searches of the geneticist, the nutrition specialist or the bacteriologist, respectively. She is, withal, a lass of many parts.

As poultrymen we respect the hen as being of all domestic animals the most efficient converter of raw materials into edible food stuffs. We respect her as one of the most profitable sources of farm revenue, the mainstay of many a farm home where crops have not yielded the promise of spring. As biologists, let us also respect her as one to whom science owes no inconsiderable debt of gratitude. It is fitting that we should draw on all the resources of science to keep her in a state of maximum efficiency, to prolong her useful life, to prevent the ills to which she is subject and to raise her progeny with a minimum of loss. By so doing we make some slight return for the contributions to knowledge which have resulted from "research with a hen."

SCIENTIFIC EVENTS

THE ALGERNON FIRTH PATHOLOGICAL INSTITUTE AT THE UNIVERSITY OF LEEDS

The British Medical Journal reports that the recently opened Algernon Firth Pathological Institute in Leeds will include the university departments of pathology, bacteriology and cancer research, thus coordinating investigation and teaching, as well as facilitating the application of new scientific discoveries to the social and industrial needs of the community. Including its equipment, the provision of the building has cost approximately £50,000. Half this sum was offered by Sir Algernon Firth, at the instigation of Lord Moynihan, on condition that in the new building there should be suitable accommodation for cancer research. Sir Algernon, who opened it, mentioned that he fully realized the continuing value to humanity of a research building under the control and care of so permanent an organization as the University of Leeds. Cancer research might diminish or even terminate with the attainment of success in its objective, but the need for persistence in other investigations to reduce the sum of human unhappiness would still remain. The pro-chancellor, Colonel C. H. Tetley, accepting the definition of the Firth Institute as the keystone of a structure which had been built up gradually, insisted that the achievement had only been rendered possible by the collaboration with the University of the City Council, the General Infirmary and other Leeds hospitals, and the Yorkshire Council for Cancer Research. He hoped that the one remaining unfinished part of the scheme, namely, the furnishing and equipping of the pathological museum, would be accomplished before long by yet another instance of cooperation. Professor Robert Muir, of Glasgow, summing up the outlook of the institute, said that, since it was impossible to vest in one person both clinical knowledge and the faculty of applying scientific methods, the information resulting from these two lines of observation should be fused so far as was possible. The institute would make it one of its obligations to promote the close cooperation of physicians and surgeons with laboratory investigators, involving an interchange of ideas, and would combine routine hospital pathological inquiries, teaching and research. The number of problems capable of being attacked by independent workers was rapidly diminishing. The many problems that remained demanded a combined effort on the part of workers possessing very different scientific qualifications. Cooperation and organization, Professor Muir added, were becoming more and more essential, and there was no disease which could not be more clearly elucidated thus. The determination of the presence of cancer in its earliest stage in any part of the body was a goal which was being keenly approached by workers starting from various points and applying different branches of scientific research. Vast benefits would accrue to the whole community when these coordinated, though very diverse, activities attained their joint objective.

JUNIOR SCIENCE CLUBS OF THE AMERICAN INSTITUTE

THE American Institute's Junior Science Clubs held three meetings on Saturday morning, November 4, for its seven thousand members, all of whom are under eighteen years of age. The meetings, centering about the general themes of biology, physical science and general science, attempted to make some real contribution to the individual interests of each of the two hundred member clubs.

These three meetings, on different science subjects, are a part of a plan to assist the "young scientists" of the city. The speakers, all of whom are well known in their different fields, agreed to devote the morning to the presentation of phases of science which the junior clubs could, themselves, begin work in. The talks were planned to lift science above the routine of the classroom and to demonstrate to the children its place in their own lives. The chairmen of the divisions, with the speakers and their subjects, follow:

At the College of the City of New York: Junior Science, *chairman*, Mr. Alfred Knight, vice-president of the American Institute, fellow of the Royal Astronomical Society. Speakers: Dr. Raymond L. Ditmars, curator

of reptiles and mammals, New York Zoological Park, "Strange Animal Friends." Dr. Ditmars illustrated his talk with three reels of motion pictures, taken by himself, and told of his recent trip to the American tropics in search of vampire bats. Mr. Merwin M. Peake, founder of the Junior Air Squadron of Elizabeth, New Jersey, "Junior Aeronautics for Science Clubs." Illustrated with actual airplane models and with motion pictures and slides. Several boys from his own "Air Squadron" were given ground tests before the audience.

At the New York Botanical Garden: Senior Biology, *chairman,* Dr. William Crocker, director, Boyce Thompson Institute for Plant Research, Yonkers, New York. Speakers: Dr. E. D. Merrill, director, New York Botanical Garden, "The Origin of Our Cultivated Food Plants." Robert F. Light, biochemist, research staff, Fleischmann Laboratories, "Clinical and Experimental Phases of the Study of Vitamins." For this group the botanical gardens arranged special exhibits of food plants from all over the world.

At the College of the City of New York: Senior Physical Science, *chairman,* Dr. Morris Meister, of the Plan Committee for the Junior Science Clubs. Speakers: Dr. Lincoln T. Work, School of Engineering, Columbia University, "The Significance of Fine Particles in Chemical Engineering." Professor Parke B. Fraim, physics department, Polytechnic Institute of Brooklyn. Professor Fraim's talk was similar in character to his "Twenty Demonstrations in Twenty Minutes," a lecture given recently for teachers of science.

THE THIRD TECHNICAL AND CHEMICAL INTERNATIONAL CONGRESS OF AGRICULTURAL INDUSTRIES

THE United States has been invited by the Ministry of Agriculture of France to participate in the third Technical and Chemical International Congress of Agricultural Industries, which will be held in Paris, during the week of March 26, 1934. Upon the recommendation of the Secretary of Agriculture, Dr. Atherton Seidell was designated to represent the United States on the Committee of Organization of this congress which met in Paris on July 10 last. At that time the regulations and a tentative program of scientific activities were adopted. Twenty sections covering most branches of agricultural chemistry have since been organized and a number of questions proposed which will form the subjects of a series of symposia.

Dr. C. A. Browne, chief chemist of the Bureau of Chemistry and Soils, U. S. Department of Agriculture, has addressed the letter given below to scientific men who may wish to attend the congress.

The central organizing Committee of the Congress desires that as large a representation from America as possible be present and participate to the fullest extent in the activities of the congress. Due to the short time which remains it is not possible for the Paris Bureau of the Congress to send invitations direct to persons, institutions, societies, commercial organizations, etc., in the United States. We have, therefore, been requested to bring the subject to the attention of all who may be interested.

This letter should be considered as a personal invitation to you and other representatives of your group to take part in the congress and, if possible, submit communications which may be placed on the program of the meeting.

The date has been advanced to March 26 to 31, inclusive, to permit those who attend the Paris Congress to reach Madrid in time (April 5) for the Ninth International Congress of Pure and Applied Chemistry.

An invitation to attend the Madrid Congress has also been cordially extended by the Spanish organizing committee to all American chemists, and you will consequently be able to attend two important world congresses of chemistry within a period of three weeks. This is an exceptional occasion and American chemists should certainly make an effort to take advantage of it.

Upon request to this office copies of the regulations and general organization of these congresses as well as application forms for membership will be sent.

We trust that you will cooperate with us in bringing the matter to the attention of any one who may be interested and call upon us for any further information you may desire.

THE CINCINNATI AND BOSTON MEETINGS OF THE AMERICAN PHYSICAL SOCIETY

THE one hundred and eighty-seventh meeting of the American Physical Society will be held at the University of Cincinnati on Friday and Saturday, December 1 and 2.

This meeting will celebrate the opening of the new Physics Building at the University of Cincinnati. Special features of this meeting are the inspection of the Basic Science Laboratories and a joint meeting with the American Mathematical Society in a symposium on "Spinor Analysis." The addresses at this symposium will be made by Professor Otto Laporte, of the University of Michigan, and Professor Oswald Veblen, of the Institute for Advanced Study at Princeton.

On Friday evening at eight o'clock there will be a dinner for the members of the American Physical Society and their friends at the Netherland-Plaza Hotel. A luncheon for mathematicians and mathematical physicists will be held at 12:30 on Saturday at Mecklenburg's restaurant.

The preliminary arrangements for the Boston meeting, to be held on December 28, 29 and 30, include a joint session with the American Mathematical Society at the time of the Josiah Willard Gibbs Lecture, and a joint session with Section B of the American Association for the Advancement of Science and the Amer-