

tions that existed for giving training in particular subjects should now be able to supply excellent apparatus and specialised teachers for the purpose. Unfortunately, however, too often these institutions were crippled in their finances.

Prof. Reid, of Aberdeen, urged that the responsibility of training was at present thrown too exclusively upon the schools. Speakers had argued for industrialising education. He wished to argue for educationalising industry. And he thought that a hopeful change in this direction might be anticipated if the spirit of the older and smaller industries could be got into the big industrial concerns to-day. Other speeches, following somewhat upon these lines, seemed to indicate that the general opinion of the three united sections had reached this interesting, and, on the surface, somewhat paradoxical, conclusion: at present the industries left training to the school, and kept vocational selection to themselves; it was urged the industries should take upon themselves more and more of the responsibilities of training, and the schools should take on more and more of the work of the testing and selecting with a view to ultimate vocational guidance. But it seemed universally agreed that, whether in the matter of training or in that of selection, neither school nor industry could shift the responsibilities entirely on to the shoulders of the other.

Mechanical Engineering Education in Bengal.

SOME months ago a committee was appointed by the Government of Bengal to investigate the training of mechanical engineers in the Province, with special reference to the improvement of the education of apprentices in the State railway workshops at Kancharapara. The committee consists of Sir Rajendra Nath Mookerjee, Mr. A. T. Weston (Director of Industries), Mr. B. Heaton (principal, Bengal Engineering College), Prof. R. Wolfenden (professor of mechanical engineering, Bengal Engineering College), Mr. W. H. Everett (Director of Technical Education, Bengal), Mr. A. Cochran, Mr. H. Spalding, Mr. S. A. Skinner, Mr. Miller King, Mr. H. S. Strachey (representing the railway workshops and various well-known engineering firms in Calcutta), and Dutt Subrawardy, of the Bengal Legislative Council.

This committee is to be known as the "Board of Control for Apprenticeship Training in Bengal." It has had several meetings and has drawn up a scheme of apprenticeship training which, it is hoped, will greatly improve mechanical engineering education in Bengal. The scheme, which will be put into operation at Kancharapara immediately, consists of an admission examination (similar to the graduate examination of the Institution of Mechanical Engineers), followed by four years' training in workshops with compulsory attendance at a technical school to be built at Kancharapara. All the apprentices will live in barracks to be provided by the railway. It is hoped that by the end of the four years of training the brighter students will have reached such a standard of proficiency in mechanical engineering subjects as will enable them to proceed to a two years' course in the mechanical engineering department of the Bengal Engineering College. Those who are not sufficiently well qualified to be admitted to the college will remain at the works for a further two years of training. The course will, therefore, in all cases be a six years' course. The scheme, at present,

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will be compulsory only in the workshops of the East Bengal Railway at Kancharapara, but it is hoped that other State workshops—such as the ordnance factories and the large engineering firms in Calcutta—will join in the scheme.

The new Board of Control is also supervising the courses and examinations in mechanical engineering at the Bengal Engineering College. These courses have to provide, at present, for students admitted directly to the college after having passed the matriculation, or the intermediate science examinations of Calcutta University. They comprise (a) a three years' course at the college, together with three years' practical training in approved workshops, leading to a college diploma; and (b) a four years' course at the college followed by two years' practical training in workshops leading to the associateship of the college. Course (b) is for the exceptionally good men who, in the opinion of the examiners and of the professor of mechanical engineering, would profit by a year of more advanced training.

The courses are arranged to suit the conditions prevailing in India, and will include training in modern workshop methods and measurements, and in workshop management and accounts. It is hoped that these courses will succeed in producing a regular supply of thoroughly trained mechanical engineers for service in the Province.

University and Educational Intelligence.

EDINBURGH.—There comes into operation this year the new Science Ordinance, under which a student may study either for a pass or for an honours B.Sc. degree. Four years is the minimum time in which either degree may be completed. The main difference between the two classes of degree is that a student aiming at the honours degree in any science devotes in general the third and fourth years to a specialised study of the subject he is professing, cognate sciences being studied up to a somewhat lower standard. In the pass degree several branches of science are carried forward simultaneously to an intermediate standard. With the exception of the first year chemistry the lectures and laboratory work are now being conducted in the new King's Buildings on the southern margin of greater Edinburgh. Next year all the work will be transferred there.

The University Court has approved generally of a draft Ordinance founding an independent professorship in the department of natural philosophy, to be called the Tait chair of natural philosophy.

The following new courses have been instituted:—(1) A course in Indian geology for forestry students who have been selected as probationers for the Indian Forest Service, and (2) two half courses in economic geology, the first to deal with ore deposits.

In terms of an Act of Parliament recently passed the income of the John Newland Endowment (capital 22,500*l.*) will in future be applied in bursaries, the award to be determined on the results of the University examination for entrance bursaries.

Negotiations have been completed for the purchase of about ten acres of ground for the extension of the University athletic field.

MANCHESTER.—Prof. F. E. Weiss has been appointed Pro-Vice-Chancellor.

The resignation of Mr. P. A. Cooper, assistant lecturer in physics, is announced.

Mr. C. G. Core and Miss Lucy Higginbotham have been re-appointed Schunk research assistants.