

populations afford the most serious problems in their steadily increasing demands.

The White Paper was discussed on a motion moved by the Minister of Health, Mr. Willink, in the House of Commons on May 3. While the statement received a general welcome, there was criticism from all sides that the suggested procedure was slow and the scheme lacked boldness. Mr. Willink said that the main instrument for collecting information on the yield and quality of water resources is the Inland Water Survey, and the Government proposes to press on with it at the earliest possible date. The Central Advisory Water Committee, with new powers, would advise the Minister of Health on general policy in the light of the information provided by the Survey. As an alternative to this Central Committee, a national water board under a strong, well-qualified chairman, was suggested as a means of co-ordinating the water policy of Great Britain. Against this suggestion it was urged by the Minister of Agriculture, Mr. R. S. Hudson, that water policy touched on too many aspects of national administration, such as housing, health, drainage and agriculture, to make a national water board feasible and practicable.

Regional Organization in Australasia

THE Agreement between the Commonwealth of Australia and the New Zealand Governments signed at Canberra on January 21, 1944, has now been published (Cmd. 6513). In addition to undertaking general collaboration with regard to the location of machinery set up under international organizations such as the United Nations Relief and Rehabilitation Administration, the two countries agree to promote the establishment of a regional organization with advisory powers, which could be called the South Seas Regional Commission, on which the Governments of the United Kingdom, the United States and the French Committee of National Liberation might be represented. Such a Commission would have as its function to secure a common policy on social, economic and political development directed towards the advancement and well-being of the inhabitants themselves and, particularly, the Commission would recommend arrangements for the increasing participation of local inhabitants in administration, with a view to the ultimate attainment of self-government in the form most suited to the circumstances of the peoples concerned; arrangements for material development, including production, finance, communications and marketing; for the co-ordination of health and medical services and education; for the maintenance and improvement of labour conditions and social services as well as collaboration in economic, social, medical and anthropological research.

The publication of periodical reviews of progress in this field is also visualized, and in addition to the establishment of a regional zone of defence and of permanent machinery for collaboration and co-operation between Australia and New Zealand, the Agreement provides for joint action in support of the principles that full control of the international air trunk routes and the ownership of all aircraft and ancillary equipment should be vested in an international air transport authority operating those routes, and that the routes themselves should be specified in an international agreement. Failing such agreement the two Governments support a system of air trunk routes controlled and operated by Governments of the British Commonwealth of Nations under Government ownership.

Colonial Geological Surveys

THE function and future of the Colonial Geological Surveys formed the subject of a recent article in *NATURE* (153, 273; 1944), in which a discussion on the matter, held under the joint auspices of the Geological Society of London and the Institution of Mining Engineers in November last, was summarized at some length. The subject has again been dealt with in the *Bulletin of the Imperial Institute* (41, No. 4, 255; 1943), by the 'intelligence staff' of the Institute, under the heading "A Review of Geological Survey Work in the Colonies". In this article the authors refer to all the Colonies except those small islands and groups where, it is stated, the question of establishing official Surveys scarcely arises. Particulars are given separately for each Colony as to area, the years, if any, during which geological survey work has been carried out, the amounts of money expended on such work, the staffs employed and the maps that have been published. Reference is also made to the question of water-supply and to mining activities. With few exceptions, it appears that in none of the colonies was a Geological Survey established earlier than 1918. In Ceylon, a mineral survey was commenced in 1903; and in British Malaya a Geological Survey has existed for forty years, though until 1912 it employed only one geologist. In certain other Colonies short-term mineral surveys were carried out in the early years of this century by the Imperial Institute, under the auspices of the Colonial Office.

The information supplied is based on published records, and it certainly provides factual support for the views expressed at the joint meeting of the Geological Society and the Institution of Mining Engineers at their joint meeting last year. It makes it clear, in fact, that there is ample room for enlargement, and improvement in the continuity and scope, of the work of the Colonial Geological Surveys. Actually the matter is in hand, for the Secretary of State for the Colonies has appointed a panel of experts to advise him on the subject. The intention of the authors of the Imperial Institute article is to point out the desirability that a fair share of the Colonial Office grants for the extension of scientific investigation into Colonial problems should be allocated to the expansion of geological survey work. In the view of the Institute, a Geological Survey should be regarded as a public service available to the mining, agricultural and other industries; as well as for government-sponsored public works and water supply services; and also as an educational institute. The association of the Imperial Institute with the Colonial Geological Surveys is one of long standing, and the recommendations made in this article, backed by an authoritative statement of facts, should command the attention of those interested in the welfare and development of the Colonies.

Archæological Find in Kenya

DR. L. S. B. LEAKEY, honorary curator of the Coryndon Museum, who is employed in war-time duties with the C.I.D., Nairobi, has spent eighteen days leave on Site 10 at Mount Olorgesailie in Kenya, accompanied by Mrs. Leakey, Mr. A. J. Arkell, the Commissioner for Archæology in the Sudan, Miss E. Cory, Mr. F. de V. Kirk and Mr. G. Alkin. The excavations carried out showed that the surface indications noted early in 1942 had not been misleading and that the site is of outstanding importance.

The trial trenches that have been dug have revealed that the deposits consist of lake beds alternating with land surfaces. Upon four of the land surfaces—or layers—exposed, there are abundant signs of occupation by Acheulean man, and very large numbers of hand-axes, cleavers and bolos stones have been found closely associated with the fossilized remains of extinct animals. Another discovery of importance is the finding of another occupation floor that represents the first well-authenticated evidence of the existence of a flake-culture people anywhere in East Africa, in the deposits of the Middle Pleistocene. The animal fossils found include those of extinct species of elephant, hippopotamus, giraffe and rhinoceros, a baboon that was as big as a gorilla, and a pig that was as large as a present-day rhinoceros. The Kenya Government has fenced the site, and it is proposed that the various occupation floors shall be exposed and then roofed so that visitors can see the implements and fossils lying in position.

Science and the War

A SYMPOSIUM of papers presented at the seventy-fifth anniversary meeting of the Kansas Academy of Science on April 10, 1943, has now been reprinted (*Trans. Kansas Academy of Science*, 46) under the title "Science and the War". L. E. Cull deals with the place of food and J. H. McMillan with that of physics in the war effort. The latter points out that when Japan began hostilities, the United States had nearly two hundred physicists directing about five hundred professional physicists, investigating specific war problems. This represented about seventy-three per cent of the physicists in the United States who were judged capable and free to carry on this type of work. Both in government research laboratories and in industry there has been an acute shortage of physicists, and the programme for training war-time physicists does not appear to have been so well organized as that for research. N. P. Sherwood's paper on "Bacteriology, Medicine and the War" emphasizes the marked advance in our knowledge and resources since 1928 for dealing with wound infections, venereal disease, typhoid and tetanus, etc.

J. W. Greene, discussing "Chemistry and the War Effort", briefly reviews the familiar achievements of the chemist in such fields as explosives, synthetic rubber, plastics, fertilizers, aviation spirit, solvents, synthetic organic chemicals, etc. "The Role of Botany in War-time" is outlined by P. B. Sears, who refers to the services of botanists in camouflage work, cotton fibre problems, plant breeding and control of disease, the preparation of airfield runways with sod covers which will prevent erosion, and particularly in food production. J. C. Frye and C. P. Kaiser's paper, "Geology in the Present War", refers to the services of the geologist in meeting difficulties in the supply of strategic minerals and other raw materials, domestic water supplies, and in mapping. J. Breukelman deals with the "Relation of Zoology to the War Effort", and refers in particular to its contribution in the field of nutrition, in pest control, in jungle warfare and in the conservation of fauna. The final paper, by H. B. Reed on "Some Contributions of Psychology toward the War Effort", after referring to the neglect of psychology after 1918 by the Armed Forces, indicates the value of the psychologist in placing men in the activities for which they are best qualified and in which they may be of the greatest service to the country, in devising technique for effective training in the skills required in military

work or for building up civilian and military morale and propaganda effects, in handling and dealing with children in bombed areas, and in the effective care of war orphans. A brief account of the classification work in the U.S. Army is included.

William H. Nichols Medal of the American Chemical Society : Award to Prof. C. S. Marvel

THE William H. Nichols Medal for 1944 of the New York Section of the American Chemical Society has been presented to Prof. Carl Shipp Marvel for outstanding contributions to knowledge of the structure of vinyl polymers, the long-chain molecules used as rubber substitutes, in production of plastics, and as thickening and blending agents in chemical manufacturing, and for his research in the structure of sulphur dioxide - olefin polymers. Prof. Marvel is professor of organic chemistry at the University of Illinois, and president-elect of the American Chemical Society. As a graduate student at the University of Illinois, Prof. Marvel became interested during the War of 1914-18 in the development of synthetic chemicals, at a time when the United States was dependent upon Germany for many drugs and dyes. He is now recognized as one of the outstanding authorities in the United States in organic chemistry, especially in the field of polymers, and for his extensive knowledge of organic chemical reactions. He is also a leader in the development of synthetic methods for making organic compounds, and early in his career at the University of Illinois began manufacturing chemicals needed for research there and elsewhere. One contribution in this latter field was the production of pure amino-acids, which have served brilliantly in vitamin studies and determinations of essentials of diet. The amino-acids also are used for intravenous feeding of persons unable to tolerate proteins. Other work by Prof. Marvel has dealt with the relationship of hydrogen bonding and solubility behaviour, the synthesis and rearrangement of polyenes and polyines, association of free radicals, and other research fields. Prof. Marvel was born at Waynesville, Ill., on September 11, 1894, and received his bachelor of arts degree from Illinois Wesleyan University in 1915. He was a student of Dr. A. W. Homberger, Illinois Wesleyan, and of the late Prof. W. A. Noyes, at the University of Illinois. He has been associated with the editorial board of "Organic Syntheses" since 1923, and with the *Journal of Organic Chemistry* since its founding. He is a member of the National Academy of Sciences, and was chairman of Section B-3, National Defense Research Committee, during most of 1941 and 1942.

Tannic Acid and Burns

THE impression that tannic acid is a safe and reliable dressing for burns is nowadays so widespread that there will be much interest in recent experimental evidence suggesting that tannic acid should be abandoned because of the risk of the damage to the liver which it may cause. S. L. Rae and A. W. Wilkinson (*The Lancet*, March 11, 1944, p. 332) studied, by the levulose-tolerance test, the liver function of 27 children, aged twelve years or less, who had been burned or scalded. Of these children, 12, who had burns covering an average of 17 per cent of the body surface, were treated with 2 per cent gentian violet followed by silver nitrate; and 8 of them, whose burns were smaller, covering an average of 5 per cent of the body surface, were