

NEWS AND VIEWS

Science and the National War Effort

IN order to ensure the continuance of the fullest co-operation of scientific workers with the Government in the national war effort, the Lord President of the Council, after discussion with the Royal Society, has, with the approval of the Prime Minister, appointed a Scientific Advisory Committee with a secretary from the Cabinet Secretariat. The terms of reference of the committee are: (a) to advise the Lord President on any scientific problem referred to them; (b) to advise Government departments, when so requested, on the selection of individuals for particular lines of scientific inquiry or for membership of committees on which men of science are required; (c) to bring to the notice of the Lord President promising new scientific or technical developments which may be of importance to the war effort.

The members of the committee are: Lord Hankey, G.C.B., G.C.M.G., G.C.V.O., chancellor of the Duchy of Lancaster (chairman); Sir William Bragg, O.M., K.B.E., president of the Royal Society; Dr. E. V. Appleton, F.R.S., secretary of the Department of Scientific and Industrial Research; Sir Edward Mellanby, K.C.B., F.R.S., secretary of the Medical Research Council; Sir Edwin Butler, C.M.G., F.R.S., secretary of the Agricultural Research Council; Prof. A. V. Hill, O.B.E., F.R.S., M.P., secretary and Foulerton research professor of the Royal Society; Prof. A. C. G. Egerton, F.R.S., secretary of the Royal Society and professor of chemical technology in the Imperial College of Science and Technology.

Social Survey of Tyneside

IN "Tyneside: the Social Facts" (Newcastle-upon-Tyne: Co-operative Printing Society, Ltd., 1940. 1s.) Mr. D. M. Goodfellow gives the results of a session's work of a tutorial class organized by the Workers' Educational Association in Newcastle-upon-Tyne, which shows the effects of the depression in Tyneside. A short summary is given of the death-rates from tuberculosis, pulmonary and non-pulmonary, in the Tyneside area which shows that the Tyneside districts in 1917 showed increases for the most part much greater than in corresponding districts throughout the country, while by 1921-25, the reduction in the incidence of tuberculosis was far less than in the whole country, except for one town; although the position improved by 1935-37, the improvement was appreciably less than in England and Wales as a whole. These high tuberculosis rates, in spite of a relatively high standard of public health services, much superior to that of the Welsh areas, is attributed to the effects of a false prosperity which reached its apex during the War of 1914-18 and weakened Tyneside's resistance in the long depression that followed, overcrowding and large families rendering the area specially vulnerable.

Children and Poverty

MR. GOODFELLOW accordingly points out that sanatorium treatment of tuberculosis must be followed by real enterprise to remove the poverty of the patient. Infant mortality figures confirm this effect of the last war on Tyneside. In 1911-13, Newcastle, Tynemouth, South Shields and Gateshead were all below the infant mortality average for English county boroughs. By 1914-16, as a result of increased industrial effort without proper safeguards, these four Tyneside boroughs had infant mortality rates much higher than English county boroughs as a whole and while from 1911-13 to 1935-37 in the country as a whole infant mortality was reduced by practically 50 per cent, the Tyne black spots showed no such improvement. These figures again are related to overcrowding. In 1925, one baby in three in Tynemouth was born in a one-room apartment, and even in 1933 one baby in five suffered this fate although in 1938 the rate had fallen to one in 20. The figures are again related to the work of infant welfare centres. In Leeds, for example, with an infant mortality rate of 64 per 1,000 births, the rate fell to 21 among babies attending the clinics.

Mr. Goodfellow's review of the maternity and child welfare centres on Tyneside shows the variation in the provision for such services made in very similar areas and emphasizes the need for radical reorganization of local government services taking account of the needs of all types of district. Similar variations or discrepancies occur in the school medical services, in the provision of school meals, milk, or for defective children. During the past few years Tyneside and Durham have fallen further behind other districts in regard to malnutrition of school children, even by present methods of assessment the percentage of under-nourished children being more than three times as high in Tyneside and Durham as it is in London and the south. Equally wide variations occur in the Tyneside districts in regard to the percentage of elementary school children leaving school at the age of 15 or over, although it should be noted that in five years Tyneside has lost more than 15 per cent of its elementary school children.

Civic Authority and Social Development

THE local rates show the same wide fluctuation, and Mr. Goodfellow points out that if civic conscience is to be developed, Newcastle, Gosforth and Whitley Bay and Monkseaton must enter a unified Tyneside and give it the benefit of their rateable value. The attitude of mind which has allowed business people to reside in Gosforth on profits made out of Jarrow or Felling or Hebburn, while disowning all responsibility for even the barest minimum of decent existence in Jarrow, Felling or Hebburn is utterly inconsistent with civic decency. Mr. Goodfellow

considers that the new region should also include Durham, partly to avoid Tyneside, as an industrial region, being swamped by a conservative and agricultural county, which has not yet shown itself to possess industrial standards in its social services, and partly because of Durham's achievements in the development of such services, and he also points out the example set by some of the districts such as Felling in changing their character from a slum-ridden overcrowded little town to one of the best garden cities in the country. If such districts lose control of their own civic life the division of powers between local and regional authorities will require the closest consideration to avoid friction or deadlock, and Mr. Goodfellow advocates the transfer of control of all services and ownership of all public utilities to the regional authority as most conducive to social development.

Conflicting Ideals and War Aims

ON the outbreak of war, the -ologies and -isms into which the world of European civilization had been divided since the irruption of the dictator into national and international politics were resolved into an opposition of Christianity over against paganism. Such at least has been the rallying cry with which Britain, in what may be termed her official proclamations, asks for and has received the moral and material support of the members of the British Commonwealth of Nations, the United States of America and the remaining free peoples of the world. It must be patent, however, that in the present stage of development of modern thought, a literal interpretation of this bond as a subscription to a theological formula, as would seem to be implied, would set outside the pale not only those who are members of the other great religious systems of the world, but also those who, while intellectually 'non-jurors', have entered upon the struggle to secure the ascendancy in world affairs of that spirit which inspires Christianity, but is not peculiar to it, with a fervour and passionate devotion which has all the intensity of religious emotion. To say this is not to imply a revival of the over-long opposition of religion and science. It is rather to emphasize what has been in fact an approach to composing their differences; but there are not lacking those who in the cause of intellectual integrity would prefer to clarify the issue and to rest upon a statement of our aim in its simplest and widest appeal as being alone acceptable to those who adopt the point of view of the rationalist.

Such a line of argument is set out, for example, by Mr. A. Gowans Whyte in "Make your own Religion" (The Thinker's Forum, London, Watts and Co., 1940. Pp. 47. 6d.). After passing in review the evidences of the failure of Christianity—unkindly drawn in part from the utterances of the Churches themselves—and the bankruptcy of a Christianity which alternatively depends upon a few generalized moral principles, Mr. Whyte sets out on "an adventure" towards a new religion, a religion which is "a search for the truth" and "the satisfaction of the will to know" as opposed to "the will to believe".

The object of this "will to know" is the building up of a picture of the universe and man's place in it in accordance with the doctrines of evolution. Christian morality, it is argued, is not far and away superior to all other codes as the Divine law, but is as imperfect as those other codes and is subject to change in form from time to time and from place to place. The ideal on this view—a moral system which enables the individual to live "a full mental, emotional and physical life in harmonious association with others equally blessed"—is, it is admitted, still a long way ahead, but progress will depend upon knowledge of the moral evolution of mankind and upon a mind set free "to learn, to probe, no doubt, to reject, to accept, as experience and reason suggest"—in other words upon the principle of freedom of thought for which really we are fighting.

Additions to the British Flora

ALTHOUGH only an infinitesimal proportion of the alien plants which reach Great Britain in some form or other and take root ever succeed in establishing themselves, much less colonizing the country, a small number of additions to the flora that have established themselves in recent years from garden escapes or alien casuals of industry may have some important bearing upon the flora of the future. In 1928, F. W. Holder and R. Wagstaffe, of the Southport Scientific Society, found an alien composite with small yellow flowers at Freshfield, West Lancashire (vice county 59, botanically "South" Lancashire), which Druce afterwards identified as *Siegesbeckia orientalis*, fairly widely distributed in the southern hemisphere, but not previously recorded in Britain. In the twelve years since then, the species has firmly established a colony of plants at the Freshfield station and J. D. Massey, in a communication to the Liverpool Botanical Society, has pointed out that it differs from Ridley's description of the species in the "Dispersal of Plants Throughout the World" in growing much taller (5–6 ft.), in always possessing five long narrow bracts instead of four, and has glands on the leaves and stem as well.

About the same period, R. E. D. Baker discovered *Scirpus americanus* (Pers) by a slack on the Freshfield dunes, its only other European station being on Jersey, although W. G. Travis had an unnamed 1909 specimen from the same Freshfield site in his herbarium. Since then, the colony of *Scirpus americanus* has considerably extended on the site to about half an acre, and J. D. Massey has successfully transplanted a second colony 100 yards south. The steady colonization of the countryside by such *Petasites* garden escapes as the winter heliotrope and white butterbur (*P. albus*) may be emulated by another white butterbur, *Petasites japonicus*, which was recently added to the Cheshire flora (Eric Hardy, *J. Bot.*, April 1940). Wilson has noted it in Lakeland ("Flora of Westmorland"), and the former record elicited specimens in the British Museum herbarium from additional stations at Denham and Langsdale, and elsewhere from Denbighshire (*Field*, August 28).