

I have learned one or two (besides Greek and Latin) of my own accord. I only say their importance has been vastly overrated, and the relative importance of certain other subjects unaccountably underrated.

"On the other hand, education ought certainly to include for everybody, men and women alike, some general acquaintance with the following subjects: Mathematics, so far as the particular intelligence will go; physics, so as to know the properties of matter; generalized chemistry; zoology; botany; astronomy; geography; geology; human history, and especially the history of the great central civilization, which includes Egypt, Assyria and Babylonia, Persia, Asia Minor, Hellas, Italy, Western Europe, America; human arts, and especially the arts of painting, sculpture and architecture in North Africa, Western Asia and Europe. If this seems a large list for the foundations of an education, it must be remembered that six or seven years would be set free for the acquisition of useful knowledge by the abolition of grammatical rote-work; and that a general idea alone of each subject is all I ask for.

"For instance, in physics, it would suffice that students should be taught the fundamental laws of matter, solid, liquid, and gaseous; the principles of gravitation; the main facts about light and heat; and some notions of electrical science. In biology, it would suffice that they should be taught the general classification of animals, a little comparative anatomy and physiology, and some idea of specific distinctions. At present, quite well informed people will speak of a porpoise or a lobster as a fish; such grotesque blunders ought to be made impossible; they ought to be considered far more damnable evidence of ignorance and ill-breeding than "you was" or "me and him went there." A few weeks' practice will enable any intelligent young man or woman of eighteen to identify any plant in the American flora by the aid of a technical description; and the mental value of that training is immeasurably greater than the mental value of ten years' work at Greek syntax. And so forth with the other subjects. I contend that a man or woman ought to leave college with a fairly competent general idea of most arts and sciences, to be supplemented by exact knowledge of one chosen subject—say, beetles or chemistry, or the English literature of the seventeenth century, or Hittite inscriptions, or the fresh water mollusks of the United States, or early Flemish painting, or the geology of the Ohio basin. The special subject ought always to be one chosen, out of pure predilection, by the student himself; the general subjects ought to be imposed from above by the educational authorities of the particular university. In this way you avoid complete and foolish ignorance of any one subject about which it is desirable for everybody to know something; but at the same time you give full and free play to individual diversities of taste and faculty.

"A person brought up on such a curriculum ought to be fairly well equipped for the battle of modern life in everything except the technical training of the particular profession. And technical training must, of course, come afterwards—in the medical school, in the lawyer's office, in the engineering yard, in the merchant's counting-house. But I maintain that every man or woman will be better fitted for every position in life—he or she may fill—as a citizen, as a bread-winner, as a wife, as a parent—than when linguistically educated upon the existing basis. Wide knowledge of facts is essential to success in modern life; it is ignorance of facts that most often causes failure of adaptation. And any nation that ventured to adopt such an education in facts, instead of words, would forge ahead of all other nations with an accelerated rapidity that would astonish even those who introduced it.

"But there is a preconception still more fatal to progress than all these preconceptions with which I have hitherto dealt—a preconception that vitiates as yet almost all thinking on the subject, even in America. It is the

deep-seated prejudice in favour of the college itself—of education as essentially a thing of teaching, not of learning—of education as bookish and scholastic—another baneful legacy of the monkish training. I believe almost everybody still overestimates the importance of college as such, and underestimates the value of travel and experience. Let me put the thing graphically. Thousands of American parents, asked to thrust their hands into their pockets and pay a round sum to send their sons or daughters to Harvard or Vassar, will do so without hesitation. Thousands of English parents will do the same thing, at still greater expense, for Oxford or Girton. But ask those same parents to thrust their hands into their pockets and pull out an equal amount to send their sons and daughters traveling, deliberately, as a mode of education, in Europe, and they will draw back at once; 'I don't want to waste so large a sum on a mere pleasure excursion.'

"Why is this? Clearly because the mediæval idea that most learning, or all learning, is to be derived from books, still survives among us. In the middle ages travel was difficult. People lived much in the same place, and the knowledge of the times was really all book knowledge. To-day people travel freely; but the conception of travel as a great educator hardly exists at all in Europe, and is relatively little known even in America. I say 'even in America,' for I gladly admit that many more Americans than Europeans do really understand the high educational value of travel. But for the Englishman, travel in England itself is comparatively useless; so for the American, is travel in America. It is travel in other countries that is of prime importance—above all, in the motherlands of culture—France, Germany, Italy, Greece, Egypt. And the greatest of these is Italy.

"In my opinion, a father who has sons and daughters of the proper age to go to college, will do better by his children, and not less economically for himself, if he sends them for two years to travel in Europe than if he sends them for three years to an American or English university.

"The knowledge gained at the university is unreal and bookish—mere half knowledge; the knowledge obtained by travel is real and first hand; it teaches and impresses. And the things it has taught us live with us forever.

"Let any cultivated man or woman of middle age ask himself or herself seriously: 'How much of what I know that I really prize did I learn at school and college, or learn from books, and how much did I learn from things seen and visited in London, Paris, Venice, Florence, Munich, Nuremberg, Dresden, Brussels?' Will not the answer be, to the first half, next to nothing; to the second half, almost everything? Speaking for myself I can honestly say I went away from Oxford without a single element of education worth speaking of, and without the slightest training in method or development of faculties. Everything that I have ever learned worth knowing I have taught myself since by observation and travel; and I reckon in particular my first visit to Italy as the greatest and most important date in my mental history. Oxford taught one how to write imitation Latin verses; Italy taught one who the Romans were, and why their language and literature are worthy of study. Until you have been in Rome it is silly and childish to read Roman books; only when you know Rome does Rome begin to live and speak for you.

"One's own experience is often the best guide one can have; therefore I shall make no apology for adding that on the first day I ever spent in Rome, I took a long drive round the town—a drive of mere orientation, suitable for a man who was weary with travelling all night; and in the course of it I saw the Forum, the Capitol, the Palatine, the island in the Tiber, the Vatican, St. Peter's, the Pantheon, the column of Trajan and most of the other great monuments and churches. Now, I had been teaching Roman history half my life, and lecturing on the