

is nevertheless prepared to assist in measures for defence against anti-democratic movements. To this end, it stresses the importance of the immediate formation of an organization to see that the most efficient use is made of scientific knowledge; the following points are put forward for consideration:

"(1) It is in the best interests of the country that scientists should be utilized in scientific work, and that the organization and control of scientific work should be in the hands of scientists.

"(2) The professional organization of scientists should play an important part in drawing up and operating any scheme of organization and also be represented on scientific advisory committees to the defence departments.

"(3) In any scheme of registration, scientists should be grouped on a laboratory basis, no matter whether university, special research or industrial. It is particularly important that scientific workers in industry should be included in any such scheme and not left at the disposal of individual employers. Further, scientists should be consulted *now* with regard to such organization, firstly on the grounds of efficiency and secondly to secure its democratic working.

"(4) Some machinery should be provided whereby scientists, including those in service departments, may exercise a right of criticism on purely scientific and technical matters.

"(5) It is important that scientific and technical as well as medical education should be maintained in time of war."

New Chancellor at the University of Leeds

On January 17, with appropriate ceremony, the University of Leeds installed the Duke of Devonshire as chancellor in succession to his father, who had occupied that post for nearly thirty years, having succeeded the first chancellor of the University, the Marquess of Ripon, in 1909. The proceedings commenced with a lunch to the honorary graduands and to the representatives of other universities and of local education authorities, given by the Court of the University, in the fine new Civic Hall rendered available through the courtesy of the Lord Mayor of Leeds. The ceremony of installation took place in the Town Hall, in the presence of representatives of all sections of the University, and other universities, of local authorities in Yorkshire, together with other dignitaries. His Grace was received by the vice-chancellor, Mr. B. Mouat Jones, who presented him with the scroll recording his admission to the honorary degree of doctor of laws of the University, and then installed him as chancellor, delivering a brief address of welcome. After the chancellor's response, a number of honorary degrees were conferred. Earl Baldwin of Bewdley and the Right Hon. W. S. Morison, Minister of Agriculture and Fisheries, were presented for the degree of LL.D. The degree of D.Sc. was conferred upon Sir Arthur Eddington, Plumian professor of astronomy and director of the Observatory, Cambridge, upon Sir John Ledingham, director of the Lister Institute, and upon Dr. J. S. B. Stopford, formerly professor of anatomy and now vice-chancellor of the University of Manchester. In the evening, the Chancellor and the Duchess of Devonshire received the guests at a reception in the University, when

many scientific and technological departments were thrown open, special demonstrations being on view. These exhibits remained open for inspection by the general public throughout the following day.

Botanic Gardens of the World

WE have received the second edition of the list of botanic gardens of the world compiled under the direction of Dr. Stuart Gager, director of the Brooklyn Botanic Garden ("Botanic Gardens of the World: Materials for a History". *Brooklyn Bot. Rec.*, 27, No. 3, July 1938. Price 2 dollars 50 cents). Apart from its intrinsic value to botanists, the list will prove helpful to research botanists and teachers of botany who may require information or material from definite localities. In this way, the list forms a sure guide. But there are inconsistencies in the information given concerning each individual garden. This is due to the fact that the compiler has been at great pains to make the information authoritative by obtaining it from the source, namely, the gardens themselves. In this, Dr. Gager experienced certain difficulties, since, though most garden officials supplied all the necessary information, some made no or scant reply to the questionnaires sent. Where the information can be considered complete, it is of great utility. For example, under the Royal Botanic Gardens, Kew, are listed date of establishment, area, list of directors, organization, source of income, library, herbarium, arboretum and fruticetum, plantations, publications, museums, etc. The list is not intended to be simply a guide to existing botanic gardens, but as material for a history of botanic gardens, existing or defunct, and "thus as a contribution to one of the most important phases of the history of the organization and administration of botanical science, from the time of Aristotle to the present". Such a history would receive a warm welcome from all botanists, since we believe no such comprehensive history exists at present. We would suggest one slight improvement in the next edition of this list, which would undoubtedly render reference more easy. The gardens are arranged alphabetically under each country, and the latter in turn are arranged alphabetically. There are, however, no page headings (except page number). It would be a distinct advantage if the name of the country were placed at the top of each page.

Folk-lore and Medicine

At a meeting of the West London Medico-Chirurgical Society on January 13, Dr. J. D. Rolleston read a paper on "Folk-lore and Medicine". He said that since the publication in 1927 of the late Dr. Dan McKenzie's work entitled "The Infancy of Medicine: an Enquiry into the influence of Folk-lore upon the Evolution of Scientific Medicine", the subject of folk-lore in connexion with medicine has attracted little attention in Great Britain, in marked contrast with the enthusiasm which it has provoked on the Continent. The various prophylactic and therapeutic measures in folk-lore medicine, in which the curative methods far outnumber the preventive, can be ranged under one or more of the following headings: (1) trans-

ference of the disease to other persons, animals or inanimate objects; (2) animal, plant or mineral remedies; (3) religious influences, including the invocation of special saints; (4) the healing power attributed to water in the form of wells, springs, fountains and streams; (5) the mystical power of odd numbers; (6) repellent and disgusting remedies, including coprotherapy, for the purpose of drawing out the evil spirit supposed to be the cause of the disease; (7) miscellaneous causes, such as the doctrine of signatures, constriction by rings, charms connected with death or the grave, etc. The diseases and symptoms for which the largest number of folk-lore remedies and preventive methods have been applied are whooping cough, 'ague', including not only malaria, but also as its etymology indicates, any acute fever, epilepsy and convulsions of any kind, rheumatism, consumption, eye diseases, skin diseases, especially warts, cattle diseases, headache, toothache, jaundice, hæmorrhages of any kind, and bites of snakes and scorpions. After giving numerous examples of folk-lore medicine in whooping cough, epilepsy, rheumatism and jaundice, Dr. Rolleston concluded by saying that, though many folk-lore remedies have become obsolete, some are still practised, not only by the inhabitants of remote country districts, but also by educated persons in large cities.

The New Deal in Education in the United States

THE Federal Government of the United States seems likely, in future, to play an increasingly important part in the education services of the States. A summary has recently been published ("The Federal Government and Education". Washington, D.C.: Superintendent of Documents. Price 10 cents) of certain findings and proposals of the President's Advisory Committee on Education relating to present conditions with special emphasis on inequalities of educational opportunity, the national interest in education and proposals for federal grants amounting in 1939-40 to 72 million dollars and increasing gradually to 202 millions in 1944-45. The Committee found that "glaring inequalities characterize educational opportunities throughout the nation" and it is argued that federal aid is the only way of adequately remedying this evil. It is pointed out that while the abilities of the States and local communities to provide education have always been unequal, recent changes in social and economic conditions have magnified this inequality and at the same time education has become increasingly important. Fundamentally the inequality is largely due to drainage of wealth, through migration and modern methods of organization of manufacture, commerce and finance, from all parts of the country into the towns and cities and particularly the great metropolitan areas. Hence such glaring contrasts as that between a farm population in the south-eastern States responsible for $4\frac{1}{4}$ million children, with only 2 per cent of the national income, and a non-farm population in the north-east with $8\frac{1}{2}$ million children, and 42 per cent of the national income—21 times as much income from which to educate only twice as many children.

The Josiah Macy, Jr. Foundation

IN a six-year review of the activities of the Josiah Macy, Jr. Foundation, New York, 1930-1936, Dr. Ludwig Kast, president of the Foundation, reports that up to December 31, 1936, the Foundation made 324 grants, amounting to 806,681 dollars, to thirty-four different universities and twenty-seven other agencies for research in the United States, Belgium, Czechoslovakia, France, Germany, Hungary, Netherlands and the U.S.S.R. Special reference is made in the report to the interest of the Foundation in psychosomatic problems, including a survey of the relation of emotion to disease, to its support of investigations upon growth, development, maturation and ageing, the bearing of which upon the changing age distribution of population in the United States and the problems arising from that trend are stressed, as well as in social research concerning health and sickness and medical education. The Foundation in 1933 published the results of a review of the available data and immediate problems in human arteriosclerosis in a volume entitled "Arteriosclerosis: a Survey of the Problem", and the report emphasizes that, in view of the tendency for the age distribution of population to change towards a predominantly older group with a smaller population less than twenty years of age, the problems associated with the ageing of individual men and women are not merely medical problems but also require study by workers in other branches of science, such as economics and sociology. A chronological list of grants is included in the report.

Steam Boilers for Electric Power Stations

CONSIDERABLE progress has recently been made in developing the type of boiler used in electric power stations. It is now generally recognized that considerable economies can be effected by the use of larger steam-generating units, higher steam pressures and higher temperatures. The average capacity of boilers now being installed in power stations has risen to nearly 200,000 lb. of steam per hour. These work in conjunction with alternating current generators giving 30,000-50,000 kilowatts. In the *Electrical Times* of November 24 a description is given by Mr. V. Walker of a number of the latest types of boilers recently installed. Attention is also directed to the alterations made necessary when pulverized fuel is used. Messrs. Babcock and Wilcox have developed some of their boilers so as to take advantage of the economies inherent in the use of high rates of heat release per square foot of furnace now obtainable. They have designed a boiler for the Brighton Corporation so as to have a normal evaporation of 175,000 lb. per hour at 675 lb. pressure per square inch and 875° F. To overcome the difficulties of natural circulation, forced circulation has been developed. Two other types of boiler, the La Monte and the Loeffler, are also being installed in Great Britain.

Recent Additions to the British Museum (Bloomsbury)

AMONG the additions of archaeological interest reported at the meeting of the trustees of the British Museum (Bloomsbury) on January 14, was a