

Hudson River to her pier in New York Harbour on the completion of her voyage on Monday, June 1. The thrilling scenes which accompanied the superb reception given by the hundreds of thousands of spectators were described by commentators at various vantage points, such as the quay front, a tug accompanying the giant liner, an aeroplane flying overhead and a special announcer located seventy stories up on the Radio City building. Since much of this programme had to be relayed over two or more radio links with the intermediate land-line connexions, the high average standard of the broadcasts illustrates the tremendous possibilities which result from the modern technique and organisation of this branch of communications engineering.

Anniversary of Marconi's First Patent

FORTY years ago on June 2, Marconi filed the application for his first patent for a wireless invention. That patent—No. 12039 of 1896—described the use of Marconi's sensitive tube receiver, or coherer, connected to an earth and elevated aerial and the tuning of the transmitting and receiving circuits with each other. Since that time nearly 800 patents have either been granted to Marconi and the Marconi companies, or are pending, for the inventions and developments in wireless telegraphy and telephony and broadcasting. The first British ship was equipped with Marconi apparatus in 1901. To-day, more than 3,000 British ships carry Marconi wireless installations, and thousands of people owe their lives to its use. Wireless messages were exchanged between England and Canada in 1902, and a public service was opened in 1907. For direct transmission by the long-wave system the estimated power to the aerial amounted to something like 1,000 kilowatts, the stations were to cost more than £1,000,000 each, the wave-lengths were to be of the order of 18 miles, and the aeriels were to be carried on towers about 800 feet high. These figures now seem fantastic. As the result of a series of tests between the experimental station at Poldhu and Marconi's yacht *Elettra*, in 1923 and 1924, the short-wave beam system was evolved which enabled the Marconi Company to make an offer to the Post Office to establish communication with the Dominions using a fiftieth of the power, involving a twentieth of the cost, and providing a speed of working at least three times as great as that which was possible with the earlier long-wave system of communication. Experiments in telephony by wireless were first carried out by the Marconi Company in 1906, and it is claimed that there are now 180 Marconi broadcasting stations in use in 32 countries. It is estimated that the wireless industry employs 50,000 workpeople in Great Britain, and that the British radio industry alone has a turnover of £30,000,000 per annum.

Zoo: A New Periodical

THE Zoological Society of London has begun a venture which rounds off its benefactions to the nation. For well over a century its collections have amused and instructed the general public, it has

spent vast sums upon the publication of scientific papers for the learned, and now in a popular monthly magazine it proposes to bring the interest of the zoo to those who cannot visit the enclosures, and generally to diffuse a knowledge of animals and their ways. Britain has lagged far behind the United States in the production of high-class popular magazines of science: we know nothing that can compare with *Natural History*, the journal of the American Museum of Natural History. But *Zoo*, in the quality of its text and in the interest and character of its illustrations, comes near to the American standard, and from the popular view it has gone one better, in leaving the stricter path of knowledge and introducing lighter stories of wild life. Many of the articles in the first number are by well-known scientific workers, and it is a pleasure to see that they possess the art of driving the pen so that the plain man can read.

Cultivation of Cherries and Soft Fruits

THE healthy and expanding state of the fruit-growing industry in Great Britain is evident from the Royal Horticultural Society's report on the conference on cherries and soft fruits held in July last. This follows a similar report of the conference on apples and pears held in 1934. The chairman, Sir Daniel Hall, expressed the opinion in his opening address that no other branch of agriculture has profited so much from the findings of research, and this close connexion between the industry and the various research institutions is fully borne out by the papers read at the conference. These are contributed equally by officers of the research stations and commercial fruit growers, and display a close co-ordination between the two points of view. The subjects dealt with embrace every aspect of the soft fruit industry, particular attention being devoted to cultural problems and the control of pests and diseases, whilst extensive data are presented concerning manurial treatment and the effects of certain mineral deficiencies. A symposium on strawberry cultivation indicates the widespread interest in this fruit and the anxiety of both growers and research workers to deal with the numerous pests which have depleted the crop in recent years. Much information is given regarding the characteristics of varieties of cherries, raspberries and loganberries, and the qualities of fruit required for canning and bottling are also discussed. Copies of the report, price 6s., may be had from the Royal Horticultural Society, Vincent Square, S.W.1.

Greenkeeping Research

EVERY question connected with turf production and maintenance comes under review at the St. Ives Research Station, Bingley, Yorks, and a perusal of the Report for 1935 published by the Board of Greenkeeping Research shows how rapidly both the experimental and advisory work have developed since the Station was founded in 1929. The bulk of the money required to finance the work is subscribed by British golf clubs through the national unions. Free postal

advice is supplied to subscribers on any green-keeping matter, and advisory visits are carried out at standard terms, the large number of requests for advice showing that the work of the Research Station is already widely appreciated. At the same time, it is inevitable that non-subscribing golf clubs are also reaping the benefits of the experience gained at the Station, and the Board urges all unions to consider whether the time has not come when every affiliated club should be required to make an annual minimum contribution to this work for the common good, at a fixed rate according to membership and size or number of their courses. A danger exists that if the present system of purely voluntary subscriptions is maintained, clubs which have supported the work liberally in the past may be unwilling to continue their subscriptions at the same rate, while other clubs obtain similar benefit for a smaller contribution or even contribute nothing at all.

Oxford University Junior Scientific Club

THE triennial conversazione and exhibition meeting of the Oxford University Junior Scientific Club was held in the University Museum, Oxford, on May 23. An introductory lecture was given by Sir Edward Poulton, formerly Hope professor of zoology and one of the founders of the Club fifty-three years ago. A lecture, illustrated by a number of X-ray films, was given during the evening on "Cineradiology" by Dr. J. Russell Reynolds. A large number of exhibits of scientific interest were demonstrated by undergraduate members of the Club, and much research apparatus was on view. The exhibition was planned to provide both a summary of the progress of fundamental scientific research and a conspectus of the applications of research to modern life. The latter purpose was furthered by the generous assistance of many industrial undertakings, and of the Public Relations Department of the Post Office.

Award of the Albert Medal to Lord Derby

THE Council of the Royal Society of Arts, with the approval of the president, H.R.H. The Duke of Connaught, has awarded the Albert Medal for 1936 to the Earl of Derby, "for the advancement of Commerce and Arts especially in Lancashire". The Albert Medal, instituted in 1863 as a memorial of H.R.H. the Prince Consort, who for eighteen years was president of the Royal Society of Arts, is awarded for "distinguished merit in promoting Arts, Manufactures and Commerce". The list of past recipients includes the names of many persons of the highest distinction, both in Great Britain and abroad; of the seventy-five awards which have been made, no less than forty-one have been to ordinary fellows and nine to foreign members of the Royal Society. Last year's Albert Medal was awarded to Sir Robert Hadfield.

Linnean Society of London

At the anniversary meeting of the Linnean Society of London held on May 28, the president, Dr. W. T. Calman, delivered his presidential address entitled

"The Origin of Insects". The Linnean Gold Medal was presented to Prof. J. Stanley Gardiner. In making the presentation, the president referred to Prof. Gardiner's researches on the biology of corals, and the origin and development of coral reefs and islands, and also to his services to zoological exploration by means of the many important expeditions which owed their existence to his organising ability, and their success to his enthusiasm and leadership. The following were elected officers for the year 1936-37: *President*, Dr. W. T. Calman; *Treasurer*, Mr. Francis Druce; *Secretaries*, Mr. John Ramsbottom (botany) and Dr. Stanley Kemp (zoology). The new members of the Council were Captain Cyril Diver, Mr. M. A. C. Hinton, Prof. R. C. McLean, Mr. Charles Oldham and Dr. Fred Stoker. The president announced that he had appointed the following vice-presidents: Mr. Francis Druce, Dr. John Hutchinson, Dr. Margery Knight and Lieut.-Colonel R. B. Seymour Sewell.

International Congress of Genetics

THE Seventh International Congress of Genetics will be held in Moscow in the second half of August 1937. Preparations for the Congress have been begun by the Organisation Committee, under the presidency of A. I. Muralov, president of the Lenin Academy of Agricultural Sciences; other members of the Committee are N. I. Vavilov and V. L. Komarov (vice-presidents), S. G. Levit (general secretary), and N. P. Gorbunov, G. D. Karpechenko, B. A. Keller, N. K. Koltzoff, T. D. Lysenko, G. K. Meister, H. J. Muller, M. S. Navashin and A. S. Serebrovsky. All those working in the field of genetics are invited to present contributions. The titles and abstracts should reach the Organisation Committee before February 15, 1937. Detailed information concerning the programme, membership, exhibits, accommodation and transport are being prepared. Excursions to various parts of the U.S.S.R. will form part of the programme. Suggestions and applications for information should be sent to the General Secretary, Organisation Committee, Seventh International Congress of Genetics, B. Kaluzhskaya, 75, Moscow, U.S.S.R.

Working-Class Family Budgets

IT was announced in the House of Commons on May 28 that the following committee has been appointed to advise the Minister of Labour as to the methods to be adopted in the collection of information, by means of family budgets, showing the approximate average weekly expenditure of working-class families on the items which should be taken into account in the construction of index numbers, designed to measure the percentage changes, from month to month, in the cost of maintaining a present-day standard of living: Mr. F. W. Leggett, Ministry of Labour (chairman); Mr. J. N. Beckett, Ministry of Health; Mr. F. J. Blakemore, past president of the National Chamber of Trade; Prof. A. L. Bowley, professor of statistics, University of London; Mr. H. Crow, Scottish Office; Mrs. W. Y. Darling; Mrs.