EDUCATION FOR THE NEW ERA

By ANNIE BESANT

I AM to speak to you this evening on Education, and Education with a special object—Education for the New Era—that is really for the world to which we are looking forward, a world that we hope will be very different from the world of to-day. Hence in speaking to you on Education I will begin by suggesting that every one who is interested in the subject, every one especially who has practical influence in moulding it, whether by thought or by practice, should have a very definite ideal in his mind as to what kind of human being the education is designed to foster and to develop. For, after all, the conduct of affairs must be directed by thought, by the ideal towards which we are aiming, and we have to consider what kind of a man, what kind of a woman, do we want to see come out of our schools worthy to take a place in that new world, fit to be a citizen in that newly-evolved nation. And so I will suggest that the great aim of our education is to bring out of the child who comes into our hands every faculty and quality that he brings with him, and then try to win that child to turn all his abilities, his powers, his capacities, to the helping and the serving of the community of which he is a part, trying to induce him to see the larger self of which he is a part or a fragment, trying to win him to realise that in the service of that larger self lies his own true happiness as well as his own duty.

Now what is our ideal of the future man and the future woman? Clearly, I think, we may agree the

human being who has developed in and through the younger years of life what I just put as all the faculties and powers that he has brought with him into the world. (I will ask you to realise when I say "man" or "he" or "his" I mean to include "woman" and "she" and "her," because nothing is more awkward than to go on saying "he and she" and "her and his." I will take it for granted when I say "man" you will suppose I am saying it in the large sense of man and woman regarded as a human being.)

Now, that process of development of all that is in the child clearly implies a careful study of the child, the individual child, and an education fitted to the individual child. Further, the recognition that the child is to be part of a social order implies that in that development of the individual there must also be in the education a common basis which will fit him to be a citizen of a community, helpful, serviceable, dutiful, adding his own faculties to the common stock, thinking of the general happiness, aiming at the general good. So that on the one side we have the development of the individual, on the other the subordination of the individual to the order, the community, the nation of which he is a part. We have to try to reconcile those two parts of education, and I think it is well to look on all education as having this double end in view. I do not know how far you agree with the use of the old Greek sense of the word "politics" to include the whole of the relations that every individual in the State has to the whole State. It is so often in our modern phrase restricted to a particular form of activity that we are pleased to call the "political," which very often also is restricted further to the strife of parties, the quarrels and the emulations of statesmen. But the word is a good and a convenient word to use in that old sense, the development of all the virtues that make the man a good part of the city. For as you know, the ideal of the Greek was the City State, and hence the word from which our "political" is derived really refers to the life of the State as a whole, in all its manifold activities.

Now, I am more familiar with the lines of thought of education in India than I am with the more modern lines of thought in Great Britain. Constantly concerned in all its details with education there, my educational thought is naturally moulded by that which is wanted in India, which has some difficult peculiarities, such as that of trying to teach children the knowledge that all need in a tongue which is not their own, a terrible disadvantage and strain upon the child, both intellectually and morally. Fortunately, we are not troubled with that here. We do not propose to teach geography and history, mathematics and science, in German or French or Italian; in fact, you would probably think a person a lunatic who suggested to you that you should teach in any but the mother tongue. Other languages you may take up for other purposes, but as a medium of instruction you rightly and naturally use your own. Now, whether subjects shall be taught in English or in the vernacular is a burning question in Indian education, and I am happy that I can put that entirely out of sight and take it for granted that in speaking to you you all take the rational system that a child should be educated by the medium of his mother tongue.

One disadvantage I have in addressing you from the fact that I am not familiar with much of the detail of your newer system of education here. Something of it I know, but a great deal I do not know; hence I cannot take up certain questions of detail which probably are very important to you, and especially important to those who are teachers in any school. I must necessarily put to you rather the larger ideals and the principles common to all healthy education than go into many minutiæ as to the smaller details of the instruction of the child.

Having said that education should be directed on the one side to the education of the individual, making him as all round and complete a person as the qualities he brings with him enable him to be, then should be directed also to making that human being the best possible person in his relationship to his fellowmen,—

having said that let me pause for one moment upon what might be a point of difference in theory between you and myself, but the practical outcome is very much the same, although naturally I prefer my own theory, and think that it gives a far fuller explanation of child life. You will all know I am a Theosophist, and I believe in reincarnation. That is, I believe, putting it roughly, that all the qualities the child brings with him, good, bad, and indifferent, are the results of his experience in former lives upon earth, and that our business is to take advantage of that experience and build upon it in our development of the individual child. Many of you may not look on the child in that way, but those of you who do not would probably agree in the scientific view that a child coming into the world is by no means a sheet of blank paper, as people used to imagine in the early part of the nineteenth century, a sheet on which the teacher can write anything that he pleases, a sheet which is simply there with nothing upon it, there having been no previous life, and so the development of the child depends very much more on the environment of that child than on the qualities that he brings with him. Modern science, however, has very clearly shown that the human being is a developing organism, and that looking at a child born in a civilised society, with a long course of human and social experience behind him, he brings with him into the world a very definite character, moulded largely and derived from what may be called the general social experience. You will see that both those theories, while one may be more complete and logically satisfactory than the other, come to something of the same result, that you are dealing not with a piece of clay that you are moulding as you please, but with a very definite human being, a mass of qualities, a mass of capacities, a mass of possibilities within him, and that the education should therefore be based primarily on the study of the individual child as adapted to his peculiarities.

Now that, of course, is not the older view of education. Education used to begin with a theory made in

the air. The education was a thing that was to shape the child, whereas the more modern view is that the child is to shape the education. The older idea was that you were to have an educational system, and that the child was to be fitted into the system. The modern idea is that the child is an organic growth, and that the system must be modified in order to suit the organic growth of the child. And it is on that basis that I would put to you the whole theory of education. The old one always reminds one of the old Greek story of Procrustes, who had an iron bed, and when he took a prisoner, if the prisoner were too long he lopped off one end of him, and if the prisoner were too short he pulled him out until he fitted his bed. Education in the old days was rather such an iron Procrustes' bed, whereas nowadays the bed is adapted to fit the child. Hence the whole theory of education which, in the older days used to be based rather on coercion is now based on liberty, a fundamental change in the whole method and system which, once accepted, has to be worked out practically into detail, every child being encouraged to show what he has in him, and the teacher being expected to accept that child as he is, and to make the very best that is possible out of the material that the child affords for the helping and shaping hand of the teacher. There, of course, we come into an entirely different idea from the old plan. We do not deny that it is necessary, because of the ignorance and inexperience of the child, to guard him from dangers into which his inexperience and ignorance might lead him. We protect the child largely from the results of his own inexperience, but it is wise, I think, wherever it is possible, to help the child in gaining experience for himself and not to be too eager to stand between him and a piece of experience which he may run into, causing himself not a serious, but a slight amount of trouble, and even possibly pain, because in many many ways experience is the wisest teacher, and the will of the child, if too carefully protected from the experience given to him by contact with nature, is likely to be unwisely weakened, and the intelligence

and discrimination of the child too much impeded in their exercise. It seems to me enormously important to help the child to see that any rule suggested for his guidance has its justification in the larger experience of the teacher, and not in any desire on the part of the teacher to control or dominate the child. That is, that as far as possible where a suggestion is made, or in cases where serious harm would result from the lack of experience, the reason for what then in those cases would have to be an order should be very carefully explained. It should not be taken for granted that it is the duty of the child to obey. It is very important that he should understand that it is sometimes the wisdom of the child to obey, but those two ideas are exceedingly different. The old way, which probably the elder among you have had said to you in your own childhood, "You must do it because I tell you to," inevitably raises a feeling of rebellion and an intense desire to do the exact opposite, because the bigger person wants to compel you to follow his way. That is the kind of feeling that ought never to be raised in the mind of the child, and my reason for saying that is that one of the great necessities for the citizen is reverence for law. On that the fabric of society is built up ; by that society gradually evolves. And unless the child gains that reverence, primarily based on a study of the laws of nature which he finds to be inviolable by his own experience and not simply by the dictum of the teacher, the reverence for law which is based on that study of nature, which makes the child feel that he lives in a realm of law, will not be developed, and that reverence seems to me a vital part of the training of the child. Wherever possible, then, it is well that he should find that out for himself, well that he should be warned by an elder person who knows it as a fact that if he does so and so it will cause him trouble and will not lead him to happiness.

Taking as an illustration a very simple case, and a very common case with a child—a child born into this country and other Western countries is generally born with a very strong sense of private property, and one

of the first things a little child very often does here is to want to appropriate something as his "very own," so that he feels it belongs to him; and next to defend his very own against the assaults of any one else, whether another child or an elder person. Now that sense, curiously, is not so much found in the East, because the sense of property there is not largely developed in the elders. Things are there looked upon very much more as articles to be used than articles to be owned, and the result of that atmosphere round the child naturally reflects itself in the child's own nature, so that that very strong sense of "my-ness" does not arise in the East as much as it does over here. Now some people in dealing with a young child—and I am thinking of a very young child in this case—will try to get over that by taking the thing away and forcing the child to give it up, perhaps to a younger one. Naturally that intensifies the feeling of property and adds to it the sense of injustice, two undesirable things in the evolution of the quality of the child. If, on the contrary, you suggest to the child that it would make so and so happy to have a share of the toy that he values, if you suggest to him that it is not a matter of strength but a matter of generosity, if you first try to make him see and feel really that he is happier in sharing something with a comrade, and that the double happiness is larger than the two happinesses put together, you may win him to make an experiment on that line. But if you cannot do it without forcing it, then it is wiser to say to him very kindly, "You will not find it makes you at all happy if you don't share what you have with other people, for you will make them inclined not to share what you want to have a share in." And if he persists leave him alone to find it out. The only kind of punishment, I submit—and it ought not to be a punishment but an inevitable result—of any of the childish naughtinesses, ought to be that the child is outside for a few moments the ordinary circle of happy and joyous comrades, that they shrink away from him because he makes everything disagreeable; they leave him out of the play

because he spoils the game; and that natural and inevitable result will gradually develop in him the human instinct, the instinct which is in every social creature, and man among them, that he is happier with happy comrades round him than he can ever be by himself. Supposing a child disturbs a whole class by being noisy and troublesome. The only thing to do with him is kindly to lead him out of the room and leave him alone, which is the thing that he does not want at all, and to make him realise that where a large number of people are all intent on doing one thing, one solitary person must not prevent them from doing what they desire to do. That, of course, is part of the social lesson, what I call the political lesson, the lesson how to live in society. But that lesson will not have to be taught in the school, if in the earlier years at home the child has been gently trained into it by father and mother and those who are around him in the social circle.

That brings me at once to the question, At what age should a child be sent to school? Now, here I rather speak with submission to your better experience, many of you; but as far as we are concerned in India we prefer that the child should remain in the home until he is five years old, and that the home training should be round him for those first five years of life. I am obliged to grant to the full that if the home is not a good home that view would have to be modified in the case of any individual child, but if the home is a good home, if the father and mother are really a father and mother, if they realise that the child is in their hands not as a convenience, to save them trouble, as so many parents think, but as a living spirit come into their hands in order that they may help it through the early years of ignorance and inexperience in the new body, then such parents are the greatest blessings that the child can have, and their loving and gentle care the best training which is possible.

Another reason for being anxious rather on that point is that we have to realise that the health of the future man depends on extreme physical care during those early years of childhood. In fact, during the

first seven years of life the physical body is the thing that ought most to be thought about ; plenty of nourishment, suited to the particular child. That is what is needed by the childish body, practically as much as the child will take, taking care that the elders do not make the food of a character which induces the child to overeat himself for the sake of taste. I mean by that, that while it should be thoroughly nice and thoroughly nutritious, it ought not to be unduly attractive, so as to tend to make the child want more than the natural desire for food, the satisfying of hunger, would induce. Now it is very very difficult in the school to ensure that great care, that individual care of children of different ages within the school, and yet without that individual care in the youngest years of life the whole future body of that child is handicapped for its future work. Few people realise, I think, the enormous difference it makes in the future of the child, not only as regards his body physically, but also as regards the instrument through which his thoughts and emotions must work, if he has not been brought up scrupulously with the fullest attention to the laws of health, the greatest care in the right nutrition of the body, the most scrupulous attention to every physical need. We are at once faced at the present day with the impossibility of giving that, it is said, to the great majority of children who are born in homes that are not sanitary, where the food is not sufficient and suitable, and where the endless needs of a young child cannot be attended to because the mother is too busy, and the breadwinner is too poor. Clearly in these cases it may often be better that the child should go to a school before my favourite five years are over, becaus it is possible the school may give what the home cannot give. But surely that condition of the homes is a passing condition which will vanish when social order is established, instead of the social anarchy that we suffer from to-day. Surely in the New Era every child born into the nation will be born into a condition of comfort, of refinement, of sufficiency, for that must be regarded as the foremost duty of the nation,

the foremost duty of the people at large, to ensure those conditions not only as they are now to the children of the well-to-do, but to the children of everyone, for everyone ought to be well-to-do in a civilised country.

Any one of you who has had to do with a very young child knows all the things that have to be provided for it. You know the minutiæ and the care that you take of it; how things are made to give way to the baby; how scrupulous the attention that is paid. And that is the right of the child. Every child has the right to be well born and well attended after birth, and nothing can make up to the nation for the neglect of that primary national duty.

When we come on into the school I submit that the primary school—the school for the care of the body, the training of the senses, of the fingers, in concert with the observing brain—that that first stage of education should last from 5 to 7. Parents should be taught that before that age, before the child comes to school, it is not only a question of the body that I have been pressing, but of that training of the senses which belongs to childhood, and can never be so effectively carried out if neglected in the early years of life. Every psychologist and physiologist knows that the senses are most active during the years of childhood, just as they are more active in the ordinary savage than in the civilised man. Curiosity, a certain amount of anxiety about new surroundings, a great amount of wish to understand and to know, lead to very careful observation on the part of the child, and the senses are the means of observation and ought to be developed to the full during these early years. Clearly in the school we should follow—at least I venture to submit it, perhaps I ought not to say "clearly" because there may be differences of opinion among you, but at least in our own schools in India we have adopted—the system usually known under the name of Madame Montessori, as the foundation of the teaching of the child. That system includes two points that I have laid stress upon, the liberty of the child to show what is in him, and the training of

the child through the senses, with their development, with their education, and with turning them to useful purposes, purposes which attract the child and make him eager to learn. Now, the very worst part of much of our education is that the child loses his desire to learn. He comes into the world, and when he begins to notice, as soon as he can he begins to ask questions. He has an intense desire to know. That is checked by his stupid grown-up relatives, partly because they do not like too many questions, they think it a bother; partly because they do not know always how to answer the question, and they like the child to think that the elder is a fount of knowledge which can never be exhausted. Now, a child's salvation lies in asking questions and in having them reasonably answered. One great merit of this system is that it stimulates the curiosity of the child, enables the child to try experiments and work them out, hardly knowing that it is a little helped and guided, and not being questioned but being encouraged to ask questions. The great function of the teacher of the young child, to my mind, is not to ask questions, but to answer the child's questions, to find out what the child wants to know and tell him; not to find out what the child does not know and then try to push it into him. Because the child should be eager to receive, not forced to receive, and he is always eager; but he is not always eager for the things that the teacher wants to teach him, and there lies the misfortune. If the teacher will try to find out what the child wants to know and put the things in his way that will help him to know, then the child goes joyously along his road of learning and experience; but if the teacher sets the unfortunate child down on an uncomfortable bench, with an uncomfortable sort of desk before him, made sometimes for the "average child" which is no child at all, and therefore not suiting any particular child—though I believe that is being improved now—if that is done, and then the child is set to make strokes—I don't know whether they do that still, we never do in India—to draw pothooks and hangers, it would never interest the child. They are

like nothing in heaven or earth except the copy-books, which do not represent or stimulate anything, but only bore the child inexpressibly; you cannot wonder he does not want to learn to write. Why should he ? There is nothing there to show him the value of writing nor the service it may be to himself. But if instead of that you happen to have a set of little household utensils, made according to the things that are used in your own kitchens, not like those we use in India, for we make some of our details for the Montessori system ourselves to suit our own children, we make little brass things that the child sees the mother or the cook using and takes a certain interest in. We give it those to play with, and after a little time we surreptitiously put on the top of each of these certain mysterious black marks, or cut-out white letters. The child plays with those and gradually gets to connect these mysterious marks with the thing on which they are placed—cup or plate or whatever it may happen to be. And after a little time we feloniously abstract one of these from the set of toys when the child is not looking—with a very intelligent child when he is not there—so that next time he comes to play with them one is missing, and he cannot find it. But we leave the mysterious symbol in the place of the stolen toy, and he looks at that. Presently he brings it up to the teacher, and he holds it up and says he wants "that." He has always seen them together, he associates them together, and when he has only got half of his associated thing he takes that half to the teacher and says he wants the other. The teacher may tell him at first how to get it, to try to find it. He cannot. He comes back rather troubled and says he cannot. Then the teacher says, "Well, I saw that thing in such and such a room." And the child begins to wonder how he can get the thing out of one room into the other ; the door is shut and he cannot open it. The teacher suggests, "Let us take up this thing we have always seen with it and send it away to the other room and see if we can get it back again." So off goes the symbol and presently back comes the child. We give it to the

child very often to fetch. Then he cannot see the thing, but he shows the symbol to a grown-up person in that room. The grown-up person reads it and says, "Yes, you want your plate, here it is." The child finds there is a use in that; that that little thing, those marks he sees, mean something. And then we coax him to imitate the marks by giving him a piece of paper and a cut out letter, so that he can trace it on the paper first with a stick which does not mark, then with a pencil which does, so that he begins to make the letters. Presently he learns to put them together. The curious thing is that quite suddenly that child will begin to write. He has had no trouble over it; no suffering over it; no scolding over it. He has come to want to do it, and there is something in the child that makes what we call—I don't know why, whether it is a word used by Madame Montessori—an explosion. The child wants to write and is able to write. So all along the way the child learns in that way, teaches himself, and the teacher is only a helper, helping him to learn a little more quickly when he wants help, leaving him alone when he doesn't want it. We have found with our Indian children that the system suits them remarkably well, from which I conclude they are not so very different from the English children, or Italian, or French. The great benefit of it is that one exercise after another develops the senses to most extraordinary keenness. There are so many things they do—distinguishing colours, weighing things in the hand, developing the sense of touch so that the very smallest difference is recognised between two similar boxes that would seem to you and me to be the same, but within them have weights with a fractional difference between them. And the child learns to distinguish merely by the feeling of touch. And so with colours, and so with textures, first feeling and seeing, and later only feeling, with eyes blindfolded. So that you find with the child first the power of observation wonderfully developed, and then the power of using that added keenness of observation by the senses in the ordinary little affairs of the school life, and you find

by the time that child has gone through this training that he has become observant, quick, deft with his hands, very ready to do a thing accurately and rightly, for accuracy is always followed, and you have developed an amount of intelligence in the child that is absolutely wonderful, and all without trouble or pain or coercion, making learning what it ought to be to the child, a matter of joy and delight, and not of time unpleasantly filled up, and constant desire for the lesson to be over.

Now that liberty of the child again is enormously valuable. The child gradually learns to observe certain very simple rules that make him happier than he otherwise would be, gradually learns to observe them of his own will, because he finds he is happier if he does. And so there begins in him the second part of the recognition that he is surrounded by law—the willing accord with the law, because he sees it works for happiness and increased power.

Now if during the first seven years of life you were to train the senses in this way, so that you got a wonderfully well-developed body when you come to the age of seven, the next thing you want to do is to learn, by observing the child, whether he does or does not show any special trend, any special characteristics. And you always find he does. But you don't want, I venture to submit, to specialise too soon. You want, when you begin the further teaching of the child, which I would put at from 7 to 14, to realise that between those ages is the critical period of the development of the emotional nature in the child, that your greatest care should be directed to helping the emotions to develop along good channels, the right emotions, very gently repressing the wrong emotions by giving them nothing to feed upon. You can do a great deal more by starving out a bad emotion than by directing the child's attention to it by blame, still less by punishment. We have to realise that great truth that man is created by thought, and that the qualities that are thought about are the qualities that develop, just as you will find in Sandow's system that the muscles that are thought about during their practice develop

very much better than those that are not thought about while undergoing physical exercise. Sandow's system is based on that very largely. He took it from India.

Now that view of thought, if you apply it to the child, means that the child shall think of all that is good and shall not think of what is undesirable. If you scold the child you make him think more of the mistake he has made and the blunder into which he has fallen, and the more he thinks of it the more that will develop, until it becomes a fixed part of the character. Now I know that that is not a view which is sufficiently widely spread among Western peoples. They have a sort of idea which you hear come out now and then, " Well, my thoughts are my own, anyhow." They are not in the least your own. You do a great deal more harm with thoughts than you do with fists, because they work in a far more subtle and powerful medium. An electric current is more dangerous than a stick, though you can see the stick and cannot see the electricity. But you can kill a man more easily by an invisible electric current than you can with a not too heavy stick. You don't make nearly so much mess, either; it is less observable. Thought is more powerful than electricity, if you know how to use it, but it chiefly goes—not altogether, but most largely—into the building of your own character, because you are always thinking more or less about yourself. Therefore it affects you more than it does other people. Now, supposing that you remember that in dealing with the child, and remember that the child's mind is very very sensitive. It is young and plastic. The first thing you ought to see is that nothing that stimulates the bad, anti-social emotions ever comes from you to the child; that is, that the elders have to consider their thoughts, especially when they are anywhere near their children. For an irritable thought, even though not expressed, will stir irritability in the child, and very often when a child is punished for being naughty it is the parent who ought to be punished for thinking badly, and so producing in the

child a corresponding thought which the child, not being, I was going to say, as hypocritical as the parent, allows to come out at once, and so you see it, while you don't see it—unless you are clairvoyant—in the parent. But really half the child's naughtiness is the wrong thinking of the people round him, and there is where you want to be so critical as to people who come near your children: as far as you can, to keep away people who are passionate and hasty, to keep away people who have any tendencies to cruelty, to keep away people who are cross in thought, for all those feed the seeds of similar possible faults in the child. The child only brings over germs of faculties; you can develop or starve them as you like, and if a child has a hot temper naturally, don't think angrily or hastily anywhere near him, for you are stimulating the seed to grow by the thought with which you are nourishing it; and above all things, as far as is possible to do it, ignore wrong emotions in the child. Try to turn his mind away from them; don't turn his mind towards them by talking to him and blaming him for them. Don't tell him he is naughty, because then he will think about the naughtiness; that strengthens it. Some people will say you can punish a child for naughtiness; that is a bad way, for then he will do it when he is out of your way. I grant you may frighten him so that you make him a hypocrite, but that is not making the good citizen or individual of the future. A child should be absolutely fearless, otherwise fear will breed dislike, and dislike will grow into hatred and hypocrisy. The most wicked thing to do is to frighten a little child. The child is naturally fearless if his elders will allow him to remain so, but his nerves are delicate and he may very easily be made to fear. An angry look will do it, much more a harsh word. A mere look of displeasure will arouse this feeling of fear which comes from the strained nerve, and the thing you want to do with a child is to starve out all that is in him that ought not to be there for the good man and the good citizen; encourage and feed all that is good. Take it for granted he is good. Never take it for

granted he is bad. Even if a child tells a lie, try to understand first why he has told it; whether you frightened him so that he tells the lie for self-protection, very very often the case. Or if you are not conscious of having ever frightened him, tell him he has made a mistake in that case; what he said, not being the fact, led you wrong. And then point out to him that you know he didn't mean to do it, and you are going to trust him just as much as you did before. Don't say that thing to a child, "You have told a lie and I won't trust you again!" Your want of trust encourages the tendency to deception. Trust him, believe in him, and tell him you believe in him, and then he will exert himself to be his best. Always expect from the child the best, and be glad and tell him you are glad when you see it. And if the less good comes, ignore it as far as you possibly can.

Now, these emotions certainly should be considered while the child is quite young, but the emotional age, the age that ought to be given for preparation for the great outburst of emotion that comes a little later, are these critical years from 7 to 14. During that time you want to train the good emotions as far as you can without forcing them; encourage everything that is beautiful, everything that is refining, all the tastes that will tend to make the child's life happy, and itself beautiful. Try as far as you possibly can to prepare the child for the surges of emotion that will come later and bewilder and puzzle him, so that he may feel you as his friend, to whom he can go, asking for counsel and advice, and not with any fear that you will blame or reproach. That is vital during these years of life, vital so to train the good that the bad will be starved out, vital so to make the child understand himself to a point that he will feel you are always on the side of the best in him, and will turn to you as his natural friend and helper.

"But," you will say, "you are not telling us anything about the intellectual training." The foundation of that went in the training of the senses. You ought not to try to develop the mind too much in the direction

of the reasoning faculties, practically not at all until after 7 years, and even later, very very carefully until you have passed the second 7 years of life. These are natural physiological, psychological, cycles in the life. Now, the reason for that is really a physical one—the cells of the brain. The brain of the child is very different from your brain and mine. Looking at your brain and mine we find in them a certain number of large cells which have sent off little roots in every direction, "dendra" they are called, and if you look at those carefully you will find that they first mix together and then cling together, and then that the dividing walls where they are in contact dissolve, and put the two rootlets into communication with each other. So that gradually developing within the little child's brain is a network, a network bringing into communication a certain number of cells that never divide as other cells do, but grow and send out these rootlets which net themselves in the way that I tell you. Now, those are the physical bases of the reasoning faculties and that is the point you want to remember. They develop earlier in the girl than in the boy, and that sometimes comes out in a very curious way. I myself was experimented on by a teacher when I was quite a girl; a teacher of boys, who found his pupils very stupid over mathematics, found they could not learn Euclid, and that they learned the letters and the figures and could not follow the reasoning, so if he changed all the letters the boy, depending on his memory, having learned the proposition, could not solve it. One day—he was a Harrow master—he came to me, and said, "I wish you would let me try an experiment with you. I want to explain a proposition in Euclid to you." He explained it very clearly. It was one of the early propositions. I followed the explanation, and was able to reproduce it, not by having learned the proposition, for I had not seen it, but by being able to trace the logical sequence of the parts. Now that kind of experiment, often repeated, leads to the general result that the brain of the girl develops a little earlier than the brain of the boy, and that you are not doing

the boy any good, but that you are very much trying your own temper, if you try to make him argue out a logical sequence before he has got the mechanism ready, which enables these cells to communicate with each other and so gives the physical basis for that kind of thought.

Now I do not mean that you are not to point out to a child the relationship between cause and effect as concretely as possible; but not by thought merely. Do not try too soon to make him reason. First, he cannot do it effectively; secondly, the strain of it will tend rather to injure the brain, and he will do less well than if you leave him alone along that side for the time, and take it up later. He will make up in a very few years by much better appreciation that which he would have stumbled over and which would have made him a hater of mathematics all his life where you force it upon him too soon.

After 14, then, you may go in for the more purely intellectual, but use 7 to 14 for developing all the more emotional sides of the mind; the arts, any art to which the child is attracted; and all through education I venture to suggest, from the earliest to the latest stage, training in some art or craft, manual training, should accompany emotional and intellectual. That appears to me to be vital as a part of education. The Montessori system trains the senses to begin with, trains the fingers to begin with, but right through every class in the school, up through the secondary school, there should be some creative action on the part of the child, directed by the brain, carried out by the senses co-operating with the fingers. Only in that way will you make a whole person. Brain, senses, fingers, are all the ways in which the man shows his creative power. That has been too much left out of the schools, though I presume here it is now coming very thoroughly into them. It is part of the difference in India between Government schools and National schools. The National schools have taken up that way of training the child, the boy, the girl, turning out capable young people, and the capacity they develop is something

extraordinary. The way in which young boys, young girls, will make beautiful articles and delight in the making, shows how much may be done by an intelligent use of the time when the minds are awakening when you direct them along good, useful and beautiful lines, and so enable that part of the education to be well forward before you come to the more abstract matters, the matters of thought, ideas divorced from objects.

And that may be carried out in so many different ways. You may carry it out continually with the child by bringing into education all the common things of life. One form of map that I have seen being used in some of our schools, a map of India—as the children are Indians—showed on the map the various products of the different parts of the country by putting a scrap of the product on to the actual map, so that the eye was appealed to and the memory did not have to think such and such a part of the country produces cotton; they had already learned, by putting a thread of cotton on that particular part of the country where the cotton grew best. It makes rather a funny map, I admit; a grain of rice here, a small piece of tea there, a piece of tobacco somewhere else. But the children delight in doing it, and they almost unconsciously learn all the different products of their country, learn them by the fingers and the sight as well as by the memory. There is nothing the child delights in more than to make something that is useful and beautiful, and we have not taken advantage of that at all in our Indian schools until the last few years. Taking a governor round one of our schools I showed him a number of things the boys had made. "Oh," he said, "I thought the Indians did not like to use their fingers"? I said, "Well, I suppose you have been told so, but they never had the chance." The moment you give them the chance they use them and delight in using them, but if you bring a boy up entirely on books you must not blame him because he is not keen on modelling or carpentry. He cannot do it by natural genius only, he has to be helped to do it. The result is then that you turn out a capable human being. It is extraordinary

how many boys and girls—I do not know whether that is so here—do not know how to knock a nail in without making an ugly hole in the wall and knocking down a lot of plaster. Many people do not know how to tie a knot; they tie "grannies" not knots. But every child ought to be taught to tie half-a-dozen knots for different purposes, and to tie the right one that is wanted for a particular thing, one knot to tie a parcel so that you can untie it more easily; the usual way is to wind the string round and round until at last you cut it to get rid of the bother.

All those things seem very small, but it is the training that matters. It is the quickness and deftness of fingers, the knowing how to do a thing, instead of behaving as though all your fingers were thumbs, and those not very good ones! This element of manual training then, I urge everywhere, and it must go on then into science in the higher schools; but the boy or girl goes then with senses ready to observe, fingers ready to perform; he has learnt it all in the earlier play days of his school life. Then you have your intelligence ready to train, with all its servants ready to command. And when you come to about 12 or 14, up to which I venture to say the education should be general rather than special, by that time you will have developed along these lines the characteristics natural to your pupil, and you will be able to see in what direction his intelligence and his powers should be turned.

Another reason why you want to make education the same up to a considerable point is for the sake of thought and culture in the whole of the community. The great difficulties between us, I have often said, of what we now call social rank, are difficulties of culture not of nature, and therefore you want to give a similar culture in all classes, so that as men and women they may be comrades and friends, able to understand each other. That is one of the great lacks of modern education. You take a boy or girl and train him or her for a particular thing, leave off educating them far too early, and set them to breadwinning far too soon. I hold that no young person's education should be

technically finished until about the age of 21; that is, until three full cycles have been completed, for the body, the emotions, and the intellect. Then comes the time when the man is ready to take his place in the world, effectively trained, socially disciplined, and the child, learning to discipline himself will need but little of outer pressure, and the youth learning to master himself will need but little of outer regulation, and the young man in the strength of his manhood, with his intellect trained, his emotions under his control, his body strong, healthy and vigorous, is fit to go out as a free man into a free community, willing to subordinate himself where necessary to the larger good; willing to serve, for his emotions have been trained to service, able to serve because his body has been carefully nourished, trained and disciplined. Such a man, such a woman, fit for work, fit for citizenship—that it seems to me is the goal of our education.

I have not spoken specially of religion, because to me religion should permeate the whole of education at all times, from the cradle to the grave. Because religion is not a series of doctrines but a method of living; not a creed to be repeated, but an attitude towards life. Doctrines you have everywhere; canons of art; canons of science; canons of society; all of those are based on doctrine, teaching ascertained facts, and there is nothing more religious than to train up the young mind in the recognition of law, in the duty of co-operating with law, in the limits of human law and individual conscience. For while the laws of nature cannot be broken the laws of man can, and the law in society is the outcome of the average conscience. It does not appeal to the most highly developed—it may go against them. It does not appeal to the lowest developed—they fear and hate it. It is the average level of the average conscience, and a great part of your education, and the spirit through it all, should be the duty to educate conscience, and the duty to follow it whatever may be the result. For unless that is taught all through life, you will never have the check on human society which comes where someone more highly

developed than another disobeys a bad law and accepts the penalty for the disobedience. For that means a step upwards and onwards, a conscience recognising something higher than the human law and lifting up society gradually to the point which that more developed conscience had attained. I know that conscience sometimes tells a person what is wrong. It is fallible, and there was a very sensible phrase once used by a not very admirable person—a bishop, I think—in the time of Charles I.; when a Puritan came before him, and the Puritan said he must obey his conscience—quite properly—the prelate answered, "Yes, but take care your conscience is not the conscience of a fool!" He meant, of course, that the conscience was that of a fool, whereas it was probably better than that of the prelate. But the advice is good advice. Conscience is only the result of past experience—individual, I should say; social, perhaps some of you would say. It is not the voice of God, as people think, but the result of experience, and we need the people who have grown higher in conscience than we have to strike a higher note, in order that society may see and perhaps begin to recognise. That is the enormous value of those who are called conscientious objectors. They may not always be right. Personally, not being a pacifist, I do not think they always were right, but I think they were quite right to do as they did, which is a very different thing. I think they performed a great social service by doing as they did, because they did what they believed to be right, and they suffered for it; and there is no greater lesson to the conscience of others than the sight of the suffering of another who cares for the right more than for the agreeable. That is the great lesson every martyr teaches, and many martyrs have died for a mistake; their memory was none the less revered. Intellectually they blundered, morally they triumphed. It is the people who make them suffer, it is on those that the responsibility for the hardening and searing of the public conscience rests. And so I would ask you to develop in education both the individual and the social conscience, and let

the young man and the young woman learn to realise the difference between the laws of nature and the laws of man; but reverence for the law will teach him that if he breaks a law because of conscience he accepts the suffering that comes from the breaking. For so does he pay alike his duty to himself and to society.

These are problems that teachers should think about. I am not trying to dictate to you, but only to tell you what I believe to be the right way of looking at this tremendous problem. Every one of you can help in the solution. Every one of you can practise at least that tenderness to the child, that care for the child, which all good men and women recognise to-day. Such, then, are to me the principles on which education should be founded; the holding up of the ideal; founding it on the definite principles that I have stated; the careful adaptation of it to the individual child; the general line of culture in which all alike should share for the sake of the future; and that improvement by experience which only experiment can teach us; so that we shall at least work out a theory of education which shall make the good man and the good citizen.

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