

Between 1891 and 1893, Washington studied petrology under Zirkel at the University of Leipzig and obtained his doctorate with a thesis on "The Volcanoes of the Kula Basin in Lydia". Afterwards he was assistant in mineralogy at Yale for a short time and continued his petrographical researches in Europe and America. From 1906 until 1912 he practised as a consulting mining geologist, and in 1912 he was appointed petrologist to the Geophysical Laboratory in Washington, a position which he still held at the time of his death.

Dr. Washington travelled extensively and the results of his geological, petrological and volcanic studies in Europe, North America, Brazil, Asia Minor and the Hawaiian Islands are incorporated in numerous publications. His devotion to the chemical side of petrology was the ruling factor in his career, and his skill as an analytical chemist and petrographer, together with an unflinching interest in volcanic processes and rocks, have contributed greatly to our present knowledge of modern lavas. At the same time his scientific activities embraced a much wider field, and his investigations ranged from archæological subjects to problems of the earth's interior.

In 1904 he published his "Manual of the Chemical Analysis of Igneous Rocks", the fourth edition of which appeared in 1930. He was joint author with Cross, Iddings and Pirsson of "The Quantitative Classification of Igneous Rocks", published in 1903, and author of the "Chemical Analyses of Igneous Rocks" which was issued by the United States Geological Survey as a Professional Paper in 1903, and in an enlarged edition in 1917. An enormous amount of work is represented in this compilation, of which the importance, from a petrological point of view, cannot be over-estimated; it must always remain an admirable memorial to its author.

It is impossible to deal adequately with Washington's scientific publications, which form an imposing list, but among the more important may be mentioned "The Roman Co-Magmatic Region" (1906), "The Deccan Traps and other Plateau Basalts" (1922), "The Petrology of the Hawaiian Islands" (1923-1928) and "The Composition of the Earth's Crust" (1924, in collaboration with Dr. F. W. Clarke).

Dr. Washington's scientific attainments were widely recognised both in the United States and in Europe. He was a foreign member of the Geological and Mineralogical Societies of London; of the Paris Academy of Sciences; and of the Academies of Science of Norway, Turin and Modena, and of the Royal National Academy of the Lincei (Rome).

With his death, geology must mourn the passing of a great figure in the petrological world.

WE regret to announce the following deaths:

Prof. J. R. Ainsworth-Davies, formerly principal of the Royal Agricultural College, Cirencester, on April 7, aged seventy-two years.

Prof. A. B. Macallum, F.R.S., formerly professor of biochemistry in the University of Toronto, lately professor of biochemistry in McGill University, on April 5, aged seventy-four years.

Sir Frederick Palmer, K.C.M.G., C.I.E., president of the Institution of Civil Engineers in 1926-27, who was a well-known bridge and harbour engineer, on April 7, aged seventy-two years.

Prof. Sydney H. Vines, F.R.S., formerly Sherardian professor of botany in the University of Oxford, president of the Linnean Society of London in 1900-4, on April 4, aged eighty-four years.

News and Views

"Letters to the Editor"

AN explanation is due to our readers for the unusually large proportion of this week's issue of NATURE devoted to "Letters to the Editor". In NATURE of February 10, we published an enlarged paper to provide accommodation for twenty columns of correspondence; since then, we have printed a dozen or so letters each week, which have occupied altogether a hundred columns of space. In fairness to our correspondents, it should be said that many of them have acted upon our suggestion that communications should be reduced in length, but still it has been difficult to ensure that prompt publication of current work which is now so widely recognised as one of the chief functions of our correspondence columns. In the circumstances, it has been decided once more to publish an extra number of pages of correspondence, in order to reduce the waiting list, and the present issue of NATURE therefore contains thirty-two columns under the heading "Letters to

the Editor". Of the twenty-nine communications printed, about a half are from centres in Great Britain and Ireland. The remainder come from places so widespread as Copenhagen, Leningrad, Moscow and Warsaw in Europe, Boulder, Chicago, Harvard and Montreal in North America, Sendai in Japan, Cairo, and Kyancutta (South Australia). They provide further evidence, if such be needed, of the wide circulation of this journal and the keen activity with which scientific problems are being attacked in many parts of the world.

Prof. G. H. Lemaître

PROF. G. H. LEMAÎTRE, professor of mathematical methodology and the history of mathematical sciences in the University of Louvain, has been awarded the Francqui Prize of the value of 500,000 francs. The Francqui Foundation was created in 1932, and may award this annual prize to the Belgian who has made outstanding contributions to science

and thus enhanced the international prestige of Belgium. This year's prize has been awarded to Prof. Lemaitre for his outstanding work on the systems of galaxies and on cosmic theory. His discoveries and theories have had a profound influence on astrophysical and physical thought throughout the world, especially in connexion with the theory of the expanding universe, which he originated. The presentation was made in the presence of the King of the Belgians.

Native Problems in North Australia

THE natives of Arnhem Land in North Australia are presenting an interesting problem to the Commonwealth Government. The methods usually adopted in dealing with disturbances among the natives are the old-time punitive police expedition or special missionary enterprise; quite recently a mixture of the two has been tried. As Prof. F. Wood Jones has pointed out, the former is apt to lead merely to massacre, and the latter must be admitted to have failed to effect any permanent solution of the problem. It is properly soluble only by rigorous segregation of the blacks from settlers, traders and the like (European and Asiatic), and by prolonged intimate study of them by highly trained anthropologists willing and able to live amongst them as members of their tribes. The University of Melbourne has made an admirable and practical move in offering to the Department of the Interior the services of an able and experienced research student to work amongst the Arnhem Land natives. To the great regret of all who are interested in these primitive peoples, the offer has been declined; but the last has not been heard of it. On scientific, no less than humanitarian, grounds a determined effort along sound modern lines should be made to resolve this long-neglected native problem. The establishment of a Commonwealth Department of Native Affairs would be a step in the right direction.

Water Supplies in Great Britain

IN reply to a question in the House of Commons on April 9 as to the present position in regard to water supplies in Great Britain, Mr. Ramsay MacDonald said: "The reserves of many water undertakers have fallen to a low level for this time of the year. The Government have been carefully watching the situation and, because of the continued absence of abundant rains, are satisfied that emergency measures must be taken. Therefore, in view of seriousness of the position, the Government propose to bring legislation before the House immediately." The Water Supplies (Exceptional Shortage Orders) Bill was accordingly presented to the House on April 10, whereby the Minister of Health, and the Secretary of State and the Department of Health for Scotland, would be authorised "to make orders, and to give directions with a view to meeting deficiencies in water supplies due to exceptional shortage of rain, and for purposes connected with the matters aforesaid". It will be remembered that the subject of water supply and regulation was discussed in

NATURE of November 11, 1933, p. 725, in an article dealing with a report of a committee of the British Association, when the institution of an inland water survey of Britain was urged as a necessary preliminary to efficient water administration. Reference was also made in that article to the presidential address to the Institution of Mechanical Engineers delivered by Mr. Alan Chorlton, M.P., in which he suggested the construction of a water 'grid' in Great Britain comparable with the electricity 'grid' recently completed.

Pooling of Water Supplies

MR. CHORLTON returned to the subject in a recent paper read before the Royal Society of Arts (*J. Roy. Soc. Arts*, Feb. 23, 1934), in which he directs attention to the policy of Great Britain, which has allowed water supply to remain in the hands of local authorities without any national plan devised in the interests of the population as a whole. As a result, there are 1,100 separate water undertakings in the country with a mosaic of disconnected entities and interlocking boundaries. Urban areas are best served, but many rural areas require adequate provision. A hydrogeological survey is needed before plans on a large scale can be matured. Furthermore, some pooling of supplies is essential because of the vagaries of rainfall within any given year, and lastly, special storage reservoirs should be constructed to serve abnormal demands in dry seasons. These might be in the Thames valley, for the south generally; in south Lincolnshire for the Ouse flood waters; and in the Lake District to serve the industrial areas of Lancashire. Such undertakings would, according to Mr. Chorlton, have many advantages in providing a certainty of good water in all areas, and a possibility of encouraging increased use of water without alarm of shortage, while the expenditure on labour would decrease unemployment for some years to come.

Australian Support for Empire Agricultural Research

SATISFACTION will be felt at the decision of the Commonwealth Government to adopt the recommendation of the Executive Council of the Imperial Agricultural Bureaux that financial support be given to certain research organisations in Great Britain formerly assisted in part by the Empire Marketing Board. It is true that the sum involved is not very considerable: £800 per annum to the Entomological Laboratory at Farnham Royal, £500 to the Station at Slough dealing with insect infestation of stored products, and £4,500 to the Low Temperature Research Station at Cambridge; a total of £5,800 per annum. The point of importance, however, is that the Australian decision is an indication of the growing feeling there that teamwork in agricultural research is not merely desirable in the interests of the various members of the Empire, but also is essential if full advantage is to be taken of the limited total resources available for scientific work. The Empire Marketing Board did much to foster this spirit, the value of which is clearly recognised in the outlying dominions.