VI

THE SCHOOLING OF THE WORLD

And now I am going on to a review of the broad facts of the educational organization of our present world.

I am myself a very under-educated person. It is a constant trouble to me. Like seeks like in this world. I propose to ask the question whether the whole world is not under-educated, and I warn you in advance that I am going to answer in the affirmative.

I am going to discuss the possibility of raising the general educational level very considerably, and I am going to consider what such a raising of the educational level would mean in human life.

I propose to adopt rather a vulgar, business-like tone about all this. I am going to apply to the human community much the same sort of tests that a manufacturer applies to his factory. His factory has some distinctive product, and when he looks into his affairs he tries to find out whether he gets the utmost quantity of the product, whether he gets the best possible quality of the product, whether he gets it as efficiently and inexpensively as possible, and constantly how he can improve his factory and his processes in all these matters.

Now the human community may be regarded as a concern engaged in the production of human life. And it may be judged very largely by the question whether the human life it produces is abundant and full and intense and beautiful.

Most of the tests that we apply to a state or a city or a period or a nation resolve themselves, you will find, into these questions:--

What was the life it produced?
What is the life it produces?

Now I will further assume that as yet the community has little or no control over the raw product, over the life, that is to say, that comes into it. I admit that from at least the time of Plato onward the possibility has been discussed of breeding human beings as we do horses and dogs. There is an enormous amount of what is called eugenic literature and discussion to-day. But I will set all that sort of thing aside from our present discussion because I do not think anything of the kind is practicable at the present time.

Quite apart from any other considerations, one has to remember one entire difference between the possible breeding of human beings and the actual breeding of dogs and horses. We breed dogs and horses for uniformity, for certain very limited specified points--speed, scent and the like. But human beings we should have to breed for variety: we cannot specify any particular points we want. We want statesmen and

poets and musicians and philosophers and swift men and strong men and delicate men and brave men. The qualities of one would be the weaknesses of another.

It is really a false analogy, that between the breeding of men and the breeding of horses and dogs. In the case of human beings we want much more subtle and delicate combinations of qualities. For any practical purposes we do not know what we want nor do we know how to get it. So let us rule that theme out of our present discussion altogether.

And I also propose to rule out another set of topics from this discussion--simply because if we don't do so we shall have more matter than we can handle conveniently in the time at our disposal. I propose to leave out all questions of health and physical welfare. There is, as you know, a vast literature now in existence, concerned with the health and welfare of children before and after birth, concerned with infantile life, with social conditions and social work directed to the production of a vigorous population. I am going to assume here that all that sort of thing is seen to--that it is all right, that somebody is doing that, that we need not trouble for the present about any of those things.

This leaves us with the mental life only of our community and its individuals to consider. On that I propose to concentrate this discussion.

Now the human mind in its opening stages in a civilized community passes

through a process which may best be named as schooling. And under schooling I would include not only the sort of things that we do to a prospective citizen in the school and the infant school but also anything in the nature of a school-like lesson that is done by the mother or nurse or tutor at home, or by playmates and companions anywhere. Out of this schooling arises the general mental life. It is the structural ground-stuff of all education and thought.

Now what is this schooling to do--what is it doing to the new human being?

Let us recall what our own schooling was.

It fell into two pretty clearly defined parts. We learnt reading and writing, we made a certain study of grammar, the method of language, perhaps we learnt the beginnings of some other language than our own; we learnt some arithmetic and perhaps a little geometry and algebra; we did some drawing. All these things were ways of expression, means of expressing ourselves, means of comprehending our thoughts in terms of other people's minds, and of understanding the expressions of others. That was the basis and substance of our schooling; a training in mental elucidation and in communication with other minds. But also as our schooling went on there was something more; we learnt a little history, some geography, the beginnings of science. This second part of education was not so much expression as wisdom. We learnt what was generally known of the world about us and of its past. We entered into the common

knowledge and common ideas of the world.

Now, obviously, this schooling is merely a specialization and expansion of a parental function.

In the primitive ages of our race the parent, and particularly the mother, out of an instinctive impulse and practical necessity, restrained and showed and taught, and the child, with an instinctive imitativeness and docility, obeyed and learnt. And as the primitive family grew into a tribe, as functions specialized and the range of knowledge widened, this primitive schooling by the mother was supplemented and extended by the showing of things by companions and by the maxims and initiations of old men.

It was only with the development of early civilizations, as the mysteries of writing and reading began to be important in life, that the school, qua school, became a thing in itself. And as the community expanded, the scope of instruction expanded with it. Schooling is, in fact, and always has been, the expansion and development of the primitive savage mind, which is still all that we inherit, to adapt it to the needs of a larger community. It makes out of the savage raw material which is our basal mental stuff, a citizen. It is a necessary process of fusion if a civilized community is to keep in being. Without at least a network of schooled persons, able to communicate its common ideas and act in intelligent co-operation, no community beyond a mere family group can ever hold together.

As the human community expands, therefore, the range of schooling must expand to keep pace with it.

I want to base my inquiry upon that proposition. If it is sound, certain very interesting conclusions follow.

I have already shown in the preceding discussions that the range of the modern state has increased at least ten times in the past century, and that the scale of our community of intercourse has increased correspondingly. I want now to ask if there has been any corresponding enlargement of the scope of the schooling--either of the community as a whole or of any special governing classes in the community--to keep pace with this tremendous extension of range. I am going to argue that there has not been such an enlargement, and that a large factor in our present troubles is the failure of education and educational method to keep pace with the new demands made upon them.

Now I will first ask what would one like one's son or daughter to get at school to make him or her a full living citizen of this modern world. And at first I will not take into consideration the question of expense or any such practical difficulties. I will suppose that for the education of this fortunate young citizen whose case we are considering we have limitless means, the best possible tutors, the best apparatus and absolutely the most favourable conditions. The only limits to the teaching of this young citizen are his or her own limitations. We

suppose a pupil of fair average intelligence only.

Now first we shall want our pupil to understand, speak, read and write the mother tongue well. To do this thoroughly in English involves a fairly sound knowledge of Latin grammar and at least some slight knowledge of the elements of Greek. Latin and Greek, which are disappearing as distinct and separate subjects from many school curricula, are returning as necessary parts of the English course.

But nowadays a full life is not to be lived with a single language. The world becomes polyglot. Even if we do not want to live among foreigners, we want to read their books and newspapers and understand and follow their thought. Few of us there are who would not gladly read and speak several more languages if we had the chance of doing so. I would therefore set down as a desirable part of this ideal education we are planning, two or three other languages in addition to the mother tongue learnt early and thoroughly. These additional languages can be acquired easily if they are learnt in the right way. The easiest way to learn a language is to learn it when you are quite young. Many prosperous people in Europe nowadays contrive to bring up their children with two or three foreign languages, by employing foreign nurses and nursery governesses who never speak to the children except in the foreign languages. In many cases what is known as the alternate week system prevails. The governess is Swiss and for one week she talks nothing but French and for another nothing but German. In this way the children at the age of eight or nine can be made to talk all three languages with a perfect accent

and an easy idiom.

Now, if this can be done for some children it could be done for all children--provided we could find the nurses and governesses or some equivalent for the nurses and governesses, and if we can organize the business efficiently. That point I will defer. I note here simply that the thing is possible, if not practicable.

Children, however, who have made this much start with languages are unable, in England and America at least, to go on properly with the learning of languages when they pass into a school. Our schools are so badly organized that it is rare to find even French well taught, and there is rarely any teaching at all of modern languages other than French or German. Often the two foreign languages are taught by different teachers employing different methods, and both employing a different grammatical nomenclature from that used in studying the mother tongue. The classes are encumbered with belated beginners. The child who has got languages from its governess, therefore, marks time--that is to say, wastes time in these subjects at school. The child well grounded in some foreign tongue is often a source of irritation to the teacher, and gets into trouble because it uses idiomatic expressions with which the teacher is unfamiliar, or seems to reflect upon the teacher's accent. These are the limitations of the school and not the limitations of the pupil. Given facilities, there is no reason why there should not be a rapid expansion of the language syllabus at thirteen or fourteen, and why language generally should not be studied. Some

Slavonic language could be taken up--Russian or Czech--and a beginning made with some non-Aryan tongue--Arabic, for example.

The object of language teaching in a civilized state is twofold: to give a thorough, intimate, usable knowledge of the mother tongue and of certain key languages. But if teaching were systematic and no time were wasted, if schooling joined on and were continuous instead of being catastrophically disconnected, there is another side of language teaching altogether--now entirely disregarded--and that is the acquisition in skeleton of quite a number of languages clustering round the key languages. If at the end of his schooling a boy knows English, French and German very well and nothing more, he is still a helpless foreigner in relation to large parts of the world. But if, in addition, he has an outline knowledge of Russian and Arabic or Turkish or Hindustani--it need only be a quite bare outline--and if he has had a term or so of Spanish in relation to his French, or Swedish in relation to his German, then he has the key in his hands for almost any language he may want. If he has not the language in his head, he has it very conveniently on call--he needs but a sensible conversation dictionary and in a little while he can possess himself of it.

You may think this a large order; you may think I am demanding linguistic prodigies; but remember that I am upon my own ground here; I am a trained teacher and a student of pedagogic science, and I am a watchful parent; I know how time and opportunity are wasted in school, and particularly in language teaching. Languages are not things that

exist in water-tight compartments; each one illuminates the other and--unless it is taught with stupefying stupidity--leads on to others. A child can acquire the polyglot habit almost unawares. This widening grasp of languages is or was within the capacity of nearly everyone born into the world--given the facilities.

I ask you to note that qualification--"given the facilities."

And now let us turn from the language side to the rest of schooling. A second main division of our schooling was mathematical instruction of a sort. It fell into the three more or less isolated subjects of arithmetic, algebra and Euclid. We carried on in these closed cells what was, I now perceive, a needlessly laborious and needlessly muddled struggle to comprehend quantity, series and form.

In all these matters, looking back upon what I was taught, comparing it with what I now know, and comparing my mind with the minds of more fortunate individuals, I cannot resist the persuasion that I was very badly done indeed in this section. And it is small consolation to me to note that most people's minds seem to be no better done than mine.

My arithmetic, for instance, is mediocre. It is pervaded by inaccuracy. You may say that this is probably want of aptitude. Partly, no doubt, but not altogether. What is want of aptitude? Bad as my arithmetic is now it is not so bad as it was when I left school. When I was about twenty I held a sort of inquest upon it and found out a number of

things. I found that I had been allowed to acquire certain bad habits and besetting sins--most people do. For instance, when I ran up a column of figures to add them I would pass from nine to seven quite surely and say sixteen; but if I went from seven to nine I had a vicious disposition to make it eighteen. Endless additions went wrong through that one error. I had fumbled into this vice and--this is my point--my school had no apparatus, and no system of checks, to discover that this had occurred. I used to get my addition wrong and I used to be punished--stupidly--by keeping me in from exercise. Time after time this happened; there was no investigation and no improvement. Nobody ever put me through a series of test sums that would have analysed my errors and discovered these besetting sins of mine that led to my inaccurate arithmetic.

And another thing that made my arithmetic wrong was a defect in eyesight. My two eyes haven't quite the same focal length and this often puts me out of the straight with a column of figures. But there was nothing in my school to discover that, and my school never did discover it.

My geometrical faculties are also very poor and undeveloped. Euclid's elements, indeed, I have always found simple and straightforward, but when it comes to anything in solid geometry--the intersection of a sphere by a cone, let us say, or something of that sort--I am hopelessly at sea. Deep-seated habits of faulting and fogging, which were actually developed by my schooling, prevent my forming any conception of the

surfaces involved.

Here again, just as with the language teaching, hardly any of us are really fully educated. We suffer, nearly all of us, from a lack of quantitative grasp and from an imperfect grasp of form. Few of us have acquired such a grasp. Few of us ever made a proper use of models, and nearly all of us have miserably trained hands. Given proper facilities--and here again I ask you to note that proviso--given proper educational facilities, most of us would not only be able to talk with most people in the world but we should also have a conception of form and quantity far more subtle than that possessed by any but a few mathematicians and mechanical geniuses to-day.

Let me now come to a third main division of what we call schooling. In our schooling there was an attempt to give us a view of the world about us and a view of our place in it, under the headings of History and Geography.

It would be impossible to imagine a feebler attempt. The History and Geography I had was perhaps, in one respect, the next best thing to a good course. It was so thoroughly and hopelessly bad that it left me with a vivid sense of ignorance. I read, therefore, with great avidity during my adolescence.

In English schools now I doubt if the teaching of history is much better than it was in my time, but geography has grown and improved--largely

through the vigorous initiative of Professor Huxley, who replaced the old dreary topography by a vivid description of the world and mingled with it a sort of general elementary science under the name of Physiography. This subject, with the addition of some elementary Biology and Physiology does now serve to give many young people in Great Britain something like a general view of the world as a whole. We need now to make a parallel push with the teaching of history. Upon this matter of the teaching of history I am a fanatic. I cannot think of an education as even half done until there has been a fairly sound review of the whole of the known past, from the beginnings of the geological record up to our own time. Until that is done, the pupil has not been placed in the world. He is incapable of understanding his relationship to and his rôle in the scheme of things. He is, whatever else he may have learnt, essentially an ignorant person.

And now let me recapitulate these demands I have made upon the process of schooling--this process of teaching that begins in the nursery and ends about the age of sixteen or seventeen. I have asked that it should involve a practical mastery of three or four languages, including the mother tongue, and that perhaps four or five other additional languages shall have been studied, so to speak, in skeleton. I have added mathematics carried much higher and farther than most of our schools do to-day. I have demanded a sound knowledge of universal history, a knowledge of general physical and general biological science, and I have thrown in, with scarcely a word of apology, a good training of the eyes and hands in drawing and manual work.

So far as the pupil goes, I submit this is an entirely practicable proposal. It can be done, I am convinced, with any ordinary pupil of average all-round ability, given--what is now almost universally wanting--the proper educational facilities. And now I will go on to examine the question of why these facilities are wanting. I want to ask why a large class, if not the whole of our population, is not educated up to the level of wide understanding and fully developed capacity such a schooling as I have sketched out implies.

Well, the first fact obvious to every parent who has ever enquired closely into the educational outlook of his offspring, the first fact we have to face is this: there are not enough properly equipped schools and, still more, not enough good teachers, to do the job. It is proclaiming no very profound secret to declare that there is hardly such a thing in the world to-day as a fully equipped school, that is to say a school having all the possible material and apparatus and staffed sufficiently with a bright and able teacher, a really live and alert educationist, in every necessary subject, such as would be needed to give this ideal education. That is the great primary obstacle, that is the core of our present problem. We cannot get our modern community educated to anything like its full possibilities as yet because we have neither the teachers nor the schools.

Now is this a final limitation?

For a moment I will leave the question of the possibilities of more and better equipped schools on one side. I will deal with the supply of teachers. At present we do not even attempt to get good teachers; we do not offer any approach to a tolerable life for an ordinary teacher; we compel them to lead mean and restricted lives; we underpay them shockingly; we do not deserve nearly such good teachers as we get. But even supposing we were to offer reasonable wages for teachers; an average all-round wage of £1,000 a year or so, and respect and dignity; it does not follow that we should get as many as we should need--using the methods that are in use to-day--to provide this ideal schooling for most of our population, or, indeed, for any large section of our population.

You will note a new proviso creeping in at this point--"using the methods that are used to-day."

Because you must remember it is not simply a matter of payment that makes the teacher. Teachers are born and not made. Good teaching requires a peculiar temperament and distinctive aptitudes. I doubt very much, even if you could secure the services of every human being who had the natural gifts needed in a good teacher, if you could disregard every question of cost and payment, I doubt whether even then you would command the services of more than one passable teacher for a hundred children and of more than one really inspired and inspiring teacher for five hundred children. No doubt you could get a sort of teacher for every score or even for every dozen children, a commonplace person who

could be trained to do a few simple educational things, but I am speaking now of good teachers who have the mental subtlety, the sympathy and the devotion necessary for efficient teaching by the individualistic methods in use to-day. And since, using the methods that are used to-day, you can only hope to secure fully satisfactory results with one teacher to every score of pupils, or fewer, and since it is unlikely we shall ever be able to command the services of more than a tithe of the people who could teach well, it seems that we come up here against an insurmountable obstacle to an educated population.

Now I want to press home the idea of that difficulty. I am an old and seasoned educationist; most of my earliest writings are concealed in the anonymity of the London educational papers of a quarter of a century ago, and my knowledge of educational literature is fairly extensive. I know in particular the literature of educational reform. And I do not recall that I have ever encountered any recognition of this fundamental difficulty in the way of educational development. The literature of educational reform is always assuming parents of limitless intelligence, sympathy and means, employing teachers of limitless energy and capacity. And that to an extreme degree is what we haven't got and what we can never hope to have.

Educational reformers seem always to be looking at education from the point of view of the individual scholastic enterprise and of the individual pupil, and hardly ever from the point of view of a public task dealing with the community as a whole. For all practical purposes

this makes waste paper of a considerable proportion of educational literature. This literature, the reader will find, is pervaded by certain fixed ideas. There is a sort of standing objection to any machining of education. There is, we are constantly told, to be no syllabus of instruction, no examinations and no controls, no prescribed text-books or diagrams because these things limit the genius of the teacher. And this goes on with a blissful invincible disregard of the fact that in nine hundred and ninety-nine cases out of the thousand the genius of the teacher isn't and can't be there. And also of the fact that this affair of elementary education has in its essentials been done over and over and over again for thousands of millions of times. There ought to be as much scope left for genius and originality in ordinary teaching as there is for genius and originality in a hen laying an ordinary egg.

These educational idealists are always disregarding the fundamental problem of educational organization altogether, the problem of economy, economy of the most precious thing of all, teaching power. It is the problem of stretching the competent teacher over the maximum number of pupils, and that can be done only by the same methods of economy that are practised in every other large-scale production--by the standardization of everything that can be standardized, and by the use of every possible time and labour-saving device and every possible replacement of human effort, not in order to dispense with originality and initiative but in order to conserve them for application at their points of maximum efficiency.

I have said that a disregard of the possibilities of wide organization and its associated economy of effort is characteristic of most "advanced" educational literature. You will, if you will examine them, find that disregard working out to its natural consequences in what are called the "advanced" schools that appeal to educationally anxious parents nowadays. You will find that these places, often very picturesque and pleasing-looking places, are rarely prosperous enough to maintain more than one or two good teachers. The rest of the staff shrinks from scrutiny. You will find these schools adorned with attractive diagrams drawn by the teachers, and strikingly original models and apparatus made by the teachers, and if you look closely into the matter or consult an intelligent pupil, you will find there are never enough diagrams and apparatus to see a course through. If you press that matter you will find that they haven't had time to make them so far. And they will never get so far. No school, however rich and prosperous and however enthusiastically run, can hope to make for itself all the plant and diagrams and apparatus needed for a fully efficient modern education such as we have sketched out. As well might a busy man hope to array himself, by his own efforts, with hats, suits and boots made by himself out of wool and raw hides.

But now I think you will begin to see what I am driving at. It is this: that if the general level of education is to be raised in our modern community, and if that better education is to be spread over most of our community, it is necessary to reorganize education in the world upon

entirely bolder, more efficient, and more economical lines. We are inexorably limited as to the number of good teachers we can get into the educational organization, and we are limited as inexorably as to the quality of the rank and file of our teaching profession; but we are not limited in the equipment and systematic organization of teaching methods and apparatus. That is what I want particularly to enlarge upon now.

Think of the ordinary schoolhouse--a mere empty brick building with a few hat-pegs, a stale map or so, half a dozen plaster casts, a few hundred tattered books, a blackboard, and some broken chemical apparatus: think of it as the dingy insufficiency it is! In such a place the best teacher must needs waste three-fourths of his energies. In such a place staff and pupils meet chiefly to waste each other's time. This is the first and principal point at which we can stanch the wastage of teaching energy that now goes on. Everywhere about the world nowadays, the schoolhouse is set up and equipped by a private person or a local authority in more or less complete ignorance of educational possibilities, in more or less complete disconnectedness, without any of the help or any of the economy that comes from a centralized mass production. Let us now consider what we might have in the place of this typical schoolhouse of to-day.

Let me first suggest that every school should have a complete library of very full and explicit lesson notes, properly sorted and classified. All the ordinary subjects in schools have been taught over and over again millions and millions of times. Few people, I think, realize that,

and fewer still realize the reasonable consequences of that. Human minds are very much the same everywhere, and the best way of teaching every ordinary school subject, the best possible lesson and the best possible succession of lessons, ought to have been worked out to the last point, and the courses ought to have been stereotyped long ago. Yet if you go into any school to-day, in ninety-nine cases out of the hundred you will find an inexpert and ill-prepared young teacher giving a clumsy, vamped-up lesson as though it had never been given before. He or she will have no proper notes and no proper diagrams, and a halting and faulty discourse will be eked out by feeble scratchings with chalk on a blackboard, by querulous questioning of the pupils, and irrelevancies. The thing is preposterous.

And linked up with this complete equipment of proper lesson notes upon which the teacher will give the lessons, there should be a thing which does not exist at present in any school and which ought to exist in every school, a collection of some hundreds of thousands of pictures and diagrams, properly and compactly filed; a copious supply of maps, views of scenery, pictures of towns, and so forth for teaching geography, diagrams and tables for scientific subjects, and so on and so on. You must remember that if the schools of the world were thought of as a whole and dealt with as a whole, these things could be produced wholesale at a cost out of comparison cheaper than they are made to-day. There is no reason whatever why school equipment should not be a world market. A lesson upon the geography of Sweden needs precisely the same maps, the same pictures of scenery, types of people, animals, cities,

and so forth, whether that lesson is given in China or Peru or Morocco or London. There is no reason why these pictures and maps should not be printed from the same blocks and distributed from the same centre for the schools of all mankind. If the government of any large country had the vigour and intelligence to go right ahead and manufacture a proper equipment of notes and diagrams for its own use in all its own schools, it would probably be able to recoup itself for most of the outlay by dominating the map and diagram markets of the rest of the world.

And next to this full and manageable collection of pictures and diagrams, which the teacher would whip out, with the appropriate notes, five minutes before his lesson began, the modern school would have quite a considerable number of gramophones. These would be used not only to supply music for drill and so forth, and for the analytical study of music, but for the language teaching. Instead of the teacher having to pretend, as he usually pretends now, to a complete knowledge of the foreign language he can really only smatter, he would become the honest assistant of the real teaching instrument--the gramophone. Here, again, it is a case for big methods or none--a case for mass production. A mass production of gramophone records for language teaching throughout the world would so reduce the cost that every school could quite easily be equipped with a big repertory of language records. For the first year of any language study, at any rate, the work would go always to the accompaniment of the proper accent and intonation. And all over the world each language would be taught with the same accent and quantities and idioms--a very desirable thing indeed.

And now let me pass on to another requirement for an efficient school that our educational organization has still to discover--the method of using the cinematograph. I ask for half a dozen projectors or so in every school, and for a well-stocked storehouse of films. The possibilities of certain branches of teaching have been altogether revolutionized by the cinematograph. In nearly every school nowadays you will find a lot of more or less worn and damaged scientific apparatus which is supposed to be used for demonstrating the elementary facts of chemistry, physics and the like. There is a belief that the science teachers--and they do their best with the time and skill and material at their disposal--rig up experimental displays of the more illuminating experimental facts with this damaged litter. Many of us can recall the realities of the sort of demonstration I mean. The performance took two or three hours to prepare, an hour to deliver and an hour or so to clear away; it was difficult to follow, impossible to repeat, it usually went wrong, and almost invariably the teacher lost his temper. These practical demonstrations occurred usually in the opening enthusiasm of the term. As the weeks wore on, the pretence of practical teaching was quietly dropped, and we crammed our science out of the text-book.

Now that is the sort of thing that still goes on. But it ought to be entirely out of date. All that scientific bric-a-brac in the cupboard had far better be thrown away. All the demonstration experiments that science teachers will require in the future can be performed once for all--before a cinematograph. They can be done finally; they need never

be done again. You can get the best and most dexterous teacher in the world--he can do what has to be done with the best apparatus, in the best light; anything that is very minute or subtle you can magnify or repeat from another point of view; anything that is intricate you can record with extreme slowness; you can show the facts a mile off or six inches off, and all that your actual class teacher need do now is to spend five minutes on getting out the films he wants, ten minutes in reading over the corresponding lecture notes, and then he can run the film, give the lesson, question his class upon it, note what they miss and how they take it, run the film again for a second scrutiny, and get out for the subsequent study of the class the ample supply of diagrams and pictures needed to fix the lesson. Can there be any comparison between the educational efficiency of the two methods?

So I put it to you, that it is possible now to make--and that the world needs badly that we should make--a new sort of school, a standardized school, a school richly equipped with modern apparatus and economizing the labour of teaching to an extent at present undreamt of, in which, all over the world, the same stereotyped lessons, leading the youth of the whole world through a parallel course of schooling, can be delivered.

I know that in putting this before you I challenge some of the most popular affectations of cultivated people. I know that many people will be already writhing with a genteel horror at the idea of the same lesson being given in identical terms to everybody in turn throughout the

world. It sounds monotonous. It will rob the world of variety--and so on and so on. But indeed it will not be monotonous at all. That lesson will be new and fresh and good to every pupil who receives it. And remember it is by our hypothesis the best possible form and arrangement of that lesson. It is to take the place of a sham lesson or no lesson at all. There is an eternal freshness in learning as in all the other main things in life. It will be no more monotonous than having one's seventh birthday or falling in love for the first time.

And as for variety, I for one do not care how soon every possible variety of ignorance and misconception is banished from the world. The sun shines on the whole world and it is the same sun. I have still to be persuaded that our planet would be more various and interesting if it were lit by two or three thousand uncertain, spasmodic and differently coloured searchlights directed upon it from every direction. I am pleading for a clear white light of education that shall go like the sun round the whole world.

You see that in all this I am driving at--what shall I call it?--syndicated schools, syndicated lesson notes, and, so far as equipment goes, mass production. I want to see the sort of thing happening to schools that has already happened to many sorts of retail shops. In the place of little ill-equipped schools, each run by its own teacher and buying its own books and diagrams and material and so forth in small quantities at high prices, I want to see a great central organization, employing teachers of genius, working in consultation and

co-operation and producing lesson notes, diagrams, films, phonograph records, cheaply, abundantly, on a big scale for a nation, or a group of nations, or, if you like, for all the world, just as America produces watches and alarum clocks and cheap automobiles for all the world. And I want to see the schools of the world being run, so far as the intellectual training goes, not by local committees but by that central organization.

It is only by this reorganization of schooling upon the lines of big production that we can hope to get a civilized community in the world at an educational level very markedly higher than the existing educational level.

But if we could so economize teaching energy--if we made our really great teachers, by the use of modern appliances, teachers not of handfuls but of millions; if we insisted upon a universal application of the best and most effective methods of teaching, just as we insist upon the best and most effective methods of street traction and town lighting--then I believe it would be possible to build the civilization of the years to come on a foundation of mental preparation incomparably sounder and higher than anything we know of to-day.