

INDEX OF VOLUME XXXV

- ALBERT, A. A. On the Rank Equation of Any Normal Division Algebra, 335.
- ALLEN, E. S. See REVIEWS, under Baldus, Barbarin, Klein.
- AYRES, W. L. Continuous Curves in which Every Arc may be Extended, 850.
- BEATLEY, R. See REVIEWS, under Cajori.
- BECKENBACH, E. F. An Inequality for Definite Hermitian Determinants, 325.
- BELL, E. T. A Partial Isomorphism between the Functions of Lucas and Weierstrass, 321, 498.
 — Non-Existence Theorems on the Number of Representations of Arbitrary Odd Integers as Sums of $4r$ Squares, 695.
 — See REVIEWS, under Nazimoff.
- BERNSTEIN, B. A. Irredundant Sets of Postulates for the Logic of Propositions, 545.
 — Reports of Meetings: of the San Francisco Section, October, 11; of the Society at Berkeley, June, 593.
- BIRKHOFF, G. D. See REVIEWS, under Landau.
- BÔCHER, M. See OSGOOD, W. F.
- BRADSHAW, J. W., FIELD, P., HILDEBRANDT, T. H., and KARPINSKI, L. C. Alexander Ziwet, In Memoriam, 259.
- BRAND, L. The Role of Direction in the Variations of a Definite Integral in Space, 565.
- CAJORI, F. See REVIEWS, under Enriques, Euler, Fladt.
- CAMP, C. C. See REVIEWS, under Duarte.
- CAMPBELL, A. D. Note on Linear Transformations of n -ics in m Variables, 691.
- COHEN, A. See REVIEWS, under Bieberbach, Hoheisel.
- COOLIDGE, J. L. The Heroic Age of Geometry, 19.
- COWLEY, E. B. See REVIEWS, under Müller.
- CURTISS, D. R. Classes of Diophantine Equations whose Positive Integral Solutions are Bounded, 859.
- DADOURIAN, H. M. See REVIEWS, under Cajori.
- DATTA, B. See REVIEWS, under Kaye.
- DAVIS, D. R. The Inverse Problem of the Calculus of Variations in a Space of $(n+1)$ Dimensions, 371.
- DICKSON, L. E. The Forms $ax^2+by^2+cz^2$ which Represent All Integers, 55.
- DODD, E. L. See REVIEWS, under Burnside.
- DOWLING, L. W. See FACULTY OF THE UNIVERSITY OF WISCONSIN.
- DRESDEN, A. Reports of Meetings of the American Mathematical Society: October Meeting in New York, 1; March Meeting in New York, 433.
- EIESLAND, J. See REVIEWS, under Grassmann.
- EMCH, A. On the Mapping of the Quadruples of the Involutorial G_4 in a Plane upon a Steiner Surface, 381.

- ETTLINGER, H. J. See REVIEWS, under Riemann.
- EVANS, G. C. See REVIEWS, under Cournot.
- FACULTY OF THE UNIVERSITY OF WISCONSIN. Linnaeus Wayland Dowling, In Memoriam, 123.
- FIELD, P. See BRADSHAW, J. W.
- FINE, H. B. See VEULEN, O.
- FRÉCHET, M. The Inauguration of the Institute Henri Poincaré in Paris, 198.
- FRY, T. C. The Use of Continued Fractions in the Design of Electrical Networks, 463.
- GARVER, R. On the Removal of Four Terms from an Equation by Means of a Tschirnhaus Transformation, 73.
- GRAUSTEIN, W. C. Note on a certain Type of Parabola, 819.
- GRONWALL, T. H. See REVIEWS, under Bieberbach, Birtwistle, Netto, Picard.
- HADAMARD, J. On Ordinary Restricted Extrema in Connection with Point Transformations, 823.
- HARDY, G. H. An Introduction to the Theory of Numbers, 778.
- HILDEBRANDT, T. H. See BRADSHAW, J. W.
- HILL, L. S. See REVIEWS, under Pascal.
- HILLE, E. See REVIEWS, under G. Julia.
- HOFMANN, L. On a certain Metric Aspect of Plane Projective Transformations, 391.
- HOLLCROFT, T. R. Multiple Points of Algebraic Curves, 841.
- INGRAHAM, M. H. Reports of Meetings of the American Mathematical Society: Cincinnati Meeting, 149; December Meeting in Chicago, 191; March Meeting in Chicago, 447.
- JAMES, G. See REVIEWS, under Beck.
- JEFFERY, R. L. The Existence of the Lebesgue-Stieltjes Integral, 357.
- KARPINSKI, L. C. See BRADSHAW, J. W.
- KELLOGG, O. D. Singular Manifolds among those of an Analytic Family, 711.
- KOVARIK, A. F. See REVIEWS, under Bridgman, Thomson.
- LEHMER, D. H. On the Number $(10^{23} - 1)/9$, 349.
— Errors in Kraitchik's Table of Linear Forms, 865.
- LEHMER, D. N. An Announcement regarding Factor Stencils, 684.
- LINDSAY, R. B. See REVIEWS, under Planck.
- LOGSDON, M. I. See REVIEWS, under König.
- LONGLEY, W. R. See REVIEWS, under Horn, Ince, Piaggio.
- MACDUFFEE, C. C. On the Independence of the First and Second Matrices of an Algebra, 344.
- MANNING, H. P. See REVIEWS, under de Vries.
- MANNING, W. A. A Theorem concerning Simply Transitive Primitive Groups, 330.
- MARDEN, M. Zero-Free Regions of Linear Partial Fractions, 363.
- MILLER, G. A. Groups which Admit Automorphisms in which Exactly Three-Fourths of the Operators Correspond to their Inverses, 559.
- MITCHELL, H. H. See REVIEWS, under Dickson.

- MITCHELL, U. G. See REVIEWS, under Cajori.
- MOORE, C. N. See REVIEWS, under Borel.
- MORSE, M. The Critical Points of Functions and the Calculus of Variations in the Large, 38.
- MURNAGHAN, F. D. Modern Hydrodynamical Theory, with Special Reference to Aeronautics, 294.
- NEELLEY, J. H. Concerning Covariants of the Rational Plane Quartic Curve with Compound Singularities, 67.
- Effects of the Oscnode upon Covariant Forms of the Rational Plane Quartic Curve, 571.
- OSGOOD, W. F. Maxime Bôcher, 205.
- OWENS, F. W. See REVIEWS, under Forder.
- PAGE L. See REVIEWS, under Brioullin, Schrödinger.
- PERKINS, F. W. A Note on certain Continuous Non-Differentiable Functions, 239.
- PIERCE, T. A. Symmetric Functions of n -ic Residues (mod p), 708.
- PIERPONT, J. On the Attraction of Spheres in Elliptic Space, 351.
- PILLAI, S. On some Functions connected with $\phi(n)$, 832.
- On a Function connected with $\phi(n)$, 837.
- REYNOLDS, C. N., JR. See REVIEWS, under de Donder.
- RICHARDSON, R. G. D. Reports of Meetings of the American Mathematical Society: Thirty-Fifth Annual Meeting, 156; February Meeting in New York, 289; Thirty-Fifth Summer Meeting, 753.
- RICHMOND, D. E. A New Proof of certain Relations of Morse in the Calculus of Variations in the Large, 248.
- ROBERTSON, H. P., and WEYL, H. On a Problem in the Theory of Groups arising in the Foundations of Infinitesimal Geometry, 686.
- RUPP, C. A. The Equation of the V_{n-1}^{n-1} in S_n , 319.
- SHEFFER, I. M. A Proof of the Fundamental Theorem of Algebra, 227.
- SMITH, D. E. See REVIEWS, under Gillain.
- SMITH, H. B. The Theory of Multiple Implication and its Application to the Generalized Problem of Epimenides, 60.
- SMITH, P. A. See REVIEWS, under Menger.
- SNYDER, V. The Problem of the Cubic Variety in S_4 , 607.
- STOUFFER, E. B. Report of the Twenty-First Regular Meeting of the Southwestern Section, 145.
- SULLIVAN, C. T. The Determination of Plane Nets Characterized by certain Properties of their Laplace Transforms, 549.
- TAMARKIN, J. D. See REVIEWS, under Knopp, Lainé, Tonelli.
- TAYLOR, J. H. An Application of Tensor Analysis to the First Variation of an Integral, 231.
- See REVIEWS, under Veblen.
- THOMAS, J. M. See REVIEWS, under Eisenhart.
- TONELLI, L. Report on the 1928 International Congress of Mathematicians, 201.
- TRJITZINSKY, W. J. A Correction, 197.
- UHLER, H. S. See REVIEWS, under Jeffreys, Milne, Steward.

- VANDIVER, H. S. A Theorem of Kummer's concerning the Second Factor of the Class Number of a Cyclotomic Field, 333.
- VAN VLECK, E. B. On the Location of Roots of Polynomials and Entire Functions, 643.
- VEBLEN, O. Henry Burchard Fine. In Memoriam, 726.
- WALSH, J. L. The Approximation of Harmonic Functions by Harmonic Polynomials and by Harmonic Rational Functions, 499.
- WEISS, P. See REVIEWS, under Carnap.
- WEYL, H. See ROBERTSON, H. P.
- On the Foundations of General Infinitesimal Geometry, 716.
- WHELAN, R. Approximate Solutions of certain General Types of Boundary Problems from the Standpoint of Integral Equations, 105.
- WHITE, H. S. The Amherst Colloquium, 16.
- WHYBURN, G. T. Concerning Collections of Cuttings of Connected Point Sets, 87.
- On Regular Points of Continua and Regular Curves of at most Order n , 218.
- The Boulder Colloquium, 775.
- WHYBURN, W. M. Non-Isolated Critical Points of Functions, 701.
- WIDDER, D. V. See REVIEWS, under Mandelbrojt.
- WILDER, R. L. See REVIEWS, under Fraenkel.
- WILSON, W. A. Some Properties of Multi-Coherent Continua, 78.
- See REVIEWS, under Townsend
- WONG, B. C. On the Maximum Deficiency of r -Space Curves, 237.
- On the Number of Apparent Triple Points of Surfaces in Space of Four Dimensions, 339.
- On certain Loci of Lines Incident with Curves and Surfaces in Four-Space, 553.
- A certain Birational Transformation of Order r^2 between Two r -Spaces in an $(r+1)$ -Space, 829.
- WOOD, F. E. Cubics whose (Hessian)ⁿ's are Themselves, 225.
- WYCKOFF, R. W. G. See REVIEWS, under Schoenflies.
- ZIWET, A. See BRADSHAW, J. W.

REVIEWS

- Bacon, N. T. See Cournot, A.
- Baldus, R. Nicht-Euklidische Geometrie. Hyperbolische Geometrie der Ebene, E. S. ALLEN, 271.
- Barbarin, P. La Géométrie Non-Euclidienne (troisième édition), E. S. ALLEN, 271.
- Bauer, G. See Bieberbach, L.
- Beck, H. Einführung in die Axiomatik der Algebra, G. JAMES, 414.
- Bieberbach, L. Theorie der Differentialgleichungen (zweite Auflage), A. COHEN, 136.
- Vorlesungen über Algebra. Unter Benutzung der dritten Auflage des gleichnamigen Werkes von Gustav Bauer in vierter vermehrter Auflage dargestellt, T. H. GRONWALL, 581.
- Birtwistle, G. The new Quantum Mechanics, T. H. GRONWALL, 736.

- Borel, E. *Leçons sur les Séries Divergentes* (deuxième édition), C. N. MOORE, 875.
- Bosmans, H. See Gillain, O.
- Breuer, S. See Euler, L.
- Bridgman, P. W. *The Logic of Modern Physics*, A. F. KOVARIK, 412.
- Brioullin, L., and de Broglie, L. *Selected papers on Wave Mechanics*, translated by W. M. Deans, L. PAGE, 403.
- de Broglie, L. See Brioullin, L.
- Brun, V. See Netto, E.
- Burnside, W. *Theory of Probability*, E. L. DODD, 410.
- Cajori, F. *Mathematics in Liberal Education*, R. BEATLEY, 135.
- *The Early Mathematical Sciences in North and South America*, U. G. MITCHELL, 277.
- *A History of Physics* (revised), H. M. DADOURIAN, 739.
- Carnap, R. *Abriß der Logistik*, P. WEISS, 880.
- Cournot, A. *Researches into the Mathematical Principles of the Theory of Wealth*, translated by N. T. Bacon, with an *Essay on Cournot and Mathematical Economics and a Bibliography of Mathematical Economics*, by I. Fisher, G. C. EVANS, 269.
- Deans, W. M. See L. Brioullin, E. Schrödinger.
- Dickson, L. E. *Algebren und ihre Zahlentheorie, mit einem Kapitel über Idealtheorie von A. Speiser*, H. H. MITCHELL, 261.
- de Donder, T. *Théorie des Champs Gravifiques*, C. N. REYNOLDS, JR., 884.
- Duarte, F.-J. *Nouvelles Tables de Log $n!$* , C. C. CAMP, 883.
- Eisenhart, L. P. *Non-Riemannian Geometry*, J. M. THOMAS, 264.
- Enriques, F. *L'Evolution des Idées Géométriques dans la Pensée Grecque*, traduit sur la troisième édition italienne par M. Solovine, F. CAJORI, 415.
- Euler, L. *Drei Abhandlungen über die Auflösung der Gleichungen (1738, 1764, 1790)*, übersetzt von S. Breuer, F. CAJORI, 411.
- Fisher, I. See Cournot, A.
- Fladt, K. *Quellenhefte zur Elementarmathematik, erster Band, erstes Heft*, F. CAJORI, 412.
- Forder, H. G. *The Foundations of Euclidean Geometry*, F. W. OWENS, 881.
- Fraenkel, A. *Zehn Vorlesungen über die Grundlegung der Mengenlehre*, R. L. WILDER, 405.
- Frank, P. See Riemann, B.
- Gillain, O. *La Science Egyptienne. L'Arithmétique au Moyen Empire, avec une préface de H. Bosmans*, D. E. SMITH, 407.
- Grassmann, H. *Projektive Geometrie der Ebene unter Benutzung der Punktrechnung, zweiter Band, erster und zweiter Teil*, J. EIESLAND, 124.
- Harmegnies, R. See Julia, G.
- Hoheisel, G. *Gewöhnliche Differentialgleichungen*, A. COHEN, 136.
- Horn, J. *Gewöhnliche Differentialgleichungen* (zweite Auflage), W. R. LONGLEY, 267.
- Ince, E. L. *Ordinary Differential Equations*, W. R. LONGLEY, 267.

- Jeffreys, H. Operational Methods in Mathematical Physics, H. S. UHLER, 882.
- Julia, G. Exercices d'Analyse rédigées par R. Harmegnies et R. Julia, tome I, E. HILLE, 739.
- Julia, R. See Julia, G.
- Kaye, G. R. The Bakhshâli Manuscript, B. DATTA, 579.
- Klein, F. Vorlesungen über Nicht-Euklidische Geometrie, neu bearbeitet von W. Rosemann, E. S. ALLEN, 271.
- Knopp, K. Aufgabensammlung zur Funktionentheorie, zweiter Band, J. D. TAMARKIN, 415.
- König, R., und Krafft, M. Elliptische Funktionen, M. I. LOGSDON, 877.
- Kowalewski, G. See Cesàro, E.
- Krafft, M. See König, R.
- Krames, J. L. See Müller, E.
- Lainé, E. Précis d'Analyse Mathématique, volume I et volume II, J. D. TAMARKIN, 277.
- Landau, E. Vorlesungen über Zahlentheorie, drei Bände, G. D. BIRKHOFF, 401.
- Mandelbrojt, S. Modern Researches on the Singularities of Functions defined by Taylor's Series, edited by E. R. C. MILES, D. V. WIDDER, 409.
- Menger, K. Dimensionstheorie, P. A. SMITH, 868.
- Miles, E. R. C. See Mandelbrojt, S.
- Milne, W. E. Tables of Damped Vibrations, H. S. UHLER, 738.
- Müller, E. Vorlesungen über Darstellende Geometrie, zweiter Band, herausgegeben von J. L. KRAMES, E. B. COWLEY, 737.
- Nazimoff, P. S. Applications of the Theory of Elliptic Functions to the Theory of Numbers, translated from the Russian by A. E. ROSS, E. T. BELL, 735.
- Netto, E. Lehrbuch der Kombinatorik (zweite Auflage), erweitert und mit Anmerkungen versehen von V. Brun und T. Skolem, T. H. GRONWALL, 577.
- Pascal, E. Repertorium der Höheren Mathematik (zweite Auflage), herausgegeben von E. Salkowski, erster Band, zweiter Teilband, L. S. HILL, 737.
- Piaggio, H. T. H. An Elementary Treatise on Differential Equations and their Applications (new edition), W. R. LONGLEY, 267.
- Picard, É. Leçons sur quelques Types d'Equations aux Dérivées Partielles avec des Applications à la Physique Mathématique, T. H. GRONWALL, 733.
- Traité d'Analyse (troisième édition), volume 3, T. H. GRONWALL, 736.
- Planck, M. Einführung in die Theoretische Physik (vierte Auflage), erster Band, und (zweite Auflage), zweiter Band, R. B. LINDSAY, 413.
- Riemann, B., und Weber, H. Die Differential- und Integralgleichungen der Mechanik und Physik, zweiter, physikalischer Teil, herausgegeben von P. Frank, H. J. ETTLINGER, 133.
- Rosemann, W. See Klein, F.
- Ross, A. E. See Nazimoff, P. S.

- Salkowski, E. See Pascal, E.
Schoenflies, A. Theorie der Kristallstruktur, R. W. G. WYCKOFF, 135.
Schrödinger, E. Collected Papers on Wave Mechanics, translated from the second German edition by J. F. Shearer and W. M. Deans, L. PAGE, 403.
—— Four Lectures on Wave Mechanics, L. PAGE, 403.
Shearer, J. F. See Schrödinger, E.
Skolem, T. See Netto, E.
Solovine, M. See Enriques, F.
Speiser, A. See Dickson, L. E.
Steward, J. C. The Symmetrical Optical System, H. S. UHLER, 884.
Struik, R. See de Vries, H. K.
Thomson, J. J. Beyond the Electron, A. F. KOVARIK, 414.
Tonelli, L. Serie Trigonometriche, J. D. TAMARKIN, 871.
Townsend, E. J. Functions of Real Variables, W. A. WILSON, 576.
Veblen, O. Invariants of Quadratic Differential Forms, J. H. TAYLOR, 416.
de Vries, H. K. Die vierte Dimension, nach der zweiten holländischen Ausgabe ins Deutsche übertragen von R. Struik, H. P. MANNING, 731.
Weber, H. See Riemann, B.
-

Errata, 197, 498.

Index of Volume XXXV, 914.

New Publications, 141, 284, 427, 587, 747, 889.

Notes, 137, 279, 417, 582, 740, 885.

Papers Read before the Society and Subsequently Published, Thirty-Eighth Annual List of, 895.

NOTES AND OTHER ITEMS

Academies, Associations, Congresses, and Societies:

American Mathematical Society: Annual Meeting, 2; Auditors' Report, 159; Bequest, 279; Bôcher Prize, 162, 282; Budget, 159; Bulletin, 161; By-Laws, 450; Cole Prize, 450; Colloquium Lectures and Publications, 3, 161, 741; Committee on Ann Arbor Meeting, 450; on Cleveland Meeting, 450; on Colloquia, 3, 740; on Forms of Type, 161; on Gibbs Lecture, 161; on Nominations, 449; 760; on Pacific Meetings, 11, 448; on Summer Meeting, 760; on Western Meetings, 161; Dates and Places of Meetings, 2, 3, 11, 161, 449; Election of Officers, 159; Endowment Fund, 159; Gibbs Lecture, 161, 162; Librarian's Report, 159; New Members Admitted, 1, 2, 158, 448, 760; Pacific Meetings, 11, 161, 448; 593; Representatives on American Yearbook, 3, 450; on Council for the American Association for the Advancement of Science, 450; on National Research Council, 161; San Francisco Section, 11, 161, 448; Southwestern Section, 449; Statistics, 158, 159; Summer Meetings, 3, 161, 760; Transactions, 137, 161, 279, 582; Treasurer's Report, 159; Visiting Lecturer, 425.

Associations for the Advancement of Science; American, 156, 161, 281, 449, 450; British, 138.

Abel Centenary, 583, 741; Accademia d'Italia, 583; Accademia Pontificia dei Nuovi Lincei, 417; Acoustical Society of America, 417; American Association of University Professors, 139; American Geophysical Union, 885; American Institute of Electrical Engineers, 417; American Physical Society, 163; Astronomical Society of France, 885; Astronomical Society of the Pacific, 741; Berlin Physical Society, 740; Bureau of Standards, 138; Carnegie Foundation, 283; Chicago World's Fair, 281; Comité International d'Histoire des Sciences, 885; Congress of Mathematicians of Slavic Countries, 583; Congress of Roumanian Mathematicians, 885; General Education Board, Rockefeller Foundation, 283, 450, 760; Huygens Tercentenary, —; Italian Society of Sciences, 583; London Mathematical Society, 280; Naples Academy, 417; National Academy of Sciences, 282, 583, 760; National Research Council, 138, 161, 281; New York Academy of Sciences, 282; Optical Society of America, 138; Paris Academy, 281; Radiological Society of America, 282; Research Corporation, 583; Royal Academy of Science of Holland, 740; Royal Astronomical Society of Edinburgh, 417; Royal Meteorological Society, 281; Royal Society of Edinburgh, 417; Royal Society of London, 281; Société Mathématique Suisse, 138, 885; Society of Arts and Sciences, 417; Vienna Academy, 417.

Books, Announcement of New, 740.

Doctorates in Mathematics, American, 422.

Fellowships, 138, 742, 886, 886, 886.

Journals:

American Journal of Mathematics, 137, 279, 582, 740; American Yearbook, 3, 450; Annals of Mathematics, 279, 582; Archeion, 885;

Berlin Sitzungsberichte, 585; Boletín del Seminario Matemático Argentino, 138; Bulletin of the American Mathematical Society, 161, 885; Comentarîi Mathematici Helvetici, 138, 885; Messenger of Mathematics, 885; Quarterly Journal of Mathematics, 885; Revista Matemática Hispano-Americana, 280; Transactions of the American Mathematical Society, 137, 161, 279, 582.

Papers and Communications Presented to the Society, Authors:

Adams, C. R., 434; Albert, A. A., 182, 183, 183, 441, 441; Altshiller-Court, N., 146, 171, 172; Anderson, N. L., 145; Archibald, R. G., 4; Arnold, H. E., 3; Ayres, W. L., 186, 187, 443, 772, 772, 772.

Babcock, W., 146; Ballantine, J. P., 593; Bamforth, F. R., 435, 435, 436; Barnett, I. A., 166; Barrow, D. F., 168; Basoco, M. A., 15; Bateman, H., 594; Baten, W. D., 759; Beckenbach, E. F., 293; Beenken, M. M., 457; Bell, C., 594; Bell, E. T., 12, 12, 12, 12, 13, 196, 196, 196, 594, 595, 595, 595, 595; Benton, T. C., 10, 443; Bernstein, B. A., 595, 596; Berry, A. C., 180; Birkhoff, G. D., 149, 153, 435; Bliss, G. A., 452, 459; Blumberg, H., 152; Brand, L., 153, 453; Brenke, W. C., 146; Brinkmann, H. W., 184, 184, 184; Brown, A. B., 596; Brown, O. E., 458; Browne, E. T., 443; Buchanan, H. E., 773.

Cajori, F., 13, 13, 13, 596, 596, 597; Calugaréano, G., 292; Camp, B. H., 440; Camp, C. C., 761; Campbell, A. D., 155, 172, 768; Carson, J. R., 774; Churchill, R. V., 154; Coble, A. B., 16, 775; Cohen, L. W., 150; Cook, A. J., 597; Coolidge, J. L., 162; Cope, T. F., 437, 437; Copeland, A. H., 189; Copeland, L. P., 766; Craig, H. V., 597; Cramlet, C. M., 438.

Daus, P. H., 597; Davis, D. R., 759, 760; Davis, H. A., 456, 456; Davis, H. T., 151, 759; Dickson, L. E., 192, 192, 195, 459, 459; Dines, L. L., 758, 773; Dodd, E. L., 758; Donahue, J. E., 289; Doole, H. P., 597; Dorwart, H. L., 171; Douglas, J., 4, 5, 173, 173, 174, 292.

Earl, J. M., 455; Edwards, P. D., 453; Eiesland, J., 457; Elliott, W. W., 174; Emch, A., 292, 458; Engstrom, H. T., 181, 442; Erikson, C. M., 760; Ettlinger, H. J., 164.

Féraud, L., 445; Foster, M. C., 170; Franklin, P., 7, 7, 178; Frink, O., 177, 182, 182; Fry, T. C., 153.

Garabedian, C. A., 179; Garver, R., 6, 14, 14, 14, 184, 184, 598, 769, 769; Germond, H. H., 460; Gill, B. P., 436; Glenn, O. E., 291; Gourin, E., 290; Griffiths, L. W., 192, 767; Gronwall, T. H., 293, 293, 437, 443; Grove, V. G., 194.

Hagihara, Y., 178; Hardy, G. H., 162, 433; Harkin, D. C., 185; Hart, W. L., 598, 760; Haskell, M. W., 598; Hedrick, E. R., 149, 176, 599; Henderson, A., 149; Hickey, D. M., 173; Hickey, M. I., 439; Hildebrandt, T. H., 197; Hill, L. S., 768; Hille, E., 165; Hofmann, L., 5; Hollcroft, T. R., 3, 170, 442, 599; Hurwitz, S., 436.

Ingold, L., 145; Ingraham, M. H., 195, 459.

Jackson, D., 162; James, G., 599; Jeffery, R. L., 175; Jerbert, A. R., 14; Johnson, M. M., 152; Jones, B. W., 191, 599.

Kasner, E., 6, 8, 169, 290, 444; Keller, E. G., 179, 461; Kellogg, O. D., 180, 438; Kempner, A. J., 145, 773; Ketchum, P. W., 452; Koopman, B. O., 9; Kramer, E. E., 290.

Lane, E. P., 195, 456; Langer, R. E., 195, 460, 764; LaPaz, L., 452, 761, 761; Latimer, C. G., 462, 766; Lehmer, D. H., 768; Littauer, S. B., 180; Lotka, A. J., 188; Lubben, R. G., 185, 186, 774; Lubin, C. I., 445.

McCoy, N. H., 461, 461; McDonnell, J., 769; McFarlan, L. H., 600, 600, 600; McGiffert, J., 177; MacDuffee, C. C., 151, 459; Manning, W. A., 15, 196; March, H. W., 455; Marden, M., 9, 174, 763; Michal, A. D., 438, 439, 439; Mickelson, E. L., 455; Miller, E. W., 152; Milne, W. E., 462, 601, 758; Mitchell, U. G., 146; Moore, C. N., 435; Moore, R. L., 185; Moore, T. W., 461; Morse, M., 176; Muckenhoupt, C. F., 178; Musselman, J. R., 456.

Nelson, C. A., 169; Nyswander, J. A., 757.

Olson, H. L., 774; Ore, O., 183, 441; Osgood, W. F., 162.

Perkins, F. W., 166; Peterson, T. S., 439, 439; Pierce, T. A., 461, 601; Pierpont, J., 162, 188, 293, 440, 593; Pixley, H. H., 190; Poritsky, H., 175, 175, 176, 176, 763; Powers, R. E., 184; Putnam, R. G., 442.

Rainich, G. Y., 153, 460, 758; Rashevsky, N., 5; Rawles, T. H., 168, 293; Reid, W. T., 147, 148, 454, 454; Reynolds, C. N., 172, 173; Rider, P. R., 189, 189, 440; Ritt, J. F., 9, 291, 291; Roberts, J. H., 186, 186, 601, 602, 770; Robertson, H. P., 602; Robinson, L. B., 762; Robison, G. M., 167; Roeber, W. H., 146; Roman, I., 165; Roos, C. F., 190; Rosinger, K. E., 193; Roth, W. E., 151, 769; Rowe, C. H., 774; Rupp, C. A., 171; Rutledge, G., 168, 168, 440, 763; Rutt, N. E., 602.

Schwatt, I. J., 166; Seely, C. E., 445; Serghiesco, S., 168; Sheffer, I. M., 154, 164, 164, 434; Shohat, J. A., 150, 451; Simmons, H. A., 769; Sisam, C. H., 757; Slater, J. C., 163; Slotnick, M. M., 169; Smith, G. W., 767; Smith, R. G., 767; Snyder, V., 753; Stafford, E. T., 181; Stone, M. H., 6, 166, 167, 167, 167; Stouffer, E. B., 147, 767; Sullivan, C. T., 169; Suschkewitsch, A., 7; Swingle, P. M., 6.

Tamarkin, J. D., 165, 165, 165; Thielman, H. P., 439, 762; Thompson, L. T. E., 179; Trjitzinsky, W. J., 174, 438; Turner, J. S., 147, 147. Uspensky, J. V., 765.

Vandiver, H. S., 181, 181, 445, 446, 446, 765, 765, 766, 766, 766; Van Vleck, E. B., 447; Van Vleck, J. H., 163; Vasilesco, F., 180.

Wall, H. S., 193, 451, 451; Walsh, J. L., 177, 289, 444; Ward, L. E., 453, 764, 764; Ward, M., 603; Weisner, L., 4; Weiss, M. J., 767; Weyl, H., 163, 434, 602, 603; Whitney, H., 442; Whyburn, G. T., 7, 148, 187, 187, 188, 603, 603, 770; Whyburn, W. M., 14, 178, 603, 604, 604; Widder, D. V., 168, 437; Wiener, N., 8, 163, 180, 444; Wilder, R. L., 194, 194, 457, 458, 604, 770, 770, 771; Williams, A. R., 605; Williams, K. P., 155; Williams, W. L. G., 181; Williamson, J., 182; Wilson, W. A., 8, 9, 291, 772; Wong, B. C., 605, 605; Wood, F. E., 192; Woodard, D. W., 605.

Zariski, O., 170; Zippin, L., 8, 154, 293, 442, 606, 770.

Personal Notes:

Abel, N. H., 584, 741; Adams, C. R., 449, 756; Aguirre, A., 280; Albert, A. A., 138, 422, 746, 885; Alcock, W. B., 426; Alexander, J. W., 162, 282; Alter, D., 743; Andersen, A. E., 746; Andoyer, H., 746; Arnold, H. E., 422; Ayres, W. L., 138, 887.

Babcock, R. W., 283; Bamforth, F. R., 138; Bardell, R. H., 140; Bartlett, D. P., 887; Bateman, H., 885; Bath, F., 584; Beenken, M. M., 422; Bell, E. T., 281, 449, 885; Bennett, T., 138; Benton, T. C., 422; Berger, A., 282; Bernstein, B. A., 448, 744, 885; Bernstein, S., 282; Berry, A., 282; Besicovitch, A. S., 282; Bianchi, L., 583, 886; Bickerstaff, T. A., 283; Bickerton, A. W., 426; van Biesbroeck, G., 281; Birkeland, R., 140; Birkhoff, G. D., 137, 282, 742; Birtwistle, G., 746; Bjerknes, V. F. K., 742; Blakesley, T. H., 426; Blichfeldt, H. F., 449, 885; Blue, A. H., 422; Blumberg, H., 885; Blumenthal, L. M., 746; Boccardi, G., 742; Bond, W. M., 283; Bortolotti, E., 417, 418; Bousinesq, J., 426, 742; Bower, E. C., 886; Bowie, W., 418, 885; Bradshaw, J. W., 450; Bragg, W., 138; Breit, G., 425; Briggs, G. B., 422; Brinkmann, H. W., 162; Brioullin, L., 418; de Broglie, M., 281; Brouwer, L. E. J., 741; Brusotti, L., 418, 742; Bryan, G. H., 283; Burkill, F. C., 744; Burzio, F., 281; Bush, V., 740.

Cairns, W. D., 450; Cajori, F., 744, 885; Camp, C. C., 744; Carathéodory, C., 742; Carey, E. F. A., 744; Carlini, L., 426; Carmichael, G. N., 586; Carmichael, R. D., 449, 885, 887; Carslaw, H. S., 742; Castelnovo, G., 583; Cecioni, F., 742; Chamberlin, T. C., 283; Chapman, S., 741; Chisini, O., 886; Chou, P. Y., 422; Church, A., 138; Coble, A. B., 741, 885; Cohen, L. W., 422; Cole, C. A., 450; Cole, F. N., 450; Compton, A. H., 282, 742; Condon, E. U., 744; Coolidge, J. L., 756, 885; Cope, T. F., 138, 586; Copp, P. T., 139; Coradi, G., 888; Cowley, E. B., 425; Cramlet, C. M., 138, 744; Crum, W. L., 887; Currier, A. E., 746; Currier, C. H., 756.

Darmois, G., 281; Davis, B., 742; Davis, H. A., 422; Davis, H. T., 885; Davison, G. W., 585; Davisson, C. J., 282, 742; Defant, A., 741; Dickson, L. E., 449, 885; Dienes, P., 584; Dines, L. L., 740, 885; Dirac, P. A. M., 283, 744; Divisia, F., 281; DoBell, H. A., 422; Donahue, J. N., 283; Douglas, J., 138; Drach, J., 742; Duclout, J., 586; Duffenbach, O. S., 743; Duncan, D. C., 422; Dunlap, L. T., 140; Dyson, F., 742, 886.

Earl, J. M., 423; Eberhard, V., 140; Eddington, A. S., 281; Edwards, P. D., 887; Einstein, A., 585, 742, 741; Emch, A., 280; Emde, F., 886; Engel, F., 741; Erlang, A. K., 426; Esclangon, E., 886; Evans, G. C., 885.

Fantappié, L., 139; Fermi, E., 583, 583; Feyer, E., 418; Field, A. B., 417; Field, P., 885; Fine, H. B., 140, 160, 283; Finsterwalder, S., 886; Fisher, I., 740; Fithian, J. H., 888; Fitterer, J. C., 744; Flanders, D. A., 138, 888; Fletcher, H., 417; Focke, T. M., 450; Folley, K. W., 746; Ford, W. B., 450; Fort, T., 161, 449, 450, 740, 740; Foster, W. I.,

887; Fowler, R. H., 280; Fraenkel, A., 282, 743; Franel, J., 886; Fréchet, M., 281, 418; Fry, T. C., 885; Fueter, R. E., 741; Fuller, K. G., 586; Furch, R., 418.

Gafafer, W., 744; Gage, W. H., 744; Garabedian, C. A., 744; Garretson, W. V. N., 744; Garver, R., 885; Gehman, H. M., 585; Gerasimovic, B. P., 282; Gergen, J. J., 138, 423; Gevrey, M., 281; Giorgi, G., 742; Giraud, G., 281; Glaisher, J. W. L., 283, 885; Glover, J. W., 450; Goldsbrough, G. R., 418; Gonseth, F., 886; Gordon, W. O., 140; Grammel, R., 886; Graves, L. M., 740; Griffiths, L. W., 885; Gronwall, T. H., 740.

Hadamard, J., 584; Hamilton, J. A., 140; Hardy, G. H., 280, 425, 584, 885, 885; Hargreaves, J., 583; Hartree, D. R., 584; Haseman, M. G., 139; Haskell, M. W., 449, 740; Haus, F. C., 281; Hausdorff, F., 418; Hazard, W. J., 585; Hazlett, O. C., 743; Hedlund, G. A., 746; Hedrick, E. R., 137, 585; Heisenberg, W., 425, 583; Henrici, O., 140; Hensel, K., 741; Hertzprung, E., 417; Heun, K., 746; Hickey, D. M., 886; Hicks, H. C., 586, 745; Hickson, A. O., 423, 425; Hilb, E., 888; Hildebrandt, T. H., 450; Hill, E. L., 423; Hill, L. S., 585; Hill, M. J. M., 426; Hilton, H., 281; Hirai, J., 140; Hofmann, L., 586; Hollcroft, T. R., 885; Hoppe, E., 746; Hovgaard, W., 742; Humphreys, W. J., 418; Hund, F., 584; Huntington, E. V., 161, 885; Hurewicz, W., 744; Hurst, J. W., 745; Huygens, C., 740.

Iarnik, V., 743; Ingold, L., 450; Ingraham, M. H., 161, 450, 450, 450.

Jackson, D., 161; Jackson, R. L., 423; Jaeger, C. G., 745; Jeffery, R. L., 423; Jeffreys, H., 281; Jewett, F. B., 281, 417; Johnson, E. H., 888; Johnson, M. M., 423; Johnson, R. A., 745; Johnston, A. W., 585; Johnston, L. S., 139; Jones, B. W., 423; Jones, G., 283; Jones, T. D., 283; Joos, G., 282; Jordan, P., 584; Juel, C. S., 741; Jüttner, F., 418; Julia, G., 281; Juvet, G., 419.

Kaluza, T., 584; Kasner, E., 885; Kaye, G. R., 888; Keller, E. G., 423; Kellogg, O. D., 161, 449, 740; Kennedy, R. J., 743; Kent, F. C., 888; Keuligan, G. H., 423; Kimball, B. F., 887; Kimball, S. H., 746; Kline, J. R., 139, 885; Klinger, E. L., 746; Knebelmann, M. S., 138, 423, 425; Knibbs, G., 746; Knight, E., 745; Knobelauch, E. A., 746; Koenigs, G., 282; Kormes, M., 423; Kramer, E., 745; von Kries, J., 426; Krull, W., 418; Kunkel, P. V., 140.

Lalesco, T., 888; Lambert, W. D., 885; Landau, E., 741; Landé, A., 887; Landers, A. W., 586; Lane, E. P., 885; Langevin, P., 742; Langford, C. H., 745, 885; Langmuir, I., 281, 741, 742; LaPaz, L., 138, 423; Latimer, C. G., 885; Latimer, W. M., 743; von Laue, M., 584; Lefschetz, S., 3; Lense, J., 139; Lepeshkin, S. A., 746; Levi, B., 139; Levi-Civita, T., 742, 886, 886; Lévy, P., 281; Libman, E. E., 887; Lichtenstein, L., 742; Lindelöf, E. L., 741; Litzinger, M., 585; Löbel, F., 419; Loewner, K., 418; Long, T. R., 745; Lori, F., 583; Love, C. E., 745; Lovitt, W. V., 585; Lubin, C. I., 745.

MacCreadie, W. T., 423; Maillard, L., 419; Male, C. T., 745; Mammana, G., 139; Mandelbrojt, S., 281; Manning, W. A., 885; March, H. W., 740; Marden, M., 138, 423; Marletta, G., 742; Mason, M., 281; Meder, A. E., 745; Meissner, A., 885; Menger, K., 417; Menzel, D. H., 282; Michal, A. D., 586; Michelson, A. A., 138, 417; Mieli, A., 885; Miles, E. R. C., 425; Millikan, R. A., 281, 417, 742; Milne, W. E., 586; Miriotti, S., 886; Molina, E. C., 740; Moore, C. N., 281; Moore, R. L., 161; Moore, T. W., 138, 745; Moore, W. L., 423; Morrey, G. B., 746; Morrow, D. C., 423, 746; Morse, M., 742, 885; Mott, N. F., 886; Müntz, H., 886; Mulliken, R. S., 743; Murnaghan, F. D., 885; Myers, G. W., 745; Myers, S. B., 746.

Nadai, A., 740; Neelley, J. H., 885; Nevanlinna, R., 419; Neville, E. H., 280; Nikliborc, W., 585.

Oberth, H., 886; Oppenheim, S., 426; Ortvay, R., 139; Ott, H., 743.

Painlevé, P., 584; Park, R. H., 740; Parkinson, G. A., 745; Paschen, F., 281; Peano, G., 741; Pearl, R., 138, 584; Perkins, F. W., 423; Perron, O., 417; Peters, A. S., 888; Peters, J. W., 423; Peterson, O. J., 139, 424; Peterson, R. E., 140; Phalen, H. R., 584; Phipps, C. G., 424; Phragmén, E., 741; Pierce, T. A., 887; Pierpont, J., 161, 280, 885; Pincherle, G., 138, 741; Pistolesi, E., 583, 742; Planck, M., 741; Plimpton, G. A., 743; Pogo, A., 886; Poincaré, H., 283; Poritsky, H., 138, 887; Porter, C. S., 745; Prandtl, L., 742; Prater, A. W., 426; Puiseux, P. H., 426; Pupin, M. I., 281.

Rado, T., 584; Radon, J., 139; Ramsey, F. P., 744; Raudenbush, H. W., 586; Reddick, H. W., 159; Rees, P. K., 283; Reilly, M., 140, 279; Reinsch, B. P., 745; Remak, R., 419; Rey Pastor, J., 138; Rice, C. D., 140; Richardson, C. H., 425; Richardson, M. R., 139; Richardson, R. G. D., 756; Richeson, A. W., 424; Richmond, H. W., 282; Rietz, H. L., 161, 281; Riquier, C., 426; Risselman, W. C., 139, 424; Ritt, J. F., 885; Robb, R. A., 584; Robertson, H. P., 745; Rojansky, V. B., 424; Roos, C. F., 281; Rosati, C., 583; Roth, W. E., 424; de Rothschild, E., 283; Rudio, F., 888; Rupp, C. A., 424; Ruse, H. S., 282; Russell, H. N., 425, 743; Russo, G., 426; Rutherford, E., 138; Rutt, N. E., 138, 424.

Saurel, P., 159; Sauté, G., 746; Scarborough, J. B., 139; Schander, J. P., 585; Schelkunoff, S. A., 424, 887; Schilling, B., 743; Schlesinger, F., 741; Schmidt, R., 743; Schou, E., 586; Schreier, O., 888; Schrödinger, E., 138, 583; Schur, I., 742; Segre, C., 138; Semple, J. G., 583; Severi, F., 583; Shaghoian, A. A., 424; Sheffer, I. M., 138, 746; Sherer, C. K., 887; Sherk, W. H., 426; Shohat, J. A., 885; Shover, G., 888; Shuster, C. N., 586; Sierpinski, W., 583, 584; Signorini, A., 583; Simon, W. G., 450, 450; de Sitter, W., 583, 584, 742; Slater, J. C., 743; Slaughter, H. E., 161, 585; Smail, L. L., 586; Smart, W. M., 744; Smekal, A., 282; Smiley, C. H., 425, 743; Smith, A. H., 586; Smith, C. D., 424; Smith, F. E., 424; Smith, G. W., 887; Smith, P. A., 586; Snyder, V., 885; Sommerfeld, 584, 584, 741; Speiser, A., 138; Sterneck,

R., 140; Stodola, A., 417, 886; Stouffer, E. B., 161, 161, 885; Sun, D., 424; Sun, J., 743; Swann, W. F. G., 742; Swingle, P. M., 140, 888.

Takagi, T., 741; Tamarkin, J. D., 885; Taylor, J. H., 746; Taylor, W. H., 425; Thomas, L. H., 887; Thompson, E. L., 424; Thompson, J. M., 746; Thomsen, G., 282; Thuloup, A., 281; Tietze, H., 417, 583; Timoschenko, S., 740; Titchmarsh, E. C., 281, 744; Titsworth, A. A., 283; Togliatti, E. G., 886; Tonelli, L., 583, 584; Torrey, R., 426; Townsend, E. J., 887; Trefftz, E., 886; Trjitzinsky, W. J., 586; Trkal, V., 743; Tyler, H. W., 139, 756.

Ursell, H. D., 583; Uspensky, J. V., 556.

Vallauri, G., 583; de la Vallée Poussin, C., 584, 741; Vandiver, H. S., 885; Van Schaack, G. B., 746; Van Vleck, E. B., 425; Van Vleck, J. H., 743; Veblen, O., 281, 418, 741, 741; Vedova, G. C., 140, 746; Vehse, C. H., 586; Verblunsky, S., 583; Vèzes, M., 281; Vietoris, L., 418; Vitali, G., 583; Vivian, R. H., 887.

van der Waerden, B. L., 418; Waldo, L., 283; Walker, E., 585; Walsh, J. L., 742; Ward, M., 424; Warner, R. W., 586; Watson, G. N., 281; Weatherburn, C. E., 585; Weaver, W., 161, 885; Weber, C., 139; Wedderburn, J. H. M., 885; Weisner, L., 586; Weiss, M. J., 138, 424; Wells, E. H., 887; Wenzel, G., 139; Western, A. E., 281; Wexler, C., 746; Weyl, H., 280, 419, 425, 741, 742; White, F. P., 281; Whittaker, E. T., 280, 417; Whittaker, J. M., 583; Whyburn, G. T., 283, 426, 743, 885; Whyburn, W. M., 885; Widder, D. V., 885; Wiechert, E., 140; Wien, W., 140; Wilder, R. L., 746, 885; Willers, F. A., 282; Williams, A. R., 885; Williams, F. G., 746; Williamson, C. O., 424; Williamson, J., 140; Wilson, A. H., 741; Wilson, W. A., 885; Winger, R. M., 449, 885; Wong, B. C., 885; Wood, F. E., 885; Woodard, D. W., 424; Woolard, E. W., 140, 888; Wren, T. L., 281; Wright, W., 281.

Yang, K. C., 424; Young, J. W., 885; Young, W. H., 281.

Zanstra, H., 283; Zarankiewicz, C., 585; Zariski, O., 586; Zeeman, P., 138, 584; Zinszer, H. A., 888; Zippin, L., 888; Ziwet, A., 140.

Prizes and Medals:

Abbe, 885; Accademia Pontificia dei Nuovi Lincei, Quantum Theory Prize, 417; Ackermann-Teubner, 741; American Institute of Electrical Engineers, 417; Astronomical Society of France, Prize for Astronautics, 886; Astronomical Society of the Pacific, Bruce Medal, 741; Bôcher, 162, 282; Cambridge University, 583, 741, 741; Cole, 450; Columbia University, Medal of Class of '89, 741; Italian Society of Sciences, 583; Naples Academy, 417; National Academy of Sciences, 282, 583; New York Academy of Sciences, Morrison Prize, 282, 886; Paris Academy, 281; Planck, 741; Radiological Society of America, 282; Research Corporation, 583; Royal Astronomical Society, 417; Royal Meteorological Society, Buchan Prize, 281; Royal Society of Edinburgh, 417; Royal Society of London, 281; Sacchetti, 138; Society of Arts and Sciences, 417; Vienna Academy, Lieben Prize, 417.

Universities and Technical Schools:

- Bologna, 138;
California, Berkeley, 419;
California, Los Angeles, 419;
Cambridge, 583, 741, 741;
Chicago, 419;
Colorado, 419;
Columbia, 419, 741;
Cornell, 420;
Illinois, 420;
Indiana, 420;
Iowa, 420;
Johns Hopkins, 420;
Kansas, 420;
Michigan, 420, 585;
Minnesota, 421;
Ohio State, 421;
Oslo, 583, 741;
Paris, 283;
Pennsylvania, 421;
Pisa, 886;
Pittsburgh, 421;
Princeton, 283, 283, 425;
Stanford, 421;
Texas, 421;
Wesleyan, 585;
Wisconsin, 422.