

rithms and other Mathematical Tables" and "Mathematical Theories of Planetary Motions" (a translation by Harrington and Hussey) together with several technical papers appeared during his residence at Michigan and Stanford Universities. While at Lick Observatory his "Micrometrical Observations of Double Stars discovered at Pulkowa" appeared as Volume V of the Lick Observatory Publications, and in addition he contributed about 130 technical articles to various astronomical periodicals during that time. Subsequently, the total of his technical articles had increased to more than one hundred and seventy.

Professor Hussey's only respite from hard work was found in travel and his journeys were always of an expeditionary character. In 1903 his search for observatory sites in behalf of the Carnegie Institution took him to Arizona, Southern California and Australia. At this time he reported favorably on the present site of Mount Wilson Observatory. In 1905 he headed the very successful Lick Observatory Expedition to Egypt. In 1911 his four journeys to La Plata began. In 1912 he conducted an eclipse expedition to Brazil, but clouds prevented observation. In 1923 he extended his search for observatory sites to Africa. In 1925 at Geneva, New York, he sat in the basket of a balloon ready to ascend under perilous conditions to observe the eclipsed sun from an elevation above the clouds. Expert balloonists forbade the flight. He was embarking on the major expedition of his career when death came.

The University of Michigan has lost a prominent scientist, educator and administrator. Astronomy has lost one of its distinguished contributors, organizers and builders. Those of us who were close to Professor Hussey mourn the loss of a generous and loyal friend.

R. H. CURTISS

ANN ARBOR, MICHIGAN

SCIENTIFIC EVENTS

AWARD OF PRIZES BY THE FRENCH ACADEMY OF SCIENCES

THE following prizes have been awarded by the French Academy of Sciences for the year 1926:

The Poncelet Prize (2,000 fr.), Paul Montel, professor of mathematics at the University of Paris.

The Francoeur Prize (1,000 fr.), Gaston Julia, professor of mathematics at the University of Paris.

The Montyon Prize (1,500 fr.), Professor Kyrille Popoff, of the University of Sofia.

The Henri de Parville Prize (1,500 fr.), Colonel Antoine Alayrac, chief engineer of the Bureau of Aeronautics.

The Henry Bazin Prize (5,000 fr.), Leo Escande and

Marcel Ricaud, lecturers in electromechanics at the University of Toulouse.

The Montyon Prize for Pathological Industries (2,500 fr.), Ernest Portier, inspector of education for the Seine district, and (1,500 fr.) Louis Chelle, professor of chemistry at the University of Bordeaux.

The Jecker Prize (6,000 fr.), André Wahl, professor of industrial chemistry at the University of Paris, and (4,000 fr.) Gustave Vavon, professor of organic chemistry at the University of Nancy.

The La Caze Prize (10,000 fr.), André Job, professor of chemistry at the University of Paris.

The Cahours Foundation Prize, Raymond Delaby, of the School of Pharmacy, and Michel Samsoen, engineer.

The Hirn Foundation Prize (2,500 fr.), M. Thoret, of the air force.

The Becquerel Foundation Prize (3,000 fr.), Georges Bruhat, professor of physics at the University of Lille.

The Houzeau Prize (700 fr.), Louis Hackspill, professor of mineralogical chemistry at the University of Strasbourg.

The Berthelot Medal, Ernest Portier, winner of the Montyon Prize and André Job, winner of the La Caze Prize.

The Serres Prize (7,500 fr.), Charles Pérez, professor of zoology at the University of Paris.

The Vaillant Prize (4,000 fr.), Mme. Lucie Randoïn, director of the laboratory of research in nutrition at the Institute of Agronomical Research.

The Jean Reynaud Prize (10,000 fr.), to the late Alfred Giard, member of the Academy of Sciences.

The Saintour Prize (3,000 fr.), Pierre Fauvel, professor of zoology at the University of Angers.

The Longchamps Prize (4,000 fr.), Charles Dhéré, professor of physiology at the University of Freiburg.

The Wilde Prize (2,000 fr.), Professor Armand Renier, of the University of Liège, and (2,000 fr.) M. Bruneau, explorer.

The Caméré Prize (4,000 fr.), Raoul Férét, director of the laboratory for research in the construction of bridges and roads.

The Gaston Roux Prize (1,000 fr.), M. Chevey, assistant at the museum of Natural History.

The Thorlet Prize (1,600 fr.), Adolphe Richard, former assistant at the School of Mines.

The Albert 1st of Monaco Prize (100,000 fr.), Jean Charcot, the explorer.

The Tremont Foundation Prize (1,000 fr.), Edmond Marcotte, advisory engineer at the mines of Lalucque.

PRESENTATION OF THE ROYAL SOCIETY'S MEDALS TO SIR FREDERICK G. HOPKINS AND DR. D. H. SCOTT

In presenting the Copley medal to Sir Frederick Gowland Hopkins, and the Darwin medal to Dukinfield Henry Scott at the anniversary meeting of the Royal Society the following citations were made:

For twenty years Sir Frederick Hopkins has been a foremost leader in biochemistry, a branch of science that

has grown rapidly in importance and influence during this period. The guide and director of a great research laboratory in Cambridge, he is everywhere recognized as one of the great pioneers of his science. In his active life he has made a series of fundamental discoveries, each of which has led to the opening up of new fields of work. The isolation and identification of tryptophane twenty-five years ago, at a time when but few of the amino-acids that enter into the composition of proteins were recognized, marked an epoch in the pure chemistry of these substances. The importance of this discovery was enhanced by Hopkins's later work on this substance, which led to a revolution in the physiology of proteins in nutrition, the end of which is not yet in sight. Some of the most fruitful work in recent physiology has been upon the nature of muscular contraction. The work of A. V. Hill and Meyerhof, of Embden, and many others, turns upon the fundamental earlier discoveries by which Hopkins, in collaboration with W. M. Fletcher, defined the conditions governing the appearance of lactic acid in muscle during activity, and its disappearance during recovery. One of the most important discoveries of this century is summed up in the word "vitamins." Fifteen years ago, Hopkins had carried out experiments which not only showed that appropriate mixtures of proteins, carbohydrates, fats and salts, might, for lack of traces of unknown substances, be inadequate for the nutrition of animals, but also at the same time established the general lines of the methods used ever since in the investigation of these substances, by important groups of biochemists in all parts of the world. The discovery of the dipeptide glutathione, coming at a time when the nature of the processes underlying biochemical oxidations was the subject of significant work in many laboratories, has again brought Hopkins into the van as a leader in yet another part of the field of biochemistry and given the signal for intense renewed activity there. Hopkins's work throughout has shown a genius for discovery. It has inspired a very large part of the best work in biochemistry in this century.

At a moment when there seemed some danger that the brilliant advances in paleophytology made by Professor Williamson might slacken owing to advancing years, Dr. Scott entered upon a fruitful cooperation with the veteran. Several joint memoirs were the result of this happy coalition; but later Scott established a quite independent position of his own. Among the numerous memoirs published by him during the last forty years, none stands out more prominently as a model of presentation of complex structure than that on *Cheirostrobos*, a new type from the Calceiferous sandstone. Not only was its elaborate structure fully described, but also the comparative treatment showed a master hand. This quality came out with even greater effect in the study of the new class of the Pteridosperms, or primitive seed-plants with fern-like habit. The extensive knowledge of these early land-plants which we now possess has been mainly based upon the work of Scott, Oliver and Kidston. Such work, of which these examples do nothing more than suggest the

nature and the scope, has been gathered up by Scott into his "Studies in Fossil Botany," now in its third edition. It deals primarily with early vascular plants, placing them in natural relations to their living correlatives, and giving a picture of early land-vegetation that has never been surpassed in clarity of presentment, combined with accuracy of detail and of reference. It supplies not only a great mass of fact that is positive and new; but it also subjects those facts to a detailed criticism and a philosophical treatment such as Darwin himself would have been among the first to appreciate.

APPOINTMENT OF A. V. HILL TO THE BAKER LECTURESHIP AT CORNELL UNIVERSITY

It is announced by Professor L. M. Dennis, head of the department of chemistry at Cornell University, that Dr. Archibald Vivian Hill, F.R.S., Foulerton research professor of physiology in the University of London and Nobel prizeman in medicine, will fill the George Fisher Baker non-resident lectureship in chemistry in Cornell University throughout the second semester of this academic year, from February to June.

The lectureship was founded and endowed last year by George F. Baker, of New York. Previous incumbents of the chair have been Professor Ernest Cohen, of the University of Utrecht, and Professor Fritz Paneth, of the University of Berlin, who is lecturing there this term.

At the age of forty, Professor Hill is one of the youngest of the fellows of the Royal Society, to which he was elected in 1918. His wife is a sister of John Maynard Keynes, author of "The Economic Consequence of the Peace." He was educated at Trinity College, Cambridge, and after graduating with honors and several prizes he was a fellow of that college for several years and then a fellow of King's College, Cambridge, and university lecturer in physical chemistry. He held a professorship in the University of Manchester for four years until 1923, when he accepted the Jodrell professorship of physiology in University College, London. The Royal Society established the Foulerton research professorship in physiology in London in 1924 and Professor Hill is the first incumbent. The Nobel prize in medicine was awarded to him in 1922.

Professor Hill has made important studies of the chemistry and mechanism of muscular contraction, using athletes as experimental subjects, and he plans to develop these studies still further while he is at Cornell. The university athletic association has offered to give him all possible aid. He is eminent not only in physiology but also in mathematics, physics and physical chemistry. He has brought these