

News and Views

Lord Bledisloe and New Zealand

ON many occasions since Lord Bledisloe became Governor-General of New Zealand in 1930, we have referred to stimulating addresses delivered by him on applications of scientific knowledge to agricultural and other industries, and to economic and social problems. In all his addresses, the great importance of research has been emphasised and the results of investigations carried out in Great Britain and in other parts of the world have been brought before the people of the Dominion. This has been particularly the case with agriculture, on which subject Lord Bledisloe is himself a high authority. It is gratifying, therefore, to learn from a message from the Wellington (N.Z.) correspondent of *The Times*, that more than 54,000 dairy-farmers have subscribed to an address from their industry recording his thorough understanding of their problems and his assistance in solving them. Scientific societies and the newspaper Press in the Dominion have similarly expressed grateful appreciation of his wise counsel and practical guidance.

Lord Rutherford's Portrait for New Zealand

DURING his term of office, which closes on March 15, Lord Bledisloe has lost no opportunity of emphasising the important part which science has played, and must continue to play, in the development of the country. The most distinguished scientific worker which New Zealand has produced is unquestionably Lord Rutherford, whose name will always be associated with the advance of atomic physics, and Lord Bledisloe proposes to mark the conclusion of his five years of office by presenting to the Dominion a portrait of Lord Rutherford, to be hung in the new National Art Gallery at Wellington. By a fortunate coincidence, a distinguished portrait painter who is also a New Zealander, Mr. Oswald Birley, was available for the task. Mr. Birley painted a portrait of Lord Rutherford which was presented to the Royal Institution by fellows of the Royal Society some three years ago. Lord Bledisloe therefore commissioned Mr. Birley to paint a replica, which has been sent to New Zealand. The presentation will be made at a civic reception to Lord and Lady Bledisloe to be held in the Town Hall, Wellington, on the eve of their departure for England. By this public-spirited action, Lord Bledisloe has given New Zealand a striking picture, by one of her own artists, of a son who has achieved an international reputation in the field of science.

Death of Lady Dewar

THE death on January 7 of Lady Dewar, widow of Sir James Dewar, was reported to the members of the Royal Institution at a recent general meeting. Lady Dewar's long and intimate association with the Institution began in 1887 when her husband, already the Fullerian professor of chemistry, succeeded Tyndall as superintendent of the House. From that

time until Sir James Dewar's death in 1923, she was the hostess of the Institution, and the regard in which her memory is held by a wide circle of members and friends is expressed in the words of Sir William Bragg at the general meeting. Sir William said that her death "had broken a precious link connecting the present times with those of the past in which Sir James Dewar had made the Royal Institution such a powerful agent of research and exposition. Not only had Lady Dewar been the true helper of Sir James in his work: she had, as many would gratefully remember, been a most able and kindly hostess to the scientists and others who flocked to see her husband and the Institution over which he presided. The members of the Institution would gladly acknowledge their debt to Lady Dewar, and for ever keep her name in appreciation and affectionate remembrance."

Lady Dewar's Bequests for Science

A BEQUEST by the late Lady Dewar is announced of ten thousand pounds to the Royal Institution. The gift is free of duty, and is made on the condition that the income is to be used for the purpose of furthering scientific research in the Institution and as a permanent memorial to the work there of her husband, Sir James Dewar. Lady Dewar has also left to the Royal Institution her husband's medals and diplomas and his scientific papers and apparatus, together with a sum of money to provide accommodation for them. A large part of his apparatus, in particular that used in his low temperature researches, has remained at Albemarle Street since his death, and in recent years has been displayed in the Institution's collection. The papers and objects now presented are additional material likely to be of great historic value to the Institution in relation to the period of Dewar's professorship. Lady Dewar's other bequests include £4,000 to the Royal Society's Mond Laboratory at Cambridge and £3,000 to the Royal Academy of Music. The residue of the estate is left for the furtherance of research in chemistry and physics at one of the Universities of Edinburgh, St. Andrews, Glasgow or Aberdeen, or for the assistance of bacteriological research in connexion with the Royal Infirmary of Edinburgh and the Glasgow Royal Infirmary.

Archæological Discovery in Honduras

AN important discovery in the ruins of Copan, the ancient city of the Maya in Honduras, is reported in *The Times* of February 21. An expedition of the Carnegie Institution of Washington, now working at Copan under Dr. Gustav Stronsvik, in exposing a large stone staircase, has found an extensive system of canals and sewers connecting a massive series of buildings, which is now underground. The buildings thus revealed include amphitheatres in which are monoliths and large statues in stone. A statue of a warrior is described as of gigantic size. Other

discoveries are cruciform rooms, of which the floors are covered with red paint; and among the artefacts are a number of bead-collars. Of even greater importance for the archaeologist is a pair of solid gold boots, nearly two inches high, of exquisite workmanship. With two doubtful exceptions, objects of worked gold have not been found hitherto in that period of the Maya civilisation to which the ruins of Copan are assigned. Unless further and more intensive study should point to a foreign origin, these boots of gold must be accepted as evidence that the Maya added no little skill in this technique to their artistic accomplishment, and that a neglect of gold-working, which has always seemed somewhat surprising, has been attributed to them in error. Further details of the stone statues and monoliths will be awaited by archaeologists with the greatest interest, as owing to the conditions of discovery, they should throw further light on the development of the Maya art of stone carving, for which the site of Copan is already remarkable among Maya remains.

COPAN, situated in the modern State of Honduras, lies in what was the southern area of Maya occupation, and was the fourth city to be founded after they had entered the country. It belongs to the 'Old Empire' or early Maya period and was occupied in at least the period from 195 A.D. until 540 A.D. This minimum period is derived from Mayan dates carved on stelæ found on the site, which are correlated with the Christian era according to a generally accepted interpretation. Copan is one of the most extensive and important of Maya sites. Its ruins consist of a vast complex of buildings which were reconstructed time and again in the course of occupation. Structural remains cover nearly the whole of the Copan valley. Recently, however, the site has suffered much from the effects of earthquake, and the river has begun to encroach on important parts of the ruins. In the circumstances, the Mexican Government has asked for the assistance of the Carnegie Institution's Expedition, which has had its headquarters at Chichen Itzá in Yucatan for some years and has had much experience in the restoration and preservation of Maya structures. Of this co-operation the present discovery is an outcome. Dr. Stronsvik reports, according to a communication issued by Science Service, Washington, that a part of the bank has collapsed into the river, and a beautifully carved chamber excavated fifty years ago by the late A. P. Maudslay, the well-known British archaeologist, has fallen in. The landslide has left a vertical section of the ruins about a hundred feet in height on the eastern side. Dr. Stronsvik is of the opinion that the Maudslay chamber can be reconstructed, but the material carried away by the river is irrecoverably lost. As a minor mitigation, however, the landslide has revealed an instructive cross-section of the city's development.

Pygmy Man in India

A REMARKABLE report has come from Bombay of the discovery of the fossilised remains of a pygmy man in Baroda State. According to the account

from the correspondent of *The Times* in the issue of February 21, the discovery was made at Vadnagar in the Mehsana district of Baroda. The remains were said to have been found in a prehistoric step-well, 150 ft. long, and were those of a man 15 inches high. With them was a cow 18 inches high; nearby was a stick 10 inches high. The correspondent of *The Times* went on to point out that the discovery might call for a new orientation of theories concerning the cradle of the human race and the origin of civilisation which would no longer be traced to Java, or the valley of the Nile or the Indus, but rather to the valley of the Narmada. He also referred to Homer's story of the battle of the dwarfs and cranes and the report of Ctesias in the fifth century B.C. of the existence of a dwarf race in the heart of India. Even if the report were taken seriously—it has been stated to be a hoax—the discovery of a single specimen of so remarkably an aberrant character would be scant foundation "to prove the existence of an extinct race of pygmies more diminutive than that in Africa". Most ethnologists postulate a negro strain in the Indian peoples which may have been derived from a diminutive race, not of some unknown extinct form, but analogous to one of the pygmy peoples, which extend, with intermissions, from West Africa to New Guinea; but these peoples are a highly specialised rather than a primitive type and their stature does not, as a rule, fall much below four feet six inches. Ethnological theory, for the moment, remains unshaken.

High-Altitude and Long-Distance Flights

THE Air Ministry has recently authorised the construction of two new experimental aeroplanes, one for high-altitude and the other for long-distance flights. The high-altitude machine will presumably be used for exploring the question of flight in the stratosphere, which is usually taken to mean that region in space above a height of 28,000 feet. There are plenty of aircraft in existence capable of reaching heights greater than this; the present record is 47,356 ft. held by the Italian pilot Donati, but no attempt has yet been made to deal with the possibilities of economical flight at such heights. The ultimate possibilities in this respect are much greater speeds owing to the reduced resistance of the rarified air. It will be necessary to carry superchargers to supply the required oxygen for the combustion of the engine fuel, appliances for breathing and heating, air-tight cabins or special suits for the occupants, and propellers the pitch of which can be changed to suit the different air conditions. These extras will have weight, which will reduce the fuel-carrying capacity of the machine, and it is not impossible that this requirement alone will limit the practical utility of stratosphere flying.

THE time taken to climb to such heights will be considerable, which will possibly make the proposition not worth while except for long flights, where again lack of fuel capacity will place a limit on it. Such flights are not likely to have any immediate application to air transport, but their importance in the experimental sense is obvious. The long-range