

I sent one of my students who was a graduate of London to do research under Kennelly. He often wrote saying how kind the professor was to him, having him to his house every week and going for a picnic into the country on holidays. Unfortunately, war broke out and he returned to join the army and paid the great sacrifice. I communicated the sad news to Prof. Kennelly and received a long letter back telling how popular the student was at Harvard, and how he took a leading part in all their sports and how they would ever remember him. They placed a memorial at Harvard.

By all who knew him, Kennelly will be sadly missed, but it is pleasant to remember that to him it was given to have a long and useful life spent in the service of his fellow men. A. RUSSELL.

WE regret to announce the following deaths:

Prof. J. Grinnell, professor of zoology and director of the Museum of Vertebrate Zoology in the University of California, on May 29, aged sixty-two years.

Mr. F. W. Jones, O.B.E., known for his work on the chemistry of explosives, on June 24, aged seventy-two years.

Dr. Witmer Stone, emeritus director of the Academy of Natural Sciences of Philadelphia, on May 23, aged seventy-two years.

Prof. A. E. Wells, professor of metallurgy in Harvard University during 1926-31, on May 24, aged fifty-five years.

Prof. J. E. Woodman, emeritus professor of geology, in New York University, on May 19, aged sixty-five years.

NEWS AND VIEWS

Prof. V. Gordon Childe

PROF. V. GORDON CHILDE, whose election as an honorary member of the Prehistoric Society of Switzerland in recognition of his services to prehistoric archaeology is announced, has been professor of prehistoric archaeology in the University of Edinburgh since 1927. This chair, which he is the first to hold, was founded in memory of the late Lord Abercromby, himself distinguished as a pioneer in study of the Bronze Age in Europe. Prof. Childe, who is an Australian by birth, has travelled extensively in Greece, the Balkans, central Europe, and the East. His early visits to eastern European sites strongly influenced the line of his development in archaeological thought, leading him to appreciate, more fully, perhaps, than had been done by archaeologists previously, the importance of the Danube Valley and adjacent regions as a key position in the study of European prehistory. During his tenure of the chair in Edinburgh, Prof. Childe has not only been active in promoting general interest in archaeological studies in Scotland, but he has also taken a leading part in the organization of field research on Scottish sites. Of his own work in the field, the excavation of the stone age village settlement of Skara Brae in the Orkneys ranks as the most remarkable revelation of a complete prehistoric cultural unit which has yet been made in Northern Europe. His contributions to the literature of prehistoric archaeology are all remarkable for their grasp of detail, combined with an unusual breadth of view in tracing the general trends of development, as well as for insight into the interplay of the underlying forces, especially such as belong to the field of prehistoric economics.

Newton's Correspondence

THE Royal Society has formed a committee for the purpose of collecting and publishing the whole of the correspondence of Sir Isaac Newton. It is

hoped that a substantial part of the work will be completed and that some of the volumes will be issued by the time of the celebration of the tercentenary of Newton's birth in 1942. The members of the committee are as follows: Sir Charles Sherrington (chairman), Prof. E. N. da C. Andrade, Prof. G. N. Clark, Sir William Dampier, Sir Arthur Eddington, Sir Thomas Heath, Dr. H. Spencer Jones, the Librarian of Trinity College (Mr. Adams) and Prof. H. C. Plummer. The Council invited Prof. Plummer to be the editor of the correspondence and he has accepted this great responsibility. It is hoped to obtain the co-operation of all librarians in the various libraries of America and of Europe, and notifications of any original letters appertaining to Newton in their collections should be sent to the Assistant Secretary of the Royal Society, Burlington House, London, W.1.

Malaya and India: Early Cultural Relations

CONFIRMATION of a conclusion, which ran counter to generally accepted opinion, as to the archaeological possibilities of Malaya in the study of early cultural development in south-eastern Asia, has been afforded by the results of a fourteen months' archaeological investigation undertaken by the Greater India Research Committee during 1937-38. Excavations were carried out in Kedah, Perak and Johore under the field direction of Dr. H. G. Quaritch Wales, by whom the results have been described recently (*Illustrated London News*, June 24), and with the financial assistance of the Governments of the States interested. The most extensive and important of the excavations were in Kedah, some thirty sites, ranging in date from the fourth to the thirteenth century of our era, being thoroughly examined. The earliest remains are scattered and do not suggest any very large settlement before the sixth century. The oldest site found was on an isolated hill on the Sala River, some twenty miles north of Kedah Peak. Here was

found the massive laterite basement of a *stupa* and a small stone inscribed with a Buddhist formula in a South Indian script, not later than the second half of the fourth century. Another *stupa* site to the south on the Bujang stream produced a sun-dried clay tablet, inscribed with three stanzas of a Mahayana text in Sanskrit, which previously was known only in Chinese. This antedates previous evidence from Sumatra of the introduction of Mahayana Buddhism into Indonesia by more than a hundred years.

EXCAVATION of mounds on the site of the ancient city of Lankasuka revealed remains of Shiva temples and established the Pallava affinities of the art of the colonists in the seventh and eighth centuries, while foundation deposits from temples excavated on Kedah peak consisted of caskets, which, though undoubtedly Indian in character, are of a type unknown in India and are explicable only by reference to Java. The ruined state of the temple buildings made it possible to excavate the foundations more thoroughly than is usually possible, with the result that much valuable information as to dating and cultural relations with southern India was obtained from this source. Especially noteworthy is evidence of a revival of Hinduism in the eleventh to fourteenth centuries. These results, as well as those of earlier expeditions of the Greater India Research Committee, for which Dr. Wales has been responsible, suggest that the criticisms directed against the projected exhibition of the art of Greater India (see *NATURE*, July 1, p. 20) are outweighed by the advantages which will accrue to Indian cultural studies from the enhanced knowledge and interest in the art and archaeology of Greater India which such an exhibition must arouse. This should result in stimulating further exploration and research. By tracing and exemplifying local developments of Buddhist and Hindu art, the exhibition should in itself supply the unifying link, of which the absence has been imputed as one of the gravest defects of the proposal.

Civil Defence

THE second Bulletin of the Air Raid Defence League gives an outline of civil defence in which the general framework is reviewed as a whole, so that the various technical, social and economic problems fall into their proper perspective in the defence of the whole living organism of a nation in a war zone. After discussing the nature and object of air attack and the policies which might be used by the attacker, the Bulletin concludes that evacuation of the congested target areas is the most radical strategic move and is called for on a much wider scale than is at present announced by the Government. It is urged that all who can should be evacuated and only special classes should stay. Careful planning of evacuation and action before war is in being could vastly reduce the dislocation caused by evacuation. A priority scheme, however, is required as the basis of defence measures in which the proportionate risk has been roughly calculated on scientific principles. Bomb-proof accessible shelter both for work and for rest is

advocated for those whose duty it will be to remain at work in the congested target areas and for the protection of those engaged in running vital services such as telephones or first aid. For less congested and vulnerable areas shallow shelters of the Anderson or other types or strengthened basements must be provided, and small communal shelters or strengthened basements for large blocks of flats or offices are necessary.

THE apathy of local authorities and the lack of staff for effective training are criticized as the chief hindrances to the effective utilization of volunteers in national service. The Bulletin then urges the importance of policy being designed to make the economic system of Great Britain strategically less vulnerable. The Government should give a clear lead to industry to organize itself to meet war conditions and to undertake the preparation of suitable alternative premises and services of supply and to provide pools of reserve plant. Similarly the maintenance of food supply is of paramount importance. Reserve stocks of food must be accumulated and protected. Facilities for handling and storing food and essential commodities at ports at present little used but likely to be important in time of war in view of their comparative safety should be improved. Much of our present storage is in highly vulnerable positions; so production of food should be greatly increased. Special stress is also laid upon the mobilization of science, the full resources of which are insufficiently utilized by the Government. Among subjects for urgent team research methods are food and storage, optical instruments, special drugs and shelter problems. The importance of full publicity is emphasized and establishment of a Ministry of Information is recommended.

Earthquakes in California

ON the morning of June 23, an earthquake of considerable intensity was felt along the whole of the coast of Southern California. It was particularly severe at Hollister and Salina, where it was said to be the worst since 1906, though no material damage was done. California is particularly prone to local earthquakes and tremors, and a glance at the geomorphic map prepared by the Earthquake Investigation Commission shows that considerable movement has taken place from time to time along the great fault systems which chiefly run parallel with the coast line. In this particular instance it is difficult to state exactly where the epicentre may have been, but it is possible that slipping may have taken place along the San Andreas Fault which runs practically along the whole length of the affected area and lies approximately midway between Hollister and Salina. A second shock was felt at Pasadena and San Diego in the early afternoon of the same day. This probably had its epicentre in the mountainous region of Nevada; it was sufficiently intense to have caused considerable damage had it occurred in a densely populated region. California has several seismological observatories, so that thorough investi-