

in Gilman Hall, as a permanent memorial of the occasion.

2. An anniversary volume, made up of congratulatory letters to Professor Jennings, together with photographs of the writers, to the end that he personally may have a permanent reminder of the affection and esteem in which he is held by his old students and colleagues. This volume in quarto format is bound in full crushed levant morocco, and contains a large number of letters from all parts of the world.

3. A large silver platter presented to Mrs. Jennings, as a token of the part she has played in her husband's scientific career, and in the lives of his students during their university days.

4. Photographic copies of the portrait, one of which is to be sent to each contributor to the celebration.

On May 28 a subscription dinner was given in Professor Jennings's honor at the Chateau in Baltimore. Some 44 persons were in attendance. Dr. C. B. Davenport presented a remarkably impressive review of Jennings's scientific career and contributions to biology. The anniversary volume was presented. In replying Professor Jennings gave an analysis, at once penetrating and humorous, of the manifold advantages of maturity over youth.

SCIENTIFIC NOTES AND NEWS

DR. ALEXIS CARREL, member of the Rockefeller Institute for Medical Research, has been elected a national associate of the Paris Academy of Medicine. Under the rules of the academy there may be only twenty national associates, all of whom have heretofore been residents of France.

DR. HIDEYO NOGUCHI, of the Rockefeller Institute for Medical Research, has received the honorary degree of doctor of science from Brown University, as well as from Yale University. Dr. Oswald T. Avery, of the institute, received the honorary degree of doctor of science from Colgate University.

THE University of Pennsylvania has conferred the degree of Doctor of Laws on Dr.

Hobart Amory Hare, professor of materia medica in Jefferson Medical College.

BOWDOIN COLLEGE has conferred the degree of Doctor of Science on Dr. Preston Kyes, professor of preventive medicine in the University of Chicago.

THE degree of Doctor of Science has been conferred by Tufts College on Frank William Durkee, professor of chemistry at the college, and on William Henry Nichols, chairman of the Allied Chemical and Dye Corporation.

HONORARY degrees of Doctor of Science were conferred on June 15 by Colorado College on Professor S. L. Goodale, professor of metallurgy at the University of Pittsburgh, and on Dr. C. A. Hedblom, of the Mayo Foundation. Both are alumni of the Colorado College.

DR. JOHN A. KOLMER, professor of pathology and bacteriology in the graduate school of medicine of the University of Pennsylvania, and director of the pathologic laboratories of the Dermatological Research Institute, received the honorary degree of Doctor of Science at Villanova College.

THE University of Manchester has conferred the degree of D.Sc. on Dr. C. S. Sherrington, professor of physiology, Oxford, and president of the Royal Society; on Dr. Horace Lamb, formerly Beyer professor of mathematics in the university; and on Sir Ernest Rutherford, formerly professor of physics. The degree of Litt.D. has been conferred on Dr. G. Elliot Smith, formerly professor of anatomy.

ACCORDING to *Nature* the list of honors conferred on the occasion of the King's birthday includes the following names of men known to the world of science: *Knights*: Professor Arthur Keith, Hunterian professor and conservator of the Royal College of Surgeons; Dr. T. Lewis, hon. consulting physician since April, 1918, to the Ministry of Pensions; Dr. S. Russell-Wells, vice-chancellor of the University of London; Dr. F. Conway Dwyer, ex-president of the College of Surgeons, Ireland; Mr. J. B. Harrison, director and govern-

ment analyst, Department of Science and Agriculture, British Guiana; and Brig.-Gen. D. J. McGavin, director-general of Medical Services in New Zealand. *C.B.*: Mr. L. S. Lloyd, assistant secretary to the Department of Scientific and Industrial Research. *K.C.I.E.*: Col. W. H. Willcox, late medical adviser to the Civil Administration in Mesopotamia. *C.I.E.*: Dr. M. N. Banerjee, principal of Carmichael Medical College, Belgatchia, Bengal. *Companion Imperial Service Order*: Mr. G. J. Williams, senior inspector of mines, Mines Department.

PROFESSOR G. F. FERRIS, of Leland Stanford University, California, is spending the summer collecting and studying scale insects in Texas, in cooperation with the Division of Entomology of the Texas Agricultural Experiment Station.

THE British government will devote the sum of 1,000,000*l.* to fostering cotton-growing in the Empire. The money will be placed at the disposal of the British Empire Cotton Growing Corporation, and will be in place of the government's former promise of 50,000*l.* a year for five years to the corporation.

UNIVERSITY AND EDUCATIONAL NEWS

DR. LIVINGSTON FARRAND, chairman of the executive committee of the Red Cross, formerly adjunct professor of psychology and professor of anthropology at Columbia University and president of the University of Colorado, has been elected president of Cornell University.

DR. FRANK PIERREPONT GRAVES, dean of the school of education of the University of Pennsylvania, has been appointed commissioner of education of the state of New York and president of the University of the State of New York.

DR. P. J. HANZLIK, of the medical school of Western Reserve University, has been appointed professor of pharmacology in the Stanford University Medical School to succeed Professor A. C. Crawford, who died recently.

DR. W. H. RODEBUSH, who has been for the

past year a research fellow of the National Research Council at the University of California, has been appointed associate professor of physical chemistry at the University of Illinois.

GEORGE M. WHEELER, Ph.D. (1921), Bussey Institution, has been appointed instructor in entomology, and William E. Greenleaf, instructor in zoology, in the zoology department of Syracuse University.

DR. R. R. GATES has been appointed to the university chair of botany tenable at King's College, University of London, in succession to Professor W. B. Bottomley. He was appointed university reader in botany at that college in 1919, and has since that date been in charge of the department in the absence of Professor Bottomley.

DISCUSSION AND CORRESPONDENCE

THE CANNONBALL LANCE FORMATION

TO THE EDITOR OF SCIENCE: In reviewing Stanton's memoir on the Cannonball Lance formation, Dr. Schuchert has advocated drawing the line between Cretaceous and Tertiary at the base of the Wasatch. He has referred to the vertebrate evidence as supporting this view, and as recent researches have considerably clarified and extended this evidence, a brief summary of its present status may be of some aid toward harmonizing the existing conflict of opinion.

The position of these border-line formations has been in dispute not merely for a number of years, as Dr. Knowlton remarks, but ever since they were first discovered. A Cretaceous vertebrate fauna was found associated with a Tertiary flora. Vertebrate palaeontologists and palaeobotanists took opposite sides; the stratigraphic geologists were divided, and the relations with the marine succession, European standard, theories of diastrophism, etc., have been invoked by both sides for a decision. This discrepancy has been maintained and confirmed by all subsequent work. It should be recognized as the fundamental difficulty. It does not help matters to misrepresent or ignore any part of the evidence, and if Dr. Cross's references to the vertebrate evidence fairly reflect the way in which the U.