POPULAR SCIENCE MONTHLY AWARD

DR. GEORGE H. WHIPPLE, dean and professor of pathology of the School of Medicine and Dentistry at the University of Rochester, and Dr. George R. Minot, professor of medicine in the Harvard Medical School, discoverers of the value of liver and liver extract as a treatment for pernicious anemia, formerly incurable, received on December 18 at a dinner at the University Club, New York, a $10,000 prize offered by *The Popular Science Monthly* for "the current achievement in science of greatest benefit to the public." The awards and gold medals were presented by Dr. Robert A. Millikan, chairman of the executive council of the California Institute of Technology, and responses were made by Dr. Minot and Dr. Whipple. Addresses were then made by Dr. Simon Flexner, director of the Laboratories of the Rockefeller Institute for Medical Research, and by Dr. Millikan. According to a press report Dr. Millikan said:

Only that is of most potential value to the human race which represents a fundamental increase in human knowledge not only in one way but in many ways. Every bit of our material civilization to-day can be traced to the discarding by Galileo and Newton of the a priori method of approaching reality and substituting for it the method of empiric investigation.

Until twelve years ago we lagged far behind other nations of the world in fundamental science. That was inevitable as long as we focused our attention on the immediate application of science to some practical end. The foundation of the national research fellowships has put this country far ahead of what it was. Within the last twelve years our physics in the United States has leaped forward more than it had ever done in any previous decade.

The first thing is to see that the spirit of science should be kept strong and active. The second is to spread the gospel of science throughout the country. Our work to succeed must be brought before the attention of the intelligent public in order that it might have a universal appeal. If it does not have a universal appeal, it will eventually fail.

Dr. Millikan cited the Nobel prizes as an example of bringing the work of scientific research before the general public. *The Popular Science Monthly* awards, he declared, were in the same category with the Nobel prizes in that they will spread knowledge of what is being done in laboratories among the public and will add stimulus to research in pure science.

The committee of award consisted of:

Dr. Frank B. Jewett, vice-president, American Telephone and Telegraph Company, *chairman*.

Dr. C. G. Abbot, secretary, The Smithsonian Institution.

Dr. Samuel A. Brown, dean, New York University and Bellevue Hospital Medical College.

Dr. George K. Burgess, director, U. S. Bureau of Standards.

Dr. William W. Campbell, president emeritus, University of California; director emeritus, Lick Observatory.

Dr. Harvey N. Davis, president, Stevens Institute of Technology.

Dr. Arthur L. Day, director, Geophysical Laboratory, Carnegie Institution of Washington.

Dr. E. E. Free, consulting engineer.

Dr. Vernon Kellogg, permanent secretary, National Research Council.

Charles F. Kettering, president and general director, Research Laboratories, General Motors Corporation.

Dr. Arthur D. Little, president, Arthur D. Little, Inc., Chemists.

Dean Collins P. Bliss, director, Popular Science Institute, New York.

Dr. John C. Merriam, president, Carnegie Institution of Washington.

Dr. Robert A. Millikan, chairman, executive council, California Institute of Technology.

Professor Henry Fairfield Osborn, president, The American Museum of Natural History.

Dr. S. W. Stratton, Massachusetts Institute of Technology.

Dr. Elihu Thomson, director, General Electric Research Laboratories (Lynn, Massachusetts).

Dr. Edward R. Weidlein, director, Mellon Institute of Industrial Research.

Henry H. Westinghouse, director, Westinghouse Electric and Manufacturing Company.

Dr. Albert E. White, director, department of engineering research, University of Michigan.

Dr. Willis R. Whitney, vice-president and director of research, General Electric Company.

Orville Wright, scientist and inventor.

SCIENTIFIC NOTES AND NEWS

THE American Association for the Advancement of Science and about forty associated societies will meet at Cleveland during the week beginning December 29. The number of SCIENCE for November 28 was a special issue containing the preliminary announcement of the meeting edited by the permanent secretary. Dr. Thomas Hunt Morgan will preside at the opening session, when Dr. Robert A. Millikan will give the address of the retiring president on "Atomic Disintegration and Atomic Synthesis."

DR. ALBERT A. MICHELSON completed his seventy-eighth year on December 19, while engaged at Pasadena on the measurement of the velocity of light through a vacuum tube.

DR. JAMES H. BREASTED, of the University of Chicago, director of the Oriental Institute, has been

elected a corresponding member of the Institute of France. He succeeds to the place occupied by the late Sir Edward Maunde Thompson, for many years director of the British Museum.

DR. HEINRICH JACOB GOLDSCHMIDT, professor of chemistry at Göttingen, formerly of Oslo, has been elected a member of the Göttingen Academy of Sciences.

DR. PHILIPP FURTWÄNGLER, professor of mathematics at the University of Vienna, has been awarded the Ernst Albe memorial prize and medal of the Carl Zeiss Foundation.

THE gold Georg-Neumayer Medal of the Geographical Society of Berlin has been conferred on Dr. Hugo Eckener.

DR. CLAUDIUS REGAUD, director of the Radium Institute and professor at the Pasteur Institute of Paris, has been created commander of the Legion of Honor.

A JOHN C. HEMMETER professorship of physiology will be established at the University of Maryland School of Medicine, in honor of Dr. Hemmeter, who was graduated from the University of Maryland in 1884, and was appointed professor of physiology in 1891 and of clinical medicine in 1903. He resigned in 1922. Besides Dr. J. M. H. Rowland, dean of the school, the committee includes Dr. John Evans, secretary, and Drs. William J. Mayo, Julius Friedenwald, Randolph Winslow, J. M. T. Finney, Harry Adler, Robert P. Bay, William H. Smith, Thomas S. Cullen, H. A. B. Dunning, Arthur M. Shipley and Judge Walter I. Dawkins.

AT the annual meeting of the New York Academy of Sciences on December 15 the A. Cressy Morrison Prizes for 1930 were awarded to Professor H. von Zeipel, of the Astronomical Observatory at Upsala, for his paper entitled "The Evolution and Constitution of Stars"; to Dr. Ernst Gellhorn, of the University of Oregon, for his paper entitled "Permeability and Fatigue in Muscle and its Bearing on the Problem of Ion Antagonism," and to Dr. Douglas W. Johnson, professor of physiography at Columbia University, for his paper entitled "A Theory of Appalachian Evolution."

OFFICERS of the New York Academy of Sciences have been elected as follows: *President,* Clark Wissler; *Vice-presidents,* Horace N. Coryell, Horace W. Stunkard, Frederick W. Hodge; *Recording Secretary,* Roy Waldo Miner; *Corresponding Secretary,* Horace W. Stunkard; *Treasurer,* George H. Sherwood.

DR. CARL GUTHE, director of the Museum of Anthropology at the University of Michigan, was reelected president of the Michigan-Indiana Museum Association at the convention held recently at South Bend, Indiana.

DR. GEORGE D. LOUDERBACK, professor of geology, chairman of the department, and dean of the College of Letters and Sciences of the University of California, has been reelected president of the American Seismological Society. Dr. Perry Byerly, assistant professor of seismology and university seismologist, has been elected secretary.

DR. NEIL E. STEVENS, of the Bureau of Plant Industry, has been elected president of the Botanical Society of Washington.

DR. JUAN CARLOS NAVARRO, pediatrist, has been elected president of the Academy of Medicine of Buenos Aires.

AT the annual meeting of the Royal Society of Edinburgh Sir E. A. Sharpey-Schafer was elected president. The vice-presidents elected were Professor J. Graham Kerr, Professor W. Wright Smith, Professor F. G. Baily, Professor T. J. Jehu, Professor J. H. Ashworth and Dr. A. Logan Turner.

MR. W. L. GOSS, who has been connected with the Bureau of Plant Industry since 1905, has accepted an appointment with the California State Department of Agriculture. Mr. Goss will be in charge of the seed work for the state, including direction of the cooperative seed laboratory at Sacramento.

MR. CHARLES H. HADLEY, of the Bureau of Entomology, has been appointed to take charge of research on the Japanese beetle and Asiatic beetle at Moorestown, New Jersey. Mr. Hadley succeeds Loren B. Smith who resigned recently and comes to the bureau by transfer from the Plant Quarantine and Control Administration. Mr. L. H. Worthley, administrator in the field in the enforcement of the quarantine on account of the European corn borer, has taken over the field work of administering the Japanese beetle quarantine, of which Mr. Hadley has been in charge for two and a half years.

PROFESSOR VICTOR K. LAMER, of the department of chemistry, Columbia University, who is on sabbatical leave from the university where he has taught since 1919, will be visiting professor at Stanford University during the spring session of 1931. He will direct courses in physical chemistry and catalysis. Professor LaMer is a former chairman of the Organic Division of the American Chemical Society.

DR. EDMUND S. CONKLIN, professor of psychology in the University of Oregon, has been granted leave of absence for the winter term of the present academic year, and has accepted a visiting professorship in the University of Chicago for that period.

DR. E. LEG. TROUGHTON, of the Australian Museum, Sydney, is visiting the United States.

MR. C. P. CLAUSEN, of the Bureau of Entomology, who returned from Singapore to the United States late in September, left Washington on November 20 for Cuba, where he will observe the progress of the experimental work on the infestation of black flies with the parasites he brought over from the Malay Peninsula. Mr. Clausen will take some of the black flies from Cuba to Singapore, infest them with parasites, and send them back to Cuba.

DR. LAFAYETTE B. MENDEL, Sterling professor of physiological chemistry in Yale University, gave an illustrated lecture at Wellesley College on December 3, and before the Rhode Island Section of the American Chemical Association at Providence on December 11 on "Fat Formation in Relation to Diet."

DR. GEORGE E. NICHOLS, professor of botany at Yale University, delivered an illustrated lecture entitled "North American Arctic-Alpine Plants" at the Science Club of the Connecticut College for Women on December 12.

DR. M. H. SOULE, associate professor of bacteriology at the University of Michigan Medical School, gave an address on the first International Congress of Microbiology, held at the Pasteur Institute, Paris, from July 20 to 25, before the Biological Society of Purdue University on December 11. Dr. Soule was a member of the national committe of the congress.

ON November 24, 1930, Dr. Michel Weinberg, professor of bacteriology and chief of the laboratory service of the Pasteur Institute, Paris, gave an illustrated lecture before the faculty and students of the University of Colorado School of Medicine at Denver on "The Rôle of the Anaerobic Bacteria in Human Pathology." On November 25, Dr. Weinberg lectured before the Denver City and County Medical Society on "The Serotherapy of Medical and Surgical Infections Caused by Anaerobic Bacteria."

DR. W. STEWART DUKE-ELDER, of London, gave two lectures under the auspices of the Howe Laboratory of Ophthalmology on "Recent Work on the Metabolism of the Eye" at the Harvard Medical School on December 15 and 17. The first lecture was entitled "Physiological Aspects" and the second "Clinical Aspects."

RECENT speakers before the Geological Society of Northwestern University, with the titles of their addresses, are: Dr. G. R. Mansfield, U. S. Geological Survey, "New Discoveries in Geologic Structure"; Dr. David White, U. S. National Museum and Geological Survey, "Stratigraphic Problems of the Permo-Carboniferous"; Dr. Margaret Fuller Boos, U. S. National Park Service, "Geology of the Bryce Canyon Region"; Mr. Earl A. Trager, Skelly Oil Corp., "Subsurface Correlation in the Mid-Continent Field"; Dr. G. F. Loughlin, U. S. Geological Survey, "What is an Economic Geologist?"; Dr. Douglas W. Johnson, Columbia University, "Significance of the Low Shore Terraces"; Mr. King Hubbert, University of Chicago and Columbia University, "Isostasy."

THE North Jersey Section of the American Chemical Society will meet at the Hotel Winfield Scott, Elizabeth, New Jersey, at 7:45 p. m., on Monday, January 12. Dr. Saul Dushman will address the section on "The New Mechanics in Relation to Chemistry." An informal dinner at 6:30 p. m. will precede the meeting.

THE Committee on Scientific Research of the American Medical Association invites applications for grants of money to aid in research on problems bearing more or less directly on clinical medicine. Preference is given to requests for moderate amounts to meet specific needs. For application forms, please address the committee at 535 North Dearborn Street, Chicago, Illinois.

A NEW laboratory of the Rockefeller Institute for Medical Research is ready for occupancy this month. It stands on a high, stony bluff overlooking the East River and extends from 67th to 68th Streets. The building is seven stories in height with two basement levels, and has a cubage of about 1,500,000 feet. Connected with the laboratory is a wing of four stories for animals, which in turn connects through an additional new low animal unit of four stories with the main animal house which is six stories in height.

BUILDING will be started on the Benjamin Franklin Memorial and Franklin Institute Museum at Philadelphia in a few weeks, according to an announcement made by Mr. Cyrus H. K. Curtis, president of the Benjamin Franklin Memorial, Inc., who was host at a dinner given recently to 2,200 people who took part in the campaign to raise funds for the institution. John T. Windrim is preparing the plans. Subscriptions amounted to $5,060,809, in addition to $2,500,000 provided by the Franklin Institute for endowment. The central exhibition hall of the new building will be named the "Cyrus Herman Kotzschmar Curtis Hall" and the scientific library will be named in honor of former Senator George Wharton Pepper, chairman of the financial campaign.

A BEQUEST of $100,000 is made to Western Reserve University in the will of the late Dr. George Clark Russell.

A RHODODENDRON collection, said to be the finest in the United States, has been presented to the Univer-

sity of California by a group of donors. The collection contains 10,000 specimens, more than half of which are of especial interest. The collection was purchased from Messrs. Carl H. Andries and M. Jongeneel, who had propagated the plants at their nursery at Aptos, near Santa Cruz. Mr. Andries has been appointed superintendent of the Botanical Garden and rhododendron expert.

THE Mexican scientific society "Antonio Alzate" (founded in 1884) by virtue of a resolution passed by the President of the Republic and the Department of Public Instruction has been constituted as the National Academy of Sciences, under the title of Academia Nacional de Ciencias Antonio Alzate and was inaugurated on December 9. Its offices and library have been established in the new building that the Federal Government has granted to it at Justo Sierra Street, No. 19. The president of the academy is Alberto Maria Carreño, and the permanent secretary Rafael Aguilar y Santillan.

DR. EDWARD R. WEIDLEIN, director of the Mellon Institute of Industrial Research, has announced that the institution has lately begun a broad investigation into possible industrial uses for raw and refined sugar. The research will be carried on by a multiple industrial fellowship that will be sustained by The Sugar Institute, Inc., of New York, an organization that represents the cane sugar refiners of the United States. The comprehensive program of investigation will be supervised by Dr. George D. Beal, assistant director of the Mellon Institute, and by Dr. Gerald J. Cox, senior industrial fellow. They and the scientific investigators who will be under their direction in endeavoring to find and to develop uses for sugar in various industries will have the close advisory collaboration of Dr. Leonard H. Cretcher, the sugar specialist who is the head of the Department of Research in Pure Chemistry. According to Dr. Weidlein, various studies made by private research workers have already indicated results of industrial promise; these findings will be carefully studied in the laboratories of Mellon Institute. Most of these proposals relate to applications for sugar in such technologic practises as wood preservation, textile finishing, and the manufacture of adhesives. Sugar is thought to merit searching investigation as a basic raw material for employment in various branches of chemical industry. Four chemists, headed by Dr. Cox, have begun the initial scientific research of the industrial fellowship. Additions will be made to this staff, as needed, from time to time.

The Official Record of the U. S. Department of Agriculture reports that an investigation which, if successful, will lead to the commercial propagation of certain species of flies to be used by the medical profession in treating wounds and inflamed bones is under way in the Bureau of Entomology. This new treatment is the outgrowth of an accidental discovery by Dr. William S. Baer, clinical professor at the Johns Hopkins University. While serving at the front in the war, Dr. Baer was greatly interested in the remarkable healing of the wounds of two soldiers who had been brought in after lying for seven days on the battle field. The wounds were heavily infested with fly larvae. About eight years later Dr. Baer tried the larval treatment on a few of his patients who were suffering from osteomyelitis. Since then nearly 300 patients have been treated in this way. All the children and four out of five of the adults recovered, the cure usually being effected within six weeks. The success of Dr. Baer's experiments and the large number of cases to which this treatment is adapted have created a demand for larvae. The department entomologists are interested in accurate identification of the flies, in methods for their propagation in large numbers, and in methods of producing enough larvae in suitable condition for the surgeon.

IT has been decided that the British Photographic Research Association should go into voluntary liquidation. This decision, according to the London *Times,* has been reached in full accord between the Department of Scientific and Industrial Research and the manufacturer members of the association. Two main factors have necessitated this decision. The first is that important changes have taken place in the organization of the industry itself; manufacturing interests have been consolidated, and as a result the number of separate firms interested in the work of the association has been considerably reduced. The second factor is a very marked increase in the research work carried out in the laboratories of the manufacturing firms themselves. This widening of the outlook of the industry with regard to research is one of the results which it was hoped the research association would achieve. In a statement announcing the dissolution of the association acknowledgment is made of the valuable assistance and encouragement given by the Department of Scientific and Industrial Research, and grateful thanks are given to the director of research, Dr. T. Slater Price, who, assisted by a loyal staff, has throughout his period of office so ably and efficiently served the association.

THE registrar-general's statistical review for 1929, recently published, shows, according to a summary in the *Journal* of the American Medical Association, that the estimated population of Great Britain and Ireland was 48,684,000, compared with 48,574,000 in 1928, an increase of 110,000, or 0.23 per cent. Taking the constituent parts of the British Isles

separately, there was an increase in England and Wales and a decrease in Scotland and the Irish Free State. The estimated population of England and Wales in 1929 was 39,607,000, against 39,482,000 in 1928, an increase of 125,000, or 0.32 per cent. For Scotland the figures are 4,884,000 and 4,893,000, a decrease of 9,000, or 0.18 per cent.; for the Irish Free State 2,943,000 and 2,949,000, a decrease of 6,000, or 0.2 per cent. The marriage rate for England and Wales during 1928 was 15.8 per thousand living and was the highest since 1921. The number of divorces was 3,396 against 4,018 in 1928, a decrease of 15.5 per cent. The birth rate was 16.3 per thousand of population, against 16.7 in 1928, thus continuing the steady fall of recent years. The proportion of male to female births was 1,043 to 1,000, a close approximation to that in recent and prewar years.

DISCUSSION

AN INTERNATIONAL BOTANICAL ADDRESS BOOK

AT the final plenary meeting of the Fifth International Botanical Congress, Cambridge, England, August 23, 1930, it was unanimously resolved that an international address book of botanists should be prepared and published. A committee consisting of Professor L. Diels, director of the Botanic Gardens, Berlin-Dahlem, Dr. E. D. Merrill, director of the New York Botanical Garden, and Dr. T. F. Chipp, assistant director of the Royal Botanic Gardens, Kew, England, was appointed to consummate the project.

The last publication of its kind, Dorfler's "Botaniker Addressbuch," was published in 1909; the need of an up-to-date publication has been increasingly felt in late years, with the rapid growth of botanical science and the necessity for more general communication and cooperation among botanists in different parts of the world.

At meetings of the committee held in London on August 25 and September 4, 1930, it was agreed that:

(1) The address book should follow the general scheme of Dorfler, but the countries to be arranged alphabetically with a supplementary index by continents.

(2) The sections under each country should comprise a list of institutions and societies, and a list of botanists, with their surnames and initials, professional qualifications, offices, addresses and the special field of interest of each individual.

(3) Entries should be made in the language of each country in Roman characters.

(4) In applied subjects, such as forestry, agriculture and bacteriology, only those working in the botanical aspects of the subject should be included.

(5) The final compilation of data should be done at Kew.

It was tentatively decided that April 1, 1931, or a later date, if necessary, would be the date for closing the entries.

The committee realized that if the project was to be successfully consummated, the assistance of botanists in each country would be necessary. Accordingly, each member of the committee undertook the responsibility of collecting and collating the necessary data from the various parts of the world. Professor Diels accepted Central and Eastern Europe, U. S. S. R. and most of South America; Dr. Merrill, the whole of North America, the West Indies, other than the British colonies, Colombia, Ecuador, British, French and Dutch Guiana, Venezuela, Paraguay, all of Polynesia, and the Philippines, and Dr. Chipp the rest of the world.

Dorfler's address book had about 12,500 entries. It is estimated that a comprehensive new address book will contain in excess of 20,000 entries. To make it reasonably complete the cooperation of botanists everywhere is desired. If individuals within the areas assigned to me and who desire their names to appear in the new botanical address book will send me a post card giving the data required, I will see that these data are properly compiled and transmitted to the central office at Kew. What is needed in each case is the name and initials of the individual, his or her address, degrees and titles, position and special field of interest. About ninety collaborators have been selected and asked to compile data for specific areas, covering institutions and societies as well as individual names and addresses. Names of many individuals who should appear in the new address book will doubtless be overlooked, hence this appeal to individual botanists everywhere. Please compile the data required on an ordinary post card, in typewriting if possible, and send it to the undersigned; all such supplementary data will be collated with those supplied by the selected collaborators, before transmission to Dr. Chipp at Kew.

E. D. MERRILL

NEW YORK BOTANICAL GARDEN,
BRONX PARK, NEW YORK

THE WHALING SITUATION

DURING the past two years the writer has been interested in collecting statistical matter relative to present-day whaling. In a presentation of this subject in the January, 1930, number of the *Bulletin* of the New York Zoological Society, he introduced sta-