to the fact that these fellowships were founded to promote research in certain special branches of science. Moreover, as years pass, this record may prove of some slight value as an indication of the problems which were uppermost at various periods of time.

The classification of the fellowships into junior, fourth-year, and senior, which was effected in 1922 with a view to remove as far as possible the objection that as originally designed they opened up no career to those possessed of the spirit of research, has now been tested, and it is a source of satisfaction that Dr. David Keilin, lecturer in parasitology in the University of Cambridge, whose researches have proved of outstanding merit, should have been the first to complete the tenure of a Beit fellowship for seven years and thus to show "by his published work his fitness for a scientific career."

In the review of 1923 it is mentioned that "all who are competent to judge are agreed as to the high position which the fellowships now hold in the department of science with which they are concerned, and as to the legitimate satisfaction which may be entertained by the founder of the trust." It is believed that this may now be repeated without hesitation and also that "this foundation still stands for the advancement by research of knowledge for its own sake, apart from its material value."

THE DANIEL GUGGENHEIM FUND FOR THE PROMOTION OF AERONAUTICS

THE Daniel Guggenheim Fund for the Promotion of Aeronautics has announced two grants aggregating $600,000 to California educational institutions. To Leland Stanford University at Palo Alto, a fund amounting to the income from about $300,000 has been awarded, and to the California Institute at Pasadena $200,000, and $10,000 annually for a period of ten years.

The California institutions were notified of the grants by Harry F. Guggenheim, son of Daniel Guggenheim and president of the fund. In his communication to Dr. R. L. Wilbur, president of Leland Stanford University, Mr. Guggenheim outlined the purpose of the grant and said:

> This gift is made also in recognition of the quality of work which is done in your school of engineering by Dean W. F. Durand and his associates, and also because of our belief that in the great educational institutions of California such important contributions already have been made to science that the world is justified in looking there for very great and outstanding results in the near future.

In a telegram to Dr. R. A. Millikan, president of the California Institute of Technology, Mr. Guggenheim, after referring to the purpose of the gift, said:

> This gift is made also as a tribute to the distinguished work in science and education of yourself and associates, and because of our belief that you are developing in Southern California an institution which is destined to make very great contributions to the progress not only of our own country but of the whole world.

A message from Stanford University announced that, in honor of the donor, the university authorities planned to establish the Daniel Guggenheim experimental laboratory of aerodynamics and aeronautic engineering.

A full course for the training of young men in aerodynamics and aeronautic engineering will be established. This course will be an extension of the present work of the university.

Work along three lines, each headed by an expert, is planned as follows: Aerodynamics, structural design and construction and laboratory research. The men to head the first two divisions are yet to be appointed. The laboratory will be directed by Professor E. P. Lesley, who has for a decade been associated with Dr. Durand in the work of the present laboratory.

A message from Dr. Millikan of the Institute of Technology said that a new Aeronautics Building, containing a ten-foot high-speed wind tunnel, would be built at once, at a cost of about $200,000. It set forth that the grant would make possible the following:

(1) Extension of theoretical courses in aerodynamics and hydrodynamics, with the underlying mathematics and mechanics taught by such men as Professors Harry Bateman, Edward T. Bell and Paul S. Epstein.

(2) Initiation of a group of practical courses conducted by the institute's experimental staff, in cooperation with the engineering staff of the Douglas Airplane Company, with the aid of the facilities at the institute combined with those of the Douglas plant.

(3) Initiation of a comprehensive research program on airplane and motor design, as well as on the theoretical bases of aeronautics.

(4) Immediate perfection of the new stagger-decalage, tailless airplane recently developed at the institute, primarily by A. A. Merrill, a radical departure from standard aeronautical design, which in recent tests has shown promise of adding greatly to the safety of flying.

(5) Establishment of a number of research fellowships in aeronautics at the California Institute.

(6) Planning and manning of the new school so as to include the building and testing not only of models for wind and tunnel work, but also of full-size experimental gliders and power planes for free flight work.

MEETING OF PLANT PHYSIOLOGISTS

THE mid-western regional meeting of the American Society of Plant Physiologists was held at the University Farm, St. Paul, Minn., on Thursday, Friday and Saturday, July 15, 16 and 17, 1926. On Thursday and Saturday the plant physiologists met in joint

session with the agronomists; on Friday the two societies had separate meetings, Friday morning's session of the plant physiologists was devoted to demonstrations and the reading of papers on various phases of plant physiological work. The subjects considered were, the production and measurement of light, including polarized light, and fluorescence and phosphorescence, winter hardiness in alfalfa varieties and in apple varieties, methods and apparatus for measuring freezing points and killing points, methods of construction of thermocouples and their use in temperature measurements, use of ethylene in breaking the rest period, tracheal contents of the apple tree and the preservation of fruits and vegetables in their natural color. There were forty-five plant physiologists present at this meeting and much interest was manifested in the program.

Friday afternoon was devoted to an inspection tour. The Linnaean library and the new botany building under construction on the university campus at Minneapolis were visited. Trips were also made through the Washburn Crosby Flour Mills and the banana plant of the E. P. Stacy Co. Friday evening all were entertained by Dr. and Mrs. R. B. Harvey at a picnic dinner on the banks of the St. Croix river twenty-five miles from St. Paul. It was a very pleasant social occasion.

The newly elected officers for the year 1926–27 are, *President,* Dr. Francis E. Lloyd, McGill University; *Vice-president,* Dr. Wright A. Gardner, Auburn Polytechnic Institute; *Secretary-treasurer,* Dr. S. V. Eaton, University of Chicago.

THE INTERNATIONAL CONFERENCE ON FLOWER AND FRUIT STERILITY

THIS conference is being held in New York City during the present week under the auspices and with the financial support of the Horticultural Society of New York. The organization of the conference has been in the charge of an executive committee consisting of Dr. N. L. Britton, *chairman,* Mr. Frederic Newbold, *treasurer,* and Dr. A. B. Stout, *secretary,* and a local advisory committee consisting of Professor R. A. Harper and Professor H. M. Richards, of Columbia University; Dr. C. Stuart Gager, director of the Brooklyn Botanic Garden; Dr. William Crocker, director of the Boyce Thompson Institute for Plant Research, and Mr. Leonard Barron, editor of *Garden and Home Builder.* Various persons both in America and abroad have rendered valuable assistance in the development of the program.

The conference convened at Columbia University in the auditorium of Schermerhorn Hall, on Thursday morning after an opening address by Dr. N. L. Britton, and an address of welcome by T. A. Havemeyer, president of the Horticultural Society of New York. A program of nine papers was presented. At the close of this session motor busses were provided for the trip to the New York Botanical Garden where lunch was served and a scientific program presented. Afterwards there was opportunity for inspection of the garden.

The sessions of Friday were held at the Boyce Thompson Institute for Plant Research, Yonkers. A smoker with informal discussion was held in the evening. The conference held its sessions on Saturday at the Brooklyn Botanic Garden.

The foreign men of science announced to take part in the conference were: Fred J. Chittenden, director of the Royal Horticultural Society Garden, England; M. B. Crane, The John Innes Horticultural Institution, England; Dr. Kathleen B. Blackburn and Dr. J. W. Heslop Harrison, Armstrong College, University of Durham, Newcastle-on-Tyne, England; Dr. F. Gagnepain, Museum d'Histoire Naturelle, Paris, France; Professor Ernst Lehmann, University of Tubingen, Germany; Dr. M. J. Sirks, Institut voor Plantenverdiling, Wageningen, Holland; Dr. W. E. de Mol, Lisse, Holland; Erling Kvaale, Norway, Dr. Rudolph Florin, Royal Swedish Museum of Natural History, Stockholm, Sweden; Professor F. Kotowski, College of Agriculture, Warsaw, Poland; Professor W. Paschkevitch, presented by Professor N. Maxomow, Institute of Applied Botany, Leningrad, Russia; Professor Torasaburo Susa, Hokkaido Imperial University, Sapporo, Japan, and Professor Akio Kikuchi, Tottori Agricultural College, Japan.

SCIENTIFIC NOTES AND NEWS

M. PAUL LANGEVIN, professor of physics at the Collège de France, has been elected president of the French Association for the Advancement of Science.

THE fifth William Thompson Sedgwick Memorial Lecture was given this year at the Marine Biological Laboratory at Woods Hole, Mass., by Professor Thomas Hunt Morgan, of Columbia University, whose subject was "Genetics and the Physiology of Development." The lectureship was established in 1922. Earlier lecturers have included Dr. Edmund B. Wilson, of Columbia University; Dr. William H. Welch, of the Johns Hopkins University; Dr. W. J. V. Osterhout, formerly of Harvard and now of the Rockefeller Institute for Medical Research, and Dr. Charles V. Chapin, superintendent of health, Providence, R. I.

THE medal of the American Society of Mechanical Engineers was awarded to Dr. Robert Andrews