principal experimental procedure. These investigations have been found to be so numerous that there is "scarcely a phase of organic chemistry in which one can read far without encountering Willstaetter's name."

Dr. Willstaetter's work with the cocaine alkaloids made possible the commercial synthesis of local anesthetics. His studies in chlorophyll paved the way for the triumphs of Professor Hans Fischer, at Munich, and Professor James Bryant Conant, at Harvard, in this field.

Dr. Willstaetter's experiments with the carotinoids have made possible the separation of the individual components of this group and their relation to Vitamin A, while his researches in the enzymes "lifted the veil that obscured the complex processes of protein hydrolysis."

## SCIENTIFIC NOTES AND NEWS

According to press dispatches, Dr. Albert Einstein has accepted "with the greatest pleasure and gratitude" a professorship in the University of Paris. It is said that the professorship is at the Sorbonne, but it is also reported that the French government has proposed to establish a chair of mathematical physics for him in the Collège de France. It is understood that this new appointment will not interfere with Dr. Einstein's professorship in the University of Madrid or with appointments that he has accepted in Brussels and Glasgow. Dr. Einstein will return to the United States in the autumn to occupy for part of the year the chair of mathematical physics in the Institute for Advanced Study at Princeton.

The Trustees of Princeton University announce the retirement of Dr. Edwin Grant Conklin, professor of zoology; of Dr. Charles F. W. McClure, professor of comparative anatomy, and of W. B. Harris, professor of geodesy. They will continue their connection with the university as lecturers. The resignation of Professor Augustus Trowbridge, dean of the graduate school, on account of ill health, is also announced. Professor Edmund Newton Harvey, professor of physiology, has been assigned to succeed Dr. Conklin in the Henry Fairfield Osborn professorship of biology, and Professor Wilbur Willis Swingle has been appointed to the Edwin Grant Conklin professorship of biology.

Dr. Mortimer E. Cooley, dean emeritus of the College of Engineering and Architecture of the University of Michigan, celebrated his seventy-eighth birthday on March 28. During the day Dr. Cooley received his colleagues and friends in his room at the Engineering Building.

Dr. Frank A. Hartman, professor of physiology at the University of Buffalo, has been awarded the Schoellkopf Medal for 1933, for his work on cortin. This medal is bestowed annually by the western New York section of the American Chemical Society for outstanding achievement in science.

THE Joseph A. Capps Prize for 1932 of the Institute of Medicine of Chicago has been awarded to Eugene L. Walsh, Northwestern University Medical School, 1931, for his "Studies on the Etiology of

Gallstones." Dr. Walsh holds the George W. Belcher fellowship in urology at the Cleveland Clinic Foundation. Honorable mention was given to Edward E. P. Seidmon, University of Illinois College of Medicine, 1932, for his paper on "Influence of Vitamin Deficient Diets upon Intestinal Acid-base Equilibrium." The Joseph A. Capps Prize of \$500 is awarded annually for meritorious medical research by a graduate of a medical school in Chicago completed within two years after graduation.

Dr. Theodor Wiegand, Berlin, president of the Imperial Archeological Institute, has been made an honorary doctor of the medical faculty of the University of Berlin.

Dr. VICTOR GOLDSCHMIDT, of Heidelberg, has been elected an honorary member of the German Mineralogical Society.

The Makdougall-Brisbane Prize of the Royal Society of Edinburgh for 1930–32 has been awarded to Dr. A. C. Aitken, of the University of Edinburgh, for contributions to mathematics published in the *Proceedings* of the society, and the Gunning Victoria Jubilee Prize for 1928–32 to Sir James Walker, for work in physical and general chemistry.

The Journal of the American Medical Association reports that three hundred and seventy-five friends of Dr. Howard A. Kelly, Baltimore, gathered at a dinner on February 20, in celebration of his seventy-fifth birthday. Dr. Thomas S. Cullen, Baltimore, was toastmaster, and speakers included Dr. Walter W. Chipman, emeritus professor of obstetrics and gynecology, McGill University, and Dr. Abraham Flexner, director of the Institute for Advanced Study, Princeton. A special tribute was sent to Dr. Kelly by Dr. William H. Welch, emeritus professor of the history of medicine at the Johns Hopkins University School of Medicine, who, since February 1, has been a patient in the Brady Clinic, Johns Hopkins Hospital. Dr. Kelly, who is known as the "father of gynecology," is professor emeritus of gynecology at Johns Hopkins, with which he has been associated since 1889, retiring from active work at the school in 1919.

Dr. WILLIAM H. PARK, general director of the Bureau of Laboratories of the Department of Health of

New York City, professor of bacteriology and hygiene at New York University and professor of preventive medicine at Bellevue Hospital Medical College, was the guest of honor at a dinner given at the Biltmore on April 19 by his friends and associates. The date was the fortieth anniversary of Dr. Park's founding in New York of the first public bacteriological laboratory in the world. Dr. Linsly R. Williams, director of the New York Academy of Medicine, was chairman of the dinner committee and Dr. Shirley W. Wynne, Health Commissioner, was toastmaster. The speakers included, in addition to Dr. Williams, Dr. Matthias Nicoll, Homer Folks and Dr. C.-E. A. Winslow.

WE learn from Nature that at the annual general meeting of the Institute of Metals, the following officers were elected for the year 1933-34: President, Sir Henry Fowler; Vice-presidents, Professor C. H. Desch and Professor R. S. Hutton; Members of Council, Eng. Vice-Admiral Sir Robert Dixon, Mr. Wesley Lambert, Mr. H. C. Lancaster, Mr. A. H. Mundey, Mr. A. J. G. Smout, Mr. F. Tomlinson. The silver jubilee meeting of the institute will be held in Birmingham from September 18 to 21. It was in Birmingham that the first general meeting of the institute was held in the autumn of 1908, under the presidency of the late Sir William White.

Dr. Harry A. Charipper, assistant professor of biology at the Washington Square College of New York University, has been appointed head of the department.

MARGARET M. FULFORD, of the department of botany of the University of Cincinnati, has been appointed curator of hepatics and a member of the advisory board of the Sullivant Moss Society.

WORK at the new Leonard Wood Laboratory for the Eradication of Leprosy on Culion Island, the Philippines, is planned by Dr. Malcolm H. Soule, University of Michigan; Dr. E. B. McKinley, George Washington University; Dr. E. W. Goodpasture, Vanderbilt University; Dr. E. R. Long, University of Pennsylvania; Dr. T. M. Rivers, Rockefeller Institute, and Dr. Hans Zinsser, Harvard University. A correspondent writes: "Recently Drs. Soule and McKinley succeeded in isolating the leprosy bacillus, or germ, outside the human body. Monkeys inoculated with the bacillus developed conditions suggestive of the human disease, but soon recovered. Other laboratory animals failed to show any signs of the disease. Drs. Soule and McKinley have been granted leave of absence from June next to February, 1934. They will be the first of the group who within the next few years will endeavor to work out preventive treatment and, if possible, a cure for the disease."

Dr. Svein Rosseland, director of the observatory at Oslo, has arrived at the Massachusetts Institute of Technology to make an intensive study of the differential analyzer designed by Dr. Vannevar Bush, vice-president of the institute and professor of electrical power transmission.

PROFESSOR OTTO HAHN, director of the Kaiser Wilhelm Institute in Berlin, non-resident Baker lecturer at Cornell University, will deliver the second John Howard Appleton Lecture at Brown University on April 28. His subject will be "The Radioactive Elements and their Application in Chemical Research."

Dr. Otto Loewi, professor of pharmacology at Graz, will deliver at 5 o'clock on May 4 and 11 the Edward K. Dunham Lectures for the promotion of the medical sciences at Harvard University. The subjects of the lectures are "Humoral Transmission of the Nerve Impulse" and "Regulation and Adaptation."

Dr. Felix Bernstein, director of the Institute of Mathematical Statistics of the University of Göttingen, spoke before the Sigma Xi Chapter of the University of Cincinnation April 10 on "Solution of Mathematical Problems in Physics and Engineering by New Mechanical Means."

PROFESSOR H. J. MULLER, of the University of Texas, lectured at the University of Stockholm on April 4 on "Evolution in the Light of the Modern Mutation Theory." On April 6 he lectured at the University of Oslo, on April 8 before the Mendelian Society of Lund and on April 11 at the University of Copenhagen. He is to address the Genetical Society of London on April 27.

Professor A. E. Kennelly spoke on April 11 on "Experiences during the Development of Electrical Engineering since the Year 1875," before a joint meeting at Harvard University of the Boston Section of the American Institute of Electrical Engineers with the Student Branches of Harvard University, Massachusetts Institute of Technology, Northeastern University and Tufts College.

THE program of illustrated lectures arranged by the California Academy of Sciences during April and May, at San Francisco, under an endowment by an unnamed friend, is announced as follows: "Natural and Cultural Pearls," Dr. Charles A. Kofoid, professor of zoology, University of California; "Explorations in Plant Life," Arthur C. Pillsbury; "Crystals and Crystallization," Dr. Austin F. Rogers, professor of mineralogy, Stanford University, and "Some Protozoa and Causes of Disease in Animals and Man," Dr. Charles A. Kofoid, professor of zoology, Uni-

versity of California. These lectures are free to the public.

The Pennsylvania Topographic and Geologic Survey has recently moved its offices from the Claster Building on Market Street in Harrisburg, Pennsylvania, to the sixth floor of the South Office Building of the Capitol group. The scientific staff and its special interests now is as follows: George H. Ashley, state geologist, coal; Ralph W. Stone, assistant state geologist, structural materials; Stanley H. Catheart, associate geologist, oil and gas; Bradford Willard, associate geologist, paleontology; Charles K. Graeber, associate geologist, mineralogy and areal geology; Forrest T. Moyer, assistant geologist, areal geology; W. O. Hickok, 4th, assistant geologist, areal geology and metals; M. N. Shaffner, technical assistant.

Industrial and Engineering Chemistry writes that at the Tenth Conference of the International Union of Chemistry, held at Liége in September, 1930, the committee on thermochemical data, formed in 1925 for a limited time, was replaced by the standing committee on thermochemistry, which includes the following: L. Keffler, Great Britain; C. Matignon, France; W. A. Roth, Germany; F. Swarts, Belgium; W. Swietoslawski, chairman, Poland; P. E. Verkade, Holland, and E. W. Washburn, United States. One of the main functions of that committee consists in the preparation of an International Table of Thermochemical Data, to be published under the patronage of the International Union of Chemistry under the same conditions as the International Tables of Atomic Weights. Authors of papers connected with thermochemistry and published within the last five years are requested to send two copies to the secretary of the committee, L. Keffler, Thermochemical Laboratory, University of Liverpool.

A DISPATCH to The New York Times from Paris reports that a decree creating the Superior Council for Scientific Research was signed by President Lebrun on April 14. The council will resemble France's Superior Council of Public Instruction and will coordinate scientific organizations and facilitate research in pure science. It will have eight divisions covering mathematical, mechanical, statistical, astronomical, physical, chemical, biological, natural, historical, philosophical and social sciences.

As a result of its recent petition the council of the Institute of Marine Engineers have received official information that King George has approved the grant of a charter to the institute. The attainment of this distinction follows closely on the forty-fourth anniversary of the foundation of the institute, in 1889. To-day the membership amounts to 3,550, including over 2,800 corporate members, among whom are many

of the foremost marine engineers in Great Britain and the Dominions. The King became patron of the institute in 1918. The grant of the Royal Charter signifies recognition of the institute's record of work and achievement and affirms its status as the representative organization of the marine engineering profession.

THE Yosemite School of Field Natural History will be held in the Yosemite National Park from June 26 to August 11. The headquarters of the school are at the Yosemite Museum, but the greater part of the time will be spent in field work.

THE new Saguaro National Monument in Arizona comprises about 60,000 acres, mainly within the Coronado National Forest, on the slopes of the Santa Catalina mountains about 25 miles northeast of Tucson. It was created a National Monument by proclamation of President Hoover on March 1. Administration of the area will be in the hands of the Forest Service. The land will be protected from any use that would interfere with the preservation of the native flora, which is considered of great educational and scientific interest. Some of the specimens of the Giant Cactus on the area are believed to be more than 100 years old. Examples of European and American Indian and European archeological handiwork have been placed on display for the first time in Denver by the department of anthropology of the University of Denver. Pieces of Continental Paleolithic and Neolithic implements of the early man are arranged in the collection. Many of the specimens have been gathered personally by Dr. E. B. Renaud, head of the department of anthropology, during his archeological work in Spain and France. The greater portion of the exhibition is devoted, however, to the display of Indian native art and craftsmanship.

ACCORDING to the Journal of the American Medical Association, the Deutsche Gesellschaft für Kinderheilkunde, at its meeting in Dresden in September, 1931, expressed in a proclamation the fear that the long-continued economic crisis might cause a general weakening of resistance to disease in the oncoming generation. Observations made during the war show that children suffer the most from inadequate nutrition. For that reason, Drs. Gottlieb and Stransky, of the Vienna Public Health Service, examined 800 young children, establishing the weight of each child. They report in an article in the Klinische Wochenschrift that the number of underweight children in families that had been at least a year without a definite source of income was considerably higher than the number of children showing overweight. Among the children of employed parents, however, the number showing overweight was more than twice as large as the number presenting underweight. The children of the unemployed, ranging between 2 and 4 years of age, show an especially large number who are underweight. In children 5 and 6 years old, the differences are not so marked.

Nature reports that at a recent meeting of the Industrial Advisory Committee of the Ross Institute, London, reports were received of the over-seas activities of the institute. Seven research centers in Assam and northern Bengal have been opened, and antimalarial work and the testing of new drugs for the treatment of malaria have been pursued there and in Rhodesia and East and South Africa. In the Assam tea gardens, anti-malarial work has resulted in much improved health, for in 1930 among a population of

13,248 the admissions to hospital were 23,226, but in 1932 with a slightly larger population the admissions were reduced to 15,141. A standard oil mixture for killing mosquito larvae has been devised in conjunction with the Burma-Shell group. The health among lead miners in Yugoslavia was investigated and a health scheme was formulated and is now in operation. At the conclusion of the proceedings, Mr. Still and Sir Malcolm Watson addressed the meeting on the subject of yellow fever. Now that travel by aeroplane is so rapid, the grave danger that infection may be carried from the yellow fever zone in West Africa to East Africa and Asia, which would be followed with disastrous consequences, was emphasized.

## DISCUSSION

## ZOOLOGICAL NOMENCLATURE

Professor A. S. Pearse, of Duke University, has recently contributed to Science<sup>1</sup> a number of thought-provoking reviews of recent text-books of zoology.

Professor Pearse makes, rather dogmatically, two statements in his reviews that to the taxonomist stand out as though they were printed in red ink and, though they are of distinctly minor importance, are as startlingly incongruent with the established formalities of nomenclature as red ink would be on a page of Science.

Professor Pearse makes the statement that "the scientific name of an animal consists of the genus, species and the name of the author." (The italics are Professor Pearse's). Had Professor Pearse said that the name of the author should be appended to the scientific name of an animal at least once in the publication using the name, one could agree with him, and might even walk with the International Commission on Zoological Nomenclature and add that the date of the proposal or some other clue to the original use of the name might also appear to advantage.<sup>3</sup>

Article 2 of the International Rules of Zoological Nomenclature states that "the scientific designation of animals is uninomial for subgenera and all higher groups, binomial for species, and trinomial for subspecies." Article 22 reads in part as follows (there is no need of quoting it in full): "If it is desired to cite the author's name, this should follow the scientific name without interposition of any mark of punctuation;—"<sup>4</sup> If the author's name is a part of the scientific name, as Professor Pearse contends, how is it

<sup>1</sup> Science, n. s., 77: 169-172.

<sup>2</sup> Loc. cit., p. 170, first paragraph.

<sup>3</sup> See resolution of the International Commission on Zoological Nomenclature at Budapest, 1927, as published in U. S. Public Health Service, Public Health Reports, Oct. 28, 1927, pp. 2639–2640.

<sup>4</sup> International Rules of Zoological Nomenclature; Proc. Biological Society of Washington, volume 39, pp. 75-104. possible for it to follow the scientific name? How can the part follow the whole?

Professor Pearse at another place<sup>5</sup> makes the following comment: "Evidently the writer disapproves of the modern tendency to begin even generic names with small letters, —" Let us refer to the Code. Article 8 reads: "A generic name must consist of a single word, simple or compound, written with a capital initial letter—."

Of course, a word may be used in more than one sense. The word felis, for instance, may be used as a formal scientific name, in which case it is properly capitalized. Also it may be used as a common noun, just as is its English equivalent, cat. In the latter usage it is not capitalized. Can it be this that Professor Pearse means? If so, he fails to make himself clear and has no need to appeal to a non-existent "modern tendency" for support of what has always been good usage.

Any tendency, however trivial, to flout the International Rules, the only hope we have for ultimate stability in zoological nomenclature, should bring a vigorous protest, even though the protestee is one as eminent and respected as Professor Pearse. Indeed, the more eminent the offender, the more necessary the protest.

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## THE INVOLVED GENETICS OF FISH

The recent paper by Hubbs and Hubbs on "Apparent Parthenogenesis in Nature, in a Form of Fish of Hybrid Origin" is of great interest to any one concerned with the extremely puzzling phenomena of ichthyological genetics. The matter is puzzling for the reason that although some crosses behave in normal Mendelian fashion, other crosses, like those

<sup>5</sup> *Loc. cit.*, p. 170, second column, first paragraph. <sup>1</sup> SCIENCE, n. s., 76: 628. 1932.