

## SHORTENING THE COLLEGE COURSE: THE SOCIAL POINT OF VIEW.

EVERYONE at all familiar with the history of modern education knows that during the past four or five centuries all progressive peoples have been steadily strengthening and enriching their systems of public instruction. To provide a more extended and a better training for all children has been the aim constantly before enlightened statesmen and ruling bodies. One cannot fail to be impressed with the vigor of this movement, if he will compare what is being done today in America, or England, or France, or Germany with the best that was done anywhere in the world, even as late as in the time of John Locke, who has told us much of the ideals and practices of his age. Then a boy was thought to be well equipped for life if he received eight or ten years of tuition in the classics; and only the favored few, the élite, who had leisure, were expected to have such an elaborate schooling as this. But now in most of the great nations every child is given the privilege of, and is even required to pursue, a long course of training at public expense. In our own country and in some others it is not only the common or elementary school that is free to all children; but anyone who chooses and is qualified therefor may spend four years more in the high school as a ward of the public, and many in every community avail themselves of this opportunity. And this is not all; among us nearly every commonwealth maintains its university, which is practically free to the youths of the state who have mastered what is presented in the schools below; and here they may remain at least a half-dozen years, if they wish and have the ability to take advantage of the opportunities offered them.

The ambition everywhere, these later years, has been to lengthen the school period for all children. Public sentiment has approved every effort that has been made to achieve this end. The cry has come from all quarters: "Keep the boy at school." Parents have sacrificed their own comforts that they might

give their offspring a "better schooling than they had themselves;" communities have sacrificed present advantage that the rising generation might be more broadly and thoroughly disciplined than the one passing off the stage. Theorists have taught that the well-being of any nation is in the long run always dependent upon the breadth and depth of its educational régime, and lawmakers have written upon the statute-books provisions which are designed to compel indifferent or hostile men, if there are any, to put themselves into line with this tremendous upward tendency in every department of educational activity. Statesmen everywhere have indorsed the sentiments of Lord Brougham: "The schoolmaster is abroad, and I trust to him, armed with his primer, against the soldier in full military array."

In recent times there has been heard above the general acclamation hardly a voice raised in opposition to the multiplication of school advantages and the extension of the educational period for all persons. But just now there are some indications of disaffection which are quite threatening. A few people occupying high positions in the councils of the nation have discovered that it is possible to carry the educational business too far. It has been pointed out that in Germany, for instance, the thing has been overdone, and there have been produced already a good many learned paupers, doctors of philosophy who have to beg for bread. The universities are charged with having spoiled many good carpenters and mechanics and clerks; and some think the presence of this large body of men whose wits have been sharpened, but who are putting them to no good use, and who are restless and dissatisfied, is a source of danger to the empire. One distinguished German educator recently expressed grave doubts respecting the wisdom of the United States accepting the Carnegie and other gifts, because of the danger of our getting on our hands a lot of overeducated men who could not be utilized to advantage in the social organism.

Among us it is being said that boys do not get into practical work early enough. Our grandfathers set up for themselves at twenty-one, but the young men of today are working over their

books as late as twenty-five, and in some cases they are studying even at thirty. Statisticians have shown that the age of graduation from college into professional or business positions is being raised constantly as the years go by. The courses in all grades of schools are being made harder from decade to decade; the examinations for entrance to college are growing stiffer all the time; the requirements for entering upon one's life-work are made more exacting each year; and as a result many young men are not beginning to help themselves until the race is half run. And as a corrective it is urged that we cut down the college course at least by one-fourth; and it is even suggested that we grant the bachelor's degree at the completion of two years of study. This will enable boys to get into business earlier; if they engage in mercantile pursuits, or if they desire to prepare themselves for the professions, they can in any event save a couple of years by this arrangement. This plan in a moderate form has already been in operation in a few of the universities for some time, for there may be finished in six years the regular college course and a professional course, which together required seven years for completion heretofore, thus practically shortening the scholastic period by one year.

It should be emphasized that the considerations urged in favor of curtailing the educational period are strictly practical, perhaps one might say financial, and they take account only of the affairs of the individual and ignore the needs of the society of which he is a member. It is represented that boys do not become self-supporting early enough; but, so far as I have been able to ascertain, no one has shown, or has even thought it necessary to show, that from the standpoint of the community there is a demand for more men in the professions or in business, which could be supplied if young men would only get started earlier. If one may place any faith in popular belief, there is an overcrowded condition in every profession now; law and medicine and teaching and engineering and commerce have all the men, such as they are, that can be employed, so that there is, as a matter of fact, no call for boys to get under way

younger than is the custom at present, so that the ship of state may be kept sailing on.

Those who assert that young men of today dally too long in schools before taking up the burdens of real life are determined in their views, not by any present public need of their services, not by any bad social condition, but simply by their feeling (which we all possess to a greater or less degree) that as soon as a boy comes of age he ought to shift for himself. And the age at which he is assumed to arrive at his majority has been passed down unchanged from remote times. Many of us do not consider that the period of immaturity may be continually lengthening, due alike to transformations in the social organism and to gradual modifications in human nature itself. It has never occurred to some persons that it is exceedingly arbitrary to say on just what day a boy attains that development of mind and body which should fit him to live a perfectly independent life. The neurologists are telling us today that the brain goes on developing until the age of thirty-three at any rate, and it would be more rational from one point of view to make the latter rather than the earlier age the age of majority.

Few seem fully to appreciate a point to which John Fiske called attention some years ago, and which others have exploited at some length since, that the long period of unripeness in the individual of the human species has been one of the primary factors in the advancement of mankind. The chick comes of age very soon after birth. Before the expiration of its fourth or fifth month of terrestrial experience it has achieved the summit of its evolution; it can earn its own living by this time, and look out for itself generally without assistance from its parents. The same is true in principle of the colt and calf and kitten and puppy. But the human child is compelled to mewl in its nurse's arms for many long months; and for many long years he requires the constant care and protection of his elders. As Mr. Russell has said:

It is written that he is born like the wild ass's colt; but this overstates the fact in his favor, for the wild ass's colt is greatly his superior at birth. And

not only does man thus begin life at the very bottom of the ladder, but he "crawls to maturity" at a slower pace by far than any of the animal species. Long before he reaches manhood most of the brute contemporaries and play-mates of his infant years will have had their day and declined into decrepitude or died of old age.

And, again, every student of anthropology knows that the period of immaturity or plasticity has been continually lengthening even in the human species. The individual attains manhood at an earlier age among primitive than among highly developed peoples. An Indian child of ten is better able to care for himself than a white child of that age, who has been reared under the protection and in the seclusion of the schools, and who has thus been spared the necessity of taking his own part in the struggle for existence. Says Chamberlain :

Among the Athka Aleuts the boy is an independent hunter at ten and may marry; the boy of the Bismarck Archipelago, who goes out with his father very early, knows as much as he does by his tenth or twelfth year; in Tahiti the ease with which food can be obtained allows children to become practically free from paternal control, and by their eighth year to set up a sort of group-life by themselves; among the Khevsurs of the Caucasus children early begin to fight, and "by their eighth or tenth year may and do speak their word in public;" and many more examples from all over the world might be cited.

But if one will compare a child of civilization and a child of savagery at fifteen, again at twenty, and still again at thirty, he will appreciate that the relative immaturity, and helplessness perhaps, in the younger years of the child of civilization is essential for his later superiority.

Any community where most of the children are required to provide for themselves at a tender age cannot expect to progress rapidly or to attain a high position in the scale of civilization, for the reason that the new generations are not plastic and educable long enough to adapt themselves to an increasingly complex social environment; they could not assimilate elaborate achievements of their predecessors, even if these were made. If the race of Indians now on the boards could in a day develop a degree of culture equal to our own, but if their young continued to ripen as early as they now do, the accomplishments of

the present age would be largely lost, because their successors would have neither time nor adaptability to master them, and so to conserve and perpetuate them. When the child hastens with too fleet a foot toward maturity, it means that he must adjust himself to some low sphere of thought and conduct. All complex and intricate things in intellect or achievement elaborated in the later stages of development he cannot appropriate.

Children on the streets of our great cities, who are condemned to shift for a livelihood before they have entered their 'teens, reach the dead line betimes, and consequently their growth ceases when those under more favorable circumstances are still pushing forward, and possessing themselves of ever higher and more complex products of civilization. Of course, I am not speaking of the exceptional case of the genius, who usually manifests his superiority very early in life, as Sully, Galton, and others have shown; but even the genius, whether musician, or painter, or poet, or scholar, or scientist, or philosopher, has a prolonged development. He does not get his set until late in his career, and in some cases his plasticity (which means his power of adaptation to new conditions) lasts until the very end.

One who is moving onward constantly in his development does not contract any system of mechanical habits concerned with some form of bread-winning, and this is a necessary condition for continual growth. But the case is quite different with one who has to do all for himself in the fight for life. Just as soon as the mind and body get organized for accomplishing certain definite ends which are required for self-preservation, just then the energies of the whole being tend to expand themselves in the support of these activities, and the acquisition of other and higher modes of action is exceedingly difficult. The individual may become able to do these simple things well enough, but he jeopardizes his chances of ever being able to handle himself in more complicated situations. The street gamin, living in his simple but precarious way, becomes adept in the ways of the street shortly after he emerges from the cradle, but he is apt not to get beyond this point ever. While

his mate in the school keeps forging ahead, this little unfortunate soon comes to a dead stop, because untoward conditions force him to solve the practical problems of existence too early, and he lives out his days in the circle of ideas and feelings and volitions which are appropriate to his more or less primitive environment. If every child born in America during the next quarter of a century should receive such a training as do the street arabs on Clark street, in Chicago, our civilization would revert to the stage of semi-barbarism through which it passed ages ago.

The principle I wish to impress is that the stability and constant advancement of the race require a continual lengthening of the plastic age, so that each new generation may master all that has been accomplished by those who have gone before. We have pushed beyond the Indian in the development of culture because, for one reason, our youth remain in the acquisitive condition for a longer period, and our social regulations happily are such that we gladly protect them in their immaturity. In this way all that comes into the possession of the race at any age is acquired by the age following. And as our people have become more intelligent, as knowledge and skill have accumulated, that is to say, as our race has evolved, the period of plasticity in our youth has been lengthening at a corresponding rate. Just as soon as the extending of this period of acquisition ceases, just then will the development of our people be arrested; the one thing conditions the other. You cannot have a race pushing ahead uninterruptedly, while the new generations assume the functions of maturity as early as the preceding ones.

A study of the evolution of races will show, I think, that those only are leading in the march of civilization which do not require their youths to enter into the bread-and-butter relation with their environments until they have mastered all that has been achieved in the different fields in which they are to labor. This must be the guiding principle in every progressive community—one generation must care for the next until the new one has made itself master of all the intellectual and moral and motor attainments that the older one possesses. Each genera-

tion will make additions on its own account, to the sum of the accomplishments which it inherits, and will care for its successor until it has gained the whole; and so the plan works on and progress is made.

Now, no one will maintain that the sophomore in our colleges, as he exists among us, masters anywhere near all the achievements of the race in any field; and if we go to turning him out into practical life with this equipment, we shall soon get to the end of our rope. Suppose he spends three years more in the study of some profession—law, or medicine, or engineering—will this give him time to reach the summit of human evolution in any direction? Can the physician acquire all that is known about his science, and gain all the skill in applying it to concrete cases that anyone possesses, in five years' application beyond the high school? There ought to be no particular difficulty in finding a true answer to this question. Take the testimony of those whose business it is to supply society with doctors of medicine; what do they say? They declare that, on the whole, young men, even college graduates, do not know enough when they get hold of them, and they cannot keep them under educational influences long enough for them thoroughly to acquire even the fundamental principles of medicine. Every important medical school desires its students to have the equivalent of at least a four-year college course before they knock at its doors for admission. And then, of course, after they get in, since every year sees important developments in the field of medicine, there is demanded a continually lengthening period of probation. The more that becomes known about the human body, and the way to treat it to keep it in health, and to restore it to this condition when it becomes diseased, the longer it will take the individual to acquire this knowledge. And if provision is not made for extending the learning period, it needs no unusual insight to discern the outcome in the long run. A youth who is permitted to discharge the function of physician in any community before he has possessed himself of the knowledge and skill that his predecessors developed strikes the welfare of that community a death-blow; and if this practice should continue, it would be only



a matter of time when by retrogressive movement the stage of civilization represented by the witch-doctor and sorceress would be reached.

If it should be said, as it is being said in some quarters now, that a boy will by his own effort keep moving onward after he separates himself from all educational agencies, it may be answered that both theory and practice disprove the proposition, as it applies to the majority of persons at any rate. Of course, physicians, like the members of many other professions, appreciate the necessity of keeping up with the times, and so they have their organizations for mutual helpfulness through discussion and stimulation; but yet everyone knows old doctors who are tampering with the human body today, who are administering drugs according to the custom of a century ago, and they are supremely ignorant of all that modern science has accomplished; and, what is worse, they are hostile to all the new-fangled ways. It is this state of affairs which led Holmes to say: "I firmly believe that if the whole *materia medica* could be sunk to the bottom of the sea, it would be all the better for mankind, and all the worse for the fishes." Shakespeare, too, advised man to "throw physic to the dogs" and have none of it. The more or less general suspicion of the ordinary doctor, as able to heal disease, is indicated in a line from one of the old poets:

See one physician like a tiller plies,  
The patient lingers, and by inches dies;  
But two physicians, like a pair of oars,  
Waft him more swiftly to the Stygian shores.

One not infrequently comes across a doctor who seems to be little more than a modern version of the wizard or conjurer. It is impossible for men of this stamp to continually readjust themselves to changing views and practices incident to progress, and so they ridicule the whole thing. When one gets a bread-and-butter relation to a situation, he quickly settles into the method of reacting upon it with which he begins, and which brings him a measure of success, and then he goes on doing the same thing over and over again. This is what makes it so imperative that he should not take the crucial step until he can summon for his

guidance all the help, all the light, all the wisdom, that can be obtained from any source. There is no other way by which we may conserve what has already been accomplished, and which will enable us to keep on subjugating, so to speak, ever larger domains of our environments, moral, intellectual, and physical.

Doubtless much can be accomplished in the direction of economy in our educational methods by cutting out work which is of relatively little value. To require of one who aspires to the practice of medicine long years of study of a dead language, for instance, is of doubtful expediency, to say the least. The problem of the comparative worth of the various branches of instruction is far from being satisfactorily solved yet, but still it seems highly probable that there are in our curricula today subjects that, while of considerable account in themselves for certain people, are nevertheless not worth the time and energy which are spent upon them by the great body of students. But even if all such comparatively worthless stuff should be banished from the schools, there would still remain enough, and more than enough, bearing directly upon the work of the physician, for instance, and which he gets but a taste of now as things go, to occupy him probably for a longer period than he at present gives to his preparation, not to speak of shortening this period. An engineer, in order to understand the modern engine in all its complexity, realizes that he must trace its evolution from its simplest beginnings to its present stage of development; and how much more essential it is that the physician, in order to comprehend this well-nigh infinitely complicated machine, the human body, should trace its evolution throughout ancestral history, seeking to discover how the whole has been elaborated, and what function has been assigned to each part! Is it too much to say that no youth should be allowed to hang out his shingle until he has mastered all that is known regarding the general plan and the details of construction of the human organism, until, as Voltaire urged, "having studied nature from his youth, he knows the properties of the human body, the diseases which assail it, and the remedies which will benefit it"? But there are men practicing among us who

are quite uninformed upon this subject, and who are unable in consequence to understand much that is being revealed by modern research respecting the causation of disease; and, true to the instincts of mankind, they oppose what they cannot comprehend, and so advance is impeded.

Again, it is well known today to students of the matter that the mind exerts a profound influence upon all vital function, and it seems that no one should be permitted to meddle with a man's health until he has been made thoroughly acquainted with whatever is well established regarding the relationships existing between mind and body. One of the old Roman philosophers had some sort of conception of the function of the physician treating the mind as well as the body. "*Medicus nihil aliud est quam animi consolatio*," he says—"A physician does nothing more than console the mind." Cicero says frequently that when the mind is in a disturbed condition, health cannot exist. But what proportion of the physicians now in service have any exact knowledge, so that they can use it advantageously, of the constitution of the human mind, and how it affects vital processes in its varied states and functionings? If a law could be enacted requiring that every youth before he would be decorated with the badge of physician should, in addition to what is now commonly required of him, first master all that is known respecting the evolution of the human body and the influence of thought and feeling upon vital function, who can estimate to what extent society would be benefited by this one act?

And then the physician must be more than a physician in the strict and narrow sense; he cannot confine himself solely to treating the bodies of men; as a great force in the social organism, he ought to understand how society is constructed, and what conditions are essential for its health and prosperity. And especially ought he to have developed in him strong ethical and social impulses, so that he will give himself graciously and unstintedly to the service of his fellows—a matter which Plato made most prominent in his ideal republic. A highly trained man charged with the conduct of such momentous affairs, but whose motives and incentives are all self-centered, is likely often

to be an enemy of, rather than a friend to, his kind. Still once more, a physician has leisure time that must be spent in some manner, and how shall he dispose of it? In riotous living, as many do, in the saloon and gambling den? Or shall he turn rather to the music hall and the art gallery and the library? This is a very real and vital problem, as it relates to the welfare of society, though I know it is not commonly so regarded; and it is affected by the demand for shortening the period of education. Through music, art, and literature man has sought to express his ideals and make them permanent; and whatever has lived for long ages must have been found valuable. It must have developed a higher, a better, a more social kind of life; in brief, it must have been a means of adjusting men more happily to one another.

And the physician as a servant of society needs to be exposed to the inspiring and elevating influences of all the highest ideals the race has developed. If his interests center around the saloon and the gambling table, he really becomes a barrier to social progress. But anyone who has been brought much in contact with those who are supposed to be masters of the healing art knows that a goodly proportion of them feel more at home in the bar-room than in the library; they love to look upon the flowing bowl rather than upon some great painting. It is this condition of affairs which leads one to declare emphatically that physicians as a body need to get a training somewhere that will give them familiarity with, and strong interests in, the aspirations and ideals of the race as expressed in its literature and art and music.

And what has thus been said in mere outline of the education of the physician applies in principle to the training of every professional man. It is commonly heard in these times that the development of society is impeded because of the army of half-baked lawyers that prey upon it. Conditions were not much better in Shakespeare's time, probably, for he says in *Henry VIII.*: "The first thing we do let's kill all the lawyers." Burton in his *Anatomy of Melancholy* says he thinks lawyers will "plead their

clients' causes hereafter, some of them in hell." It is likely that if there were only one-third as many legal practitioners, but these had studied deeply into the evolution and constitution of human society, and had become acquainted with the principal events, with their causes and effects in the history of the race; and if they had also had developed in them social good-will in the place of selfish greed, society would be far better off than it is among us today. Think of a youth still in the pin-feather stage attempting to adjust the relations of men out of sorts with one another in such a complex social mechanism as our own! He has had but four or five years of study beyond the high school, and in this time he has had to possess himself of the principles and the technique of his trade; not to speak of all else he needs to make him a friend instead of an enemy of society. Is the law such a simple thing that it can be mastered in this brief space? Or is it not essential that one whose function it is to conserve the social organism and cause justice to prevail everywhere should study deeply into the nature and history of society, and the impulses which regulate the human heart?

It seems scarcely necessary to say that every pettifogger is a menace to the community in which he lives; he is a relic of a simple and crude social organization. If all those in our country who interpret and apply the laws should not rise above mere pettifoggers, we should drop back in the scale of civilization many centuries. Of course, society appreciates this in a way, and it has established regulations to protect itself against quackery and pettifoggery. But society is never aggressive in this matter; it does not act until it is evident that action is absolutely imperative. There is never any danger of people moving too rapidly in the direction of increasing the requirements for those who would fill the offices and professions in the community.

Looking at the matter from this point of view, one cannot fail to reach the conclusion that it is most inopportune to urge the shortening of the college course at this point in our evolution, and especially in our own country. Rather, every effort

ought to be made to lengthen and to strengthen it; to increase, instead of diminish, the requirements of the physician and the lawyer and the teacher, and above all the politician and the statesman. The doctrine that all young men ought to feel the harness as soon as they pass the twenty-one-year mark is a relic from primitive times; no one today can have faith in it who studies the altered conditions of society, and the factors which contribute to its stability and continuous development. In the place of talk about curtailing the period of training, we should be hearing more about the duty and opportunity of individuals and commonwealths to contribute to the maintenance of men of talent as long as they will continue in study, in the effort to possess themselves of all the race knows and can do in given fields, and make additions thereto. What a warning it ought to be to us to learn, as we seem to be learning today, that there were ancient civilizations whose culture and arts exceeded our own, but they have perished from the earth altogether for long ages, and the secrets of many of their accomplishments are lost forever! Cut short the time which our youth now spend in study, and instead of leading the way in the onward movement of civilization, we shall inevitably begin to retrace our steps, and we must ultimately swell the ranks of decadent nations.

Happily, though, there is no imminent danger; private citizens and states alike are constantly lending greater aid to young men and women who have the ability and courage to push on and reach the summit of racial achievement, and it is in this great movement that we must place our faith and hope for the future. And we ought to do all in our power to encourage this tendency; we ought to exalt this and not the other thing. Nothing could be more gratifying to a well-wisher of our nation than to see how our great state universities are meeting their responsibilities in this respect. They not only furnish free tuition for all the gifted youths within their respective domains who have an inclination to engage in mental pursuits; but they are, in addition, gradually establishing fellowships whereby "lads o' pairs" are relieved for several years from the neces-

sity of earning their daily bread by practical labor, so that they may keep on pushing upward in the attempt to reach the pinnacle of human achievement. We ought not in this day and age of the world to be complaining about the expense of giving a few choice men a little food and clothing while they are trying to master for their own generation what the generations before have accomplished. Woe be to our civilization the moment it concludes, and acts upon its conclusion, that men are now studying too long, and that they ought to begin earning their living earlier! Our universities get a chance at but an infinitesimal part of humanity anyway—just a handful of persons who, speaking generally, have the power to deal with complex things of an intellectual character. These need to be encouraged to keep on in their course; the natural tendency is to stop, for the road is steep and rocky. We need not fear that too many people will follow the difficult path; the chief source of danger is in the likelihood that too few of them will have strength and courage enough to scale the heights.

Of course, if they should all give their whole time to Hebrew, or Greek, or metaphysics, or philology, they would soon be a drug in the market; and this may account for the situation in Germany. But we need have no fear of such a catastrophe here. Science in all its ramifications, and history in its relation to present problems of government, and medicine and law and commerce and engineering—in brief, everything that concerns the progress of mankind—is too much in fashion in the universities of our country to admit of the development of a class of learned paupers. It is true, without doubt, that a man may become possessed of vast learning and not employ it for the good of his kind; but, taking the thing as a whole, the educated man in all times and places has served the community that begot him. If his service in the sum has not been as great as it should be, and if in individual cases nothing at all has been given, the defect must be due to the method of the teacher, who has either taught useless stuff, or who, while filling the heads of his students, has forgotten their hearts. He has left the springs of conduct untouched; he has not fired them

with the thoughts and aspirations of the race which are embodied in its literature and institutions and art. But this defect suggests the need of more, not less, education; it requires for correction a longer, rather than a shorter, period of training; it makes it imperative to add to the college course instead of subtracting from it.

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