

The genes in general seem not at any moment to be narrowly limited with respect to changes they may undergo, or limited either with regard to the ultimate source of the influence to which their changes are due. Chance is arbiter in the field of variation, and the normal frequency curve is the type of distribution to which heritable variations in any stock or character tend to conform.

Given heritable variation uncontrolled in direction, natural selection everywhere operative in the intensity indicated and the undisputed effect of inheritance, it follows inevitably that with respect both to the size of their genera, and to the area their species occupy in the world, organisms must be related numerically as we have seen. It must be possible to say that the graph which summarizes the result of organic evolution, and expresses its law, is a curve derivable from the normal curve and one whose ordinates are successively the sums in order of the homologous terms of an infinite series of infinite descending geometric progressions, whose common ratios lie between the limits of $1/2$ and 1.0 .

Infinite in diversity, admirable in simplicity and unity, is the process whose order may be expressed so briefly.

W. H. LONGLEY

GOUCHER COLLEGE

SCIENTIFIC EVENTS

THE GORGAS MEMORIAL INSTITUTE

THE New York *Times* reports that a program for the participation of every Central and South American country with the United States and the Republic of Panama in an effort to place the Americas on a sanitary status comparable to that of the city of Panama and the Canal Zone, which were transferred by Major-General William C. Gorgas from pest holes of disease to one of the most healthful areas in the world, took form at the meeting of the board of directors of the Gorgas Memorial Institute on April 23.

The proffer by Panama of a site and building, formerly intended for a school of medicine at Panama City, but now dedicated as the Gorgas Memorial Laboratory for the study of tropical disease, was approved by the board.

Dr. Franklin H. Martin, president of the institute, pointed out the importance of this research to every great industry doing business around the Caribbean Sea, as well as its humanitarian significance. "If this laboratory in Panama can discover a cure for malaria," Dr. Martin said, "it would mean a saving for industry of millions of dollars, besides a saving of thousands of lives."

Vice-president Curtis was elected a director of the institute. Ex-president Coolidge, whose term as hon-

orary president of the institute automatically expired with his office as president and whose place has been filled by President Hoover, was elected on the institute's advisory council, as was former Vice-president Charles G. Dawes. Florencio Harmodio Arosemena, president of Panama, and Henry L. Doherty, of New York City, were elected to serve with Mr. Coolidge and Mr. Dawes on the council.

Surgeon-General Edward Riggs and Rear-Admiral Edward R. Stitt, both of the United States Navy, were elected to the board of directors.

MEMORIAL TO DR. SALMON

ANNOUNCEMENT is made by George W. Wickersham, honorary chairman, of the establishment of the Thomas William Salmon Memorial to give recognition to the scientific man who makes the greatest contribution of the year in the field of mental medicine. The memorial is in honor of Dr. Thomas W. Salmon, former professor of psychiatry at Columbia University and medical director of the national committee for mental hygiene, who died on August 13, 1927.

The plans of the memorial call for a series of lectures to be given by the person to whom the award is made in various cities of the United States under the auspices of accredited scientific, medical or educational organizations. It is intended to disseminate knowledge of value in the control and prevention of mental and nervous diseases.

The administration of the initial fund of \$100,000 is to be vested in the New York Academy of Medicine. It will be a permanent and endowed establishment with national and international connections. The movement was started by one hundred and fifty leading neurologists and psychiatrists who are associated with leaders in the mental hygiene movement and in psychiatric, social service and nursing fields.

It is said that universities, medical schools, scientific societies and independent workers in this country and abroad are to be surveyed annually in a search for the individual, prominent or obscure, whose original work promises most in the line of relief to the states, municipalities, private organizations and individuals confronting the economic and humane problems incident to the increasing number of people suffering from mental and nervous diseases.

The honorary vice-chairmen of the memorial include General John J. Pershing, Dr. Nicholas Murray Butler, the Rev. Dr. Harry Emerson Fosdick, Mrs. Helen Hartley Jenkins and Dr. John H. Finley. The chairman is Dr. Frankwood E. Williams and the vice-chairman Dr. William L. Russell. Dr. Austen Fox Riggs is secretary; Paul O. Komora, assistant secretary; the New York Trust Company, treasurer, and Dr. Samuel W. Hamilton, assistant treasurer. The

ways and means committee includes Dr. Russell as chairman and Dr. C. C. Burlingame as vice-chairman and the following members: Drs. Stephen P. Duggan, Homer Folks, C. Floyd Haviland, Augustus Knight, Austen Fox Riggs, Frankwood E. Williams and Brigadier-General S. H. Wadhams.

THE MEDALS OF THE FRANKLIN INSTITUTE

THE medal meeting of the Franklin Institute, Philadelphia, will be held on the afternoon of May 15 at 3:30.

Presentations will be made as follows:

Certificate of Merit to Mr. George F. Machlet, American Gas Furnace Company, Elizabeth, New Jersey.

Longstreth Medals to Mr. Edward G. Herbert, Atlas Works, Manchester, England; Dr. Konrad Jagschitz, Mainz, Germany; Mr. A. W. Machlet, American Gas Furnace Company, Elizabeth, New Jersey, and Mr. J. F. Peters, Westinghouse Electric and Manufacturing Company, East Pittsburgh, Pennsylvania.

Wetherill Medals to Mr. Gustave Fast, The Bartlett Hayward Company, Baltimore, Maryland; Mr. W. H. Mason, Masonite Corporation, Laurel, Mississippi, and Dr. Johannes Ruths, Djursholm, Sweden.

The Levy Medal to Mr. Lodewyk J. R. Holst, Brock and Weymouth, Inc., Philadelphia.

The Clark Medal to Mr. W. H. Gartley, Philadelphia Gas Works Company, Philadelphia.

Cresson Medals to Sir James C. Irvine, St. Andrews, Scotland; Dr. Chevalier Jackson, Jefferson Medical College, Philadelphia, and Dr. Elmer A. Sperry, Sperry Development Company, Brooklyn, New York.

Franklin Medals and Certificates of Honorary Membership to Mr. Emile Berliner, Washington, District of Columbia, and Dr. Charles Thomson Rees Wilson, Cambridge, England, received by Sir Esme Howard, British Ambassador to the United States.

The following papers will be read:

"Vocal Physics—Historical Notes," by Emile Berliner, and "Some Thundercloud Problems," by Professor C. T. R. Wilson, University of Cambridge, who will be presented by Professor John Zeleny, of Yale University.

PRESENTATION OF THE JOHN FRITZ MEDAL TO PRESIDENT HOOVER

PRESIDENT HOOVER received on April 25 the John Fritz Gold Medal, which is annually awarded by the John Fritz Medal Board, representing the American Society of Civil Engineers, the American Institute of Mining and Metallurgical Engineers, the American Society of Mechanical Engineers and the American Institute of Electrical Engineers, for "notable scientific or industrial achievement, without restriction on account of nationality or sex." This medal, which is

the highest honor bestowed by these four engineering societies, with a membership of 60,000, was presented to the President by representatives of the societies, who called at the White House.

According to the report in the *United States Daily*, Dean Dexter S. Kimball, of the College of Engineering, Cornell University, chairman of the present board of award, presided and gave a brief history of the medal. He is a past president of the American Society of Mechanical Engineers. General J. J. Carty, of New York, vice-president of the American Telephone and Telegraph Company, spoke briefly of the human elements of Mr. Hoover's work. Dr. John R. Freeman, past president of the American Society of Civil Engineers and the American Society of Mechanical Engineers and a former member of the board of award spoke of Mr. Hoover's work as an engineer.

J. V. W. Reynders, past president of the American Institute of Mining and Metallurgical Engineers and chairman of the board which made the award to Mr. Hoover, presented the medal and quoted from the certificate which accompanied the medal the citation "To Herbert Hoover, engineer, scholar, organizer of relief to war-stricken peoples, public servant."

The first award of the medal was made to John Fritz at a dinner given to him on his eightieth birthday, August 21, 1902. The other awards have been as follows:

1905, to Lord Kelvin for his work in cable telegraphy and other scientific attainments.

1906, to George Westinghouse for the invention and development of the air brake.

1907, to Alexander Graham Bell for the invention and introduction of the telephone.

1908, to Thomas Alva Edison for the invention of the duplex and quadruplex telegraph, the phonograph, the development of a commercially practical incandescent lamp, the development of a complete system of electric lighting, including dynamos, regulating devices, underground system, protective devices and meters.

1909, to Charles T. Porter for his work in advancing the knowledge of steam engineering and in improvements in engine construction.

1910, to Alfred Noble for notable achievements as a civil engineer.

1911, to Sir William H. White for notable achievements in naval architecture.

1912, to Robert W. Hunt for his contributions to the early development of the Bessemer process.

1913, no award.

1914, to Professor John E. Sweet for his achievements in machine design and pioneer work in applying sound engineering principles to the construction and development of the high-speed steam engine.

1915, to Dr. James Douglas for notable achievement in mining, metallurgy, education and industrial welfare.