## NOTES

The James Scott Prize of the Royal Society of Edinburgh was presented to Professor P. A. M. Dirac of the University of Cambridge at a meeting of the Society on February 6.

The James Alfred Ewing Medal has been awarded to Professor A. H. Gibson of the University of Manchester.

The Board of Directors of the Research Corporation of New York has awarded \$2,500 to Dr. Vannevar Bush, president of the Carnegie Institution of Washington, in recognition of his invention of mathematical computing machines.

Professor Harlow Shapley, director of the Harvard Observatory, has received the Bruce Medal of the Astronomical Society of the Pacific.

Professor Arthur Conway of University College, Dublin, has been appointed a member of the Pontifical Academy of Sciences.

Dr. William Findlay, professor of mathematics at the University of Toronto, recently gave an address as president of the Royal Society of Canada. His subject was *Mathematics and astronomy*.

The following mathematicians were starred for the first time in the sixth edition of American Men of Science: L. V. Ahlfors, Harvard University (now at the University of Helsingfors); Garrett Birkhoff, Harvard University; Salomon Bochner, Princeton University; Alonzo Church, Princeton University; Richard Courant, New York University; H. T. Davis, Indiana University; Harold Hotelling, Columbia University; B. O. Koopman, Columbia University; E. J. McShane, University of Virginia; A. D. Michal, California Institute of Technology; H. A. Rademacher, University of Pennsylvania; H. P. Robertson, Princeton University; Otto Szász, University of Cincinnati; Gabor Szegö, Stanford University; J. M. Thomas, Duke University; W. J. Trjitzinsky, University of Illinois; Hermann Weyl, Princeton University; Hassler Whitney, Harvard University; Aurel Wintner, Johns Hopkins University; Oscar Zariski, Johns Hopkins University.

The one hundredth anniversary of the birth of Josiah Willard Gibbs was commemorated by Yale University on February 16.

Professor H. F. Blichfeldt of Stanford University has retired with the title emeritus.

Professor J. A. Eiesland of West Virginia University has been given the title emeritus.

Professor Raymond Pearl of Johns Hopkins University was elected president of the American Statistical Association at its recent meeting in Detroit.

Professor H. N. Russell, director of the Princeton University Observatory, has been elected correspondent of the Section of Astronomy of the Paris Academy of Sciences in succession to the late Professor E. W. Brown.

Mr. H. C. Trimble has been awarded a General Education Board Fellowship.

Dr. S. Goldstein, fellow and lecturer in mathematics at St. John's College, Cambridge, is spending this term at the California Institute of Technology.

A project for the Computation of Mathematical Tables, sponsored by Dr. L. J. Briggs, Director of the National Bureau of Standards, is being conducted by the Works Progress Administration for the City of New York. Three tables are completed, five are being computed, and seven others are under consideration. The directors of the project desire to hear from those conducting like work elsewhere and also from those who wish to offer suggestions for new tables. Communications may be addressed to Dr. A. N. Lowan, Chief Project Supervisor, 475 Tenth Avenue, New York City.

The following sixty-eight doctorates, with mathematics or mathematical physics as a major subject, were conferred during 1938 in universities in the United States and Canada; the major subject is mathematics unless otherwise specified. The university, month in which the degree was conferred, minor subject (other than mathematics), and the title of the dissertation are given in each case if available.

Leonidas Alaoglu, Chicago, August, Weak topologies of normed linear spaces.

G. E. Albert, Wisconsin, June, Asymptotic forms of the generalized Legendre functions.

Vera A. Ames, Bryn Mawr, June, Linear equations with n parameters.

Frank Ayres, Jr., Chicago, August, A Cremona transformation generated by a pencil of surfaces.

H. G. Barone, Cornell, June, Limit points of sequences and their transforms by methods of summability.

R. C. F. Bartels, Wisconsin, March, Saint-Venant's flexure problem for a regular polygon.

E. J. Bernet, Wisconsin, June, major in physics, minor in mathematics, Gammarays from fluorine due to proton bombardment.

Fannie W. Boyce, Chicago, August, Certain types of nilpotent algebras.

C. P. Brady, Chicago, August, The minimum of a function of integrals in the calculus of variations.

B. W. Brewer, Jr., Missouri, August, Criterion for solvability by radicals in an algebraically perfect field.

D. M. Brown, Illinois, February, minor in physics, Arithmetics of rational generalized quaternion division algebras.

C. R. Cassity, Illinois, June, minor in physics, The maps determined by the principal curves associated with five and six points in the plane.

C. E. Clark, Cornell, June, Simultaneous invariants of a complex and subcomplex.

J. J. DeCicco, Columbia, July, The geometry of whirl series.

F. L. Dennis, Illinois, June, minor in astronomy, Some geometric applications of algebraic correspondences.

J. M. Dobbie, Illinois, June, minor in physics, A generalized Lambert series.

C. H. Dowker, Princeton, June, Mapping theorems in non-compact spaces.

Rev. W. C. Doyle, St. Louis, June, minor in physics, A further generalization of Lambert series.

F. A. Ficken, Princeton, June, Riemannian and affine differential geometry of product-spaces.

Sister Mary Charlotte Fowler, Catholic University of America, June, minors in physics and education, *The discriminant of the sextic of double point parameters of the plane rational guartic curve.* 

Sister Catherine Francis Galvin, Catholic University of America, June, minors in chemistry and physics, Two geometrical representations of the symmetric correspondence,  $C_{n,n}$ , with their interrelations.

B. H. Gere, Massachusetts Institute of Technology, June, minor in physics, On lengths of curves and areas of surfaces.

C. H. Graves, Chicago, March, On certain surfaces in five-dimensional space.

J. W. Green, California (Berkeley), May, I. A property of harmonic functions in three variables. II. Harmonic functions in regions with multiple boundary points.

Marion Greenebaum, Bryn Mawr, June, The nonexistence of integral normal bases in certain algebraic fields.

Mary B. Haberzetle, Chicago, June, Two new universal Waring theorems.

D. W. Hall, Virginia, June, A decomposition of true cyclic elements.

N. A. Hall, California Institute of Technology, June, minor in physics, I. A formal expansion theory for functions of one or more variables. II. The number of representations function for binary quadratic forms.

P. R. Halmos, Illinois, June, minor in philosophy, Invariants of certain stochastic transformations. The mathematical theory of gambling systems.

P. C. Hammer, Ohio State, September, Projective geometries over a pseudo-field

Philip Hartman, Johns Hopkins, June, Mean motions and almost periodic functions.

R. J. Havens, Wisconsin, June, major in physics, minor in mathematics, The variation of the electric moment of carbon monoxide and nitric oxide with inter-nuclear distance.

Hsien-Yü Hsü, Washington (St. Louis), June, minor in physics, Certain integrals and infinite series involving ultraspherical polynomials and Bessel functions.

I. F. Keeler, Iowa, August, minor in applied mathematics, *Properties of completely* regular spaces.

E. H. Krause, Wisconsin, June, major in physics, minor in mathematics, The sensitized fluorescence of potassium.

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R. R. McDaniel, Cornell, June, Approximation to algebraic numbers by means of periodic sequences of transformations on quadratic forms.

W. G. Madow, Columbia, December, Contributions to the theory of multivariate statistical analysis.

P. T. Maker, Illinois, June, minor in philosophy, Conditions on U(X, Y) and V(X, Y) necessary and sufficient for the regularity of U+iV.

Margaret E. Mauch, Chicago, December, Extensions of Waring's theorem on seventh powers.

M. G. Moore, Illinois, February, minor in physics, On expansions in series of exponential functions.

D. L. Netzorg, Illinois, February, minor in physics, Mechanical quadrature formulas and the distribution of zeros of orthogonal polynomials.

I. M. Niven, Chicago, June, A Waring problem.

G. H. Peebles, Minnesota, June, minor in physics, Some generalizations of the theory of orthogonal polynomials.

D. T. Perkins, Yale, June, Automorphisms of finite abelian groups.

Sam Perlis, Chicago, August, Maximal orders in rational cyclic algebras of composite degree.

J. A. Pierce, Michigan, June, A study of a universe of n finite populations with application to moment-function adjustments for group data.

Henry Primakoff, New York, June, major in physics, minor in mathematics, Relations between the second and higher order processes in the electron-neutrino field theory.

Haim Reingold, Cincinnati, June, Invariants of a system of linear homogeneous differential equations of the second order.

Eric Reissner, Massachusetts Institute of Technology, June, minor in physics, Contributions to the theory of elasticity of non-isotropic materials.

R. W. Rempfer, Illinois, February, minor in physics, Space Cremona groups of transformations of planar type.

H. E. Robbins, Harvard, June, On the classification of the maps of a two-complex into a space.

L. D. Rodabaugh, Ohio State, March, The solution of a certain linear partial differential equation of the first order.

S. S. Saslaw, Massachusetts Institute of Technology, June, minor in physics, Gap theorem on Fourier series.

W. T. Scott, Rice Institute, June, Studies on continued fractions and infinite products.

Max Shiffman, New York, June, minor in physics, The Plateau problem for minimal surfaces of arbitrary topological structure.

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D. R. Shreve, Illinois, June, minor in physics, A certain class of algebraic hypersurfaces in projective space  $S_r$  invariant under the symmetric substitution group  $G_{(r+2)1}$ .

Ruth G. Simond, Michigan, February, Relations between certain continuous transformations of sets.

C. E. Springer, Chicago, December, Metric geometry of surfaces in four-dimensional space.

R. C. Staley, Michigan, February, Contributions to the study of non-normal difference equations of the second order.

Morris Teles, October, Illinois, minor in philosophy, Geodesic correspondence between Riemannian spaces.

Leonard Tornheim, Chicago, August, Integral sets of quaternion algebras over a function field.

A. M. Turing, Princeton, June, Systems of logic based on ordinals.

F. E. Ulrich, Harvard, June, The problem of type for a certain case of Riemann surfaces.

J. V. Wehausen, Michigan, February, Studies in linear topological spaces.

E. L. Welker, Illinois, June, major in statistics, minor in education, Correlation in heterogeneous populations.

Audrey Wishard, Harvard, June, Functions of bounded type.

H. A. Wood, Massachusetts Institute of Technology, December, minor in mechanical engineering, Superposition theorems and an inverse boundary value problem in the theory of heat flow.

J. W. Wrench, Jr., Yale, June, The derivation of arctangent relations.

Dean G. D. Birkhoff of Harvard University has been appointed to a Walker-Ames Professorship of Mathematics at the University of Washington for the summer quarter of 1939.

Mr. G. E. Jones has been appointed to an assistant professorship at Louisiana Polytechnic Institute.

Dr. G. E. Uhlenbeck, formerly professor of theoretical physics at the University of Utrecht, has been appointed to a professorship at the University of Michigan.

Assistant Professor C. H. Vehse of the University of West Virginia has been promoted to an associate professorship.

Dr. G. P. Wadsworth of the Massachusetts Institute of Technology has been promoted to an assistant professorship.

Dr. Louise A. Wolf of the University of Wisconsin at Milwaukee has been promoted to an assistant professorship.

Assistant Professor E. C. Goldsworthy of the University of California at Berkeley is on leave during the spring term. Dr. Leon Gropper, Dr. Jeanette Fox Keston, Dr. A. J. Maria, and Dr. W. J. Van Stockum have appointments at Brooklyn College.

The following appointments to instructorships are announced: Albany Academy: Mr. Karl Johannes; University of California (Berkeley): Dr. F. W. Dresch; Herzl Junior College, Chicago, Ill.: Mr. Leonard Tornheim; Hunter College: Dr. Madeline Levin; University of Tennessee: Mr. G. W. Whitehead; West Virginia University: Dr. Margaret Buchanan Cole.

The death of M. Louis Fabry on January 26, 1939, has been announced by the Paris Academy of Sciences.

The death of Principal Pandit Hemraj of Dayal Singh College, Lahore, India, has been announced. He was a member of the Indian Mathematical Society.

Dr. Ferdinand von Lindemann, professor emeritus of mathematics of the University of Munich, died on March 7, 1939, in his eighty-seventh year.

Mr. Albert R. Gallatin, died March 13, 1939, at the age of seventy. He had been a member of the Society since 1927.

Associate Professor W. E. Wilbur of the University of New Hampshire died December 9, 1938.

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