

Education and Industry.

TWO NEW INQUIRIES.

IT will be recalled that, following the report of the Emmott Committee of Inquiry into Technical Education (see NATURE, Jan. 14, 1928), Lord Eustace Percy outlined to that committee as much of his future policy with regard to education for commerce and industry as was possible pending the publication of the report of the Malcolm committee which was dealing with related problems. That policy aimed "to use the machinery we have already got and to secure wider publicity for the inquiries we are already conducting." Many inquiries had been and were being made; but, "while we have had many inquiries, we have hardly had a programme."

Subsequent events go to show that the programme has been commenced. Two special inquiries mentioned in the reply to the Emmott Report are to be set up. "I hope to begin the new series of reports on education for commerce and industry by the publication of an introductory survey in October," said Lord Eustace Percy in the House of Commons on Aug. 2. "I have not yet finally completed the constitution of the Advisory Committees in connexion with the two special inquiries on training for salesmanship," but "Mr. F. W. Goodenough, Chairman of the British Commercial Gas Association, has consented to be chairman of the former, and Sir Dugald Clerk of the latter." The committees will consist of representatives of trade and industry associated with teachers and professors in technical colleges and universities, and will, so far as possible, be representative of the various branches of industry with which they will be dealing. Representatives of local education authorities will advise on the administrative aspects of technical education. The actual investigations will be carried out by inspectors of the Board, and the committees will be mainly concerned to advise on the scope and methods of investigations and to review, and comment on, the findings.

It must not be forgotten, however, that, valuable as will be these separate inquiries, they need to be supplemented by a more permanent national machinery. The Malcolm committee, which has now presented its report (see NATURE, July 28, 1928; pp. 121-123), has recommended such machinery. When it is put into operation there need no longer be any doubt that separate inquiries will be conducted on the sound basis of a national programme.

University and Educational Intelligence.

APPLICATIONS are invited by the Manchester Municipal College of Technology for a scholarship, value £40 per annum for two years, tenable in the full-time course in applied optics at the college. The scholarship, which is endowed by the British Optical Association, will be awarded upon the results obtained at the entrance examination to be held on Sept. 24, 25, and 26, particulars of which are to be had from the Registrar.

THE Research Information Service of the National Research Council of the United States has published a list of doctorates conferred in the sciences by universities in that country in 1926-27, giving the titles of the doctors' theses classified by subjects and by universities. The number of doctorates, 792, is the highest yet reached in any year. Of the subjects, chemistry heads the list with 268. Physics comes next with 91, followed by psychology (74), zoology (70), botany (53), mathematics (46), geology (42), physiology (34), bacteriology (20), agriculture (19), pathology (16, including plant pathology, 13), geo-

graphy (14), anatomy (13), engineering (10), astronomy (9), metallurgy (4), public health (4), anthropology (3), mineralogy (2). Of the fifty universities by which the doctorates were conferred, Chicago, as usual, comes first, having conferred 86; next come Columbia (62), Cornell (62), Wisconsin (55), Johns Hopkins (44), California (42), Harvard (42). Similar lists are published independently by the Library of Congress.

THE place of museums in education is discussed in an article by the Director of the American Association of Museums in the March issue of *School Life*, the official organ of the United States Bureau of Education. Attention is directed to the fact that only a small proportion, estimated at less than two per cent, of the school children of the United States come under the direct influence of museum collections. To extend this influence, two national associations, representing respectively the schools and the museums, have recently addressed themselves to the task of promoting co-operation along two lines: instruction of classes at the museum, and lending of illustrative material, selected by the teacher, for use as aids in the regular work of the class room. The associations have adopted a joint statement of principles, and a commission is to be appointed, consisting of representatives of universities, colleges, and schools, and of art, science, and history museums, to gather information as to where material for visual education can be obtained, and also to furnish material to schools in places in which there are no museums. The associations' joint manifesto insists upon the duty of the schools to bring children into touch with "the greatest of all museums, the out-of-doors," and to use museum objects and pictorial illustrations by way of supplement to such study in the open. It enumerates the most useful kinds of visual material. By such means, coupled with the further growth, already rapid, in the number of small museums, an improvement will, it is hoped, be effected in the teaching of natural science in the elementary schools, in which there is at present little real incentive for attention to the study of Nature.

AN adult education movement, already important, is rapidly growing in the United States of America, where some 350 universities and colleges are stimulating it by offering university extension services of various kinds, described in some detail in "College and University Extension Helps in Adult Education," published as *Bulletin No. 3* (1928) by the United States Bureau of Education. What is to be done with the ample leisure now enjoyed in that country is, says the *Bulletin*, the most important question in the United States to-day, and among the foremost agencies that give promise of helping to save civilisation from the decline with which it is threatened through the misuse of leisure is university extension. The bulletin is a guide-book and advertisement intended to help institutions offering valuable opportunities in this field to compete successfully not only with those who only profess to be purveyors of amusement, but also with those who, like the quack lecturers in applied psychology, exploit in their own interests and to the detriment of their dupes adult demands for instruction. The two kinds of extension work most in demand are work by correspondence and work in classes held outside the institutions, but there is, in addition, a wide variety of extension activities, including public lectures, parent-teacher association or other club service, etc. The list of topics elucidates the definition given by Dr. Abraham Flexner in his recent Rhodes Trust lecture at Oxford of the American university as comprised of three parts—a college for boys and girls, a service station or agency for the general public, and a graduate school for advanced students.