allowed to remain.

The Carnegie Pension Scheme makes it easier for the University to deal with the case of the

Professor who is "past his work," and the establishment of this scheme means that the State Universities must follow suit, as they cannot afford to let the private Universities offer better terms of employment as to superannuation. There is much to be said for the benevolent despotism of the University president, provided that he is the right man for his That implies, among other things, that he does not interfere with the right of the heads of departments to select their own staff. Under the American dispensation it is impossible that the reputation of a class, and therefore of a whole department—or even of several departments should be prejudiced because one Professor has outlived his term of usefulness and efficiency.

One cannot give official figures as to the salaries paid, because few Universities publish such statistics. But the salary of the President of one of the most famous Universities is £1500, of which £100 is an entertainment allowance. On the average the Professor draws £800. Leland Stanford and Chicago pay more to a few

¹ Appendix, p. 214.

heads of departments, but the average is lower there than in the chief eastern Universities. The assistant professor's salary is about £300, and the M instructor's £100. Professor Norman Smith, who migrated not long ago from Glasgow University to the Chair of Psychology at Princeton, drew my attention to a not unimportant difference between American and Scotch Universities. In the States there are assistant professors; in Scotland there are only assistants to professors. The American Professor has nearly four months' vacation per annum, and in many Universities he enjoys, every seven years, a vacation of twelve months, which is commonly spent in travel or study in Europe. The Professor has ample time for original work during the session. At Princeton some instructors arrange their class-work so that they need lecture only on three days each week.

The American student, during the necessarily limited opportunities I had of making his acquaintance, impressed me as a more mature individual than the Scotch undergraduate, as I used to know him familiarly and as I see him now. In point of mere chronology he is

If here

more mature; for the average age of matriculation in the States is nearer nineteen than eighteen. But he seemed to me more self-possessed, more confident and easy in bearing, better informed upon and more keenly interested in the events of the day, than his Scotch equal in age. That his attainments on entering college are less substantial and less thorough is beyond doubt. The comparative simplicity of entrance examinations in so many Universities makes that fact palpable. The contrast was expressed succinctly by an instructor at Johns Hopkins, who said to me that the British boy on leaving school had some general outline of the history of the world to take with him to college, but that the American lad was not expected to know much about any event earlier than the birth of George Washington. The American student appears to take a very limited interest in academic distinction. In our Universities, to be president of the Students' Representative Council or of a political or other club is fame; but these honours do not, or at least did not, rank higher than a Clark Fellowship, or the Snell Exhibition, or a double first in honours. Dr. R. M. Wenley, in a pamphlet on "The University in the United States," emphasises in a footnote the difference in the attitude of the American student towards honours:—"For example, here are the 'University honours' of a distinguished student, printed in the list of his class, in a book issued by his fellow-students:—Freshman Glee Club; Smoker Committee; Athletic Committee; Senior Reception Committee; Social Committee; Class Football Tea; Michigamua (Senior Society). In the same book the name of the ablest A.B. of the year passes absolutely without comment."

The American student is largely engrossed in the social side of college life, and we have noted how, at Princeton, success or failure at college is for many bound up in election to the most desirable Senior Clubs. The other burning interest of the majority of students is athletics. The passion for spectacular football and baseball reached so high a pitch a few years ago, and the former game had become so honeycombed with veiled professionalism, underhand tactics, and methods of calculated brutality, that a strong

reaction set in. Michigan has found it necessary to limit the number of matches in order to get any work done between them. In many Universities Freshmen are barred from the team in order to check the importation of disguised professionals; and the college athlete must make some show at least in his class work to be retained on the University books. Obviously, however, this ordinance can be interpreted with considerable lenience when "the reputation of the University" is at stake, and the value of athletic fame as an advertisement is still an important factor in the situation. Another proof of the reaction towards sanity in athletics was noted in dealing with Cornell, where a playing field is being provided for those who are not in the University teams—that is to say, for about 90 per cent of the student body. To be in the football or baseball team is an occupation in itself; but it is coming to be recognised that every student should have an opportunity of playing games in addition to spending so many hours a week in the gymnasium.

In an early chapter I gave some account of the Harvard football team at practice. At Princeton

I saw the team in action against an inferior foe. Perhaps it was on that account that descriptions of the roughness of American college football seemed to me then to be grossly exaggerated. There was a small "gallery" that day-perhaps not more than 600 or 800 students. The organised applause impressed me not only as a novelty, but as something grotesque and infantile. When the Princeton team scored or distinguished themselves otherwise the leader of applause stood up near the touch-line, faced the stand, and collected the attention of his forces, just as the conductor of an orchestra does. Then with different gesticulations of his arms, each appropriate to a section of the cheer, he led these 600 youths through the devotional rendering of the college yell-"Rah! rah! rah! Tiger! Sis! Boom! Ah! Princeton!" Perhaps the performance would have been more impressive and less ridiculous if Princeton had been playing Yale with all the stands full. Everything in the States is organised - even the expression of emotion. And considering the extreme exuberance of American youth, perhaps this is necessary and inevitable.

CHAPTER XV

SOME GENERAL CONCLUSIONS

BEFORE bringing together some general conclusions as to what American Universities have to teach us, an outline of University government in the States may be laid down. In the last chapter one function of the President, as intermediary between the Trustees—or the Regents, in the case of a State University—and the Faculty and the student body, was indicated. There is no regularly constituted body in the American University holding a place equivalent to that of our General Council. Theoretically, members of Faculty are appointed by the Regents or Trustees, as the case may be; theoretically, because these bodies delegate this duty largely to the President,

who commonly leaves it to the head of a department, or even to an individual Professor, when the appointment is a minor one. In general the Faculty initiates and executes the educational policy and controls discipline. The Faculty is therefore our Senate; or, rather, that body finds its equivalent in the Faculty Council, to which each school in the University elects representatives. The Faculty Council determines educational policy affecting the University as a whole.

In the State Universities graduates, as such, exercise no direct power or function whatever in academic or fiscal administration. An exception to this rule is the University of Wisconsin, where it happens that a considerable number of the Regents are elected from the body of alumni. In the "private" Universities the position tends to be different. The graduates exercise more or less power in many cases; in some others none at all. At Columbia graduates as such have no formal share in government, but five-sixths of the Trustees happen to be graduates of the University which they control. At Amherst, one of the foremost of the small colleges—with nearly 500

students—the entire board of Trustees is elected by the alumni as such. They are more highly organised in private than in State Universities, and have more power. At Cornell they elect one-third of the Trustees, and at Yale six members of that body. Apart from election to the controlling body the graduates exercise few administrative functions. They frequently make recommendations to the Faculty or the Trustees; they superintend the disposition of gifts and funds which they have been instrumental in obtaining; and in the important department of University athletics they exercise advisory control.

The American University admonishes us for the neglect of our libraries. A good deal of emphasis has been laid, in previous chapters, upon this department of University administration, and especially on the fact that everywhere one finds the University or College Library open from early morn till late at night. From 9 a.m. to 10 p.m. are normal hours. Another admirable feature is the open-shelf system. Libraries are made freely accessible. The student is encouraged to browse, to drop into the library at a leisure hour, and take down books, with-

out being limited in his choice by the formality of registering at the counter. In the rotunda of the Michigan Library there are open shelves of travel and fiction, stocked especially for the benefit of the casual reader. Of course the development of the library means more money. Columbia spends £10,000 a year on this department, dividing the sum almost equally between the maintenance and increase of books and the salaries of the staff. If Glasgow University allotted the same proportion of its income to books, the library would have £5600 per annum spent upon it for all purposes, whereas in two recent years the average amount so spent was under £2900.

But the usefulness of a library does not depend wholly on expenditure. The Scotch University is still in bondage to the misconception that the first duty of a librarian is to protect the books from the students—to safeguard them against loss or damage. The American conception of a college librarian is that his first business is to keep books in circulation, to see that they are used to the utmost extent, and that every student has the greatest possible facility in draw-

ing upon the library. The Scotch University library is a museum of books, out of which the student is permitted to extract specimens, under conditions which tend to discourage the habit of reading. He has to select his book, without knowing what it contains, and to take it home in order to discover that it does not contain what he wants. It is true that there are losses under the open-shelf system. But the American University would rather lose a hundred pounds' worth of books per annum than feel that its library regulations made books inaccessible. The Open Door, for twelve hours a day, and the Open Shelf, and the Departmental Library, for the use of the individual classes and seminars, are three wholly admirable features of the American University. No benefactor of learning could use his means more profitably than by assisting the Scotch University to "turn its library from a prison into a workshop."

Compulsory physical culture is established at many American Universities. The Freshman and the Sophomore must take an hour per day of gymnastics; and there can be no doubt that

they benefit by this drill. The American undergraduate is better set up than our own, even when we discount his greater maturity on entrance. The physical instructor at Michigan ranks in salary with a professor, and works at least as hard for his money. Part of his routine is to prepare and maintain an anthropometric chart for every student. Some years ago American colleges were badly bitten by the anthropometric craze, and there was a tendency to measure the efficiency of rival institutions according to biceps instead of brains—a tendency illustrated, with regard to athletics, in the remark of the New York parent that if Harvard was whopped again at football he guessed his boy would be sent to Yale. Anthropometricism as a cult has passed, I believe; but the excessive attention paid to athletics has stimulated gymnastics in two ways. Physical culture was found necessary to develop the footballer to his full pitch, and also to keep him in training through the winter; the gymnasium was also all that was left of athletics for the general body of the students, since the training of the teams, and of the

squads from which they are drawn, monopolised all attention. I suppose there are few people likely to dispute the value of compulsory physical drill during the Scotch student's earlier years-if it could be conveniently ordained. But it depends almost necessarily upon the residential system, or at least upon the concentration of the whole student body within a short distance of the University, so that the hour's gymnastics can be easily fitted in. Physical training is not compulsory at all American Universities, or even at all the largest of them. It seems probable that the necessities of the Scotch student, in this respect, will be met by providing improved facilities for gymnastic instruction, conscription being impracticable.

The value of the tutorial system, and the high esteem in which it is held in the States, are other points worth emphasising. The extension of tutorial work obviously implies more rooms, departmental libraries, and, of course, an increase in the personnel and cost of the Faculty—which means more money. The seminar, in so far as we have it at all, is reserved for the

honours student. No doubt he demands, and is entitled to have, the individual attention of instructors; but the truth has been noted and put into action—at Princeton chiefly—that the junior student needs such guidance and help even more than the senior man, who has found his feet and begun to specialise. The work of the preceptor at Princeton is to direct the junior student according to his individual needs, and, incidentally, to teach him the uses of a library. The system described in some detail in a recent chapter deserves the attention of the British educator. It is not revolutionary, but rather a return upon the practice of instruction in the early colleges of New England.

The residential system, no matter whether it consists of dormitories maintained by the University or by private enterprise, of Greek Letter Societies, or of a combination of these and other methods, affects the whole fabric of University life, on its educational as well as its social side. The student who resides in a University has more time for work, for the business of seminars or tutorial classes, for

reading in the library or in his rooms, for physical as well as mental culture, than the student who lives outside the University, and who must make his way to and from classes, by car or train, perhaps twice a day. The effect of residence in developing the social side of University life is self-evident. The daily travelling to and from college implies a waste, in many cases, of two or even three hours a day, and also a substantial outlay of physical energy, which might be much more usefully engaged. The student who "digs," as so many do in our large cities, close to the University, avoids the waste of time in travelling, and escapes the distractions of the home circle. But he has no ordered life, unless he has sufficient self-control and self-denial to construct one for himself. He is too often at a loose end, is apt to fritter away much of his time, to acquire loafing habits; and he is subject to all the temptations which beset the youth who leads a solitary life in a large city. The provision of halls of residence for Scotch students has received a good deal of attention in recent years, and it seems certain that the tentative attempt

already made to provide hostels will develop and broaden out. Edinburgh has about 150 students divided over five halls. For men students in Glasgow there is a Divinity Hall, which accommodates about a score. There are student residences in Durham, Liverpool, Leeds, and Manchester.

Of course, one cannot suggest the transplanting of the residential system, as it has grown up naturally in American Universities situated in country towns or country places, to a Scotch or English city. So many conditions are dissimilar. But it is to be noted that Harvard and Columbia, both urban Universities, conduct dormitories for 800 and for 1000 students respectively. Pennsylvania, another urban University, houses 600. And at Harvard and Yale many students whose families live in Boston and Newhaven prefer residence in the University to the comforts -and distractions-of home. At Harvard and Columbia the dormitories are maintained on no charitable basis, but on a business footing. They yield a small but assured dividend to the University. The hostels already in operation

in this country work out at an average cost per man of £56 per annum, or about 37s. per week during the college session. Clearly that is more than the ordinary student can afford to pay, and more than twice as much as many hundreds of them do pay for board and lodgings. The hostel on a larger scale could give the student very much better terms. The Carnegie fee fund should make it easier for the student of limited means to pay the difference between the cost of lodgings and rooms in a hostel. It is by no means certain that the best method of making a beginning as a residential University is to provide first of all for the student who can pay least. There should be no suggestion of charity about the hostel. The aim should be to attract the best class of student from the start, and to establish the conviction that residence is the ideal condition, to secure which some sacrifice is worth making. Once established on that basis the hostel would be able to provide for students with limited means by the grading of charges according to accommodation provided.

Obviously all these requirements come back

in the end to the need of more money. One does not require to survey American Universities to be convinced upon that point; but even a cursory glance at some of them serves to accentuate the relatively limited provision which the State makes for higher education in Scotland. The annual income of Michigan University from all sources is three times that of Glasgow, or £210,000. And apart from tuition fees, which are nominal compared with those of the "private" Universities, that income is almost wholly derived from the State, which last year made an extra grant of £50,000 for special purposes. In America the conviction that education increases the effective value of the citizen is a more dynamic belief than with us. Congress has set apart for the endowment of education an area of public lands considerably larger than the extent of Great Britain and Holland combined. Even when full allowance is made for the enormous actual and potential wealth of America, it is evident that our State provision for higher education is relatively meagre. The individual obligation cheerfully and even eagerly accepted

by Americans of wealth has been sufficiently emphasised in preceding chapters, as well as the conspicuous part played by the alumni in adding to the resources of their Universities. This suggests one thing which might be done for Scotch Universities without any substantial outlay—namely, the linking up of graduate clubs and societies into an Alumni Association, with some rather wider description, and open not only to graduates but to all friends of the University. An Employment Bureau, for undergraduates and men who have completed their courses, is another University department which entails no great outlay in relation to its usefulness.

In this and in preceding chapters I have tried to indicate what we have to learn from the United States. An inspection of their immense and wealthy institutions is apt to breed a discontent with many of the conditions of our own. But it is not to be supposed that they have the advantage of us in every respect. They possess enormous material resources, organised upon the most practical lines, with all the energy and confidence of a young nation. But apparently

the American Universities have not yet begun to produce scholars. This is hardly surprising, as only a few of the Universities are more than sixty years old, while the majority of them, old and new, are largely engrossed in providing professional and technical education. Johns Hopkins and the graduate schools of one or two other Universities are exceptions—and brilliant exceptions—to the general rule. This view is frankly accepted by many educational authorities in the States. One of the first whom I happened to meet put this to me in a very striking way. He was a man of high attainments in his department, and of long academic experience—a man of notably distinguished bearing, whose culture was not an acquirement of which he could produce proof when called upon, but something ingrained and unobtrusively salient in his talk. I was introduced to him as a Scotsman interested in higher education in America, whereupon he remarked, addressing his colleague, "There is a preliminary inquiry your friend will have to make -Is there any higher education in America?" And then he proceeded to demonstrate the

grounds of his belief that there is not. Some of the grounds on which his opinion was based I have indicated cursorily. Referring to the remark of the Johns Hopkins professor, that the American undergraduate is not supposed, on entering college, to know much of the world's history prior to the birth of George Washington, I obtained one curious and amusing example of the limitations of even the graduate's general knowledge. He was showing me round his University, one of the most famous. "By the way," he said, "you come from Glasgow. Your University is about thirty years old, isn't it?" "Sir," I replied, "my University was founded about half a century before Columbus discovered America." admirable presence of mind he at once explained that he must have been thinking of the age of the present buildings. But the slip was suggestive, all the same. Before taking leave of the American University I wish to acknowledge, from an experience which left pleasant impressions, what is not the least important of its achievements. It produces a type of graduateprofessor, instructor, or other officer-whose

conspicuous characteristics are frankness, hospitality to strangers, readiness to take any amount of trouble on their behalf, and a charm of manner which the non-academic American so frequently lacks. The American Universities fulfil one part of their work, the forming of character, with notable success. When they are some centuries older they will produce scholars, as well as engineers, doctors, lawyers, agriculturists, and administrators in politics and commerce. In the meantime the Universities are training the kind of man required by a nation whose material resources have only begun to be developed. It is a great country, America. In University matters, as in social and political affairs, it does not know where it is going; but it is determined to get there.

APPENDIX

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Professor James R. Angell, of the University of Chicago, has pointed out that, while this is true of Yale, as compared with the other privately endowed Universities of the Eastern States, Michigan has a constituency equally cosmopolitan.

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The endowment of the University was mainly in scrip of the Baltimore and Ohio Railway; the reorganisation of this company has handicapped the finances seriously, and the same may be said of the recent disastrous fire in the business part of Baltimore, where the University had investments. Thus the University has not been able to develop either so quickly or in so many directions as its competitors.

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The plan has been abandoned definitely meantime, owing mainly to the opposition of the alumni and their representatives on the Board of Trustees. Nevertheless, President Wilson's position has not been shaken in the least. Every one recognises his inestimable value to Princeton.

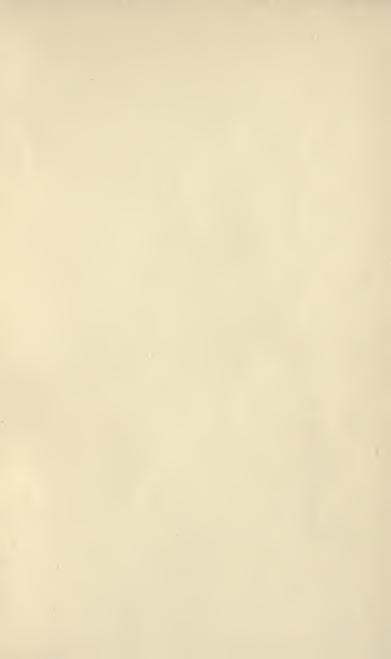
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This action was brought about mainly by the Yale Alumni Association of New York City—the most powerful association of alumni possessed by any University—seconded ably by other associations, such as those of Chicago and Cincinnati.

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Mr. Carnegie has now extended his system to the State Universities by a gift of \$5,000,000, with a promise of "as much more as may be needed." Any application of a State University to be placed on the beneficiary list must be approved formally by the University President and Regents, and by the Legislature and Governor of the relative State. The Regents of Michigan have already taken action, and the Legislature and Governor will do so in all likelihood at the first session in January 1909. It is current report that at least two Governors of Western States, where anti-corporation feeling runs high, will veto any action that may be taken by their Regents and Legislatures. In such event, it will be for these States to enact further support for their Universities for pensions, otherwise they will be placed at a serious disadvantage in securing the services of the most eminent scholars.









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