

## SCIENTIFIC NOTES AND NEWS

THE doctorate of science was conferred on June 16 at the commencement exercises of Princeton University on Dr. Richard Chace Tolman, professor of physical chemistry and mathematical physics at the California Institute of Technology and vice-chairman of the National Defense Research Committee, and on Childs Frick, honorary curator of late tertiary and quaternary mammals at the American Museum of Natural History and trustee of the museum.

DR. GEORGE HARRISON SHULL, professor of botany and genetics at Princeton University, was awarded the degree of doctor of science at the commencement of the Iowa State College in recognition of his early research leading to the discovery of the scientific basis for hybrid corn.

THE doctorate of laws was conferred on June 19 at the commencement exercises of New York University on Dr. Frederick P. Keppel, from 1923 to 1941 president of the Carnegie Corporation.

AT the recent commencement exercises of the University of North Carolina Dr. William S. Tillett, professor and head of the department of medicine of the New York University Medical School, was awarded the honorary degree of doctor of science.

J. R. VAN PELT, head of the curatorial department of the Chicago Museum of Science and Industry since 1930, has received the honorary degree of doctor of science from Cornell College, in recognition of his contribution to better public appreciation of pure and applied science.

A TESTIMONIAL dinner in honor of Professor Albert Ball, head of the department of physics at Cooper Union, who is retiring after thirty-seven years of service, was given on May 28 by forty-nine past and present members of the faculty at the Hotel Lafayette in New York City. A bound volume containing seventy-two letters of tribute was presented to him by George F. Bateman, dean of the Engineering School. Other speakers included Gordon Thompson, Class of 1909, chief engineer of the Electrical Testing Laboratory; Professor Harold W. Merritt, who becomes senior member of the department of physics, and Professor Ball. J. Charles Ridel, chief engineer of the New York City Board of Estimate and Apportionment, was toastmaster.

IT is reported in the *Journal* of the American Medical Association that Dr. Jacob C. Krafft, clinical professor of pediatrics at the Loyola University School of Medicine, on May 13 was the guest of honor at a dinner given by the Northwest Branch of the Chicago Medical Society and by friends, in recogni-

tion of his many years of service in the profession and in special recognition of his work in the care of the mentally handicapped child. Dr. Krafft was presented with a sphygmomanometer.

PROFESSOR M. GREENWOOD, head of the department of epidemiology and vital statistics at the London School of Hygiene, has been elected an honorary fellow of the National Institute of Sciences of India.

THE newly elected officers of the University of Southern California Chapter of the Society of the Sigma Xi are: Dr. Thomas Clements, *President* (geology); Dr. Arthur Wyckes Nye, *Vice-president* (physics); Dr. Sydney Duncan, *Treasurer* (engineering), and Dr. Francis Marsh Baldwin, *Secretary* (zoology).

OFFICERS of the Association of College Geology Teachers have been elected as follows: *President*, Percival Robertson, of The Principia College; *Vice-president*, David M. Delo, of Knox College; *Secretary-Treasurer*, Katherine F. Greacen, of Milwaukee Downer College.

DR. HENRY J. MASSON, for twenty-five years a member of the faculty of the College of Engineering of New York University, has been appointed assistant dean of the college. Dr. Masson, who is now director of the graduate and evening divisions, is also chairman of the department of chemical engineering.

DR. R. G. GUSTAVSON, professor of chemistry at the University of Colorado, has been appointed dean of the Graduate School, to succeed Dean O. C. Lester, who retires at the end of the summer session.

DR. WALTER L. HARD, assistant professor of zoology at the University of Maryland, has become assistant professor in the department of histology and embryology of the School of Medicine.

THE *Journal* of the American Medical Association states that Dr. Leopoldo Luis Benedetti B., Panama, has been awarded a fellowship in pediatrics by the American Academy of Pediatrics, the training to be carried out at the College of Medicine of the University of Cincinnati.

CLYDE W. LEAF, of the Girandau-Delawanna, Inc., has been appointed organic chemist in the chemical engineering section of the Armour Research Foundation.

DR. R. A. ROGERS, of the department of physics of Park College, Parkville, Mo., has been appointed by the Bureau of Aeronautics of the Navy Department Ground School instructor in physics, mathematics and meteorology.

RECENT appointments in the office of the Medical Division of the Office of Civilian Defense include Dr. Dean A. Clark, since 1939 surgeon of the staff of the Division of Public Health Methods of the National Institute of Health, who has been appointed head of a hospital section organized to carry out the new program recently announced by the OCD and the Federal Security Agency. Dr. Clark will also be placed at the head of a new Emergency Medical Section in the Public Health Service, which will administer the program jointly with the Medical Division.

DR. CHARLES ARMSTRONG, senior surgeon of the Public Health Service and director of the division of infectious diseases of the National Institute of Health, is convalescing at Hamilton, Mont., from a severe attack of tularemia (rabbit fever). He was taken ill on May 25, a few hours after his arrival on an official visit to the Rocky Mountain Spotted Fever Laboratory at Hamilton.

DR. REGINALD FITZ, Wade professor of medicine in the School of Medicine of Boston University and member of the council on medical education of the American Medical Association, delivered on June 18 the commencement address at the College of Medicine of the University of Vermont.

IN recording the honorary degree conferred by Franklin and Marshall College on Dr. William Henry Welker, his position was given as head of the department of physical chemistry of the University of Illinois. This should have read the department of physiological chemistry of the College of Medicine.

*Nature* states that an Association of Austrian Engineers, Chemists and Scientific Workers in Great Britain has recently been formed. The main activities of the association will be to assist members in their professional work and interests, to represent them with the authorities, to promote contact and relations with British colleagues and to form a link with British scientific and technical institutions. Lectures, courses and discussions will be held and will give opportunities for the exchange of views and to discuss matters of mutual interest. It is hoped that the association may assure that better use is made of the knowledge and abilities of Austrian engineers, chemists and scientific workers who are anxious to assist in the war effort. The acting chairman of the association is Dr. F. Ehrenfest-Egger; inquiries should be sent to the honorary secretary, Mrs. K. Hilfreich, 133 Hatherley Court, London, W.2. Lectures are being given on the first Monday of each month. Every Monday, commencing June 1, at 7 P.M., a clubroom will be open for members of the association at the Austrian Center, where there will be opportunities to read technical periodicals and to meet other colleagues.

THE Council of the British Institution of Electrical Engineers has made the following awards of premiums for papers read or accepted for publication during the session 1941-42: *Institution Premium* to J. M. Meek; *Ayrton Premium* to J. S. Forrest; *Fahie Premium* to Dr. W. G. Radley and E. P. G. Wright; *John Hopkinson Premium* to Dr. A. L. Williams and L. E. Thompson; *Kelvin Premium* to E. Colin Cherry; *Overseas Premium* to Professor K. Aston and M. V. Kesava Rao; *Extra Premiums* to Dr. A. H. M. Arnold, G. W. Bowdler, G. W. Bowdler and W. G. Standing, R. Davis, Dr. H. D. Einhorn and Professor B. L. Goodlet, Dr. Hackett and A. M. Thomas, E. A. Richards, V. Sia, R. C. Woods and A. S. MacDonald; *Installations Section Premiums* to L. J. Davies, H. R. Ruff and W. J. Scott (Crompton Premium), R. Grierson; *Meter and Instrument Section Premiums* to E. A. Burton, J. S. Forrest and T. R. Warren (Silvanus Thompson Premium), D. J. Bolton; *Transmission Section Premiums* to J. W. Leach (Sebastian de Ferranti Premium), W. Casson and F. H. Birch; *Wireless Section Premiums* to O. S. Puckle (Duddell Premium), Dr. D. C. Espley and D. O. Walter (Ambrose Fleming Premium), J. E. Thwaites and F. J. M. Laver.

THE Army unit of the New York Hospital and Cornell Medical College has been called into service, and its personnel reports for active duty on July 15. As the Ninth General Hospital, the unit bears the same number as the New York Hospital in France, which cared for 15,000 men of the American Expeditionary Force in the last war. Fifty-five doctors, 120 nurses and a number of non-professional employees will leave the hospital for service with the detachment. Chief of the Surgical Service will be Dr. Ralph F. Bowers, attending surgeon, and the head of the Medical Service will be Dr. Bruce Webster, assistant attending physician, each with the rank of lieutenant-colonel.

THE sum of \$250,000 has been given by an anonymous donor to the Brush Foundation of Western Reserve University for research and education. The work will be under the supervision of Dr. William Walter Greulich, professor of physical anthropology and anatomy, director of the foundation.

THE Laboratories of Nutritional Biochemistry of the Massachusetts Institute of Technology have been granted \$12,300 by the Rockefeller Foundation to be used during the twelve-month period beginning on July 1. Under this grant research on development of emergency rations and food mixtures for armies and distressed populations under the direction of Professor Robert S. Harris will be continued. A similar grant was made by the Rockefeller Foundation last year.

MRS. ALEXANDER LOWY has established a fund in memory of her late husband, who for over twenty years was professor of chemistry in the University of Pittsburgh. This fund is to help students in the course leading to the degree of bachelor of science in chemistry or to the Ph.D.

THE two Lynn, Massachusetts, plants of the General Electric Company, employing 25,000 workers, received the Navy "E" on June 19 for excellence in turning out war equipment. The pennant was presented on the same day to the Bound Brook, N. J., plant of the Bakelite Corporation, which produces a synthetic electrical insulation.

*Nature* writes: "We understand that the trustees of Charles Darwin are considering disposing of original MSS of Darwin's which are in their care. These include the manuscript journal kept by Darwin during the voyage of the *Beagle* (1831-36) on which was based his 'Journal of Researches into the Natural History and Geology of the various countries visited by H.M.S. *Beagle* . . .'; Darwin's autobiography in his own handwriting with alterations made or suggested

by Mrs. Darwin; the manuscript of 'The Effects of Cross- and Self-Fertilization in the Vegetable Kingdom'; the 1844 sketch of 'The Origin of Species,' and a large number of letters and miscellaneous material, most of which has been published. Although this material may contain little of strictly scientific value, it has an obvious interest to the historian of science as revealing the workings of Darwin's mind at different periods of his life, and it would be unfortunate if the material should be dispersed. Such documents should be preserved in a library where access to them can be had by students, and it is to be hoped that some benefactor of science, aided perhaps by the Friends of the National Libraries, or some similar body, may be able to secure them for that purpose."

At the request of the British Minister of Agriculture, the National Institute of Agricultural Botany has set up a special Seed Production Committee the duty of which will be to take all possible steps to stimulate, coordinate and ensure home seed production. The chairman of the committee is W. Gavin, agricultural adviser to the Ministry of Agriculture.

## DISCUSSION

### POST-GLACIAL CLIMATIC AMELIORATION AND THE EXTINCTION OF BISON TAYLORI

THE extinction of the late glacial bison species or races variously assigned to *occidentalis*, *antiquus* and commonly of late designated as *Bison taylori*, has become a matter of more than ordinary interest to the archeologist. Followed on the time scale, as it is, by a closely related and still existing species, its possibilities as an index fossil are considerable. Unfortunately, as in the case of other Ice Age forms, considerable mystery has clothed its demise. Similar mystery attends the first appearance of *Bison bison*, the succeeding form.

*Bison taylori* has been reported associated with human artifacts over a wide area of the High Plains. In certain instances, however, the identifications were not based upon the evidence of skull characters which are, at the present time, the only diagnostic features carrying entire conviction. To date *Bison bison* remains have not been reported intermixed with the extinct species upon any of these sites, yet it is a reasonable assumption that the two species overlap at some point on the late Pleistocene or early Recent time scale.

Indeed, a recent assertion in Hibben's monograph on Sandia cave<sup>1</sup> as to the presence of a form "near

but smaller than *taylori*" leads us to wonder whether a smaller type may not have existed contemporaneously in the southern regions—though the size range in both *Bison bison* and *taylori* is not sufficiently known to clarify the situation, a state of affairs which tends to vitiate evidence drawn from limb fragments alone.<sup>2</sup>

It has been intimated occasionally that climate could not have been a major factor in the extermination of the Pleistocene fauna<sup>3</sup> because these animals survived the great ice movements only to disappear at their close. In the case of certain northern forms, at least, this has always seemed to the present writer like a dubious and wilful inversion of a much more reasonable assumption; namely, that some species adapted to more boreal conditions were poorly adjusted physiologically to the climatic amelioration which attended the recession of the last ice sheet. This is not to assign climate a single role in the process of extinction. It is obvious, however, that under conditions of increased temperature, species contending for survival

<sup>2</sup> Interesting in this connection is the fact that Figgins and others have noted a greater spread in the horn cores of the existing species as one progresses from south to north. Indeed Figgins speculates on the basis of stratigraphic evidence that *Bison bison bison*, which he recognizes as the shorter-horned variety, has extended its range northward in more recent times. (J. D. Figgins, *Proceedings of the Colorado Museum of Natural History*, 12: 26, 28, 1933.)

<sup>3</sup> A. L. Kroeber, "Conclusions: The Present Status of Americanistic Problems," Chapter 34, "The Maya and Their Neighbors," Appleton-Century, New York, 1940.

<sup>1</sup> Frank C. Hibben, *Smithsonian Miscellaneous Collections*, 99: 33, 1941. See also the present writer's review of this work in *American Antiquity*, 7: 4, 1942 (in press).