

interest of the pamphlet lies, however, not so much in the typical enough story of past development as in the present situation and its potentialities for the future. The Berlin Technical Highschool was renamed the Technical University in 1946, almost, as it were, in repudiation of its former reputation, and completely in line with the Faustian conception, current to-day among German technicians, that technology cultivated without regard to its social and humanistic responsibilities has a 'demonic power' over its practitioners. This conception, which was debated with very marked emotional content at the Darmstadt Conference of Engineers in 1947, has led to a movement among the technical highschools to include some sort of 'humanistic faculty' in their teaching. Aachen and Berlin, at least, have actually taken practical steps in this direction, and it is on these grounds that the Technische Hochschule Berlin-Charlottenburg now claims the title of University. The German technicians appear, in fact, to be finding for themselves a rationalization of the apocalyptic destruction, material and moral, of the German debacle; and it may well prove that the outward expression will not be confined in the future to mere platform oratory and piously expressed intentions. On the contrary: the German capacity to rationalize a strong emotional surge in fact and deed may have important consequences in the future bias of technical education in Germany. It is here, if anywhere, that the Berlin pamphlet is significant.

International Health Bulletin

THE first (January-March 1949) issue of a new quarterly journal, entitled *International Health Bulletin of the League of Red Cross Societies*, published in French and English (8 rue Munier-Romilly, Geneva; 66 Swiss francs, or 1.50 dollars a year), shows that the Red Cross Societies and their medical advisers now have a unified and well-edited epitome of the medical aspects of international Red Cross work. Designed to replace the League's *International Health Review* and to revive its earlier surveys of medical and scientific literature, this new bulletin will summarize the most recent and original projects undertaken by the various national Red Cross Societies and will report important medical developments likely to interest Red Cross workers. Described by its editor as a "modest review, designed to appeal to all Red Cross medical advisers", the bulletin is not intended to rival other scientific publications; but it will be surprising if it does not interest many who do not actually work for the Red Cross. In the first issue there are articles by medical men of many nationalities, including articles on co-operation between the League of Red Cross Societies and the World Health Organisation, on the League's extensive and thorough campaign against tuberculosis, on its relief work in the Near East and on its work on venereal diseases, blood-transfusion, first aid, social service and other problems. About half this issue is given to medical information under the heading of "Medical News", examples of the items discussed being the risks of new drugs and the uses of aureomycin and streptomycin. A short survey of books and a list of the films in the League's film library add to the value of this number. The information given about the contents of future issues suggests that these will be no less interesting. No doubt there will be a big demand for the two forthcoming special issues, one entitled "Atomic Bomb and Atomic Medicine" and the other "Cancer Detection".

Standardization of Units of Measurement in Civil Aviation

THE Montreal headquarters of the International Civil Aviation Organisation has announced that substantial progress has been made towards the solution of a problem, in the world of air transport, that has always made difficult the international exchange of ideas, namely, the standardization of units of measurement used in scientific work. Although this problem is not peculiar to aviation, the result of a misunderstanding due to a multiplicity of measuring units is likely to be more disastrous to the occupants of aircraft in flight than to anyone else. The plan consists of an agreement to use five tables of units, incorporating both the metric and the foot-pound-second systems. The first table uses the English system (except that it measures temperatures in Centigrade instead of Fahrenheit). Each other table introduces alterations leading progressively towards the metric system, the change in each case being the one that the organisation has agreed will be the next most easy to adopt. The final (fifth) table uses the metric system, with the exception of nautical miles and decimal parts for long distances and speeds. Time is measured in twenty-four hours, beginning at midnight Greenwich Mean Time. At present there are at least fourteen different combinations of units in use within the territories of the member States of the Organisation. Table 5, the complete adoption, has been accepted immediately by sixteen nations, and eighteen others, of which Great Britain is one, have accepted one of the other four tables and will progress towards the final standardizations in due course. There are fifty-two member nations in the world organisation.

Cambridge School of Veterinary Medicine

THE University of Cambridge has decided to initiate a course of veterinary teaching, and powers are being sought under the Veterinary Surgeons Act, 1948, to confer a degree in veterinary medicine that will be a registerable qualification. In October a limited number of veterinary students will begin a six-year course leading to this degree, of which the first three years will be spent in study for the Natural Sciences Tripos, and the following three years in professional studies. It is probable that colleges will stipulate the passing of three of the four parts of the First M.B. Examination as the necessary condition for admission to the course. Plans are being drawn up for the erection of buildings for the new School of Veterinary Medicine, which will be situated within two miles of the centre of Cambridge on an area of approximately 120 acres of farmland. Financial provision for these courses will be made by the University Grants Committee, and £31,000 has been allocated for 1949-50.

Exhibition of Joule's Water-Friction Apparatus

IN June 1849, J. P. Joule announced the results of extensive researches carried out in Manchester, in which he found that the expenditure of energy, in whatever form, is always accompanied by the production of a corresponding amount of heat. Prior to this, there had been considerable disagreement among men of science concerning the nature of heat; some held it to be a material fluid (called caloric) which permeated the space between particles composing a hot body, while others attributed it to the mechanical energy of these same particles which were to be

regarded as being in rapid motion or vibration. Joule's work settled the controversy in favour of the second alternative, and thereby laid the foundation for the modern theory of heat. With a water-friction apparatus Joule obtained the experimental result that to heat a pound of water through one degree F. requires 772 ft. lb. of mechanical energy. This original apparatus is preserved at the Science Museum, South Kensington, London, S.W.7, and is on special exhibition there until the end of July.

1851 Exhibition Senior Studentship Awards

THE Royal Commission for the Exhibition of 1851 has announced the award of senior studentships for 1949 to the following for research work to be carried out at the places stated: Dr. J. W. Craggs (applied mathematics, at the University of Cambridge); Dr. A. J. B. Robertson (physical chemistry, at the Royal Institution of London); Dr. N. Sheppard (physical chemistry, at the University of Cambridge); Miss Janet Watson (geology, at the Imperial College of Science and Technology, London). The awards are of the value of £600-650 a year and are ordinarily tenable for two years.

Colonial Service: Recent Appointments

THE following appointments in the Colonial Service have been announced: J. J. Lowes, agricultural officer (soil conservation), Nyasaland; E. F. Bradford, geologist, Federation of Malaya; Miss M. N. Massie, veterinary officer, Tanganyika; D. A. Davies, director of East African Meteorological Service, East Africa High Commission; R. N. Champion Jones, agricultural development officer, Nigeria; J. B. Phillips, development officer, Veterinary Department, Nigeria; G. D. Scott, pasture research officer, Tanganyika; C. H. B. Williams (deputy director of agriculture, British Guiana), deputy director of agriculture, Trinidad; J. Wright (senior agricultural officer, Jamaica), deputy director of agriculture, Jamaica; A. Foggie (senior assistant conservator of forests, Gold Coast), conservator of forests, Gold Coast; H. Fraser (senior assistant conservator of forests, Tanganyika), working plans officer, Tanganyika; Dr. J. W. Field (senior medical research officer, Institute of Medical Research, Federation of Malaya), director of the Institute of Medical Research, Federation of Malaya; R. B. Heisch (parasitologist, Kenya), senior pathologist, Kenya; R. W. Crowther (veterinary officer, Cyprus), veterinary research officer, Cyprus; H. T. B. Hall (Government veterinary officer, Fiji), deputy director of agriculture (veterinary services), Jamaica; L. R. Hutson (veterinary officer, Barbados), chief veterinary officer, Leeward Islands; C. W. Wells (veterinary officer, Federation of Malaya), chief veterinary officer, Singapore; D. G. White (senior veterinary officer, Tanganyika), assistant director of veterinary services, Tanganyika; G. F. Cole (senior marine officer, Tanganyika), chief fisheries officer, Lake Victoria Fisheries Service; H. T. Lloyd (assistant agricultural officer, Kenya), agricultural officer, Kenya; E. G. Young (agricultural development officer, Nigeria), agricultural superintendent, Nigeria.

University of London: Appointments

PROF. ILLIAN M. PENSON has been re-elected vice-chancellor of the University of London for the year 1949-50, and Prof. H. Gordon Jackson, master of Birkbeck College, has been appointed deputy vice-

chancellor. Dr. M. G. Kendall has been appointed to the University chair of statistics tenable at the London School of Economics and Political Science as from October 1; Dr. Christoph von Fürer-Haimendorf to the University readership in anthropology with reference to India tenable at the School of Oriental and African Studies as from October 1.

The title of emeritus professor in the University has been conferred on the following: Prof. W. T. Gordon, professor of geology at King's College since 1920; Prof. F. L. Hopwood, professor of physics at St. Bartholomew's Hospital Medical College since 1924; and Prof. Doris L. Mackinnon, professor of zoology at King's College since 1927.

The degree of D.Sc. has been conferred on C. J. Eliezer (an external student).

International Meeting for Optics

AN international meeting for optical science is being organised to be held in London during July 17-26, 1950, in connexion with the official sessions of the International Optical Commission. The programme will include papers and lectures on optical subjects, an exhibition of optical apparatus and instruments, and visits to various laboratories and industrial firms. The organising committee (appointed by the optical sub-committee of the National Committee for Physics with the approval of the Council of the Royal Society) is acting under the chairmanship of Prof. R. W. Ditchburn, with Prof. L. C. Martin, of the Imperial College of Science and Technology, as honorary secretary, and Mr. A. J. Philpot, director of the British Scientific Instrument Research Association, as treasurer. Further particulars will be announced in due course.

Announcements

PROF. H. U. SVERDRUP and Prof. Hans Pettersson have been elected honorary members of the Marine Biological Association of the United Kingdom.

SIR ALFRED EGERTON, head of the Department of Chemical Engineering and Applied Chemistry at the Imperial College of Science and Technology, London, has been appointed director of the Salters' Institute of Industrial Chemistry, in succession to the late Sir Robert Robertson.

THE British Rheologists' Club is holding, jointly with the Midland Chemists, a conference on "The Rheology of Thickened Liquids" in the University of Birmingham during July 15-16. The chairman for the first day will be Prof. F. H. Garner, and for the second day, Dr. A. H. Nissan. Applications for attendance should be addressed to Mr. R. B. Shearn, Chemical Engineering Department, University, Edgbaston, Birmingham 15.

At a special meeting of the Council of the Association of University Teachers of Scotland, held in Edinburgh on June 18, final arrangements were made for the affiliation of this Association with the Association of University Teachers of England, Wales and Northern Ireland. The Scottish group retains its own constitution within the wider framework.

A NOTICE appeared in *Nature* of June 11, p. 895, of "The Failure of Metals by Fatigue", published by the Melbourne University Press; we are informed that this book is available in Great Britain from the Cambridge University Press, which acts as agent for all publications of the Melbourne University Press.