

index to the views of persons who are ever ready to pass judgment upon the educating capabilities of science and art. A course of instruction which ignores science and gives the cold shoulder to art is in one sense "secondary," but in no respect can it be called education. "Secondary education, properly so called," cannot exist distinct from "instruction in science and art." In fact, it is a little difficult to imagine what meaning Sir William Anson is intending to express. It would seem that he wishes to draw a distinction between the education offered in institutions of the grammar school type and those in which the curricula are at present directly governed by the Department of Science and Art. But it is a noteworthy circumstance that quite a number of old grammar schools provide, side by side with their classical work, classes in science which are actually subsidised by the much maligned department at South Kensington. And what is even more strange, judged from the point of view of Sir William Anson's letter, quite a number of these old grammar schools are also what is technically called "organised schools of science," which being interpreted, means that their time tables are modelled upon the regulations laid down in the Science and Art Directory, since they must be approved by the Inspector of the Department.

But the inference of the second quotation is of a more perverted type. "Scientific teaching alone will not produce the educated man," &c. Here again, something different from what is actually said is meant. Of course, Sir William Anson would agree that no teaching which is not scientific will do much towards educating anybody. As he himself said in a debate in the House of Commons on June 26, teachers should be taught how to teach, that is, should have "scientific" teaching explained to them. What is doubtless meant in the *Times* letter is, that instruction in natural science alone will not produce the educated man.

With this statement every man of science will agree; but neither will instruction in any single branch of human knowledge by itself educate. It would be just about as wise to attempt to educate a boy without introducing him to the beauties of our own incomparable national literature or that of some other great country, as it would to attempt to make him a cultured man and at the same time keep him ignorant of his place in the scheme of the universe and of the grandeur and beauty of the laws which govern things material. Culture is not the narrow business which the products of an exclusively classical training would have the world believe. Those authorities who claim for themselves alone the positions of priests in the temple of culture, are anachronisms—they should have lived in the Middle Ages. No education is worthy of the name which fails to endow its possessor with a sufficient breadth of view to give him a charitable demeanour towards every department of mental activity, and most of all to that wonderful accumulation of scientific knowledge to which we owe all that is best in life at the end of the nineteenth century. The man of science is as devout an admirer of literature, whether classical or modern, as any man. He is as ready with a profound admiration for the unique creations of the highest art, whether pictorial, musical, dramatic or what not, as any man. But he does claim that his goddess, science, is as worthy of attention as any other, and he has a right to expect that the reverence which he willingly extends to other deities shall similarly be shown by those who approach his particular shrine.

"The scientific expert may not be the best judge of the value of literary and historical studies or of the respective parts which science and the humanities should play, even in an education which is mainly scientific." So writes Sir William Anson. Possibly not, is the natural answer. But it is just as true that the classical (or historical) expert may not be the best judge of the value

of scientific and artistic studies, or of the respective parts which the humanities and science should play, even in an education which is mainly classical. This is only a verbose way of saying that no individual can know everything. There is just as good reason, to say nothing stronger, for giving the control of the classical part of secondary education into the hands of a widely cultured and eminent man of science as there is for making a similarly great classical authority responsible for the government of the teaching of science or art. We surmise that no good will come of special pleading of this specious kind.

With the third quotation from Sir William Anson's letter given above there can be no disagreement if it is rightly understood. No man of science would imagine the youth of the country to be educated who had merely acquired some useful knowledge. We all want our secondary education to be given well. But let us look facts in the face. It is possible to spend twenty years in studying classics and to remain uneducated. We may become familiar with the histories of all the nations of the earth and be as far from culture as when we started the study. The secrets of nature may all have been laid bare before our understanding eyes, and yet we may still dwell with the Philistines. Let it be thoroughly understood that education and culture are greater than history, greater than classics, greater than science, but include them all, each in its proper place, and these narrow-minded bickerings as to the place of this or that subject of study will become things unknown.

One more reference to Huxley will define the scope of education from the point of view of a representative man of science. Speaking in 1868 to the working men of South London, Huxley defined the well-educated man: "That man, I think, has had a liberal education who has been so trained in youth that his body is the ready servant of his will, and does with ease and pleasure all the work that, as a mechanism, it is capable of; whose intellect is a clear, cold, logic engine, with all its parts of equal strength, and in smooth working order; ready, like a steam engine, to be turned to any kind of work, and spin the gossamers as well as forge the anchors of the mind; whose mind is stored with a knowledge of the great and fundamental truths of Nature and of the laws of her operations; one who, no stunted ascetic, is full of life and fire, but whose passions are trained to come to heel by a vigorous will, the servant of a tender conscience; who has learned to love all beauty, whether of Nature or of art, to hate all vileness, and to respect others as himself."

THE UNIVERSITY OF LONDON.

THE supplementary vote of 65,000*l.* required in connection with the housing of the University of London in the Imperial Institute building at South Kensington was agreed to by the House of Commons on Monday.

A portion of the western end of the building is to be assigned to the Institute free of rent, and the eastern and central portion of the building will form the new home of the London University. The space which will be given to the University in the building will be far greater than was now enjoyed by that body. In consideration for the transfer of the lease to the Office of Works, the Government will provide funds sufficient to pay off the existing mortgage of 40,000*l.* and discharge the floating debt of 15,000*l.* In addition to the cost of structural alterations, estimated at 7000*l.*, the vote included 3000*l.* for the maintenance and repair of the buildings and for the purchase of the necessary furniture.

The Treasury Minute, dated July 13, containing particulars of the transfer, is reprinted below:—

The First Lord and the Chancellor of the Exchequer recall the attention of the Board to the question of the future housing of the University of London in the present Imperial Institute buildings, and they refer to the Board's Minute of February 16 last.

In pursuance of that Minute, conferences have been held between representatives of the University, of the Institute and of Her Majesty's Government, which have resulted in definite arrangements, subject only to adjustment on points of detail. The report of the Government representatives is now before the Board together with correspondence and memoranda connected with the subject.

Before proceeding to state the conclusions as affecting the University, the First Lord and Chancellor of the Exchequer desire to refer in general terms to the arrangements which have been made by Her Majesty's Government with the governing body of the Institute respecting the whole group of buildings now in their possession.

They are as follows:—

(1) The lease under which the buildings are held from the Commissioners for the Exhibition of 1851 will be transferred to the Commissioners of Works as representing the Crown, and the latter Commission will thereupon become responsible for maintenance, rates, custody and protection of the buildings. The Commissioners for the Exhibition of 1851 have assented to this arrangement.

(2) An agreed portion of the buildings will be assigned for the use of the Institute, free of rent, but with the responsibility for internal maintenance and repairs of that portion.

(3) The cost of removing the Institute from the portions of the buildings which they will surrender, including the necessary structural alterations, will be paid by Government.

(4) In consideration of the transfer of the lease, Government will provide funds sufficient to pay off the existing mortgage of 40,000*l.* on the building, and also to discharge a floating debt of the Institute, not to exceed in all 15,000*l.*

These arrangements will enable Her Majesty's Government to offer to the London University accommodation in the building which may roughly be described as follows:—

The eastern and central portions of the main block, including the principal entrance, vestibule and staircase, and the Great Hall; subject to occasional use by the Institute of certain portions of the central block when not required by the University, under regulations approved by the Chancellor of the University, and subject also to certain reservations in favour of the Government of India.

Also a portion of the upper floor of the inner block of building running east and west; and the temporary structure now standing in the South-Eastern Court.

This offer, which provides much more space than the present building in Burlington Gardens, has been accepted by the Senate of the University.

The principal structural alterations and adaptations required are—

(a) For the University—the provision of suitable lavatories and refreshment accommodation for candidates, and, if desired, the construction of a separate staircase giving access for candidates to examination rooms on the upper floors:

(b) For the Institute—the construction of a new entrance at the western end of the main block, the provision of new library and dining accommodation for Fellows, and the redecoration of rooms to which some of the services (Colonial and Indian) now provided in the eastern portion of the building will be transferred.

The University will occupy its new quarters under conditions substantially the same as those under which it now occupies the building in Burlington Gardens.

As regards accommodation for the practical examinations of the University in physics and chemistry, it has been agreed that this shall be provided in the new buildings about to be erected for the Royal College of Science, subject to arrangement between the two bodies as to dates of user. The Science and Art Department will take charge of, and keep in order, the instruments and appliances for the examinations.

The formal transfer of the lease will be carried into effect by the Solicitor to this Board; and the First Commissioner of Works should report at once as to the cost of the necessary works, as to arrangements for custody of the building, and as to the terms upon which the Institute should become tenants of the part of the building to be assigned to them.

The formal concurrence of the University and of the Institute, subject to settlement of details, has been obtained.

My Lords concur. They take note of the statements of the First Lord and Chancellor of the Exchequer, and desire that the necessary steps may be taken for carrying them into effect.

NOTES.

THE seventy-first meeting of German Naturalists and Physicians will be held at Munich on September 17–23. According to the final programme of arrangements, the two general meetings will be held in the Königliche Hoftheater. At the opening meeting, on Monday, September 18, the following lectures will be delivered:—Dr. Nansen, on his journey towards the North Pole, and its results; Prof. v. Bergmann, Berlin, on the use of radiography to surgery; and Prof. Förster, Berlin, on the progress of astronomical thought during the past hundred years. At the second general meeting, on Friday, September 22, Prof. Birch-Hirschfeld, Leipzig, will lecture on science in relation to medicine; Prof. Boltzmann, Vienna, on the development of the methods of theoretical physics in modern times; and Prof. Klemperer, Berlin, on Liebig and medicine. There will be thirty-seven sections for scientific papers, seventeen being devoted to purely scientific subjects, and twenty to medicine. In a general meeting of the scientific sections Prof. Chun, Leipzig, will give an account of the results of the German Deep Sea expedition. A report will be presented by Prof. Bauschinger (Berlin), Prof. Mehmke (Stuttgart), and Prof. Schülke (Osterode) on the question of the decimal division of time and angle—a subject which will also be dealt with in a congress to be held in connection with the Paris Exposition next year. In a general meeting of the medical sections, Prof. Marchand (Marburg) and Prof. Rabl (Prague) will report upon the relation of pathological anatomy and general pathology to embryology, with special reference to the cell theory.

HITHERTO the overhead system of conveying electrical energy for driving tramcars has been the one most commonly adopted. The London County Council has, however, just decided to test underground systems of electric traction upon one of their lines. The recommendation of the Highways Committee, adopted on Tuesday, is as follows:—“That the estimate submitted by the Finance Committee for 10,000*l.* be approved; and that the Council do authorise the expenditure by the Highways Committee of that sum for the preparation of plans, specifications, and estimates, and other preliminary expenses, in connection with the reconstruction, for the experimental use of underground systems of electrical traction, of that part of the London County Council tramways between Westminster Bridge and Tooting; and that the committee be authorised to make all necessary arrangements for the purpose above referred to.”

THE Duke of Bedford has been elected by the Council President of the Zoological Society of London, to fill the vacancy caused by the death of the late Sir William Flower.

UPON the recommendation of the Governor-General of India in Council, Her Majesty's Government has conferred upon Surgeon-General Sir J. Fyrrer, Bart., K.C.S.I., Indian Medical Service, as a reward for distinguished and meritorious service, a good service pension of 100*l.* per annum.

THE Welby Prize of 50*l.*, offered for an essay on “The causes of the present obscurity and confusion in psychological and philosophical terminology, and the directions in which we may hope for efficient practical remedy,” has been gained by Dr. Ferdinand Tönnies, whose essay, translated by Mrs. B. Bosanquet, appears in the current number of *Mind*.