

antitoxins, and the results of other workers had been tested; as a result a higher average of antitoxic value had been reached. Several races of streptococcus pyogenes had been used in immunizing horses with the view of obtaining a polyvalent serum. Researches dealing with problems of immunity were in progress, and papers had been published in the diphtheria bacillus and a new pathogenic streptothrix.

THE BRITISH NATIONAL PHYSICAL LABORATORY.

A DEPUTATION of prominent English men of science waited on the financial Secretary of the Treasury, Mr. Hanbury, M. P., on June 5th with the object of securing a site in the Old Deer Park, Richmond, for the new National Physical Laboratory. Another deputation had an interview with Mr. Hanbury a few days before to protest against the proposed buildings as an interference with the amenities of Kew Gardens, and it was to meet their objections that the present deputation waited upon Mr. Hanbury. Amongst those present were Lord Lister, Lord Rayleigh, Lord Kelvin, Sir Courtney Boyle, Sir John Wolfe Barry, Sir M. Foster, M. P., Sir E. Carbutt, Sir N. Barnaby, Sir Andrew Noble, and Professors Rücker, Clifton, Schuster, Fitzgerald and Elliott.

According to the report in the London *Times* Lord Lister said the Royal Society was deeply interested in the question of the new National Physical Laboratory, and they were supported by all the scientific bodies in the kingdom.

Lord Rayleigh, as Chairman of the National Physical Laboratory, said they recommended "That the institution should be established by extending the Kew Observatory in the Old Deer Park, Richmond, and that the scheme should include the improvement of the existing buildings at some distance from the present observatory." They had already the Kew Observatory, which had been doing very valuable work cognate to that proposed to be undertaken by the new institution, and that alone suggested the Deer Park as a natural site. Besides, there were very few sites that were likely to be at all suitable, because the character of the work to be carried out was of the

kind to be removed from all kinds of mechanical and electrical disturbances. Electrical disturbance was a new feature, but one that might be made from tramways anywhere. On that ground no private site could meet the case, because there was no security from buildings of other kinds creating mechanical and electrical disturbances.

This consideration greatly limited their choice of sites for this laboratory. That principle was recognized by the Greenwich Observatory being placed in the middle of a park; the German institution at Potsdam was in a park; and the International Bureau of Weights and Measures stood in the park of Sèvres. In a public park they had some guarantee that the buildings would be free from electrical and other disturbances. Some comment had been made on the provisional arrangement with the woods and forests as to the 15 acres required. One of the reasons for that large area being taken was that they wanted one of their buildings to be at a considerable distance from the other. It had never been proposed to cover the whole 15 acres with buildings. The actual area proposed to be covered with buildings was only a quarter of an acre, or the 60th part of the whole area proposed to be taken.

Sir John Wolfe-Barry said that he was placed on the committee which recommended this site for the laboratory as the representative of applied science, numbering 9000 members, and the general opinion was that it was extremely important to establish this physical laboratory from the point of view of the trade of this country and the huge commercial interests at stake. The committee gave the greatest possible attention to the question of site, and they came to the conclusion that Kew was very suitable. The one thing they had in view was quiet, and Kew possessed advantages which could not be given at any other place within a reasonable distance of London. It was easily accessible and it was quiet. They wanted a good space because they did not want the public to approach too near.

Mr. Hanbury, in reply, said: I hope the deputation are under no misapprehension whatever as to our strong desire that this scheme for a physical laboratory should be carried out.

The money has been promised, and we are anxious to find a site. As to the absolute importance to the country of having a laboratory of that kind there is no doubt whatever. That is not the question raised by the Treasury or by any deputation. The real difficulty has been how far this undertaking would interfere with the amenities of Kew Gardens. We want, so far as we can, to satisfy both the scientists and lovers of nature. Undoubtedly there has been some alarm among a certain portion of the public; especially those interested in Kew Gardens and open spaces, that this might to a certain extent interfere with the amenities of Kew. I am bound to say that the impression gathered from you to-day is that to a great extent that alarm is unnecessary. Of course the deputation represented to me the other day the danger of the quiet being disturbed by the noise of the operations in the two proposed buildings, and from what Lord Kelvin and others have said to-day I am satisfied that on that point, at any rate, there need not be any alarm. The most important point that has come out to-day is as to whether after all on this site you are yourselves secure against electrical disturbance. I need not express any opinion upon that. We ought to wait for the report of the Board of Trade committee to see how far that will meet your requirements. I understand that if there is any extension of the buildings required it will be only to a little extent, and the public need not fear that you will build over the whole of these 15 acres.

PROTECTION AND IMPORTATION OF BIRDS.

DURING the last session of Congress a law was enacted, commonly known as the Lacey Act, which places the preservation, distribution, introduction, and restoration of game and other birds under the Department of Agriculture; regulates the importation of foreign birds and animals, prohibiting absolutely the introduction of certain injurious species; and prohibits interstate traffic in birds or game killed in violation of State laws.

The Secretary of Agriculture has placed the Division of Biological Survey of his Department in charge of all matters relating to the preser-

vation and importation of animals or birds under the Act, and Dr. T. S. Palmer, the Assistant Chief of that Division, has immediate charge of the issue of permits for the importation of animals and birds from foreign countries.

The regulations for carrying out the purposes of the Act have just been published by the U. S. Department of Agriculture as Biological Survey Circular No. 29, entitled 'Protection and Importation of Birds under Act of Congress approved May 25, 1900.'

The circular explains the object of placing the work in charge of an Executive Department of the Federal Government as being merely to supplement and not to hamper or replace the work hitherto done by State commissions and organizations; in other words, to co-ordinate and direct individual efforts, and thus insure more uniform and more satisfactory results than could otherwise be obtained.

Attention is called to the fact that while the Act provides for the purchase and distribution of birds, no appropriation is made for that purpose. The Department, therefore, has no quail, pheasants, or other game birds for distribution.

The Department issues no permits for shipping birds *from one State to another*. In some States the Board of Fish and Game Commissioners is authorized to issue permits for shipping birds for propagating purposes, and a few States make exceptions in their game laws in the case of birds captured for breeding purposes; but when a State forbids the exportation of birds without exception, interstate commerce in birds from that State is in violation of the Lacey Act, whether the birds are captured during open seasons or whether they are intended for propagation or not.

Persons contemplating the importation of live animals or birds from abroad must obtain a special permit from the Secretary of Agriculture, and importers are advised to make application for permits in advance, in order to avoid annoyance and delay when shipments reach the custom house. The law applies to single mammals, birds or reptiles, kept in cages as pets, as well as to large consignments intended for propagation in captivity or otherwise.

Permits are *not* required for domesticated