

These include the various kinds of angel-fishes, parrot-fishes, snappers, trunk-fishes, morays, barracudas, sea-horses, etc., and are most beautifully exhibited in the tanks of the aquarium. But much remains to be done in ascertaining what is available in the local fauna, and the director of the aquarium has already taken steps to carry out a preliminary biological survey of the region about Miami.

The aquarium is situated on the bay side of Miami Beach at the east end of the new causeway connecting the beach with the city of Miami. A line of electric cars crosses the causeway and makes the run in either direction in about twenty minutes. Hence a person working at the laboratory may reside either in Miami, the fourth largest city in Florida, or at Miami Beach, where sleeping apartments and bungalows may be had and where there are ample restaurant accommodations. Those who want particular information about the laboratory should apply to the director, Mr. L. L. Mowbray, Miami Aquarium, Miami Beach, Florida.

G. H. PARKER

HARVARD UNIVERSITY

#### THE TORONTO MEETING OF THE AMERICAN SOCIETY OF ZOOLOGISTS

THE executive committee of the American Society of Zoologists has decided to present at the meeting of the society at Toronto, Canada, December 28-30, 1921, a symposium program on the general subject of "Orthogenesis," broadly interpreted, the object being to bring into the discussion as many of the newer aspects from the varied fields of the natural and physical sciences as may be feasible. The speakers the committee have invited to address the society and the subjects of each speaker are as follows; several are still in the tentative stage, as indicated:

Professor L. J. Henderson, Harvard University, "Orthogenesis from the standpoint of the biochemist;" speaker to suggest an opener for the discussion. The speaker who has been invited is at present abroad.

Professor C. B. Lipman, University of California, "Orthogenesis in bacteria;" speaker to suggest an opener for the discussion.

Professor M. F. Guyer, University of Wisconsin, "Orthogenesis in serological reactions."

Professor Wm. Bateson, of England, discussion by Dr. O. C. Riddle, Cold Spring Harbor, Long Island, New York. Title not yet received.

Professor W. M. Wheeler, Harvard University, "Orthogenesis in ants;" discussion by Professor H. C. Crampton, Barnard College, New York City.

Professor H. F. Osborn, Columbia University, New York City, "Orthogenesis as observed from paleontological evidence beginning in the year 1889;" discussion by Dr. J. C. Merriam, Carnegie Institution.

CHARLES A. KOFOD,  
President

#### SCIENTIFIC NOTES AND NEWS

THE autumn meeting of the National Academy of Sciences will be held at the University of Chicago on November 14 and 15.

THE thirty-ninth stated meeting of the American Ornithologists' Union will convene in Philadelphia, at the Academy of Natural Sciences, from November 8 to 10.

THE Berzelius medal has been conferred on Professor E. Abderhalden, director of the physiological institute of the University of Halle, for his research on the defensive ferments and in other lines of biologic chemistry.

MR. A. CROMMELIN, assistant astronomer of the Royal Observatory at Greenwich, has been awarded the Pontecoulant Prize of the Paris Academy of Sciences in recognition of his general astronomical work.

PRESIDENT HARDING has appointed Dr. John Glover South, of Frankfort, former president of the Kentucky State Medical Association, as minister to Panama.

JAMES A. CRAWFORD left his position with the Buffalo Botanic Gardens on October 1 to accept an appointment as assistant curator at the New York Botanical Garden.

GEORGE M. ROMMEL, now chief of the division of animal husbandry of the Bureau of Animal Industry, United States Department of Agriculture, became editor-in-chief of the publications of the American International Publishers of New York, beginning on November 1. These include *The Field Illustrated*;

*System on the Farm; El Campo Internacional, and The Field Year Book.*

MR. ALFRED CHASTON CHAPMAN, F.R.S., president of the Institute of Chemistry of Great Britain and Ireland, has been appointed a member of the British Royal Commission on Awards to Inventors, in the room of Sir James Johnston Dobbie, D.Sc., F.R.S., resigned.

It is announced that the Colonial Office of Great Britain is organizing an expedition for research on the serotherapy of sleeping sickness in Africa. The research is to include both men and animals, and plans for a two years' stay. The expedition is in charge of Drs. Marshall and Bassolo of the Uganda Public Health Service, with two assistant physicians and two veterinarians.

THE University of Toronto through its department of biology is developing a plan for the systematic study of the inland waters of Ontario. The work will be chiefly economic in outlook and will be under the supervision of Professor B. A. Bensley. A field party in charge of Professor W. A. Clemens spent the past summer on Lake Nipigon.

DR. R. P. HIBBARD, associate professor of plant physiology at the Michigan Agricultural College and plant physiologist at the Michigan Agricultural Experiment Station, has been granted leave of absence for the current year in order to accept a Johnston scholarship in the Johns Hopkins University. He is engaged in research in the laboratory of plant physiology.

THE first meeting for the session 1921-1922 of the Chicago Institute of Medicine was held October 21, when the Pasteur lecture was delivered by Dr. Theobald Smith on "Theories of Susceptibility and Resistance in Relation to Methods of Artificial Immunity."

DR. RENÉ LEDOUX LEBARD, of Paris, addressed the historical section of the New York Academy of Medicine on October 13. The subject of his paper was "Color Print Illustration of Medical Books up to the Year 1800."

SIR HAROLD J. STILES, of Edinburgh, delivered the Wesley M. Carpenter Lecture be-

fore the New York Academy of Medicine on the evening of October 20. His subject was "Surgical Tuberculosis in Children and Its Relation to the Milk Problem." On October 14 he delivered a Mayo Foundation lecture, "The history of medicine in Edinburgh."

PROFESSOR CHARLES BASKERVILLE, of the College of the City of New York, lectured on "Science and Civilization; the Rôle of Chemistry," at the joint meeting of the Technical Societies and the Rhode Island Section of the American Chemical Society, at Providence on October 18.

SIR W. J. POPE, president of the British Society of Chemical Industry, lectured before the Congress of Industrial Chemistry recently held in Paris on the future of organic chemistry, with special reference to the advantages which France and Britain might derive from their tropical possessions. Sir William Pope spoke at the annual dinner of the British Society of Chemical Industry when he referred to the recent visit of delegates of the society to Canada and the United States.

*Nature* states that Charles Darwin's birthplace, known as The Mount, Shrewsbury, situated in that part of the town known as Frankwell, has been purchased by H. M. Office of Works. The house was built about 1800, and at the time when Sir Francis Darwin wrote, in 1887, "The Life and Letters of Charles Darwin," it had undergone but little alteration. It was "a large, plain, square, red-brick house, of which the most attractive feature" was "the pretty greenhouse, opening out of the morning-room."

PROFESSOR ALEXANDER GRAY, director of the school of electrical engineering at Cornell University, died at his home in Ithaca on October 13.

THE death is announced of Dr. M. H. Fussell, professor of applied therapeutics in the University of Pennsylvania and a member of the committee on revision of the U. S. Pharmacopeial Convention.

THE death is announced of Emile Houzé, professor of anthropology at the University of Brussels and at the École d'Anthropologie of that city.

WE regret to record the death of Seymour C. Loomis, Esq., who while practicing law at New Haven long served the American Association for the Advancement of Science as secretary of the section of social and economic sciences.

THE 111th regular meeting of the American Physical Society will be held in Chicago, at the Ryerson Physical Laboratory, on Saturday, November 26. If the length of the program requires it, there will also be sessions on Friday, November 25. Other meetings for the current season are as follows: December 27-31, Toronto: annual meeting. February 25, New York. April 22, Washington.

A PUBLIC meeting under the auspices of the New York sections of the four national engineering societies on the subject of "the St. Lawrence Ship Canal and Power Project" will be held in New York City on November 14.

THE annual meeting of the American Philosophical Association will be held on December 28, 29, and 30, at Vassar College, Poughkeepsie, N. Y. The meeting will open with an informal smoker on Wednesday evening. On Thursday morning and afternoon and Friday morning the sessions will be devoted to the reading and discussion of papers. The annual dinner, followed by the address of the president, will be held on Thursday evening.

WE learn from *Nature* that the number of ordinary scientific meetings of the London Chemical Society to be held during the coming year has been increased with the object of affording greater facilities for papers to be read before the society. The first meeting was held at Burlington House on October 6. Following the custom of the last few years, the council has again arranged for the delivery during the session of three special lectures which, by the courtesy of the council of the Institution of Mechanical Engineers, will be held in the lecture-hall of that institution. The first, entitled "The genesis of ores," will be delivered by Professor J. W. Gregory on December 8.

On February 9, Sir Ernest Rutherford will lecture on "Artificial disintegration of elements"; while the last lecture, by Dr. H. H. Dale, entitled "Chemical and physiological properties," will be given on June 8.

THE *Journal* of the American Medical Association reports that an appropriation of \$16,000,000 for the construction of additional hospital facilities to provide medical, surgical and hospital services for former service men is contained in a bill introduced by Representative Langley of Kentucky, chairman of the House Committee on Public Buildings and Grounds. The money is supplementary to the \$18,500,000 appropriated at the last session of Congress, the total of which has already been disbursed with the exception of \$1,339,000. In the new Langley measure \$15,500,000 will be used for hospitals and extensions to present facilities to be distributed under the supervision of the Secretary of the Treasury. The other \$500,000 carried by the bill will be assigned to the purchase of additional land and for the erection of new buildings at the Mount Alto institution. Representative Langley presented his bill after extensive conferences with representatives of the Treasury Department and with officials of the American Legion.

THE prevalence of foot and mouth disease in some countries in Europe, in certain parts of Asia and Africa, as well as in South America, has caused the United States Department of Agriculture to institute special quarantines against the importation of live stock from these places. Any one who wishes to import cattle, sheep, goats, swine or other animals from any country, except Canada or Mexico, must first obtain from the Secretary of Agriculture a permit, to be presented to the American consul at the port from which the animals will be shipped. No permits are issued for shipment from countries where rinderpest, surra, foot and mouth disease, or contagious pleuro-pneumonia exist. Foot and mouth disease prevailed to a serious extent in England during the last two years, but recently has been abated to the extent that horses from both England and Ireland

are now allowed to enter the United States if certain restrictions regarding feeding and care are observed.

THE 158th meeting of the Washington Academy of Sciences was held at the Public Library, October 20. The meeting was devoted to a discussion of popular and readable books in science. After informal talks by Dr. G. F. Bowerman, librarian of the Public Library, and by several members of the committee appointed to select the list of "one hundred popular books in science," an opportunity was given to examine the books themselves and to discuss them informally. In addition to the selected list of 100, there was a second exhibit consisting of books suggested for the popular list, but not used, and the members of the committee were invited to criticize their choice and suggest substitutions or additions, in order that the best possible list might be prepared for distribution by the librarian. A third exhibit consists of readable manuals or information-books which workers in one branch of science can recommend to workers in other branches or to readers seeking general information on a given subject. Suggestions as to improvements and additions to this list were also invited.

THE department of botany of the State College of Washington has increased its herbarium by the acquisition of the recent collections of Mr. James R. Anderson, the veteran Canadian botanist of Victoria, B. C. His herbarium comprises 2,600 mounted sheets of the higher plants, coming from all over British Columbia. The majority of the specimens are from Vancouver Island, but there are also considerable numbers from the humid coastal strip of the mainland, others from the dry belt east of the Cascades, and others from the high Rockies.

THE Iowa Child-Welfare Research Station at the State University has organized a Laboratory in Child Psychology for experimental work with children from two to four years of age. A new four-room building has been constructed, and 24 children are now in attendance daily, in two sections from 9 to 12 o'clock. The laboratory is under the immediate direction of Dr. Bird T. Baldwin, research profes-

sor in psychology, and Dr. Lorle I. Stecher, research assistant professor, with graduate student assistants.

THE Polish National Museum of Natural History has been formed by a union of the Branicki Zoological Museum and the Zoological Museum of the University of Warsaw.

THE New York Zoological Park has made a presentation of a number of reptiles to replace those in the Jardin des Plantes, Paris, which had to be destroyed during the war. The gift includes two boa constrictors, six alligators, and sixteen turtles.

A PRIZE of £20,000 is being offered by the French Aeronautic Propaganda Committee to the constructor of a motor for commercial aviation which shall best satisfy the tests of a special competition, including durability, regularity and simplicity.

A SPECIAL faculty research committee has been organized at Oberlin College to cooperate with the "National Research Council." Dr. S. R. Williams, head of the department of physics, is chairman, while other members of the committee include members of the departments of mathematics, sociology, psychology, chemistry and geology.

DR. WM. CURTIS FARABEE, president of the American Anthropological Association, has returned to his work at the University of Pennsylvania. During the summer he attended the Centennial Celebration at Lima, Peru, as one of the special mission appointed by President Harding. The Lima Scientific Society held a special meeting in Dr. Farabee's honor and elected him a corresponding member. All members of the Mission were elected to the ancient order "El Sol de Peru." The commission, composed of the Honorable Albert Douglas, General Hunter Liggett, Admiral Hugh Rodman, Colonel Wm. Boyce Thompson, Honorable Wm. Heimke and Dr. Wm. Curtis Farabee, sailed from New York on three U. S. battleships, the *Arizona*, *Oklahoma* and *Nevada*, under command of Admiral John McDonald.

MR. GEORGE D. HUBBARD, professor of geology at Oberlin College, has returned from a

year of travel and study in the Hawaiian Islands, Japan, Korea and China. He spoke at the government colleges for teachers in Peking, and at other schools in China. The report of his work, which is the most detailed study made to date, of the valley of the Min river in the borderland of Thibet, some 300 miles beyond Cheng Tu, will be published by the government geological survey of China. Mr. Hubbard is also preparing papers on the copper mines near Cheng Tu worked by the Chinese, on the antimony mines at Kwang Tung, near Canton, on the physiographic history of the Yang Tse river, and on the geography of some of the Chinese rivers. The copper mines at Asieo, Japan, will be the subject of a paper. Mr. Hubbard is planning two books based on the year's study; a book on the development of the mineral resources of China, and a book on the geography of China for use in Chinese schools.

#### UNIVERSITY AND EDUCATIONAL NEWS

DEAN HENRY P. TALBOT, of the department of chemistry of the Massachusetts Institute of Technology, and Dr. William H. Nichols, of New York, made addresses at the dedication of the new Steele Chemistry Building at Dartmouth College, on October 29.

PROFESSOR ARTHUR M. GREENE, JR., head of the mechanical engineering department at Rensselaer Polytechnic Institute, at Troy, N. Y., has been appointed dean of the School of Engineering of Princeton University.

PROFESSOR A. V. MILLER, associate professor of drawing and descriptive geometry, has been appointed assistant dean of the college of engineering of the University of Wisconsin to take the place of Professor J. D. Phillips who is now acting business manager of the university.

At the Detroit College of Medicine and Surgery Dr. Donald Beaver, formerly of the pathologic department of the University of Minnesota has been appointed assistant professor of pathology, Dr. Paul Wooley, former professor of pathology in the University of Cincinnati, associate professor of pathology

and pathologist to the Herman Keiffer Hospital, Detroit.

DR. SERGIUS MORGULIS has been appointed professor of bio-chemistry and Dr. George A. Talbert assistant professor of physiology in the College of Medicine, University of Nebraska, Omaha.

DR. M. J. DORSEY, for ten years in charge of the section of fruit breeding of the department of horticulture of the University of Minnesota, has been elected head of the department of horticulture of the West Virginia University and the West Virginia Agricultural Experiment Station, to succeed Professor J. H. Gourley.

HENRY SCHMITZ AND C. EDWARD BEHRE, of the school of forestry, University of Idaho, have been advanced, respectively, to the rank of associate professors of forest products and of lumbering.

#### DISCUSSION AND CORRESPONDENCE AERIAL OBSERVATION OF PHYSIOGRAPHIC FEATURES

THE article on "Aerial observation of earthquake rifts" published by Professor Bailey Willis in *SCIENCE* for September 23, 1921, prompts me to add a word to his interesting discussion. During the war I had occasion to make a short aeroplane flight over the harbor of Valona for the purpose of studying the natural topographic defenses of that strategic key to the southern Adriatic Sea. The ascent was made in the late afternoon, when strong shadows brought out most distinctly the relief of the terrain. It was to me a matter of some surprise to find that physiographic features which were so poorly represented on the inadequate maps of the region as scarcely to betray their presence, or at least their true character, appeared with surprising distinctness when seen from the plane. In particular, certain abandoned shorelines, now left some distance inland by the prograding of the shore, and which I had failed to observe in brief excursions by automobile about the harbor, suddenly stood out with all the clearness of a diagram. The es-