

THE ORGANIZATION OF THE HIGHER EDUCATION

When we digressed to the general question of the political, social, and moral atmosphere in which the English-speaking citizen develops, we left the formal education of the average child, whose development threads through these papers and holds them together, at about the age of fifteen and at the end of the process of Schooling. We have now to carry on that development to adult citizenship. It is integral in the New Republican idea that the process of Schooling, which is the common atrium to all public service, should be fairly uniform throughout the social body, that although the average upper-class child may have all the advantages his conceivably better mental inheritance, his better home conditions, and his better paid and less overworked teachers may give him, there shall be no disadvantages imposed upon the child of any class, there shall be no burking of the intellectual education for any purpose whatever. To keep poor wretches in serfdom on the land by depriving them of all but the most rudimentary literary education, as a very considerable element in the new Nature Study Movement certainly intends, is altogether antagonistic to New Republican ideas, and there must be no weeding out of capable and high-minded teachers by filtering them through grotesque and dishonouring religious tests--dishonouring because compulsory, whatever the real faith of the teacher may be. And at the end of the Schooling period there must begin a process of

sorting in the mass of the national youth--as far as possible, regardless of their social origins--that will go on throughout life. For the competition of public service must constitute the Battle for Existence in the civilized state. All-round inferiority in school life --failure not simply at this or that or at the total result (which, indeed, may be due very often to the lopsidedness of exceptional gifts) but failure all along the line--is a mark of essential inferiority. A certain proportion of boys and girls will have shown this inferiority, will have done little with any of their chances in or out of school during their school life, and these--when they are poorer-class children--will very naturally drop out of the educational process at this stage and pass into employment suited to their capacity, employment which should not carry with it any considerable possibility of prolific marriage. A really well-contrived leaving-school examination--and it must be remembered that the theory and science of examinations scarcely exists as yet--an examination which would take account of athletic development and moral influence (let us say provisionally by the vote of fellow-pupils) and which would be so contrived as to make specially high quality in one department as good as all-round worth--could effect this first classification. It would throw out the worst of the duffers and fools and louts all along the social scale. What is to become of the rejected of the upper and wealthy class is, I admit, a difficult problem as things are to-day. At present they carry a loutish ingredient to the public schools, to the Army, to Oxford and Cambridge, and it is open to question whether it would not be well to set aside one public school, one especially costly

university, and one gentlemen's regiment of an attractively smart type, into which this mass of expensive slackness might be drained along a channel of specially high fees, low standards, and agreeable social conditions. That, however, is a quite subsidiary question in this discussion. A day may come, as I have already suggested, when it will be considered as reasonable to insist upon a minimum mental qualification for the administration of property as for any other form of power in the state. Pride and their many advantages--of which one is quite conceivably an average essential superiority--will probably ensure a satisfactory result from the Schooling process in the case of a much greater proportion of better-class than of lower-class boys and girls. [Footnote: In most big public schools, I am told, there is a system of superannuation about sixteen, but I know nothing of the provision for those who are weeded out.]

From the mass who show a satisfactory result at the end of the Schooling process, the functional manhood and womanhood of our peoples have to be developed, and we have now to discuss the nature of the second phase of education, the phase that should be the mental parallel and accompaniment of physical adolescence in all the citizens who are to count for strength in the state. There is a break in the whole development of the human being at this age, and it may very well be paralleled by a break in methods and subjects of instruction. In Great Britain, in the case of the wealthier classes, schooling and puerile discipline is prolonged altogether too far, largely through the gross incapacity of our secondary teachers. These men are unable, boring away

day after day, week after week, year after year, with vain repetitions, imbecile breaks and new beginnings, through all the vast period from eleven or twelve until twenty, to achieve that mastery of Latin and Greek which was once the necessary preliminary to education, and which has become at last, through the secular decline in scholastic energy and capacity due to the withdrawal of interest in these studies, the unattainable educational ideal. These classical pedagogues, however, carry the thing up to three or four and twenty in the Universities-- though it is inconceivable that any language spoken since the antediluvian age of leisure, can need more than ten years to learn--and if they could keep the men until forty or fifty they would still be fumbling away at the keys to the room that was ransacked long ago. But with educated men as teachers and practical handbooks to help, and practical examiners to guide them, there is no reason whatever why the great mass of the linguistic training of the citizen, in the use of his own and any other necessary language, should not be done for good and all by fourteen, why he should not have a fairly complete mastery of form and quantity through mathematical training and drawing, and why the way should not be clear and immediate for the development of that adult mental edifice of which this is the foundation.

By fourteen the power of abstract reasoning and of an analytical treatment of things is in existence, the learner is now less to be moulded and more to be guided than he was. We want now to give this mind we have established, the most stimulating and invigorating training we can, we want to give it a sane coherent view of our

knowledge of the universe in relation to itself, and we want to equip it for its own special work in the world. How, on the basis of the Schooling we have predicated, are these ends to be attained?

Now let us first have it perfectly clear that this second stage in development lies no more completely within the idea of College than the former lay completely within the idea of School. In the general discussion of these things we are constantly faced by the parallel error to that we have tried to dissipate in regard to schools, the error that the Professor and his Lecture and (in the case of experimental sciences) his Laboratory make, or can make, the man, just precisely in the same way that the Schoolmaster or Schoolmistress is supposed to be omnipotent in the education of the boy or girl. And, unhappily, the Professor, unless he is a man of quite exceptional mental power for a Professor, shares this groundless opinion. The Schoolmaster is under-educated in regard to his work, and incapable of doing it neatly; the Professor is too often over-specialized and incapable of forming an intelligent, modest idea of his place in education; and the same consequence flows from the defect of either, an attempt to use an improperly large portion of the learner's time and energy. Over-direction, and what one may call intellectual sectarianism, are faults from which few College courses are free to-day. The Professor stands between his students and books, he says in lectures in his own way what had far better be left for other men's books to tell, he teaches his beliefs without a court of appeal. Students are kept writing up their notes of his not very brilliant

impromptus, and familiarizing themselves with his mental constitution instead of the subject of study. They get no training in the use of books as sources of knowledge and ideas, albeit such a training is one of the most necessary of all acquisitions for an efficient citizen, and whatever discussion the modern student indulges in is all too often treated rather as presumption to be discouraged than as the most necessary and hopeful of mental processes. Our Universities and Colleges are still but imperfectly aware of the recent invention of the Printed Book; and its intelligent use in this stage of education has made little or no headway against their venerable traditions. That things are only understood by being turned over in the mind and looked at from various points of view is, of course, altogether too modern a conception for our educationists. At the London Royal College of Science, for example, which is an exceptionally new and efficient College, there is no properly organized escape from the orthodoxy of the lecture-theatre, no circulating library whatever available to the students, no library, that is, which will ensure a copious supply and exchange of the best books on each subject, and, consequently, even to look up an original paper that has been quoted or discussed, involves an expenditure of time that is practically prohibitive of the thing as a general practice. [Footnote: There are three very fine libraries in the adjacent South Kensington Museum, especially available to students, but, like almost all existing libraries, they are managed in most respects on lines conceived when a copy of a book was an almost unique thing made specially by the copyist's hand. However much a book is in demand, however cheap its price of publication may be, no library in

England, unless it is a modern subscription library, ever gets duplicate copies. This is the cause of the dearness of serious books; they are bought as rarities, and have to be sold in the same spirit. But when libraries learn to buy by the dozen and the hundred, there is no reason why the sort of book now published at 10s. 6d. should not be sold at a shilling from the beginning.] The Professors, being busy and important men, lecture from their particular standpoints, and having lectured, bolt; there is no provision whatever for the intelligent discussion of knotty points, and the only way to get it is to buttonhole a demonstrator and induce him to neglect his task of supervising prescribed "practical" work in favour of educational talk. Let us, therefore, in view of this state of affairs, deal with the general question how a branch of thought and knowledge may be most beneficially studied under modern conditions, before discussing the more particular question what subjects should or should not be undertaken.

Now the full statement not only of what is known of a subject, but of its difficulties, dark places, and conflicting aspects should be luminously set forth in the College text-books, large, well-written, well-illustrated books by one or several hands, continually revised and kept abreast of the advance of knowledge by capable and critical-minded young men. Such books are essential and cardinal in proper modern teaching. The country may be speckled with universities until they are as thick as public-houses, and each may be provided with its score or so of little lecturers, and if it does not possess one or more good

general text-books in each principal subject then all this simply means that a great number of inadequate, infertile little text-books are being dictated, one by each of these lecturers. Not the course of lectures, but the sound, full text-book should be the basis of College instruction, and this should be supplemented by a greater or lesser number of more or less controversial pamphlets or books, criticising, expanding or correcting its matter or putting things in a different and profitable way. This text-book should be paralleled in the case of experimental science by a hand-book of illustrative and explanatory laboratory work. Portions of the book could be set for preparation at each stage in the course with appropriate experiments, students could submit difficulties in writing to be dealt with by the Professor in conversational lectures, and the reading of the students could be checked by periodic examinations upon cardinal parts, and supplemented, if these examinations showed it to be necessary, by dissertations upon special issues of difficulty. Upon the matters that were distinctively his "subject," or upon his points of disagreement with the general issues of the book, the Professor might lecture in the accepted way. This is surely the proper method of work for adolescent students in any subject, in philology just as much as in comparative anatomy, and in history just as much as in economics. The cheapening of printing, paper, and, above all, of illustration has done away with the last excuse for the vocal course of instruction and the lecturer's diagrams. But it has not done away with them.

It is one of the most curious of human phenomena, this persistence of

tradition against what one might have imagined the most destructive facts, and in no connection is this aspect more remarkable than in all that concerns the higher stages of education. One might think that somewhere in the seventeenth century it would have been recognized at the Seats of Learning that thought and knowledge were progressive things, and that a periodic revision of courses and syllabuses, a periodic recasting of work and scope, a re-arrangement of chairs and of the appliances of the faculties, was as necessary to the continued healthy existence of a University as periodic meals and sleep and exercise are necessary to a man. But even today we are founding Universities without any provision for this necessary change, and the chances are that in a century or so they will present just as much backwardness and illiteracy as do the ordinary graduation organizations of Oxford and Cambridge today, that a hundred years from now the past graduates of ripe old Birmingham, full of spite against newfangled things "no fellow can understand," will be crowding up to vote against the substitution of some more modern subject for "Huxley"--"Huxley" they will call the subject, and not Comparative Anatomy, on the model of "Euclid"--or for the retention of compulsory "Commercial Geography of the Nineteenth Century," or "Longhand Bookkeeping" in the Little Go. (And should any germinating noble founder read these pages I would implore him with all the earnestness that is possible in printed matter, to provide that every fifty years, let us say, the whole of his prospective foundation shall go into solution, shall re-apportion its funds and reorganize the entire mechanism of its work.)

The idea that a text-book should be regularly reset and reprinted is still quite foreign to the Professorial mind, as, indeed, is the idea that the care of text-books and publications is a University function at all. No one is startled by a proposal to apply £800 or £1000 a year to a new chair in any subject, but to apply that sum yearly as a standing charge to the revision and perfection of a specific text-book would seem, even today, quite fantastically extravagant to most University men. Yet what could be more obviously helpful to sound and thorough teaching than for a University, or a group of Universities, to sustain a Professor in each of the chief subjects of instruction, whose business would be neither teaching as it is now understood, nor research, but the critical and exhaustive editing of the College text-book of his subject, a text-book which would stand in type at the University Press, which would be revised annually and reprinted annually, primarily for the use of the matriculated students of the University and incidentally for publication. His business would be not only to bring the work up to date and parallel with all the newest published research and to invite and consider proposals of contributions and footnotes from men with new views and new matter, but also to substitute for obscure passages fuller and more lucid expositions, to cut down or relegate to smaller type passages of diminishing importance and to introduce fresh and more efficient illustrations, and his work would be carried on in consultation with the General Editor of the University Press who would also be a specialist in modern printing and book-making, and who would be constantly taking up, trying, and adopting fresh devices of

arrangement, and newer, better, and cheaper methods of printing and illustration. It would not merely raise the general efficiency of the College work of adolescents very greatly to have this series of textbooks living and growing in each subject at one or (better) at several Universities or grouped Universities, but in each subject the periodic change in these books would afford a most valuable corrective to the influence of specialized work by keeping the specialist worker easily in touch with the current presentation of his science as a whole.

The text-book, however good, and the lecturer, however able, are only one of two necessary factors in College work, the reciprocal element is the students' activity. Unless the students are actively engaged not simply in taking in what they are told, but in rearranging it, turning it over, trying and testing it, they are doing little good. We recognize this quite abundantly in the laboratory nowadays, but we neglect it enormously in the more theoretical study of a subject. The facts of a subject if it is a science may be got at in the most thorough way by handling in the laboratory, but the ideas of a subject must be handled in discussion, reproduction and dispute. Examinations, examinations by teachers who understand this very fine art, in which the student is obliged to restate, apply, and use the principles of his subject, are of the utmost value in keeping the mind active and not simply receptive. They are just as good and as vitally necessary as examination papers which merely demand definitions and lists and bald facts are bad. And then there might be discussions--if the Professor

were clever enough to conduct them. If the students of a class could be induced to submit propositions for discussion, from which a topic could be selected, and could then be made to prepare for a disputation to which all would have to contribute, with the Professor as a controlling influence in the chair to check facts and logic and to conclude, it would have the value of a dozen lectures. But Professors who are under the burthen of perhaps ninety or a hundred lectures a year cannot be expected to do anything of this sort. Directed reading, conferences on knotty points, special lectures followed by the questioning of the lecturer, discussions upon matters of opinion, laboratory work when needful, fairly frequent test examinations, and a final examination for places, are the proper ingredients of a good modern College course, and in the necessity of leaving the Professor's energies free for the direction of all this really educational work, lies another reason for that complete, explicit, well-arranged text-book upon which I am insisting.

Coming back now from these general propositions about books and teaching to our mass of young people about fifteen years old, our adolescent nation, who have accomplished their Schooling and are ready for the College phase, we have to consider what subjects they are to be taught, and how far they are to go with these subjects. Whether they are to give all or part of their time to these College studies, whether they are going to pursue them in evening classes or before breakfast in the morning or during the livelong day is a question of secondary conveniences that may very well be disregarded here. We are concerned

with the general architecture now, and not with the tactical necessities of the clerk of the works. [Footnote: But I may perhaps point out here how integral to a sane man-making scheme is the raising of the minimum age at which children may work. A day will come, I hope, when even the partial employment of children under fifteen will be prohibited, and when, as Mr. Sidney Webb suggested some time ago, employment up to the age of twenty-one will be limited to so few hours a week--his suggestion was thirty--as to leave a broad margin for the more or less compulsory college work and physical training that are becoming essential to the modern citizen.]

We need waste little time nowadays, I submit, in disposing of Encyclopaedic conceptions of College Education, conceptions that played a part in almost all educational schemes--Bentham's stupendous Chrestomathia is the fearful example--before the middle nineteenth century. We are all agreed in theory, at any rate, that to know one subject or group of subjects exhaustively is far better than a universal smattering, that the ideal of education is more particularly "all about something" with "something about everything" in a very subordinate place. The fact remains that the normal curriculum of our higher schools and colleges is a pointless non-educational miscellany, and the average graduate in Arts knows something, but not enough, of science, mathematics, Latin, Greek, literature, and history; he has paid tribute to several conflicting schemes of education, and is a credit to none. We have to get rid of this state of affairs, and we have to provide (i) a substantial mental training which shall lead at

last to a broad and comprehensive view of things, and which shall be a training in generalization, abstraction, and the examination of evidence, stimulating and disciplining the imagination and developing the habit of patient, sustained, enterprising and thorough work, and (ii) we have to add a general culture, a circle of ideas about moral, aesthetic, and social matters that shall form a common basis for the social and intellectual life of the community. The former of these two elements must at some stage develop--after two or five or seven or some such period of years, which may be different in different cases--into the special training for the definite function of the individual in the social body, whether as engineer, business manager, doctor, priest, journalist, public administrator, professional soldier, or what not. And before we ask what must constitute (i) it may be well to define the relation between the first and the second section of the College stage of education.

It is (i) that will constitute the essential work of the College, which will be the especial concern of the Professorial staff, which will "count" in examinations, and I conceive it as occupying typically four full working days in the week, four good, hard-driving days, and no more, of the students' time. The remaining three, so far as they are not engaged by physical exercise, military training, and mere amusement, must be given to (ii), which I imagine an altogether more general, discursive, various, and spontaneous series of activities. To put the thing briefly, with the use of a convenient slang word (i), is "grind," and (ii) is general culture, elements that

are altogether too greatly confused in adolescent education. A large number of people will consider it right and proper that (ii) on the seventh day of the week should become devotional exercise or religious thought and discussion. I would submit that under (ii) there should be formally recognized certain extremely valuable educational influences that are at present too often regarded as irregular or improper invasions of school and college work, the collegiate debating society, for example, private reading, experimental science outside the curriculum, and essays in various arts. It should be possible to provide a certain definite number of hours weekly in which the student should be required merely to show that he was doing something of a developmental kind, he would have his choice between the Library--every College ought to have a good and not too priggishly conceived Library, in which he might either read or write--or the music master, the debating society, the museum, the art studio, the dramatic society, or any concern of the sort that the College authorities had satisfactory reason for supposing to be alive and efficient. In addition (ii) should include certain minor but necessary studies not included in (i), but pursued for all that with a certain insistence, taught or directed, and controlled perhaps by examinations. If, for example, the acquisition of a foreign language was a part of the preliminary schooling, it could be kept alive by a more fastidious study in the higher grade. For the making of the good, all-round, average citizen (i) will be the essential educational factor, but for the boy or girl with a dash of genius (ii) will rise from the level of culture to that of a great opportunity.

What subject or group of subjects is to constitute (i)? There are at least three, and quite probably beyond the very limited range of my knowledge there are other, arrangements of studies that can be contrived to supply this essential substantial part of the College course. Each suffices completely, and I would hesitate to express any preference for one or the other. Each has its special direction towards certain sorts of adult function, and for that reason it may be suggested that the secondary education of an English-speaking country might very well afford all three (or more) types of secondary course. The small schools might specialize upon the type locally most desirable, the larger might group its triplicate (or quadruplicate) system of sustained and serious courses about a common Library and the common arrangements for Section ii. of the College scheme.

The first of these possible College courses, and the one most likely to be useful and fruitful for the mass of the male population in a modern community, is an expansion of the Physics of the Schooling stage. It may be very conveniently spoken of as the Natural Philosophy, course. Its backbone will be an interlocking arrangement of Mathematics, Physics, and the principles of Chemistry, and it will take up as illustrative and mind-expanding exercises, Astronomy, Geography, and Geology conceived as a general history of the Earth. Holding the whole together will be the theory of the Conservation of Energy in its countless aspects and a speculative discussion of the constitution of matter. A certain minimum of Historical and Political reading and of

general "Library" would be insisted upon in Section ii. This could be made a quite noble and spacious course of instruction extending over from three to five years, from fourteen or fifteen up to eighteen or twenty-one (or even longer in the case of those partially employed); its less successful products would drop out--it might be before completion--to take up the work of more or less skilled artisans and technical workers, and its more successful ones would pass some of them into the technical colleges for special industries with a view to business direction, into special study for the engineering trades, for the profession of soldiering, [Footnote: I may perhaps explain that my conception of military organization is a universal service of citizens --non-professional soldiers--who will be trained--possibly in boyhood and youth, to shoot very well indeed, to ride either horses or bicycles, and to take up positions and move quickly and easily in organized bodies, and, in addition, a special graduated profession of soldiers who will be in their various ranks engineers, gunners, special-force men of various sorts, and, in the higher ranks, masters of all the organization and methods necessary for the rapid and effective utilization of the non-professional manhood of the country, of volunteers, militia, or short-service enlistment levies, drawn from this general supply, and of all the machinery of communication, provisioning, and so forth. They will not be necessarily the "social superiors" of their commands, but they will naturally exercise the same authoritative command in warfare that a doctor does in a sick-room.] or for the naval and mercantile services, or into research and the literature of science. Some also would pass on to study for the

profession of medicine through more special work in Chemistry and Physiology, and some with a proclivity for drawing and design would become architects, designers of appliances, and the like. The idea of the ordinary development of this course is not so very remote from what already exists in Great Britain as the Organized Science School, but, as with all these courses, it would be done in varying degrees of thoroughness and extension under varying conditions. This is the first of my three alternative College courses.

The second course will probably seem less acceptable to many readers, but all who are qualified to speak will testify to its enormous educational value. It is what one may speak of as the Biological Course. Just as the conception of Energy will be the central idea of the Natural Philosophy course, so the conception of Organic Evolution will be the central idea of the Biological Course. A general review of the whole field of Biology--not only of the Natural History of the present but of the geological record--in relation to the known laws and the various main theories of the evolutionary process will be taken, and in addition some special department, either the Comparative Anatomy of the Vertebrata chiefly, or of the plants chiefly, or of several Invertebrated groups chiefly, will be exhaustively worked out in relation to these speculations. The first of these alternatives is not only probably the most invigorating mental exercise of the three but bears also more directly upon the practical concerns of life. Physiology will be taken up in relation to this special exhaustive study, and the "Elementary Physics of the Schooling" stage will be

prolonged up into a treatment of Chemistry with especial reference to biological problems. Through such a course as this students might pass to the study of medicine just as well as through Natural Philosophy, and the medical profession would profit by the clash of the two types of student. The biological course, with its insistence upon heredity and physiological facts, would also give the very best and gravest preparation in the world for the practical concerns of motherhood. From it students would pass on illuminated to the study of psychology, philosophical science, and educational method. The training in the discussion of broad generalization, and much of the fact involved, would be a most excellent preliminary to special theological study and also to the advanced study of economics and political science. From this course also artists of various sorts would escape through the avenue of Section ii. which, by the by, would have to involve Historical Reading. So much for my second suggested College course.

The third of these three alternative courses is the History course, done extensively in relation to general geography, economic theory, and the general evolution of the world, and intensively in relation to British or American history, and perhaps to some particular period. Out of it would spring a thorough study of the development of English literature and also of the legal systems of the English-speaking peoples. This course also would be a way of approach to philosophical science, to theology, to the thorough study of economic and political science, and possibly it would contribute a larger proportion of its students to imaginative literature than either of the two preceding

courses. It would also be the natural preliminary course to the special study of law and so a source of politicians. In the Section ii. of this course a light but lucid treatment of the great generalizations of physical and biological science would be desirable. And from this course also the artist would break away.

Conceivably there are other courses. The course in Mathematics as one sees it given to the Cambridge Tripos men, and what is called the Classical course, will occur to the reader. Few people, however, are to be found who will defend the exclusively mathematical "grind" as a sound intellectual training, and so it need not be discussed here. The case, however, is different with the classical course. It is alleged by those who have had the experience that to learn Latin and Greek more or less thoroughly and then to stumble through one or two Latin and Greek authors "in the original" has an educational value surpassing any conceivable alternative. There is a mysterious benefit from one's private translation however bad that no other translation however good can impart. Plato, for example, who has certainly in the very best translations, quite perceptibly no greater mind than Lord Bacon, Newton, Darwin, or Adam Smith, becomes god-like to all who pass beyond the Little-Go. The controversy is as old as the Battle of the Books, a quite interminable wrangle, which I will not even attempt to summarize here. For my own part I believe all this defence of the classics on the part of men with classical education is but one more example of that human weakness that splashes Oxford metaphysical writings with needless tags and shreds of Greek and set Demetrius the silversmith bawling in

the streets. If the reader is of another opinion there is no need to convert him in this present argument, provided only that he will admit the uselessness of his high mystery for the training of the larger mass of modern men. By his standards they are beneath it. A convention upon this issue between the two parties therefore is attainable. Let us admit the classical course for the parents who like and can afford this sort of thing for their sons and daughters. Let us withdraw all objections to its endowment, unless it is quite excessive endowment. Let the classical be the senior service, and the classical professor, to use his own queer way of putting things, *primus inter pares*. That will make four courses altogether, the Classical, the Historical, the Biological, and the Physical, for one or more of which all the secondary schools and colleges in that great English-speaking community at which the New Republic aims should be organized. [Footnote: One may, however, suggest one other course as possible under special conditions. There is one sort of art that requires not only a very rigorous and exhaustive training, but also an early commencement, and that is music, at once the most isolated and the most universal of arts. Exceptional gifts in the direction of music will have appeared in the schooling stage, and it is quite conceivable that the college phase for those who are destined for a musical career should have as its backbone a "grind" in the theory and practice of music, with languages and general culture relegated to a Section ii.]

It may be objected that this is an idealized proposal, and that existing conditions, which are, of course, the material out of which

new conditions are to be made do not present anything like this form. As a matter of fact, if only the reader will allow for a certain difference in terminology, they do. What I have here called Schooling is, so far as the age of the pupils go, typically presented in Great Britain by what is called the elementary school, and in America by the public school, and certain schools that unanalytical people in England, mistaking a social for an educational difference, seem disposed to class with secondary schools, the inferior Grammar Schools, the cheaper private schools, and what are called Preparatory Schools, [Footnote: As things are, there is no doubt a considerable advantage in the child from a good home going on to a good preparatory school instead of entering a public elementary school, and the passage above must not be misread as a sweeping condemnation of such establishments.] are really also elementary schools. The latter have more social pretension and sometimes far less efficiency than a Government Elementary School, but that is all the difference. All these schools admit of a gradual approximation to the ideal of schooling already set forth in the sixth of these papers. Some are already within a measureable distance of that ideal. And above these elementary schools, above the School grade proper, and answering to what is here called College, there is a great variety of day and evening schools of the most varied description which agree all of them in the presentation of a second phase in the educational process beginning about the age of thirteen to sixteen and going on to nineteen and twenty. In Great Britain such institutions are sometimes called secondary schools and sometimes colleges, and they have no distinct boundary line to separate them from the University

proper, on the one hand, or the organized Science Schools and the Higher Grade Board Schools and evening classes of the poorer sort. The Universities and medical schools are, indeed, hampered with work quite similar to that of secondary schools and which the secondary schools have failed to do, the Cambridge undergraduate before his Little-Go, the London University medical student before his Preliminary Scientific Examination, are simply doing the belated work of this second stage. And there is, I doubt not, a similar vague complexity in America. But through the fog something very like the boundary line here placed about fourteen is again and again made out; not only the general requirements for efficient education, but the trend of present tendency seems to be towards a scheme of three stages in which a first stage of nine or ten years of increasingly serious Schooling (Primary Education), from a very light beginning about five up to about fourteen, is to be followed by a second stage of College education (Secondary Education), from fourteen or sixteen to an upward boundary determined by class and various facilities, and this is to be succeeded by a third stage, which we will now proceed to consider in detail.

Let us make it clear at once that this third stage is a much ampler thing than the graduation or post graduation work of a university. It may or it may not include that as an ingredient. But the intention is to express all those agencies (other than political, social, and economic forces, and the suggestions that arise from them), that go to increase and build up the mental structure of the man or woman. This includes the pulpit, so far as it is still a vehicle for the

importation of ideas and emotions, the stage, books that do anything more than pass the time, newspapers, the Grove and the Agora. These all, in greater or lesser degrees, work powerfully together to make the citizen. They work most powerfully, of course, in those plastic unsettled years that last from adolescence to the middle twenties, but often in very slowly diminishing intensity right into the closing decades of middle age. However things may have been in the quieter past when newspapers did not exist, when creeds were rigid, plays mere spectacles to be seen only "in Town," and books rare, the fact remains that to-day everybody goes much further and learns far more than any of the professedly educational agencies can be held accountable for. There was a time, perhaps, when a man really did "settle down" intellectually, at the end of his days of learning, when the only way--outside the libraries and households of a few princely personages--to go on thinking and to participate in the secular development of ideas, was to go to a University and hear and dispute. But those days have gone for a hundred years at least. They have gone by, and the strange thing is that a very large proportion of those who write and talk about education have not discovered they have gone by, and still think and talk of Universities as though they were the only sources and repositories of wisdom. They conjure up a vision in my mind of an absent-minded water-seller, bearing his precious jars and crying his wares knee-deep, and going deeper into a rising stream. Or if that does not seem just to the University in the past, an image of a gardener, who long ago developed a novel variety of some great flower which has now scattered its wind-borne seed everywhere, but who still proffers

you for sale in a confidential, condescending manner a very little, very dear packet of that universal commodity. Until the advent of Mr. Ewart (with his Public Libraries' Act), Mr. Passmore Edwards, and Mr. Andrew Carnegie, the stream of endowment for research and teaching flowed just as exclusively to the Universities as it did in Tudor times.

Let us deal, then, first with the finally less important and more formal portion of the third stage in the educational process; that is to say, with the University Course. One may conceive that so far as positive teaching and learning go, a considerable proportion of the population will never pass beyond the second stage at all. They will fail to keep up in the course of that stage, or they will branch off into the special development of some special aptitude. The failures will gravitate into positions a little better perhaps, but analogous to those taken up by the failures of the Schooling phase. The common clerks and common shop-hands, for example, would come out here. The others, who fall out without completing their College course, but who may not be College failures at all, will be all sorts of artists and specializing persons of that type. A great many girls, for economic and other reasons, will probably never get beyond the College stage. They will pass from the Biological and Historical courses into employment, or marry, or enter domestic life. But what may finally become a much larger proportion of New Republican citizens will either from the beginning, taking the College course in the evening, or after a year or so of full attendance at the College course, start also upon the third-

grade work, the preparation for the upper ranks of some technical and commercial employment, for the systematic and liberal instruction that will replace the old rule-of-thumb apprenticeship. One can imagine a great variety of methods of combining the apprenticeship phase of serious occupation with the College course. Many waking up to the demands of life may do better for themselves with a desperately clutched College course of evening classes than others who will have progressed comfortably in day Colleges. There should be opportunity by means of scholarship openings for such cases of a late awakening to struggle back into the higher education. There may be every gradation from such students to those who will go completely and exhaustively through the College and who will then go on at one and twenty or two and twenty to equally complete and exhaustive work in the third grade. One imagines the third grade in its completeness as a most varied choice of thorough studies carried on for three or four years after eighteen or twenty-one, special schools of medicine, law, engineering, psychology, and educational science, economics and political science, economics and commercial science, philosophy and theology, and physical science. Quite apart from the obvious personal limitation, the discussion of the method of dealing specifically with each of these subjects would be too diversified and special a theme to occupy me now. The larger fact to which attention has to be given is this: that all these studies and all the technical study and such like preparation at lower levels of the third stage must be as it were floating in a common body of Thought, which is the unifying principle, the common initiative, the real common life of the truly civilized state, and that

this body of Thought is no longer to be contained within the form of a University. It is the larger of the two things. And the last question, therefore, in these speculations is the general organization of that body of Thought, that is to say of contemporary literature, using the word in its widest sense to cover all that is good in journalism, all untechnical speculative, philosophical writing, all that is true and new in the drama, in poetry, fiction or any other distinctly literary form, and all scientific publication that is not purely a matter of recording or technical working out, all scientific publication that is, that deals with general ideas.

There was a time when the higher education was conceived of as entirely a matter of learning. To endow chairs and teachers, and to enable promising scholars to come and hear the latter was the complete organization of the higher education. It is within quite recent years that the conception of endowing research for its own sake, leaving the Research Professor free altogether from direct teaching or with only a few good pupils whose work consisted chiefly in assimilating his ideas and helping with his researches, has become at all widely acceptable. Indirectly, of course, the Research Professor is just as much a teacher as the Teaching Professor, because his results become accessible as he writes them. Our work now is to broaden both the conception of research and of teaching, to recognize that whatever imports fresh and valid ideas, fresh and valid aspects--not simply of chemical and physical matters, but of aesthetic, social, and political matters, partakes of the honour and claims of research--and that whatever conveys ideas and

aspects vividly and clearly and invigoratingly, not simply by word of mouth but by book or picture or article, is teaching. The publication of books, the whole business of bringing the contemporary book most efficiently home to the general reader, the business of contemporary criticism, the encouragement and support of contemporary writers, is just as vitally important in the modern state as the organisation of Colleges and Schools, and just as little to be left to the enterprise of isolated individuals working primarily upon commercial lines for gain.

There are two aspects of this question. There is the simpler one of getting an abundance of good books, classical and contemporary, and of good publications distributed everywhere through the English-speaking world, and there is the more subtle and complex problem of getting, stimulating, and sustaining the original writers and the original critics and investigators upon whom the general development of contemporary thought, upon whom indeed the progress of the world finally depends. The latter problem may be reserved for the next paper, and here we will deal simply with the question of access and distribution.

For the present we must assume the quality of the books; all that sort of question must be deferred for our final discussion. We will simply speak of good books, serious books, on the one hand, and of light and merely amusing books on the other, in an intentionally vague way. The former sort of books is our present concern; pleasure as an end,

pleasure except as necessary recuperation, is no affair for the state.

Books are either bought or borrowed for reading, and we have to consider what can be done to secure the utmost efficiency in the announcement, lending and selling of books. We have also to consider the best possible means of distributing periodicals. We have particularly to consider how books specifically "good," or "thorough," or "serious," and periodicals that are "sound" and "stimulating" are to be made as widely and invitingly accessible as possible. The machinery we have in hand are the booksellers and the newsvendors, the circulating libraries, the post-office, and the free public libraries that are now being energetically spread throughout the land [by men who, in this aspect, answer very closely to the conception of New Republicans as it is here unfolded], and to bring and keep all this machinery to the very highest level of efficiency is integral to the New Republican scheme of activity.

It may be objected that the organization of bookselling and publishing is the discussion of trivial details in the intellectual life of a people, but indeed that is not so. It is a constant trouble, a perpetual drain upon the time and energy of every man who participates in that life, to get the books that are necessary to the development of his thoughts. The high price of books, burthensome as it is, is the lesser evil, the great trouble is the trouble of access. There are a great number of people now who read nothing at all, or only promiscuous fiction, who would certainly become real readers were books of any

other sort attractively available. These things are not trivial. The question of book distribution is as vitally important to the intellectual health of a modern people as are open windows in cases of phthisis. No nation can live under modern conditions unless its whole population is mentally aerated with books.

That allusion to the predominance of fiction brings one round to the question of the Public Library. One is constantly reading attacks on these new and most promising institutions, and always these attacks base themselves on the fact that the number of novels taken out was so many times, so many hundred times greater than the number of "serious books." Follows nonsense about "scrappy" reading, shallowness of the public mind, and so forth. In Great Britain public pomposities take up the strain and deliver large vague, foolish discourses on our intellectual decline. It occurs to none of these people--nothing, indeed, ever does seem to occur to this sort of people--to inquire if a man or woman can get serious reading from a public library. An inspection of a Public Library Catalogue reveals, no doubt, a certain proportion of "serious" books available, but, as a rule, that "serious side" is a quite higgledy-piggledy heap of fragments. Suppose, for example, an intelligent mechanic has a proclivity for economic questions, he will find no book whatever to guide him to what literature there may be upon those questions. He will plunge into the catalogue, and discover perhaps a few publications of the Cobden Club, Henry George's Progress and Poverty, J. S. Mill's Autobiography, Ruskin's Unto This Last, The Statesman's Year

Book for 1895, and a text-book specially adapted to such and such an examination by the tutors of some Correspondence College. What can you expect from such a supply but a pitiful mental hash? What is the most intelligent of mechanics likely to secure for himself from this bran pie? Serious subjects are not to be read in this wild disorderly way. But fiction can be. A novel is fairly complete in itself, and in sticking to novels, the Public Library readers show, I submit, a better literary sense and a finer intellectual feeling than the muddle-headed, review-inspired, pretentious people who blame them.

But manifestly the Public Libraries ought to be equipped for serious reading. Too many of them are covers without meat, or, at least, with nothing to satisfy a respectable mind hunger. And the obvious direct method to equip them is to organize an Association, to work, if possible, with the Librarians, and get this "serious" side of the Libraries, this vitally important side, into better order. A few men with a little money to spend could do what is wanted for the whole English-speaking world. The first business of such an Association would be to get "Guides" to various fields of human interest written, guides that should be clear, explicit Bibliographies, putting all the various writers into their relationships one to another, advising what books should be first taken by the beginner in the field, indicating their trend, pointing out the less technical ones and those written obscurely. Differential type might stamp the more or less important works. These Guides ought to go to every Public Library, and I think also that all sorts of people would be eager to buy them if they were

known to be comprehensive, intelligent, and inclusive. They might even "pay." Then I would suggest this Association should make up lists of books to present an outline course or a full course corresponding to each Guide. Where books were already published in a cheap edition, the Association would merely negotiate with the publisher for the special supply of a few thousand copies of each. Where books were modern and dear the Association would negotiate with publisher and author, for the printing of a special Public Library Edition. They would then distribute these sets of books either freely or at special rates, three or four sets or more to each Library. In many cases the Association would probably find it preferable to print its editions afresh, with specially written introductions, defining the relationship of each book to the general literature of the subject. [Footnote: In America Mr. George Iles is already organizing the general appraisal of books for the public library reader in a most promising manner. The Bibliography of the Literature of American History, with an appraisal of each book, which has appeared under his direction, is edited by Mr. Larned, and is a most efficient performance; it is to be kept up to date by Mr. P. P. Wells, librarian of the Yale Law School. It includes an appendix by Professor Channing, of Harvard, which is on the lines of the "Guides" I suggest, though scarcely so full as I should like them. This appendix is reprinted separately for five cents, and it is almost all English public librarians and libraries need so far as American history goes. The English Fabian Society, I may note, publishes a sixpenny bibliography of social and economic science, but it is a mere list for local librarians, and of little use to the

uninitiated reader.]

Such an Association in the present state of publishing would become--in Great Britain, at any rate--quite inevitably a Publishing Association. A succession of vigorous, well-endowed Voluntary Publishing Associations is a quite vital necessity in the modern state. A succession is needed because each age has its unexpected new needs and new methods, and it would not be a bad idea to endow such associations with a winding-up clause that would plump them, stock, unspent capital, and everything except perhaps a pension fund for the older employés, into the funds of some great Public Library at the end of thirty or forty years. Several such Associations have played, or are still playing a useful part in British affairs, but most of them have lost the elasticity of youth. Lord Brougham's Society for the Diffusion of Useful Knowledge was one of the earliest, and we have today, for example, the Society for the Promotion of Christian Knowledge, the Catholic Truth Society, the Rationalist Press Association, and the Fabian Society. There is a real need to-day for one--indeed there is room for several--Publishing Associations that would set themselves to put bright modern lights into these too often empty lanterns, the Public Libraries. So lit, Great Britain and America would have in them an instrument of public education unparalleled in the world, infinitely better adapted to the individualistic idiosyncrasy of our peoples than any imitation of German colleges can possibly be. Propaganda of all sorts could be diverted to this purpose. Persons of imperialistic tendencies might well consider the advisability of Guides to good

geographical and historical reading and sets of travel books, and of geographical and historical works. Americanisers might consider the possibility of sets that would help the common British to a clearer idea of America, and Americans to a realization that the British Islands are something more than three obscure patches of land entirely covered by a haughty peerage and a slightly absurd but historically interesting Crown. . . . Indeed, whatever you want thought or believed, I would say, give books!

But the good New Republican would have a wider scope for his Publishing Association than to subdue it to this specific doctrine or that. It is not the opinion makes the man; it is not the conclusion makes the book. We live not in the truth, but in the promise of the truth. Sound thinking, clearly and honestly set forth, that is the sole and simple food of human greatness, the real substance and the real wealth of nations; the key that will at last unlock the door to all we can dream of or desire.