

art-mæcenas Herr Jacobsen invited the Congress to his place at the Carlsberg Brewery. In the 'theatre' the lectures of Stadler and Preiss were delivered, a sumptuous Danish supper was served in one of the rooms of the Art Gallery, and the promenade through the extensive gardens, in the light of the full moon and lit up by numerous lanterns and torches, will long remain in the memories of those present.

Another feature of great scientific interest was the visit to the collections in Herr Schiøler's hospitable house. These collections, more or less limited to the Danish possessions, including Greenland and Iceland, are a masterpiece of completeness. All birds are represented by some beautifully mounted specimens and numerous skins, as well as very large series of skeletons, and anatomical preparations. The collection is in every way as it should be, though such completeness can at present only be reached in birds from a limited area, and is the work of a lifetime. A morning was spent in the Zoological Museum of the University, where lectures and discussions took place.

Invitations for the seventh International Ornithological Congress had come from Tunis, Finland, and Holland. A small number of the members of the International Committee voted for Tunis, others for Finland, but an overwhelming majority for Holland. The general meeting of the Congress adopted, therefore, Holland, where the next Congress is to take place in 1930, in the large and comfortable new Colonial Institute in Amsterdam.

The Lister Institute of Preventive Medicine.

THE annual report which was presented by the governing body of the Lister Institute to the meeting of members held on June 9 records another year of satisfactory progress. There has been only one substantial change in staff: Dr. A. T. MacConkey, who has been in charge of the serum laboratories at Elstree for twenty years, has retired, and is succeeded by Dr. G. F. Petrie. Dr. Muriel Robertson, after several years of absence through ill-health, has returned to work and will restore the protozoological laboratory to a working department. The activities of the staff are augmented by workers maintained by the Medical Research Council, the Foot-and-Mouth Disease Research Committee, the Rockefeller Foundation, the British Empire Cancer Campaign, and others who find in the Institute the facilities and atmosphere which they need.

Under Prof. Ledingham, the bacteriological department has pursued a variety of researches. Particular notice should be made of the inquiries into the invisible viruses of smallpox, vaccinia, and foot-and-mouth disease, and of those, due chiefly to Dr. J. A. Arkwright and Mr. Bruce White, into the variation and biochemical structure of the food-poisoning and other bacteria—questions which have an important bearing on the conception and differentiation of 'species.' The systematic classification, nomenclature, and identification of bacteria, upon which all good physiological and pathological work with them ultimately depends, are cared for by the National Collection of Type Cultures, maintained at the Institute by the Medical Research Council.

The biochemical department in charge of Prof. Harden, who has also acted as director of the Institute during Prof. C. J. Martin's absence on sick leave, has been continuing its work on hexosephosphates and alcoholic fermentation and on the concentration and possible isolation of vitamins; Dr. Zilva is supervising the preparation of large supplies of concentrated lemon juice for the Antarctic whaling expedition.

Dr. Robison is following up his important discoveries of the phosphoric esters in blood and tissues and their hydrolysis by specific enzymes.

The department of experimental pathology is energised by the director and Dr. Chick, and in various directions they have extended the investigations of accessory food factors for which the laboratory is now so well known. Refinements of knowledge have led to technical difficulties, and the distinction which must now be made between vitamin A (which promotes growth) and the antirachitic vitamin D has made a good deal of previous work unsatisfactory and new experiments more and more complex. Dr. Boas has made the significant discovery that dehydration, however it is carried out, makes egg-white quite unsuitable as a sole source of protein, and indeed seems to confer on it almost poisonous properties. Long and laborious observations on the nutritional qualities of cows' milk show that diet is the important factor in determining its content in vitamin A, while the amount of sunlight the animal gets is the chief thing which influences the antirachitic value of its milk.

The finances of the Institute are superficially in good order, the past year's work leaving a balance of 14,000*l.* But the position is actually far from what it should be, for of a total income of 51,000*l.* no less than 36,000*l.* was derived from diagnosis fees and the sale of sera and vaccines. The demand for these products naturally varies with the vagaries of epidemics in different parts of the world, and the precarious nature of the income so obtained must hamper the governing body in extending the activities of the Institute along lines which involve long or permanent commitments. A reduplication of Lord Iveagh's splendid benefaction is much needed.

University and Educational Intelligence.

LONDON.—The following doctorates have been conferred:—*D.Sc. (Applied Statistics)* on Mr. G. M. Morant (University College) for a thesis entitled "A Study of Egyptian Craniology from Prehistoric to Roman Times"; *D.Sc. (Biochemistry)* on Mr. J. H. Quastel (Imperial College—Royal College of Science) for a thesis entitled (1) "The Relationship of the Chemistry of Resting Bacteria towards Bacterial Growth," and (2) "A Theory of the Mechanism of Oxidations and Reductions *in vivo*"; *D.Sc. (Zoology)* on Mr. F. W. R. Brambell (University College) for a thesis entitled "Oogenesis of the Fowl (*Gallus bankira*)"; *D.Sc. (Engineering)* on Mr. E. Mallett (Imperial College—City and Guilds College) for a thesis entitled "Forced Oscillations, Electrical and Mechanical"; *D.Sc. (Geology)* on Mr. F. Raw for a thesis entitled "The Development of *Leptoplastus Salteri* and other Trilobites"; *D.Sc. (Physics)* on Dr. R. L. Smith-Rose for a thesis entitled "Some Recent Research in Wireless Direction Finding," and other papers; *D.Sc. (Zoology)* on Miss N. B. Eales for a thesis entitled "The Anatomy of the head of a Foetal African Elephant," and other papers.

THE League of Nations' International Committee on Intellectual Co-operation held its eighth plenary session at Geneva on July 26–29 under the presidency of Prof. Lorentz. The British Empire was represented by Prof. Gilbert Murray and Sir J. C. Bose. Among the subjects discussed were: the means for securing profits for scientific workers in connexion with the industrial application of their discoveries, the organisation of an international system of scholarships for the promotion of science, the foundation of an international university for the training of