

cial interest, the first working aneroid made by Vidi in 1857, and a series of models illustrating the development of the chick.

BARON EDMOND DE ROTHSCHILD, administrator of the Eastern Railway Company of France, has given 10,000,000 francs to found a scientific institute to encourage students to devote their lives to the work of research. The institute will aim to develop science in industry and agriculture. The institute is to be managed by a council, members of which are to be elected by the Academy of Sciences, the College of France, the Faculty of Sciences and the Paris Museum.

THE *Journal* of the American Medical Association reports that a new pathological and bacteriological institute has been opened in Prague. There are divisions for pathologic anatomy, experimental pathology, bacteriology and legal medicine. It is popularly called Hlava's Institute, from the name of its chief, Professor Jeroslav Hlava. Dr. Hlava is the senior professor of the staff of the Czech medical school, and is a well known authority on exanthematic fevers. In addition to being president of several medical societies and a corresponding member of the French Academy of Medicine, he is also the president of the Czech Society for Cancer Research. On the day the new building for pathology was opened, the president of the republic made a gift of 100,000 crowns to the Cancer Society for continuing and developing its work.

THE importance of regular meteorological reports from Greenland for the forecasting services of Western Europe, and, indeed, for that of Canada also, has, says *Nature*, been recognized for some years. The question of these reports was discussed at the meeting of the International Commission for Weather Telegraphy which was held in London in November last, and the commission decided unanimously that "the establishment at the earliest possible date of a high-power radio-telegraphic station in Greenland is of the utmost importance to the meteorology of Western Europe, and, further, it is of such importance as to warrant the international provision of funds for main-

taining it." It is probable that the provision of such a station by the Danish government will be made at an early date. When this station has been provided it will be possible to make a definite use in weather forecasting in Europe of meteorological observations from Canada and the United States. Hitherto the gap between the European and American observations has been so great that meteorologists have been unable to justify the expense which would be involved in regular cable messages from America to England.

THE medical division of Stanford University Medical School has received a grant of \$300 from the Committee on Scientific Research of the American Medical Association. This money is to be used for the furtherance of an investigation into the factors influencing the rate of urea excretion.

UNIVERSITY AND EDUCATIONAL NEWS

BEQUESTS amounting to \$16,624,203 are assured to the medical schools of Harvard, Columbia and Johns Hopkins Universities by the action of Miss Alice A. De Lamar in the Surrogate's Court in waiving her rights to protest the will of her father, Captain Joseph R. De Lamar. The will left more than half of his estate, valued at \$33,327,000, to education and charity. The descendant's estate law of New York bars a person from leaving more than half of his estate to charity, without approval of the heirs.

DR. G. CANBY ROBINSON, Baltimore, has accepted the post of professor of medicine at the Johns Hopkins Medical School and physician-in-chief of the Johns Hopkins Hospital, to succeed Dr. William S. Thayer. Dr. Robinson is now professor of medicine and dean of the medical faculty of Vanderbilt University, Nashville, Tenn., and expects to return at the end of the year.

DR. PAUL J. HANZLIK, associate professor of pharmacology, school of medicine, Western Reserve University, has been appointed professor of pharmacology in the

school of medicine of Leland Stanford Junior University. Upon his resignation from the medical faculty at Western Reserve, a dinner in honor of Dr. Hanzlik was given at the University Club of Cleveland.

AT Oberlin College, Mr. F. E. Carr has been promoted to an assistant professorship of mathematics, and Dr. C. H. Yeaton, of Milwaukee College of Engineering, has been appointed assistant professor of mathematics.

DR. PAUL THOMAS YOUNG, of the University of Minnesota, has been appointed associate in psychology in the University of Illinois.

HARRY F. LEWIS, A.B., A.M. (Wesleyan), Ph.D. (Illinois), at present with the National Aniline and Chemical Company of Buffalo, has been elected associate professor of chemistry at Cornell College, Mount Vernon, Iowa.

DISCUSSION AND CORRESPONDENCE

AN ANALOGY BETWEEN THE THEORIES OF NATURAL SELECTION AND ELECTROLYSIS

1. IN a recent reading of the "Origin of Species" I was struck by a marked similarity of the theory, to Clausius's views of the nature of electrolysis. In the latter one begins with ions produced by causes quite outside of the electrical forces. Their presence is a phenomenon on a scale of forces totally beyond the compass of the relatively feeble electric field. They are usually an essentially rare occurrence among molecules. The period of existence of each ion, moreover, is relatively short; but their virtues are at once retrieved, I might say inherited, by the progeny of some other molecule, so that the phenomenon is practically continuous. The familiar result is that the presence of an apparently inadequate field gives us a continuous supply of anions and cations at the electrodes.

2. Now replace ionization by variation, also an essentially independent phenomenon. Consider the positive ion a favorable variation and the negative ion an unfavorable variation. Let the electric field be replaced by natural selection, which embodies a sort of tendency or draft of the same nature as a physical field of force. At least, reciprocally with the

individual, it amounts to that, as is evidenced by the term "struggle." Physical forces, moreover, are in a similar way doubly specific. Finally, let the cathode be the goal of survival and let the anode denote extinction. Then the two mechanisms would function in the same way.

3. I have drawn inferences from the model; but these are beyond the mark here. It is merely my purpose to indicate that a mechanism which functions so efficiently in the laboratory, can not under a wider interpretation, fail to function in the economy of nature, and that you have in electrolysis an ocular and approachable demonstration of the result. The thing works. Of course the model represents only an infinitesimal element (as it were) in the continuity of Darwinian evolution. Nevertheless given ionization (however rare among millions of molecules) or an available variation; given also an electrical field (however feeble) or natural selection, you can not have stagnation; irremediably you will have to accept development, appreciable within a period commensurate with the two factors.

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NATIONAL TEMPERAMENT IN SCIENTIFIC INVESTIGATIONS

TO THE EDITOR OF SCIENCE: In Professor Carmichael's paper on "National temperament in scientific investigations" in SCIENCE for April 1, 1921, occurs the sentence:

They (the British) have no university eager to nurse and develop new talent, so that the new thinker becomes devoted to nature.

In Merz's "European Thought in the Nineteenth Century," in the first volume, part one, "on the growth and the diffusion of the scientific spirit in the first half of the nineteenth century," we find the statement on page 286:

The rare genius, gifted with the power of original thought, who found no academy ready to call him, no schools where he could be trained, no university eager to nurse and develop his talent, did not retire into the depths of his own