

the L.C.C.) as guest speaker. Much depends upon the question master, who introduces the speakers, and generally 'controls' his team. Questions are invited from the public, and an average number of about thirty are sent in for each meeting. It has been found that a good panel can deal with about ten questions in an hour, so the Committee gives careful consideration to selecting those questions which cover the most ground and provide the greatest variety. The audience particularly appreciates an opportunity of submitting written supplementary questions. Stewards (provided with pencils and paper) collect these during the session, and the last twenty minutes are devoted to dealing with them in a brisk 'sharp-shooting' fashion. One important feature of the Nottingham Open Forum is that the members of the panel meet for a few minutes before the public proceedings begin, when they are given a list of the questions. This avoids any confusion as to who shall answer each question first, and provides an opportunity for the speakers to decide when they can best make their own special contributions, while in no way destroying the spontaneity of their answers. The Open Forum has attracted an audience of from three hundred to four hundred at each meeting, and the enthusiasm shown has been gratifying. Especial appreciation has been expressed by foreign nationals from the occupied countries who are much impressed by the 'free speech' permissible in Great Britain. Further information can be obtained from the Secretary of the Nottingham Open Forum, Mrs. R. B. Calder, 5 Western Terrace, The Park, Nottingham.

Charles L. Mayer Awards for Animal Cell Growth Research

DR. WILLIAM J. ROBBINS, chairman of the National Science Fund of the U.S. National Academy of Sciences, has announced the creation of two 2,000 dollars prizes to be known as the Charles L. Mayer Awards and to be presented in 1942 and 1943 for outstanding contributions to our knowledge of factors affecting the growth of animal cells with particular reference to human cancer. The awards are to be not only in recognition of past accomplishments but are also designed to increase the opportunities of those with exceptional abilities to carry on further research. To assist the National Science Fund in effective administration of the Mayer Awards, a special advisory committee has been appointed consisting of Dr. R. R. Williams, chemical director of the Bell Telephone Laboratories, Dr. Alan Gregg, director for the Medical Sciences of the Rockefeller Foundation, Dr. George H. Whipple, dean of the School of Medicine and Dentistry of the University of Rochester, and Dr. Elihu Root, jun., as the lay member. The donor of the Charles L. Mayer Awards, Dr. Robbins said, had in mind the vast possibilities offered by research on the action of chemical agents and physical factors in stimulating or retarding cell growth, and the National Science Fund would consider studies of factors controlling the growth of protozoa, of animal tissue cultures or of entire organisms as eligible.

In announcing the establishment of these Awards, Dr. Robbins directed attention to significant work which has been done on the amino-acids and some of the more recent discoveries on the importance of the rarer mineral elements, for example, manganese and copper, as necessary for animal cell development.

Recent advances in the identification and isolation of some of the vitamins and hormones have opened new vistas for the student concerned with the control of growth. Along with the increased knowledge of factors stimulating growth there have been significant contributions to our information about growth-inhibitors such as the sulpha drugs and the anti-vitamins. Dr. Robbins emphasized that the Committee is interested primarily in fundamental studies on the factors influencing growth of animal cells rather than applications to any particular aspect of normal or abnormal growth. Applications based on such studies may develop in the future but at present we need more knowledge of the essentials concerned. Reports of empirical success in treatment of human cancer will not be eligible for the awards. The Advisory Committee will welcome suggestions at once as to outstanding published contributions and manuscripts of 1942 on any phase of this subject, at the National Science Fund offices, 515 Madison Avenue, New York City.

National Coal Board

At the first meeting of the National Coal Board held on December 21, Major the Right Hon. Gwilym Lloyd George, Minister of Fuel and Power, presided. He pointed out that the establishment of the Board completes the final stage in the Government's plan for the war-time reorganization of the industry in Great Britain. The Board would advise the Minister, in whose hands control of the industry is vested, and he appealed to members of the Board to approach the problems with which they would deal from a national point of view, and on the basis of national service. Sub-committees were appointed for dealing with the following matters: (1) The general planning of production, including the allocation of district and regional targets. The best means of securing the highest efficiency of the coal-mining industry and any improvements in machinery or methods of operation whereby output may be increased. (2) The provision of supplies, equipment and materials for the conduct of mining operations. (3) Matters relating to the maintenance of man-power and labour productivity, including the enrolment of new entrants and the instruction, training and advancement of boys and youths. (4) All matters affecting the welfare of mine-workers, including housing, transport and feeding facilities; and questions of health and safety and, in particular, such occupational diseases as silicosis and nystagmus, with the view of providing all possible preventive measures, clinical treatment and rehabilitation.

The Turkish Earthquakes

EVER since the great Turkish earthquakes of December 27, 1939 (*NATURE*, 145, 13; 1940), it has been noted that the earth-blocks in the affected district have never really attained their final position of rest. Aftershocks of the 1939 earthquake were frequent, of considerable amplitude and protracted. These followed the normal course, consisting of large shocks of gradually decreasing severity, interspersed with numerous minor shocks and tremors. Aftershocks, however, normally finish some months after their 'parent' shock and subsequent earthquakes with adjacent epicentres must be regarded as discrete. As recently as December last (*NATURE*, 150, 687; 1942) renewed seismic activity in Anatolia was noted.

Ciorum appeared to have been the most affected during the preceding month, though Balikesir was also damaged. During this time about 20 people were killed, 24 injured, 1,600 houses totally wrecked and some further 1,300 partly wrecked.

The most recent very strong earthquake took place on December 21, 1942, and the epicentre appears to have been slightly to the east and very close to Erba. This place is approximately a hundred miles to the east of Ciorum, and west-north-west of the epicentre of the very severe 1939 (Erzinjan) earthquake. On the recent occasion Erba was almost completely destroyed, partly by the earthquake and partly by the fires which followed it, and it is feared that more than a thousand people have perished. Niksar, east of Erba, also suffered severely, as did the intervening villages. Erba is the centre of a rich tobacco-growing region about eighty miles south-east of Samsun on the Turkish Black Sea coast, and about 280 miles east of Istanbul. The strong shocks were also felt severely in Ordu, Sivas, Kastamuni, Bakir-chai, Tokat, Fatza, Kaisarieh and Zara, though no major damage is reported from the last-named place.

North African Natural History

As suggested earlier in the War, the armies in North Africa have stimulated much useful war-time observation of fauna and flora in otherwise difficult regions, and the current issue of *Countryside* (12, No. 5) contains original papers by members serving abroad. These include notes on the birds of the British list wintering in West Africa by A. C. Allnutt, who noticed that while whinchats wintered in the coastal region for the whole of the six winter months, the willow-warblers arrived in waves of migration and remained only a few days. Blue-headed and grey-headed wagtails were there from December until February but no nuptial songs were heard. Their feeding habits were no different from those observed in Europe. Waders seen regularly included the marsh-sandpiper, ringed plover, greenshank, bartailed godwit, black-winged stilt; those seen mainly on passage were the sandpiper, curlew-sandpiper, grey plover, redshank, spotted redshank, little stint, turnstone and sanderling. Migrating sandwich terns remained for several weeks, and the arctic skua and black tern were noted. Previous numbers of this volume of *Countryside* have contained notes on the birds of Tobruk. In the current issue Col. W. R. Roberts has notes on the flora of the Egyptian wadis near Cairo.

Fruit Growing

ALLOTMENTS and gardens, though small units of horticultural production, are now so numerous that their aggregate contribution to the nation's nutrition is not small. The Ministry of Agriculture and Fisheries has recently issued "Growmore" Bulletin No. 7, "Fruit from the Garden" (H.M. Stationery Office, 3d. net, 1942) to assist the small grower to increase his production of fruit. Mr. J. M. S. Potter, of the Royal Horticultural Society, has written the text, which deals adequately with the planting and general management of stone fruits, apples and soft fruits. The bulletin's advice is eminently suited to the southern parts of Britain, but northern growers should not be advised to "avoid the strong growers like Bramley's Seedling and Newton Wonder". These varieties are often the most suitable for difficult climates. Many small apple orchards in the north are also unpro-

ductive because of the relative scarcity of other trees for pollination, and it is disappointing to find scant mention of suitable pollinating kinds for each variety. A useful spraying calendar is given, and sections on picking and storing, pruning, and the treatment of old trees also appear. Fruit culture is never so economically successful as when practised on a domestic scale, and it is good to see the Ministry's recognition of this important fact.

Planning of Science: in War and in Peace

THE Association of Scientific Workers is organizing a conference to be held on January 30 and 31, at the Caxton Hall, London, S.W.1, on the planning of science in war and in peace. Sir Robert Watson-Watt, president of the Association, will open the Conference. The first session will deal with the central direction of scientific research and development, and Sir Stafford Cripps has agreed to speak. It is also hoped to have statements on the organization of science in the U.S.A. and the U.S.S.R. The second session will be devoted to the local organization of scientific research and its application; among the speakers will be Mr. W. C. Devereux, managing director of High Duty Alloys, and Mr. Ben Smith, national organizer of the Association, who will speak on the relationship between managements and scientific staff as it affects production; detailed consideration will be given to the relations between scientific and other workers and to the work of joint production committees. The third session will discuss those changes in the organization of science brought about during the War which may have a continuing effect on the relations of science with society, and the re-orientation of science after the War. Prof. P. M. S. Blackett and Sir Lawrence Bragg will be the main speakers. The chair will be taken by Prof. J. D. Bernal. Tickets (2s. 6d. for whole conference or 1s. per session at the door) and full particulars can be obtained from the Conference Secretary, Association of Scientific Workers, 73 High Holborn, London, W.C.1.

Announcements

No. 3 of the War Background Studies issued by the Smithsonian Institution is by Dr. Aleš Hrdlička and is devoted to an account of the peoples of the Soviet Union. While there is nothing in these twenty-nine pages which purports to be new matter, the little publication gives a very convenient conspectus of the early history and make-up of the peoples of the U.S.S.R. It is compiled for the general public.

THE following appointments and promotions in the Colonial Service have recently been made: J. F. A. Sprent, veterinary research officer, Nigeria; I. H. Pattison, veterinary officer, Palestine; J. R. Curry (agricultural officer, Tanganyika Territory), director of agriculture, Bahamas; M. Greenwood (specialist (chemistry), Agricultural Department, Gold Coast), senior specialist, Agricultural Department, Gold Coast.

THE Institution of Naval Architects is offering two scholarships in naval architecture (Elgar Scholarship, £130 a year, and Denny Scholarship, £100 a year) and two in marine engineering (Parsons Scholarship, £150 a year, and Yarrow Scholarship, £100 a year) for competition in 1943. The age limit for the Denny Scholarship is nineteen, and that for the other scholarships twenty-three. Particulars can be obtained from the secretary of the Institution, 10 Upper Belgrave Street, London, S.W.1.