

industries but afterwards a number of joint industrial councils collapsed or became moribund. By 1924 there were more than 30 trade boards and more than 50 Whitley Councils in existence but only three new national councils were set up between 1921 and 1930. Although the General Strike of 1926 emphasized the need for a more constructive relation between management and labour, and the Mond-Turner conferences assisted to break down old suspicions and frictions, the position between 1928 and 1934 was stationary. In the last few years, the basic ideas of industrial democracy, industrial organization and standing committees have gained support, and machinery for their implementation has been consolidated. Since 1933, new trade boards have been established in four industries, as well as a form of district organization, with statutory application of agreements, in road transport, while negotiations are proceeding for the improvement of conditions in retail trades by co-operative methods.

THE broadsheet describes in some detail the establishment, achievements and limitations of the two new Whitley Councils, the National Joint Industrial Council for the Clay Industries and the corresponding Council for the Cast Stone and Cast Concrete Products Industry. In addition the tendency in the older industries for standing committees representing employers and operatives and others, such as the Joint Committee of Cotton Trade Organisations, to be set up for many purposes is increasing. The building trades have set up the Civil Defence Constructional Industries Committee for the organization of demolition and rescue squads (both light and heavy) in the localities. A Joint Consultative Committee, representing the building employers, operatives and defence departments has also been set up to discuss defence problems affecting the industry. In flour milling there has been a joint deputation to the Government with proposals for maintaining supplies in war-time, while in the docks the employers and operatives are working out a scheme for the transfer of labour from port to port under emergency conditions in war-time. The driving force for co-operative effort no longer comes from a minority of enlightened employers and trade union leaders: on the workers' side particularly the impetus comes from the rank and file as well as from headquarters. Persistence of this attitude should lead to a new period of expansion in the organization of co-operation in British industry.

#### The Rockefeller Foundation

FIFTEEN million dollars were disbursed in 1938 by the Rockefeller Foundation for the advancement of "the well-being of mankind throughout the world". Being more than twice the year's income, this huge expenditure involved recourse to the principal fund as well as reducing accumulated balances. In addition to its complete annual report, the Foundation has published for wider circulation in pamphlet form an extraordinarily interesting review by its president, Raymond B. Fosdick. In the field of public health, in which alone the Foundation itself undertakes the

conduct of operations, the fight against yellow fever progressed satisfactorily and more than a million vaccinations were performed with its new virus (17D). But a more formidable task is resistance to the invasion of South America by *Anopheles gambiae*, the most deadly of Africa's malaria carriers, introduced apparently by air traffic into Natal in Brazil nine years ago and steadily spreading westward. The Foundation is now co-operating with the Government of Brazil in organizing an anti-gambiae service. In all, 2½ million dollars were given to public health work. The account of contributions to work in the medical sciences is prefaced by a note on the comparative volumes, trends and merits of private and public support of medical research in America and Europe and on the particular fields in which further research is likely to be most productive. One of the least developed is that of mental hygiene: "In no other field is the need more desperate or the potentialities for useful advances more promising. . . . Cases of mental and nervous diseases occupy more hospital beds in this country than all other diseases combined."

WHILE medical sciences absorbed a quarter of the Foundation's 1938 appropriations (not counting 1,580,000 dollars given to the China Medical Board under an earlier authorization), an equal amount was spent in support of the social sciences, chiefly by financing a five-year programme of research and training in public administration in non-academic institutions. Believing that an understanding of the social forces moulding the future can only be arrived at through the dispassionate scientific approach which gave us command over our physical environment, the Foundation continued its support of various organizations working along such lines, notably the Institute of Pacific Relations and the Geneva Graduate Institute of International Studies. Of the 3 million dollars given to the natural sciences, more than half went to the University of Chicago for the endowment of biological research and more than a million in grants to other institutions for work in experimental biology. For projects of rural reconstruction in China 300,000 dollars were given, and despite Japanese depredations all these projects are still functioning. A sketch map shows the enforced transference towards the south-west of the scene of their operations.

#### Conditions and Aspects of the Scientific Profession

THE summer number of the *Scientific Worker* includes an account of an investigation of the profession of science which the Association of Scientific Workers is undertaking. The inquiry covers the methods of entry into the scientific profession and the actual conditions and economic aspects of the profession. The plan of research is designed to include a study of undergraduates in science departments and a study of practising qualified scientific workers. The former will endeavour to discover the factors which determine the decision to take a university course, the choice of university and course of studies and the extent to which vocational wishes influence

these problems. The second will cover three groups of men of science—chemists, physicists and biologists—and will be directed to discover the objective conditions of scientific employment and the attitude of men of science to scientific training and employment. These studies will cover the training for and obtaining of scientific posts, the conditions of scientific employment as well as the tenure of posts and incidence of unemployment. The studies on attitude will embrace attitude to university, to employment and to the main types of professional associations. It is hoped that the results obtained will provide data upon which policy for the regulation of the scientific profession can be based and also indicate how the practice of science in industrial firms affects the development of industry as well as possibilities in the application of science to industry.

#### Education in Germany

THE main features of education in Germany as remoulded under the Nazi regime are presented in a bulletin ("Education in Germany". Washington, D.C.: Government Printing Office, 1939) prepared for the United States Office of Education by Dr. Alina Lindgren, specialist in west European education, who visited Germany in 1935 and 1936 and completed her investigation of the subject a year ago. Among the most pregnant changes have been those in the education of teachers. Long before the Nazi party came into power its leaders resolved on a rapid unification of the teaching staffs and on eliminating teachers antagonistic to its views. The resultant limitation and precise definition of objectives must have been important factors in the production of a vigorous and efficient system. For teaching in elementary schools, candidates must enter two-year training colleges in which the curriculum includes three main fields: political world-view (*weltanschauliche*) education, scientific study and practical work. Entrance conditions include ability to sing and to play the violin, piano or organ and to instruct in gymnastics and sports. Women must in addition qualify in needlework and home economics. Aspirants to secondary school teaching posts must spend a year in one of these training colleges so as to mix with candidates for elementary school-teaching and so help to unify the profession. The declared purpose of the secondary school is to give preliminary training to especially gifted young people fit to qualify themselves eventually for authoritative positions in the political, cultural and economic life of the nation, and "the constant basis of selection shall be physical fitness, fitness as to character, mental fitness or ability, and national fitness". Conditions of study in the universities, which are subject to close control by the Reich Government, are elucidated by a comparison with the corresponding conditions in the United States.

#### Educational Finance in the U.S.A.

It has long been recognized in the United States that there are glaring inequalities between the educational opportunities available in different parts

of the country and that the systems of financing the public schools do not take sufficient account of the distribution of financial resources. The resources of many States being insufficient for remedying these inequalities, Federal aid has been invoked again and again in the past five-and-twenty years to correct defects in particular fields—first vocational education and later rural education, teacher training, health work in schools, nursery schools and adult education—but hitherto there has been no comprehensive measure for making good the radical defects in the systems of financing the public schools. The President's Advisory Committee on Education, constituted in 1936, with special reference in the first instance to vocational education, has lately taken this matter in hand, and a pamphlet on "Principles and Methods of Distributing Federal Aid for Education" has been prepared by its research staff (Supt. of Documents, Washington, D.C. 20 cents). It starts with the assumption, based on a study of present costs, that 48 dollars per pupil per annum is not more than enough to pay for elementary and secondary education of tolerable quality in a community enjoying optimum conditions of cost and is insufficient where sparsity of the population or high cost of living enhance the expensiveness of education. It proceeds to elaborate ingenious plans for distributing Federal aid, amounting to upwards of 600 million dollars a year, designed to approximate to the ideal—to each community according to its educational needs, from each according to its means.

#### Association for the Study of Systematics

THE Association for the Study of Systematics in Relation to General Biology was formed in 1937 (see NATURE, 141, 163; 1937: 142, 1069; 1938). Up to the present, the organization of the Association has been deliberately kept as loose as possible, and there has been no subscription. In a leaflet recently issued it is announced that the annual subscription is now five shillings. Further, a fund has been started to provide for expenditure on special purposes. Donors of £5 or more to this fund during the next three years will be designated founder members, and will enjoy for life the privileges of ordinary members. The leaflet also outlines the work so far carried out by the Association. It is hoped that all present members will continue on the new terms and that other biologists will find themselves in sympathy with the aims of the Association. Copies of the leaflet, with forms of application for membership, can be obtained from Mr. H. W. Parker, British Museum (Natural History), Cromwell Road, or from Mr. J. S. L. Gilmour, Royal Botanic Gardens, Kew, Surrey.

#### Blood Group Tables

THE rapid increase in the literature on blood groups makes it desirable to have a reference work on the subject. Dr. William C. Boyd has supplied this need (*Tabulae Biologicae*, 17, 113-240) by presenting the basic facts in tabular form with a minimal amount of text. All the essential facts