author and by Alvin Seale. More than 300 species of Pacific marine fishes have been cast and colored from life by J. W. Thompson and described by Bryan and Seale. Of land snails in the islands there appears to be an endless variety, certainly more than 400 forms, and the Museum has them by the hundred thousand. These have been arranged and many new forms described by C. M. Cooke. The collection of marine shells have all been determined by W. H. Dall.

Clearly this is a good beginning toward the gathering of data looking to the solution of the problems of the Pacific Ocean.

CHARLES SCHUCHERT

SCIENTIFIC EVENTS

COTTON RESEARCH IN LANCASHIRE

THE British Cotton-growing Research Association has issued a report covering the first nine months of its work. According to an abstract in the London *Times* actual research work has as yet scarcely begun. Dr. A. W. Crossley, the director of research, was not free to leave the University of London until Easter. The council and director agree that the association's researches will achieve success in proportion to the extent to which they are organized on a cooperative basis, the workers in the several sciences directing their efforts towards the solution of a common problem. In order that the various departments should all be working at one center, a property, known as The Towers, has been acquired at East Didsbury, a Manchester suburb, and the council is about to issue a special building fund appeal for £250,000. The next step anticipated by the council is the appointment of heads of departments on the subjects of chemistry, physics, colloids, botany and technology. Dr. A. E. Oxley, of Cambridge and Sheffield Universities, has been appointed head of the physics department, and Dr. J. C. Withers, of the chemical department, St. Thomas's, London, has been appointed to direct the abstracting and indexing of scientific and technical information in the records bureau. It is stated that information is so scattered that it will be some time before a comprehensive idea can be given of the work accomplished in the past. The report adds that the chief aim will be to arrive at the principles or theory underlying the practise of the industry, leaving the application of the theory to those actively engaged in the industry. Applied research can not, however, be entirely omitted, especially in respect of such matters as may be considered beyond the resources of individual firms.

In cooperation with the Empire Cotton-growing Committee a joint committee has been appointed, with the immediate object of granting scholarships to graduate students, so as to secure a supply of trained men for the future. Three botanical research studentships have already been established. The total number of individual members of the association is 1,408. The income for the year, including £6,750 government grant, amounts to £17,150.

THE BRITISH SCIENCE GUILD

Nature reports the annual meeting of the British Science Guild held in London on June 8. Lord Sydenham, the president, in his address on "Science and the nation," discussed industrial problems, due partly to an abnormal state of mind arising from the war, but originally fostered by the industrial changes of the last century, namely, the general use of machinery, rendering labor monotonous and leaving less room for the individual skill of the craftsman, and the formation of large companies, whereby the personal touch between master and man was lost. In the latter portion of his address Lord Sydenham emphasized the importance of a more general knowledge of science, especially amongst members of the government and the Civil Service, and alluded to the efforts made by the Guild in the dissemination of scientific knowledge and methods. He concluded by quoting Goethe's saying that "there is no more dreadful sight than ignorance in action."

The president-elect, Lord Montagu, of Beaulieu, then delivered an address on "Some national aspects of transport," and afterwards occupied the chair. Lord Montagu remarked upon the growing difficulties of railways, which, although subsidized by the state, were

working with a diminishing margin of profit owing to the vast increase in cost of materials and in wages. In view of the national importance of these problems, the creation of a chair of transport at one of the leading universities would be a deserving object for private beneficence. The two institutions of Civil Engineers and Mechanical Engineers should be more frequently consulted by the government in regard to road transport, and the National Physical Laboratory had done excellent work. The problem, however, was so vast as to demand continuous research at a special establishment.

The annual report of the executive committee, summarized by Lord Bledisloe, dealt with various aspects of the work of the Guild. The second British Scientific Products Exhibition, held in 1919, was honored by a visit from both King George and Queen Mary, accompanied by Prince Henry and Princess Mary, and demonstrated the growing appreciation by British manufacturers of the value of applied science. During the present year it is hoped to arrange a conference on science and labor in association with the Labor party. A representative committee is being set up to collect full data on the utilization of science, not only in the civil services, but also in all government departments, and the Parliamentary committee, which has already intervened with good effect in the Forestry Bill, will watch all prospective legislation involving scientific and technical issues. The education committee of the Guild is still pressing for a real survey of the existing provision of university and higher technical education in the country, considering that the new standing committee on university grants, acting under the Board of Education, is inadequate as regards composition and reference. The revised specifications of the technical optics committee in regard to microscopes have already been adopted by two British firms.

THE DIVISION OF CHEMISTRY AND CHEMICAL TECHNOLOGY OF THE NATIONAL RESEARCH COUNCIL

THE annual meeting of the Division of Chemistry and Chemical Technology, National Research Council, held in Washington, on May 7, is reported in the *Journal of Industrial and Engineering Chemistry*. There were present Messrs, Alsberg, Bancroft, Bleininger, Derick, Fink, Francis, Johnston, Lamb, Moore, Noyes, Stieglitz, Washburn; and by invitation Messrs. Angell, Christian, Cottrell, Kellogg, Mendenhall, Munroe, and Yerkes.

The following officers were elected for the ensuing year: Vice-Chairman, Julius Stieglitz; Members-at-Large, A. A. Noyes, E. W. Washburn. The members of the Executive Committee will be the chairman and vice-chairman, C. L. Alsberg, A. B. Lamb, John Johnston, and W. D. Bancroft, *ex-officio*, retiring chairman. The American Chemical Society nominated C. L. Alsberg, W. D. Bancroft, and C. G. Derick as members of the division, and the American Institute of Chemical Engineers nominated H. K. Moore.

In connection with the meeting of the International Chemical Union to be held in Rome, Dr. Charles L. Parsons was appointed delegate. The admission to the Union of Poland and Czecho-Slovakia was favored, the division expressing the unanimous opinion that any neutral nation, eligible from the point of view of its scientific activities, that might apply for admission should be admitted.

In presenting the report of the Committee on Synthetic Drugs, Julius Stieglitz, chairman, pointed out the valuable work done by this committee in furnishing information and advce to manufacturers. The report of the Committee on Explosives Investigations was presented by the chairman, Professor Charles E. Munroe. The Committee on the Thermal Properties of Explosive Materials was not continued, the work being transferred to the Committee on Explosives Investigations. This latter committee was requested to associate with itself W. P. White and others interested in the study of the thermal properties of explosives. In the absence of H. N. Holmes, chairman of the committee on colloids, the report of the committee was presented by W. D. Bancroft.

Upon the suggestion of C. G. Derick, a committee on methods of organic analysis was appointed. The need for cooperation between