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PREFACE

This volume is a continuation of the decennial bibliography¹ of the University of Chicago, and contains the published work of members of the institution from July 1, 1902, to June 30, 1916. Each person's list is confined to the period of his connection with the University. So far as membership in the Faculty is concerned, this period is indicated by the dates in brackets after the name; and the appearance, in anyone's list, of publications of earlier date implies connection with the University in some other capacity than that of member of the Faculty. For example, many instructors are graduates of the University and published books or articles while they were students. Such work is included. On the other hand, some publications are listed which bear a date later than the author's connection with the University. In these cases the work was done during his term of residence, though not published till later. This is very common among the Doctors of Philosophy, who under the University regulations are not required to print their theses till two years after graduation. Books and articles which were in the hands of publishers on June 30, 1916, were accepted by the Committee, and, as many of these have been published while this volume was going through the press, the date 1917 not infrequently appears.

The publications of members of institutions affiliated with the University of Chicago are not included, except where, as in the Otho S. A. Sprague Memorial Institute, the work has been done in the laboratories or libraries of the University. Where persons hold concurrent appointments in the University and some other institution, only those writings are listed which may reasonably be credited to the former.

After each individual's name is given his position in the University, followed, in the case of those who have resigned, by the title of the position now held. The academic record inserted does not aim to give a complete statement of all stages of advancement or honors, but includes only the most notable. A conspectus of editorial activities and of affiliations with commissions, surveys, etc., precedes the bibliographical list proper. The latter includes books, articles, and reviews,

¹ *Publications of the Members of the University of Chicago*. "The Decennial Publications," First Series, Vol. II. Chicago: University Press, 1904.

the titles being arranged chronologically within their respective groups. Of the reviews only the more important have been cited with full bibliographical detail.

Where an instructor is a member of more than one department or has been transferred from one department to another, his list is given under the department with which he is more closely identified or to which he now belongs. No one's list is divided, even articles on general educational questions or on other subjects not immediately connected with the author's specialty being included with his departmental writings. The names of Doctors of Philosophy or of graduate students given among the members of the Faculty are not repeated in the doctoral or student lists.

The Committee wishes to express its appreciation of the assistance rendered by the members of the Faculty who acted as advisers for their departments and whose co-operation has greatly facilitated the compilation of the volume.

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THE DEPARTMENTS



THE DEPARTMENT OF PHILOSOPHY

JAMES HAYDEN TUFTS [1892-], Professor and Head of the Department of Philosophy.

A.B. Amherst, 1884; D.B. Yale, 1889; Ph.D. Freiburg i. B., 1892; LL.D. Amherst, 1904; Assistant Professor of Philosophy, Chicago, 1892-94; Associate Professor, *ibid.*, 1894-1900; Dean of the Senior Colleges, *ibid.*, 1899-1904, 1907-8; Professor, *ibid.*, 1900-; Head of the Department of Philosophy, *ibid.*, 1905-. President, Western Philosophical Association, 1906, 1914; President, American Philosophical Association, 1914.

Editor, of the *School Review*, 1906-9; of the *International Journal of Ethics*, 1914-; of *Studies in Philosophy and Psychology*, by Former Students of Charles Edward Garman. 8vo, xxiv+411. Boston: Houghton Mifflin Co., 1906; and of *Letters, Lectures, and Addresses of Charles Edward Garman*. 8vo, xiii+616. Boston: Houghton Mifflin Co., 1909.

The Individual and His Relation to Society as Reflected in British Ethics. Part II: "The Individual in Economic and Social Relations." 8vo, 58. University of Chicago Contributions to Philosophy, Vol. I, No. 6, 1904; published also as Monograph Supplement of *Psychological Review*, 1904.

Ethics (with John Dewey). American Science Series. 8vo, xiii+618. New York: Henry Holt & Co., 1908.

The Social Standpoint, *Journal of Philosophy, Psychology, and Scientific Methods*, I (1904), 197-200.

The Liberal and the Practical in Education, *Monson Academy Centennial Proceedings* (1904), 12-18.

Social Psychology in Small's *General Sociology, Psychological Bulletin*, II (1905), 393-98.

Some Contributions of Psychology to the Conception of Justice (President's Address before the Western Philosophical Association), *Philosophical Review*, XV (1906), 361-79; published also in *Michigan Law Review*, V (1906), 79-93.

Westermarck on the Origin of Moral Ideas, *Psychological Bulletin*, III (1906), 400-403.

On Moral Evolution, in *Studies in Philosophy and Psychology*, by Former Students of Charles Edward Garman (1906), 3-39.

- On the Psychology of the Family, *Psychological Bulletin*, IV (1907), 371-74.
- The Adjustment of the Church to the Psychological Conditions of the Present, *American Journal of Theology*, XII (1908), 177-88.
- Ethical Value, *Journal of Philosophy, Psychology, and Scientific Methods*, V (1908), 517-22.
- How Far Is Formal Systematic Instruction Desirable in Moral Training in the Schools? *Religious Education*, III (1908), 121-25.
- The American College and Life, *Science*, XXIX (1909), 407-14.
- Darwin and Evolutionary Ethics, *Psychological Review*, XVI (1909), 195-206.
- The Problem of Moral Education in the Public Schools as Affected by the Changed Conditions in Industry and Home Life, *Religious Education*, IV (1909), 343-48.
- The Present Task of Ethical Theory, *International Journal of Ethics*, XX (1910), 141-52.
- The Ultimate Test of Religious Truth: Is It Historical or Philosophical? *American Journal of Theology*, XIV (1910), 16-24.
- Recent Literature on Social Psychology, *Psychological Bulletin*, VII (1910), 406-12.
- Recent Discussions of Moral Evolution, *Harvard Theological Review*, V (1912), 157-79.
- The University and the Advance of Justice, *University of Chicago Magazine*, V (1913), 186-98.
- The Use of Legal Material in Teaching Ethics, *Journal of Philosophy, Psychology, and Scientific Methods*, IX (1913), 460-62.
- The Teaching of Ideals, *School Review*, XXII (1914), 326-33.
- Ethics in High Schools and Colleges, *Religious Education*, IX (1914), 454-59.
- The Present Significance of Scholarship, *Washington University Record*, X (1914), No. II, 1-12.
- Ethics of States, *Philosophical Review*, XXIV (1915), 131-49.
- Why Should Law and Philosophy Get Together? *International Journal of Ethics*, XXV (1915), 188-95.

The Test of Religion. In *University of Chicago Sermons* (edited by T. G. Soares; Chicago: University Press, 1915), pp. 89-106.

The Ethics of the Family, *Annual Report of National Conference of Charities and Corrections* (1915), 24-37; published also in *International Journal of Ethics*, XXVI (1916), 223-40.

REVIEWS OF: Ward, Pure Sociology, *Philosophical Review*, XIII, 347-51; Lipps, Grundlegung der Aesthetik, *ibid.*, 677-81; Croce, Philosophy of the Practical, *ibid.*, XXIV, 321-25; Sumner, Folkways, *Psychological Bulletin*, IV, 384-88; Ellwood, Sociology in Its Psychological Aspects, *ibid.*, IX, 461-65; Ross, Social Psychology, *Journal of Philosophy, Psychology, and Scientific Methods*, VI, 357-61. Other reviews in *Philosophical Review*, X, 179-80, 329-31, 574, 674-78; XIV, 717-20; XVII, 199-202; XX, 317-20; *Psychological Bulletin*, I, 394-96, 474-76; III, 404-8; V, 391-94; VI, 118-20; *International Journal of Ethics*, XX, 358-61; *American Journal of Theology*, XV, 148-51; *Harvard Law Review*, XXVI, 279-80.

JOHN DEWEY [1894-1904], Professor and Head of the Department of Philosophy; Director of the School of Education; Head of the Department of Philosophy, Columbia University.

A.B. Vermont, 1879; Ph.D. Johns Hopkins, 1884; LL.D. Wisconsin, 1904; Instructor in Philosophy, Michigan, 1884-86; Assistant Professor, *ibid.*, 1886-88; Professor of Philosophy, Minnesota, 1888-89; Professor of Philosophy, Michigan, 1889-94; Professor and Head of the Department of Philosophy, Chicago, 1894-1904; Director of the School of Education, *ibid.*, 1902-4.

President of the American Psychological Association, 1899-1900.

Shortening the Years of Elementary Schooling, *School Review*, XI (1903), 17-20.

Emerson, Philosopher of Democracy, *International Journal of Ethics*, XIII (1903), 405-13.

The Psychological and the Logical in Teaching Geometry, *Educational Review*, XXVI (1903), 387-99.

GEORGE HERBERT MEAD [1894-], Professor of Philosophy.

A.B. Harvard, 1883; Assistant Professor of Philosophy, Michigan, 1893-94; Assistant Professor, Chicago, 1894-1902; Associate Professor, *ibid.*, 1902-7; Professor, *ibid.*, 1907-.

Editor of the Social Psychology number of the *Psychological Bulletin*, December 1, 1912.

A Report on Vocational Training in Chicago and in Other Cities (with E. A. Wreidt and W. J. Bogan). 8vo, xiii+315. Chicago: City Club, 1912; now published by the University of Chicago Press.

- Science in the High School, *School Review*, XIV (1906), 237-49.
- Imagination in Wundt's Treatment of Myth and Religion, *Psychological Bulletin*, III (1906), 393-99.
- The Teaching of Science in College, *Science*, XXIV (1906), 390-97.
- The Educational Situation in the Chicago Public Schools, *City Club Bulletin*, I (1907), 131-38.
- Concerning Animal Perception, *Psychological Review*, XIV (1907), 383-90.
- The Philosophic Basis of Ethics, *International Journal of Ethics*, XVIII (1908), 311-23.
- Educational Aspects of Trade Schools, *Union Labor Advocate*, VIII (1908), 19-21.
- The Social Settlement: Its Basis and Function, *University Record*, XII (1908), 108-10.
- Social Psychology the Counterpart of Physiological Psychology, *Psychological Bulletin*, VI (1909), 401-8.
- What Social Objects Must Psychology Presuppose? *Journal of Philosophy, Psychology, and Scientific Methods*, VII (1910), 174-80.
- Psychology of Social Consciousness Implied in Instruction, *Science*, XXXI (1910), 688-93.
- The Social Self, *Journal of Philosophy, Psychology, and Scientific Methods*, X (1913), 374-80.
- The Psychology of Internationalism, *Survey*, XXXIII (1915), 604-7.
- Natural Rights and the Theory of the Political Institution, *Journal of Philosophy, Psychology, and Scientific Methods*, XII (1915), 141-55.
- Madison—University of Wisconsin in the Political Agitation of 1914, in the W. H. Allen Survey in 1915, and in the Legislative Fight of 1915, *Survey*, XXXV (1915), 349-51, 354-61.

REVIEWS OF: Draghicesco, Du rôle de l'individu dans le déterminisme social, *Psychological Bulletin*, II, 399-405; Jacoby, Sélection chez l'homme, *ibid.*, 407-12; Bergson, L'Évolution Créatrice, *Psychological Bulletin*, IV, 379-84.

ADDISON WEBSTER MOORE [1895-], Professor of Philosophy.

A.B. DePauw, 1890; Ph.D. Chicago, 1898; Assistant Professor of Philosophy, *ibid.*, 1902-4; Associate Professor, *ibid.*, 1904-9; Professor, *ibid.*, 1909-.

President, Western Philosophical Association, 1912.

Pragmatism and Its Critics. 8vo, xi+283. Chicago: University Press, 1910.

Some Logical Aspects of Purpose. In Dewey, *Studies in Logical Theory*. Decennial Publications of the University of Chicago, Second Series, XI (1903), chap. xi, 341-82.

Humanism, *Monist*, XIV (1904), 747-52.

"Experience" and Subjectivism, *Philosophical Review*, XV (1906), 182-86.

The Function of Thought, *Journal of Philosophy, Psychology, and Scientific Methods*, III (1906), 518-22.

Anti-Pragmatism, *ibid.*, VI (1909), 291-95.

Reply to Professor Pratt, *ibid.*, VIII (1911), 403-7.

Bergson and Pragmatism, *Philosophical Review*, XXI (1912), 397-414.

Thought and Its Function, *Mind*, N.S., LII (1912), 233-37.

Isolated Knowledge, *Journal of Philosophy, Psychology, and Scientific Methods*, XI (1914), 393-408.

Pragmatism, Science, and Truth, *Philosophical Review*, XXIV (1915), 631-38.

REVIEWS OF: The University of California Publications, Vol. I: Philosophy, *Psychological Bulletin*, III, 18-25; Baldwin, Thoughts and Things, *ibid.*, IV, 81-88; Santayana, The Life of Reason, *Journal of Philosophy, Psychology, and Scientific Methods*, III, 211-21; Santayana, Reason in Science, *ibid.*, 469-71; Studies in Philosophy (Garman Commemorative Volume), *ibid.*, 531-37. Other reviews in *Philosophical Review*, XIII, 569-72; XVII, 669-772; XXI, 833-34; *American Journal of Theology*, XIII, 477-78; XVIII, 312-13; *School Review*, XVII, 582-83; *Psychological Bulletin*, VII, 302-3; *Journal of Philosophy, Psychology, and Scientific Methods*, VIII, 717-18; *Science*, XXXIII, 775-77; *International Journal of Ethics*, XXV, 554-56.

EDWARD SCRIBNER AMES [1896-7; 1900-], Assistant Professor of Philosophy.

A.B. Drake, 1889; D.B. Yale, 1892; Ph.D. Chicago, 1895; Professor of Philosophy and Pedagogy, Butler, 1897-1900; Assistant Professor of Philosophy, Chicago, 1909-.

The Psychology of Religious Experience. 8vo, xii+428. Boston: Houghton Mifflin Co., 1910.

The Higher Individualism. 162. Boston: Houghton Mifflin Co., 1915.

Theology from the Standpoint of Functional Psychology, *American Journal of Theology*, X (1906), 219-32.

Social Consciousness and Its Object, *Psychological Bulletin*, VIII (1911), 407-16.

Psychology of Religion, *Cyclopedia of Education*, V (1913), 143-44.

The Survival of Asceticism in Education, *American Physical Education Review*, XIX (1914), 10-18.

Mystic Knowledge, *American Journal of Theology*, XIX (1915), 250-67.

Prayer. In *University of Chicago Sermons* (edited by T. G. Soares; Chicago: University Press, 1915), pp. 165-80.

MYRON LUCIUS ASHLEY [1905-], Extension Assistant Professor of Philosophy; Head of Department of Psychology, Chicago Normal College.

Ph.B. Northwestern, 1894; A.M. Harvard, 1900; Ph.D. Chicago, 1901.

The Nature of Hypothesis. Doctor's thesis. In Dewey, *Studies in Logical Theory*. Decennial Publications of the University of Chicago, Second Series, XI (1903), chap. vii, 143-82.

WILLIAM KELLEY WRIGHT [1907-9], Associate in Philosophy; Assistant Professor of Philosophy, Dartmouth College.

A.B. Chicago, 1899; Ph.D. Chicago, 1906; Instructor in Philosophy, Indiana, 1906; Instructor in Philosophy, Texas, 1906-7; Associate in Philosophy, Chicago, 1907-9.

The Ethical Significance of Feeling, Pleasure, and Happiness in Modern Non-Hedonistic Systems. Doctor's thesis. 8vo, 95. Philosophic Studies, No. 1. Chicago: University Press, 1907.

Happiness as an Ethical Postulate, *Philosophical Review*, XVII (1908), 518-28.

REVIEWS IN: *Psychological Bulletin*, IV, 390, 396-99; V, 25-26.

ELIZABETH KEMPER ADAMS, Ph.D. 1904; Professor of Education, Smith College.

The Aesthetic Experience; Its Meaning in a Functional Psychology. Doctor's thesis. 8vo, 114. Chicago: University Press, 1907.

MATILDE CASTRO, Ph.D. 1907; Professor (elect) of Education, and Director of the Phebe Anna Thorne Model School, Bryn Mawr College.

The Respective Standpoints of Psychology and Logic. Doctor's thesis. 8vo, 77. Philosophic Studies, No. 4. Chicago: University Press, 1913.

GEORGE TILDEN COLMAN, PH.D. 1914; Instructor in Philosophy, MacKenzie College, São Paulo, Brazil.

Important Factors in the Transition from Individualistic Ethical Ideals of the Seventeenth Century to Social Ideals of the Nineteenth Century. Doctor's thesis. 8vo, 110. Menasha, Wis.: George Banta Publishing Co. In Press.

JOHN FORSYTH CRAWFORD, PH.D. 1913; Professor of Philosophy, Beloit College.

Relation of Inference to Fact in Mill's Logic. Doctor's thesis. 8vo, 50. Philosophic Studies, No. 5. Chicago: University Press, 1916.

CLARENCE HERBERT HAMILTON, PH.D. 1914; Professor of Philosophy and Psychology, University of Nanking, Nanking, China.

A Psychological Interpretation of Mysticism. Doctor's thesis. 8vo, 85. Privately printed, 1916.

FREDERICK GOODRICH HENKE, PH.D. 1910; Professor of Philosophy and Education, Allegheny College, Meadville, Pa.

A Study in the Psychology of Ritualism. Doctor's thesis. 8vo, vii+96. Chicago: University Press, 1910.

Experiments on Tactual Sensations of the White Rat (with E. S. Bogardus), *Journal of Animal Behavior*, I (1911), 125-37.

ELIJAH JORDAN, PH.D. 1911; Professor of Philosophy, Butler College, Indianapolis, Ind.

The Constitutive and Regulative Principles in Kant. Doctor's thesis. 8vo, 53. Chicago: University Press, 1912.

IRVING KING, PH.D. 1904; Assistant Professor of Education, State University of Iowa, Iowa City.

The Psychology of Child Development. 8vo, ix+265. Chicago: University Press, 1903.

The Differentiation of the Religious Consciousness. Doctor's thesis. 8vo, iv+72. New York: Macmillan Co., 1905.

ETHEL MAY KITCH, PH.D. 1914; Associate Professor of Philosophy, Oberlin College.

Origin and Development of Subjectivity in Hindu Thought. Doctor's thesis. 8vo, 82. Philosophic Studies, No. 7. Chicago: University Press, 1917.

IRVING ELGAR MILLER, PH.D. 1904; Assistant Professor of Philosophy and Education, University of Rochester.

The Significance of the Mathematical Element in the Philosophy of Plato. Doctor's thesis. 8vo, iii+96. Chicago: University Press, 1904.

HOMER BLOSSER REED, PH.D. 1912; Assistant Professor of Psychology and Philosophy, University of Idaho, Moscow.

The Morals of Monopoly and Competition. Doctor's thesis. iii+143. Menasha, Wis.: George Banta Publishing Co., 1916.

ELLA HARRISON STOKES, PH.D. 1910; Professor of Philosophy and Education, Penn College, Oskaloosa, Iowa.

The Conception of a Kingdom of Ends in Augustine, Aquinas, and Leibniz. Doctor's thesis. 8vo, iv+129. Chicago: University Press, 1912.

ANNA LOUISE STRONG, PH.D. 1908; United States Children's Bureau, Washington, D.C.

The Psychology of Prayer. Doctor's thesis. 12mo, 122. Chicago: University Press, 1909.

DAGNY GUNHILDA SUNNE, PH.D. 1909; Instructor in Psychology, Newcomb College, Tulane University, New Orleans.

Some Phases in the Development of the Subjective Point of View during the Post-Aristotelian Period. Doctor's thesis. 8vo, 96. Philosophic Studies, No. 3. Chicago: University Press, 1911.

JULIA JESSIE TAFT, PH.D. 1913; State Charities Aid Association, New York City.

The Woman Movement from the Point of View of Social Consciousness. Doctor's thesis. 8vo, x+62. Philosophic Studies, No. 6. Chicago: University Press, 1916.

ERNEST LYNN TALBERT, PH.D. 1909; Extension Assistant Professor of Psychology, University of Chicago; Director of Admissions and Secretary of the Faculty, University of Cincinnati.

Dualism of Fact and Idea. Doctor's thesis. 8vo, 52. Chicago: University Press, 1910.

Opportunities in School and Industry. 8vo, 64. Chicago: University Press, 1912.

Two Modern Social Philosophies, *International Journal of Ethics*, XXI (1910), 68-82.

Recent Treatments of Social Grouping, *Psychological Bulletin*, VIII (1911), 417-27.

The Play Attitude and the School Fraternity, *Popular Science Monthly* (1915), 472-77.

REVIEWS OF: Leuba, Psychology of Religion, *Philosophical Review*, XXVII (1913), 424-31. Other reviews in *Psychological Bulletin*, VIII, 428-32; X, 471-75; XI, 478-81; *Philosophical Review*, XXIII, 572-73.

BENJAMIN WHITMAN VAN RIPER, PH.D. 1912; Assistant Professor of Psychology, Pennsylvania State College.

Some Views of the Time Problem. Doctor's thesis. 8vo, 99. Menasha, Wis.: George Banta Publishing Co., 1916.

CHARLES EDGAR WITTER, PH.D. 1912; Principal of the Bryan Hill School, St. Louis, Mo.

Pragmatic Elements in Kant's Philosophy. Doctor's thesis. 8vo, iv+76. Chicago: University Press, 1913.

THE DEPARTMENT OF PSYCHOLOGY

JAMES ROWLAND ANGELL [1894-], Professor and Head of the Department of Psychology; Director of the Psychological Laboratory; Dean of the Faculties of Arts, Literature, and Science.

A.B. Michigan, 1890; A.M. *ibid.*, 1891; Litt.D. Vermont, 1915; Assistant Professor of Experimental Psychology, Chicago, 1894-1901; Associate Professor, *ibid.*, 1901-4; Professor and Director of the Psychological Laboratory, *ibid.*, 1904-; Head of the Department of Psychology, *ibid.*, 1905-; Dean of the Senior Colleges, *ibid.*, 1908-11; Dean of the Faculties of Arts, Literature, and Science, *ibid.*, 1911-.

President of the American Psychological Association, 1906; appointed Exchange Professor at the Sorbonne, 1914.

Co-operating Editor, Baldwin's *Dictionary of Philosophy and Psychology*, 1901-2; Editor of the Psychological Monographs, 1909-.

- Report to the American Psychological Association of the Committee on Standardizing Tests, *Psychological Bulletin*, V (1908), 37, 38; Report to the same Association (with President Sanford of Clark College) on The Teaching of Psychology in Colleges and Universities with Laboratories, *Psychological Monographs*, XII (1910), No. 51, 94; Report to the same Association on Standardizing Tests for Mental Imagery, *Psychological Monographs*, XIII (1911), 62-108; Report (with other members of a commission) of the United States Bureau of Education Survey of the Higher Institutions of the State of Iowa, 1916.
- Psychology*. 8vo, vii+402. New York: Henry Holt & Co., 1904; 4th ed., rewritten and enlarged, 8vo, 468, 1908.
- Chapters from Modern Psychology*. 8vo, vii+308. New York: Longmans, Green, & Co., 1912.
- Psychology and Social Welfare, *Chautauquan*, XL (1905), 453-59.
- Christian Science from a Psychologist's Point of View, *World To-Day*, VIII (1905), 403-6.
- Psychology at the St. Louis Congress, *Journal of Philosophy, Psychology, and Scientific Methods*, II (1905), 533-46.
- Recent Discussion of Feeling, *ibid.*, III (1906), 169-74.
- The Province of Functional Psychology, *Psychological Review*, XIV (1907), 61-91.
- Articles on Psychology, *Cyclopedia Americana*, 1907.
- Doctrine of Formal Discipline in the Light of the Principles of General Psychology, *Educational Review*, XXXVI (1908), 1-14.
- The Influence of Darwin on Psychology, *Psychological Review*, XVI (1909), 152-69.
- Contributions on Psychology, *The Cyclopedia of Education*. New York: Macmillan Co., 1910.
- William James, *Psychological Review*, XVIII (1911), 78-82.
- Imageless Thought, *ibid.*, 295-323.
- Entrance Requirements at the University of Chicago, *Science* (1911), 945-50.
- Combination of the Certificate and Examination System, *School Review*, XX (1912), 145-68.

The University Today, *University of Chicago Magazine*, VI (1913), 124-28, 147-56.

Professor Watson and the Image, *Journal of Philosophy, Psychology, and Scientific Methods*, X (1913), 609.

Duplication of School and College Work, *School Review*, XXI (1913), 1-10.

Behavior as a Category of Psychology, *Psychological Review*, XX (1913), 255-70.

The Junior-College Movement in High Schools, *School Review*, XXIII (1915), 289-302.

A Reconsideration of James's Theory of Emotion, *Psychological Review*, XXIII (1916), 251-61.

REVIEWS OF: Pierce, Studies in Auditory and Visual Space, *Psychological Review*, IX, 397-403; Stratton, Experimental Psychology and Culture, *Psychological Bulletin*, I, 21-25; Pfänder, Einführung in die Psychologie, *Philosophical Review*, XIV, 242-43; Titchener, Experimental Psychology, Manual Laboratory Practice. Vol. II, Quantitative Experiments: Part I, Students' Manual; Part II, Instructor's Manual, *American Journal of Psychology*, XVII, 585-93; Jastrow, The Subconscious, *Dial*, XLI, 106-9; James, Pragmatism, *International Journal of Ethics*, XVIII, 226-35; Judd, I, Psychology, General Introduction; II, Laboratory Manual; III, Laboratory Equipment, *Philosophical Review*, XVII, 432-39; Titchener, Textbook of Psychology, Vol. I, *Psychological Review*, XIX, 319-23; Titchener, Textbook of Psychology, Vols. I and II, *Philosophical Review*, XX, 545-51; Cannon, Bodily Changes in Pain, Hunger, Fear and Rage; and Crile, Origin and Nature of Emotions, *Science*, XLII, 696-700; Dunlap, Outline of Psychology, *Psychological Bulletin*, XII, 420-21.

HARVEY CARR [1908-], Associate Professor of Psychology.

S.B. Colorado, 1901; S.M. *ibid.*, 1902; Ph.D. Chicago, 1905; Assistant Professor of Psychology, *ibid.*, 1908-16; Associate Professor, *ibid.*, 1916-.

Review Editor, *Journal of Animal Behavior*, 1914-; Advisory Editor, *Journal of Experimental Psychology*, 1916-.

A Visual Illusion of Motion during Eye Closure. Doctor's thesis. Psychological Monographs, VII, 3, Whole No. 31. Svo, 127. Lancaster, Pa.: Psychological Review Co., 1906.

A Study of Certain Relations of Accommodation and Convergence to the Judgment of the Third Dimension (with Jessie Allen), *Psychological Review*, XIII (1906), 258-75.

The Pendular Whiplash Illusion of Motion, *Psychological Review*, XIV (1907), 169-80.

Apparent Control of the Position of the Visual Field, *ibid.*, 357-82.

Voluntary Control of the Distance Location of the Visual Field, *ibid.*, XV (1908), 139-49.

Unusual Illusions Occurring in Psycholeptical Attacks of Hysterical Origin, *Journal of Abnormal Psychology*, II (1908), 260-71.

Orientation in the White Rat (with J. B. Watson), *Journal of Comparative Neurology and Psychology*, XVIII (1908), 27-44.

Visual Illusions of Depth, *Psychological Review*, XVI (1909), 219-56.

The Autokinetic Sensation, *ibid.*, XVII (1910), 42-75.

Human Reactions in a Maze (with V. C. Hicks), *Journal of Animal Behavior*, II (1912), 98-125.

Some Novel Experiences, *Psychological Review*, XIX (1912), 59-65.

Principles of Selection in Animal Learning, *ibid.*, XXI (1914), 157-65.

A Critique of the Head Theory of Cutaneous Sensitivity, *ibid.*, XXIII (1916), 262-78.

REVIEWS OF: Thorndike, Animal Intelligence, *Journal of Animal Behavior*, II, 441-46; Watson, Behavior, *Psychological Bulletin*, X, 308-12. Other reviews in *Psychological Bulletin*, VI, 290; VIII, 235-39; IX, 257-60; X, 261-65; XII, 216-18.

JOSEPH WANTON HAYES [1909-], Assistant Professor of Psychology.

A.B. Amherst, 1903; Ph.D. Chicago, 1911; Associate in Psychology, *ibid.*, 1909-11; Instructor, *ibid.*, 1911-16; Assistant Professor, *ibid.*, 1916-.

A Horizontal-Vertical Illusion of Brightness in Foveal Vision Apparent in Astronomical Observations of the Relative Luminosity of Twin Stars.

Doctor's thesis. Psychological Monographs, XX. 1, Whole No. 85. 8vo, 126. Lancaster, Pa.: Psychological Review Co., 1915.

ERNEST LYNN TALBERT [1903-5; 1911-], Extension Assistant Professor of Psychology; Director of Admissions and Secretary of the Faculty, University of Cincinnati. See under Department of Philosophy, p. 10.

JOHN BROADUS WATSON [1903-8], Assistant Professor of Experimental Psychology; Professor of Psychology and Director of the Psychological Laboratory, Johns Hopkins University.

A.M. Furman University, 1897; Ph.D. Chicago, 1903; Assistant in Experimental Psychology, *ibid.*, 1903-4; Instructor, *ibid.*, 1904-8; Assistant Professor, *ibid.*, 1908.

Editor, Comparative Psychology Numbers, *Psychological Bulletin*, III (1906), and V (1908).

Animal Education. Doctor's thesis. 8vo, 122. Chicago: University Press, 1903.

Kinaesthetic and Organic Sensations: Their Rôle in the Reactions of the White Rat to the Maze. Psychological Monographs, VIII. 2, Whole No. 33. 8vo, vi+100. Lancaster, Pa.: Psychological Review Co., 1907.

Some Unemphasized Aspects of Comparative Psychology, *Journal of Comparative Neurology and Psychology*, XIV (1904), 360-63.

The Effect of the Bearing of Young upon the Body-Weight and the Weight of the Central Nervous System of the Female White Rat, *ibid.*, XV (1905), 514-24.

The Need of an Experimental Station for the Study of Certain Problems in Animal Behavior, *Psychological Bulletin*, III (1906), 149-56.

A Comparison of the White Rat with Man in Respect to the Growth of the Entire Body (with H. H. Donaldson and E. H. Dunn), *Boas Anniversary Volume*, New York (1906), 5-26.

Condition of Noddy and Sooty Tern Colony, Bird Key, Tortugas, Fla., *Bird Lore*, IX (1907), 307-16.

Imitation in Monkeys, *Psychological Bulletin*, V (1908), 169-79.

Behavior of Noddy and Sooty Terns, *Carnegie Publication* 103, 1908, pp. 187-255.

Orientation in the White Rat (with H. A. Carr), *Journal of Comparative Neurology and Psychology*, XVIII (1908), 27-44.

Experiments Bearing upon Color Vision in Monkeys, *ibid.*, XIX (1909), 1-28.

REVIEWS OF: Yerkes, Dancing Mouse, *Journal of Philosophy, Psychology, and Scientific Methods*, V, 184-89; Baird, Color Sensitivity of the Peripheral Retina, *Psychological Bulletin*, II, 380-85. Other reviews in *Psychological Bulletin*, II, 144-49; III, 172-74; *Science*, XXVIII, 151-54; *Journal of Political Economy*, XII, 558-61; *Journal of Comparative Neurology and Psychology*, XVI, 470-72; XVIII, 329-31.

ELLSWORTH FARIS [1913; 1914-15], Instructor in Psychology; Associate Professor of Psychology, State University of Iowa, Iowa City.

S.B. Texas Christian University, 1894; A.M. *ibid.*, 1906; Ph.D. Chicago, 1914; Professor of Philosophy and Psychology, Texas Christian University, 1906-11; Assistant in Psychology, Chicago, 1913; Assistant Professor of Philosophy, State University of Iowa, 1913-14; Instructor in Psychology, Chicago, 1914-15.

The Origin of Punishment, *International Journal of Ethics*, XXV (1914-15), 54-67.

REVIEWS IN: *International Journal of Ethics*, XXV, 113-14, 271, 272, 597; *Psychological Bulletin*, XI, 463-66.

WARNER FITE [1897-1903], Instructor in Experimental Psychology; Stuart Professor of Ethics, Princeton University.

A.B. Haverford, 1889; Ph.D. Pennsylvania, 1894; Instructor in Philosophy, Williams College, 1894-96; Dean of the Faculty, *ibid.*, 1895-97; Docent in Philosophy, Chicago, 1897-98; Assistant in Psychology, *ibid.*, 1898-1901; Instructor in Experimental Psychology, *ibid.*, 1902-3.

An Introductory Study of Ethics. 12mo, xi+374. New York: Longmans, Green, & Co., 1903.

The Place of Pleasure and Pain in the Functional Psychology, *Psychological Review*, X (1903), 633-44.

REVIEWS IN: *American Journal of Theology*, VI, 534-35, 536-37, 616, 634.

HARRY DEXTER KITSON [1914-], Instructor in Psychology.

A.B. Hiram College, 1909; Ph. D. Chicago, 1915; Assistant in Psychology, Minnesota, 1912-13; Associate in Psychology, Chicago, 1914-15; Instructor, *ibid.*, 1915-.

How to Use Your Mind. 12mo, x+226. Philadelphia: J. B. Lippincott Co., 1916.

The Scientific Study of the College Student. Doctor's thesis. Psychological Monographs, XXIII. 1, Whole No. 98. 8vo, 80. Lancaster, Pa.: Psychological Review Co., 1917.

The Rôle of Association in Lip-Reading, *Volta Review*, XVI (1914), 619-20.

Rational Buying and the Public Schools, *Manual Training and Vocational Education*, XVI (1914), 214-18.

Suggestions toward a Tenable Theory of Vocational Guidance, *ibid.* (1915), 265-70.

Psychological Tests for Lip-Reading Ability, *Volta Review*, XVII (1915), 471-76.

Psychological Tests and Vocational Guidance, *School Review*, XXIV (1916), 207-14.

REVIEW OF: Gowin, The Executive and His Control of Men: A Study in Personal Efficiency, *Journal of Political Economy*, XXIV, 310-11.

WALTER VAN DYKE BINGHAM [1906-8], Associate in Psychology; Professor of Psychology, Carnegie Institute of Technology, Pittsburgh. A.B. Beloit, 1901; Ph.D. Chicago, 1908; Associate in Psychology, Chicago, 1906-8.

Studies in Melody. Doctor's thesis. Psychological Monographs, XII. 3, Whole No. 50. 8vo, vi+88. Lancaster, Pa.: Psychological Review Co., 1910.

The Rôle of the Tympanic Mechanism in Audition, *Psychological Review*, XIV (1907), 229-43.

KARL TINSLEY WAUGH [1907-9], Associate in Psychology; Professor of Psychology and Philosophy, Beloit College.

A.B. Ohio Wesleyan, 1900; Ph.D. Harvard, 1907; Professor of Philosophy and Mathematics, Claflin University, 1901-4; Assistant in Philosophy, Harvard, 1906-7; Associate in Psychology, Chicago, 1907-9.

REVIEW OF: Washburn, Animal Mind, *Psychological Bulletin*, V, 205-9. Other reviews in *Journal of Abnormal Psychology*, II, 186-87; *Psychological Bulletin*, VII, 240-41.

HENRY FOSTER ADAMS [1910-11], Assistant in Psychology; Instructor in Psychology, University of Michigan.

Ph.B. Wesleyan, 1905; Ph.D. Chicago, 1910; Assistant in Psychology, *ibid.*, 1910-11.

Autokinetic Sensations. Doctor's thesis. Psychological Monographs, XIV. 2, Whole No. 59. 8vo, 44. Lancaster, Pa.: Psychological Review Co., 1912.

A Set of Blind Rats Which Could Not Learn the Maze, *Journal of Animal Behavior*, III (1903), 300-302.

EDWINA ABBOTT (MRS. AUSTIN M. COWAN), PH.D. 1913; Wichita, Kan.

The Effect of Adaptation on the Temperature Difference Limen. Doctor's thesis. Psychological Monographs, XVI. 2, Whole No. 68. 8vo, 36. Lancaster, Pa.: Psychological Review Co., 1914.

JESSIE BLOUNT ALLEN (MRS. W. W. CHARTERS), PH.D. 1904; Columbia, Mo.

The Associative Processes of the Guinea Pig; A Study of the Psychical Development of an Animal with a Nervous System Well Medullated at Birth. Doctor's thesis. *Journal of Comparative Neurology and Psychology*, XIV (1904), 293-359.

A Study of Certain Relations of Accommodation and Convergence to the Judgment of the Third Dimension (with H. A. Carr), *Psychological Review*, XIII (1906), 258-75.

JASPER CONVERSE BARNES, PH.D. 1911; Dean and Professor of Psychology, Maryville College, Maryville, Tenn.

Voluntary Isolation of Control in a Natural Muscle Group. Doctor's thesis. Psychological Monographs, XXII, Whole No. 93. 8vo, 50. Lancaster, Pa.: Psychological Review Co., 1916.

JUNE ETTA DOWNEY, PH.D. 1907; Professor of Philosophy, University of Wyoming, Laramie.

Control Processes in Modified Hand-Writing: An Experimental Study. Doctor's thesis. Psychological Monographs, IX. 1, Whole No. 37. 8vo, vii+148. Lancaster, Pa.: Psychological Review Co., 1908.

GRACE MAXWELL FERNALD, PH.D. 1907; Instructor in Psychology, State Normal School, Los Angeles, Cal.

The Effect of Achromatic Conditions on the Color Phenomena of Peripheral Vision. Doctor's thesis. Psychological Monographs, X. 3, Whole No. 42. 8vo, iv+91. Lancaster, Pa.: Psychological Review Co., 1909.

MABEL RUTH FERNALD, PH.D. 1910; Psychologist and Director, Laboratory of Social Hygiene, Bedford Hills, New York.

The Diagnosis of Mental Imagery. Doctor's thesis. Psychological Monographs, XIV. 1, Whole No. 58. 8vo, iv+169. Lancaster, Pa.: Psychological Review Co., 1912.

KATE GORDON, PH.D. 1903; Assistant Professor of Psychology, Carnegie Institute of Technology, Pittsburgh.

The Psychology of Meaning. Doctor's thesis. 8vo, 84. Chicago: University Press, 1903.

Meaning in Memory and Attention, *Psychological Review*, X (1903), 76-91.

MARY HOLMES STEVENS HAYES, PH.D. 1910; Associate Psychologist, Laboratory of Social Hygiene, Bedford Hills, New York.

A Study of Cutaneous After-Sensations. Doctor's thesis. Psychological Monographs, XIV. 3, Whole No. 60. 8vo, 89. Lancaster, Pa.: Psychological Review Co., 1912.

WALTER SAMUEL HUNTER, PH.D. 1912; Professor of Psychology, University of Kansas, Lawrence.

The Delayed Reaction in Animals and Children. Doctor's thesis. 8vo, 86. Boston: Henry Holt & Co., 1913.

A Note on the Behavior of the White Rat, *Journal of Animal Behavior*, II (1912), 137-41.

ROBERTS BISHOP OWEN, PH.D. 1914; Lecturer in Philosophy, Columbia University.

Recognition: A Logical and Experimental Study. Doctor's thesis. Psychological Monographs, XX. 2, Whole No. 86. 8vo, 154. Lancaster, Pa.: Psychological Review Co., 1915.

LOUIS AUGUSTUS PECHSTEIN, PH.D. 1916; Assistant Professor of Psychology, University of Rochester.

Whole vs. Part Methods in Motor Learning. Doctor's thesis. Psychological Monographs, XXIII. 2, Whole No. 99. iii+80. Lancaster, Pa.: Psychological Review Co., 1917.

FLEMING ALLEN CLAY PERRIN, PH.D. 1913; Instructor in Psychology, University of Pittsburgh.

An Experimental and Introspective Study of the Human Learning Process in the Maze. Doctor's thesis. Psychological Monographs, XVI. 4, Whole No. 70. 8vo, 97. Lancaster, Pa.: Psychological Review Co., 1914.

HARVEY ANDREW PETERSON, PH.D. 1909; Professor of Psychology, Illinois State Normal University, Normal.

The Influence of Complexity and Dissimilarity on Memory. Doctor's thesis. Psychological Monographs, XII. 2, Whole No. 49. 8vo, 87. Lancaster, Pa.: Psychological Review Co., 1909.

JOSEPH PETERSON, PH.D. 1907; Professorial Lecturer in Psychology, University of Minnesota.

Combination Tones and Other Related Auditory Phenomena. Doctor's thesis. Psychological Monographs, IX. 3, Whole No. 39. 8vo, 136. Lancaster, Pa.: Psychological Review Co., 1908.

CARL LEO STAHR RAHN, PH.D. 1912; Instructor in Psychology, University of Illinois.

Translation of *Clever Hans* from the German of Oskar Pfungst. 8vo, 274. New York: Henry Holt & Co., 1911.

The Relation of Sensation to Other Categories in Contemporary Psychology: A Study in the Psychology of Thinking. Doctor's thesis. Psychological Monographs, XVI. 1, Whole No. 67. 8vo, vi+131. Lancaster, Pa.: Psychological Review Co., 1913.

FLORENCE ELLA RICHARDSON, PH.D. 1908; Professor of Psychology, Drake University, Des Moines, Iowa.

A Study of Sensory Control in the Rat. Doctor's thesis. Psychological Monographs, XII. 1, Whole No. 48. 8vo, iv+124. Lancaster, Pa.: Psychological Review Co., 1909.

SARAH MARGARET RITTER, PH.D. 1916; Instructor in Psychology, Winthrop College, Rock Hill, S.C.

The Vertical-Horizontal Illusion. An Experimental Study of Meridional Disparities in the Visual Field. Doctor's thesis. Psychological Monographs, XXIII. 4, Whole No. 101. iii+110. Lancaster, Pa.: Psychological Review Co., 1917.

ARTHUR HOWARD SUTHERLAND, PH.D. 1909; Instructor in Psychology, Yale University.

Critique of Word Association Reactions. An Experimental Study. Doctor's thesis. 8vo, 44. Menasha, Wis.: George Banta Publishing Co., 1913.

HELEN BRADFORD THOMPSON (MRS. PAUL WOOLEY), PH.D. 1900; Director of Cincinnati Survey of Working Children, Cincinnati, Ohio.

Psychological Norms in Men and Women. Doctor's thesis. vii+188. Chicago: University Press, 1903.

STELLA BURNHAM VINCENT, PH.D. 1912; Instructor in Psychology, Chicago Normal College.

The Function of the Vibrissae in the Behavior of the White Rat. Doctor's thesis. Animal Behavior Monographs, I (1905), No. 5, iv+85.

The Mammalian Eye, *Journal of Animal Behavior*, II (1912), 249-55.

The Tactile Hair of the White Rat, *Journal of Comparative Neurology and Psychology*, XXIII (1913), 1-27 (with 4 plates).

The White Rat and the Maze Problem, I, The Introduction of a Visual Control, *Journal of Animal Behavior*, V (1915), 23-43; II, The Introduction of an Olfactory Control, *ibid.*, 140-57; III, The Introduction of a Tactual Control, *ibid.*, 175-85; IV, The Number and Distribution of Errors. A Comparative Study, *ibid.*, 367-74.

CLARA JEAN WEIDENSALL, PH.D., 1910; New York, N.Y.

Studies in Rhythm. Doctor's thesis. 8vo, 40. Cincinnati: Bohnett & Co., 1916.

CLARENCE STONE YOAKUM, PH.D. 1908; Adjunct Professor of Philosophy, University of Texas, Austin.

An Experimental Study of Fatigue. Doctor's thesis. Psychological Monographs, XI, 3, Whole No. 46. 8vo, vi+130. Lancaster, Pa.: Psychological Review Co., 1909,

Some Experiments upon the Behavior of Squirrels, *Journal of Comparative Neurology and Psychology*, XIX (1909), 541-68.

EMORY S. BOGARDUS. *See under* Department of Sociology, p. 81.

F. M. GREGG and C. A. MCPHEETERS, Graduate Students.

Behavior of Raccoons to a Temporal Series of Stimuli, *Journal of Animal Behavior*, III (1913), 241-59.

FREDERICK GOODRICH HENKE. *See under* Department of Philosophy, p. 9.

VINNIE C. HICKS, Graduate Student.

The Relative Value of the Different Curves of Learning, *Journal of Animal Behavior*, I (1911), 138-56.

R. L. KELLY, Graduate Student.

Psychophysical Tests of Normal and Abnormal Children—A Comparative Study, *Psychological Review*, X (1903), 348-72.

C. R. SQUIRE, Graduate Student.

Fatigue: Suggestions for a New Method of Investigation, *Psychological Review*, X (1903), 56-75.

ANNA WYCZOLKOWSKA, Graduate Student.

Study of Certain Phenomena Concerning the Limit of Beats, *ibid.*, XIII (1906), 378-87.

THE DEPARTMENT OF EDUCATION

CHARLES HUBBARD JUDD [1909-], Professor and Head of the Department of Education; Director of the School of Education.

A.B. Wesleyan, 1894; Ph.D. Leipzig, 1896; LL.D. Miami, 1909; LL.D. Wesleyan, 1913; Professor of Experimental Psychology, New York, 1898-1901; Professor of Psychology and Education, Cincinnati, 1901-2; Assistant Professor of Psychology, Yale, 1904-7; Professor and Director of the Psychological Laboratory, *ibid.*, 1907-9; Professor and Head of the Department of Education and Director of the School of Education, Chicago, 1909-.

Member, Council of American Psychological Association, 1907-8; President, American Psychological Association, 1909; President, National Society of College Teachers of Education, 1910 and 1915-16; Member, National Council of Education, 1911-.

Editor, Department of Psychology, Monroe's *Cyclopedia of Education*, 1908-13; Editor, *Elementary School Journal*, 1909-; Member, Editorial Board, *School Review*, 1909-.

Secretary of the Commission of the North Central Association of Colleges and Secondary Schools, 1913-; publications: (1) *List of Approved Colleges and Universities in the North Central Association of Colleges and Secondary Schools for 1913*, *School Review* Monographs, No. 4 (1913), 8vo, 32; (2) *A Study of the Colleges and High Schools in the North Central Association*, United States Bureau of Education Bulletin, No. 630 (1915), 5-30; (3) *Proceedings of the North Central Association*, 1913, 1914, 1915.

Psychology of High School Subjects. 8vo, ix+515. Boston: Ginn & Co., 1915.

The Training of Teachers in England, Scotland, and Germany. 8vo, 86. Washington: United States Bureau of Education Bulletin, No. 609, 1915.

Measuring the Work of the Public Schools. 12mo, 290. Cleveland: The Survey Committee of the Cleveland Foundation, 1916.

- Standardizing State Normal Schools* (with S. Chester Parker). 8vo, 141. Washington: United States Bureau of Education Bulletin, No. 12, 1916.
- A Course in Form Study, *Elementary School Teacher*, X (1909), 32-39.
- The Department of Education in American Universities, *School Review*, XVIII (1909), 593-608.
- Evolution and Consciousness, *Psychological Review*, XVII (1910), 77-97.
- On Scientific Study of High-School Problems, *School Review*, XVIII (1910), 84-98.
- Numerous Contributions to Monroe's *Cyclopedia of Education*, Vols. I-V (1910-13). New York: Macmillan Co.
- Studies in the Principles of Education (series of five articles), *Elementary School Teacher*, XII (1911-12), 34-39, 82-90, 176-85, 206-14, 278-86.
- Reasons for Modifying Entrance Requirements, *Education*, VIII (1912), 1-12.
- Meaning of Science in Secondary Schools, *School Science and Mathematics*, XII (1912), 87-98.
- Intelligence as Distinguished from Instinct (abstract of paper), *Psychological Bulletin*, IX (1912), 51-52.
- The Meaning of Secondary Education, *School Review*, XXI (1913), 11-25.
- Psychological Characteristics of the Intermediate Grades, *School Review Monographs*, III (1913), 1-6.
- The Cultivation of Initiative in Teachers, *Report of Department of Superintendence, National Education Association* (1913), 55-65.
- A Seven-Year Elementary School, *Elementary School Teacher*, XIII (1913), 274-86.
- The Status of Secondary Education, *Report of the Commissioner of Education of the United States*, I (1913), 67-94.
- Reading Tests, *Elementary School Teacher*, XIV (1914), 365-73.
- Some Observations in German Schools, *ibid.*, 437-44.
- The Junior High School, *School Review*, XXIII (1915), 25-33.
- Protection of Professional Interests, *Proceedings of the Department of Superintendence, National Education Association* (1915), 21-25.

The Junior High School, *School Review*, XXIV (1916), 249-60; published also in *Proceedings of the National Education Association* (1916), 917-25.

REVIEWS IN: *Elementary School Teacher*, X, 305, 405-6; XII, 93, 141, 242, 290-91; XIII, 43, 107-9, 199-200, 248, 304, 405, 456; XIV, 445-46, 491-93; *Elementary School Journal*, XV, XVI; *School Review*, XXIII, 201-2, 204-6.

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Chairman of the Joint Committee on the Relations between the University of Chicago and Co-operating Secondary Schools; report in *School Review*, XIX (1911), 124-27.

The Aim in the High School—The Development of the Many-sided Interest, or Special Preparation for Life, *School Review*, XIV (1906), 135-42.

The Moral and Religious Element in Education, *Religious Education*, I (1906), 88-93.

Parents' Associations, *School Review*, XVI (1908), 78-88.

A Unique School System, *Elementary School Teacher*, VIII (1908), 565-67.

The Meaning of Industrial Education, *Report on Industrial and Commercial Education to the Chicago Association of Commerce* (1909), 3-8.

The Teacher as a Constructive Moral Force, *Religious Education*, IV (1909), 550-60.

Private Education in the Middle West, *World To-Day*, XIX (1910), 863-71.

The Twenty-fourth Annual Conference of Academies and High Schools in Relations with the University of Chicago, *School Review*, XX (1912), 383-400.

The Function of the College, *Colby Alumnus Magazine*, I (1912), 146-51.

Vocational Guidance for Boys in Chicago, *Annual Report of the Chicago Association of Commerce* (1913), 55-59.

The Twenty-fifth Annual Conference of Academies and High Schools in Relations with the University of Chicago, *School Review*, XXI (1913), 398-411.

Industrial Education and Vocational Guidance, *Annual Report of the Chicago Association of Commerce* (1913), 61-63.

Continuous [University] Sessions, *Cyclopedia of Education*, V, 451-52.

University Extension, *ibid.*, 684-87.

Impress of Oriental Christians on Un-Christian America, *Standard*, LXI (1914), 589.

Has the Church a Message for the Modern World? In *University of Chicago Sermons* (edited by T. G. Soares; Chicago: University Press, 1915), pp. 255-68.

Educational Opportunities in Chicago, *Advance* (Chicago), LXVII (1915), 1218-19.

Liberal Education and the Time-Spirit, *Proceedings of the Fifty-first Convocation of the University of the State of New York* (1915), 87-105; published also in *University Record*, I (1915), 159-72.

REVIEWS IN: *Biblical World*, XX, 159-60; XXI, 392-94; *Elementary School Teacher*, III, 135-37; *School Review*, XIV, 67; XV, 472-73; XXIV, 484-85; *Standard*, LVI, 623, 1038; LVII, 358.

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Editor of the Yearbooks of the National Society for the Study of Education, 1911-15.

A Text Book in the History of Modern Elementary Education. Svo, xxiv+505. Boston: Ginn & Co., 1912.

Methods of Teaching in High Schools. Royal 8vo, xxv+529. Boston: Ginn & Co., 1915.

Standardizing State Normal Schools (with C. H. Judd). 8vo, 141. Washington: United States Bureau of Education Bulletin, No. 12, 1916.

History of the College Curriculum of Miami University: A Study in the History of Higher Education, *Miami University Bulletin*, IX (1910), 1-39.

The Present Status of Education as a Science: Educational Methods, *School Review Monographs*, II (1912), 135-50.

The Training of Teachers, *Report of the Commissioner of Education of the United States*, I (1915), 169-85.

REVIEWS IN: *Elementary School Teacher*, X, 44-45, 304-5, 456-57; XI, 39-40; XII, 241-42, 341-42, 441; XIII, 108-99; *School Review*, XVIII, 567-69; XXII, 419; *American Journal of Sociology*, XV, 705-6, 849-50.

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Member of (1) South Bend (Indiana) Survey; Report, 8vo, 102. South Bend: School Board, 1914; (2) San Antonio (Texas) Survey: Report, 8vo, 256. San Antonio: School Board, 1915; (3) Cleveland Survey: *What the Schools Teach and Might Teach*. 12mo, 110. Cleveland: Survey Committee, 1915; (4) Denver Survey: *General Organization and Administration*. 8vo, 120. Denver: Survey Committee, 1916; (5) Grand Rapids (Michigan) Survey.

Supervision of City Schools, Twelfth Yearbook of the National Society for the Study of Education, Part I (1913), 8vo, 96.

Literature in the Elementary Curriculum (with A. C. Boyce and M. L. Perkins), *Elementary School Teacher*, XIV (1913), 153-66.

The School Survey: Finding Standards of Current Practice, *Elementary School Journal*, XV (1914), 41-54.

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A.B. Wesleyan, 1900; A.M. *ibid.*, 1903; Ph.D. Columbia, 1905; Instructor in Education, Wisconsin, 1905-7; Assistant Professor, *ibid.*, 1907-9; Associate Professor of Education, Chicago, 1909-12.

The Relative Standing of Pupils in the High School and in the University, Bulletin of the University of Wisconsin, No. 312; High School Series, No. 6 (1909), pp. 44.

School and University Grades, Bulletin of the University of Wisconsin, No. 368; High School Series, No. 9 (1910), pp. 59.

Qualitative Elimination from School, *Elementary School Teacher*, X (1909), 1-13.

Problems in the Psychology of Reading, *Science*, XXXI (1910), 593.

Experiments in Learning, *Journal of Educational Psychology*, I (1910), 373-88.

Experimental Education, *School Review Monographs*, I (1911), 6-14.

REVIEWS IN: *School Review*, XVII, 509-11; *Elementary School Teacher*, X, 94-96.

FRANK NUGENT FREEMAN [1909-], Associate Professor of Educational Psychology.

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Member of the Editorial Board, *School Review*, 1911-16; Member of the Editorial Board, *Elementary School Journal*, 1916-.

Co-operating Investigator with Committee on Economy of Time of Department of Superintendence, 1914.

The Teaching of Handwriting. 12mo, 155. Boston: Houghton Mifflin Co., 1914.

Experimental Analysis of the Writing Movement, Psychological Monographs, XVII. 4. Svo, 54. Lancaster, Pa.: Psychological Review Co., 1914.

The Psychology of the Common Branches. 16mo, 274. Boston: Houghton Mifflin Co., 1916.

Experimental Education: Laboratory Manual, and Typical Results. 16mo, viii+217. Boston: Houghton Mifflin Co., 1916.

Manual Training in the Service of Physics, *School Review*, XVII (1909), 609-17.

Untersuchungen über den Aufmerksamkeitsumfang und die Zahlauffassung bei Kindern und Erwachsenen, *Pädagogisch-psychologische Arbeiten*, I (1910), 88-168.

Tests, *Psychological Bulletin*, VIII (1911), 21-24.

Experiments on the Perception of Number in Children and Adults (abstract), *ibid.*, 43-44.

Some Issues in the Teaching of Handwriting, *Elementary School Teacher*, XII (1912), 1-7, 53-59.

Grouped Objects as a Concrete Basis for the Number Idea, *ibid.*, 306-14.

Problems and Methods of Investigation in Handwriting, *Journal of Educational Psychology*, III (1912), 181-90.

Tests, *Psychological Bulletin*, IX (1912), 215-22.

Current Methods of Teaching Handwriting, *Elementary School Teacher*, XII (1912), 427-36, 481-93; XIII (1912), 25-40.

Tests, *Psychological Bulletin*, X (1913), 271-74.

Some Practical Studies of Handwriting, *Elementary School Teacher*, XIV (1913), 167-79.

Writing, Psychology, Pedagogy, and Hygiene, *Cyclopedia of Education*, V (1913), 822-27.

Minimum Standards and Current Practices in Handwriting, *Fourteenth Yearbook, National Society for the Study of Education* (1915), 61-77.

An Analytical Scale for Judging Handwriting, *Elementary School Journal*, XV (1915), 432-41.

Tests, *Psychological Bulletin*, XII (1915), 187-88.

Handwriting Tests for Use in School Surveys, *Elementary School Journal*, XVI (1916), 299-301.

REVIEWS IN: *Elementary School Teacher*, X, 404-5; XI, 40-41, 501-2; XII, 189, 344; XIV, 190, 297; *School Review*, XIX, 132-33, 419-20; XX, 204-5; XXII, 569-72; XXIII, 567-69; *Psychological Bulletin*, XIII, 36-38.

MARCUS WILSON JERNEGAN [1902-6; 1908-], Associate Professor of History. See under Department of History, p. 60.

FRANK MITCHELL LEAVITT [1910-], Associate Professor of Industrial Education.

Principal, Manual Training Schools, Boston, 1892-1906; Associate Professor of Industrial Education, Chicago, 1910-.

Secretary, Department of Manual Training, National Education Association, 1904, 1905; President, *ibid.*, 1906, 1907; President, Eastern Manual Training Association, 1908; President, Illinois Manual Arts Association, 1912, 1913; President, National Vocational Guidance Association, 1914.

Associate Editor, *Manual Training and Vocational Education*.

Member, Commission on the Reorganization of Secondary Education of the National Education Association.

Examples of Industrial Education. 8vo, 325. Boston: Ginn & Co., 1912.

Prevocational Education in the Public Schools (with Edith Brown). 8vo, v+245. Boston: Houghton Mifflin Co., 1915.

The Relation of the Movement for Vocational and Industrial Training to the Secondary Schools, *School Review*, XIX (1911), 85-95.

The Relation of the Present Movement for Vocational Education to the Teaching of the Mechanic Arts, *Elementary School Teacher*, XII (1911), 158-68.

The Reorganization of School Systems, *ibid.*, 225-36.

The Independent Industrial School of Newton, Massachusetts, *Vocational Education*, I (1912), 243-57.

Vocational Education in the Boston Public Schools, *ibid.*, 316-31.

Vocational Purpose in the Manual-Training High School, Indianapolis, Ind., *ibid.*, II (1912), 36-52.

The Need, Purpose, and Possibilities of Industrial Education in the Elementary School, *Elementary School Teacher*, XIII (1912), 80-90.

Some Sociological Phases of the Movement for Industrial Education, *American Journal of Sociology*, XVIII (1912), 352-60.

The Continuation School: Cincinnati's Examples, *Vocational Education*, II (1913), 218-34.

Vocational Guidance and the Manual Arts, *Manual Training Magazine*, XIV (1913), 423-30.

The Reorganization of Secondary Education (III), *Journal of Education*, LXXVII (1913), 44-45.

The Grand Rapids Conventions, *School Review*, XXI (1913), 698-704.

Vocational Education, *Survey*, XXXI (1913), 353.

Co-operation of the Schools in Reducing Child Labor, *Vocational Education*, III (1914), 344-50.

To Be Educated or Not to Be Educated, *Industrial Arts Magazine*, II (1914), 189-92.

Adaptation of Regular School Subjects to the Needs of Prevocational Boys, *Elementary School Journal*, XV (1914), 185-90.

Natural Growth in Industrial Education, *Industrial Arts Magazine*, III (1915), 1-4.

The School Phases of Vocational Guidance, *School Review*, XXIII (1915), 687-96.

REVIEWS IN: *School Review*, XIX, 208-9, 350-51; XX, 206-9; XXII, 207, 281; XXIII, 139, 501, 565; *Survey*, XXXI, 528-29; XXXIII, 658; XXXIV, 544; *Elementary School Teacher*, XIV, 295-96; *Journal of Political Economy*, XXIV, 84-86.

GEORGE HERBERT LOCKE [1899-1905], Associate Professor of Education; Chief Librarian, Public Library, Toronto, Canada. See under College of Education, p. 485.

HERMAN CAMPBELL STEVENS [1913-], Associate Professor of Education.

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Member of the Chicago City Council Crime Commission, and author of the following articles in the Commission's Report (1915): (1) The Examination of Sixty-five Female Prisoners of the House of Correction, pp. 96-99; (2) The Examination of Sixty-three Juvenile Delinquents in the John Worthy School, pp. 106-13.

Visual Sensations Caused by a Magnetic Field (with C. E. Magnusson), *Philosophical Magazine*, XXVIII (1914), 188-207.

Mongolian Idiocy and Syphilis, *Journal of the American Medical Association*, LXIV (1914), 1636-40.

Eugenics and Feeble-mindedness, *Journal of Criminal Law*, VI (1915), 190-98.

The Spinal Fluid in Mongolian Idiocy, *Journal of the American Medical Association*, LXVI (1916), 1373-75.

A Survey of Retarded School Children, *School Review*, XXIV (1916), 450-61.

REVIEWS OF: Birnbaum, Die Psychopathischen Verbrecher, *International Journal of Ethics*, XXV, 255-99; Locomotor Functions, *Psychological Bulletin*, XII, 411-14; Healy, The Individual Delinquent, *Journal of Criminal Law*, VI, 849-60.

WILLARD CLARK GORE [1902-16], Assistant Professor of Psychology, the College of Education.

Ph.B. Michigan, 1894; Ph.D. Chicago, 1901; Assistant Professor of Psychology, Chicago, 1902-16.

Editor of the *School Review*, 1906-13.

Image and Idea in Logic. In Dewey's *Studies in Logical Theory*. Decennial Publications of the University of Chicago, Second Series, XI (1903), chap. viii, 184-202.

Notes on the Psychological Observation of Children, *Elementary School Teacher*, III (1903), 307-17.

Academic and Professional Training of Teachers, I, II, *ibid.*, 517-23, 632-37.

Manual Training and Manual Labor, *ibid.*, V (1904), 77-81.

Image or Sensation? *Journal of Philosophy, Psychology, and Scientific Methods*, I (1904), 434-41; II (1905), 97-101.

Externality and Inhibition, *ibid.*, XI (1914), 377-82.

Annual reviews of publications on Memory, Concept, Judgment, Logic (Theory), *Psychological Bulletin*, IX, 337-42; X, 347-51; XI, 324-29; XII, 354-59.

Other reviews in: *Psychological Bulletin*, XI, 108-12; *Elementary School Teacher*, IV, 254-56; *School Review*, XIII, 352-54; *American Journal of Theology*, XVII, 459-62; *Journal of Philosophy, Psychology, and Scientific Methods*, XI, 137-39; *International Journal of Ethics*, XXVI, 125-26.

WILLIAM SCOTT GRAY [1914-], Assistant Professor of Education; Dean of the College of Education.

S.B. Chicago, 1913; Ph.D. *ibid.*, 1916; Assistant in Education, *ibid.*, 1914-15; Instructor, *ibid.*, 1915-17; Assistant Professor, *ibid.*, 1917-.

Studies of Elementary-School Reading. Doctor's thesis. 8vo, 157. Chicago: University Press, 1917.

Methods of Testing Reading, I, *Elementary School Journal*, XVI (1916), 231-46; II, *ibid.*, 281-98.

HAROLD ORDWAY RUGG [1915-], Assistant Professor of Education.

S.B. Dartmouth, 1908; Ph.D. Illinois, 1915; Instructor in Education, Chicago, 1915-17; Assistant Professor, *ibid.*, 1917-.

Teacher's Marks and Working System, *Educational Administration and Supervision*, I (1915), 117-42.

KATHARINE E. DOPP [1902-], Extension Instructor in Education.

Ph.B. Michigan, 1893; Ph.D. Chicago, 1902; Assistant in Pedagogy, State Normal School, Oshkosh, Wis., 1899-1900; Extension Associate in Education, Chicago, 1902-5; Extension Instructor in Education, *ibid.*, 1905-.

The Place of Industries in Elementary Education. Doctor's thesis. 1st ed., 1903; 2d ed., vi+270, 1905. Chicago: University Press.

Industrial and Social History Series:

The Tree-Dwellers. 12mo, 160. Chicago: Rand, McNally & Co., 1903.

The Early Cave-Men. 12mo, 184. Chicago: Rand, McNally & Co., 1904.

The Later Cave-Men. 12mo, 197. Chicago: Rand, McNally & Co., 1906.

The Early Sea People. 12mo, 224. Chicago: Rand, McNally & Co., 1912. 2d ed., 1913.

CLARENCE TRUMAN GRAY [1915-17], Research Instructor in Education; Instructor in Education, University of Texas, Austin.

A.B. Indiana, 1904; Ph.D. Chicago, 1916.

Variations in Grades of High-School Pupils. 8vo, 120. Baltimore: Warwick & York, 1912.

JONATHAN FRENCH SCOTT [1910-13], Instructor in the History of Education; Cambridge, Mass.

A.B. Rutgers, 1902; A.M. *ibid.*, 1905; Instructor in History, Bowdoin, 1909-10; Instructor in the History of Education, Chicago, 1910-13.

An Investigation in Regard to the Conditions of Labor and Manufacture in Massachusetts, 1860-70, *Transactions of the Wisconsin Academy of Science, Arts, and Letters*, XVII (1909, issued November, 1911), 167-86.

Apprenticeship under the English Gild System, *Elementary School Teacher*, XIII (1913), 180-88.

Decline in the English Apprenticeship System, *ibid.*, 445-54.

LILLA ESTELLE APPLETON, PH.D. 1909; Fellow in Laboratory Research, The Training School, Vineland, N.J.

A Comparative Study of the Play Activities of Adult Savages and Civilized Children. An Investigation of the Scientific Basis of Education. Doctor's thesis. 8vo, iv+94. Chicago: University Press, 1910.

FRED CARLETON AYER, PH.D. 1915; Professor of School Administration, University of Oregon, Eugene.

The Psychology of Drawing with Special Reference to Laboratory Teaching. Doctor's thesis. 12mo, ix+186. Baltimore: Warwick & York, 1916.

JOHN ADDISON CLEMENT, PH.D. 1911; Professor of Education, DePauw University, Greencastle, Ind.

Standardization of the Schools of Kansas. Doctor's thesis. 8vo, 130. Chicago: University Press, 1912.

JOSEPH KINMONT HART, PH.D. 1909; Assistant Professor of Education, University of Washington, Seattle.

A Critical Study of Current Theories of Moral Education. Doctor's thesis. 8vo, 48. Chicago: University Press, 1910.

LEONARD V. KOOS, PH.D. 1916; Associate Professor of Education, University of Washington, Seattle.

The Administration of Secondary-School Units. Doctor's thesis. Supplementary Educational Monographs, No. 3. 8vo, ix+194. Chicago: University Press, 1917.

WALTER SCOTT MONROE, PH.D. 1915; Professor of School Administration, Kansas State Normal School, Emporia.

The Development of Arithmetic as a School Subject. Doctor's thesis. *United States Bureau of Education Bulletin*, No. 10 (1917), 1-170.

CLARA SCHMITT, PH.D. 1914; Child Study Expert, Board of Education, Chicago.

Standardization of Tests for Defective Children. Doctor's thesis. Psychological Monographs, XIX. Whole No. 83. 8vo, 181. Lancaster, Pa.: Psychological Review Co., 1915.

Retardation Statistics of Three Chicago Schools, *Elementary School Teacher*, X (1910), 478-92.

The Teaching of the Facts of Sex in the Public Schools, *Pedagogical Seminary*, XVII (1910), 229-41.

The Binet Simon Tests of Mental Ability, *ibid.*, XIX (1912), 186-200.

DANIEL AMBROSE TEAR, PH.D. 1906; Principal, Gladstone School, Chicago.

The Logical Basis of Educational Theory from the Standpoint of "Instrumental" Logic. Doctor's thesis. 8vo, 58. Chicago: University Press, 1908.

ROLLA MILTON TRYON, PH.D. 1915. *See under* College of Education, p. 486.

LEWIS ATHERTON, Graduate Student.

Literary Selections Most Frequently Memorized in the Elementary Schools, *Elementary School Teacher*, XIV (1914), 208-17.

JOSEPHINE H. BOWDEN, Graduate Student.

Learning to Read, *ibid.*, XII (1912), 21-33.

E. E. CAMPBELL, Graduate Student.

A Study of Retardation and Class Standing on the Basis of Home Language Used by Pupils, *ibid.*, XIV (1914), 264-82; 331-47.

RALPH E. CARTER, Graduate Student.

Correlation of Elementary Schools and High Schools, *ibid.*, XII (1912), 109-18.

MARY L. DOUGHERTY, Graduate Student.

On the Binet Tests, *Journal of Educational Psychology*, IV (1913), 338-52.

HERSCHEL T. MANUEL, Graduate Student.

The Use of an Objective Scale for Grading Handwriting, *Elementary School Journal*, XV (1914-15), 269-78.

E. E. OBERHOLTZER, Graduate Student.

Testing the Efficiency of Reading in the Grades, *ibid.*, XV (1915), 313-22.

M. L. PERKINS, Graduate Student.

Literature in the Elementary Curriculum (with J. F. Bobbitt and A. C. Boyce), *Elementary School Teacher*, XIV (1913), 158-66.

C. A. PHILLIPS, Graduate Student.

Development of Methods in Teaching Elementary Geography, *ibid.*, X (1910), 427-39, 501-15.

CARRIE RANSOM SQUIRE, Graduate Student.

Graded Mental Tests, *Journal of Educational Psychology*, III (1912), 363-80, 430-43, 493-506.

OTHA BOWMAN STAPLES, Graduate Student.

Is There a Relation between the Amount of Schooling and Financial Success in Later Life? *Elementary School Teacher*, X (1910), 261-69.

K. D. WALDO, Graduate Student.

Tests in Reading in Sycamore School, *Elementary School Journal*, XV (1915), 251-68.

THE DEPARTMENT OF POLITICAL ECONOMY

JAMES LAURENCE LAUGHLIN [1892-1916], Professor and Head of the Department of Political Economy. Retired.

A.B. Harvard, 1873; Ph.D. *ibid.*, 1876; Doctor *honoris causa*, Giessen, 1906; Assistant Professor of Political Economy, Harvard, 1883-88; Professor of Political Economy and Finance, Cornell, 1890-92; Professor and Head of the Department of Political Economy, Chicago, 1892-1916.

Member, Cobden Club; Member, L'Institut International de Statistique; Member, Indianapolis Monetary Commission, 1898; Exchange Professor in Berlin, 1906; Delegate, Pan-American Scientific Congress, 1908-9; Chairman, Executive Committee, National Citizens League for the Promotion of a Sound Banking System, 1911-13.

Member of the Editorial Board, *Journal of Political Economy*, 1892-1916.

Principles of Money. Svo, xvi+550. New York: Charles Scribner's Sons, 1903.

Reciprocity (with H. Parker Willis). Svo, xii+583. New York: Baker & Taylor Co., 1903.

- Industrial America: Berlin Lectures of 1906.* 8vo, x+261. New York: Charles Scribner's Sons, 1906.
- Aus dem amerikanischen Wirtschaftsleben.* 12mo, ii+160. Leipzig: B. G. Teubner, 1907.
- Guaranty of Bank Deposits.* 8vo, 16. Chicago: Johnson, Koch, and Quin, 1908.
- Banking Reform.* 8vo, xiv+428. Chicago: National Citizens League, 1912.
- Life and Character of Hermann E. von Holst, *University Record*, VIII (1903), 161-68.
- The Currency Situation, *World To-Day*, V (1903), 1405-9.
- The New International Silver Movement, *Journal of Political Economy*, XI (1903), 448-49.
- The Quantity Theory and Its Critics: A Rejoinder, *ibid.*, 621-25.
- Hobson's Theory of Distribution, *ibid.*, XII (1904), 305-26.
- A Theory of Prices, *Publications of the American Economic Association*, Third Series, VI (1904), 66-83.
- Large Fortunes, *Atlantic Monthly*, XCVI (1905), 40-46.
- Present Monetary Problems, *Popular Science Monthly*, XLVII (1905), 209-21.
- Hope for Labor Unions, *Scribner's Magazine*, XXXVIII (1905), 627-33.
- Orchards in the Desert, *World To-Day*, IX (1905), 1319-23.
- Academic Liberty, *Journal of Political Economy*, XIV (1906), 41-43.
- Union versus Higher Wages, *ibid.*, 129-42.
- Currency Reform, *ibid.*, XV (1907), 603-10.
- Guaranty of Bank Deposits, *Proceedings of the Eighteenth Annual Convention of the Illinois Bankers' Association*, Chicago, October, 1908, 10-85.
- Guaranty of Bank Deposits, *Scribner's Magazine*, XLIV (1908), 101-9.
- The Aldrich-Vreeland Act, *Journal of Political Economy*, XVI (1908), 489-513.
- A Reply to Current Socialism, *Journal of Commerce and Commercial Bulletin*, January 4, 1909.

- Government *vs.* Bank Issues, *Scribner's Magazine*, XLV (1909), 265-71.
- Valuation of Railways, *ibid.*, 434-41.
- Socialism a Philosophy of Failure, *ibid.*, 613-21.
- The Abolition of Poverty, *ibid.*, 752-60.
- Gold and Prices, 1890-1907, *Journal of Political Economy*, XVII (1909), 257-71.
- Social Settlements, *Scribner's Magazine*, XLVI (1909), 341-49.
- Strike at Iquique, *Journal of Political Economy*, XVII (1909), 641-43.
- Discussion on the Teaching of Elementary Economics, *ibid.*, 704-6.
- The Increased Cost of Living, *Scribner's Magazine*, XLVII (1910), 539-50.
- The People's Investments, *Proceedings of the Association of Life Insurance Presidents*, Chicago, IV (1910), 118-27.
- Banknotes and Lending Power, *Journal of Political Economy*, XVIII (1910), 777-92; published also in *Proceedings of the Academy of Political Science*, I (1911), 199-206.
- Causes of the Changes in Prices since 1896, *Bulletin of the American Economic Association*, Fourth Series, No. 2 (1911), 26-36.
- Women and Wealth, *Scribner's Magazine*, XLIX (1911), 199-206.
- Investments for Women, *Rollins Magazine*, I (1911), 4-8.
- The Economic Seminar, *Proceedings of the Second Conference on the Teaching of Economics*, University of Chicago, 1911, 101-6.
- Canadian Reciprocity, *Proceedings of the Western Economic Society*, I (1911), 115-21.
- The Futility of Socialism, *Columbian* (1911), 631-37.
- Banking Reform and the National Reserve Association, *Banker and Investor Magazine* (1911), 325-32.
- Monopoly of Labor, *Atlantic Monthly*, CXII (1913), 444-53.
- Banking and Currency Act of 1913, *Journal of Political Economy*, XXII (1914), 293-318, 405-35.
- The European War and American Banking, *Journal of the Canadian Bankers' Association* (1915), 89-93.
- Business and Democracy, *Atlantic Monthly*, CXVI (1915), 89-98.

Capitalism and Social Discontent, *North American Review*, CCIII (1916), 403-12.

Economic Liberty: Convocation Address, *University Record*, New Series, II (1916), 57-72.

REVIEWS IN: *Journal of Political Economy*, XIII, 272-73, 479-80, 611-12; XVI, 629-31; XVII, 305-6, 383; XIX, 150, 356-57, 432; *Harvard Graduates' Magazine*, XIII, 537-39, 742-43.

LEON CARROLL MARSHALL [1907-], Professor of Political Economy; Dean of the Senior Colleges and of the School of Commerce and Administration.

A.B. Harvard, 1901; Professor of Economics, Ohio Wesleyan, 1903-7; Assistant Professor of Political Economy, Chicago, 1907-8; Associate Professor, *ibid.*, 1908-11; Dean of the School of Commerce and Administration, *ibid.*, 1909-; Professor, *ibid.*, 1911-; Dean of the Senior Colleges, 1911-.

Member of the Editorial Board, *Journal of Political Economy*, 1907-; Member of the Editorial Board of the series, *Materials for the Study of Economics*; Editor of the series, *Materials for the Study of Business*.

Outlines of Economics (joint author). 1st ed., 1910; 2d ed., 1911; 3d ed., 1912. 16mo, xvi+144. Chicago: University Press.

Materials for the Study of Elementary Economics (joint editor). 1st ed., 1913; 2d rev. ed., 1915. 8vo, xviii+928. Chicago: University Press.

The Commodities Clause, *Journal of Political Economy*, XVII (1909), 448-60.

The Teaching of Economics, *ibid.*, 715-19.

The Bibliography of Economics in the United States, *Papers, Bibliographical Society of America*, IV (1910), 73-82.

Professor Taussig's Theory of Wages, *American Economic Association Quarterly*, XI (1910), 161-67.

Report of the Committee on the Teaching of Economics in the United States, *Proceedings of the Second Conference on the Teaching of Economics* (University of Chicago, 1911), 106-36; published also in *Journal of Political Economy*, XIX (1911), 760-89.

Sequence in Economics Courses at the University of Chicago, *ibid.*, XXI (1913), 18-33.

The College of Commerce and Administration of the University of Chicago, *ibid.*, 97-110.

REVIEWS IN: *Journal of Political Economy*, XVII, 42-43, 167, 377-78; *Economic Bulletin*, II, 133-35.

ERNEST RITSON DEWSNUP [1904-7], Professorial Lecturer on Railways, and Curator of the Museum of Commerce; Professor of Railway Administration, University of Illinois.

B.A. Victoria University, Manchester, 1895; M.A. *ibid.*, 1900; Warburton Prizeman in Local Government and Stanley Jevons Student in Economic Research; Sikes Lecturer in Economics and Head of the Department of Higher Commercial Education, Technical College of Huddersfield, England, 1899-1903; Lecturer in Railway Transport, University of Manchester, 1903-4; Professorial Lecturer on Railways and Curator of the Museum of Commerce, Chicago, 1904-7. Fellow of the Royal Statistical Society.

Railway Organization and Working. 8vo, xi+498. Chicago: University Press, 1906.

The Housing Problem in England. 8vo, vii+327. Manchester, England: University Press, 1907.

Railway Education, *Proceedings of St. Louis Railway Club*, X (1906), 12-26.

REVIEWS IN: *Journal of Political Economy*, XIV, 59-61, 119-22, 185-86, 187; XV, 179-81, 555-58.

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A.B. Amherst, 1905; Ph.D. Columbia, 1910; Instructor in Economics, Colorado College, 1908-10; Associate Professor of Economics, Amherst, 1910-15; Associate Professor, Chicago, 1915-.

Member of the Editorial Board, *Journal of Political Economy*, 1915-.

The Concept of Value, *Quarterly Journal of Economics*, XXIX (1915), 663-73.

A Rejoinder, *ibid.*, 709-23.

The Changing Basis of Economic Responsibility, *Journal of Political Economy*, XXIV (1916), 209-29.

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Member of the Editorial Board, *Journal of Political Economy*, 1902-8.

Value and Distribution. 12mo, 576. Chicago: University Press, 1908.
Scope and Method of Grammar, *Education*, XXIII (1902), 161-71,
208-21.

Relation of Business Profits to Industrial Depression, *Journal of Political Economy*, XI (1903), 629-31.

Capital as a Competitive Concept, *ibid.*, XIII (1904), 33-47.

The Theory of Interest and Tendency Rates, *Rand McNally's Bankers' Monthly*, XXIX (1905), 313-17.

Cost History and Cost Theory, *Journal of Political Economy*, XIII (1905), 449-52.

Doctrinal Tendencies: Fetter, Flux, Seager, Carver, *Yale Review*, XIV (1905), 300-324.

A New Text: Seligman: "Social Value," *Journal of Political Economy*, XIV (1906), 143-69.

Morality, Charity, State Insurance, *ibid.*, 392-95.

Taxation in Missouri, *ibid.*, XV (1907), 491-92.

Can Industrial Insurance Be Cheapened? *ibid.*, 542-45.

The Taxation of Dividends, *ibid.*, 552-54.

Tax Legislation by Constitutional Amendment, *ibid.*, 611-14.

A Permissive Habitation Tax, *ibid.*, 614-19.

The Working of Restricted Credit, *ibid.*, XVI (1908), 26-30.

Employer's Liability in Insurance Theory, *ibid.*, 157-59.

REVIEWS OF: Walsh, Fundamental Problem in Monetary Science, *Journal of Political Economy*, XII, 137-44; Carver, Distribution of Wealth, *ibid.*, XIII, 138-44; Fisher, The Rate of Interest, *ibid.*, XV, 635-41. Other reviews in *Journal of Political Economy*, XII, 574-77.

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Member of the Editorial Board, *Journal of Political Economy*, 1908-; Managing Editor, *ibid.*, 1909-10, 1911-; Chairman of the Editorial Board of the series, *Materials for the Study of Economics* (7 volumes published).

The Progress of Eugenics. 8vo, 71. Cambridge: Harvard University Press, 1911.

Outlines of Economics (joint author). 1st ed., 1910; 2d ed., 1911; 3d ed., 1912. 16mo, xvi+144. Chicago: University Press.

Materials for the Study of Elementary Economics (joint editor). 1st ed., 1913; 2d rev. ed., 1915. 8vo, xviii+928. Chicago: University Press.

How Far Should Members of the Family Be Individualized? *Publications of American Sociological Society*, III (1908), 194-96; published also in *American Journal of Sociology*, XIV (1909), 810-12.

The Early Propagandist Movement in English Population Theory, *Bulletin of the American Economic Association*, Fourth Series, I, No. 2 (1911), 207-36.

The Western Economic Society, *Nation*, XCII (1911), 574-75.

The Western Economic Society, *ibid.*, XCIII (1911), 464-65; XCIV (1912), 257-58.

Eugenics and Demography, *Proceedings of the XV International Congress of Hygiene and Demography*, VI (1912), 209-13.

Eugenics, *Bliss' Encyclopedia of Social Reform*, rev. ed. In Press.

Publicity by Prosecution: A Commentary on the Birth-Control Propaganda, *Survey*, XXXV (1916), 599-601.

The Beginnings of the Birth-Control Movement, *Surgery, Gynecology, and Obstetrics*, XXIII (1916), 185-88.

REVIEWS IN: *American Economic Review*, II, 677-78; IV, 436-38; V, 373-75; *Journal of Political Economy*, XVII, 102-3, 480-81, 732-33; XVIII, 70-71, 228-30, 563-64; XIX, 605-6; XXIV, 408-9; and in *Nation*.

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Director of the Agricultural Guild, 1908-13.

Conditions in the Cattle Industry, *Journal of Political Economy*, XIII (1904), 1-12.

REVIEWS IN: *Journal of Political Economy*, XIV, 122-24, 184-85.

†ROBERT FRANKLIN HOXIE [1906-16], Associate Professor of Political Economy.

Ph.B. Chicago, 1893; Ph.D. *ibid.*, 1905; Acting Professor of Political Economy, Cornell College, Iowa, 1897-98; Acting Professor of Political Economy and Political Science, Washington and Lee, 1901-2; Assistant Professor of Political Economy, Chicago, 1908-12; Associate Professor, *ibid.*, 1912-16.

Member of the Editorial Board, *Journal of Political Economy*, 1906-16.

Investigator for the United States Commission on Industrial Relations, 1914-15; publication: *Scientific Management and Labor* (Questionnaire). 404. Cooperstown, N.Y.: A. H. Crist, 1914.

Scientific Management and Labor. x+302. New York: D. Appleton & Co., 1915.

The Economics of Colonial Expansion, *Southern Collegian* (1902), 87-99, 161-77.

The American Colonial Policy and the Tariff, *Journal of Political Economy*, XI (1903), 198-219.

Fetter's Theory of Value, *Quarterly Journal of Economics*, XIX (1905), 210-30.

The Demand and Supply Concepts. Doctor's thesis. *Journal of Political Economy*, XIV (1906), 337-61, 401-26.

Historical Method vs. Historical Narrative, *ibid.*, 568-72.

Sociology and the Other Social Sciences: A Rejoinder, *American Journal of Sociology*, XII (1907), 739-55.

Trade Union Point of View, *Journal of Political Economy*, XV (1907), 345-63.

The Failure of the Telegraphers' Strike, *ibid.*, 545-47.

Is Class Conflict in America Growing and Is It Inevitable? *American Journal of Sociology*, XIII (1908), 776-81.

The Convention of the Socialist Party, *Journal of Political Economy*, XVI (1908), 442-50.

President Gompers and the Labor Vote, *ibid.*, 693-700.

The Teaching of Economics, *ibid.*, XVII (1909), 711-13.

The Rising Tide of Socialism: A Study, *ibid.*, XIX (1911), 609-31.

Unionism and Unionism, *Survey*, XXVII (1911), 1425-26.

† Deceased.

- The Socialist Party in the November Elections, *Journal of Political Economy*, XX (1912), 205-23.
- The Socialist Party and American Convention Methods, *ibid.*, 738-44.
- Springs of Conflicting Action, *Survey*, XXX (1913), 580-81.
- The Truth about the I.W.W., *Journal of Political Economy*, XXI (1913), 785-97.
- The Problem of Syndicalism, *American Economic Review Supplement*, IV, No. I (1914), 136-44.
- Trade Unionism in the United States: General Character and Types, *Journal of Political Economy*, XXII (1914), 201-17.
- Trade Unionism in the United States: The Essence of Unionism and the Interpretation of Union Types, *ibid.*, 464-81.
- The Theory of Unionism: The Principle of Uniformity, in Hamilton's *Current Economic Problems*, 602-5. Chicago: University Press, 1915.
- Scientific Management and Social Welfare, *Survey*, XXXV (1916), 673-80, 685-86.
- What Is College For? *University of Chicago Magazine*, VIII (1916), 262-65.
- Scientific Management and Labor Welfare, *Journal of Political Economy*, XXIV (1916), 833-54.
- Why Organized Labor Opposes Scientific Management, *Quarterly Journal of Economics*, XXXI (1916), 62-86.

REVIEWS IN: *Journal of Political Economy*, XV, 122-23, 181-82, 497-98, 641-42; XVI, 47-48, 540-42; XIX, 895-96; XX, 432-33; XXI, 969-70; *Philosophical Review*, XV, 442, 668-70; *American Economic Review*, II, 379-80, 654; III, 932-34; IV, 397-99, 433.

ALVIN SAUNDERS JOHNSON [1909-11], Associate Professor of Political Economy; Editorial Staff, *The New Republic*, New York City.

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Member of the Editorial Board, *Journal of Political Economy*, 1909-10; Managing Editor, *ibid.*, 1910-11.

Introduction to Economics. Svo, xii+404. Boston: D. C. Heath & Co., 1909.

The Incidence of the Federal Corporation Tax, *South Atlantic Quarterly*, IX (1910), 35-42; *International Year-Book* (Tariff) (1909), 686-91.

REVIEWS IN: *Journal of Political Economy*, XVII, 644-47; XVIII, 477-79; *Political Science Quarterly*, XXIV, 712-15.

CHESTER WHITNEY WRIGHT [1907-], Associate Professor of Political Economy.

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Member of the Editorial Board, *Journal of Political Economy*, 1907-; Member of the Editorial Board of the series, *Materials for the Study of Economics*.

Wool-Growing and the Tariff. 8vo, xiii+362. Boston: Houghton Mifflin Co., 1910.

Outlines of Economics (joint author). 1st ed., 1910; 2d ed., 1911; 3d ed., 1912. 16mo, xvi+144. Chicago: University Press.

Materials for the Study of Elementary Economics (joint editor). 1st ed., 1913; 2d rev. ed., 1915. 8vo, xviii+928. Chicago: University Press.

The Teaching of United States Economic History, *Educational Bi-Monthly* (1911), 574-88.

The Trust Problem—Prevention versus Alleviation, *Journal of Political Economy*, XX (1912), 574-87.

The Economics of Governmental Price Regulation, *American Economic Review*, III (1913), 126-31.

REVIEW OF: Beer, The Old Colonial System, *Journal of Political Economy*, XXI, 662-67. Other reviews in *Journal of Political Economy*, XVI, 42-44, 172-73, 458-59; XVII, 303-4, 382-83, 730-31; XVIII, 233-34, 264-66, 319-22, 561-62, 751-52; XX, 95-96, 425-27, 863-65; XXI, 965-66; XXII, 492-95, 597; XXIII, 80-82; *American Historical Review*, XVII, 632-34, 861-63; XIX, 900-902; XXII, 384-86; *Dial*, LII, 274-75; LIV, 458-60.

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Occupations in the Twelfth Census, *Journal of Political Economy*, XIII (1904), 66-76.

Chicago Teamsters' Strike, *ibid.*, 536-73.

Eighteenth Annual Meeting of the American Economic Association, *ibid.*, XIV (1906), 47-48.

The Trade-Union Programme of Enlightened Selfishness, *ibid.*, XV (1907), 149-65.

Mortality Statistics, *ibid.*, 367-70.

The Conversion of the Economist, *ibid.*, XVII (1909), 206-19.

REVIEWS IN: *Journal of Political Economy*, XIV, 181-84, 333-34, 396-99, 454-59, 520-23, 575-79, 641-45; XV, 57-58, 242-44.

WALTON HALE HAMILTON [1914-15], Assistant Professor of Political Economy; Amherst College.

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Member of the Editorial Board, *Journal of Political Economy*, 1914-15; Member of the Editorial Board of the series, *Materials for the Study of Economics*.

Current Economic Problems. 8vo, xxxix+789. Chicago: University Press, 1915.

Economic Theory and "Social Reform," *Journal of Political Economy*, XXIII (1915), 562-84.

REVIEW OF: H. W. Laidler, Boycotts and the Labor Struggle, *International Journal of Ethics*, XXV, 543-47. Other reviews in *American Economic Review*, IV, 614-17; *Mississippi Valley Historical Quarterly*, II.

HENRY RAND HATFIELD [1898-1904], Assistant Professor of Political Economy; Dean of the College of Commerce and Administration; Professor of Accountancy, University of California.

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Editor of *American Commerce and Finance*. 8vo, viii+387. Chicago: University Press, 1905; and *Lectures on Commerce*. 8vo, viii+387. Chicago: University Press, 1906.

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A.B. Harvard, 1892; A.M. *ibid.*, 1894; Assistant Professor of Political Economy, Chicago, 1905-6.

Government Regulation of Railway Rates: A Study of the Experience of the United States, Germany, France, Austria-Hungary, Russia, and Australia. 8vo, xxvii+486. New York: Macmillan Co., 1905.

Municipal Ownership in Great Britain. 8vo, xii+340. New York: Macmillan Co., 1906.

Rate Making by Government, *Railroad Gazette*, XXXVIII (1905), 497-503.

Municipal Ownership in Great Britain, *Journal of Political Economy*, XIII (1905), 481-505.

Danger of Increasing Commission's Power, *Moody's Magazine*, I (1906), 197-200.

Railroad Rates as Protective Tariffs, *Journal of Political Economy*, XIV (1906), 1-13.

A Reply to Professor B. H. Meyer, Privy Councilor Von der Leyden, Professor Willard Fisher, *ibid.*, 193-223.

The Disastrous Results in Italy of State Railroad Building, *ibid.*, 362-69.

Government Regulation of Railway Rates, *Publications of the American Economic Association*, Third Series, VII (1906), 61-68, 108-12.

HAROLD GLENN MOULTON [1910-], Assistant Professor of Political Economy.

Ph.B. Chicago, 1907; Ph.D. *ibid.*, 1914; Assistant Professor of Political Economy, *ibid.*, 1914-.

Secretary of the Western Economic Society, 1914-.

Member of the Editorial Board, *Journal of Political Economy*, 1910-; Member of the Editorial Board of the series, *Materials for the Study of Economics*.

Waterways versus Railways. Doctor's thesis. 8vo, xviii+468. Boston: Houghton Mifflin Co., 1912.

Principles of Money and Banking, Developed by Selected Materials and Explanatory Introductions. 8vo, xl+283+502. Chicago: University Press, 1916.

Exercises and Questions on Money and Banking. 12mo, 95. Chicago: University Press, 1916.

The Illinois Water Power Scheme, *Journal of Political Economy*, XVIII (1910), 381-87.

Discussion on Water Transportation, *Bulletin of American Economic Association*, Fourth Series, No. 2 (1911), 199-202.

Some Aspects of the Waterways Question, *Journal of Political Economy*, XXII (1914), 239-53.

The New Currency Act, *Business Woman's Magazine*, I (1914), 70-73.

A National Movement for Co-operative Marketing and Farm Credit, *Survey*, XXXII (1914), 307-8.

The Cost of the Erie Barge Canal, *Journal of Political Economy*, XXIII (1915), 490-500.

Formal Argumentation. In Boynton's *Principles of Composition*, 241-73. Boston: Ginn & Co., 1915.

The Sensitive Mechanism of Credit. In Hamilton's *Current Economic Problems*, 202-6. Chicago: University Press, 1915.

Inelasticity of Credit under the National Banking System, *ibid.*, 249-50.

Emergency Elasticity of Credit, *ibid.*, 255-56.

A Setback for the Waterways Movement, *Journal of Political Economy*, XXIII (1915), 961-71.

REVIEW OF: Final Report of the National Waterways Commission, *American Economic Review*, II, 956-60. Other reviews in *Journal of Political Economy*, XIX, 246; XX, 86-89; XXII, 399-400, 811-13; XXIII, 92-94, 517-20; *American Economic Review*, II, 355-57.

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The Theory of Business Enterprise. 8vo, vii+400. New York: Charles Scribner's Sons, 1904.

An Early Experiment in Trusts, *Journal of Political Economy*, XII (1904), 270-79.

Credit and Prices, *ibid.*, XIII (1905), 460-72.

The Place of Science in Modern Civilization, *American Journal of Sociology*, XI (1906), 585-609.

REVIEW OF: Sombart, *Der Moderne Kapitalismus*, *Journal of Political Economy*, XI, 300-305. Other reviews in *Journal of Political Economy*, XI, 130-31, 146-48, 306, 311-15, 324-26, 655-58; XIII, 120-22; 136, 319-20.

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The New Science and English Literature in the Classical Period. Doctor's thesis. 8vo, 191. Menasha, Wis.: George Banta Publishing Co., 1913.

The Paternalism of Public Service Commissions, *Forum*, LIII (1915), 101-6.

Supervised Utilities and the Investor, *Moody's Magazine*, XVIII (1915), 339-41.

The Economics and Legality of Premium Giving, *Journal of Political Economy*, XXIV (1916), 921-50.

JOHN BENNET CANNING [1914-], Instructor in Political Economy in the School of Commerce and Administration.

Ph.B. Chicago, 1913; Special Assistant in Political Economy, *ibid.*, 1914; Assistant in Political Economy, *ibid.*, 1914-15; Instructor, *ibid.*, 1915-.

The Function of the Modern Business Corporation, in Hamilton's *Current Economic Problems*, 191-94. Chicago: University Press, 1915.

The Meaning of Student Marks, *School Review*, XXIV (1916), 196-202.

ROBERT MORRIS [1904-7], Instructor in Political Economy.

A.B. Nashville, 1897; LL.B. West Virginia University, 1899; Instructor in Political Economy, Chicago, 1904-7.

The Causes of Industrial Crises, *Banker's Monthly*, XXXI (1905), 79-82.

REVIEWS IN: *Journal of Political Economy*, XIV, 62, 124-26, 254-55.

HOMER HOYT [1915-], Assistant in Political Economy.

A.B. Kansas, 1913; A.M. *ibid.*, 1913; Assistant in Political Economy, Chicago, 1915-.

The Social Function of Law. In Hamilton's *Current Economic Problems*, 654-58. Chicago: University Press, 1915.

The Relation of the Literacy Test to a Constructive Immigration Problem, *Journal of Political Economy*, XXIV (1916), 445-73.

REVIEW IN: *Journal of Political Economy*, XXII, 920-23.

EDGAR HUTCHINSON JOHNSON [1909-10], Assistant in Political Economy; Professor of History and Economics, Emory College, Oxford, Ga.

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The Economics of Henry George's "Progress and Poverty." Doctor's thesis. *Journal of Political Economy*, XVIII (1910), 714-35.

Method of Taxing the Unearned Increment, *Quarterly Journal of Economics*, XXIV (1910), 759-62.

REVIEWS IN: *School Review*, XVIII, 208-9; *Journal of Political Economy*, XVIII, 839-41.

DUNCAN ALEXANDER MACGIBBON [1912-13], Assistant in Political Economy; Professor of Economics, Brandon College, Brandon, Manitoba.

A.B. McMaster, 1908; Ph.D. Chicago, 1915; Assistant in Political Economy, *ibid.*, 1912-13.

French Socialism Today, *Journal of Political Economy*, XIX (1911), 36-46, 98-110.

Grain Legislation Affecting Western Canada, *ibid.*, XX (1912), 224-53.

REVIEWS IN: *Journal of Political Economy*, XX, XXI, and XXIV.

EDITH ABBOTT, PH.D. 1905. See under Department of Sociology, p. 79.

DONALD ELLIOTT BRIDGMAN, PH.D. 1907; Attorney, New York City.

An Examination into the Economic Causes of Large Fortunes in This Country. Doctor's thesis. 8vo, 80. St. Paul: Pioneer Co., 1909.

WILLIAM JOHN ALEXANDER DONALD, PH.D. 1914; Lecturer in Economics and Sociology, McMaster University, Toronto.

The Canadian Iron and Steel Industry. A Study in the Economic History of a Protected Industry. Doctor's thesis. 12mo, xv+370. New York: Houghton Mifflin Co., 1915.

Land Grants for Internal Improvement in the United States, *Journal of Political Economy*, XIX (1911), 404-10.

The Growth and Distribution of Canadian Population, *Journal of Political Economy*, XXI (1913), 296-312.

Canadian Financial Problems, *ibid.*, XXIII (1915), 753-90.

REVIEWS IN: *Journal of Political Economy*, XIX, 146-48, 506-7.

EARL DEAN HOWARD, PH.D. 1905; Professor of Economics, Northwestern University.

The Development of Government in Industry, *Illinois Law Review*, X (1916), 567-73.

ISAAC LIPPINCOTT, PH.D. 1912; Assistant Professor of Economics, Washington University, St. Louis.

A History of Manufactures in the Ohio Valley to the Year 1860. Doctor's thesis. 8vo, vii+214. New York: Knickerbocker Press, 1914.

JAMES DYSART MAGEE, PH.D. 1913; Assistant Professor of Economics, University of Cincinnati.

The World's Production of Gold and Silver from 1493 to 1905, *Journal of Political Economy*, XVIII (1910), 50-58.

Food Prices and the Cost of Living, *ibid.*, 294-308.

The Italian Banking System, *Proceedings of the Academy of Political Science*, I (1911), 43-42.

The Degree of Correspondence between Two Series of Index Numbers, *Quarterly Publications of the American Statistical Association*, XIII (1912), 174-81.

Money and Prices: A Statistical Study of Price Movements. Doctor's thesis. *Journal of Political Economy*, XXI (1913), 681-711, 798-818.

ALBERT NEWTON MERRITT, PH.D. 1906; Secretary of the Commercial Exchange of Chicago.

Federal Regulation of Railway Rates. Doctor's thesis. 8vo, xii+240. Boston: Houghton Mifflin Co., 1906.

OSCAR DOUGLAS SKELTON, PH.D. 1908; Professor of Political Science, Queen's University, Kingston, Canada.

Socialism: A Critical Analysis. Doctor's thesis. 8vo, ix+329. Cambridge, Mass.: The Riverside Press, 1911.

GEORGE ASBURY STEPHENS, PH.D. 1909; Associate Professor of Economics, University of Nebraska, Lincoln.

The New Apprenticeship. Doctor's thesis. *Journal of Political Economy*, XIX (1911), 17-35.

WILLIAM WALKER SWANSON, PH.D. 1908; Assistant Professor of Economics, Queen's University, Kingston, Canada.

The Establishment of the National Banking System. Doctor's thesis. 8vo, 117. Kingston: The Jackson Press, 1910.

MURRAY SHIPMAN WILDMAN, PH.D. 1904; Professor and Head of the Department of Economics, Leland Stanford Junior University.

Money Inflation in the United States. Doctor's thesis. 8vo, ix+238. Chicago: Privately printed, 1905.

ANNA PRITCHETT YOUNGMAN, PH.D. 1908; Instructor in Economics, Wellesley College.

The Economic Causes of Great Fortunes. Doctor's thesis. 12mo, 185. New York: The Bankers Publishing Co., 1909.

M. CHASE GOING, Graduate Student.

German War Finance, *Journal of Political Economy*, XXIV (1916), 513-46.

LEWIS C. SORRELL, Graduate Student.

Dislocations in the Foreign Trade of the United States Resulting from the European War, *ibid.*, 25-75.

S. ROY WEAVER, Graduate Student.

The First Negotiations for Reciprocity in North America, *ibid.*, XIX (1911), 411-15.

THE DEPARTMENT OF POLITICAL SCIENCE

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CHARLES EDWARD MERRIAM [1900-], Professor of Political Science.

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Associate Editor, *Political Science Review*; Associate Editor, *National Municipal Review*.

- Secretary, Chicago Harbor Commission (Report, 383 pp., 1909);
 Chairman, Chicago Commission on City Expenditures (Reports,
 1909-11); Director, Chicago Bureau of Public Efficiency, 1909-11;
 Chairman, Executive Committee, *ibid.*, 1911-14 (Reports, 1909-11,
 1911-14); Member, Chicago Waste Commission (Report, 1914);
 Chairman, Chicago Crime Commission (Report, 196 pp., 1915).
- A History of American Political Theories.* 12mo, xv+364. New York:
 Macmillan Co., 1903.
- Municipal Revenues of Chicago.* 8vo, xiii+161. Chicago: University
 Press, 1906.
- Primary Elections.* 8vo, xi+308. Chicago: University Press, 1908.
- State Government, *New York State Library Bulletin Review of Legislation*
 (1902), 711-16; (1903), 11-9; (1904), 11-15.
- State Central Committees, *Political Science Quarterly*, XIX (1904),
 224-33.
- Sovereignty, *New International Encyclopedia*, XIV (1904), 16, 17.
- The State, *ibid.*, 147, 148.
- The Chicago Primary System, *Publications of the Michigan Political
 Science Association*, VI (1905), 118-24.
- Review of State Legislation in 1905, *New York State Library Bulletin*,
 VII (1906), 1-40.
- Review of State Legislation, *ibid.*, 153-66.
- Hobbes' Doctrine of the State of Nature, *Proceedings of the American
 Political Science Association* (1906), 151-57.
- The Chicago Charter Convention, *American Political Science Review*,
 II (1907), 1-14.
- Revenues and Expenditures of American and European Cities, *Uni-
 versity of Chicago Magazine*, II (1910), 141-47.
- Citizenship, *ibid.*, III (1911), 275-82.
- Work and Accomplishments of Chicago Commission on City Expendi-
 tures, *City Club Bulletin*, IV (1911), 195-208.
- Chicago Commission on City Expenditures: Investigations as a Means of
 Securing Administrative Efficiency, *Annals of the American Academy
 of Political and Social Science*, XLI (1912), 281-303.

Outlook for Social Politics in the United States, *American Journal of Sociology*, VII (1912), 113-25.

Primary, *Cyclopaedia of American Government* (McLaughlin and Hart, eds.), II (1914), 49-51.

Direct Primary, *ibid.*, 51-55.

The Case for Home Rule, *Annals of the American Academy of Political and Social Science*, LVII (1915), 170-74.

The Political Philosophy of John C. Calhoun. In *Studies in Southern History and Politics* (edited by J. W. Garner; New York: Columbia University Press, 1915), chap. xiii, pp. 319-38.

Budget Making in Chicago, *Annals of the American Academy of Political and Social Science*, LXII (1915), 270-76.

Findings and Recommendations of the Chicago Council Committee on Crime, *Journal of Criminal Law and Criminology*, VI (1915), 345-62.

REVIEWS IN: *Political Science Quarterly*, XVIII, 331-32, 693-95; XXII, 355-56; *American Journal of Sociology*, IX, 723-24; *Annals of the American Academy*, and *American Historical Review*.

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The State Governments of the American Revolution. Doctor's thesis. Partly published in *Revision and Amendment of State Constitutions*. Baltimore: Johns Hopkins University Press, 1910.

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Ph.B. Franklin, 1898; Ph.D. Chicago, 1907.

Digest of City Charters. 8vo, xxi+351. Chicago: Chicago Charter Convention, 1906.

The Liquor Traffic and City Government, *Proceedings of the National Municipal League* (1908), 421-43.

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The Province of Burma: A Study Undertaken for the University of Chicago. 2 vols., 973; 1001. Boston: Houghton Mifflin Co., 1907.

FREDERICK DENNISON BRAMHALL [1908-], Instructor in Political Science.

Ph.B. Chicago, 1902; Legislative Reference Librarian, New York State Library, 1907-8; Instructor, Chicago, 1908-.

Political Phases of the Liquor Problem in Chicago, *Proceedings of Buffalo Conference for Good City Government* (1910), 423-38.

ELDON COBB EVANS, PH.D. 1915.

The Australian Ballot in the United States. Doctor's thesis. 8vo, iv+102. Chicago: University Press, 1917.

SAMUEL MACCLINTOCK, PH.D. 1908; Secretary, LaSalle Extension University, Chicago.

Aliens under the Federal Laws of the United States. Doctor's thesis. 8vo, 120. Chicago: Illinois Law Review, 1909.

SUSAN WADE PEABODY, PH.D. 1908; Chicago, Ill.

Historical Study of Legislation Regarding Public Health in the States of New York and Massachusetts. Doctor's thesis. 158. *Journal of Infectious Diseases*, Supplement No. 4, 1909.

JEREMIAH SIMEON YOUNG, PH.D. 1902; Professor of Political Science, University of Minnesota.

A Political and Constitutional Study of the Cumberland Road. Doctor's thesis. 8vo, 106. Chicago: University Press, 1902.

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Study of Chinese Jurisprudence, *Illinois Law Review*, VI (1912), 456-76, 518-33.

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Director, Bureau of Historical Research of Carnegie Institution, 1903-5.

- Member of the Editorial Board, *American Historical Review*, 1898-1914; Managing Editor, *ibid.*, 1901-5; Editor (with A. B. Hart) of the *Cyclopaedia of American Government*, Vols. I, II, III, 410, 732, 773, 785. New York: D. Appleton & Co., 1914-.
- A History of the United States for Schools* (with C. H. Van Tyne). 8vo, xviii+430. New York: D. Appleton & Co., 1911.
- The Study of History in Secondary Schools* (with C. H. Haskins, J. H. Robinson, and James Sullivan). 8vo, 69. New York: Macmillan Co., 1911.
- The Courts, the Constitution, and Parties*. 8vo, 299. Chicago: University Press, 1912.
- A History of the American Nation*. 8vo, 562. New York: D. Appleton & Co., 1913, new ed., revised and largely rewritten.
- The Uses of an Historical Society, *Proceedings of the Historical Society of North Dakota*, I (1907), 53-69.
- Introduction to *The Diary of James K. Polk*. xi-xx. Chicago: A. C. McClurg & Co., 1910.
- Democracy and the Constitution, *Proceedings of the American Anti-Quarian Society for October, 1912*.
- Articles on Federal Convention, Sources of the Constitution, Articles of Confederation, Courts and Unconstitutional Legislation, Political Parties, and many other subjects in *Cyclopaedia of American Government*, Vols. I, II, III.
- American History and American Democracy, *American Historical Review*, XX (1915), 255-76.
- The Meaning of the Civil War, *University Record*, I (1915), 138-48.
- REVIEWS IN: *American Historical Review*, XII, 179-80, 430-31; XIII, 367-69.
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- Editor of the *Riverside History of the United States*. 12mo. Four volumes. Boston: Houghton Mifflin Co., 1915.

Statesmen of the Old South. 12mo, xi+242. New York: Macmillan Co., 1911.

Expansion and Conflict. Vol. II in the *Riverside History of the United States.* 12mo, 328. Boston: Houghton Mifflin Co., 1915.

The Fight for the Northwest, 1860, *American Historical Review*, XVI (1911), 774-89.

The West and the War with Mexico, *Journal of the Illinois Historical Society*, III (1912), 1-16.

Profitable Fields of Investigation in American History, 1815-1860, *American Historical Review*, XVIII (1913), 522-36.

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Managing Editor, *American Historical Review*, 1895-1901, 1905-; Member of the Editorial Board, *ibid.*, 1902-.

Studies in the History of the Federal Convention of 1787, *Annual Report of the American Historical Association*, I (1902), 87-167.

St. Eustatius in the American Revolution, *American Historical Review*, VIII (1903), 683-708.

Professor von Holst as a Historian, *University Record*, VIII (1903), 156-60.

The Age of Erudition, *ibid.*, X (1905), 19-28; published also in the volume *Representative Phi Beta Kappa Orations* (Boston: Houghton Mifflin Co., 1915), 326-43.

FERDINAND SCHEVILL [1892-], Professor of Modern History.

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† Deceased.

A Political History of Modern Europe. 8vo, 607. New York: Charles Scribner's Sons, 1907.

Siena: The Story of a Mediaeval Commune. 8vo, xii+433. New York: Charles Scribner's Sons, 1909.

The Making of Modern Germany. 8vo, xi+259. Chicago: A. C. McClurg & Co., 1916.

The Podestà of Siena, *American Historical Review*, IX (1904), 247-64.

San Galgano: a Cistercian Abbey of the Middle Ages, *American Historical Review*, XIV (1908), 22-37.

REVIEWS IN: *American Journal of Sociology*, XI, 579; *American Historical Review*, VIII, 110-12; IX, 357-58; X, 385-87; XI, 138-40; XII, 864-69; XVI, 625-27; XIX, 627-29, 876-77; XX, 638-40.

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Editor of *The Lincoln-Douglas Debates of 1858.* 12mo, xi+627. Springfield, Ill.: Illinois Historical Society, 1908.

United States of America. 12mo, 2 vols., 425, 385. New York: G. P. Putnam's Sons, 1904.

Narrative of Johnson's Captivity. 12mo, 36. Cleveland: Burroughs Brothers, 1905.

Last Two Journeys of Father Marquette. 8vo, 30. Chicago: Atkinson, Mentzer & Grover, 1906.

Rutherford B. Hayes: An Appreciation. 16mo, 27. Columbus, Ohio: State University, 1907.

National Development. 12mo, x+378. New York: Harper & Bros., 1907.

Propos of a Statue of Frederick the Great for America, *Chautauquan*, XXXV (1902), 507-11.

Irrigation and the American Frontier, *ibid.*, 568-72.

Week's Centennial in Chicago, *Harper's Weekly*, XLVII (1903), 1552-53.

Movement of the People, *West Virginia School Journal*, XXXII (1903), 7-9.

United States: The Westward Movement, *Encyclopedia Americana*, XVI (1904).

Collaboration of History and Geography, *Elementary School Teacher*, IV (1904), 461-65.

Beginnings of Chicago, *Journal of Western Engineers*, VIII (1904), 357-70.

The Conference on the Relation of Geography to History, *Annual Report of the American Historical Association* (1908), 55.

REVIEWS IN: *American Historical Review*, VIII, 539-41; XI, 442-43; *Dial*, XL, 229; XXV, 462-65; *Annals of the American Academy*, XXI, 161-62.

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A History of England for Schools. 8vo, xxvi+622. Chicago: Scott, Foresman & Co., 1903.

Die Heimstättengesetz-Bewegung: V, Die Heimstättengesetze und die Bürger ausländischer Geburt. *Vierteljahrsschrift der Deutsch-Amerikanischen Gesellschaft*, III (April, 1903), 24-40; VI, Die Neu-Abgrenzung der Parteien und das Heimstättengesetz, *ibid.* (July, 1903), 1-11.

REVIEWS OF: Ramsey, The Angevin Empire, *American Historical Review*, IX, 549-54; Armitage-Smith, John of Gaunt, *ibid.*, XI, 645-48; Adams, Origin of the English Constitution, *ibid.*, XVIII, 567-71. Other reviews in *American Historical Review*, VIII, 380-81; X, 917-18; XII, 613-15; XIX, 859; *World To-Day*, IX, 440; X, 217, 440, 552; XI, 1219; XII, 441-42, 582, 646.

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Editor of Mignet's *French Revolution*. 8vo, xi+527. Philadelphia: John D. Morris & Co., 1907.

Reference Studies in Mediaeval History. 1st ed., 1907. Chicago: University Press; 2d ed., revised and enlarged, 1914. 12mo, xvii+233. Chicago: published by the author.

The Wars of Religion in France: The Huguenots, Catherine de Medici, and Philip II. 1st ed., 1909; 2d ed., 1916. 8vo, 635. Chicago: University Press.

The Frankfort Book Fair. 204. The Caxton Club of Chicago, 1911.

Some Famous Historical Collections in Paris, *Literary Collector*, VII (1903), 129-34.

Vergil in Mediaeval Culture, *American Journal of Theology*, X (1906), 648-62.

Napoleon as a Booklover, *Atlantic Monthly*, XCVIII (1906), 110-18.

On the Identity of Bernard of Cluny, *Journal of Theological Studies*, VIII (1907), 394-401.

Book-hunting as a Sport, *Caxton Club Year Book*, (1908), 71-107.

Achille Luchaire, *Nation*, LXXXVII (1908), 513, 514.

Some Economic Factors in the Revocation of the Edict of Nantes, *American Historical Review*, XIV (1908), 38-51.

Anti-Loyalist Legislation during the American Revolution, *Illinois Law Review*, III (1908), 81-90, 147-71.

The Alleged Persecutions of the Christians at Lyons in 177, *American Journal of Theology*, XVI (1912), 365-84; XVII (1913), 249-58.

Profitable Fields of Investigation in Mediaeval History, *American Historical Review*, XVIII (1913), 490-503.

The Mendacity of History, *North American Review*, CXCIX (1914), 910-21.

The Commerce of France in the Ninth Century. *Journal of Political Economy*, XXIII (1915), 857-87.

The German Church and the Conversion of the Baltic Slavs, *American Journal of Theology*, XX (1916), 205-30, 372-89.

REVIEWS OF: *The Cambridge Modern History*: Vol. VIII, The French Revolution, *Annals of the American Academy*, XXV, 139-43; Lavisse, Histoire de France depuis les origines jusqu'à la révolution: I, Tableau de la géographie de la France; II, Le Christianisme, les Barbares, Mérovingiens, et Carolingiens, *American Historical Review*, VIII, 342-47. Other reviews in *American Historical Review*, III, 742-43; VIII, 119-20, 577-79; IX, 147-48; X, 387-89; XI, 300-61, 376-77, 656-59; XII, 619-21, 691-92; XIII, 859-61; XIV, 343-44; XV, 304-66, 838-39; XVI, 117-18, 343-45; XVII, 870-71; XVIII, 163-64, 359-61, 575-77, 791-92; XIX, 871-74; XX, 137-39.

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A History of Matrimonial Institutions. 3 vols., 8vo. Vol. I, xv+474; Vol. II, xv+598; Vol. III, xv+450. Chicago: University Press; Callaghan & Co., 1904.

Biographical Sketch of Amos Griswold Warner, *Notes Supplementary to Johns Hopkins University Studies*, XXII (1904), 7-10.

Marriage and Divorce in the United States, *Encyclopedia Americana*, X (1904).

REVIEWS IN: *American Historical Review*, IX, 544-47.

MARCUS WILSON JERNEGAN [1902-6; 1908-], Associate Professor of History.

A.B. Brown, 1896; Ph.D. Chicago, 1906; Assistant Professor of History, *ibid.*, 1912-16; Associate Professor, *ibid.*, 1916-.

An Unsolved Problem in Secondary Education, *Educational Bi-Monthly*, III (1908), 111-22.

The Debates in the Irish House of Commons, 1776-1789, *English Historical Review*, XXIV (1909), 104-6.

Discussion of the Report of the Committee of Seven, *Proceedings of the North Central History Teachers' Association* (1909), 20-22.

Junior College History in the University of Chicago, *History Teacher's Magazine*, I (1910), 169-70.

Factors Influencing the Development of American Education before the Revolution, *Proceedings of the Mississippi Valley Historical Association*, V (1911-12), 190-206.

A Forgotten Slavery of Colonial Days, *Harper's Magazine*, CXXVII (1913), 745-75.

Articles on Colonial Unions Previous to 1775, King's Province, Mason and Dixon's Line, New Sweden, *Cyclopaedia of American Government*, Vols. I, II, III (1914).

The Beginnings of Public Education in New England, *School Review* XXIII (1915), 319-30, 361-80.

Slavery and Conversion in the American Colonies, *American Historical Review*, XXI (1916), 504-28.

REVIEWS IN: *American Historical Review*, XIII, 660-61, 910-11; XIV, 391-92; XV, 648-49; XVII, 674-75; XVIII, 589-92, 629-30; XIX, 689-90, 889-90; XX, 437-38; XXI, 634-35; *American Journal of Theology*, XVI, 305-7; *School Review*, XIII, 739; XIV, 458, 459; XVII, 132-33; XVIII, 147; XIX, 421, 422.

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A.B. Harvard, 1903; Ph.D. *ibid.*, 1908; B.Litt. Oxford, 1910; Assistant Professor of History, Chicago, 1912-15; Associate Professor, *ibid.*, 1915-.

Factions in the English Privy Council under Elizabeth, *Annual Report of the American Historical Association* (1911), 109-19.

Walsingham and Burghley in Queen Elizabeth's Privy Council, *English Historical Review*, XXVIII (1913), 34-58.

English Foreign Trade under Elizabeth, *ibid.*, XXIX (1914), 515-25.

The Fame of Sir Edward Stafford, *American Historical Review*, XX (1915), 292-313.

REVIEWS OF: Tawney, The Agrarian Problem in the Sixteenth Century, *Journal of Political Economy*, XXI, 362-67; Newton, The Colonizing Activities of the English Puritans: The Last Phase of the Elizabethan Struggle with Spain, *ibid.*, XXII, 589-92; Williams, Maritime Enterprise, *ibid.*, 916-19; Gras, The Evolution of the English Corn Market from the Twelfth to the Eighteenth Century, *ibid.*, XXIV, 191-94. Other reviews in *Journal of Political Economy*, XXI, 83-85; XXII, 708-9; XXIII, 289-92; *American Historical Review*, XVII, 656, 872; *American Journal of Theology*, XV, 475-76.

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The Amenities of Presidential Campaigns, *World To-Day*, VII (1904), 1314-22.

John Paul Jones, *ibid.*, VIII (1905), 605-8.

The Historic Setting of Granville, *Old Northwest Genealogical Quarterly* (1905), 235-44.

William Rainey Harper, *University Record*, X (1906), 76-79.

William Rainey Harper, *Biblical World*, XXVII (1906), 162-66.

Rescuing Cuba from Europe, *World To-Day*, XI (1906), 1197-99.

The Roosevelt Régime, *ibid.*, XVI (1909), 265-68.

REVIEW IN: *American Historical Review*, XVIII, 820-21.

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A Source Book for Mediaeval History. Selected Documents Illustrating the History of Europe in the Middle Age (with E. H. McNeal). 8vo, xix+619. New York: Charles Scribner's Sons, 1905.

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Joint Editor of a series of maps for the study of Ancient History, published 1916-17 by the Denoyer-Geppert Co., Chicago.

Luther in the Light of Recent Research; a translation of Heinrich Boehmer's work. 8vo, ii+323. New York: Christian Herald Publishing Co., 1916.

REVIEW OF: Zimmerman, The Greek Commonwealth, *Journal of Political Economy*, XX, 516-20. Other reviews in *Journal of Political Economy*, XIX, 803-4; *Classical Philology*, VII, 116-18.

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REVIEWS OF: Smith, The Life and Letters of Martin Luther, *American Journal of Theology*, XV, 643; Stoeckius, Forschungen zur Lebensordnung der Gesellschaft Jesu im 16. Jahrhundert, *ibid.*, 473-75.

CURTIS HOWE WALKER [1909-], Assistant Professor of History.

A.B. Yale, 1899; Ph.D. *ibid.*, 1905; Assistant Professor of History, Chicago, 1911-.

The Trend in the Modern Interpretation of Early Church History, *American Journal of Theology*, XVI (1912), 614-33.

Communication: Concerning the Date of Sumner's First Course on Sociology, *American Journal of Sociology*, XX (1915), 829-30.

REVIEWS OF: Gwatkin, Early Church History to A.D. 313; Flick, The Rise of the Mediaeval Church, *American Journal of Theology*, XV, 635-41; D'Ales, L'Edit de Calliste. Etude sur les origines de la pénitence chrétienne, *American Journal of Theology*, XIX, 125-29; W. G. Sumner, The Challenge of Facts, *Yale Review*, V (1915), 215-17. Other reviews in *American Journal of Theology*, XIV, 472-73; XVII, 437-39, 630-31.

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The Confederation and the Shays Rebellion, *American Historical Review*, XI (1905), 42-67.

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William Branch Giles: A Biography. Doctor's thesis. Svo, 221. Menasha, Wis.: George Banta Publishing Co., 1915.

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Some Aspects of Postal Extension into the West, *Annual Report of the American Historical Association* (1909), 141-50.

REVIEWS IN: *American Historical Review*, XV, 424, 618-19; XVIII, 145-47.

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† Deceased.

Economic Self-Interest in the German Anti-Clericalism of the Fifteenth and Sixteenth Centuries, *American Journal of Theology*, XIX (1915), 509-28.

REVIEW OF: Vedder, The Reformation in Germany, *American Journal of Theology*, XIX, 129-33. Other reviews in *American Journal of Theology*, XVI, 473-75, 488-89.

EDWARD BENJAMIN KREHBIEL [1907-9], Instructor in History; Professor of European History, Leland Stanford Junior University.

A.B. Kansas, 1902; Ph.D. Chicago, 1906; Instructor in History, *ibid.*, 1907-9.

The Interdict, Its History and Its Operation, with Especial Attention to the Time of Pope Innocent III. Doctor's thesis. 12mo, viii+184. Washington, D.C.: American Historical Association, 1909.

REVIEWS IN: *American Historical Review*, XIII, 546-66; XIV, 168-69, 567-69; *American Journal of Theology*, XII, 291-95; XIII, 300-302.

†AGNES M. WERGELAND [1900-1902], Instructor in History.

Slavery in Germanic Society during the Middle Ages, *Journal of Political Economy*, IX (1900-1901), 98-120, 398-422; X (1900-1902), 230-54.

CATHARINE CAROLINE CLEVELAND, PH.D. 1914; Chicago.

The Great Revival in the West, 1797-1805. Doctor's thesis. 12mo, xii+215. Chicago: University Press, 1916.

FRANCES GARDINER DAVENPORT, PH.D. 1904; Assistant, Department of Historical Research, Carnegie Institution, Washington.

The Economic Development of a Norfolk Manor, 1086-1565. Doctor's thesis. 8vo, x+105+cii. Cambridge, England: University Press, 1906.

ELMER CUMMINGS GRIFFITH, PH.D. 1902; Professor of History and Political Science, William Jewell College, Liberty, Mo.

The Rise and Development of the Gerrymander. Doctor's thesis. 8vo, 124. Chicago: Scott, Foresman & Co., 1907.

Congressional Representation in South Dakota, *Nation*, LXXV (1902), 343-44.

† Deceased

CLEO CARSON HEARON, PH.D. 1913; Professor of History, Ripon College.

Nullification in Mississippi, *Publications of the Mississippi Historical Society*, XII (1912), 37-71.

Mississippi and the Compromise of 1850. Doctor's thesis. *Ibid.*, XIV (1913), 7-229.

REGINALD CHARLES McGRANE, PH.D. 1915; Instructor in History, University of Cincinnati.

The Crisis of 1837. Doctor's thesis. In Press.

EDGAR HOLMES McNEAL, PH.D. 1902; Assistant Professor of European History, Ohio State University, Columbus.

Minores and Mediocres in the Germanic Tribal Laws. Doctor's thesis. 8vo, 130. Privately printed, 1905.

WILLIAM RAY MANNING, PH.D. 1904; Adjunct Professor of History, University of Texas, Austin.

The Nookta Sound Controversy. Doctor's thesis. Washington: Government Printing Office; also in *Report of the American Historical Association*, 1904, 279-478.

DAVID RICHARD MOORE, PH.D. 1910; Professor of Mediaeval and Modern European History, Oberlin College.

Canada and the United States, 1815-1830. Doctor's thesis. 8vo, 131. Chicago: Jennings and Graham, 1910.

CHARLES OSCAR PAULLIN, PH.D. 1904; Member of Staff, Department of Historical Research, Carnegie Institution, Washington.

First Elections under the Constitution, *Iowa Journal of History and Politics*, II (1904), 3-33.

The Navy of the American Revolution: Its Administration, Its Policy, and Its Achievements. Doctor's thesis. 12mo, 549. Cedar Rapids, Iowa: Republican Printing Co., 1906.

THEODORE CALVIN PEASE, PH.D. 1914; Associate in History, University of Illinois.

The County Archives of the State of Illinois. cxli+730. Published by the Trustees of the Illinois State Historical Library, Springfield, 1915.

The Leveller Movement. Doctor's thesis. 12mo, vii+406. Washington, D.C.: American Historical Association, 1916.

REVIEWS IN: *Mississippi Valley Historical Review*, I, 444, 586, 588, 592.

MILO MILTON QUAIFFE, PH.D. 1908; Secretary, Wisconsin State Historical Society, Madison.

The Doctrine of the Non-Intervention with Slavery in the Territories. Doctor's thesis. 8vo, 150. Chicago: M. C. Chamberlin Co., 1910.

JAMES GARFIELD RANDALL, PH.D. 1911; Professor of History and Economics, Roanoke College.

The Confiscation of Property during the Civil War. Doctor's thesis. 8vo, 71. Indianapolis: Mutual Printing and Lithographing Co., 1913.

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The Development of Chicago and Vicinity as a Manufacturing Center Prior to 1880. Doctor's thesis. 8vo, 139. Chicago: McElroy Publishing Co., 1911.

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Mennonites of America. Doctor's thesis. 8vo, 147. Scottsdale, Pa.: Mennonite Publishing House, 1909.

SCHUYLER BALDWIN TERRY, PH.D. 1910; Lec, Higginson and Co., Chicago.

The Financing of the Hundred Years' War, 1337-1360. Doctor's thesis. 8vo, xx+196. London: School of Economics, 1914.

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Member of Board of Editors, *Studies in Classical Philology*, University of Chicago, 1895-1907; and of *Classical Philology*, 1906-.

Catalogue of Bronzes, etc., in Field Museum of Natural History. 8vo, 52.
Chicago: Field Museum of Natural History, 1909.

A Signed Proto-Corinthian Lecythus in the Boston Museum of Fine Arts,
Revue archéologique, XL (1902), 41-46.

Some Present Problems in the History of Greek Sculpture, *American
Journal of Archaeology*, VIII (1904), 442-59.

The Form of the Chlamys, *Classical Philology*, I (1906), 283-89.

The Palm of Victory, *ibid.*, III (1908), 264-72.

Architecture on Attic Vases, *American Journal of Archaeology*, XIV
(1910), 428-33.

A Marble Head of Antinous Belonging to Mr. Charles L. Hutchinson
of Chicago, *Art in America*, II (1913), 68-71.

The Pont du Gard, *Art and Archaeology*, II (1915), 45-47.

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Masters of the Early and Late Renaissance, *Dial*, XXXVIII (1905),
320-22.

Dutch Art and Artists (nine articles), *Chautauquan*, LII-LIV, September,
1908-May, 1909.

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La Vergine col Bambino del Chiodarolo, *L'Arte*, XVIII (1915), 226-28.

REVIEWS IN: *Classical Philology*, XI, 347-49; *Dial*, LXII, 66.

CAROLINE LOUISE RANSOM (MRS. GRANT WILLIAMS), PH.D. 1905;
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Couches and Beds of the Greeks, Etruscans, and Romans. Doctor's thesis.
4vo, 128. Chicago: University Press, 1905.

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Vice-President and Member of Organizing Committee, International Congress of Arts and Science, St. Louis Exposition, 1904; President, American Sociological Society, 1912-14.

Editor, *American Journal of Sociology*, 1895-.

General Sociology: An Exposition of the Main Development in Sociological Theory, from Spencer to Ratzenhofer. 8vo, xiv+739. Chicago: University Press, 1905.

Adam Smith and Modern Sociology: A Study in the Methodology of the Social Sciences. 8vo, 250. Chicago: University Press, 1907.

The Cameralists, the Pioneers of German Social Polity. 8vo, xxv+606. Chicago: University Press, 1909.

Abraham Lincoln, the Prophet of Democracy. 27. Louisville, Ky.: Temple Adath Israel, 1909.

The Meaning of Social Science. vii+309. Chicago: University Press, 1910.

Between Eras: From Capitalism to Democracy. xv+431. Kansas City, Mo.: Intercollegiate Press, 1913.

The Primary Concepts of Sociology, *American Journal of Sociology*, VIII (1902-3), 197-250.

What Is a Sociologist? *ibid.*, 468-77.

Coeducation at the University of Chicago, *Proceedings of the National Education Association* (1903), 288-97.

Immoral Morality, *Independent*, LV (1903), 710-14.

Translation of Simmel's *Sociology of Conflict*, *American Journal of Sociology*, IX (1903-4), 490-525, 672-89, 798-811.

Notes on Ward's *Pure Sociology*, *ibid.*, 404-7, 567-75, 703-7.

Will Germany War with Us? *Collier's Weekly*, December 10, 1904.

The Remaining Issue, *Newspaper Enterprise Association*, Cleveland, 1904.

- Premises of Practical Sociology, *American Journal of Sociology*, X (1904-5), 26-46.
- The Subject Matter of Sociology, *ibid.*, 281-98.
- Christianity and National Needs, *Home Mission Monthly*, XXVII (1905), 21-24.
- The Sociology of Advertising, *Publisher and Advertiser*, I (1905), 14-19.
- Research Ideals, *University of Chicago Record*, X (1905), 87.
- A Decade of Sociology, *American Journal of Sociology*, XI (1905-6), 1-10.
- Translation of Simmel's *A Contribution to the Sociology of Religion*, *ibid.*, 359-76.
- Translation of Simmel's *The Sociology of Secrecy and Secret Societies*, *ibid.*, 441-98.
- William Rainey Harper as University President, *Biblical World*, XXVII (1906), 216-19.
- William Rainey Harper: The Man, *University of Chicago Record*, XI (1906), 65.
- The Social Value of the Academic Career, *ibid.*, 21-31.
- The Relation between Sociology and Other Sciences, *American Journal of Sociology*, XII (1906-7), 11-31.
- The American Sociological Society, *ibid.*, 579-87.
- Points of Agreement among Sociologists, *ibid.*, 633-49.
- Sociology, *Nelson's Cyclopaedia*, 1907.
- Introduction to F. E. Dewhurst's *Investment of Truth*, ix-xv. Chicago: University Press, 1907.
- Are the Social Sciences Answerable to Common Principles of Method? I, II, III, *American Journal of Sociology*, XIII (1907-8), 1-19; 200-223; 392-401.
- Ratzenhofer's Sociology, *ibid.*, 433-38.
- The Doctor's Dissertation, *Proceedings of Ninth Annual Conference, Association of American Universities* (1908), 41-73.
- Personal Qualities of Professor Mashke, *University of Chicago Record*, XII (1908), 157-59.

- The Meaning of Sociology, *American Journal of Sociology*, XIV (1908-9), 1-14.
- Is the Family on Trial? *ibid.*, 806-10.
- The Vindication of Sociology, *ibid.*, XV (1909-1910), 1-15.
- Professor Ford's View of Sociology, *ibid.*, 259.
- The Sociological Stage in the Evolution of the Social Sciences, *ibid.*, 681-97.
- Translation of Simmel's *How Is Society Possible?* *ibid.*, XVI (1910-11), 372-91.
- The "Social Forces" Error, *ibid.*, 639-41.
- Discussion of Report of Committee on Teaching, *ibid.*, 789-90.
- Socialism in the Light of Social Science, *ibid.*, XVII (1911-12), 804-19.
- William Rainey Harper (Address at Dedication of the Harper Memorial Library), *University of Chicago Magazine*, IV (1912), 311-12.
- General Sociology, *American Journal of Sociology*, XVIII (1912-13), 200-214.
- The Present Outlook of Social Science, *ibid.* (1913), 433-69.
- Is It Possible for American Sociologists to Agree on a Constructive Program? *Proceedings of the American Sociological Society*, VIII (1913), 159-62.
- Lester Frank Ward, *American Journal of Sociology*, XIX (1913-14), 75-78.
- A Vision of Social Efficiency, *ibid.*, 433-45.
- Shall Science Be Sterilized? *ibid.*, 650-53.
- The "Social Concept" Bugbear, *ibid.*, 653-56.
- The Ford Motor Company Incident, *ibid.*, 656-58.
- The Social Gradations of Capital, *ibid.*, 721-52.
- The Evolution of a Social Standard, *ibid.*, XX (1914-15), 10-17.
- Bonds of Nationality, *ibid.*, 629-83.
- Nationalism and State Socialism, *Publications of the American Sociological Society*, X (1915), 93-96.
- National Preparedness—American, *American Journal of Sociology*, XXI (1915-16), 601-10.

Fifty Years of Sociology in the United States, 1865-1915, *ibid.*, 721-864.

REVIEWS OF: Münsterberg, Die Amerikaner, *American Journal of Sociology*, X, 245-52; Ross, Foundations of Sociology, *ibid.*, XI, 129-32; Bentley, Progress of Government, *ibid.*, XV, 698-706; Hobhouse, Social Evolution and Political Theory, *ibid.*, XVII, 546-48; Patten, Reconstruction of Economic Theory, *ibid.*, XVIII, 580-83; Rauschenbusch, Christianizing the Social Order; Vaughn, Socialism from the Christian Standpoint, *ibid.*, 808-11; Ward, Glimpses of Cosmos, I, II, III, *ibid.*, XIX, 659-64; and others.

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WILLIAM ISAAC THOMAS [1894-], Professor of Sociology.

A.B. Tennessee, 1884; Ph.D. Chicago, 1896; Adjunct Professor of English and Modern Languages, Tennessee, 1887-88; Professor of English, Oberlin, 1889-94; Professor of Sociology, *ibid.*, 1894-95; Assistant Professor of Sociology, Chicago, 1896-1900; Associate Professor, *ibid.*, 1900-1910; Professor, *ibid.*, 1910-.

Member of the Editorial Board, *American Journal of Sociology*.

Sex and Society. 8vo, 325. Chicago: University Press, 1907.

Source Book for Social Origins. Royal 8vo, xvi+932. Chicago: University Press, 1909.

The Origin of Society and of the State. 8vo, 72. Chicago: Zalaz Corporation, 1915.

The Sexual Element in Sensibility, *Psychological Review*, XI (1904), 61-67.

The Psychology of Race Prejudice, *American Journal of Sociology*, IX (1903-4), 593-611.

Is the Human Brain Stationary? *Forum*, XXXVI (1904), 305-20.

Der Mangel an Generalisationsvermögen bei den Negern, *Zeitschrift für Socialwissenschaft*, VII (1904), 215-21.

The Province of Social Psychology, *American Journal of Sociology*, X (1904-5), 445-55.

† Deceased.

- The Adventitious Character of Women, *American Journal of Sociology*, XII (1906-7), 32-42.
- The Mind of Woman and the Lower Races, *ibid.*, 435-69.
- The Significance of the Orient for the Occident, *ibid.*, XIII (1907-8), 729-55.
- The Psychology of the Yellow Journal, *American Magazine*, LXV (1908), 491-96.
- Race Psychology: Standpoint and Questionnaire, with Particular Reference to the Immigrant and the Negro, *American Journal of Sociology*, XVII (1911-12), 725-75.
- Education and Racial Traits, *Southern Workman*, XLI (1912), 378-86.
- The Prussian-Polish Situation: An Experiment in Assimilation, *American Journal of Sociology*, XIX (1913-14), 624-39.
- GEORGE EDGAR VINCENT [1894-1911], Professor of Sociology; Dean of the Faculties of Arts, Literature, and Science; President, Rockefeller Foundation.
- A.B. Yale, 1885; Ph.D. Chicago, 1896; Assistant in Sociology, Chicago, 1894-95; Instructor, *ibid.*, 1895-96; Assistant Professor, *ibid.*, 1896-1900; Associate Professor, *ibid.*, 1900-1904; Dean of the Junior Colleges, *ibid.*, 1900-1907; Professor of Sociology, *ibid.*, 1904-11; Dean of the Faculties of Arts, Literature, and Science, *ibid.*, 1907-11.
- Vice-Principal, Chautauqua System, 1888-1911; President, Chautauqua Institution, 1907-15.
- Literary Editor, Chautauqua Press, 1886; Member of the Editorial Board, *American Journal of Sociology*, 1895-1911.
- The University of Chicago, *Outlook*, LXXI (1902), 839-51.
- The Evolution of a Reading Course, *Chautauquan*, XXXVII (1903), 382-85.
- Laws of Hammurabi, *American Journal of Sociology*, IX (1903-4), 736-54.
- The Development of Sociology, *ibid.*, X (1904-5), 145-60.
- A Laboratory Experiment in Journalism, *ibid.*, XI (1905-6), 297-311.
- Conformity and Heresy, *Methodist Review*, LXXXVIII (1906), 771-84.
- Varieties of Sociology, *American Journal of Sociology*, XII (1906-7), 1-10.
- The Individualizing Duty of the Library, *Public Libraries*, XIII (1908), 391-97.

The Standard of Undergraduate Scholarship, *University of Chicago Magazine*, I (1908), 17-22.

Rivalry of Social Groups, *American Journal of Sociology*, XVI (1910-11), 469-84.

Sociology. Article in *Encyclopedia Americana* (ed. 1911).

Purpose and Spirit of the University, *Science*, XXXIII (1911), 977-84.

REVIEWS OF: Sumner, Folkways, *American Journal of Sociology*, XIII, 414-19; Ross, Social Psychology, *ibid.*, XIV, 681-87. Other reviews in *American Journal of Sociology*, XII, 122-25; XIV, 841-42; *Political Science Quarterly*, XXII, 741-43.

CHARLES ZUEBLIN [1892-1908], Professor of Sociology; Lecturer, Boston, Mass.

Ph.B. Northwestern, 1887; D.B. Yale, 1889; Secretary, Chicago Society for University Extension, 1892; Secretary of Class Work, Extension Division, Chicago, 1892-93; Secretary of Lecture-Study, *ibid.*, 1894; Extension Instructor in Sociology, *ibid.*, 1892-95; Extension Assistant Professor, *ibid.*, 1895-96; Associate Professor of Sociology, Chicago, 1896-1902; Professor, *ibid.*, 1902-8.

A Decade of Civic Development. 12mo, 188. Chicago: University Press, 1905.

The Religion of a Democrat. 12mo, 192. New York: B. W. Huebsch, 1908.

The Civic Renaissance: A Series of Nine Articles, *Chautauquan*, Vols. XXXVIII, XXXIX (1903-4).

The Overspecialized Business Man, *New York Sunday Times*, March 24, 1907.

The Constraint of Orthodoxy, *Unity*, LIX (1907), 217-21.

The Evolution of the American Municipality, *News-Book*, XIX (1908), 5, 6.

REVIEW IN: *Political Science Quarterly*, XXIII, 339-40.

ROBERT EZRA PARK [1913-], Professorial Lecturer in Sociology.

Ph.B. Michigan, 1887; Ph.D. Heidelberg, 1904; Assistant in Philosophy, Harvard, 1903-5; Professorial Lecturer in Sociology, Chicago, 1913-.

The Principles of Human Behavior. No. 6 in Studies in Social Science, edited by W. I. Thomas. 62. Chicago: Zalaz Corporation, 1915.

Racial Assimilation in Secondary Groups: with Special Reference to the Negro, *American Journal of Sociology*, XIX (1913-14), 606-23.

The City: Suggestions for the Investigation of Human Behavior in the City Environment, *American Journal of Sociology*, XX (1914-15), 577-612.

REVIEW OF: Evans, Black and White in the Colored States, *Journal of Political Economy*, XXIV, 304-6. Other reviews in *American Journal of Sociology*, XX, 274-76, 546-48; XXI, 418-19, 420.

SCOTT ELIAS WILLIAM BEDFORD [1911-], Associate Professor of Sociology.

A.B. Baker, 1902; L.H.D. Vermont, 1911; Assistant Professor of History, Baker, 1902-5; Professor of Sociology, Miami, 1908-11; Assistant Professor of Sociology, Chicago, 1911-16; Associate Professor, *ibid.*, 1916-.

Secretary and Treasurer, American Sociological Society, 1911-.

Member, Board of Editors, *American Journal of Sociology*; Managing Editor, *Papers and Proceedings of the American Sociological Society*, 1912-.

REVIEW OF: Bartlett, The Better Country, *American Journal of Sociology*, XVII, 269-70. Other reviews in the *American Journal of Sociology*, XIX, 417, 687; XX, 125; XXI, 704-5; XXII, 96-97, 99.

GEORGE AMOS DORSEY [1905-15], Associate Professor of Anthropology.

A.B. Denison, 1888; Ph.D. Harvard, 1894; LL.D. Denison, 1909; Professor of Comparative Anatomy, Northwestern, 1900-; Assistant Professor of Anthropology, Chicago, 1905-9; Associate Professor, *ibid.*, 1909-15.

Assistant Curator of Somatology, Field Museum of Natural History, 1896-97; Curator, Department of Anthropology, *ibid.*, 1897-; Hon. Commissioner to Peru and Ecuador, World's Columbian Exposition, 1891-92; President, American Folk-Lore Society, 1902; President, Geographic Society of Chicago, 1908.

Mythology of the Pawnee. 8vo, 546. Washington: Carnegie Institution, 1907.

American Association of Museums, *American Anthropologist*, New Series, VIII (1906), 424-26.

Legend of the Teton Sioux Medicine Pipe, *Journal of American Folk Lore*, XIX (1906), 326-30.

Skidi Rite of Human Sacrifice, *Proceedings of the International Congress of Americanists*, Twenty-fifth Session, Quebec, I (1906), 65-71.

Social Organization of the Skidi Pawnee, *ibid.*, 71-79.

A Pawnee Ritual of Instruction, *Boas Memorial Volume* (1907), 350-53.

The Problems of Somatology, *Proceedings of the St. Louis Congress of Arts and Science*, X (1907), 498-509.

Ceremony, *Handbook of American Indians*, Part I, Bulletin 30, Bureau of Ethnology (1907), 226-29.

The Sun Dance, *ibid.*, Part II.

The Anthropological Exhibits at the American Museums of Natural History, *Science*, XXV (1907), 584-89.

FREDERICK STARR [1892-], Associate Professor of Anthropology.

A.B. Lafayette, 1882; S.M. and Ph.D. *ibid.*, 1885; Sc.D. *ibid.*, 1907; Professor of Biological Science, Coe College, 1884-87; Assistant Professor of Anthropology, Chicago, 1892-95; Associate Professor, *ibid.*, 1895-.

In charge of Department of Ethnology, American Museum of Natural History, 1889-91.

Member of the Editorial Board, *American Journal of Sociology*;
Editor of the *Narrative of the Expedition Despatched to Musahdu by the Liberian Government under Benjamin J. U. Anderson in 1874*.
Svo, 43. Moravia: Privately printed, 1912.

The Ainu Group at the St. Louis Exposition. 16mo, iv+118. Chicago: Open Court Co., 1904.

Readings from Modern Mexican Authors. 16mo, 420. Chicago: Open Court Co., 1904.

The Truth about the Congo. 16mo, viii+129. Chicago: Forbes & Co., 1907.

In Indian Mexico. Svo, xi+425. Chicago: Forbes & Co., 1908.

A Bibliography of Congo Languages. Svo, 97. Chicago: University Press, 1908.

Ethnographic Notes from the Congo Free State: An African Miscellany.
Svo, 127. Reprinted from *Proceedings of the Davenport Academy of Science*, XII (1909), 90-222.

Philippine Studies. I. *A Little Book of Filipino Riddles*. 16mo, 153. Yonkers, N.Y.: World Publishing Co., 1909.

Japanese Proverbs and Pictures. Svo, iv+50. Tokyo: Privately printed, 1910.

Congo Natives—An Ethnographic Album. Svo, 38, pl. 130. Chicago: Privately printed, 1912.

Liberia: History, Description, Problems. 16mo, 277. Chicago: Privately printed, 1913.

In Memoriam Manuel Gonzales, 1883-1912. Svo, 8. Chicago: Privately printed, 1913.

- Mexico and the United States.* 8vo, 440. Chicago: The Bible House, 1914.
- Exhibition of Objects Illustrating the History and Condition of the Republic of Liberia, March 23 to April 4.* 8vo, 42. Chicago: Privately printed, 1914.
- Catalogue of the Liberian Exhibit at the Lincoln Jubilee and Half-Century Anniversary of Negro Freedom.* 8vo, 8. Chicago: Privately printed, 1915.
- The Old Geographer Matsuura Takeshiro.* 8vo, 19. Tokyo: Privately printed, 1915.
- The American on the Tokaido.* 16mo, 83 (English), 202 (Japanese). Tokyo: Dai Nippon Publishing House, 1916.
- Indian Mexico, *World To-Day*, VIII (1905), 502-9.
- Congo Museum, *ibid.*, X (1906), 487-93.
- The Cornplanter Medal for Iroquois Research, *Open Court*, XXII (1908), 316-18.
- Rude Stone Implements from the Congo Free State, *Wisconsin Archaeologist*, VII (1908), 111-15.
- Note on the Survivors from the Cargo of the Negro Slave Yacht "Wanderer," *American Anthropologist*, X (1908), 621-23.
- Japanese Riddles, *Transactions of the Asiatic Society of Japan*, XXXVIII (1910), 1-49.
- The Rebus and Its Kin in Japan, *Japan Magazine*, I (1910), 1-6.
- Charles Staniland Wake, *American Anthropologist*, XII (1910), 343-44.
- The Congo Free State and Congo Belge, *Journal of Race Development*, I (1911), 383-99.
- Lolo Objects in the Public Museum, Milwaukee, *Bulletin of the Public Museum, City of Milwaukee*, I (1911), 209-20.

REVIEWS OF: Anthropological Literature, *American Anthropologist*, II, 160-66; Dennett, At the Back of the Black Man's Mind, *ibid.*, IX, 595-99; Van Overbergh, Collection de monographies ethnographiques, *ibid.*, XI, 303-7. Other reviews in *American Anthropologist*, IX, 593-95, 599-602; X, 446-51; XI, 297-303; XVII, 735-42; *Dial*, XXXIX, 166-68; XLII, 336-38; XLV, 244-45, 248-50; *American Antiquarian and Oriental Journal* (Department of Oriental Review), XXVII, 361-62; XXX, 122-27, 185-89; and many others.

ERNEST WATSON BURGESS [1916-], Assistant Professor of Sociology.

A.B. Kingfisher College, 1908; Ph.D. Chicago, 1913; Assistant Professor of Sociology, Kansas, 1913-15; Assistant Professor of Economics and Sociology, Ohio State University, 1915-16; Assistant Professor of Sociology, Chicago, 1916-.

The Function of Socialization in Social Evolution. Doctor's thesis. 8vo, vii+237. Chicago: University Press, 1916.

IRA WOODS HOWERTH [1894-1912], Assistant Professor of Sociology; Professor of Education and Director of the University Extension, University of California.

A.B. Harvard, 1893; Ph.D. Chicago, 1897; Extension Lecturer in Sociology and Political Economy, *ibid.*, 1894-95; Assistant in Sociology, *ibid.*, 1895-96; Secretary, University Extension Class-Study Department, *ibid.*, 1896-1900; Instructor in Sociology, *ibid.*, 1896-1902; Assistant Professor, *ibid.*, 1902-12.

Secretary, Illinois Educational Commission, 1908-10; publications, (Springfield, Ill.): *Report*, 272; and the following bulletins: No. 1, *A Tentative Plan for a State Board of Education*, 38; No. 2, *A Tentative Plan for a County Board of Education with Suggestions in Regard to the County Superintendency*, 53; No. 3, *A Tentative Plan for the Certification of Teachers*, 32; No. 4, *A Tentative Plan for Making the Township the Unit of Organization*, 47; No. 5, *Tentative Recommendations Concerning County Teachers' Institutes*, 57; No. 6, *A Revision of the General School Law of Illinois*, 87; No. 7, *Minimum Salaries for Teachers*, 37; No. 8, *Bills for Providing (1) A State Board of Education, (2) The Certification of Teachers, (3) Township Organization of Rural Schools*, 8; No. 9, *Preliminary Report to the General Assembly*, 47.

The Art of Education. 237. New York: Macmillan Co., 1912.

What Is Religion? *International Journal of Ethics*, XIII (1903), 185-206.

The Civic Problem from a Sociological Standpoint, *American Journal of Sociology*, XI (1905-6), 207-18.

The Industrial Millennium, *International Journal of Ethics*, XVI (1906), 190-98.

The Social Question of Today, *American Journal of Sociology*, XII (1906-7), 254-68.

War and Social Economy, *International Journal of Ethics*, XVII (1907), 70-78.

- The Classification of the Arts, *Popular Science Monthly*, LXX (1907), 429-36.
- Education and Social Adjustment, *Education*, XXVII (1907), 556-60.
- The Social Ideal, *International Journal of Ethics*, XVIII (1908), 205-20.
- The Place of Education among the Arts, *Educational Foundations*, XX (1908), 194-205.
- The Physical Welfare of School Children, *School and Home Education*, XXVIII (1909), 364-66.
- Normal Training for Rural Teachers, *ibid.*, XXIX (1910), 341-45.
- Instruction by Correspondence, *ibid.*, XXX (1910), 22-27; *Cyclopedia of Education*, II, 211-13.
- Educational Forces, *Educational Foundations*, XXII (1910), 65-70.
- Classification of the Sciences, *Popular Science Monthly*, IX (1911), 165-71.
- Medical Inspection in the Boston Public Schools, *School and Home Education*, XXXI (1911), 24-26.
- Wealth and Welfare, *Twentieth Century Magazine*, X (1912), 459-67.
- Competition, Natural and Industrial, *International Journal of Ethics*, XXII (1912), 399-419.
- The First Magazine, *School and Home Education*, XXXIII (1912), 99-102.
- ANNIE MARION MACLEAN [1900-], Extension Assistant Professor of Sociology.
- A.B. Acadia, 1893; Ph.D. Chicago, 1900; Professor of Sociology, Adelphi College, 1906-12; Professor of Sociology, National Training School of Y.W.C.A. (New York), 1906-12.
- Director, Sociological Investigation Committee of National Board of Y.W.C.A., 1907-9.
- Modern Methods of Charity* (with C. R. Henderson and others). New York: Macmillan Co., 1903.
- Wage-Earning Women*. xv+202. New York: Macmillan Co., 1910.
- Women Workers and Society*. xii+135. National Social Science Series. Chicago: McClurg & Co., 1916.
- The Sweatshop in Summer, *American Journal of Sociology*, IX (1903-4), 289-309.
- Significance of the Canadian Migration, *ibid.*, X (1904-5), 814-23.

Nova Scotia's Crusade against Tuberculosis, *Charities*, XIV (1904-5), 736-38.

Progressive Club of Working Women, *ibid.*, XV (1905-6), 299-302.

Women in Pennsylvania Coal Fields, *American Journal of Sociology*, XIV (1908-9), 329-51.

With Oregon Hop Pickers, *ibid.*, XV (1909-10) 83-95.

The Eleanor Clubs of Chicago, *Survey*, XXXII (1914), 60-61.

Trade Unionism versus Welfare Work for Women, *Popular Science Monthly*, LXXXVII (1915), 50-55.

The Plight of the Rich Man in a Democracy, *American Journal of Sociology*, XXI (1915-16), 339-44.

Fifty Years of the Y.W.C.A., *Survey*, XXXV (1916), 481-484.

EDITH ABBOTT [1909-10; 1914-], Lecturer in Methods of Social Investigation.

A.B. Nebraska, 1901; Ph.D. Chicago, 1905; Instructor in Economics, Wellesley, 1907-8; Associate Director, Department of Social Investigation and Staff Lecturer, Chicago School of Civics and Philanthropy 1908-; Special Lecturer in Political Economy, Chicago, 1909-10; Lecturer in Sociology, Chicago, 1914-.

Statistician for Chicago Crime Commission, 1914: Report on "Statistics Relating to Crime in Chicago," in the *Report of the Council Committee on Crime of the City of Chicago*. Chicago: City of Chicago, 1915.

Women in Industry: A Study in American Economic History. 8vo, 400. New York: D. Appleton & Co., 1910.

The Delinquent Child and the Home (with Sophonisba P. Breckinridge). 8vo, 355. New York: Charities Publication Committee, 1912.

The Real Jail Problem. 15. Juvenile Protective Association, 1915.

Truancy and Non-Attendance in the Chicago Schools (with Sophonisba P. Breckinridge). 12mo, xiv+472. Chicago: University Press, 1917.

Wage Statistics in the Twelfth Census, *Journal of Political Economy*, XII (1904), 339-61.

The Wages of Unskilled Labor in the United States, 1850-1900. Doctor's thesis. *Ibid.*, XIII (1905), 321-67.

Progress of the Minimum Wage in England, *ibid.*, XXIII (1915), 268-77.

A Forgotten Minimum Wage Bill, *Life and Labor*, V (1915), 13-17.

Are Women a Force for Good Government? An Analysis of the Returns in the Recent Municipal Election in Chicago, *National Municipal Review*, IV (1915), 437-47.

Education for Social Work, chap. xiii in *Annual Report of the United States Commissioner of Education*, I (1915), 345-59.

Field Work in Schools of Philanthropy, *Proceedings of the National Conference of Charities and Correction*, XLII (1915), 615-22.

The Woman Voter and the Spoils System in Chicago, *National Municipal Review*, V (1916), 460-65.

REVIEWS IN: *Journal of Political Economy*, XV, 563-65; XXIII, 400-401; *American Economic Review*, IV, 163-66; VI, 148.

B. WARREN BROWN [1915-], Instructor in Sociology.

A.B. Beloit, 1907; Instructor in Economics, Fargo College, 1910; Professor, *ibid.*, 1911; Research Assistant, International Prison Committee, 1914-15; Instructor in Sociology, Chicago, 1915-.

Parole as an Institution of the Future, *American Journal of Criminal Law*. In Press.

REVIEW IN: *Journal of Sociology*, XXI, 702-3.

MARY E. MCDOWELL [1894-], Head Resident of the University of Chicago Settlement; Special Instructor in Sociology.

Member of the City Waste Commission, 1913; Report: *Chicago Health Department*.

For a National Investigation of Women, *Independent*, LXII (1907), 24, 25.

Play a Child's Right—and Playgrounds a City's Duty, *Epworth Herald*, May 1, 1909, 17-19.

The Girl's Bill, *Survey*, XXII (1909), 509-14.

The National Woman's Trade Union League, *ibid.*, XXIII (1909), 101-8.

How Casual Work Undermines Family and Neighborhood Life (Abstract), *Proceedings of the National Conference of Charities and Correction*, Buffalo, N.Y., June, 1909.

When Poverty Keeps Step with Old Age, *Continent*, XLIII (1912), 1831-32.

The University of Chicago Settlement, *University of Chicago Magazine*, V (1913), 148-51.

ROMANZO COLFAX ADAMS, PH.D. 1904; Professor of Economics and Sociology, Nevada State University, Reno.

The Nature of the Social Unity: An Examination of the Theory That Society Is a Psychic Unity. Doctor's thesis. *American Journal of Sociology*, X (1904), 208-27.

LUTHER LEE BERNARD, PH.D. 1910; Assistant Professor of Sociology, University of Missouri, Columbia.

The Transition to an Objective Standard of Social Control. Doctor's thesis. 8vo, 96. Chicago: University Press, 1911.

EMORY STEPHEN BOGARDUS, PH.D. 1911; Professor and Head of the Department of Sociology, University of Southern California, Los Angeles.

Relation of Fatigue to Industrial Accidents. Doctor's thesis. *American Journal of Sociology*, XVII (1911-12), 206-22, 351-74, 512-39.

Experiments on Tactual Sensations of the White Rat (with F. G. Henke), *Journal of Animal Behavior*, I (1911), 125-37.

MANUEL CONRAD ELMER, PH.D. 1914; Assistant Professor of Sociology, University of Kansas, Lawrence.

Social Surveys of Urban Communities. Doctor's thesis. 8vo, 73. Menasha, Wis.: George Banta Publishing Co., 1914.

FRANCES FENTON (MRS. L. L. BERNARD), PH.D. 1910; Columbia, Mo.

The Influence of Newspaper Presentations upon the Growth of Crime and Other Anti-Social Activity. Doctor's thesis. 8vo, 96. Chicago: University Press, 1911.

HERBERT EASTON FLEMING, PH.D. 1905; Chicago.

The Literary Interests of Chicago. Doctor's thesis. *American Journal of Sociology*, XI (1905-6), 377-408, 499-531, 784-815; XII (1906-7), 68-118.

HECTOR MACPIERSON, PH.D. 1910; Professor of Economics, Oregon Agricultural College, Corvallis.

Co-operative Credit Associations in the Province of Quebec. Doctor's thesis. 8vo, 96. Kingston, Ontario: Jackson Press, 1910.

EBEN MUMFORD, PH.D. 1906; State Leader of Farm Management, Field Studies and Demonstrations, East Lansing, Mich.

The Origins of Leadership. Doctor's thesis. *American Journal of Sociology*, XII (1906-7), 216-40, 367-97, 500-531.

CECIL CLARE NORTH, PH.D. 1908; Assistant Professor of Sociology, Ohio State University, Columbus.

The Sociological Implications of Ricardo's Economics. Doctor's thesis. 8vo, 69. Chicago: University Press, 1915.

MABEL CARTER RHOADES, PH.D. 1906; Professor of Economics and Sociology, Wells College, Aurora, N.Y.

A Case Study of Delinquent Boys in the Juvenile Court of Chicago. Doctor's thesis. *American Journal of Sociology*, XIII (1907-8), 56-78.

THOMAS JAMES RILEY, PH.D. 1904; General Secretary, Bureau of Charities, Brooklyn, N.Y.

A Study of the Higher Life of Chicago. Doctor's thesis. 8vo, 136. Chicago: University Press, 1905.

EDWIN HARDIN SUTHERLAND, PH.D. 1913; Professor of Sociology, William Jewell College, Liberty, Mo.

Unemployed and Public Employment Agencies, *Report of the Mayor's Commission on Unemployment* (Chicago, 1914), 95-175.

ERVILLE BARTLETT WOODS, PH.D. 1906; Assistant Professor of Sociology, Dartmouth College.

The Work of American Prison Societies, *Journal of Prison Discipline and Philanthropy* (1903), 63-72.

Progress as a Sociological Concept. Doctor's thesis. *American Journal of Sociology*, XII (1906-7), 779-821.

THE DEPARTMENT OF HOUSEHOLD ADMINISTRATION

MARION TALBOT [1892-], Professor of Household Administration;
Dean of Women.

A.B. Boston, 1880; S.B. Massachusetts Institute of Technology, 1888; LL.D. Cornell, 1904; Lecturer, Lasell Seminary, 1888-91; Instructor in Domestic Science, Wellesley College, 1890-92; Assistant Professor of Sanitary Science, Chicago, 1892-95; Dean of Women, *ibid.*, 1892-; Associate Professor of Household Administration, *ibid.*, 1895-1905; Professor, *ibid.*, 1905-.

Member of the Editorial Board, *American Journal of Sociology*, 1895-.

The Education of Women. 8vo, ix+255. Chicago: University Press, 1910.

House Sanitation. 8vo, viii+116. Boston: Whitcomb & Barrows, 1912.

The Modern Household (with S. P. Breckinridge). 8vo, vi+93. Boston: Whitcomb & Barrows, 1912.

The Opportunity of the Teacher, *Elementary School Teacher*, IV (1904), 729-34.

Housekeeping Old and New, *World To-Day*, IX (1905), 1306-9.

Effect on Woman of Economic Independence—Educational Aspects, *American Journal of Sociology*, XIV (1909), 619-22.

Dormitory Life for College Women, *Religious Education*, IV (1909), 41-46.

Unveiling of the Alice Freeman Palmer Memorial Tablet, *University of Chicago Magazine*, II (1910), 257-58.

The College, the Girl, and the Parent, *North American Review*, CXCII (1910), 349-58.

Eminence of Women in Science, *Science*, XXXIII (1910), 866.

Entrance Requirements and Curriculum of the University of Chicago, *Journal of the Association of Collegiate Alumnae*, V (1912), 291-94.

Fraternities in Women's Colleges, *Century Magazine*, LXXXV (1913), 527-28.

Housing in Relation to Health, *Transactions of the Illinois Academy of Science*, VI (1913), 62-66.

Household Management, *Woman Citizen's Library*, XII (1914), 3003-82.

Address at Laying of Cornerstone of Ida Noyes Hall, *University Record*, I (1915), 134-36.

A Study of Student Diet, *Journal of Home Economics*, VII (1915), 409-16.

REVIEWS IN: *American Journal of Sociology*, XVI, 128-29; XVIII, 579; *Journal of Political Economy*, XVII, 481-82, 541-43; XXI, 169-70; *School Review*, XXIV, 79-80.

SOPHONISBA PRESTON BRECKINRIDGE [1899-], Assistant Professor of Social Economy in the Department of Household Administration; Assistant Dean of Women.

S.B. Wellesley, 1888; Ph.D. Chicago, 1901; J.D. *ibid.*, 1904; Assistant Dean of Women, *ibid.*, 1902-; Assistant Professor of Household Administration, *ibid.*, 1909-10; Assistant Professor of Social Economy, *ibid.*, 1910-; Dean, Chicago School of Civics and Philanthropy, 1908-.

Editor of *The Child in the City* (Papers Presented at Chicago Child-Welfare Exhibit). 8vo, xiii+502. Chicago: Chicago School of Civics and Philanthropy, 1912.

Handbook for the Housekeepers of Chicago. 12mo, 32. Chicago: University Press, 1907.

Employment for Children (with Edith Abbott and Anne S. Davis). 8vo, 56. Chicago: Chicago School of Civics and Philanthropy, 1911.

The Delinquent Child and the Home (with Edith Abbott). 8vo, 355. New York: Charities Publication Committee, 1912.

The Modern Household (with Marion Talbot). 8vo, vi+93. Boston: Whitcomb & Barrows, 1912.

Truancy and Non-Attendance in the Chicago Schools (with Edith Abbott). 12mo, xiv+472. Chicago: University Press, 1917.

Specie Contracts, *Sound Currency*, XI (1904), 1-12.

Two Decisions Relating to Organized Labor, *Journal of Political Economy*, XIII (1905), 593-97.

Employment of Women in Industries (with Edith Abbott), *ibid.*, XIV (1906), 14-40.

Legislative Control of Women's Work, *ibid.*, 107-9.

Housewife and Maid at Law, *Bulletin of Intermunicipal Research Committee*, II (1906), 7-9.

Child-Labor Legislation, *Elementary School Teacher*, IX (1909), 511-16.

The Illinois Ten-Hour Law, *Journal of Political Economy*, XVIII (1910), 465-70.

Neglected Widowhood in the Juvenile Court, *American Journal of Sociology*, XVI (1910-11), 53-87.

Chicago Housing Conditions (with Edith Abbott):

I. Housing of Non-Family Groups of Working Men, *ibid.*, 145-70.

II. Families in Furnished Rooms, *ibid.*, 289-308.

III. Back of the Yards, *ibid.*, 433-68.

The Community and the Child, *Survey*, XXV (1911), 782-86.

Securing and Training Social Workers, *National Conference of Charities*, XXXVIII (1911), 365-70.

Chicago Housing Conditions, IV: The West Side Revisited (with Edith Abbott), *American Journal of Sociology*, XVII (1911-12), 1-34.

Women in Industry: The Chicago Stockyards (with Edith Abbott), *Journal of Political Economy*, XIX (1911) 632-54.

Beginnings of Child Labor Legislation, *Survey*, XXVII (1911), 1044-45.

Chicago Housing Conditions, V: South Chicago at the Gates of the Steel Mills (with Edith Abbott), *American Journal of Sociology*, XVII (1911-12), 145-76.

Color Line in the Housing Problem, *Survey*, XXIX (1913), 575-76.

The Care of Needy Families in Their Homes, *Studies in Chicago Philanthropy*, III (1914), 1-6.

Guidance by the Development of Placement and Follow-up Work, *U.S. Bureau of Education Bulletin*, No. 14 (1914), 59-64.

Some Aspects of the Public School from a Social Worker's Point of View, *Journal of the Proceedings and Addresses of the National Education Association*, 1914, pp. 45-51.

Political Equality of Women and Women's Wages, *Annals of the American Academy of Political and Social Science*, LVI (1914), 122-34.

A Recent Case on Women and the Legal Profession, *Journal of Political Economy*, XXIII (1915), 64-70.

REVIEWS OF: Flexner and Baldwin, The Juvenile Courts and Probation, *International Journal of Ethics*, XXV, 405-9; Van Kleeck, Working Girls in Evening Schools, *School Review*, XXIII, 641-43. Other reviews in *Survey*, XIII, 511-13; XXXII, 345; *Journal of Political Economy*, XIII, 295-98; XIX, 801-3; *American Journal of Sociology*, XVII, 414-17; XX, 831-33.

ALICE PELOUBET NORTON [1901-13], Assistant Professor of Household Administration.

A.B. Smith, 1882; A.M. *ibid.*, 1897; Lecturer on Home Sanitation, Lasell Seminary, 1893-99; Lecturer Y.W.C.A. School of Domestic Science, Boston, 1895-1900; Assistant Professor of the Teaching of Home Economics, School of Education, Chicago, 1901-4; Assistant Professor of Household Administration, Chicago, 1904-13.

Editor of *The Journal of Home Economics*.

The Selection of Food: A Reading Course for Farmers' Wives. 8vo, 8. Ithaca: Cornell University, 1906.

Food and Dietetics. 8vo, 227. Chicago: American School of Home Economics, 1907; 2d ed., 1911.

Food for Children. 8vo, 15. Chicago: Child Welfare Exhibit, 1911.

Experiments in Cooking for Children (four articles), *House Beautiful*, 1902-3.

Household Arts in the Elementary School, *Elementary School Teacher*, IV (1904), 716-19.

A Lesson in Cooking in the Elementary School (with Jessie P. Rich), *Journal of Home Economics*, II (1910), 601-4.

Differentiation of College Work for Men and Women, *Smith Alumnae Quarterly*, November, 1914, pp. 12-15.

†EDNA DAISY DAY, PH.D. 1906.

Digestibility of Starch of Different Sorts as Affected by Cooking. Doctor's thesis. U.S. Department of Agriculture. Office of Experiment Stations, Bulletin 202 (1908), 42.

THE DEPARTMENT OF COMPARATIVE RELIGION

GEORGE BURMAN FOSTER [1895-], Professor of the Philosophy of Religion.

A.M. West Virginia, 1884; Ph.D. (hon.) Denison, 1892; Professor of Philosophy, McMaster, 1892-95; Associate Professor of Systematic Theology, Chicago, 1895-97; Professor, *ibid.*, 1897-1905; Professor of the Philosophy of Religion, *ibid.*, 1905-.

The Finality of the Christian Religion. 8vo, xi+518. Chicago: University Press, 1906.

† Deceased.

The Function of Religion in Man's Struggle for Existence. xi+293.
Chicago: University Press, 1909.

Modern Estimates of Jesus, *American Journal of Theology*, IX (1905),
333-37.

Concerning Immortality, *Biblical World*, XXVII (1906), 123-32.

Pragmatism and Knowledge, *American Journal of Theology*, XI (1907),
591-96.

Concerning the Religious Basis of Ethics, *ibid.*, XII (1908), 211-30.

Battle of the Jargons, *Outlook*, XCII (1909), 530.

Concerning Authority, *Methodist Quarterly Review*, LX (1911), 62-78.

Tolstoi, *ibid.*, LXII (1913), 699-708.

Concerning the Truth of Religious Ideas, *Biblical World*, XLI (1913),
65-67.

Status and Vocation of Our Colored People, *Survey*, XXIX (1913),
567-69.

Modern Militarism at the Judgment Bar, *Standard*, LXI (1914), 5-6, 11.

The Philosophy of Feminism, *Forum*, LII (1914), 10-22.

Function of Death in Human Experience. In *University of Chicago
Sermons* (edited by T. G. Soares), pp. 333-48. Chicago: Uni-
versity Press, 1915.

Contributions of Critical Scholarship to Ministerial Efficiency, *American
Journal of Theology*, XX (1916), 161-78.

REVIEWS IN: *American Journal of Theology*, VII, VIII, IX, X, XII,
XIII, XVII, XIX; *Biblical World*, XXI, XLI.

† GEORGE STEPHEN GOODSPEED [1892-1905], Professor of Comparative
Religion and Ancient History.

A.B. Brown, 1880; D.B. Baptist Union Theological Seminary, 1883; Ph.D. Yale,
1891; Associate Professor of Comparative Religion and Ancient History, Chicago,
1892-98; Professor, *ibid.*, 1898-1905.

A History of the Ancient World for High Schools and Academies. 8vo,
483. New York: Charles Scribner's Sons, 1904.

Men Who Made Israel, *Biblical World*, XXIX (1907), 34-40, 133-37,
361-69; XXX (1907), 202-7, 260-74.

REVIEW IN: *Nation*, LXXVI (1903), 236.

† Deceased.

† CHARLES CUTHBERT HALL [1902-3; 1906-7], Professorial Lecturer on the Barrows Lectureship.

A.B. Williams, 1872; D.D. University of New York, 1890; Harvard, 1897; Yale, 1901; LL.D. Union University, 1905; President, Union Theological Seminary, 1897-1908; Barrows Lecturer in India, University of Chicago, 1902-3; Haskell Lecturer, *ibid.*, 1903; Barrows Lecturer in India (second appointment), 1906-7.

Christian Belief Interpreted by Christian Experience. The Barrows Lectures for 1902-3. 8vo, xli+255. Chicago: University Press, 1905.

Christ and the Eastern Soul. The Barrows Lectures for 1906-7. 8vo, xli+208. Chicago: University Press, 1909.

LAETITIA MOON CONARD [1915-], Extension Assistant Professor of Comparative Religion.

A.B. Smith, 1894; Ph.D. Chicago, 1899.

The Idea of God Held by North American Indians, *American Journal of Theology*, VII (1903), 635-46.

A Visit to Quinault Indian Graves, *Open Court*, XIX (1905), 737-44.

EDMUND BUCKLEY [1894-1907], Docent in Comparative Religion; Kramer, Ind.

A.B., A.M. Michigan, 1884; Ph.D. Chicago, 1894; Professor of Philosophy, Doshisha College, Kyoto, Japan, 1886-92; Docent in Comparative Religion, Chicago, 1894-1907.

Shintoism, *New International Encyclopedia*, XV (1903), 776.

Landscape Gardening, *Encyclopedia Americana*, IX (1904).

Religion, *ibid.*, XIII (1904).

Science of Religion, *Biblical World*, XXIII (1904), 256-62, 349-57.

REVIEWS OF: Gulick, Evolution of the Japanese, *American Journal of Sociology*, IX, 716-21; Hearn, Japan, *ibid.*, X, 545-50.

ANDREW PETER FORS, PH.D. 1904; Clergyman, Chicago.

The Ethical World-Conception of the Norse People. Doctor's thesis. 8vo, 57. Chicago: University Press, 1904.

† Deceased.

THE DEPARTMENT OF ORIENTAL LANGUAGES AND LITERATURES

†WILLIAM RAINEY HARPER [1891-1906], President of the University; Professor and Head of the Department of Semitic Languages and Literatures.

A.B. Muskingum College, 1870; Ph.D. Yale, 1875; D.D. Colby, 1891; LL.D. Nebraska, 1893, Tulane, 1901, Yale, 1901, Johns Hopkins, 1902, Baylor, 1903, Wisconsin, 1904, Toronto, 1904; Principal, Masonic College, 1875-76; Tutor in Preparatory Department, Denison, 1876-79; Principal, *ibid.*, 1879-80; Professor of Hebrew and Cognate Languages, Baptist Union Theological Seminary, 1879-86; Professor of Semitic Languages, Yale, 1886-91; Woolsey Professor of Biblical Literature, *ibid.*, 1889-91; President of the University of Chicago, 1891-1906.

Principal of the American Institute of Sacred Literature, 1889-1906; Principal, Chautauqua College of Liberal Arts, 1885-91; Principal, Chautauqua System, 1891-98; Chairman of the Executive Board of the Religious Education Association, 1903-6.

Founder (1882) and Editor of the *Hebrew Student*, which became successively the *Old Testament Student*, the *Old and New Testament Student*, and the *Biblical World*; Founder (1884) and Editor of *Hebraica*, which subsequently became the *American Journal of Semitic Languages and Literatures*; Collaborating Editor of the *American Journal of Theology*, 1897-1906; Chairman of the editorial committee of *Christendom* and of the *World To-Day*; General Editor of *Ancient Records*; Editor (with E. D. Burton) of the *Constructive Bible Studies*.

Religion and the Higher Life. 16mo, viii+184. Chicago: University Press, 1904.

The Structure of the Text of the Book of Amos. 4to, 38. Chicago: University Press, 1904.

The Trend in Higher Education. 16mo, ix+390. Chicago: University Press, 1905.

The Structure of the Text of the Book of Hosea. 4to, 51. Chicago: University Press, 1905.

Amos and Hosea (International Critical Commentary). Crown 8vo, clxxxi+424. New York: Charles Scribner's Sons, 1905.

The Priestly Element in the Old Testament. 3d ed. 8vo, viii+292. Chicago: University Press, 1905.

† Deceased.

The Prophetic Element in the Old Testament. 8vo, viii+142. Chicago: University Press, 1905.

The High School of the Future, *School Review*, XI (1903), 1-3.

JAMES HENRY BREASTED [1894-], Professor of Egyptology and Oriental History; Chairman, Department of Oriental Languages and Literatures; Director of Haskell Oriental Museum.

A.B. Northwestern, 1888; Ph.D. Berlin, 1894; Hon. D.B. Chicago Theological Seminary, 1898; Assistant Director, Haskell Oriental Museum, Chicago, 1895-1901; Assistant Professor of Egyptology, *ibid.*, 1898-1902; Director of Haskell Oriental Museum, *ibid.*, 1901-; Associate Professor of Egyptology and Semitic Languages, *ibid.*, 1902-5; Professor of Egyptology and Oriental History, *ibid.*, 1905-; Chairman, Department of Oriental Languages and Literatures, *ibid.*, 1915-.

Director of the Egyptian Expedition of the University of Chicago in the Sudan, 1905-7; Corresponding Member of the Royal Academy of Berlin, 1907; Morse Lecturer, Union Theological Seminary, 1912; Ann Mary Brown Lecturer, Brown University, 1912-13.

Co-operating Editor, *American Journal of Semitic Languages and Literatures*, 1902-; Member of Editorial Board, *American Journal of Theology*, 1912-; Co-operating Editor, *Biblical World*, 1899-; Editor of *Ancient Records of Egypt*; Collaborator on *Egyptian Dictionary of Royal Academies of Germany*, at Berlin, 1899-1900.

Egypt: A Journey through the Land of the Pharaohs. 8vo, 350. New York: Underwood & Underwood, 1905.

A History of Egypt; from the Earliest Times to the Persian Conquest. 8vo, xxx+634. New York: Charles Scribner's Sons, 1905; 2d ed., 1909. German ed., 4to, xvi+478. Berlin: Karl Curtius, 1910. Braille ed. (for the blind), London: 1910. Russian ed., Moscow: M. & S. Sabaschnikoff, 1914.

Ancient Records of Egypt, I. 8vo, xlii+344. Chicago: University Press, 1906.

Ancient Records of Egypt, II. 8vo, xxviii+428. Chicago: University Press, 1906.

Ancient Records of Egypt, III. 8vo, xxviii+279. Chicago: University Press, 1906.

Ancient Records of Egypt, IV. 8vo, xxviii+520. Chicago: University Press, 1906.

The Temples of Lower Nubia. 4to, 64. Chicago: University Press, 1906.

- Ancient Records of Egypt*, V. 8vo, ix+203. Chicago: University Press, 1907.
- A History of the Ancient Egyptians*. 8vo, ix+469. New York: Charles Scribner's Sons, 1908.
- The Monuments of Sudancse Nubia*. 4to, 110. Chicago: University Press, 1908.
- Development of Religion and Thought in Ancient Egypt*. Lectures delivered on the Morse Foundation at Union Theological Seminary. 8vo, xix+379. New York: Charles Scribner's Sons, 1912.
- A Short Ancient History*. 8vo, 314. Boston: Ginn & Co., 1915.
- Ancient Times—A History of the Early World*. 8vo, 742. Boston: Ginn & Co., 1916.
- A City of Ikhenaton in Nubia, *ibid.*, XL (1902), 106-13.
- The Philosophy of a Memphite Priest, *The Open Court*, XVII (1903), 458-79.
- The Earliest Occurrence of the Name of Abram, *American Journal of Semitic Languages and Literatures*, XXI (1904), 22-36.
- The Eleventh Dynasty, *Abhandlungen der Königlich-Preussischen Akademie*, in "Aegyptische Chronologie" von Eduard Meyer (1904), 156-61; also in the *American Journal of Semitic Languages and Literatures*, XXI (1905), 110-14.
- The Report of Wenamon, *ibid.*, 100-109.
- When Did the Hittites Enter Palestine? *ibid.*, 153-58.
- New Light on the History of the Eleventh Dynasty, *ibid.*, 163-66.
- Exploration and Discovery, *Biblical World*, XXVI (1905), 67-69.
- The Earliest Fixed Date in History, *ibid.*, XXVIII (1906), 108-12.
- Recovery and Decipherment of the Monuments of Ancient Ethiopia, *ibid.*, XXXII (1908), 376-85.
- The Temple of Soleb, A New Form of Egyptian Architecture, *American Journal of Archaeology*, XIII (1909), 53-54.
- The University of Chicago on the Nubian Nile, *University of Chicago Magazine*, I (1909), 193-202.
- A Reading Journey through Egypt, *Chautauquan*, LVI (1909), 45-75, 203-26, 342-70; LVII (1909-10), 49-78, 206-37, 363-86; LVIII (1910), 40-63, 184-212, 333-60.

- The Royal Feud in the Wadi Halfa Temple, *Proceedings of the Society of Biblical Archaeology* (1909), 269-79; 3 plates, 5 cuts.
- The Royal Feud in the Wadi Halfa Temple: A Rejoinder, *American Journal of Semitic Languages and Literatures*, XXVI (1910), 162-68.
- The Earliest Social Prophet, *American Journal of Theology*, XIV (1910), 114-16.
- The "Field of Abram" in the Geographical List of Sheshonk I, *Journal of the American Oriental Society*, XXXI (1911), 290-95.
- The Physical Processes of Writing in the Early Orient and Their Relation to the Origin of the Alphabet, *American Journal of Semitic Languages and Literatures*, XXXI (1916), 230-49.

REVIEWS OF: Hall, The Ancient History of the Near East, *American Historical Review*, XIX, 582-86; a more detailed review of the same book (with remarks on Western Asia by Daniel David Luckenbill), *American Journal of Semitic Languages and Literatures*, XXX, 125-37. Other reviews in *American Journal of Semitic Languages and Literatures*, XXI, 247-50; XXIII, 264-67; XXV, 319; XXVI, 123, 133-36; XXVII, 346-47; XXIX, 229; *Nation*, LXXXIII, 291-92; LXXXVII, 606-7; LXXXIX, 20-21; XC, 520, 560-61; XCII, 151-52; XCIII; XCIV, 496-97, 588-89; XCV, 192-93; C, 24-25; *American Journal of Theology*, XIV, 119-20, 441-43; XVI, 452-54; *American Historical Review*, XVII, 109-11; *Journal of Philosophy, Psychology, and Scientific Methods*, IX, 585-87; *Classical Philology*, II; III, 119; V.

†ROBERT FRANCIS HARPER [1892-1914], Professor of the Semitic Languages and Literatures.

A.B. Old University of Chicago, 1883; Ph.D. Leipzig, 1886; LL.D. Muskingum College, 1902; Instructor in Semitic Languages, Yale, 1887-88, 1889-91; Associate Professor of the Semitic Languages and Literatures, Chicago, 1892-1900; Professor, *ibid.*, 1900-1914; Acting Head of the Department of Semitic Languages and Literatures, 1906-13.

Assyriologist to the University of Pennsylvania Expedition of the Babylonian Exploration Fund, 1888-89; Director, Oriental Exploration Fund for Babylonia, 1903-14; Director, American School for Oriental Study and Research in Palestine, 1908-9.

Co-operating Editor, *American Journal of Semitic Languages and Literatures*, 1891-1902; Managing Editor, *ibid.*, 1902-6; Editor, *ibid.*, 1906-14; Co-operating Editor, *Biblical World*, 1893-1914; Member of Editorial Board, *American Journal of Theology*, 1897-1914.

† Deceased.

Editor (with Francis Brown and George F. Moore) of *Old Testament and Semitic Studies in Memory of William Rainey Harper*. Two vols. Royal 8vo, I, xxxiv+400; II, vi+438. Chicago: University Press, 1908.

The Code of Hammurabi. 8vo, xv+192. 98 plates. Chicago: University Press, 1904.

Assyrian and Babylonian Letters Belonging to the Kouyunjik Collections of the British Museum. Part IX, 8vo, xxvi+120 plates (1909); Part X, 8vo, xvi+120 plates (1911); Part XI, 8vo, xvi+120 plates (1911); Part XII, 8vo, xviii+120 plates (1913); Part XIII, 8vo, xx+120 plates (1913); Part XIV, 8vo, xvi+120 plates (1914). Chicago: University Press; London: Cambridge University Press.

Assyriological Notes, *American Journal of Semitic Languages and Literatures*, XIX (1903), 228-32.

Report from Bismya, *ibid.*, 207, 208, 269, 270.

Assyrian and Babylonian Prayers, *Biblical World*, XXIII (1904), 279-86.

Babylonian Penitential Psalms, *ibid.*, 366-75.

Exploration and Discovery (Bismya), *ibid.*, 295-97, 449-51.

Prayers from the Neo-Babylonian Historical Inscriptions, *ibid.*, 428-34.

Notes on the Code of Hammurabi, *American Journal of Semitic Languages*, XXII (1905), 1-28.

REVIEW OF: Johns, Assyrian Deeds and Documents, *American Journal of Semitic Languages and Literatures*, XIX, 118-22.

JAMES RICHARD JEWETT [1902-11], Professor of the Arabic Language and Literature; Professor of Arabic, Harvard University.

A.B. Harvard, 1884; Ph.D. Strassburg, 1890; Instructor in Semitic Languages, Harvard, 1887-88; Instructor in Semitic Languages, Brown, 1890-91; Associate Professor of Semitic Languages and Oriental History, *ibid.*, 1891-95; Professor of Semitic Languages and History, Minnesota, 1895-1902; Professor of Arabic Language and Literature, Chicago, 1902-11.

Co-operating Editor, *American Journal of Semitic Languages and Literatures*, 1902-11.

Mir'ât az-Zamân. 4to, xiv+529. Chicago: University Press, 1907.

IRA MAURICE PRICE [1892-], Professor of the Semitic Languages and Literatures; Secretary of the Department.

A.B. Denison, 1879; D.B. Baptist Union Theological Seminary, 1882; Ph.D. Leipzig, 1886; LL.D. Denison, 1903; Professor of Greek and Modern Languages, University of Des Moines, 1879-80; Professor of Hebrew and Cognate Languages, Baptist Union Theological Seminary, 1888-92; Associate Professor, of Semitic Languages and Literatures, Chicago, 1892-1900; Professor, *ibid.*, 1900-.

Secretary of the Oriental Exploration Fund, 1903-; Gay Lecturer, Southern Baptist Theological Seminary, 1906.

Co-operating Editor, *American Journal of Semitic Languages and Literatures*, 1891-; Member of Editorial Board, *American Journal of Theology*, 1897-; Co-operating Editor, *Biblical World*, 1893-.

A Syllabus of Old Testament History, 6th ed., 1903; 7th ed., 1908; 8th ed., 1912; 9th ed., 1915. 8vo, xix+202. New York: Fleming H. Revell Co. Spanish ed., New York: Sociedad Americana de Tratados, 1915.

Some Literary Remains of Rim-Sin (Arioch), King of Larsa, about 2285 B.C. 4to, 28, with 5 plates. Chicago: University Press, 1904.

The Monuments and the Old Testament, 4th ed., revised, with Appendix on the Laws of Hammurabi, 5th ed., 1907; Chicago: Christian Culture Press; 6th ed., Philadelphia: American Baptist Publication Society, 1909.

The Ancestry of Our English Bible, 1st and 2d eds., 1907; 3d ed., 1909; 4th ed., 1910; 5th ed., 1911. 12mo, xxiv+418. Philadelphia: Sunday School Times Company. Spanish ed., New York: Sociedad Americana de Tratados, 1915.

Training the Teacher; A Bible Course for Teachers (with A. F. Schauffler). 12 mo, 144. Philadelphia: Sunday School Times Company, 1908. Indian ed., Jubbulpore, India: India Sunday School Union, 1913; translation into Tamil, *ibid.*, 1916; translation into Bengali, *ibid.*, 1916; translation into Burmese, Rangoon: American Baptist Mission Press, 1916.

Sundry Articles on Old Testament Antiquities and History, *Jewish Encyclopedia*, II-XI (1902-6).

Sundry Articles on Explorations in the Orient, *Biblical World*, XXIII (1904), 7-15, 64-65, 146-48; XXIV (1904), 305-10.

Four Babylonian Seal Cylinders, *American Journal of Semitic Languages and Literatures*, XX (1904), 109-15.

An Ancient Babylonian Ax-Head Inscription, *ibid.*, XXI (1905), 173-78.

- Assyriology, *Encyclopedia Americana*, II (1912).
- Some Phases of the Literature of the Old Testament and the Literature of the Ancient Orient, *Baptist Review and Expositor*, III (1906), 248-63.
- Some Phases of the Ethical Character of the Old Testament and the Ethics of Oriental Peoples, *ibid.*, 368-82.
- Some Cassite and Other Cylinder Seals, *Old Testament and Semitic Studies in Memory of William Rainey Harper*, I (1908), 383-400.
- Thirty-four Articles on Assyrian, Babylonian, and Phoenician History and Topography, *Standard Dictionary of the Bible* (one vol.), 1909.
- Apocrypha, *Hastings' Dictionary of the Bible* (one vol.). New York: Charles Scribner's Sons, 1909.
- Translation of Twenty-nine Inscriptions in J. Pierpont Morgan's Library, *Cylinders and Other Oriental Seals* (catalogued by William Hayes Ward), 1909.
- Translations of Babylonian and Assyrian Seals in *The Seal Cylinders of Western Asia*, by William Hayes Ward, published by the Carnegie Institution, 1909.
- Some Seals in the Goucher Collection, *American Journal of Semitic Languages and Literatures*, XXVI (1910), 169-76.
- The Just Shall Live by Faith, *Biblical World*, XXXV (1910), 39-45.
- And He Believed in Jehovah and He Reckoned It to Him for Righteousness, *ibid.*, 267-72.
- The Hebrew Text of the Old Testament, *ibid.*, XXXVII (1911), 247-54.
- Translation of Jeremiah, Ezekiel, and Daniel from the Hebrew, in *The Holy Bible, An Improved Edition* (published by the American Baptist Publication Society, Philadelphia, 1912), 854-929, 937-1024.
- The Animal DUN in the Sumerian Inscriptions, *Journal of the American Oriental Society*, XXXIII (1913), 402-4.
- Committee on Religious Education, *Encyclopedia of Sunday Schools and Religious Education*, I (1915), 280-82.
- History of the International Graded Lessons, *ibid.*, II (1915), 469-77.
- Some Methods of Old Testament Exegetes before Modern Times, *Biblical World*, XLVII (1916), 237-43.

Some Methods and Problems of the Modern Old Testament Exegetes, *Biblical World*, XLVII (1916), 298-305.

Some Observations on the Financial Importance of the Temple in the First Dynasty of Babylon, *American Journal of Semitic Languages and Literatures*, XXXII (1916), 250-60.

REVIEWS OF: Thureau-Dangin, Recueil de Tablettes Chaldéennes, *American Journal of Semitic Languages and Literatures*, XXI, 251-54; Combe, Histoire du culte de Sin au Babylonie et en Assyrie, *ibid.*, XXVI, 309-11; De Genouillac, La Trouvaille de Dréhem; De Genouillac, Tablettes de Dréhem; Langdon, Tablets from the Archives of Dréhem, *ibid.*, XXVIII, 211-15; Hussey, Sumerian Tablets in the Harvard Semitic Museum, *ibid.*, XXIX, 234-36. Other reviews in *American Journal of Theology*, IX, 516-19; XIV, 443-45; XVI, 114-16, 287-90; XVII, 119-20; XIX, 143-45, 312-14; *American Journal of Semitic Languages and Literatures*, XXVI, 198-200; XXIX, 63, 143-44; XXXI, 227; *Biblical World*, XXXIII, 208-11; XXXVI, 136-37, 283-86; XL, 425-28; *American Historical Review*, XXI, 840-41; *Dial*, XLVIII, 149-51.

JOHN MERLIN POWIS SMITH [1899-], Professor of Old Testament Languages and Literatures.

A.B. Des Moines, 1893; Ph.D. Chicago, 1899; Literary Secretary to President William Rainey Harper, 1899-1906; Assistant Professor of Semitic Languages and Literatures, Chicago, 1908-12; Associate Professor, *ibid.*, 1912-15; Professor of Old Testament Languages and Literatures, *ibid.*, 1915-.

Editor, *American Journal of Semitic Languages and Literatures*, 1915-; Collaborating Editor, *ibid.*, 1907-15; Secretary (with E. J. Goodspeed), Board of Editors, *Biblical World*, 1906-12; Collaborating Editor, *ibid.*, 1913-; Member, Editorial Board, *American Journal of Theology*, 1907-.

Books for Old Testament Study. An Annotated List for Popular and Professional Use. 8vo, 70. Chicago: University Press, 1908.

The Universal Element in the Psalter (Outline Bible-Study Course of the American Institute of Sacred Literature). Royal 8vo, 40. Chicago: University Press, 1908.

Biblical Ideas of Atonement: Their History and Significance (with E. D. Burton and G. B. Smith). 12mo, viii+335. Chicago: University Press, 1909.

A Critical and Exegetical Commentary on the Books of Micah, Zephaniah, and Nahum (International Critical Commentary). 8vo, 363. New York: Charles Scribner's Sons, 1911.

- A Critical and Exegetical Commentary on the Book of Malachi* (International Critical Commentary). 8vo, 87. New York: Charles Scribner's Sons, 1912.
- A Commentary on the Books of Amos, Hosea, and Micah.* 18mo, vii+216. New York: Macmillan Co., 1914.
- The Prophet and His Problems.* 12mo, xiv+244. New York: Charles Scribner's Sons, 1914.
- Heinrich Ewald and the Old Testament, *Biblical World*, XXII (1903), 407-15.
- Comparative Translations (of I Kings 8:21; Exod. 20:7; Ps. 19:12, 13; Eccles. 11:1; Job 19:25-27; Isa. 9:6; Gen. 3:15; Hab. 2:2-4; Jer. 31:33, 34; Ps. 16:8, 11; Isa. 26:3), *ibid.*, XXI, XXII, XXIII, XXIV (1903, 1904), 139, 302, 447; 139, 301, 449; 130, 287, 443; 126, 283.
- The Structure of Obadiah, *American Journal of Semitic Languages and Literatures*, XXII (1906), 131-38.
- The Rise of Individualism among the Hebrews, *American Journal of Theology*, X (1906), 251-66.
- The Strophic Structure of the Book of Micah, *American Journal of Semitic Languages and Literatures*, XXIV (1908), 187-208; also in *Old Testament and Semitic Studies in Memory of William Rainey Harper*, II, 415-38.
- The Jewish Temple at Elephantine, *Biblical World*, XXXI (1908), 448-59.
- Books of Samuel, Hastings' *Dictionary of the Bible* (one vol.), 823-25. New York: Charles Scribner's Sons, 1909.
- Wisdom, *ibid.*, 975-76.
- A Note on Malachi 2:15a, *American Journal of Semitic Languages and Literatures*, XXVIII (1912), 204-6.
- The Old Testament and Vital Religion, *Biblical World*, XLI (1913), 373-81.
- The Religion of the Hebrews and Modern Scholarship, *ibid.*, XLII (1913), 234-39, 305-8, 373-77; XLIII (1914), 44-48.
- The Deuteronomic Tithe, *American Journal of Theology*, XVIII (1914), 119-26.

שָׂאָר יְשׁוּבָה, *Zeitschrift für die alttestamentliche Wissenschaft*, XXXIV (1914), 219-24.

Religion and War in Israel, *American Journal of Theology*, XIX (1915), 17-31.

A Note on Hos. 4: 2, *ibid.*, 275-76.

The Study of the Old Testament and of the Religion of Israel. In *A Guide to the Study of the Christian Religion* (edited by G. B. Smith; Chicago: University Press, 1916), 83-161.

Some Problems in the Early History of the Hebrew Religion, *American Journal of Semitic Languages and Literatures*, XXXII (1916), 81-97.

The Effect of the Disruption upon the Hebrew Thought of God, *ibid.*, XXXII (1916), 261-69.

REVIEWS OF: Religion and Mythology in the Old Testament (Marti, Baentsch, Gressmann), *American Journal of Theology*, XI, 316-22; Gesenius, Hebräisches und Aramäisches Handwörterbuch über das Alte Testament, 15te Auflage, *ibid.*, XIV, 446-48; Lehmann-Haupt, Israel: seine Entwicklung im Rahmen der Weltgeschichte, *ibid.*, XV, 466-69; Gesenius, Hebräisches und Aramäisches Handwörterbuch über das Alte Testament, 16th ed., *ibid.*, XX, 113-15. Other reviews in *American Journal of Theology*, VIII, 391-93; IX, 521-22, 743-50; X, 318-27; XII, 644-50; XIII, 428-34; XV, 469-70; XVI, 456-59; XVII, 107-15, 270-73, 622-24; XVIII, 427-30; XIX, 284-85; XX, 111-13; *Biblical World*, XX, 481-82; XXI, 225-26; XXII, 153; XXV, 236-37; XXXII, 219-20, 361-62; XXXIII, 283-85; XXXV, 209-11; XXXVI, 282; XXXVIII, 282-85, 430-33; XLIII, 59-61; XLVII, 195-97.

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Editor, *Christian Century*.

Member, Vice Commission of Chicago; Report, *Social Evil in Chicago*, 1911.

Studies in the First Book of Samuel. 12mo, xxxviii+305. Chicago: University Press, 1909.

The Teaching of the Books (with James M. Campbell). 12mo, 337. New York: Fleming H. Revell Co., 1915.

Moral Leaders of Israel. Vol. I, 12mo, 255. Chicago: Disciples Publishing Society, 1916. Vol. II in press.

Religious Education as Affected by the Historical Study of the Bible, *Proceedings of the Religious Education Association*, I (1903), 88-99.

Jerusalem, *Biblical World*, XXVI (1905), 325-35.

Religious and Social Ideals of Israel (Outline Bible-Study Courses of the American Institute of Sacred Literature), *ibid.*, XLVI (1915), 258-63, 326-33, 398-404; XLVII, 63-70, 133-42, 207-14, 279-86, 351-58, 421-27.

PAUL NICOLAS MILYOUKOV [1903, 1904, 1905], Professorial Lecturer on Russian Institutions.

Abiturientenexamen, Moscow, 1877; A.M. Examination, 1885; Private Docent in Russian History, University of Moscow, 1886-95; Professor Ordinarius in History, University of Sofia, Bulgaria, 1897-98; Professorial Lecturer on Russian Institutions on the Crane Foundation, Chicago, 1903, 1904, and 1905.

Russia and Its Crisis. 8vo, xiv+589. Chicago: University Press, 1905.

SAMUEL NORTHRUP HARPER [1905-9; 1915-], Assistant Professor of the Russian Language and Institutions.

A.B. Chicago, 1902; Diplômé de l'École des Langues Orientales, Paris, 1905; Associate in Russian, Chicago, 1905-9; Lecturer in Russian Institutional History, Liverpool, 1911-13; Assistant Professor of the Russian Language and Institutions, Chicago, 1915-.

English edition of Boyer and Speranski's *Russian Reader*. 8vo, xii+386. Chicago: University Press, 1906.

The New Electoral Law for the Russian Duma. 16mo, 56. Chicago: University Press, 1908.

DANIEL DAVID LUCKENBILL [1907-], Assistant Professor of Semitic Languages and Literatures.

A.B. Pennsylvania, 1903; Ph.D. Chicago, 1907; Assistant Professor of Semitics, *ibid.*, 1915-.

Collaborating Editor, *American Journal of Semitic Languages and Literatures*, 1915-; Advisory Editor, *American Journal of Theology*, 1916-.

A Study of the Temple Documents from the Cassite Period. Doctor's thesis. *American Journal of Semitic Languages and Literatures*, XXIII (1907), 280-322.

The Temples of Babylonia and Assyria, *ibid.*, XXIV (1908), 291-322.

- A Neo-Babylonian Catalogue of Hymns, *American Journal of Semitic Languages and Literatures*, XXVI (1910), 27-32.
- Some Hittite and Mitannian Personal Names, *ibid.*, 96-104.
- The Excavations in Palestine, *Biblical World*, XXXV (1910), 21-32; 97-106.
- The Early Religion of Palestine, *ibid.*, 296-308; 365-79.
- Benhadad and Hadadezer, *American Journal of Semitic Languages and Literatures*, XXVII (1911), 267-84.
- Education in Ancient Egypt, *Cyclopedia of Education*, II (1911), 423-26.
- Systems of Writing, Chapter in Vol. VI of the *Foundation Library for Young People* (1911).
- Hadadezer, King of Syria, *Expository Times*, XXIII (1912), 282-84.
- Inscriptions of Early Assyrian Rulers, *American Journal of Semitic Languages and Literatures*, XXVIII (1912), 153-203.
- Jadanan and Javan (Danaans and Ionians), *Zeitschrift für Assyriologie*, XXVII (1913), 92-99.
- The Hittites, *American Journal of Theology*, XVIII (1914), 24-58.
- Two Inscriptions of Mesilim, King of Kish, *American Journal of Semitic Languages and Literatures*, XXX (1914), 219-23.
- Notes on Some Texts from the Cassite Period, *ibid.*, XXXI (1915), 79-87.
- Notes on the Brussels Vocabulary, *Revue d'Assyriologie*, XI (1914), 197.
- A Letter of Rim-Sin, *American Journal of Semitic Languages and Literatures*, XXXII (1916), 98-101.

REVIEWS OF: Patton, etc., *Biblical and Theological Studies* (with G. B. Smith and S. J. Case), *American Journal of Theology*, XVII, 94-102; Rogers, *Cuneiform Parallels to the Old Testament*, *ibid.*, 263-67; Koldewey, *Das wiedererstehende Babylon*, *ibid.*, XVIII, 420-25; Hall, *Ancient History of the Near East* (with J. H. Breasted), *American Journal of Semitic Languages and Literatures*, XXX, 125-37; Poebel, *Historical and Grammatical Texts* (with G. A. Barton), *ibid.*, 223-27. Other reviews in *Biblical World*, XXXIV, 211-13, 422-26; XXXV, 134-40; *Classical Philology*, VII, 257; IX, 342; *American Journal of Theology*, XII, 463-64; XIV, 314; XVII, 299-301; *American Journal of Semitic Languages and Literatures*, XXIX, 231-33; XXXI, 168, 222-23; XXXII, 309-11.

WILLIAM MUSS-ARNOLT [1893-1903], Assistant Professor of Biblical Philology; Boston Public Library.

D.B. Theological Seminary of the Reformed Dutch Church, New Brunswick, N.J., 1882; Ph.D. Johns Hopkins, 1888; Professor of Ancient Languages, New Windsor College, Md., 1888-90; Instructor in New Testament Greek, Johns Hopkins, 1891-93; Acting Professor of Semitic Languages and Hellenistic Greek, Michigan, 1893; Instructor in Biblical Philology, Chicago, 1893-1902; Assistant Professor of Biblical Philology, *ibid.*, 1902-3.

Collaborating Editor of the *American Journal of Semitic Languages and Literatures*, 1902-3.

A *Concise Dictionary of the Assyrian Language (Assyrian-English-German)*, Parts XII-XIX. 8vo, 705-1202 (completing Vol. II). Berlin: Reuther & Reichard, 1902-5.

Cherubim, *Jewish Encyclopedia*, IV (1903), 13-16.

Flood, *ibid.*, V (1903), 411-15.

Lexicographical Notes, *American Journal of Semitic Languages and Literatures*, XX (1904), 223-34.

Šupar^(amél) šuparšâk (û)^(amél) šakšupp(bb)ar, *ibid.*, 186-93.

REVIEWS OF: Geffcken, *Komposition und Entstehungszeit der Oracula Sibyllina*, *American Journal of Theology*, VII, 336-42. Other reviews in *American Journal of Theology*, III, 180-84; VI, 816-21, 829-30; VII, 336-42; IX, 178-80.

MARTIN SPRENGLING [1915-], Assistant Professor of Semitic Languages and Literatures.

A.B. Northwestern College, Watertown, Wis., 1894; Professor of Classical Languages and Literatures, *ibid.*, 1910-12; Instructor in Semitic Languages and Literatures, Harvard, 1912-15; Assistant Professor of Semitic Languages and Literatures, Chicago, 1915-.

Antonius Rhetor on Versification, *American Journal of Semitic Languages and Literatures*, XXXII (1916), 145-216.

America, Arabic, and Islam, *Biblical World*, XLVII (1916), 371-80.

Severus bar Shakko's Poetics, Part II, *American Journal of Semitic Languages and Literatures*, XXXII (1916), 293-308.

Zur Priorität des Apocopatus, *Zeitschrift für der Deutschen Morgenländischen Gesellschaft*. In Press.

REVIEWS OF: Karst, Eusebius' Chronik aus dem Armenischen, *American Journal of Theology*, XX, 295-97. Other reviews in *American Journal of Theology*, XIX, 622-24.

REGINALD CAMPBELL THOMPSON [1907-9], Assistant Professor of Semitic Languages.

M.A. Cambridge, 1898; Assistant, Department of Egyptian and Assyrian Antiquities, British Museum, 1899-1905; conducted excavations at Nineveh, 1904-5; Survey Department of Civil Service of Anglo-Egyptian Sudan, 1906; Assistant Professor of Semitic Languages, Chicago, 1907-9.

Semitic Magic: Its Origins and Development. 8vo, 286. London: Luzac & Co., 1908.

The Folklore of Mossoul, *Proceedings of the Society of Biblical Archaeology*, XXVIII (1907), 165-74; XXIX (1907), 282-88, 323-31; XXX (1908), 30-33.

Assyrian Prescriptions for Diseases of the Head, *American Journal of Semitic Languages and Literatures*, XXIV (1907), 1-6, 323-53.

An Assyrian Incantation against Rheumatism, *Proceedings of the Society of Biblical Archaeology*, XXX (1908), 63-69, 145-52, 245-51.

The City of Mosul, *Spectator* (London), No. 4155 (1908), 256.

The Ancient Gold Mines at Gebêt in the Eastern Sudan, *Man*, VIII (1908), 70-72.

A Late Babylonian Letter, *Proceedings of the Society of Biblical Archaeology*, XXXI (1909), 169-71.

THOMAS GEORGE ALLEN, PH.D. 1915; Chicago.

Horus in the Pyramid Texts. Doctor's thesis. 8vo, 76. Chicago: University Press, 1916.

REVIEWS IN: *Dial*, LVI, 382-84; LVII, 23, 301; LVIII, 347-48; LX, 83-84.

CAROLINE MAY BREYFOGLE, PH.D. 1912; Dean of Women and Professor of Biblical Literature, Ohio State University, Columbus.

The Social Status of Woman in the Old Testament, *Biblical World*, XXXV (1910), 106-16.

The Religious Status of Woman in the Old Testament, *ibid.*, 405-19.

The Hebrew Sense of Sin in the Pre-exilic Period. Doctor's thesis. *American Journal of Theology*, XVI (1912), 542-60.

†WILLIAM CALDWELL, PH.D. 1904.

The Idea of Creation: Its Origin and Its Value. Doctor's thesis. 8vo, 48. Fort Worth: Keystone Printing Co., 1909.

REBECCA CORWIN, PH.D. 1909; Professor of Biblical Literature, Central College for Women, Lexington, Mo.

The Verb and the Sentence in Chronicles, Ezra and Nehemiah. Doctor's thesis. 8vo, 51. Borna near Leipzig: Robert Noske, 1909.

CARL GAENSSLE, PH.D. 1914; Professor of Greek and Latin, Concordia College, Milwaukee, Wis.

The Hebrew Particle אֲשֶׁר. Doctor's thesis. 8vo, 142. Chicago: University Press, 1915.

ALLEN HOWARD GODBEY, PH.D. 1905; Pastor, St. Louis, Mo.

Political, Religious and Social Antiquities of the Sargonid Period. Doctor's thesis. *American Journal of Semitic Languages and Literatures*, XXI (1905), 65-82.

IVAN LEE HOLT, PH.D. 1909; Professor of Old Testament Literature and Chairman of the Theological Faculty, Southern Methodist University, Dallas, Tex.

Tablets from the R. Campbell Thompson Collection in Haskell Oriental Museum. Doctor's thesis. *American Journal of Semitic Languages and Literatures*, XXVII (1911), 193-232.

ROBERT JAMES GEORGE MCKNIGHT, PH.D. 1907; Wilkinsburg, Pa.

Selected Letters from Sargonid Period with Philological Notes. Doctor's thesis. 8vo, 19. Chicago: University Press, 1909.

ISAAC GEORGE MATTHEWS, PH.D. 1912; Professor of Old Testament Interpretation, McMaster University, Toronto.

The Jewish Apologetic to the Grecian World in the Apocryphal and Pseudepigraphical Literature. Thy Sons, O Zion, Against Thy Sons, O Greece.—Zech. 9:13. Doctor's thesis. 8vo, iv+72. Chicago: University Press, 1914.

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THEOPHILE JAMES MEEK, PH.D. 1915; Matthew Robb Professor of Biblical History and Literature, James Millikin University, Decatur, Ill.

Cuneiform Bilingual Hymns, Prayers and Penitential Psalms. iv+146. Leipzig: J. C. Hinrichs, 1913.

The Sabbath in the Old Testament, *Journal of Biblical Literature*, XXXIII (1914), 201-12.

Critical Notes, *American Journal of Semitic Languages and Literatures*, XXXI (1915), 286-87.

Old Babylonian Business and Legal Documents (the RFH Collection). Doctor's thesis. *Ibid.*, XXXIII (1917), 203-44.

REVIEWS IN: *American Journal of Semitic Languages and Literatures*, XXXI, 288-89, 290-91.

GEORGE ALFRED PECKHAM, PH.D. 1909; Professor of Hebrew and Old Testament, Hiram College, Hiram, Ohio.

An Introduction to the Study of Obadiah. Doctor's thesis. 8vo, 27. Chicago: University Press, 1910.

JOHN ROTHWELL SLATER, PH.D. 1905; Professor of English Literature, University of Rochester, Rochester, N.Y.

The Sources of Tyndale's Version of the Pentateuch. Doctor's thesis. 8vo, 56. Chicago: University Press, 1906.

DAVID EDWARD THOMAS, PH.D. 1913; Professor of Old Testament Languages and Literature, Alberta College, and Special Lecturer in Hebrew, University of Alberta, Edmonton, Canada.

The Psychological Approach to the Study of Prophecy. Doctor's thesis. *American Journal of Theology*, XVIII (1914), 241-56.

OLAF ALFRED TOFFTEEN, PH.D. 1905; Rector of Scandia Academy, Chicago.

Researches in Assyrian and Babylonian Geography, Part I. Doctor's thesis. 8vo, 59. Chicago: University Press, 1908.

LEROY WATERMAN, PH.D. 1912; Professor of Semitics, University of Michigan.

Textual Notes on the Letters of the Sargon Period, *American Journal of Semitic Languages and Literatures*, XXVIII (1912), 134-43.

Some Kouyunjik Letters and Related Texts. Doctor's thesis. *Ibid.*, XXIX (1913), 1-36.

Business Documents of the Hammurabi Period, *ibid.*, XXIX (1913), 145-204, 288-303.

THE DEPARTMENT OF NEW TESTAMENT AND EARLY CHRISTIAN LITERATURE

ERNEST DEWITT BURTON [1892-], Professor and Head of the Department of New Testament and Early Christian Literature; Director of University Libraries.

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Associate Editor, *Biblical World*, 1893-1906; Editor-in-Chief, *ibid.*, 1907-12; Collaborating Editor, *American Journal of Theology*, 1897-1904; Secretary of the Board of Editors, *ibid.*, 1905-6; with G. B. Smith, 1906-8; Managing Editor (with others), *ibid.*, 1909-15; Editor (with W. R. Harper), "Constructive Bible Studies," 1901-5; Sole Editor, *ibid.*, 1906-15; Editor (with S. Mathews and T. G. Soares), "University of Chicago Publications in Religious Education," 1915-; Editor of "Historical and Linguistic Studies in Literature Related to the New Testament"; Editor of the "Publications of the American Institute of Sacred Literature," 1905-.

Chairman of the Commission on Library Building and Policy of the University of Chicago, 1902: report in the "Decennial Publications of the University of Chicago"; Chairman of the Executive Committee of the American Institute of Sacred Literature, 1905-; Chairman of the Oriental Educational Commission of the University of Chicago, 1908-9; Member of the Commission on Education of the World Missionary Conference, Edinburgh, 1910: Vol. III of the *Reports of the Conference*; Chairman of the Board of Education of the Northern Baptist Convention, 1911-: annual reports; Member of the Commission on Education of the Congress on Christian Work in Latin America, 1915-16: volume in the *Reports of the Congress*.

A Short Introduction to the Gospels. 12mo, viii+144. Chicago: University Press, 1904.

- Studies in the Gospel According to Mark.* 12mo, xxx+248. Chicago: University Press, 1904.
- A Harmony of the Gospels for Historical Study* (with W. A. Stevens). 3d ed. rev. 8vo, 293. New York: Charles Scribner's Sons, 1904.
- Some Principles of Literary Criticism and Their Application to the Synoptic Problem.* University of Chicago Decennial Publications, V (1904), 193-264.
- Biblical Ideas of Atonement, Their History and Significance* (with J. M. P. Smith and Gerald B. Smith). 8vo, 343. Chicago: University Press, 1909.
- The Expansion of Christianity in the Twentieth Century* (with A. K. Parker). 4to, 48. Chicago: University Press, 1913.
- The Origin and Teaching of the New Testament Books* (with Fred Merrifield). 12mo, 102. Chicago: University Press, 1914.
- A Harmony of the Synoptic Gospels* [in English] (with E. J. Goodspeed). 8vo, xv+300. New York: Charles Scribner's Sons, 1916.
- The Present Problems of New Testament Study, *American Journal of Theology*, IX (1905), 201-37; published also in *Proceedings of St. Louis Congress of Arts and Science*, II (1906), 585-615.
- The Biblical Teaching Concerning Divorce, *Biblical World*, XXIX (1907) 121-27, 191-200.
- Supply of Educated Men for the Ministry, *ibid.*, 447-50.
- The Relation of Biblical to Systematic Theology, *ibid.*, XXX (1907), 418-28.
- Redemption from the Curse of the Law: An Exposition of Gal. 3:13, 14, *American Journal of Theology*, XI (1907), 624-46.
- Sin, Guilt, Condemnation, *Biblical World*, XXXI (1908), 184-93.
- Quotations (in the New Testament), *Hastings' Dictionary of the Bible* (one vol.), 779-80. New York: Charles Scribner's Sons, 1909.
- The Status of Christian Education in India, *American Journal of Theology*, XIV (1910), 169-91.
- China's Far West, *World To-Day*, XVIII (1910), 69-84.
- Good and Bad in the Western Invasion of China, *ibid.*, 251-61.
- Education Old and New in China, *ibid.*, 378-85.

Religion and Ethics in the Thought of the Apostle Paul: Gal. 5: 16, *Biblical World*, XXXVI (1910), 307-15.

The Place of the New Testament in a Theological Curriculum, *American Journal of Theology*, XVI (1912), 181-95.

Some Phases of the Synoptic Problem, *Journal of Biblical Literature*, XXXI, Part II (1912), 95-113.

The Office of Apostle in the Early Church, *American Journal of Theology*, XVI (1912), 561-88.

Some Implications of Paulinism, *Biblical World*, XL (1912), 403-12.

Spirit, Soul, and Flesh, I, *American Journal of Theology*, XVII (1913), 563-98; II, *ibid.*, XVIII (1914), 59-80; III, *ibid.*, 395-414, 571-99; IV, *ibid.*, XX (1916), 391-413; V, *ibid.*, 563-96.

The Salt of the Earth. In *University of Chicago Sermons* (edited by T. G. Soares; Chicago: University Press, 1915), pp. 37-54.

The Study of the New Testament (with E. J. Goodspeed). Chap. IV of *A Guide to the Study of the Christian Religion* (edited by G. B. Smith; Chicago: University Press, 1916), pp. 163-238.

REVIEWS IN: *American Journal of Theology*, X, 115-17; *Biblical World*, XXXV, 204-7.

SHIRLEY JACKSON CASE [1908-], Professor of Early Church History and New Testament Interpretation.

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Managing Editor (with Gerald B. Smith), *American Journal of Theology*, 1912-.

The Historicity of Jesus. 12mo, vii+352. Chicago: University Press, 1912.

The Evolution of Early Christianity. 12mo, x+386. Chicago: University Press, 1914.

The Historical Method in the Study of Religion, *Yale Divinity Quarterly*, IV (1908), 121-33.

The Circumstances of Jesus' Baptism, *Biblical World*, XXXI (1908), 300-302.

Was Christianity a New Religion? *ibid.*, XXXII (1908), 417-27.

- The First Christian Community, *Biblical World*, XXXIII (1909), 54-64.
- The Resurrection Faith of the First Disciples, *American Journal of Theology*, XIII (1909), 169-92.
- The Origin and Purpose of the Gospel of Matthew, *Biblical World*, XXXIV (1909), 391-402.
- The Legalistic Element in Paul's Religion, *ibid.*, XXXV (1910), 151-58.
- The Religion of Jesus, *American Journal of Theology*, XIV (1910), 234-52.
- The Missionary Idea in Early Christianity, *Biblical World*, XXXVI (1910), 113-25.
- Modern Belief about Jesus, *ibid.*, XXXVII (1911), 7-18.
- The Scribes' Interpretation of the Old Testament, *ibid.*, XXXVIII (1911), 28-40.
- The New Testament Writers' Interpretation of the Old Testament, *ibid.*, 92-102.
- To Whom Was "Ephesians" Written? *ibid.*, 315-20.
- Jesus in the Light of Modern Scholarship, *ibid.*, 262-71, 331-40, 409-15; XXXIX (1912), 55-62.
- The Nature of Primitive Christianity, *American Journal of Theology*, XVII (1913), 63-79.
- The Rehabilitation of Pharisaism, *Biblical World*, XLI (1913), 92-98.
- The Problem of Christianity's Essence, *American Journal of Theology*, XVII (1913), 541-62.
- Christianity and the Mystery Religions, *Biblical World*, XLIII (1914), 3-16.
- Divorce and Remarriage in the Teaching of Jesus, *ibid.*, XLV (1915), 18-22.
- The Religion of Lucretius, *American Journal of Theology*, XIX (1915), 92-107.
- Religion and War in the Graeco-Roman World, *ibid.*, 179-99.
- John Mark, *Expository Times*, XXVI (1915), 372-76.
- The Authority of the Spirit in the Religion of Paul. In *University of Chicago Sermons* (edited by T. G. Soares; Chicago: University Press, 1915), pp. 145-64.

Allegory, *Dictionary of the Apostolic Church*, I (1916), 50.

Interpretation, *ibid.*, 619-20.

The Study of Early Christianity. Chap. V of *A Guide to the Study of the Christian Religion* (edited by G. B. Smith; Chicago: University Press, 1916), pp. 239-326.

REVIEW OF: Preuschen, Vollständiges griechisch-deutsches Handwörterbuch zu den Schriften des Neuen Testaments, *American Journal of Theology*, XIV, 296-99. Other reviews in *American Journal of Theology*, XII, 486-87; XIII, 114-16, 119-20, 290-302, 459-63; XIV, 448-51, 458-62; XV, 116-21, 286-89, 291-92, 626-28; XVII, 122-28, 279-91, 431-32, 627-30; XVIII, 147-48, 300-301, 433-35, 440-45, 609-16; XIX, 457-59, 472-75; 599-602; XX, 126-27, 143-44; *Biblical World*, XXXIII, 137-39, 212-14; XXXIV, 64-67, 355-57; XXXVIII, 428; XXXIX, 356; *Classical Philology*, IV, 282-83; IX, 223-24; *Harvard Theological Review*, VII, 625.

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Secretary (with J. M. P. Smith) of the Board of Editors, *Biblical World*, 1907-12.

The Martyrdom of Cyprian and Justa. Historical and Linguistic Studies, First Series, Vol. I, Part II. 8vo, 21. Chicago: University Press, 1903.

Ancient Sermons for Modern Times: Asterius (with Galusha Anderson). 12mo, 157. Boston: Pilgrim Press, 1904.

Homeric Vocabularies (with W. B. Owen), 1st ed., 1906; 2d ed., 1909. 12mo, viii+62. Chicago: University Press.

Index Patristicus. 8vo, viii+262. Leipzig: J. C. Hinrichs, 1907.

The Tebtunis Papyri, Part II (with B. P. Grenfell and A. S. Hunt). 4to, xv+485. London: Henry Frowde, 1907.

Chicago Literary Papyri. 8vo, vii+50. Chicago: University Press, 1908.

The Life of Severus, Patriarch of Antioch (*Patrologia Orientalis*, IV, No. 6). 4to, 158. Paris: Firmin-Didot, 1908.

- The Epistle to the Hebrews.* (*The Bible for Home and School.*) 12mo, xi+132. New York: Macmillan Co., 1908.
- The Toronto Gospels.* Historical and Linguistic Studies, First Series, Vol. II, Part II. 8vo, 22. Chicago: University Press, 1911.
- Index Apologeticus.* 8vo, viii+300. Leipzig: J. C. Hinrichs, 1912.
- A Descriptive Catalogue of Manuscripts in the Libraries of the University of Chicago.* 8vo, xi+128. Chicago: University Press, 1912.
- The Freer Gospels.* Historical and Linguistic Studies, First Series, Vol. II, Part III. 8vo, 66. Chicago: University Press, 1914.
- The Bixby Gospels, ibid.,* First Series, Vol. II, Part IV. 8vo, 34. Chicago: University Press, 1915.
- Die ältesten Apologeten: Texte mit kurzen Einleitungen.* xi+380. Göttingen: Vandenhoeck & Ruprecht, 1915.
- The Story of the New Testament.* 16mo, xii+150. Chicago: University Press, 1916.
- A Harmony of the Synoptic Gospels* [in English] (with Ernest D. Burton). 8vo, xv+300. New York: Charles Scribner's Sons, 1916.
- A Fourth Century Deed, *Biblia*, XV (1903), 333-37.
- The Book with Seven Seals, *Journal of Biblical Literature*, XXII (1903), 70-74.
- The Ayer Mathematical Papyrus (with plate), *American Mathematical Monthly*, X (1903), 133-35.
- The Oldest Greek Book in the World, *Biblia*, XVI (1903), 72-74.
- Did Alexandria Influence the Nautical Language of St. Luke? *Expositor*, VIII (Sixth Series) (1903), 130-41.
- A Medical Papyrus Fragment (with plate), *American Journal of Philology*, XXIV (1903), 327-29.
- Alexandrian Hexameter Fragments (with plate), *Journal of Hellenic Studies*, XXIII (1903), 237-47.
- The Epistle of Pelagia, *American Journal of Semitic Languages and Literatures*, XX (1904), 95-108.
- An Ethiopic Manuscript of John's Gospel, *ibid.*, 182-85.
- A Toledo Manuscript of Laodiceans, *Journal of Biblical Literature*, XXIII (1904), 76-78.

- Greek Ostraca in America, *American Journal of Philology*, XXV (1904), 45-58.
- The Madrid Manuscript of Laodiceans, *American Journal of Theology*, VIII (1904), 536-39.
- Ethiopic Manuscripts in the Collection of Wilberforce Eames, *American Journal of Semitic Languages and Literatures*, XX (1904), 234-44.
- The Story of Eugenia and Philip, *ibid.*, XXI (1905), 37-56.
- Fresh Papyri from Oxyrhynchus (with plates), *Biblical World*, XXV (1905), 228-32.
- The Dialogue of Timothy and Aquila, *Journal of Biblical Literature*, XXIV (1905), 58-78.
- The Original Conclusion of the Gospel of Mark, *American Journal of Theology*, IX (1905), 484-90.
- Greek Documents in the Museum of the New York Historical Society, *Mélanges Nicole* (1905), Geneva, 177-91.
- A New Glimpse of Greek Tense-Movements in New Testament Times, *American Journal of Theology*, X (1906), 102-3.
- A Group of Greek Papyrus Texts, *Classical Philology*, I (1906), 167-75.
- Tertag and Sarkis: An Armenian Folk-Tale, from the Ethiopic, *American Antiquarian*, XXVIII (1906), 133-40.
- The Beirût Syriac Gospels, *Journal of Biblical Literature*, XXV (1906), 58-81.
- The Harvard Gospels, *American Journal of Theology*, X (1906), 687-700.
- Two Supposed Hebraisms in Mark, *Biblical World*, XXIX (1907), 311-12.
- Field Museum Inscriptions, *Classical Philology*, II (1907), 277-80.
- Greek Ostraca in the Haskell Museum, *American Journal of Archaeology*, XI (1907), 441-44.
- The New Gospel Fragment from Oxyrhynchus, *Biblical World*, XXXI (1908), 142-46.
- The Detroit Manuscripts of the Septuagint and New Testament, *ibid.*, 218-26.
- The Syntax of I Cor. 7: 18, 27, *American Journal of Theology*, XII (1908), 249-50.

- Greek Life from the Papyri, *Outlook*, LXXXIX (1908), 566-71.
- A Paris Fragment of Pseudo-Chrysostom, *American Journal of Theology*, XII (1908), 443-44.
- New Biblical Manuscripts for America, *Independent*, LXV (1908), 596-601.
- Karanis Accounts, *Classical Philology*, III (1908), 428-34.
- The Freer Gospels and Shenute of Atripe, *Biblical World*, XXXIII (1909), 201-6.
- The Nestorian Tablet, *ibid.*, 279-82.
- New Textual Materials from Oxyrhynchus, *ibid.*, 344-46.
- The Teima Stone, *ibid.*, 424-25.
- The Epistles to the Thessalonians, *ibid.*, XXXIV (1909), 48-56.
- The Greek Text of Mark 7:11, *Expository Times*, XX (1909), 471-72.
- Notes on the Freer Gospels, *American Journal of Theology*, XIII (1909), 597-603.
- Paul's Voyage to Italy, *Biblical World*, XXXIV (1909), 337-45.
- The Harrison Papyri, *Classical Philology*, V (1910), 320-22.
- Biblical Texts from the Papyri, *Biblical World*, XXXVI (1910), 67-68.
- A Lost Manuscript of Justin, *Zeitschrift für die Neutestamentliche Wissenschaft*, XI (1910), 243-44.
- The Old University of Chicago in 1867, *Journal of the Illinois State Historical Society*, III (1910), 52-57.
- The Freer Manuscript of Deuteronomy-Joshua, *Biblical World*, XXXVI (1910), 204-9.
- Professor Sanders' Deuteronomy-Joshua, *ibid.*, XXXVII (1911), 199.
- The New Testament of 1611 as a Translation, *ibid.*, 271-77.
- The Making of the New Testament, *ibid.*, 379-90.
- New Testament Manuscripts in America, *ibid.*, 420-24.
- First Clement Called Forth by Hebrews, *Journal of Biblical Literature*, XXX (1911), 157-60.
- A Fourth Century Odyssey, *Classical Journal*, VII (1911-12), 185-86.
- The Vocabulary of Luke and Acts, *Journal of Biblical Literature*, XXXI (1912), 92-94.

The Washington Manuscript of the Gospels, *American Journal of Theology*, XVII (1913), 240-49.

Professor Harnack and the Paris Manuscript of Justin, *ibid.*, 411-16.

A New Testament Anniversary: 1514-1914, *Biblical World*, XLIII (1914), 164-67.

The Divinity School, *University of Chicago Magazine*, VII (1915), 133-41.

Ostraca, *International Standard Encyclopedia*, IV, 2202-3. Chicago: Howard-Severance Co., 1915.

Papyri, *ibid.*, 2238-43.

Riches and Life. In *University of Chicago Sermons* (edited by T. G. Soares; Chicago: University Press, 1915), pp. 219-32.

Recent Discoveries in Early Christian Literature, *Biblical World*, XLVI (1915), 339-48.

The Salutation of Barnabas, *Journal of Biblical Literature*, XXXIV (1915), 162-65.

The Study of the New Testament (with Ernest D. Burton). Chap. IV of *A Guide to the Study of the Christian Religion* (edited by G. B. Smith; Chicago: University Press, 1916), pp. 163-238.

SHAILER MATHEWS [1894-], Professor of Historical and Comparative Theology. See under Department of Systematic Theology, p. 449.

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Associate Editor, *Biblical World*, 1896-1905; Associate Editor, *American Journal of Theology*, 1897-1915.

Editor of the *Proceedings of the Religious Education Association*, for 1903, 8vo, 430; for 1904, 8vo, 650. Chicago: The Religious Education Association.

Books for New Testament Study, 2d ed., 1905; 3d ed., 1911. 8vo, 64. Chicago: University Press.

The Sermon on the Mount, *Hastings' Dictionary of the Bible*, V (1904), 1-45.

- The Temple at Jerusalem in Jesus' Day, *Biblical World*, XXIII (1904), 169-79.
- The Newly Discovered Sayings of Jesus, *ibid.*, XXIV (1904), 261-77.
- The Oxyrhynchus Sayings of Jesus in Relation to the Gospel-Making Movement of the First and Second Centuries, *Journal of Biblical Literature*, XXIV, Part I (1905), 79-90.
- The Field of Religious Education in America, *Biblical World*, XXV (1905), 347-60.
- The Modern Jewish View of Jesus, *ibid.*, XXVI (1905), 101-19.
- The Chronology of Jesus' Public Ministry, *ibid.*, 425-30.
- The Apocalypse of John, *ibid.*, XXXI (1908), 32-40, 290-99; XXXII (1908), 39-50, 314-28.
- Religion and Morality in the Sunday School, *ibid.*, XXXIV (1909), 159-72.
- Moral Training in the Public Schools, *ibid.*, 295-306.
- Jesus' Ideal of Life, *ibid.*, XXXV (1910), 46-56.
- Four Principles Underlying Religious Education, *American Journal of Theology*, XIV (1910), 589-607.
- Peter and the Keys of the Kingdom, *Biblical World*, XXXVI (1910), 8-25.
- Survey on the Progress of Moral and Religious Education in the American Home, *Religious Education*, VI (1911), 1-30.
- The Gospels and Contemporary Biographies, *American Journal of Theology*, XIX (1915), 45-73, 217-49.
- The Ethical Teaching of Jesus, *Biblical World*, XLVI (1915), 249-57, 319-25, 389-97; XLVII (1916), 54-62.
- FRED MERRIFIELD [1911-], Assistant Professor of New Testament History and Interpretation.
 A.B. Chicago, 1898; D.B. *ibid.*, 1901; Instructor in New Testament History and Interpretation, *ibid.*, 1911-16; Assistant Professor, *ibid.*, 1916-.
- The Origin and Teaching of the New Testament Books* (with Ernest D. Burton). 12mo, 102. Chicago: University Press, 1914.
- The Origin and Growth of Early Christianity*. Chicago: University Press. In Press.

HENRY BURTON SHARMAN [1908-10], Instructor in New Testament History and Interpretation; Chicago.

S.B. Toronto, 1891; Ph.D. Chicago, 1906; Instructor in New Testament History and Interpretation, *ibid.*, 1908-10.

The Teaching of Jesus about the Future. Doctor's thesis. 8vo, xiv+382. Chicago: University Press, 1909.

The Expanding Church, *Biblical World*, XXXIII (1909), 123-29.

REVIEWS OF: Müller, *Geschichtskerne in den Evangelien nach modernen Forschungen*: Marcus und Matthäus; Wendling, *Ur-Marcus, Versuch einer Wiederherstellung der ältesten Mitteilungen über das Leben Jesu*; Burkitt, *The Gospel History and Its Transmission*, *American Journal of Theology*, XI, 680-85. Other reviews, *ibid.*, XIII, 123, 124, 289.

FRANK GRANT LEWIS [1907-8], Associate in New Testament Interpretation; Librarian, Crozer Theological Seminary and American Baptist Historical Society, Chester, Pa.

A.B. Brown, 1893; D.B. Rochester Theological Seminary, 1907; Ph.D. Chicago, 1907; Associate in New Testament Interpretation, *ibid.*, 1907-8.

The Irenaeus Testimony to the Fourth Gospel: Its Extent, Meaning, and Value. Doctor's thesis. 8vo, 62. Chicago: University Press, 1908.

Phases of the Johannine Problem, *Biblical World*, XXX (1907), 470-72.

Jesus' Attitude toward the Old Testament: An Exposition of Mark 7:1-23, *ibid.*, XXXI (1908), 131-37.

The Origin of the Fourth Gospel, *ibid.*, 462-63.

Paul's Earlier Relation with the Corinthians, *Homiletic Review*, LXIX (1908), 228-29.

REVIEWS IN: *Biblical World*, XXX, 235-37, 289-90, 470-72; *American Journal of Theology*, XI, 368; XII, 492, 525-26.

HAMILTON FORD ALLEN, PH.D. 1905; Professor in Washington and Jefferson College, Washington, Pa.

The Infinitive in Polybius Compared with the Infinitive in Biblical Greek. Doctor's thesis. Historical and Linguistic Studies, Second Series, Vol. I, Part IV. 8vo, 60. Chicago: University Press, 1907.

JOHN WILLIAM BAILEY, PH.D. 1904; President of Central College, Pella, Iowa.

Does Hellenism Contribute Constituent Elements to Paul's Christology?
Doctor's thesis. 8vo, 90. Chicago: George K. Hazlitt & Co., 1905.

Jewish Apocalyptic Literature, *Biblical World*, XXV (1905), 30-42.

REVIEWS OF: Works on Early Christian Catechisms, *American Journal of Theology*, IX, 768-73.

HENRY BEACH CARRÉ, PH.D. 1913; Professor of Biblical Theology and English Exegesis in Vanderbilt University.

Paul's Doctrine of Redemption. Doctor's thesis. 12mo, xi+175. New York: Macmillan Co., 1914.

REVIEWS IN: *Biblical World*, XXXII, 145-46; XXXIV, 426-28; *American Journal of Theology*, XIII, 125-27.

WILLIAM DUNCAN FERGUSON, PH.D. 1906; Professor in Albany College, Albany, Ore.

The Legal and Governmental Terms Common to the Macedonian Greek Inscriptions and the New Testament, with a Complete Index of the Macedonian Inscriptions. Doctor's thesis. Historical and Linguistic Studies, Second Series, Vol. II, Part III. 8vo, 109. Chicago: University Press, 1913.

JOHN COWPER GRANBERY, PH.D. 1909; Professor of Sociology and Economics, Southwestern University, Georgetown, Tex.

Outline of New Testament Christology; A Study of Genetic Relationships within the Christology of the New Testament Period. Doctor's thesis. Historical and Linguistic Studies, Second Series, Vol. II, Part I. 8vo, 128. Chicago: University Press, 1909.

ALPHONZO AUGUSTUS HOBSON, PH.D. 1903; Waltham, Mass.

The Diatessaron of Tatian and the Synoptic Problem; Being an Investigation of the Diatessaron for the Light Which It Throws upon the Solution of the Problem of the Origin of the Synoptic Gospels. Doctor's thesis. Historical and Linguistic Studies, Second Series, Vol. I, Part III. 8vo, 82. Chicago: University Press, 1904.

HARRIS LACHLAN MACNEILL, PH.D. 1910; Professor in Brandon College, Brandon, Manitoba.

The Christology of the Epistle to the Hebrews, Including Its Relation to the Developing Christology of the Primitive Church. Doctor's thesis. Historical and Linguistic Studies, Second Series, Vol. II, Part IV. 8vo, 148. Chicago: University Press, 1914.

FREDERICK OWEN NORTON, PH.D. 1906; Dean of the Colleges, Drake University, Des Moines, Iowa.

A Lexicographical and Historical Study of διαθήκη from the Earliest Times to the End of the Classical Period. Doctor's thesis. Historical and Linguistic Studies, Second Series, Vol. I, Part VI. 8vo, 72. Chicago: University Press, 1908.

ERNEST WILLIAM PARSONS, PH.D. 1912; Professor in Rochester Theological Seminary, Rochester, N.Y.

A Historical Examination of Some Non-Markan Elements in Luke. Doctor's thesis. Historical and Linguistic Studies, Second Series, Vol. II, Part VI. 8vo, 80. Chicago: University Press, 1914.

BENJAMIN WILLARD ROBINSON, PH.D. 1904; Professor of New Testament Interpretation, Chicago Theological Seminary.

Some Elements of Forcefulness in the Comparisons of Jesus with Comparative Tables of Metaphors from the Deutero-Isaiah and Paul. Doctor's thesis. *Journal of Biblical Literature*, XXIII (1904), 106-79.

HENRY BARTON ROBISON, PH.D. 1907; Professor, Christian University, Canton, Mo.

Syntax of the Participle in the Apostolic Fathers in the Editio Minor of Gebhart-Harnack-Zahn. Doctor's thesis. Historical and Linguistic Studies, Second Series, Vol. II, Part V. 8vo, 46. Chicago: University Press, 1913.

ALONZO ROSECRANS STARK, PH.D. 1911; Cleveland, Ohio.

The Christology in the Apostolic Fathers. Doctor's thesis. 8vo, x+60. Chicago: University Press, 1912.

CALVIN KLOPP STAUDT, PH.D. 1907; Assistant Professor, Whitworth College, Tacoma, Wash.

The Idea of the Resurrection in the Ante-Nicene Period. Doctor's thesis. Historical and Linguistic Studies, Second Series, Vol. I, Part VIII. 8vo, 90. Chicago: University Press, 1909.

EFFIE FREEMAN THOMPSON, PH.D. 1907; Kingston, N.Y.

Μετανοέω and μεταμέλει in Greek Literature until 100 A.D., Including Discussion of Their Cognates and of Their Hebrew Equivalents. Doctor's thesis. Historical and Linguistic Studies, Second Series, Vol. I, Part V. 8vo, 30. Chicago: University Press, 1908.

DEAN ROCKWELL WICKES, PH.D. 1912; North China Union College, Tungchow, Peking, China.

The Sources of Luke's Perean Section. Doctor's thesis. Historical and Linguistic Studies, Second Series, Vol. II, Part II. 8vo, 88. Chicago: University Press, 1912.

CHARLES BRAY WILLIAMS, PH.D. 1908; Professor, Southwestern Baptist Theological Seminary, Seminary Hill, Fort Worth, Tex.

The Participle in the Book of Acts. Doctor's thesis. 8vo, 80. Chicago: University Press, 1909.

IRVING FRANCIS WOOD, PH.D. 1903; Professor of Biblical Literature and Comparative Religion, Smith College.

The Spirit of God in Biblical Literature; A Study in the History of Religion. Doctor's thesis. 12mo, ii+280. New York: A. C. Armstrong & Son, 1904.

What Shall the Adult Bible Class Do with the Modern Biblical Scholarship? *Biblical World*, XXI (1903), 375-78.

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President, American Philological Association, 1916.

Member of the Board of Editors, *Studies in Classical Philology*, University of Chicago, 1895-1907; and of *Classical Philology*, 1906-.

Elementarbuch der oskisch-umbrischen Dialekte (Sammlung indogermanischer Lehrbücher, herausgegeben von Hirt, 7. Band). 16mo, xii+235. Heidelberg: Carl Winter, 1905.

Introduction to the Study of the Greek Dialects. Grammar, Selected Inscriptions, and Glossary. xv+320. Boston: Ginn & Co., 1910.

Indo-European or Indo-Germanic? *Classical Review*, XVIII (1904), 399-401.

Notes on Certain Forms of the Greek Dialects, *ibid.*, XIX (1905), 242-50, 286.

The General Linguistic Conditions in Ancient Italy and Greece, *Classical Journal*, I (1905-6), 99-110.

Relations of Comparative Grammar to Other Branches of Learning, *Proceedings of the St. Louis Congress of Arts and Science*, III (1906), 32-52.

The Interrelations of the Greek Dialects, *Classical Philology*, II (1907), 241-76.

Greek Dialect Notes, *Glotta, Zeitschrift für griechische und lateinische Sprache*, I (1908), 128-32.

An Archaic Boeotian Inscription, *Classical Philology*, IV (1909), 76-80.

Studies in Greek Noun-Formation, Introductory Note, *ibid.*, V (1910), 323-25.

On a New Argive Inscription, *ibid.*, V (1911), 219-20.

The Delphian Stadium Inscription, *ibid.*, VII (1912), 78-81.

A New Epigram from Thessaly, *ibid.*, 351-53.

The Interstate Use of the Greek Dialects, *ibid.*, VIII (1913), 133-59.

Hidden Quantities Again, *Classical Review*, XXVII (1913), 122-26.

Ησσε as Evidence for ēsse, *ibid.*, XXVIII (1914), 157-58.

Is the Suffix of βασιλισσα, etc., of Macedonian Origin? *Classical Philology*, IX (1914), 370-73.

Lesbian αι for ā and η, *ibid.*, X (1915), 215-16.

Words of Speaking and Saying in the Indo-European Languages, *American Journal of Philology*, XXXVI (1915), 1-18; *ibid.*, XXXVII (1916), 125-54.

Language and the Sentiment of Nationality, *American Political Science Review*, X (1916), 44-69.

Note on the Inscriptions of Halae, *Classical Philology*, XI (1916), 210-13.

REVIEW OF: Thumb, Handbook of the Modern Greek Vernacular, *Classical Philology*, IX, 85-96. Other reviews, *ibid.*, I, 89, 195, 299; II, 123; III, 102-3, 361, 362; VII, 120, 255, 378; X, 229-30.

FRANCIS ASBURY WOOD [1897-], Professor of Germanic Philology. *See under* Department of Germanic Languages and Literatures, p. 154.

WALTER EUGENE CLARK [1908-], Assistant Professor of Sanskrit.

A.B. Harvard, 1903; Ph.D. *ibid.*, 1904; Assistant Professor of Sanskrit, Chicago, 1915-.

REVIEWS IN: *American Journal of Theology*, XVII, 462-63, 463-64; XIX, 122-24, 124-25, 475-76, 616-18; XX, 139-41, 301-4, 305.

JOHN JACOB MEYER [1900-1908], Associate in Sanskrit and Indo-European Philology; Assistant Professor of German. *See under* Department of Germanic Languages and Literatures, p. 159.

GHEN-ICHIRO YOSHIOKA [1902-7], Docent in Japanese; Professor of English and Comparative Philology, Waseda University, Tokyo, Japan.

Ph.B. Northwestern, 1902; Ph.D. Chicago, 1907; Docent in Japanese, Chicago, 1892-97.

A Semantic Study of the Verbs of Doing and Making in the Indo-European Languages. Doctor's thesis. 8vo, 46. Tokyo, Japan: Tokyo Tsukiji Type Foundry, 1908.

CARLOS EVERETT CONANT, PH.D. 1911; Professor of Modern Languages, University of Chattanooga, Chattanooga, Tenn.

The Names of Philippine Languages, *Anthropos*, IV (1909), 1069-74.

The RGH Law in Philippine, *Journal of American Oriental Society*, XXXI (1910), 70-85.

Consonant Changes and Vowel Harmony in Chamorro, *Anthropos*, VI (1911), 136-46.

Monosyllabic Roots in Pampanga, *Journal of American Oriental Society*, XXXI (1911), 389-94.

The Pepet Law in Philippine Languages. Doctor's thesis. *Anthropos*, VII (1912), 920-47.

REVIEW IN: *Anthropos*, VI, 659-60.

WILLIAM CYRUS GUNNERSON, PH.D. 1904; Principal, Dozier School, St. Louis, Mo.

History of U-Stems in Greek. Doctor's thesis. 8vo, 72. Chicago: University Press, 1905.

IVY KELLERMAN (MRS. EDWIN C. REED), PH.D. 1904; Washington, D.C.

On the Syntax of Some Prepositions in the Greek Dialects. Doctor's thesis. 8vo, 79. Lancaster, Pa.: New Era Printing Co., 1904.

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Member of the Board of Editors, *Studies in Classical Philology*, University of Chicago, 1895-1907; Member of the Board of Editors, *Classical Philology*, 1906-; Managing Editor, *ibid.*, 1908-.

Horace, Odes and Epodes (edited with introduction and notes by Paul Shorey. Revised by Paul Shorey and Gordon J. Laing). 8vo, xxxvi+517. Boston: Benjamin H. Sanborn & Co., 1910.

Articles: Herodotus, Homer, Isocrates, Lucian, Plato, Sappho, Simonides, Socrates, Sophocles, Xenophon, *New International Encyclopaedia*, 1904.

- Are the Degrees of Bachelor of Science, Bachelor of Philosophy, and Bachelor of Letters to Be Preserved or to Be Merged in the Degree of Bachelor of Arts? *Journal of the Proceedings of the Fifth Annual Conference of the Association of American Universities* (1904), 63-75.
- Relations of Classical Literature to Other Branches of Learning, *Congress of Arts and Science, St. Louis*, III (1904), 370-85.
- Plato and Minucius Felix, *Classical Review*, XVIII (1904), 302-3.
- Note on Simplicius *De caelo*, *ibid.*, XIX (1905), 205.
- Note on Plato *Republic* 566E, *ibid.*, 438-39.
- Plato and His Lessons for Today, *Independent*, LX (1906), 253-56.
- Discipline in Modern Education, *Bookman*, XXIII (1906), 96-100.
- The Influence of the Classics on American Literature, *Chautauquan*, XLIII (1906), 121-32.
- Note on Xenophon *Anabasis* i. 7. 5, *Classical Journal*, I (1905-6), 155.
- Philology and Classical Philology, *ibid.*, 169-96.
- A Case of Iotacism in Themistius, *Classical Philology*, I (1906), 81.
- A Greek Source of Milton, *Modern Language Notes*, XXI (1906), 192.
- Note on Plato *Republic* 488D, *Classical Review*, XX (1906), 247-48.
- Note on Horace *Ars Poetica* 95 and Proclus on the Plain Style, *Classical Philology*, I (1906), 293-94.
- Himerius *Oration* i and Horace *Ars Poetica* 128, *ibid.*, 415.
- Emendation of Plato *Charmides* 168b, *ibid.*, II (1907), 340.
- Note on Plato *Crito* 49e-50A, *Classical Journal*, II (1906-7), 80, 81.
- The Meaning of οὐδὲν δέομαι, *ibid.*, 171-72.
- Word-Accent in Greek and Latin Verse, *ibid.*, 219-24.
- Benjamin Jowett, Teacher, Platonist, and Scholar, *Chautauquan*, XLVI (1907), 205-15.
- The Equivocations of Pragmatism, *Dial*, XLIII (1907), 273-75.
- The Force of καίτοι, *Classical Journal*, III (1907-8), 27-30.
- A Few Parallels from the Classics, *Modern Philology*, V (1907-8), 143-44.
- Some Ideals of Education in Plato's *Republic*, *Educational Bi-Monthly*, II (1908), 208-22.

- Choriambic Dimeter and the Rehabilitation of the Antispast, *Transactions of the American Philological Association*, XXXVIII (1908), 57-88.
- Eduard Zeller, *Nation*, LXXXVI (1908), 326-27.
- Notes on the Text of Alcinous Εισαγωγή, *Classical Philology*, III (1908), 97.
- An Emendation of Aelian, *ibid.*, 101.
- Varia, *ibid.*, 198, 199.
- The Service of Humanistic Studies to the Technical School, *Bulletin of Pennsylvania State College*, June, 1908, 54-69.
- Note on Plato *Philebus*, 11 B, C, *Classical Philology*, III (1908), 343-45.
- Notes on the Text of Simplicius *De caelo*, *ibid.*, 345.
- Emendations of Themistius' Paraphrase of Aristotle's *Physics*, *ibid.*, 447-49.
- Note on Thucydides ii. 15. 4, *ibid.*, IV (1909), 81, 82.
- Note on Diogenes Laertius iv. 59, *ibid.*, 86.
- On Aristotle *De part. an.* iv. 15, *ibid.*, 203.
- Hippias Paidagogos, *School Review*, XVII (1909), 1-10.
- The Spirit of the University of Chicago, *University of Chicago Magazine*, I (1909), 229-45.
- The Poet of Science, *Dial*, XLVI (1909), 17-19.
- συγγενής ὀφθαλμός, *Classical Philology*, IV (1909), 323.
- Emendation of Crates *Epistle* xix, *ibid.*, 323.
- Aeschylus Fr. 207 and the Satyr Chorus, *ibid.*, 433-36.
- Spelling Reform in Extremis, *Dial*, XLVII (1909), 321-23.
- A Greek Analogue of the Romance Adverb, *Classical Philology*, V (1910), 83-96.
- φύσις, μελέτη, ἐπιστήμη, *Transactions of the American Philological Association* XL (1909), 185-201.
- Integer Vitae* Once More, *Classical Journal*, V (1909-10), 317-21.
- The Spirit of Greek Athletics, *Chautauquan*, LVII (1910), 255-73.
- The Abiding Power of Greek Philosophy. Introduction to Vol. IV of *The Culture of the Classics*. New York: Vincent Parke & Co., 1910.

- Homer *Iliad* 24. 367 and Plato *Republic* 492C, *Classical Philology*, V (1910), 220-21.
- The Unity of the Human Spirit, *Oberlin Alumni Magazine*, VI (1910), 343-62; published also in *Phi Beta Kappa Addresses*. Boston: Houghton Mifflin Co., 1915.
- Mill Revealed in His Letters, *Dial*, XLVIII (1910), 417-19.
- The So-called "Archon Basileus" and Plato *Menexenus* 238D, *Classical Philology*, V (1910), 361-62.
- Emendation of Herodian *περὶ σχημάτων*, *ibid.*, 368.
- The Meaning of *κύκλος* in Plato *Rep.* 424A, *ibid.*, 505-7.
- The Case of the Classics, *School Review*, XVIII (1910), 585-617; published also in F. W. Kelsey's *Latin and Greek in American Education*. New York: Macmillan Co., 1911; and in *Mitteilungen des Vereins der Freunde des humanistischen Gymnasiums*, Wien und Leipzig (1911), 52-71.
- Note on Xenophanes Fr. 18 (Diels) and Isocrates *Panegyricus* 32, *Classical Philology*, VI (1911), 88-89.
- Solon's Trochaics to Phokos, *ibid.*, 216-18.
- American Scholarship, *Nation*, XCII (1911), 466-69; published also in *Classical Weekly*, IV (1911), 226-30; and in *Fifty Years of American Education*, 400-413. Boston: Houghton Mifflin Co., 1915.
- An Educational Culture-Bouillon, *School Review*, XX (1912), 73-80.
- Reply to Professor Bagley, *ibid.*, 417-21.
- Finis Controversiae, *ibid.*, 563.
- The Study of Greek Literature. In *Greek Literature*, 1-33. New York: Columbia University Press, 1912.
- Note on Lucretius iii. 59 ff., *Classical Philology*, VII (1912), 353-54.
- Emendation of Theophrastus *De sens.* 64 (Diels' *Vorsokratiker*² 375, 44), *ibid.*, 485-86.
- Emendation of Olympiodorus, *Scholia in Platonis Phaedonem* (Finckh, p. 39, l. 9), *ibid.*, VIII (1913), 90.
- Note on Aristotle *Metaphysics* 1086b, 32-37, *ibid.*, 90-92.
- The Rendering of Greek Verse: A Reply, *ibid.*, 217-20.
- ἀντιστροφή σὺν ἀντιθέσει*, *ibid.*, 228-29.

- Emendation of Julian *Oratio* v. 179C, *ibid.*, 229-30.
- Gomperz's Greek Thinkers (Aristotle), *Nation*, XCVI (1913), 77-79.
- Die Amerikanische Hoffnung (inaugural address of Roosevelt Exchange Professor), *Berliner Akademische Nachrichten*, VIII (1913), 31.
- Note on Aristotle's *De anima* 403a 23, *Classical Philology*, IX (1914), 191.
- Note on Aristotle's *De anima* 405a 3, *ibid.*, 316-17.
- Plato's *Laws* and the Unity of Plato's Thought, Part I, *ibid.*, 345-69.
- Hope (Greek and Roman), Hastings' *Encyclopaedia of Religion and Ethics*, VI (1914), 780.
- Der wahre Emerson, *Internationale Monatsschrift für Wissenschaft, Kunst, und Technik*, VIII (1914), 1417.
- Note on the Sixth Platonic Epistle, *Classical Philology*, X (1915), 87-88.
- Emendation of Sextus Empiricus *πρὸς γραμματικούς* 126, *ibid.*, 218-19.
- Emendation of Plato *Gorgias* 503D, *ibid.*, 325.
- Emendation of Maximus of Tyre xvii. 8, *ibid.*, 452-53.
- The Place of the Languages and Literatures in the College Curriculum. In *The American College*. New York: Henry Holt & Co., 1915.
- Nationale Kultur und klassische Bildung, *Mitteilungen des Vereins der Freunde des humanistischen Gymnasiums*, Wien und Leipzig, 1915.
- Isocrates, Hastings' *Encyclopaedia of Religion and Ethics*, VII (1915), 438.
- Religion in Greek and Roman Philosophy, *ibid.* In Press.
- Notes on Sextus Empiricus *πρὸς μουσικούς* 21, *Classical Philology*, XI (1916), 99.
- Emendation of Plato *Laws* 795B, *ibid.*, 213-15.
- Note on Stobaeus *Eclog.* ii. 104. 6W, *ibid.*, 338.

REVIEWS IN: *Classical Philology*, I, 295; II, 120-22, 128, 233-35, 359, 476, 497-98; III, 211-12, 348-49, 354, 360-61, 459, 461-62; IV, 106-8, 109-10, 238-40, 240, 361-64, 364, 491-94, 494-97, 497-98; VII, 114, 115, 379-81, 487-90, 490-92, 504, 505; VIII, 99, 121, 123, 232, 234, 235, 239, 361, 387, 502; IX, 98, 202-5; X, 96-98, 230-31, 231, 334-35, 464, 482, 483-86; XI, 111; *Classical Weekly*, I, 38-39; VIII, 173-74 and many others in *Nation*, *Classical Journal*, *Philosophical Review*, *Journal of Philosophy*, *Psychology*, and *Scientific Methods*, *American Historical Review*, *Classical Weekly*, and *Dial*.

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Member of the Board of Editors, *Classical Philology*, 1910-.

Greek Composition for Schools. 8vo, viii+248. Chicago: Scott, Foresman & Co., 1903.

Evidence in Athenian Courts. Doctor's thesis. 8vo, 98. Chicago: University Press, 1905.

Elementary Greek (with T. C. Burgess). 8vo, xviii+237. Chicago: Scott, Foresman & Co., 1907.

Note on *Rapuit* in Virgil *Aeneid* i. 176, *Classical Journal*, I (1905-6), 49, 50.

Did Women Testify in Homicide Cases at Athens? *Classical Philology*, I (1906), 127-32.

The Jurisdiction of Athenian Arbitrators, *ibid.*, II (1907), 407-18.

The Legal Setting of Plato's *Apology*, *ibid.*, III (1908), 169-77.

The Use and Effect of Attic Seals, *ibid.*, 399-407.

The Mutual Intelligibility of Greek Dialects, *Classical Journal*, IV (1908-9), 356-63.

The New Greek Historian, *ibid.*, V (1909-10), 353-59.

The Name "Ten Thousand," *Classical Philology*, V (1910), 97-99.

The Boeotian Federal Constitution, *ibid.*, 405-17.

Administration of Justice in the Age of Homer, *ibid.*, VI (1911), 12-36.

Administration of Justice in the Age of Hesiod, *ibid.*, VII (1912), 17-23.

Xenophon, *Anabasis* iv. 8. 27, *Classical Journal*, VII (1911-12), 184-85.

The Organization of the Ten Thousand, *ibid.*, 356-63.

Evidence in the Areopagus, *Classical Philology*, VII (1912), 450-59.

The Minimum Vote in Ostracism, *ibid.*, VIII (1913), 223-25.

Xenophon's Comrades in Arms, *Classical Journal*, X (1914-15), 195-205.

The Four Senates of the Boeotians, *Classical Philology*, X (1915), 381-85.

The Institution of Athenian Arbitrators, *ibid.*, XI (1916), 191-95.

REVIEWS IN: *Classical Philology*, II, 345-46; III, 115-17, 357-58; IV, 331-32; VI, 104-5, 490-91; VII, 252-53, 376-77, 408; VIII, 128, 128-29; X, 112-13; *Classical Journal*, II, 139-40.

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Managing Editor, *Classical Philology*, 1906-7; Editor (with H. W. Johnston) of the "Lake Classical Series" (Scott, Foresman & Co.), 1906-.

The "Nemesis" of the Younger Cratinus, *Harvard Studies*, XV (1904), 61-75.

The Roman Fragments of Athenian Comic Didascaliae, *Classical Philology*, I (1906), 201-21.

The "More Ancient Dionysia" at Athens—Thucydides ii. 15, *ibid.*, II (1907), 25-42.

Epigraphical Problems in the History of Attic Comedy, *American Journal of Philology*, XXVIII (1907), 179-99.

REVIEW OF: Wilhelm, Urkunden dramatischer Aufführungen in Athen, *American Journal of Philology*, XXVIII, 82-90. Other reviews in *Classical Philology*, I, 193-94, 425-26, 438-40; II, 123.

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Member of the Board of Editors, *Classical Philology*, 1909-.

Marginalia on the Hellenistic Poets, *Classical Philology*, IV (1909), 320-22.

Plautus' *Trinummus* 675, *ibid.*, V (1910), 103-4.

The *Versus Inconditi* of Pap. Oxyrhynch. 219, *ibid.*, 158-68.

Three *Puer*-Scenes in Plautus, *Harvard Studies in Classical Philology*, XXI (1910), 31-50.

An Epigram of Posidippus, *Classical Philology*, V (1910), 494-501.

Apuleius *Metamorphoses* ii. 29, *ibid.*, VI (1911), 90.

Marginalia on Apuleius' *Metamorphoses*, *ibid.*, 345-50.

The Position of "Deferred" Nouns and Adjectives in Epic and Dramatic Verse, *ibid.*, VII (1912), 35-58.

Plautus *Mercator* 59: *convicium* or *coniurium*? *Classical Philology*, VII (1912), 81-82.

Plautus *Mercator* 59 and Lambinus' Note, *ibid.*, 251.

Hellenistic Literature. In *Greek Literature*, 229-66. New York: Columbia University Press, 1912.

The *Amphitruo* of Plautus, *Classical Philology*, VIII (1913), 14-22.

ἔβα ῥόον, *Classical Quarterly*, VII (1913), 176-87.

The Interpretation of Roman Comedy, *Classical Philology*, XI (1916), 125-47.

FRANK BIGELOW TARBELL, Professor of Classical Archaeology. See under Department of History of Art, p. 66.

CLARENCE FASSETT CASTLE [1892-], Associate Professor of Greek on the Edward Olson Foundation.

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An Enlarged Platform, *Classical Journal*, II (1906-7), 263-65.

REVIEW IN: *Classical Journal*, II, 185-86.

GEORGE MILLER CALHOUN [1909-11], Assistant in Greek; Adjunct Professor of Greek, University of Texas, Austin.

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Athenian Clubs in Politics and Litigation. Doctor's thesis. 8vo, 172. Austin: University of Texas Bulletin, 1913.

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Plutarch as a Source of Information on the Greek Theater. Doctor's thesis. 8vo, 64. Chicago: University Press, 1904.

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The Platonism of Plutarch. Doctor's thesis. 8vo, 153. Menasha, Wis.: George Banta Publishing Co., 1916.

Note on Plutarch's *Moralia*, 720C, *Classical Philology*, VII (1914), 76.

FRANK EGGLESTON ROBBINS [1910-11], Assistant in Greek; Instructor in Greek, University of Michigan.

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The Hexaemeral Literature; a Study of the Greek and Latin Commentaries on Genesis. Doctor's thesis. Svo, 104. Chicago: University Press, 1912.

The Relation between Codices B and F of Pliny's *Letters*, *Classical Philology*, V (1910), 467-75.

Tables of Contents in the Manuscripts of Pliny's *Letters*, *ibid.*, 476-87.

ALBERT AUGUSTUS TREVER [1911-12], Assistant in Greek; Professor of Greek, Lawrence College, Appleton, Wis.

A.B. Lawrence College, 1896; Ph.D. Chicago, 1913; Instructor in Hebrew, DePauw, 1900-1902; Professor of Greek, Lawrence College, 1904; Assistant in Greek, Chicago, 1911-12.

History of Greek Economic Thought. Doctor's thesis. Svo, 162. Chicago: University Press, 1916.

ETHEL ELLA BEERS, PH.D. 1912; Parker High School, Chicago.

Euripides and Later Greek Thought. Doctor's thesis. Svo, 113. Menasha, Wis.: George Banta Publishing Co., 1914.

HAZEL LOUISE BROWN, PH.D. 1911; Township High School, Harvey, Ill.

Extemporary Speech in Antiquity. Doctor's thesis. Svo, 184. Menasha, Wis.: George Banta Publishing Co., 1914.

FRANK WINANS DIGNAN, PH.D. 1905; LaSalle Extension University, Chicago.

The Idle Actor in Aeschylus. Doctor's thesis. Svo, 43. Chicago: University Press, 1905.

EMILY HELEN DUTTON, PH.D. 1913; Professor of Latin and Greek, Tennessee College, Murfreesboro, Tenn.

Studies in Greek Prepositional Phrases. διά, ἀπό, ἐκ, εἰς, ἐν. Doctor's thesis. vi+211. Menasha, Wis.: George Banta Publishing Co., 1916.

JOHN LEONARD HANCOCK, PH.D. 1913; Instructor in Latin and Greek, University of Arkansas, Fayetteville.

Studies in Stichomythia. Doctor's thesis. 8vo, 97. Chicago: University Press, 1916.

ANNE BATES HERSMAN, PH.D. 1907; Hyde Park High School, Chicago.

Studies in Greek Allegorical Interpretation: I, Sketch of Allegorical Interpretation before Plutarch; II, Plutarch. Doctor's thesis. 8vo, 64. Chicago: Blue Sky Press, 1906.

JOHN EMORY HOLLINGSWORTH, PH.D. 1913; Professor of Greek and Latin, Missouri Valley College, Marshall, Mo.

Antithesis in the Attic Orators from Antiphon to Isaeus. Doctor's thesis. 8vo, ix+87. Menasha, Wis.: George Banta Publishing Co., 1915.

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Simile and Metaphor in Greek Poetry from Homer to Aeschylus. Doctor's thesis. 8vo, 138. Menasha, Wis.: George Banta Publishing Co., 1914.

GENEVA MISENER, PH.D., 1903; Assistant Professor of Classics, University of Alberta, Edmonton, Canada.

The Meaning of γάρ. Doctor's thesis. 8vo, 75. Baltimore: Lord Baltimore Press, 1904.

KELLEY REES, PH.D. 1906; Professor of Classics, Reed College, Portland, Ore.

The So-called Rule of Three Actors in the Classical Greek Drama. Doctor's thesis. 8vo, 86. Chicago: University Press, 1908.

DAVID M. ROBINSON, PH.D. 1904; Professor of Classical Archaeology and Epigraphy, and Lecturer on Greek Literature, Johns Hopkins University.

Notes on the Æolian Choregic Inscriptions, *American Journal of Philology*, XXV (1904), 184-91.

A New Sinopean, *Berliner philologische Wochenschrift*, XXIV (1904), 1566-77.

Terra Cotta Finds at Corinth in 1903, *American Journal of Archaeology*, IX (1905), 72.

Ancient Sinope: An Historical Account, with a Prosopographia Sinopensis and an Appendix of Inscriptions. Doctor's thesis. *American Journal of Philology*, XXVII (1906), 125-53, 245-79.

LARUE VAN HOOK, PH.D. 1904; Associate Professor of Classical Philology, Columbia University.

The Metaphorical Terminology of Greek Rhetoric and Literary Criticism. Doctor's thesis. 8vo, 51. Chicago: University Press, 1905.

A Stamped Tile from Amyclae, *Berliner philologische Wochenschrift*, XXIV (1904), 1469.

THE DEPARTMENT OF THE LATIN LANGUAGE AND LITERATURE

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Corresponding Member, German Archaeological Institute of Berlin, Athens, and Rome; President, American Philological Association, 1892-93; Director, American School of Classical Studies in Rome, 1895-06; Chairman, Managing Committee, *ibid.*, 1895-99; Member of the Executive Committee, Classical Association of the Middle West and South, 1905-; Honorary Member, Cambridge [England] Philological Society, 1907; Vice-President, [English] Classical Association, 1907-.

Associate Editor, *Classical Review*, 1889-; Associate Editor, *Classical Quarterly*, 1907-; Member, Board of Editors, *Studies in Classical Philology*, University of Chicago, 1895-1907, and of *Classical Philology*, 1906-; Member, Board of Advisors of *Loeb Classical Library*, 1910; formerly Honorary Editor, *American Journal of Archaeology*; formerly Joint Editor, *Cornell University Studies in Classical Philology*.

Chairman of the Latin Auxiliary Committee of Twelve, 1894-96; Member of the Committee of Twelve of the American Philological Association on College Entrance Requirements, 1896-99; Member of the Committee on College Entrance Requirements in Latin, 1909; Chairman of the Joint Committee of the National Education Association, the Modern Language Association of America, and the

- American Philological Association on Grammatical Nomenclature, 1911-; Author of parts of the Committee's *Report on Grammatical Nomenclature*. 8vo, viii+65. Chicago: University Press, 1914.
- A First Latin Book*, 1st ed., 1907; rev. ed., 1912. 12mo, 354. Chicago and Boston: Atkinson, Mentzer & Grover.
- Latin Prose Composition, Based on Caesar* (with Charles H. Beeson and Wilbert L. Carr). 12mo, 137. Chicago and Boston: Atkinson, Mentzer & Grover, 1910.
- Table and Explanations of the Uses of the Latin Subjunctive in "An Experiment in the Teaching of First and Second Year Latin," *Classical Journal*, I (1905-6), 7-18.
- Catullus Once More, *Classical Review*, XX (1906), 160-64.
- A Century of Metaphysical Syntax, *Proceedings of St. Louis Congress of Arts and Science*, III (1906), 191-202.
- An Unrecognized Construction of the Latin Subjunctive: The Second Person Singular in General Statements of Fact, *Classical Philology*, I (1906), 21-42.
- The Quantitative Pronunciation of Latin, and Its Meaning for Latin Versification, *Classical Journal*, II (1906-7), 101-10.
- Indoeuropäische Modus-Syntax: eine Kritik und ein System, *Verhandlungen der Versammlung deutscher Philologen und Schulmänner in Basel* (1908), 155-56.
- The Heritage of Unreason in Syntactical Method, *Proceedings of the [English] Classical Association for 1907*, V (1908), 1-12.
- Relative Standards in Science and in Syntax, *Proceedings of the American Philological Association*, XXXIX (1908), xxx-xxxiii.
- The Manuscripts of Catullus, *Classical Philology*, III (1908), 233-56.
- Benzo of Alexandria and Catullus, *ibid.*, V (1910), 56-65.
- Latin Composition. I: As the College Conceives It, *School Review*, XVIII (1910), 225-40.
- Latin Composition. II: As the Manuals Conceive It, *ibid.*, 297-318.
- Conflicting Terminology for Identical Conceptions in the Grammars of Indo-European Languages, *Proceedings of the American Philological Association*, XL (1910), xl-xliii.

The Harmonizing of Grammatical Nomenclature, with Especial Reference to Mood-Syntax. I, *Publications of the Modern Language Association of America*, XXVI (1911), 379-41; II, *ibid.*, XXVII (1912), 419-60.

The Practical Value of Humanistic Studies, *School Review*, XIX (1911), 657-79; published also in *University Bulletin, University of Michigan*, XIII (1912), 36-58.

The Harmonizing of Grammatical Nomenclature in High-School Study, *School Review*, XIX (1911), 361-82.

The Closing of the Symposium on Grammatical Nomenclature, *ibid.*, 630-42.

Note on the Work of the Joint Committee of Fifteen on Grammatical Terminology, *ibid.*, XX (1912), 46-52.

(The foregoing three articles are reprinted in the *University Bulletin, University of Michigan*, XIII [1912], 3-24, 45-57, 58-64.)

The Classification of Sentences and Clauses, *School Review*, XXI (1912), 388-97.

Origin of the Distinction of Tenses in Latin Prohibitions, *Indogermanische Forschungen*, XXXI (1912), Festschrift in honor of Berthold Delbrück, 272-75.

Address at the Laying of the Cornerstone of the Classics Building, June 9, 1914, *Classical Journal*, X (1914-15), 387-95.

Co-operation in the Classroom, *ibid.*, XI (1915-16), 262-77.

REVIEWS OF: Stahl, Syntax des griechischen Verbums, *Classical Philology*, IV, 439-47; Bennett, Syntax of Early Latin, Vol. I, *ibid.*, VI, 367-74.

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A.B. Yale, 1882; Ph.D. *ibid.*, 1891; Associate Professor of Latin, Chicago, 1891-94; Professor of Latin, *ibid.*, 1894-1908.

Professor of Latin in the American School of Classical Studies in Rome, 1901-2.

Member of the Board of Editors, *Classical Philology*, 1906-.

A Short History of Rome. 12mo, 304. Chicago: Scott, Foresman & Co., 1906.

Handbook for the Study of Roman History. 48. Chicago: Scott, Foresman & Co., 1906.

- Roman Political Institutions* (new ed.). 450. Boston: Ginn & Co., 1908.
- The Evolution of the Modern Forms of the Letters of Our Alphabet, *Modern Philology*, II (1904-5), 307-19.
- The Constitutional Argument in the Fourth Catilinarian Oration, *Classical Journal*, II (1906-7), 123-25.
- The Use of Language as a Means of Characterization in Petronius, *Classical Philology*, II (1907), 43-50.
- The Theory of Iambic Shortening, *ibid.*, 98-100.
- Notes upon MSS containing Persius and Petrus Diaconus, *ibid.*, 331-33.
- The Accent in Vulgar and Formal Latin, *ibid.*, 444-60.
- Municipal Politics in Pompeii, *Classical Journal*, III (1907-8), 58-66.
- Some Spurious Inscriptions and Their Authors, *Classical Philology*, III (1908), 22-30.
- Notes on Latin Accent, *ibid.*, 101, 203-5.
- REVIEWS IN: *Classical Philology*, I, 183-87; II, 359-60, 470-73; III, 120-21; *Classical Journal*, I, 208; II, 315-16; III, 38-39, 292-93; *American Historical Review*, XII, 351-52.
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- Member of the Board of Editors, *Classical Philology*, 1906-.
- The Peripatetic Mean of Style and the Three Stylistic Characters, *American Journal of Philology*, XXV (1904), 125-46.
- Zu Catulls 98tem Gedicht, *Rheinisches Museum für Philologie*, LIX (1904), 478.
- The Origin and Meaning of the Ancient Characters of Style, *American Journal of Philology*, XXVI (1905), 249-90.
- Notes on Tacitus *Dialogus* 20. 10, *Classical Philology*, I (1906), 81.
- The *De Analogia* of Julius Caesar; Its Occasion, Nature, and Date, with Additional Fragments, *ibid.*, 97-120.
- A Note on Seneca *Epp. Mor.* 82, 20, *ibid.*, 412.
- Literary Sources in Cicero's Brutus, and the Technique of Citation in Dialogue, *American Journal of Philology*, XXVII (1906), 184-99.

Chaucer and Petrarch: Two Notes on the Clerkes Tale, *Modern Philology*, IV (1906-7), 179-92.

Horace's Propempticon to Virgil, *Classical Journal*, III (1907-8), 100-105.

REVIEW OF: Kroll, Die Altertumswissenschaft im letzten Vierteljahrhundert, *Classical Philology*, II, 230-34. Other reviews in *Classical Philology*, I, 69, 304; II, 367.

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Professor of Latin in the American School of Classical Studies in Rome, 1911-12.

Managing Editor of the *Classical Journal*, 1905-8; Member of the Board of Editors, *Classical Philology*, 1906-; General Editor, University of Chicago Press, 1908-; Editor of *Publications of the Members of the University of Chicago*, 1902-16.

Selections from Ovid. 8vo, xl+300. New York: D. Appleton & Co., 1905.

First Latin Lessons (with M. Smith). 12mo, x+246. Boston: Allyn & Bacon, 1908.

The "Phormio" of Terence. 12mo, x+91. Chicago: Scott, Foresman & Co., 1908.

Shorey's Odes and Epodes of Horace (revised in collaboration with Paul Shorey). 8vo, xxxvi+517. Boston: Benjamin H. Sanborn Co., 1910.

Translation of Alberico Gentili's *Tres Libri de Legationibus*. In *Classics of International Law* (Carnegie Endowment). Oxford University Press, American Branch. In Press.

Roman Milestones and the *Capita Viarum*, *Transactions of the American Philological Association*, XXXIX (1908), 15-34.

Legend of the Trojan Settlement in Latium, *Classical Journal*, VI (1910-11), 51-64.

Roman Prayer and Its Relation to Ethics, *Classical Philology*, VI (1911), 180-96.

Tertullian and the Pagan Cults, *Proceedings of the American Philological Association*, XLIV (1913), xxxv-vii.

The Cults of the City of Rome as Seen in the Inscriptions, *American Journal of Archaeology*, XVIII (1914), 80-81.

Roman Priests and Priesthoods, Hastings' *Encyclopaedia of Religion and Ethics*, s.v. "Priest," pp. 324-34.

REVIEWS IN: *Classical Review*, XIX, 232-34; *American Journal of Philology*, XXVI, 330-42; *Dial*, XLVI, 112-14; *Classical Philology*, IV, 216-17, 230; VIII, 110-13, 129-30, 249-51; *Classical Journal*, VI, 91-92, 142-43, 190-92; IX, 406-7, 408-9; *Classical Weekly*, VI, 69, 117-19.

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Professor of Latin in American School of Classical Studies in Rome, 1898-99; Acting Chairman and Chairman, Managing Committee, *ibid.*, 1899-1901; President, American Philological Association, 1906-7.

Member of the Board of Editors, *Classical Philology*, 1908-; Contributing Editor, *American Journal of Archaeology*, 1908-.

C. *Plini Caecili Secundi Epistularum Libri ix.* 8vo, 350. Leipzig: B. G. Teubner. In Press.

Catulli Veronensis Liber. 12mo, 200. Leipzig: B. G. Teubner. In Press.

Plin. *Ep.* ii. 12. 4, *Classical Philology*, IV (1909), 202.

The City of Servius and the Pomerium, *ibid.*, 420-32.

Zur frühen Ueberlieferungsgeschichte des Briefwechsels zwischen Plinius und Trajan, *Wiener Studien*, XXXI (1909), 250-58. Summary in *Verhandlungen d. 50ten Versammlung deutschen Philologen u. Schulmänner*, Leipzig, 1910.

On the Eight-Book Tradition of Pliny's Letters in Verona, *Classical Philology*, V (1910), 175-88.

On the Early Printed Editions of Pliny's Correspondence with Trajan, *ibid.*, 451-66.

Justice in the Age of Homer, *ibid.*, VI (1911), 484-85.

On Caes. *B.C.* i. 2. 6 *ante certam diem*, *ibid.*, VII (1912), 248-50.

The Case of the Marcelli (Cic. *De or.* i. 176), *ibid.*, 484-85.

Cicero to Basilus (*Fam.* vi. 15), *ibid.*, VIII (1913), 48-56.

On Cic. *Fam.* xv. 20, Verg. (?) *Catal.* 10, and Ventidius, *ibid.*, 389-400.

Execution of a Vestal and Ritual Marriage, *ibid.*, IX (1914), 317-22.

The Tradition of Pliny's *Letters*, *ibid.*, X (1915), 8-25.

On the Date of Cic. *Fam.* xi. 1, *ibid.*, 241-59.

Cicero and Bithynicus, *ibid.*, 432-37.

An Ancient Roman Game, *Classical Journal*, XI (1915-16), 365-66.

Plautus *Amph.* 551 ff. and Simultaneous Action in Roman Comedy,
Classical Philology, XI (1916), 340-41.

The "Uncial" in Jerome and Lupus, *ibid.*, 452-57.

Notes on Catullus, *Classical Quarterly*, X (1916), 125-29.

On Certain Ancient Errors in Geographical Orientation, *Classical Journal*, XII (1916-17), 88-101.

REVIEWS IN: *Classical Philology*, IV, 214-16, 449-50; V, 124-27; VII, 134-35; IX, 210-12, 220-21, 464; X, 99-101; *Classical Journal*, IV, 333-35; V, 189-92, 335-36; VI, 95, 185-88, 222-23; VIII, 125-26, 371-73; IX, 180-81, 362; X, 183-85, 424-25, 427-31; and many others in *Nation*, LXXXVII, LXXXVIII, LXXXIX, XC, XCI, XCII, XCIV, XCV, XCVII.

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Member of the Board of Editors, *Classical Philology*, 1907-; Managing Editor, *Classical Journal*, 1908-.

Second Latin Book (with C. H. Beeson). 12mo, 532+112. Chicago: Scott, Foresman & Co., 1904.

The Tragedies of Seneca: Translated into English Verse. 8vo, 534. Chicago: University Press, 1907.

Two Dramatizations from Vergil. 8vo, vi+120. Chicago: University Press, 1908.

Ovid, Metamorphoses. With an English Translation. 2 vols. 12mo, xv+967. Loeb Classical Library. London: William Heinemann; New York: G. P. Putnam's Sons, 1916.

Seneca's Tragedies. With an English Translation. 2 vols. 12mo, xxiv+1046. Loeb Classical Library. London: William Heinemann; New York: G. P. Putnam's Sons, 1916.

In Vergil's Italy, *Chautauquan*, XXXV (1902), 368-75.

Classical Training in a German Gymnasium, *School Review*, XII (1904), 96-108.

The Topical Method in the Study of Vergil, *Classical Journal*, III (1907-8), 141-49.

Evidences of Incompleteness in the *Aeneid* of Vergil, *ibid.*, IV (1908-9), 341-55.

Some Features of Ovid's Style: I. Personification of Abstractions, *ibid.*, XI (1915-16), 516-34.

REVIEWS IN: *Classical Journal*, I, 57-58, 90-91; VI, 188-89, 311-12; VIII, 269-71, 315; IX, 85, 86, 181-82; XI, 380; *Classical Weekly*, III, 7.

HENRY WASHINGTON PRESCOTT, Professor of Classical Philology. See under Department of Greek, p. 127.

CHARLES HENRY BEESON [1906-], Associate Professor of Latin.

A.B. Indiana, 1893; Ph.D. Munich, 1907; Assistant Professor of Latin, Chicago, 1909-11; Associate Professor, *ibid.*, 1911-.

Member of the Board of Editors, *Classical Philology*, 1913-.

Second Latin Book (with F. J. Miller). 12mo, 532+112. Chicago: Scott, Foresman & Co., 1904.

Hegemonius, Acta Archelai, herausgegeben im Auftrage der Kirchenväter-Commission der königl. preussischen Akademie der Wissenschaften. 4to, liv+133. Leipzig: J. C. Hinrichs, 1906.

Latin Prose Composition, Based on Caesar (with William Gardner Hale and Wilbert L. Carr). 12mo, 137. Chicago and Boston: Atkinson, Mentzer & Grover, 1910.

Isidor-Studien in Quellen und Untersuchungen zur lateinischen Philologie des Mittelalters, begründet von Ludwig Traube. Vierter Band. Zweites Heft. 4to, 174. München: C. H. Beck, 1913.

New Second Latin Book (with H. F. Scott). 12mo, 542+117. Chicago: Scott, Foresman & Co., 1916.

Isidor's *Institutionum Disciplinæ* and Pliny the Younger, *Classical Philology*, VIII (1912), 93-98.

REVIEWS IN: *Classical Philology*, V, 231-32; VI, 241-42; VII, 92-94, 103-4; VIII, 131-32, 492-93; X, 89-92, 106-8, 225-26.

SUSAN HELEN BALLOU [1898-1915], Instructor in Latin; Professor of Latin, Western State Normal School, Kalamazoo, Mich.

Ph.B. Chicago, 1897; Ph.D. Giessen, 1911; Assistant in Latin, Chicago, 1898-1900; Associate, *ibid.*, 1901-7; Instructor, *ibid.*, 1907-15.

De Clausulis a Flavio Vopisco Syracusio Scriptore Historiae Augustae Adhibitis. 8vo, 106. Weimar: R. Wagner Sohn, 1912.

The Manuscript Tradition of the Historia Augusta. 8vo, 89, 3 plates. Leipzig: B. G. Teubner, 1914.

The MSS of the *Historia Augusta*, *Classical Philology*, III (1908), 273-77.

EDWARD AMBROSE BECHTEL [1898-1908], Instructor in Latin; Professor of Classical Languages, Tulane University.

A.B. Johns Hopkins, 1888; Ph.D. Chicago, 1900; Instructor in Latin, Northwestern, 1894-97; Assistant in Latin, Chicago, 1898-1900; Associate, *ibid.*, 1900-1902; Instructor, *ibid.*, 1902-08.

Livy: The War with Hannibal. 12mo, 174. Chicago: Scott, Foresman & Co., 1905.

Finger-Counting among the Romans in the Fourth Century, *Classical Philology*, IV (1909), 25-31.

REVIEWS IN: *Classical Journal*, I, 93-94; III, 207; *Classical Philology*, II, 361-62, 492.

TENNEY FRANK [1901-5], Associate in Latin; Professor of Latin, Bryn Mawr College.

A.B. Kansas, 1898; Ph.D. Chicago, 1903; Assistant in Latin, *ibid.*, 1901-3; Associate, *ibid.*, 1904-5.

Attraction of Mood in Early Latin. Doctor's thesis. 8vo, 59. Lancaster, Pa.: New Era Printing Co., 1904.

The Influence of the Infinitive upon Verbs Subordinated to It, *American Journal of Philology*, XXV (1904), 428-66.

REVIEW IN: *Classical Review*, XVIII, 411-12.

FREDERICK WARREN SANFORD [1904-5], Assistant in Latin; Assistant Professor of Latin, University of Nebraska, Lincoln.

S.B. Illinois College, 1890; A.B. *ibid.*, 1894; Professor of Latin, Illinois College, 1897-1903; Assistant in Latin, Chicago, 1904-5.

Caesar, Gallic War, Books I-V (with H. W. Johnston). 12mo, lvii+458. Boston: Benjamin H. Sanborn & Co., 1906.

BERTHOLD LOUIS ULLMAN [1908-9], Assistant in Latin; Professor of Latin, University of Pittsburgh.

A.B. Chicago, 1903; Ph.D. *ibid.*, 1908; Assistant in Latin, *ibid.*, 1908-9.

The Identification of the MSS of Catullus Cited in Statius' Edition of 1566.

Doctor's thesis. 8vo, 64. Chicago: Published by the author, 1908.

The Book Division of Propertius, *Classical Philology*, IV (1909), 45-51.

Additions and Corrections to *CIL*, *ibid.*, 190-98.

REVIEW IN: *Classical Philology*, IV, 334-35.

HAROLD LUCIUS AXTELL, PH.D. 1906; Professor of Latin and Greek, University of Idaho, Moscow.

Deification of Abstract Ideas in Roman Literature and Inscriptions.

Doctor's thesis. 8vo, 100. Chicago: University Press, 1907.

REVIEW IN: *Classical Philology*, VIII, 500.

†BERNARD CAMILLUS BONDURANT, PH.D. 1905.

Decimus Junius Brutus Albinus; A Historical Study. Doctor's thesis.

8vo, 113. Chicago: University Press, 1907.

ALICE FREDA BRÄUNLICH, PH.D. 1913; Instructor in Latin and German, Frances Shimer School, Mount Carroll, Ill.

Note on Propertius II, 24, 1-16, *Classical Philology*, IX (1914), 196-99.

Note on Apuleius *Metamorphoses* ii. 30, *ibid.*, X (1915), 454-55.

A Theory of the Origin of Hypotaxis, *Indogermanische Forschungen*, XXXV (1915), 237-44.

FREDERICK WILLIAM CLARK, PH.D. 1913; Professor of Latin and Greek, University of Manitoba, Winnipeg.

The Influence of Sea-Power on the History of the Roman Republic. Doctor's thesis. 8vo, xi+112. Menasha, Wis.: George Banta Publishing Co., 1915.

CLINTON C. CONRAD, PH.D. 1914; Head of the Department of Latin and Mathematics, University High School, Oakland, Cal.

The Technique of Continuous Action in Roman Comedy. Doctor's thesis. 8vo, 85. Menasha, Wis.: George Banta Publishing Co., 1915.

† Deceased.

On the Meaning of *Biduum* in Certain Phrases, *Classical Philology*, IX (1914), 78-83.

REVIEW IN: *Classical Philology*, IX, 466-67.

NORMAN WENTWORTH DEWITT, PH.D. 1906; Professor of Latin Literature, Victoria College, Toronto.

The Dido Episode in the Aeneid of Virgil. Doctor's thesis. 8vo, 78. Toronto: William Briggs, 1907.

JAMES BURNETTE ESKRIDGE, PH.D. 1912; President, Southwestern State Normal, Weatherford, Okla.

The Influence of Cicero upon Augustine in the Development of His Oratorical Theory for the Training of the Ecclesiastical Orator. Doctor's thesis. 8vo, 58. Menasha, Wis.: George Banta Publishing Co., 1912.

WARREN STONE GORDIS, PH.D. 1904; Professor of English, John B. Stetson University, De Land, Fla.

The Estimates of Moral Values Expressed in Cicero's Letters. Doctor's thesis. 8vo, 102. Chicago: University Press, 1905.

MASON D. GRAY, PH.D. 1912; Head of the Classical Department, East High School, Rochester, N.Y.

Co-ordination of Latin with the Other Subjects of the High-School Curriculum, *Classical Journal*, VII (1911-12), 196-203, 338-48.

MARY JACKSON KENNEDY, PH.D. 1905; Constantinople College, Constantinople, Turkey.

The Literary Work of Ammianus. Doctor's thesis. 8vo, 65. Lancaster, Pa.: New Era Printing Co., 1912.

JOHN STRAYER MCINTOSH, PH.D. 1909; Professor of Latin and Greek, Southern Methodist University, Dallas, Tex.

A Study of Augustine's Versions of Genesis. Doctor's thesis. 8vo, x+130. Chicago: University Press, 1912.

MARY BRADFORD PEAKS, PH.D. 1905; Lawyer, 165 Broadway, New York City.

Caesar's Movements from January 21 to February 14, 49 B.C., *Classical Review*, XVIII (1904), 346-49.

The General and Military Administration of Noricum and Raetia. Doctor's thesis. *Studies in Classical Philology of the University of Chicago*, IV (1907), 161-230.

REVIEW IN: *Classical Philology*, I, 309-11.

KEITH PRESTON, PH.D. 1914; Assistant Professor of Latin, Northwestern University.

Studies in the Diction of the Sermo Amatorius in Roman Comedy. Doctor's thesis. 8vo, 67. Menasha, Wis.: George Banta Publishing Co., 1916.

On Terence *Andria*, 971-72, *Classical Philology*, IX (1914), 201.

Some Sources of Comic Effect in Petronius, *ibid.*, X (1915), 260-69.

REVIEWS IN: *Classical Philology*, VII, 507-8; VIII, 499, 500; X, 349, 350.

EVAN TAYLOR SAGE, PH.D. 1908; Assistant Professor of Latin, University of Pittsburgh.

The Pseudo-Ciceronian Consolatio. Doctor's thesis. 8vo, 64. Chicago: University Press, 1910.

DRAPER TALMAN SCHOONOVER, PH.D. 1907; Professor of Latin and Registrar, Marietta College, Marietta, Ohio.

A Study of Cn. Domitius Corbulo as Found in the Annals of Tacitus. Doctor's thesis. 8vo, vii+55. Chicago: University Press, 1909.

JUDSON ALLEN TOLMAN, PH.D. 1911; President of Howard Payne College, Brownwood, Tex.

A Study of the Sepulchral Inscriptions in Buecheler's Carmina Epigraphica Latina. Doctor's thesis. 8vo, ix+120. Chicago: University Press, 1910.

THE DEPARTMENT OF ROMANCE LANGUAGES
AND LITERATURES

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Member, Board of Editors, *Modern Philology*, 1910-; and of *The Modern Language Journal*, 1917-.

Corneille's *Polyeucte* (joint editor). xxxii+118. New York: Henry Holt & Co., 1909.

Corneille's *Horace* (joint editor). xxxi+122. New York: Henry Holt & Co., 1909.

Corneille's *Cid* (joint editor). xxxii+143. New York: Henry Holt & Co., 1909.

The French Verb: Its Forms and Tense Uses (with E. H. Wilkins). 8vo, 46. Chicago: University Press, 1914.

The Fisher King in the Grail Romances, *Publications of the Modern Language Association*, XXIV (1909), 365-418.

The Fountain Defended: "Por la costume maintenir | De vostre fontaine deffandre."—*Yvain*, vss. 1848 ff., *Modern Philology*, VII (1909-10), 145-64.

The Castle of the Grail, *Studies in Honor of A. Marshall Elliott*, I (1911), 19-51.

The Sister's Son and the *Conte del Graal*, *Modern Philology*, IX (1911-12), 291-322.

The French Requirement for Entrance to the University, *University of Chicago Magazine*, IV (1912), 95-99.

Symbolistic Poetry in France, *North American Review*, CXCVII (1913), 802-18.

The Romance of Erec, Son of Lac, *Modern Philology*, XI (1913-14), 445-89.

Sans et matière dans les œuvres de Chrétien de Troyes, *Romania*, XLIV (1915), 14-37.

The Report of the Joint Committee on Grammatical Nomenclature, *School Review*, XXIV (1916), 188-95.

Concerning the Word *Graal*, *Greal*, *Modern Philology*, XIII (1915-16), 681-85.

REVIEWS OF: Williams, *Essai sur la composition du roman gallois Peredur*, *Modern Language Notes*, XXV, 246-52; Foulet, *Roman de Renard*, *ibid.*, XXX, 145-49, 189-95; Farnsworth, *Uncle and Nephew in the Old French Chansons de Geste*, *American Journal of Sociology*, XIX, 667-70; Schœrpperle, *Tristan and Isolt*, *Journal of English and Germanic Philology*, XIII, 444-49.

THOMAS ATKINSON JENKINS [1901-], Professor of French Philology.

A.B. Swarthmore, 1887; Ph.D. Johns Hopkins, 1894; Adjunct Professor of Romance Languages, Vanderbilt, 1896-1900; Professor of French, Swarthmore, 1900-1901; Assistant Professor of Romance Languages and Literatures, Chicago, 1901-2; Associate Professor of French Philology, *ibid.*, 1902-11; Professor, *ibid.*, 1911-.

Chairman, Central Division, Modern Language Association of America, 1912-13.

Member, Board of Editors, *Modern Philology*, 1908-; Joint editor, *Studies in Honor of A. Marshall Elliott*. Vols. I, II. 8vo, 450, 334. Baltimore: Johns Hopkins University Press, 1911.

Longer French Poems (with an Introductory Treatise on French Versification). 12mo, xlii+175. New York: D. Appleton & Co., 1904.

Eruclavit: An Old French Metrical Paraphrase of Psalm XLIV. Published from all the known manuscripts and attributed to Adam de Perseigne. 8vo, xlv+128. Halle: Gesellschaft für romanische Literatur, 1909.

Eugénie Grandet, par Honoré de Balzac (prepared for class use, with introduction, notes, and vocabulary). 12mo, xx+308. New York: Henry Holt & Co., 1915.

Gaston Paris: The Scholar and the Man, *University Record*, VII (1903), 186-94.

On the Pronominal Object with *parler*, *Modern Language Notes*, XX (1905), 99-102.

A Brief for French in the High School, *School Review*, XIII (1905), 77-83.

A New Fragment of the Old French *Gui de Warewic*, *Modern Philology*, VII (1909-10), 593-96.

Old French *Melite* = Malta, *Romania*, XXXIX (1910), 83-86.

Le Contenz dou Monde by Renaud d'Andon (13th century), *Studies in Honor of A. Marshall Elliott*, I (1911), 53-79.

La Chanson de *Bele Doe* dans *Guillaume de Dole*, *Romania*, XL (1911), 452-54.

French Etymologies: *harnais*, *lanière*, *cocu*, *contretemps*, *hanse*, *enor*, *desuir*, *feire*, *Escalibor*, *Modern Philology*, X (1912-13), 439-50.

Scholarship and Public Spirit, *Publications of the Modern Language Association*, XXIX (1914), lxxxvii-cxvi.

On the Text of the "Bataille des VII Arts," *Modern Philology*, XIII (1915-16), 188-92.

An Etymon for English "Gun," *ibid.*, 239-40.

REVIEWS IN: *Modern Language Notes*, XVII, 52-53; XXII, 152, 194-96; XXVI, 148-51.

KARL PIETSCH [1896-], Professor of Romance Philology.

Ph.D. Halle, 1887; Assistant Professor of Romance Languages, Chicago, 1900-1901; Associate Professor of Romance Philology, *ibid.*, 1901-10; Professor, *ibid.*, 1910-.

Corresponding Member, Royal Spanish Academy, 1910.

Member, Board of Editors, *Modern Philology*, 1908-.

The Spanish Particle *he*, *Modern Philology*, II (1904-5), 197-224.

Notes on Spanish Folklore, *ibid.*, V (1907-8), 97-103.

Don Quixote I, Prólogo: Non bene pro toto libertas venditur auro, *Modern Language Notes*, XXIV (1909), 55-56.

Notes on Baist, *Grammatik der spanischen Sprache*², 1906., *ibid.*, 163-66.

Spanish Etymologies: (1) *Anviso*; (2) Fr. *par cœur*, Sp. *de coro*; (3) *Duecho*, *Modern Philology*, VII (1909-10), 49-60.

Span. *cortesa*, *Modern Language Notes*, XXV (1910), 209-10.

Zur spanischen Grammatik. I. Vom auslautenden, unbetonten *y*, *Zeitschrift für romanische Philologie*, XXXIV (1910), 641-50; XXXV (1911), 167-79.

Zur spanischen Grammatik. II. Verbale Kurzformen, *Modern Language Notes*, XXVI (1911), 97-104.

Duecho Once More, *Modern Philology*, IX (1911-12), 417-20.

Zur spanischen Grammatik. III. Imperativ anakoluthisch im abhängigen Satze. IV. Der Imperativ *fes*, *Modern Language Notes*, XXVII (1912), 167-74.

Zur spanischen Grammatik. V. *ser*+Adverb. VI. Formen des Präs. Ind. in der Funktion eines Imperativs, *Modern Philology*, X (1912-13), 1-17.

Concerning Ms. 2-G-5 of the Palace Library at Madrid, *ibid.*, XI (1913-14), 1-18.

On the Language of the Spanish Grail Fragments. I, *ibid.*, XIII (1915-16), 369-78, 625-46.

ERNEST HATCH WILKINS [1912-], Professor of Romance Languages.

A.B. Amherst, 1901; Ph.D. Harvard, 1910; Associate Professor of Romance Languages, Chicago, 1912-16; Professor, *ibid.*, 1916-.

Member, Board of Editors, *Modern Philology*, 1914-.

Member of the Joint Committee on Grammatical Nomenclature as Appointee of the Modern Language Association, 1911-.

Dantis Alagherii Operum Latinorum Concordantiae (edited in collaboration with E. K. Rand), 8vo, viii+577. Oxford: Clarendon Press, 1912.

Italian Short Stories (edited in collaboration with R. Altrocchi). 16mo, v+206. Boston: D. C. Heath & Co., 1912.

The French Verb: Its Forms and Tense Uses (with W. A. Nitze). 8vo, 46. Chicago: University Press, 1914.

French Verb Blank. Chicago: University Press, 1914.

Grandgent's Italian Grammar (new edition, with Exercises and Vocabulary by E. H. Wilkins). 8vo, vi+184. Boston: D. C. Heath & Co., 1915.

The Enamorment of Boccaccio, *Modern Philology*, XI (1913-14), 39-55.

The Discussion of the Date of the Birth of Boccaccio, *Romanic Review*, IV (1913), 343-51.

The Poetry of Carducci, *Amherst Graduates Quarterly*, II (1913), 317-26.

A Note on Guinizelli's "Al cor gentil," *Modern Philology*, XII (1914-15), 325-30.

The Derivation of the *Canzone*, *ibid.*, 527-58.

The Invention of the Sonnet, *ibid.*, XIII (1915-16), 463-94.

The *Emueg* in Petrarch and in Shakespeare, *ibid.*, 495-96.

REVIEW OF: Vossler, *Italianische Literatur der Gegenwart*, *Modern Language Notes*, XXX, 217-20. Other reviews in *Modern Language Notes*, XXIX, 23-25; *Romanic Review*, IV, 130-33; *Nation*, XCVI, 265-66, 310-11; XCVII, 312-13; XCVIII, 13, 273-75, 302-3; XCIX, 410-11; C, 472-73; CII, 110.

EDWIN PRESTON DARGAN [1911-], Associate Professor of French Literature.

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The Poetry of Sully Prudhomme, *Studies in Honor of A. Marshall Elliott*, I (1911), 195-208.

Shakespeare and Ducis, *Modern Philology*, X (1912-13), 137-78.

Frédéric Mistral, *Nation*, XCVIII (1914), 360.

The Prince de Ligne, *ibid.*, CI (1915), 71-72.

Paul Hervieu, *ibid.*, 624-25.

Balzac and Cooper: Les Chouans, *Modern Philology*, XIII (1915-16), 193-213.

Trissino, a Possible Source for the Pléiade, *ibid.*, 685-88.

REVIEWS OF: Recent Publications concerning Montesquieu, *Modern Language Notes*, XXX, 253-60; Lanson, Lamartine: Méditations Poétiques, *Nation*, CII, 336-37; Henning, Representative French Lyrics, *Modern Language Notes*, XXIX, 190-92.

ELIZABETH WALLACE [1893-], Associate Professor of French Literature.

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Officier d'Académie, 1905; Traveling Fellow, International Institute, Madrid, 1910-11.

A Garden of Paris. 8vo, xii+198. Chicago: A. C. McClurg & Co., 1911.

Mark Twain and the Happy Island. 16mo, xii+139. Chicago: A. C. McClurg & Co., 1913.

The Spanish Drama of Today, *Atlantic Monthly*, CII (1908), 537-66.

RUDOLPH ALTROCCHI [1915-], Assistant Professor of Romance Languages.

A.B. Harvard, 1908; Ph.D. *ibid.*, 1914; Assistant Professor of Romance Languages, Chicago, 1915-.

An Old Italian Version of the Legend of Saint Alexius, *Romanic Review*, VI (1915), 353-63.

D'Annunzio as an Orator, *Nation*, CI (1915), 4.

REVIEW OF: Hoare, Italian Dictionary, *Modern Language Notes*, XXXI, 418-25.

EARLE BROWNELL BABCOCK [1906-15], Assistant Professor of French; Professor of Romance Languages and Literatures, New York University.

Ph.B. Chicago, 1903; Ph.D., *ibid.*, 1915; Assistant Professor of French, Chicago, 1910-15.

The Use of Phonetics in Teaching Elementary French, *School Review*, XXI (1913), 608-17.

The Direct Method. Is It Profitable? *University of Illinois School of Education Bulletin*, XI (1913), 220-24.

ALGERNON COLEMAN [1913-], Assistant Professor of French.

A.B. Virginia, 1901; Ph.D. Johns Hopkins, 1913; Assistant Professor of French, Chicago, 1915-.

Western Business Manager, *The Modern Language Journal*, 1915-.

Flaubert's Literary Development in the Light of His "Mémoires d'un fou, Novembre," and "*Education sentimentale*" (1845). Elliott Monographs, No. 1. 8vo, xv+153. Baltimore: Johns Hopkins Press, 1914.

Sources and Structure of Flaubert's "Salammbô" (with P. B. Fay). Elliott Monographs, No. 2. 8vo, 55. Baltimore: Johns Hopkins Press, 1914.

REVIEWS IN: *Modern Language Notes*, XXIX, 181-85; *School Review*, XXIV, 166-67.

HENRI CHARLES EDOUARD DAVID [1902-], Assistant Professor of French Literature.

A.B. Chicago, 1902; A.M. *ibid.*, 1905; Assistant Professor of French Literature, *ibid.*, 1910-.

Le degré de Maître, degré des aspirants à l'enseignement du français, *Compte rendu du Congrès de langue et de littérature française* (New York, March, 1913), 54-62.

Chez Nous. A French First Reader with Practical Hints on Syntax and Idiom. 8vo, 393. New York: Henry Holt & Co., 1914.

"Fæneste" et "la Chronique du règne de Charles IX," *Revue d'histoire littéraire de la France*, XXIX (1912), 884-94.

Théophile Gautier: *Le Pavillon sur l'eau*: Sources et traitement, *Modern Philology*, XIII (1915-16), 391-416, 647-68.

RALPH EMERSON HOUSE [1906-], Assistant Professor of Romance Languages.

B.L. Missouri, 1900; A.M. *ibid.*, 1900; Ph.D. Chicago, 1909; Professor of Latin and Modern Languages, Territorial Normal School of Oklahoma, 1900-1904; Professor of Modern Languages, Utah, 1904-6; Instructor in Romance Languages, Chicago, 1906-16; Assistant Professor, *ibid.*, 1916-.

Trois Contes de Theuriet (with E. B. Babcock). School edition. New York: Henry Holt & Co. In Press.

The *Comedia Radiana* of Agustín Ortiz. Doctor's thesis. *Modern Philology*, VII (1909-10), 507-56.

The 1536 Text of the *Égloga* of Juan de Paris, *Modern Language Notes*, XXVIII (1913), 28-29.

The Sources of Bartolomé Palau's *Farsa Salamantina*, *Romanic Review*, IV (1913), 311-22.

REVIEW OF: Cronan, Teatro español del siglo XVI, *Modern Language Notes*, XXX, 121-23; Coester, A Spanish Grammar, *School Review*, XXII, 703.

MAXIME INGRES [1901-5], Assistant Professor of French.

B.-ès-Lettres, Université de France, Académie de Paris; Professor of French Language and Literature, McGill University, 1894-1900; Assistant Professor of French, Chicago, 1901-5; Director, Alliance Française, 1901.

French by Correspondence, *University Record*, VII (1903), 144-46.

The Teaching of French, *School Review*, XII (1904), 491-501.

THEODORE LEE NEFF [1896-], Assistant Professor of French.

Ph.B. DePauw, 1883; Ph.D. Chicago, 1896; Assistant Professor of Modern Languages, State University of Iowa, 1890-94; Assistant Professor of French, Chicago, 1908-.

René Bazin: Le Blé qui lève. Edited for class use, with Introduction Notes and Vocabulary. 12mo, xxv+300. New York: Henry Holt & Co., 1914.

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Romantisme et Protestantisme, *Modern Philology*, I (1903-4), 117-33.

Les "Discours" de Ronsard, *ibid.*, 437-56.

Shakespeare et Voltaire, "Othello" et "Zaire," *ibid.*, III (1905-6), 305-15.

SHIRLEY GALE PATTERSON [1910-11], Instructor in French; Assistant Professor of Romance Languages, Dartmouth College.

A.B. Amherst, 1906; Ph.D. Cornell, 1911; Assistant in French, Chicago, 1910-11; Instructor in Romance Languages and Literatures, *ibid.*, 1911.

A Note on a Borrowing from Chrétien de Troyes, *Modern Language Notes*, XXVI (1911), 73-74.

FRANCK LOUIS SCHOELL [1913-], Instructor in Romance Languages.

Paris, Agrégé des Lettres, 1912; Instructor in Romance Languages, Chicago, 1913-.

Une source nouvelle de Chapman: Francisci Petrarchae *De Contemptu Mundi*, *Revue Germanique*, IX (1913), 428-33.

A New Source of *Sir Gyles Goosecappe*, *Modern Philology*, XI (1913-14), 547-58.

George Chapman and the Italian Neo-Latinists of the Quattrocento, *ibid.*, XIII (1915-16), 215-38.

REVIEW IN: *Revue Germanique*, X, 96-98.

MILTON ALEXANDER BUCHANAN [1904-6], Associate in Romance Languages; Professor of Italian and Spanish, University of Toronto.

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Mira de Amescua's El Esclavo del demonio; A Critical Text, with Introduction and Notes. Doctor's thesis. 8vo, 144. Baltimore: J. H. Furst Co., 1905.

El Libro de las Trufas de los Pleitos de Julio Cesar, *Modern Language Notes*, XIX (1904), 255.

† Deceased.

"Echar un cigarro," *ibid.*, 255.

A Neglected Edition of La Leyenda del Abad Don Juan de Montemayor, *Modern Philology*, II (1904-5), 377-81.

Notes on the Spanish Drama: Lope, Mira de Amescua and Moreto, *Modern Language Notes*, XX (1905), 38-41.

A Neglected Version of Quevedo's "Romance" on Orpheus, *ibid.*, 116-18.

Pan y Toros, *ibid.*, 145-48.

Partinuplés de Bles. An Episode in Tirso's *Amar por Señas*. Lope's La Viuda valenciana, *ibid.*, XXI (1906), 3-8.

Sebastian Mey's *Fabulario*, *ibid.*, 167-71.

HENRY RAYMOND BRUSH, PH.D., 1911; Professor and Head of the Department of Romance Languages, University of North Dakota.

La Bataille de Trente: A Middle-French Poem of the Fourteenth Century. Doctor's thesis. *Modern Philology*, IX (1911-12), 511-44; *ibid.*, X (1912-13), 82-136.

AURELIO MACEDONIO ESPINOSA, PH.D. 1909; Associate Professor of Romance Languages, Leland Stanford Junior University.

Studies in New Mexican Spanish, Part I: "Phonology." Doctor's thesis. *Revue de Dialectologie Romane*, I (1909).

HENRY EMIL HAXO, PH.D. 1913; Assistant Professor of French and Spanish, University of Montana, Missoula.

Denis Piramus: "La Vie Seint Edmunt," Twelfth Century. Doctor's thesis. *Modern Philology*, XII (1914-15), 85-106; 559-83.

FLORENCE NIGHTINGALE JONES, PH.D. 1903; Chicago.

Baumarchais and Plautus: The Sources of the "Barbier de Séville." Doctor's thesis. Svo, 29. Chicago: Scott, Foresman & Co., 1908.

GEORGE FITCH MCKIBBEN, PH.D. 1905; Professor of Romance Languages, Denison University, Granville, Ohio.

The "Eructavit," an Old French Poem: The Author's Environment, His Argument and Materials. Doctor's thesis. Svo, 45. Baltimore: J. H. Furst Co., 1907.

GEORGE TYLER NORTHUP, PH.D. 1906; Assistant Professor of Italian and Spanish, University of Toronto; Associate Professor (elect) of Spanish Literature, University of Chicago.

El Libro de los Gatos, a Text with Introduction and Notes. Doctor's thesis. *Modern Philology*, V (1907-8), 477-554.

CHARLES FREDERICK WARD, PH.D. 1911; Instructor in Romance Languages, Rice Institute, Houston, Tex.

The Epistles on the "Romance of the Rose" and Other Documents in the Debate. Doctor's thesis. *Transactions of the Royal Society of Canada*, Third Series, IV (1910), 191-204.

THE DEPARTMENT OF GERMANIC LANGUAGES AND LITERATURES

STARR WILLARD CUTTING [1892-], Professor and Head of the Department of Germanic Languages and Literatures.

A.B. Williams, 1881; Ph.D. Johns Hopkins, 1892; Principal, Deerfield Academy, 1881-86; Professor of Modern Languages, South Dakota, 1888-90; Professor of German and French (*locum tenens*), Earlham College, 1891-92; Assistant Professor of German, Chicago, 1892-94; Associate Professor, *ibid.*, 1894-1900; Professor of German Literature, *ibid.*, 1900-1906; Head of the Department of Germanic Languages and Literatures, *ibid.*, 1906-.

President, Central Division of the Modern Language Association of America, 1901-2.

Member, Board of Editors, *Modern Philology*.

Thiergen, Am deutschen Herde. With English Notes. 8vo, iv+146. Boston: Ginn & Co., 1905.

Gutzkow's "Uriel Akosta" (with A. C. von Noé). 12mo, xv+105. New York: Henry Holt & Co., 1911.

Hechtenberg, Der Briefstil im 17. Jahrhundert, ein Beitrag zur Fremdwörterfrage, *Modern Language Notes*, XIX (1904), 55-57.

Ueber Schillers Geistesverwandtschaft mit Amerika. In *Zur Würdigung Schillers in Amerika: Erinnerungsblätter an die hundertste Wiederkehr von Schillers Todestag*, 26-27. Chicago: Koelling & Klappenbach, 1905.

Ueber den Gebrauch von Lehrbüchern beim Unterricht in der deutschen Sprache, *Pädagogische Monatshefte*, VI (1905), 219-26.

- Fürbrechen: *Walther von der Vogelweide 105-14* (Wilmanns²), *Modern Language Notes*, XXII (1907), 224.
- Concerning Schiller's Treatment of Fate and Dramatic Guilt in His *Braut von Messina*, *Modern Philology*, V (1907-8), 347-60.
- Ueber Schillers Dramatik, *Monatshefte für deutsche Sprache und Pädagogik*, IX (1908), 108-20.
- The Relation of the Doctorate to Teaching, *University of Chicago Magazine*, I (1909), 203-5.
- Concerning the Teaching of German Literature in High Schools and Academies, *School Review*, XIX (1911), 217-24.
- The Teaching of Foreign Modern Literatures in Our Schools, *Educational Bi-Monthly*, VII (1912-13), 97-103.
- Gutzkow and Young Germany, *German Classics of the XIXth and XXth Centuries*, VII (1913), 241-51.
- An American Estimate of Salient Features of Modern German Life, *Germanistic Society Quarterly* (1914), 124-33.
- Notes on *Walther von der Vogelweide*, *Modern Philology*, XII (1914-15), 101-8.

REVIEWS OF: Thomas' Life of Schiller, *Atlantic Monthly*, LXXXIX, 570-74; Kühnemann, Schiller, *Dial*, XL, 41-45; Heller, Studies in Modern German Literature, *Bulletin of the Washington University Association*, V, 188-95; Bert John Vos, Schiller's Wilhelm Tell, *Modern Language Notes*, XXVI, 219-23. Other reviews in *Modern Language Notes*, XXIV, 21-24; *Monatshefte für deutsche Sprache und Pädagogik*, XI, 190-91.

MARTIN SCHÜTZE [1901-], Professor of German Literature.

Ph.D. Pennsylvania, 1899; Professor of German, Beaver College, 1894-95; Assistant Professor of German Literature, Chicago, 1907-11; Associate Professor, *ibid.*, 1911-15; Professor, *ibid.*, 1915-.

Crux Aetatis and Other Poems. 8vo, 54. Boston: Richard G. Badger, 1904.

The Services of Naturalism to Life and Literature. 8vo, 20. Chicago: Trillium Press, H. Bevans, 1905. A reprint from *Sewanee Review*, XI (1903), 425-45.

Hero and Leander (a Tragedy). 8vo, 176. New York: Henry Holt & Co., 1908.

- Judith (a Tragedy)*. 8vo, 306. New York: Henry Holt & Co., 1910.
- Grillparzer, Franz. Des Meeres und der Liebe Wellen*. Edited with notes and a study of the art of Grillparzer. 1st ed., 1912; rev. ed., 1915. 16mo, lxxxv+156. New York: Henry Holt & Co.
- Songs and Poems*. Large 8vo, 127. Chicago: Laurentian Publishers, 1914.
- Goethe's Poems*. Edited with notes and an essay on the "Development of Goethe's Lyrical Art and View of Life." 16vo, lxxxi+277. Boston: Ginn & Co., 1916.
- Studies in German Romanticism, *Modern Philology*, IV (1906-7), 507-58.
- Gustav Freytag, Theorist of the Drama and Playwright, *The Drama*, No. 9 (1913), 1-28.
- Karl Immermann and His Drama "Merlin," *German Classics of the XIXth and XXth Centuries*, VII (1913), 153-62.

FRANCIS ASBURY WOOD [1903-], Professor of Germanic Philology.

A.B. Northwestern, 1880; L.H.D. *ibid.*, 1910; Ph.D., Chicago, 1895; Professor of German, Cornell, 1897-1903; Assistant Professor of Germanic Philology, Chicago, 1905-9; Associate Professor, *ibid.*, 1909-14; Professor, *ibid.*, 1914-.

Editor, "Linguistic Studies in Germanic"; Member, Board of Editors, *Modern Philology*, 1908-.

Indo-European a^x: a^xi: a^xu: A Study in Ablaut and Word-Formation. 8vo, vii+159. Strassburg: Karl J. Trübner, 1905.

Uebersichtstabellen zu Lautensprechungen und zur Kasusbildung des Nomens und Adjektivs im Germanischen. 8vo, 20. Chicago: University Press, 1911.

The "Hildebrandslied" Translated from the Old High German into English Alliterative Verse. 12mo, iv+11. Chicago: University Press, 1914.

The Indo-European Base *ghero-*, *Modern Philology*, I (1903-4), 235-45.

Some Derived Meanings, *Modern Language Notes*, XIX (1904), 1-5.

Germanic Etymologies, *Modern Philology*, II (1904-5), 471-76.

Etymological Notes, *Modern Language Notes*, XX (1905), 41-44.

Dürfen and Its Cognates, *ibid.*, 102-4.

How Are Words Related? *Indogermanische Forschungen*, XVIII (1905), 1-49.

- The Origin of Color-Names, *Modern Language Notes*, XX (1905), 225-29.
Etymological Notes, *ibid.*, XXI (1906), 39-42.
- Etymological Miscellany, *American Journal of Philology*, XXVII (1906), 59-64.
Etymological Notes, *Modern Language Notes*, XXI (1906), 226-29.
- Studies in Germanic Strong Verbs, *Modern Philology*, IV (1906-7), 489-500.
- Some Disputed Etymologies, *Modern Language Notes*, XXII (1907), 118-22.
- Rime-Words and Rime-Ideas, *Indogermanische Forschungen*, XXII (1907), 133-71.
Etymological Notes, *Modern Language Notes*, XXII (1907), 234-36.
- Studies in Germanic Strong Verbs, II, *Modern Philology*, V (1907-8), 265-90.
- Greek and Latin Etymologies, *Classical Philology*, III (1908), 74-86.
Etymological Notes, *Modern Language Notes*, XXIII (1908), 147-49.
Etymological Notes, *ibid.*, XXIV (1909), 47-49.
- Studies in Germanic Strong Verbs, III, *Modern Philology*, VI (1908-9), 441-52.
- Greek and Latin Etymologies, *Classical Philology*, V (1910), 303-8.
- Elckerlijc-Everyman*: The Question of Priority (with John M. Manly), *Modern Philology*, VIII (1910-11), 269-302.
Etymological Notes, *Modern Language Notes*, XXVI (1911), 165-67.
- Iteratives, Blends, and "Streckformen," *Modern Philology*, IX (1911-12), 157-94.
Etymologische Miscellen, *Zeitschrift für vergleichende Sprachforschung*, XLV (1912), 61-71.
- Old High German Notes, *Modern Language Notes*, XXVII (1912), 178-79.
Some English Blends, *ibid.*, 179.
Notes on Latin Etymologies, *Classical Philology*, VII (1912), 302-34.
- Kontaminationsbildungen und haplogische Mischformen, *Journal of English and Germanic Philology*, XI (1912), 295-328.

Some Parallel Formations in English, *Hesperia: Ergänzungsreihe*, I. Heft, I (1913), 1-72.

Language and Nonce-Words, *Dialect Notes*, IV (1913), 42-44.

Germanic Etymologies, *Modern Philology*, XI (1913-14), 315-38.

Etymological Notes, *Modern Language Notes*, XXIX (1914), 69-72.

Greek and Latin Etymologies, *Classical Philology*, IX (1914), 145-59.

Germanic Etymologies, *Journal of English and Germanic Philology*, XIII (1914), 499-507.

An Old Frisian Poem, *Modern Philology*, XII (1914-15), 477-80.

Notes on Old High German Texts, *ibid.*, 495-502.

So-called Prothetic *y* and *w* in English, *Journal of English and Germanic Philology*, XIV (1915), 389-92.

Old English *eo*, *ea*, *ēo(w)*, *ēa(w)*, *ǣw* in Middle and New English, *ibid.*, 499-518.

Some Latin Etymologies, *Classical Philology*, XI (1916), 208-10.

Some Verb-Forms in Germanic, *Modern Philology*, XIV (1916-17), 121-28.

REVIEWS OF: Prellwitz, *Etymologisches Wörterbuch der griechischen Sprache*, 2te Auflage, *Classical Philology*, II, 352-56; Feist, *Etymologisches Wörterbuch der gotischen Sprache*, *Modern Language Notes*, XXV, 72-76; Falk und Torp, *Wortschatz der germanischen Spracheinheit*, *ibid.*, 213-23. Other reviews in *Journal of English and Germanic Philology*, XII, 150-52; XIV, 585-88.

PHILIP SCHUYLER ALLEN [1898-], Associate Professor of German Literature.

A.B. Williams, 1891; Ph.D. Chicago, 1897; Assistant Professor of German Literature, *ibid.*, 1903-9; Associate Professor, *ibid.*, 1909-.

Managing Editor, *Modern Philology*, 1903-8.

Easy German Stories (with Max Batt). 8vo, viii+243. Chicago: Scott, Foresman & Co., 1903.

German Stories. 8vo, viii+245. Chicago: Scott, Foresman & Co., 1903.

Goethe's "*Hermann und Dorothea*." 12mo, x+285. Boston: Ginn & Co., 1905.

Goethe's "*Iphigenie auf Tauris*." 16mo, xl+286. Boston: Ginn & Co., 1906.

- Lessing's "Minna von Barnhelm."* 16mo, 285. New York: Charles E. Merrill Co., 1907.
- Schiller's "Die Jungfrau von Orleans."* 8vo, xxxv+334. Boston: Ginn & Co., 1910.
- Herein!* First German Readings. 8vo, x+289. New York, Henry Holt & Co., 1910.
- Daheim.* A German First Reader. 8vo, xii+230. New York: Henry Holt & Co., 1911.
- Hints on the Teaching of German Conversation.* 8vo, 36. Boston: Ginn & Co., 1912.
- First German Composition.* 8vo, xxxii+224. New York: Henry Holt & Co., 1912.
- Easy German Conversation* (with Paul H. Phillipson). 8vo, liii+229. New York: Henry Holt & Co., 1914.
- German Life.* 8vo, viii+212. New York: Henry Holt & Co., 1914.
- French Life* (with Franck L. Schoell). 8vo, viii+226. New York: Henry Holt & Co., 1915.
- A First German Grammar* (with Paul H. Phillipson). 8vo, xix+435. Boston: Ginn & Co., 1916.
- An den Ufern des Rheins.* 8vo, vi+306. New York: Henry Holt & Co., 1916.
- Turteltaube, *Modern Language Notes*, XIX (1904), 175-77.
- The Origins of German Minnesang, *Modern Philology*, III (1905-6), 411-44.
- A Venetian Folk Song, *ibid.*, IV (1906-7), 275-78.
- Mediaeval Latin Lyrics, Parts I-IV, *ibid.*, V (1907-8), 423-76; VI (1908-9), 3-43; 137-80; 301-16.
- The Mediaeval Mimus, Part I, *ibid.*, VII (1909-10), 329-44.
- The Mediaeval Mimus, Part II, *ibid.*, VIII (1910-11), 1-44.
- Notes on Mediaeval Lyrics, *ibid.*, IX (1911-12), 427-30.
- CHARLES GOETTSCHE [1903-], Associate Professor of German Philology.
A.B. Chicago, 1901; Ph.D. *ibid.*, 1906; Assistant Professor of German, *ibid.*, 1910-16; Associate Professor of German Philology, *ibid.*, 1916-.
- Ablaut Relations in the Weak Verb in Gothic, Old High German, and Middle High German. Doctor's thesis. Part I. *Modern Philology*, V (1907-8), 569-616; Part II. *Ibid.*, VI (1908-9), 229-56.

Syllabus for a Three-Year High-School Course in German (joint author).
School Review, XXIII (1915), 479-81.

CHESTER NATHAN GOULD [1908-], Assistant Professor of German and Scandinavian Literature.

A.B. Minnesota, 1896; Ph.D. Chicago, 1907; Assistant Professor of German and Scandinavian Literature, *ibid.*, 1911-.

President, Society for the Advancement of Scandinavian Study, 1915-.

The Syntax of AT and ON in Gothic, Old Saxon, and Old High German.
Doctor's thesis. 8vo, 82. Menasha, Wis.: George Banta Publishing Co., 1916.

The Source of an Interpolation in the Hjálmtérs Saga ok Ölvis, *Modern Philology*, VII (1909-10), 207-16.

CAMILLO VON KLENZE [1893-1906], Associate Professor of German Literature; Head of the Department of German, College of the City of New York.

A.B. Harvard, 1886; Ph.D. Marburg, 1890; Instructor in Romance Languages, Cornell, 1890-91; Instructor in Germanic Languages, *ibid.*, 1891-93; Instructor in German, Chicago, 1893-96; Assistant Professor of German Literature, *ibid.*, 1896-1902; Associate Professor, *ibid.*, 1902-6.

Member, Board of Editors, *Modern Philology*, 1903-6.

The Interpretation of Italy during the Last Two Centuries. A Contribution to the Study of Goethe's "Italienische Reise." Decennial Publications of the University of Chicago. Second Series, XVII. 8vo, xv+157. Chicago: University Press, 1907.

Goethe's Successors in Italy, *Publications of the Modern Language Association*, XIX (1904), 23-26.

Die Behandlung Venedigs in der deutschen Novelle in und seit Schiller's *Geisterseher*, *Chicago's Gedenkfeier-Souvenir* (1905), 85-94.

Die Ausfuhr deutscher Privatbibliotheken nach Amerika, *Beilage zur Allgemeinen Zeitung* (1905), 181-82.

The Growth of Interest in the Early Italian Masters, *Modern Philology*, IV (1906-7), 206-74.

HANS ERNST GRONOW [1905-], Assistant Professor of German.

Ph.B. Chicago, 1905; Ph.D. *ibid.*, 1908; Assistant Professor of German, *ibid.*, 1914-.

REVIEWS OF: Bebel, My Life, *Journal of Political Economy*, XXII, 281-82; Kayser and Monteser, Foundations of German, *School Review*, XVIII, 433-34.

†PAUL OSKAR KERN [1895-1908], Assistant Professor of Germanic Philology.

Arbiturientenexamen, Berlin, 1877; Ph.D. Chicago, 1897; Associate in Germanic Philology, *ibid.*, 1895-96; Instructor, *ibid.*, 1896-1902; Assistant Professor, *ibid.*, 1902-8.

Should Teachers of German Aim at Some Acquaintance with the Historical Development of the German Language? *School Review*, X (1902), 60-68.

The Question of Translation in the Teaching of Modern Languages, *ibid.*, XIII (1905), 293-306.

Realien im neusprachlichen Unterricht, *Pädagogische Monatshefte*, VI (1905), 226-38.

Phonetics in the Classroom, *School Review*, XV (1907), 54-60.

The Study of Cognates as an Aid in the Acquisition of a Vocabulary, *ibid.*, XVI (1908), 109-12.

Eine Rechenstunde im deutschen Unterricht, *Monatshefte für deutsche Sprache und Pädagogik*, IX (1908), 68-71; 100-104.

REVIEWS IN: *School Review*, XIII, 51-54; XIV, 154-55; XV, 309-10.

JOHN JACOB MEYER [1900-], Assistant Professor of German.

A.B. Concordia College, 1891; Ph.D. Chicago, 1900; Associate in Sanskrit, *ibid.*, 1901-8; Instructor in German, *ibid.*, 1908-10; Assistant Professor, *ibid.*, 1910-.

Kshemendras Samayamātrikā. Svo, lviii, 108. Leipzig: Lotus-Verlag, 1903.

Dāmodaraguptas Kuṭṭanīmatam. Svo, iv+156. Leipzig: Lotus-Verlag, 1903.

Kāvyaśamgraha. Metrische Übersetzungen. Svo, 221. Leipzig: Lotus-Verlag, 1903.

Asanka . . . und andere Dichtungen. Svo, 202. Leipzig: Lotus-Verlag, 1903.

Félicie, Liebes- und Wanderlieder. Svo, ix+184. Dresden: E. Pierson, 1906.

Gedichte von W. A. Koskenniemi, aus dem Finnischen übersetzt. Svo, 67+ix. Dresden: E. Pierson, 1908.

† Deceased.

- Am Strand gefunden. Gedichte.* 8vo, 91+viii. Dresden: E. Pierson, 1908.
- Hindu Tales.* Royal 8vo, x+305. London: Luzac & Co., 1909.
- Vom Land der tausend Seen.* 8vo, vi+659. Leipzig: Georg Wigand, 1910.
- Das Engadin. Rhapsodie eines Naturkneipanten.* 8vo, 24. Samaden: Engadin Press Co., 1912.
- Isoldes Gottesurteil.* 8vo, 290. Berlin: H. Barsdorf, 1914.
- Das Weib im altindischen Epos.* 8vo, xviii+440. Leipzig: Wilhelm Heims, 1915.
- Hindu Chips for Readers of Goethe, *Modern Philology*, V (1907-8), 39-41.
- A Modern Finnish Cain, *ibid.*, VII (1909-10), 221-23.
- ADOLF CARL VON NOÉ [1904-], Assistant Professor of German Literature.
 A.B. Chicago, 1900; Ph.D. *ibid.*, 1905; Instructor in German, *ibid.*, 1905-10;
 Assistant Professor, *ibid.*, 1910-.
- Editor, *Bulletin of the Bibliographical Society of America*, 1910-12;
Papers, ibid., 1910-14.
- Goethe und das junge Deutschland.* Doctor's thesis. 8vo, 72. Chicago: University Press, 1910.
- Gutzkow's "Uriel Akosta"* (with Starr W. Cutting). 12mo, xv+105. New York: Henry Holt & Co., 1911.
- Lance sur fautre, *Modern Philology*, I (1903-4), 295-301.
- Lance sur fautre, *ibid.*, 395.
- Heinrich Laube, *Die Glocke*, I (1906), 243-47.
- Das Deutschtum in Österreich, *ibid.*, 363-64.
- Why Should the Teacher of German Have a Knowledge of Phonetics? *School Review*, XV (1907), 46-48.
- Die Stellung des College im amerikanischen Unterrichtssystem, *Internationale Wochenschrift für Wissenschaft, Kunst, und Technik* (Berlin), II (1908), 917-22.
- Die Universität von Chicago, *Die Glocke*, III (1908), 65-69.
- A Goethe Library, *Modern Language Notes*, XXIV (1909), 160.
- Die Österreicher in den Vereinigten Staaten, *Österreichische Rundschau*, XX (1909), 69-71.

- Leitgedanken zum Professorenaustausch, *Internationale Wochenschrift*, III (1909), 937-42.
- Recent German Books on America, *Papers of the Bibliographical Society of America*, IV (1909), 93-119.
- Österreichs Jugend in amerikanischer Beleuchtung, *Körperliche Erziehung*, VI (1910), 70-72.
- Student Organizations in German Universities, *Sigma Chi Quarterly*, XXX (1910), 6-17.
- Angewandte Psychologie und Schule in Amerika, *Dokumente des Fortschritts*, III (1910), 665-67.
- Zur Frage der Coeducation in Amerika, *ibid.*, 667-69.
- Von amerikanischen Bibliographien, *Blätter für die gesammten Socialwissenschaften*, VI (1910), 62-63.
- Englische Zeitschriften aus und über Mittel- und Südamerika, *ibid.*, 64.
- Die "Germanistic Society of America," *ibid.*, 96.
- The International Institutes for the Bibliography of Social Sciences, Medicine, Jurisprudence, and Technology in Berlin, *Papers of the Bibliographical Society of America*, V (1910), 97-107.
- La coéducation dans les collèges américains, *Les documents du progrès, Revue internationale*, V (1911), 442-44.
- The New Classification of Languages and Literatures by the Library of Congress, *Papers of the Bibliographical Society of America*, VI (1911), 59-65.
- Die Beziehungen zwischen Staat und Kirche in Amerika, *Dokumente des Fortschritts*, V (1912), 267-69.
- Das Civilservice-System in den Vereinigten Staaten von Nord-Amerika, *ibid.*, 537-39.
- Amerikanische Forschungsinstitut, *ibid.*, 573-75.
- Institutions et recherches scientifiques en Amérique, *Les documents du progrès, Revue Internationale*, VII (1913), 330-32.
- Les rapports entre l'église et l'état en Amérique, *ibid.*, 447-50.
- Die Entgermanisierung Amerikas, *Volkserzieher* (Berlin), XVIII (1914), 128.
- Problems of Austria-Hungary, *University of Chicago Magazine*, VI (1914), 219-22.

Military Drill in the University, *University of Chicago Magazine*, VIII (1916), 102-3.

REVIEWS IN: *School Review*, XIV, 618-19, 696-97; XV, 240, 421; XVII, 212, 442, 513-14; XVIII, 584; *Bulletin of the Bibliographical Society of America*, IV, 14, 50-51; *Journal of Political Economy*, XXII, 102-3.

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Dutch History, Art, and Literature for Americans. Lectures delivered at the University of Chicago. 8vo, 210. Grand Rapids: Eerdmans-Sevensma Co., 1912.

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Parts of the Body in Older Germanic and Scandinavian. Doctor's thesis. Linguistic Studies in Germanic, No. 2. 8vo, xii+217. Chicago: University Press, 1915.

JACOB HAROLD HEINZELMANN [1910-13], Instructor in German; Professor of German, University of Manitoba, Winnipeg.

A.B. Illinois, 1902; Ph.D. Chicago, 1908; Instructor in German, *ibid.*, 1910-13.

The Influence of the German Volkslied on Eichendorff's Lyric. Doctor's thesis. 8vo, iv+92. Leipzig: Gustav Foch, 1910.

Eichendorff and the Volkslied, *Modern Philology*, VI (1908-9), 511-15.

A Bibliography of German Translations of Pope in the Eighteenth Century, *Bulletin of the Bibliographical Society of America*, IV (1912), 3-11.

Pope in Germany in the Eighteenth Century, *Modern Philology*, X (1912-13), 317-64.

PAUL HERMAN PHILLIPSON [1909-], Instructor in German.

A.M. Western Reserve, 1901; Ph.D. Chicago, 1911; Instructor in German, *ibid.*, 1913-.

Easy German Conversation (with P. S. Allen). 8vo, liii+229. New York: Henry Holt & Co., 1914.

†Deceased.

- First German Grammar* (with P. S. Allen). 8vo, xix+436. Boston: Ginn & Co., 1915.
- Germany's Isolation* (translated from the German of Paul Rohrbach). 8vo, xvii+186. Chicago: A. C. McClurg & Co., 1915.
- In Deutschland*. A cultural reader. 8vo, vi+225. Boston: Ginn & Co. In Press.
- Aus August Daniel von Binzers Leben*. Doctor's thesis. 8vo, iii+120. In Press.
- A German Adaptation of the "Blue Bells of Scotland," *Modern Language Notes*, XXV (1910), 89.
- The Direction of Thought in the *Wartburglieder* of 1817, *ibid.*, XXVI (1911), 81-83.
- The Last Days of Joseph Christian von Zedlitz, *Modern Philology*, IX (1911-12), 151-55.
- Notes on Heine, *ibid.*, XIII (1915-16), 123-28.

JOHN CONRAD WEIGEL [1913-], Instructor in German.

A.B. Lombard College, 1908; Instructor in Physics, *ibid.*, 1907-8; Professor of German, *ibid.*, 1908-9; Instructor in German, Chicago, 1913-.

The Reorganization of Teachers' Training in German in Our Colleges and Universities, *Monatshefte für deutsche Sprache und Pädagogik*, XVII (1916), Part I, 16-20; Part II, 34-44.

HENRIETTA KATHERINE BECKER (MRS. CAMILLO VON KLENZE) [1903-6], Associate in German; New York City.

A.B. Chicago, 1900; Ph.D. *ibid.*, 1903; Associate in German, *ibid.*, 1904-6.

Kleist and Hebel: A Comparative Study. Doctor's thesis. 8vo, 71. Chicago: Scott, Foresman & Co., 1904.

Elements of German. 1st ed., 1903; rev. ed., 1910. Chicago: Scott, Foresman & Co.

LEONARD BLOOMFIELD [1908-9], Assistant in German; Assistant Professor of Comparative Philology and German, University of Illinois.

A.B. Harvard, 1906; Ph.D. Chicago, 1909; Assistant in German, *ibid.*, 1908-9.

A Semasiologic Differentiation in Germanic Secondary Ablaut. Doctor's thesis. *Modern Philology*, VII (1909-10), 245-88, 345-82.

MILTON D. BAUMGARTNER, PH.D. 1913; Armstrong Professor of Germanic Languages, Butler College, Indianapolis.

On Dryden's Relation to Germany in the Eighteenth Century. Doctor's thesis. 8vo, 87. Lancaster, Pa.: New Era Printing Co., 1914.

FRANK ADOLPH BERNSTORFF, PH.D. 1912; Instructor in German, Northwestern University.

Handbook of German Grammar. 12mo, 155. Boston: Ginn & Co., 1912.

The Use of the Word "Derselbe" from the Classic Period of German Literature to the Present Day. Doctor's thesis. 8vo, 78. Menasha, Wis.: George Banta Publishing Co., 1914.

CHARLES BOYLE CAMPBELL, PH.D. 1912; Professor of Modern Languages, Agricultural and Mechanical College, Tex.

Concerning the Pronominal Antecedent and the Form of the Accompanying Relative Pronoun in Modern German Prose. Doctor's thesis. 8vo, 115. Berlin: Emil Ebering, 1913.

WILLIS ARDEN CHAMBERLIN, PH.D. 1910; Professor of German Language and Literature, Denison University, Granville, Ohio.

Periodic and Loose Sentences in Schiller's Historical Works. Doctor's thesis. 8vo, 52. Weimar: R. Wagner Sohn, 1910.

PETER A. CLAASSEN, PH.D. 1909; Professor of Modern Languages, Central University, Danville, Ky.

The Fate-Question in the Dramas and Dramatical Concepts of Schiller in Contrast to the Real So-called Fate-Dramas. Doctor's thesis. 8vo, 126. Leipzig: Reinhold Berger, 1910.

BERTHA REED COFFMAN, PH.D. 1913; University of Montana, Missoula.

The Influence of English Literature on Friedrich von Hagedorn. Doctor's thesis. *Modern Philology*, XII (1914-15), 313-24, 503-20; XIII (1915-16), 75-96.

ROSCOE MYRL IHRIG, PH.D. 1914; Associate Professor of Modern Languages, School of Applied Science, Carnegie Institute of Technology, Pittsburgh.

The Semantic Development of Words for "Walk," "Run," in the Germanic Languages. Doctor's thesis. Linguistic Studies in Germanic, No. 4. 8vo, x+168. Chicago: University Press, 1916.

GEORGE PULLEN JACKSON, PH.D. 1911; Assistant Professor, University of North Dakota, Grand Forks.

Traces of Gleim's *Grenadierlieder* in 1809 *Modern Language Notes*, XXVI (1911), 112-13.

FRANCIS WALDEMAR KRACHER, PH.D. 1913; Assistant Professor of German Language and Literature, State University of Iowa, Iowa City.

Dramatische Mitleidsmittel im modernen deutschen Drama. Erster Teil. "Wesen des Mitleids. Das Mitleid bei Lessing." Doctor's thesis. 8vo, 149. Leipzig: Wilhelm Schunke, 1913.

SAMUEL KROESCH, PH.D. 1909; Professor of German, Whitman College, Walla Walla, Wash.

The Semasiological Development of Words for "Perceive," etc., in the Older Germanic Dialects. Doctor's thesis. *Modern Philology*, VIII (1910-11), 461-510.

LOUISE MALLINCKRODT KUEFFNER, PH.D. 1909; Assistant Professor of German, Vassar College.

The Development of the Historic Drama: Its Theory and Practice. A Study Based Chiefly on the Dramas of Elizabethan England and of Germany. Doctor's thesis. 8vo, 93. Chicago: University Press, 1910.

WILLIAM FERDINAND LUEBKE, PH.D. 1911; Assistant Professor of German, State University of Iowa, Iowa City.

The Language of Berthold von Chiemsee in *Teutsche Theology*. Doctor's thesis. Part I, *Modern Philology*, X (1912-13), 207-63; Part II, *ibid.*, XII (1914-15), 277-96; Part III, *ibid.*, 457-75.

GEORGE ABRAHAM MULFINGER, PH.D. 1902; Professor of German Language and Literature, Allegheny College, Meadville, Pa.

Ferdinand Kurnberger's Roman, "Der Amerikamüde," dessen Quellen und Verhältniss zu Lenaus "Amerikareise." Doctor's thesis. 8vo, 53. Philadelphia: German American Annals Press, 1903.

WALTER RALEIGH MYERS, PH.D. 1909; Assistant Professor of German, University of Minnesota, Minneapolis.

The Technique of Bridging Gaps in the Action of German Drama since Gottsched. Doctor's thesis. *Modern Philology*, VIII (1910-11), 217-68; 363-98.

ALFRED ISAAC ROEHM, PH.D. 1910; Professor of German, State Normal College, Oshkosh, Wis.

Bibliographie und Kritik der deutschen Übersetzungen aus der amerikanischen Dichtung. Doctor's thesis. 8vo, 62. Leipzig: August Hoffman, 1910.

HENRY OTTO SCHWABE, PH.D. 1913; Instructor in German, University of Michigan.

The Semantic Development of Words for Eating and Drinking in the Germanic Dialects. Doctor's thesis. Linguistic Studies in Germanic, No. 1. 8vo, xii+110. Chicago: University Press, 1915.

MARION LEE TAYLOR, PH.D. 1908; Instructor in German, High Schools, New York City.

A Study of the Technique in Konrad Ferdinand Meyer's "Novellen." Doctor's thesis. 8vo, iv+109. Chicago: University Press, 1909.

EDWARD JOHN WILLIAMSON, PH.D. 1907; Professor of Modern Languages, Hobart College, Geneva, N.Y.

Grillparzer's Attitude toward Romanticism. Doctor's thesis. 8vo, 76. Chicago: University Press, 1910.

THE DEPARTMENT OF THE ENGLISH LANGUAGE AND LITERATURE

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Exchange Professor at the University of Göttingen, 1909.

Managing Editor, *Modern Philology*, 1908-.

- English Poetry* (1170-1892). 8vo, xxviii+580. Boston: Ginn & Co., 1907.
- Bailey-Manly Speller* (with E. R. Bailey). 8vo, xi+178. Boston: Houghton Mifflin Co., 1908.
- English Prose* (1137-1890). 8vo, xix+544. Boston: Ginn & Co., 1909.
- Lessons in the Speaking and Writing of English* (with E. R. Bailey). 2 vols. 1st ed., 1912, xv+299, xiii+356; seventh-grade ed., 1914, Vol. I, viii+203, Vol. II, entirely rewritten, ix+283; Indiana ed., 1916, Vol. I, xv+196, Vol. II, revised, xx+450. New York: D. C. Heath & Co.
- Manual for Writers* (with J. A. Powell). 8vo, vii+226. Chicago: University Press, 1913.
- English Prose and Poetry* (1137-1892). Royal 8vo, xi+792. Boston: Ginn & Co., 1916.
- Narrative Writing in Anglo-Saxon Times, *Reader*, VII (1905), 102-9.
- The Lost Leaf of *Piers the Plowman*, *Modern Philology*, III (1905-6), 359-66.
- Literary Forms and the New Theory of the Origin of Species, *ibid.*, IV (1906-7), 577-95.
- The Influence of the Tragedies of Seneca upon the Early English Drama. In F. J. Miller's *The Tragedies of Seneca*, 3-10. Chicago: University Press, 1907.
- Familia Goliae, *Modern Philology*, V (1907-8), 201-9.
- A Knight There Was, *Transactions of the American Philological Association*, XXXVIII (1908), 89-107.
- Piers the Plowman* and Its Sequence (with a Bibliography), *Cambridge History of English Literature*, II (1908), 1-42, 432-37.
- The Authorship of *Piers Plowman* with a Terminal Note on the Lost Leaf, *Modern Philology*, VII (1909-10), 83-104.
- English Literature (from Chaucer to the Renaissance). In *Encyclopaedia Britannica*, 11th ed., IX (1910), 611-14.
- The Children of the Chapel Royal and Their Masters, *Cambridge History of English Literature*, VI (1910), 314-29, 522-23.
- The Stanza-Forms of *Sir Thopas*, *Modern Philology*, VIII (1910-11), 141-44.

Elckerlijc-Everyman: The Question of Priority, Modern Philology, VIII (1910-11), 269-78.

A Contribution to *Frederick James Furnivall: A Volume of Personal Record*, 112-15. Oxford: University Press, 1911.

Memoir of William Vaughn Moody. In the *Poems and Plays of William Vaughn Moody*. Boston: Houghton Mifflin Co., 1912.

The Merry Devill of Edmonton (Text, Introduction, and Notes) in Gayley's *Representative English Comedies*, II (1912), 503-72.

What Is Chaucer's House of Fame? In *Anniversary Papers by Pupils of George Lyman Kittredge*, 73-81. Boston: Ginn & Co., 1913.

What Is the Parlement of Foules? In *Studien zur englischen Philologie*, L (1913) (*Festschrift für L. Morsbach*), 279-90.

Note on the Envoy of *Truth, Modern Philology*, XI (1913-14), 226.

A Contribution to the London Shakespeare Memorial Volume Entitled *Homage to Shakespeare* (edited by Professor Israel Gollancz; Oxford: University Press, 1916), pp. 353-55.

REVIEWS OF: Root, *The Poetry of Chaucer, School Review*, XVI 59-61; Tunison, *Dramatic Traditions of the Dark Ages, American Historical Review*, VIII, 124-26.

FREDERIC IVES CARPENTER [1895-1911], Professor of English; Barrington, Ill.

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Member, Board of Editors, *Modern Philology*, 1903-.

Romance Ascribed to Milton, *Dial*, XXXIV (1903), 238-39.

REVIEWS OF: Various books in *Nation*.

ROBERT HERRICK [1893-], Professor of English.

A.B. Harvard, 1890; Assistant Professor of Rhetoric, Chicago, 1895-1901; Associate Professor, *ibid.*, 1901-5; Professor of English, *ibid.*, 1905-.

Hawthorne's "Twice Told Tales" (with Robert W. Bruère). 16mo, 540. Chicago: Scott, Foresman & Co., 1903.

Their Child. 16mo, 150. New York: Macmillan Co., 1903.

The Common Lot. 12mo, 425. New York: Macmillan Co., 1904.

- Composition and Rhetoric for Schools* (with L. T. Damon). Rev. ed., 8vo, 435. Chicago: Scott, Foresman & Co., 1905.
- The Memoirs of an American Citizen*. 12mo, 351. New York: Macmillan Co., 1905.
- The Master of the Inn*. 16mo, 84. New York: Charles Scribner's Sons, 1908.
- Together*. 16mo, 595. New York: Macmillan Co., 1908.
- A Life for a Life*. 12mo, 433. New York: Macmillan Co., 1910.
- The Healer*. 12mo, 455. New York: Macmillan Co., 1911.
- One Woman's Life*. 12mo, 405. New York: Macmillan Co., 1913.
- The Great Adventure*. 12mo, 408. New York: Macmillan Co., 1913.
- Clark's Field*. 12mo, 478. Boston: Houghton Mifflin Co., 1914.
- The World Decision*. 16mo, 253. Boston: Houghton Mifflin Co., 1916.
- The Conscript Mother*. New York: Charles Scribner's Sons, 1916.
- Weekly articles in the *Chicago Sunday Tribune*, 1915-.

ROBERT MORSS LOVETT [1893-], Professor of English; Dean of the Junior Colleges.

A.B. Harvard, 1892; Assistant Professor of English, Chicago, 1896-1904; Associate Professor, *ibid.*, 1904-9; Dean of the Junior Colleges, 1907-; Professor, *ibid.*, 1909-.

- Richard Gresham*. 8vo, 300. New York: Macmillan Co., 1904.
- A First View of English Literature* (with W. V. Moody). 8vo, 376. New York: Charles Scribner's Sons, 1905.
- A Wingéd Victory*. 8vo, 421. New York: Duffield & Co., 1907.
- Shakespeare's "Julius Caesar."* 16 mo, 129. The Tudor Shakespeare. New York: Macmillan Co., 1913.
- Cowards*. A play. *Drama*, August, 1917. Produced at the Fine Arts Theater, Chicago, February, 1914.
- Historical and Biographical Background in the Teaching of Literature, *Journal of the Michigan Schoolmaster's Club* (1907), 72-81.
- Six articles on modern literature: Zola, *Le Rêve*; Rostand, *Cyrano de Bergerac*; Maeterlinck, *The Intruder*, and *The Blind*; Hauptmann, *The Sunken Bell*; Sudermann, *Es War*; Ibsen, *A Doll's House*, *Studies in European Literature*. Chautauqua: Chautauqua Press, 1908.

MYRA REYNOLDS [1894-], Professor of English Literature.

A.B. Vassar, 1880; Ph.D. Chicago, 1895; Assistant Professor of English Literature, Chicago, 1897-1902; Associate Professor, *ibid.*, 1903-11; Professor, *ibid.*, 1911-.

Selections from the Poems of Alfred Tennyson. With Introduction and Notes. 16mo, 363. Chicago: Scott, Foresman & Co., 1904.

The Treatment of Nature in English Poetry between Pope and Wordsworth. 2d ed., with new chapters on "Gardening and Landscape Painting." 8vo, vii+388. Chicago: University Press, 1909.

Selections from the Poems and Plays of Robert Browning. With Introduction and Notes. 8vo, 425. Chicago: Scott, Foresman & Co., 1910.

ALBERT HARRIS TOLMAN [1893-], Professor of English Literature.

A.B. Williams, 1877; Ph.D. Strassburg, 1889; L.H.D. Williams, 1916; Professor of English, Ripon, 1884-93; Assistant Professor of English Literature, Chicago, 1893-1907; Associate Professor, *ibid.*, 1907-14; Professor, *ibid.*, 1914-.

The Views about Hamlet, and Other Essays. 8vo, x+403. Boston: Houghton Mifflin Co., 1904.

Questions on Shakespeare: Part I, Introductory. 16mo, xvi+215. Chicago: University Press, 1910.

Questions on Shakespeare: Part II, The First Histories, Poems, Comedies. 16mo, x+354. Chicago: University Press, 1910.

Questions upon each of the following plays have appeared in a separate pamphlet. With the exception of one play these Questions are published only in pamphlet form: *A Midsummer-Night's Dream* (reprinted from *Part II*), 16mo, ix+40; *I Henry IV*, 16mo, ix+57; *II Henry IV*, 16mo, ix+51; *The Merchant of Venice*, 16mo, ix+59; *Much Ado about Nothing*, 16mo, ix+52; *As You Like It*, 16mo, ix+56; *Twelfth Night*, 16mo, ix+51; *The Tempest*, 16mo, ix+54.

Alternation in the Staging of Shakespeare's Plays, *Modern Philology*, VI (1908-9), 517-34.

American Folk-Songs, *Dial*, L (1911), 261-63.

Is Shakespeare Aristocratic? *Publications of the Modern Language Association of America*, XXIX (1914), 277-98.

Some Songs Traditional in the United States, *Journal of American Folk-Lore*, XXIX (1916), 155-97.

REVIEWS OF: Liddell (editor), *The Elizabethan Shakspeare*, Vol. I, *Macbeth*; Schmidt, *Shakespeare-Lexicon*, 3d ed.; Lanier, *Shakspeare and His Forerunners*; Hazlitt, *Shakspeare*; *Dial*, XXXV (1903), 165-69. Other reviews in: *Elementary School Teacher*, III, 467-68; *School Review*, XIV, 697-98.

WILLIAM CLEAVER WILKINSON [1892-], Professor Emeritus of Poetry and Criticism.

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Modern Masters of Pulpit Discourse. 8vo, viii+526. New York: Funk & Wagnalls Co., 1905.

The Epic of Moses. Part I, The Exodus. 8vo, 395. *Part II, The Wandering in the Wilderness*. 8vo, 329. Chicago: A. J. Scott & Co., 1905.

Poems. 8vo, xii+412. Chicago: A. J. Scott & Co., 1905.

Some New Literary Valuations. 8vo, 411. New York: Funk & Wagnalls Co., 1909.

The Good of Life, and Other Little Essays. 8vo, 392. New York: Funk & Wagnalls Co., 1910.

Daniel Webster: A Vindication, with Other Historical Essays. 8vo, 419. New York: Funk & Wagnalls Co., 1911.

Paul and the Revolt against Him. 8vo, 258. Philadelphia: Griffith & Rowland Press, 1914.

Concerning Jesus Christ, the Son of God. Philadelphia: Griffith & Rowland Press. In Press.

Are the Resurrection Narratives Legendary? *American Journal of Theology*, X (1906), 628-47.

Matthew Arnold as Poet Tried by His *Sohrab and Rustum*, *North American Review*, CLXXXVIII (1908), 666-81.

CHARLES READ BASKERVILL [1908-], Associate Professor of English.

A.B. Vanderbilt, 1896; Ph.D. Chicago, 1911; Professor and Head of the Department of English, Central State Normal School, Edmond, Okla., 1903-5; Assistant Professor of English, Chicago, 1912-15; Associate Professor, *ibid.*, 1915-.

Member, Board of Editors, *Modern Philology*, 1914-.

- English Elements in Jonson's Early Comedy*. Doctor's thesis. 8vo, x+328. Austin, Tex.: Bulletin of the University of Texas, No. 178, 1911.
- Some Parallels to *Bartholomew Fair*, *Modern Philology*, VI (1908-9), 109-27.
- The Sources of Jonson's *Masque of Christmas* and *Love's Welcome at Welbeck*, *ibid.*, 257-69.
- The Source of the Main Plot of Shirley's *Love Tricks*, *Modern Language Notes*, XXIV (1909), 100-101.
- Source and Analogues of "How a Man May Choose a Good Wife from a Bad," *Publications of the Modern Language Association of America*, XXIV (1909), 711-30.
- Sidney's *Arcadia* and *The Tryall of Chevalry*, *Modern Philology*, X (1912-13), 197-201.
- Bandello and *The Broken Heart*, *Modern Language Notes*, XXVIII (1913), 51-52.
- The Early Fame of *The Shepheards Calender*, *Publications of the Modern Language Association of America*, XXVIII (1913), 291-313.
- A Forerunner of Warburton's *Cook*, *Modern Philology*, XIII (1915-16), 52.
- John Rastell's Dramatic Activities, *ibid.*, 557-60.

REVIEWS OF: Feuillerat, John Lyly, Contribution à l'histoire de la Renaissance en Angleterre, *Modern Language Notes*, XXVII, 147-52; Cambridge History of English Literature, Vols. V and VI, The Drama to 1642, *Journal of English and Germanic Philology*, XI, 476-88; Briggs, Sejanus, by Ben Jonson, *ibid.*, XIII, 366-68; Boas, University Drama in the Tudor Age, *ibid.*, XIV, 620-24.

FRANCIS ADELBERT BLACKBURN [1892-1913], Associate Professor of the English Language. Retired; Hollywood, Cal.

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Editor of *Exodus and Daniel: Two Old English Poems*. 16mo, xxxvi+234. Boston: D. C. Heath & Co., 1907.

A Neglected Branch of the Teaching of English, *Publications of the Modern Language Association of America*, XXI (1906), 39-69.

The Use in Old English Literature of the Apocryphal Passage in the Third Chapter of the Book of Daniel, *International Journal of Apocrypha*, No. 19 (1909), 69-73.

Note on Beowulf 1591-1617, *Modern Philology*, IX (1911-12), 555-66.

PERCY HOLMES BOYNTON [1903-], Associate Professor of English.

A.B. Amherst, 1897; A.M. Harvard, 1898; Acting Assistant Professor of English, Washington University, 1903; Assistant Professor of English, Chicago, 1909-14; Associate Professor, *ibid.*, 1914-.

Secretary of Instruction, Chautauqua Institution, 1903-16.

Associate Editor, *Amherst Graduates' Quarterly*, 1913-15; Associate Editor, *English Journal*, 1911-.

A First View of English and American Literature (with W. V. Moody and R. M. Lovett). 8vo, 475. New York: Charles Scribner's Sons, 1909.

London in English Literature. 12mo, xii+344. Chicago: University Press, 1913.

Principles of Composition. 8vo, xii+388. Boston: Ginn & Co., 1915.

Suggestions for the English Literature Section of a High-School Library, *School Review*, XX (1912), 111-16.

Sorting College Freshmen, *English Journal*, II (1913), 73-80.

The American Undergraduate—Past and Present, *Nation*, XCIX (1914), 316-20.

Democracy in Emerson's Journals, *New Republic*, I (1914), 25, 26.

Emerson's Feeling toward Reform, *ibid.*, II (1915), 16-18.

Emerson's Solitude, *ibid.*, III (1915), 68-70.

A Colonial Farmer's Letters (Crèvecoeur), *ibid.*, 168-70.

What Has Happened to Summer? (Popular Education), *ibid.*, IV (1915), 280-82.

Walt Whitman's Idea of the State, *ibid.*, VI (1916), 139-41.

American Neglect of American Literature, *Nation*, CII (1916), 478-80.

REVIEW OF: Brook, America's Coming of Age, *Dial*, LX, 18-19. Other reviews in *Amherst Graduates' Quarterly*, II, 104-65; *English Journal*, II, 203-4; *Nation*, C, 84; CI, 207-8; *New Republic*, V, 230.

- TOM PEETE CROSS [1913-], Associate Professor of English and Celtic.
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- The Celtic Fée in *Launfal*, *Kittredge Anniversary Papers* (1913), 377-87.
- The Celtic Origin of the Lay of *Yonec*, *Studies in Philology* (University of North Carolina), XI (1913), 26-60.
- The Celtic Elements in the Lays of *Lanval* and *Graelent*, *Modern Philology* XII (1914-15), 585-644.
- Laegaire mac Crimthann's Visit to Fairyland, *ibid.*, XIII (1915-16), 731-39.
- JAMES WEBER LINN [1899-], Associate Professor of English.
 A.B. Chicago, 1897; Assistant Professor of English, *ibid.*, 1907-11; Associate Professor, *ibid.*, 1911-.
- Editor, *University of Chicago Magazine*, 1913-.
- Essentials of English Composition*. 16mo, 230. New York: Charles Scribner's Sons, 1912.
- Examples of English Composition*. 16mo, x+246. New York: Charles Scribner's Sons, 1913.
- GEORGE LINNAEUS MARSH [1902-], Extension Associate Professor of English.
 A.B. Grinnell, 1892; Ph.D. Chicago, 1903; Extension Assistant Professor of English, *ibid.*, 1909-10; Extension Associate Professor, *ibid.*, 1910-.
- English in Secondary Schools*. 8vo, 57. Chicago: Scott, Foresman & Co., 1905.
- A Teacher's Manual for the Study of English Classics*. 12mo, 272. Chicago: Scott, Foresman & Co., 1912, 1915.
- Good English, Oral and Written*. Book II (with William H. Elson and Clara E. Lynch). 12mo, 406. Chicago: Scott, Foresman & Co., 1916.
- Sources and Analogues of "The Flower and the Leaf." Doctor's thesis. *Modern Philology*, IV (1906-7), 121-67, 281-327.
- The Authorship of "The Flower and the Leaf," *Journal of English and Germanic Philology*, VI (1907), 373-94.

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A First Book in English. 8vo. Chicago: Atkinson, Mentzer & Co., 1914.

JAMES ROOT HULBERT [1907-], Assistant Professor of English.

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Chaucer's Official Life. Doctor's thesis. 8vo, 75. Menasha, Wis.: George Banta Publishing Co., 1912.

Chaucer and the Earl of Oxford, *Modern Philology*, X (1912-13), 433-37.

Syr Gawayn and the Grene Knyȝt, *ibid.*, XIII (1915-16), 433-62, 689-730.

THOMAS ALBERT KNOTT [1907-], Assistant Professor of English.

A.B. Northwestern, 1902; Ph.D. Chicago, 1912; Assistant Professor of English, *ibid.*, 1912-.

The Lost Leaf of *Piers the Plowman*, *Nation*, LXXXVIII (1909), 482-83.

A Bit of Chaucer Mythology, *Modern Philology*, VIII (1910-11), 135-39.

An Essay toward the Critical Text of the A-Version of *Piers the Plowman*. Doctor's thesis. *Ibid.*, XII (1914-15), 389-421.

The Text of Sir Gawayne and the Green Knight, *Modern Language Notes*, XXX (1915), 102-8.

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The Fire-Bringer: A Lyrical Drama. 8vo, 123. Boston: Houghton Mifflin Co., 1904.

A First View of English Literature (with R. M. Lovett). 8vo, 376. New York: Charles Scribner's Sons, 1905.

The Poems of Trumbull Stickney (with George Cabot Lodge and John E. Lodge). 12mo, 312. Houghton Mifflin Co., 1905.

† Deceased.

The Great Divide: A Play. 8vo, 167. New York: Macmillan Co., 1909.

The Faith Healer: A Play. 8vo, 164. New York: Macmillan Co., 1910.

Gloucester Moors and Other Poems. 8vo, 106. Boston: Houghton Mifflin Co., 1910.

Poems of Trumbull Stickney, *North American Review*, CLXXXIII (1906), 1005-18.

(A complete edition of Moody's poems and plays was published by the Houghton Mifflin Co. in 1912.)

EVELYN MAY ALBRIGHT [1913-], Instructor in English.

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Descriptive Writing. 12mo, ix+275. New York: Macmillan Co., 1911.

To Be Staied, *Publications of the Modern Language Association of America*, XXX (1915), 451-99.

Eating a Citation, *Modern Language Notes*, XXX (1915), 201-6.

ROBERT WALTER BRUÈRE [1899-1905], Instructor in English; Harper & Bros. Publishing Co., New York City.

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Walt Whitman, *Reader*, V (1905), 490-94.

Industrial Democracy, *Outlook*, LXXXIV (1906), 877-83.

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A Manual for Theme Writers. 12mo, 152. Chicago: Scott, Foresman & Co., 1903.

The University of Chicago: A Sketch. 12mo, 40. Chicago: University Press, 1905.

Macaulay's "Lays of Ancient Rome." With Introduction and Notes. 8vo, 130. New York: Longmans, Green, & Co., 1905.

† Deceased.

CARL HENRY GRABO [1907-], Instructor in English.

Ph.B. Chicago, 1903; Instructor in English, *ibid.*, 1910-.

Assistant Editor, *Chautauquan*, 1904-10.

The Art of the Short Story. 8vo, 321. New York: Charles Scribner's Sons, 1913.

The Amateur Philosopher. 8vo, 290. New York: Charles Scribner's Sons, 1917.

GEORGE WILEY SHERBURN [1912-], Instructor in English.

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Assistant Editor of the *Multiple Dictionary* in the Volume Library (pp. 679-830). Chicago: W. E. Richardson Co., 1912.

REVIEWS IN: *School Review*, XX, 129-31; XXIV, 243-45.

DAVID HARRISON STEVENS [1914-], Instructor in English.

A.B. Lawrence, 1906; Ph.D. Chicago, 1914; Instructor in English, Northwestern, 1908-12; Instructor in English, Chicago, 1914-.

Party Politics and English Journalism, 1702-1742. Doctor's thesis. xii+156. Menasha, Wis.: George Banta Publishing Co., 1916.

Early Records of the *London Gazette, Nation*, CI (1915), 69-70.

REVIEW IN: *Modern Language Notes*, XXIX, 256-58.

OSCAR LOVELL TRIGGS [1892-1904], Instructor in English.

A.B. Minnesota, 1889; Ph.D. Chicago, 1895; Docent in English, *ibid.*, 1892-95; Instructor in English, *ibid.*, 1895-1904.

Arts and Crafts Movement, *Independent*, LV (1903), 2449-52.

Philosophy of the Betterment Movement, *Chautauquan*, XXXVII (1903), 463-66.

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Ph.B. Chicago, 1894; Ph.M. *ibid.*, 1896; Lecturer in English, Class-Study Department, Extension Division, *ibid.*, 1896-98; Assistant in English, University College, *ibid.*, 1899-1909; Extension Instructor, *ibid.*, 1909-1915.

Composition and Rhetoric. 12mo, vii+387. New York: Hinds & Noble, 1903.

MRS. KATHARINE GRAHAM [1910-], Assistant in English.

Ph.B. Chicago, 1915.

Literary Critic, *Chicago Evening Post*, 1909-12.

Some Aspects of Echegaray, *Poet-Lore*, 1910.

Acquiring the Social Point of View, *Independent*, LXIV (1913), 141-42.

ELEANOR PRESCOTT HAMMOND [1898-1905], Docent in the English Language and Literature; 1357 East Fifty-seventh St., Chicago.

Ph.D. Chicago, 1898.

Editor: *The Eleanor Record*, Chicago.

Chaucer: A Bibliographical Manual. 8vo, 580. New York: Macmillan Co., 1908.

The Departing of Chaucer, *Modern Philology*, I (1903-4), 331-36.

Lydgate and the Duchess of Gloucester, *Anglia*, XXVII (1904), 381-98.

MSS Pepys 2006: A Chaucerian Codex, *Modern Language Notes*, XIX (1904), 196-98.

MSS Longleat 258: A Chaucerian Codex, *ibid.*, XX (1905), 77-79.

Order of the Canterbury Tales: Caxton's Two Editions, *Modern Philology*, III (1905-6), 159-78.

Two British Museum Manuscripts, *Anglia*, XXVIII (1905), 1-28.

JOHN ARTHUR POWELL [1915-16], Extension Assistant in English; Secretary of the American Academy of Baconian Literature.

Manual of Style. Revised editions of 1910, 1911, and 1914. 8vo, x+140+136. Chicago: University Press.

Manual for Writers (with John M. Manly). 8vo, 226. Chicago: University Press, 1913.

REVIEW OF: Orcutt, *Writer's Desk Book*, *English Journal*, II, 140-43.

FRANK CLYDE BROWN, PH.D. 1909; Professor of English, Trinity College, Durham, N.C.

Elkanah Settle: His Life and Works. Doctor's thesis. 8vo, x+170. Chicago: University Press, 1910.

WILLIAM FRANK BRYAN, PH.D. 1913; Associate Professor of English, Northwestern University.

Studies in the Dialects of the Kentish Charters of the Old English Period. Doctor's thesis. 8vo, xiii+40. Menasha, Wis.: George Banta Publishing Co., 1915.

GEORGE RALEIGH COFFMAN, PH.D. 1913; Professor of English, University of Montana, Missoula.

A New Theory concerning the Origin of the Miracle Play. Doctor's thesis. 8vo, vi+84. Menasha, Wis.: George Banta Publishing Co., 1914.

CLYDE BARNES COOPER, PH.D. 1914; Associate Professor of English, Armour Institute, Chicago.

Some Elizabethan Opinions of the Poetry and Character of Ovid. Doctor's thesis. 8vo, 34. Menasha, Wis.: George Banta Publishing Co., 1914.

CARSON S. DUNCAN, PH.D. 1913; Instructor in Commercial Organization. See under Department of Political Economy, p. 48.

LEE MONROE ELLISON, PH.D. 1916.

The Early Romantic Drama at the English Court. Doctor's thesis. 8vo, vii+147. Menasha, Wis.: George Banta Publishing Co., 1917.

THORNTON SHIRLEY GRAVES, PH.D. 1912; Professor of English, Trinity College, Durham, N.C.

The Court and the London Theatres during the Reign of Elizabeth. Doctor's thesis. 8vo, 93. Menasha, Wis.: George Banta Publishing Co., 1913.

A Note on the Swan Theatre, *Modern Philology*, IX (1911-12), 431-34.
Some Allusions to Religious and Political Plays, *ibid.*, 545-54.

The Heywood Circle and the Reformation, *ibid.*, X (1912-13), 553-72.

Night Scenes in the Elizabethan Theatres, *Englische Studien*, XLVII (1913), 63-67.

The Arraignment of Paris and Sixteenth-Century Flattery, *Modern Language Notes*, XXVIII (1913), 48-49.

CHARLES HENRY GRAY, PH.D. 1904; Professor of English, Tufts College, Medford, Mass.

Lodowick Carliell, His Life: A Discussion of His Plays, and "The Deserving Favorite." A Tragi-Comedy, reprinted from the original edition of 1629, with Introduction and Notes. Doctor's thesis. 8vo, 177. Chicago: University Press, 1905.

REGINALD HARVEY GRIFFITH, PH.D. 1905; Professor of English, University of Texas, Austin.

Sir Perceval of Galles: A Study of the Sources of the Legend. Doctor's thesis. 8vo, viii+131. Chicago: University Press, 1911.

ORIE LATHAM HATCHER, PH.D. 1903; Director, Virginia Bureau of Vocations for Women, Richmond, Va.

John Fletcher: A Study in Dramatic Method. Doctor's thesis. 8vo, 114. Scott, Foresman & Co., 1905.

HERBERT WYNFORD HILL, PH.D. 1911; Professor of English Language and Literature, University of Nevada, Reno.

Sidney's *Arcadia* and the Elizabethan Drama, *University of Nevada Studies*, I (1908), 1-59.

La Calprenède's Romances and the Restoration Drama. Doctor's thesis. *Ibid.*, II (1910), 1-56; III (1911), 57-158.

ANNETTE BROWN HOPKINS, PH.D. 1912; Associate Professor of English, Goucher College, Baltimore.

The Influence of Wace on the Arthurian Romances of Crestien de Troies. Doctor's thesis. 8vo, 155. Menasha, Wis.: George Banta Publishing Co., 1913.

JOHN ROBERTSON MACARTHUR, PH.D. 1903; Professor of English, State Agricultural College, Manhattan, Kan.

The First Part of "Sir John Oldcastle": A Historical Drama by Michal Drayton, Anthony Munday, Richard Hathway, and Robert Wilson. Edited with an Introduction, Critical Text, and Notes. Doctor's thesis. 8vo, 157. Chicago: Scott, Foresman & Co., 1907.

† DAVID LEE MAULSBY, PH.D. 1909.

The Contribution of Emerson to Literature. Doctor's thesis. 12mo, 177.
Medford, Mass.: Tufts College Press, 1911.

† EDWARD PAYSON MORTON, PH.D. 1910.

The Technique of English Non-Dramatic Blank Verse. Doctor's thesis.
12mo, viii+129. Chicago: R. R. Donnelley & Sons Co., 1910.

GEORGE ALBERT NICHOLSON, PH.D. 1914; Acting Head, Department of
Rhetoric, DePauw University, Greencastle, Ind.

*English Words with Native Roots and with Greek, Latin, or Romance
Suffixes.* Doctor's thesis. 8vo, 55. Chicago: University Press,
1916.

OSCAR LUDVIG OLSON, PH.D. 1914; Luther College, Decorah, Iowa.

*The Relation of the Hrólfs Saga Kraka and the Bjarkartmur to Beowulf.
A Contribution to the History of Saga Development in England and the
Scandinavian Countries.* 8vo, 104. Published by the Society for
the Advancement of Scandinavian Study, 1916.

GEORGE FULLMER REYNOLDS, PH.D. 1905; Associate Professor of Eng-
lish, Indiana University, Bloomington.

Some Principles of Elizabethan Staging. Doctor's thesis. 8vo, 34+29.
Chicago: University Press, 1905.

JAMES FINCH ROYSTER, PH.D. 1907; Professor of English, University
of Texas, Austin.

A Middle English Treatise on the Ten Commandments. Text, Notes, and
Introduction. Doctor's thesis. 8vo, xxii+35. Chapel Hill, N.C.:
University Press, 1911.

WALTER KAY SMART, PH.D. 1911; Head of the Department of English,
Armour Institute of Technology, Chicago.

*Some English and Latin Sources and Parallels for the Morality Play,
"Wisdom."* Doctor's thesis. 8vo, 93. Menasha, Wis.: George Banta
Publishing Co., 1912.

† Deceased.

MATTHEW LYLE SPENCER, PH.D. 1910; Professor of English, Lawrence College, Appleton, Wis.

Corpus Christi Pageants in England. Doctor's thesis. 12mo, 276. New York: Baker & Taylor Co., 1911.

JOHN MARCELLUS STEADMAN, JR., PH.D. 1916.

The Origin of the Historical Present in English. Doctor's thesis. *Studies in Philology* (University of North Carolina), XIV (1917).

GEORGE COFFIN TAYLOR, PH.D. 1905; Columbia, S.C.

The English "Planctus Mariae." Doctor's thesis. *Modern Philology*, IV (1906-7), 605-37.

GUY ANDREW THOMPSON, PH.D. 1912; Professor of English Literature, University of Maine, Orono.

Elizabethan Criticism of Poetry. Doctor's thesis. 8vo, 216. Menasha, Wis.: George Banta Publishing Co., 1914.

THE DEPARTMENT OF GENERAL LITERATURE

RICHARD GREEN MOULTON [1892-], Professor of Literary Theory and Interpretation, and Head of the Department of General Literature.

A.B. London University, 1869; A.B. Cambridge, 1874; Ph.D. Pennsylvania, 1891; Cambridge University Extension Lecturer in Literature, 1874-90; Lecturer to the American Society for the Extension of University Teaching, 1891; Lecturer to the London Society for the Extension of University Teaching, 1891-92; Professor of Literature (in English), Chicago, 1892-1901; Professor of Literary Theory and Interpretation, and Head of the Department of General Literature, *ibid.*, 1901-.

The Moral System of Shakespeare: A Popular Exposition of Fiction as the Experimental Side of Philosophy. 12mo, viii+381. New York: Macmillan Co., 1903. Rev. ed. under title: *Shakespeare as a Dramatic Thinker.* *Ibid.*, 1907.

The Poetry and Fiction of William Morris: A Syllabus of Private Study. 16mo, 30. Chicago: University Press, 1904.

The Modern Reader's Bible (one vol., rev. ed.). 8vo, xiv+1733. New York: Macmillan Co., 1907.

A Short Introduction to the Literature of the Bible. 16mo, vi+374. Boston: D. C. Heath & Co., 1908.

World Literature and Its Place in General Culture. 12mo, x+502. New York: Macmillan Co., 1911.

The Modern Study of Literature: An Introduction to Literary Theory and Interpretation. 12mo, xii+532. Chicago: University Press, 1915.

The Personality of the Son of Sirach, *International Journal of Apocrypha*, VIII (1907), 13-14.

GEORGE CARTER HOWLAND [1892-], Associate Professor of the History of Literature.

A.B. Amherst, 1885; A.M. *ibid.*, 1888; Assistant Professor of Italian Philology, Chicago, 1895-1911; Assistant Professor of the History of Literature, *ibid.*, 1911-13; Associate Professor, *ibid.*, 1913-.

Advanced Lessons in English. 12mo, 307. Chicago: A. C. McClurg & Co., 1910.

Elementary Lessons in English. 12mo, 202. Chicago: A. C. McClurg & Co., 1910.

Zaragüeta, by Vital Aza and Ramos Carrión. With Notes and Vocabulary. 12mo, 128. Chicago: Silver, Burdett & Co., 1915.

THE DEPARTMENT OF MATHEMATICS

ELIAKIM HASTINGS MOORE [1892-], Professor and Head of the Department of Mathematics.

A.B. Yale, 1883; Ph.D. *ibid.*, 1885, Ph.D. (hon.) Göttingen, 1899; LL.D. Wisconsin, 1904; Sc.D. Yale, 1909; Math.D. Clark, 1909; Assistant Professor of Mathematics, Northwestern, 1889-91; Associate Professor, *ibid.*, 1891-92; Professor of Mathematics, Chicago, 1892-; Head of the Department of Mathematics, *ibid.*, 1896-.

President, American Mathematical Society, 1901-3; Associate Fellow, American Academy of Arts and Sciences, 1901-; Member, National Academy of Sciences, 1901-; Vice-President, American Association for the Advancement of Science, 1911; Vice-President, V. International Congress of Mathematicians, Cambridge, 1912; Honorary Corresponding Member, British Association for the Advancement of Science, 1913-.

Editor, *Transactions of the American Mathematical Society*, 1900-1907; Member, Comitato di Redazione dei *Rendiconti del Circolo Matematico di Palermo*, 1909-; General Editor, "University of Chicago Mathematical Series"; Chairman, Board of Editors, "University of Chicago Science Series," 1914-; Associate Editor, *Proceedings of the National Academy of Sciences*, 1915-.

Introduction to a Form of General Analysis (New Haven Mathematical Colloquium). 8vo, 150. New Haven: Yale University Press, 1910.

- On the Foundations of Mathematics, *Science*, XVII (1903), 401-16; published also in *Bulletin of the American Mathematical Society*, IX (1903), 402-24; and *School Review*, XI (1903), 521-38.
- On Doubly Infinite Systems of Directly Similar Convex Arches with Common Base Line, *Bulletin of the American Mathematical Society*, X (1904), 337-41.
- On a Definition of Abstract Groups, *Transactions of the American Mathematical Society*, VI (1905), 179-80.
- The Cross-Section Paper as a Mathematical Instrument, *School Review*, XIV (1906), 317-38; published also in *School Science and Mathematics*, VI (1906), 429-50.
- Note on Fourier's Constants, *Bulletin of the American Mathematical Society*, XIII (1907), 232-34.
- The Decomposition of Modular Systems Connected with the Doubly Generalized Fermat Theorem, *ibid.*, 280-88.
- On a Form of General Analysis with Application to Linear Differential and Integral Equations, *Atti del IV Congresso Internazionale dei Matematici* (Roma), II (1909), 98-114.
- On the Foundations of the Theory of Linear Integral Equations, *Bulletin of the American Mathematical Society*, XVIII (1911-12), 334-62.
- On the Fundamental Functional Operation of a General Theory of Linear Integral Equations, *Proceedings of the Fifth International Congress of Mathematicians* (Cambridge, August, 1912), I (1913), 230-55.
- Definition of Limit in General Integral Analysis, *Proceedings of the National Academy of Sciences*, I (1915), 628-32.

GILBERT AMES BLISS [1903-4; 1908-], Professor of Mathematics.

S.B. Chicago, 1897; Ph.D. *ibid.*, 1900; Assistant Professor of Mathematics, Missouri, 1904-5; Princeton, 1905-8; Associate Professor of Mathematics, Chicago, 1908-13; Professor, *ibid.*, 1913-.

Member, National Academy of Sciences.

Fundamental Existence Theorems (Princeton Mathematical Colloquium). 8vo, 107. New York: American Mathematical Society, 1913.

An Existence Theorem for a Differential Equation of the Second Order with an Application to the Calculus of Variations, *Transactions of the American Mathematical Society*, V (1904), 113-25.

- The Exterior and Interior of a Plane Curve, *Bulletin of the American Mathematical Society*, X (1904), 398-404.
- The Properties of Curves in Space Which Minimize a Definite Integral (with Max Mason), *Transactions of the American Mathematical Society*, IX (1908), 440-66.
- A New Proof of Weierstrass' Theorem concerning the Factorization of a Power Series, *Bulletin of the American Mathematical Society*, XVI (1910), 356-59.
- Fields of Extremals in Space (with Max Mason), *Transactions of the American Mathematical Society*, XI (1910), 325-40.
- The Function Concept and the Fundamental Notions of the Calculus. One of a group of articles in *Monographs on Topics of Modern Mathematics* (1911), 261-304.
- A New Proof of the Existence Theorem for Implicit Functions, *Bulletin of the American Mathematical Society*, XVIII (1911-12), 175-79.
- A Generalization of Weierstrass' Preparation Theorem for a Power Series in Several Variables, *Transactions of the American Mathematical Society*, XIII (1912), 133-45.
- The Minimum of a Definite Integral for Unilateral Variations in Space (with A. L. Underhill), *ibid.*, XV (1914), 291-310.
- The Weierstrass E-Function for Problems of the Calculus of Variations in Space, *ibid.*, 369-78.
- A Note on Symmetric Matrices, *Annals of Mathematics*, Second Series, XVI (1914), 43-44.
- A Substitute for Duhamel's Theorem, *ibid.*, 45-49.
- A Method of Subdividing the Interior of a Simply Closed Rectifiable Curve, with an Application to Cauchy's Theorem (with F. B. Wiley), *Bulletin of the Scientific Laboratories of Denison University*, XVII (1914), 375-89.
- Generalizations of Geodesic Curvature and a Theorem of Gauss concerning Geodesic Triangles, *American Journal of Mathematics*, XXXVII (1915), 1-18.
- A Note on Functions of Lines, *Proceedings of the National Academy of Sciences*, I (1915), 173-77.
- A Note on the Problem of Lagrange in the Calculus of Variations, *Bulletin of the American Mathematical Society*, XXII (1916), 220-25.

Jacobi's Condition for Problems of the Calculus of Variations in Parametric Form, *Transactions of the American Mathematical Society*, XVII (1916), 195-206.

REVIEWS OF: Bôcher, Introduction to the Study of Integral Equations, *Bulletin of the American Mathematical Society*, XVI, 207-13; Eisenhart, Differential Geometry, *ibid.*, XVII, 470-78; Volterra, Leçons sur les fonctions des lignes, *ibid.*, XXI, 345-55.

OSKAR BOLZA, Professor of Mathematics, 1892-1910; Non-Resident Professor of Mathematics, 1910-17; Hon. Professor of Mathematics, Freiburg i.B.

Abiturientenexamen, Freiburg i.B., 1875; Ph.D. Göttingen, 1886; Associate Professor of Mathematics, Chicago, 1892-93; Professor, *ibid.*, 1894-1910; Non-Resident Professor, *ibid.*, 1910-17.

Member, National Academy of Sciences.

Lectures on the Calculus of Variations, "University of Chicago Decennial Publications," Second Series, XIV. 8vo, xv+271. Chicago: University Press, 1904.

Vorlesungen über Variationsrechnung. I, 8vo, iv+310, 1908; II, 1909; III, ix+160. Leipzig: B. G. Teubner, 1909.

Zur Zweiten Variation bei isoperimetrischen Problemen, *Mathematische Annalen*, LVII (1903), 44-47.

Ueber das isoperimetrische Problem auf einer gegebenen Fläche, *ibid.*, 48-52.

Some Instructive Examples in the Calculus of Variations, *Bulletin of the American Mathematical Society*, IX (1903), 1-10.

The Determination of the Constants in the Problem of the Brachistochrone, *ibid.*, X (1904), 185-88.

A Fifth Necessary Condition for a Strong Extremum of the Integral $\int_{x_0}^{x_1} F(x, y, y'), dx$, *Transactions of the American Mathematical Society*, VII (1906), 314-24.

Weierstrass' Theorem and Kneser's Theorem on Transversals for the Most General Case of an Extremum of a Simple Definite Integral, *ibid.*, 459-88.

Ein Satz über eindeutige Abbildung und seine Anwendung in der Variationsrechnung, *Mathematische Annalen*, LXIII (1906), 246-52.

- Die Lagrange'sche Multiplikatorenregel in der Variationsrechnung für den Fall von gemischten Bedingungen und die zugehörigen Grenzgleichungen bei variablen Endpunkten, *ibid.*, LXIV (1907), 370-87.
- The Determination of the Conjugate Points for Discontinuous Solutions in the Calculus of Variations, *American Journal of Mathematics*, XXX (1908), 210-21.
- Heinrich Maschke: His Life and Work, *Bulletin of the American Mathematical Society*, XV (1908-9), 85-95; published also in the *University Record*, XII (1908), 153-55.
- Remarks concerning the Second Variation for Isoperimetric Problems, *Bulletin of the American Mathematical Society*, XV (1908-9), 213-17.
- An Application of the Notions of "General Analysis" to a Problem of the Calculus of Variations, *ibid.*, XVI (1910), 402-7.
- Einführung in E. H. Moore's "General Analysis" und deren Anwendung auf die Verallgemeinerung der Theorie der linearer Integralgleichungen, *Jahresbericht der Deutschen Mathematischen Vereinigung*, XXIII (1914), 248-303.

LEONARD EUGENE DICKSON [1900-], Professor of Mathematics.

S.B. Texas, 1893; Ph.D. Chicago, 1896; Assistant Professor of Mathematics, California, 1899; Associate Professor of Mathematics, Texas, 1899-1900; Assistant Professor of Mathematics, Chicago, 1900-1907; Associate Professor, *ibid.*, 1907-10; Professor, *ibid.*, 1910-.

Member of the National Academy of Sciences; Associate Fellow of the American Academy of Arts and Sciences; President of the American Mathematical Society, 1916-.

Associate Editor, *Transactions of the American Mathematical Society*, 1902-10; Joint Editor, *ibid.*, 1911-; Managing Editor, *American Mathematical Monthly*, 1902-6; Associate Editor, *ibid.*, 1906-8.

Introduction to the Theory of Algebraic Equations. 8vo, v+104. New York: John Wiley & Sons, 1903.

Linear Algebras. 8vo, vi+87. Cambridge, England: University Press, 1914.

On Invariants and the Theory of Numbers (Madison Mathematical Colloquium). 8vo, iii+110. New York: American Mathematical Society, 1914.

Theory of Equations. 8vo, v+184. New York: John Wiley & Sons, 1914.

- Algebraic Invariants.* 8vo, x+100. New York: John Wiley & Sons, 1914.
- Theory and Applications of Finite Groups* (with G. A. Miller and H. F. Blichfeldt). 8vo, xvii+390. New York: John Wiley & Sons, 1916.
- Cyclic Subgroups of the Simple Ternary Linear Fractional Group, *American Journal of Mathematics*, XXIV (1902), 1-12.
- A Matrix Defined by the Quaternion Group, *American Mathematical Monthly*, IX (1902), 243-48.
- An Elementary Exposition of Frobenius' Theory of Group-Characters and Group-Determinants, *Annals of Mathematics*, Second Series, IV (1902), 25-49.
- The Groups of Steiner in Problems of Contact (Second Paper), *Transactions of the American Mathematical Society*, III (1902), 377-82.
- On the Groups Defined for an Arbitrary Field by the Multiplication Tables of Certain Finite Groups, *Proceedings of the London Mathematical Society*, XXXV (1903), 68-80.
- The Abstract Group Simply Isomorphic with the Group of Linear Fractional Transformations in a Galois Field, *ibid.*, 292-305.
- Generational Relations of an Abstract Simple Group of Order 4080, *ibid.*, 306-19.
- Generational Relations for the Abstract Group Simply Isomorphic with the Linear Fractional Group in the $GF[2^n]$, *ibid.* (1903), 443-54.
- Addition to the Paper on the Four Known Simple Groups of Order 25920, *ibid.*, Second Series, I (1903), 283-84.
- Definitions of a Field by Independent Postulates, *Transactions of the American Mathematical Society*, IV (1903), 13-20.
- Definitions of a Linear Associative Algebra by Independent Postulates, *ibid.*, 21-26.
- On the Subgroups of Order a Power of p in the Quaternary Abelian Group in the Galois Field of Order p^n , *ibid.*, 371-86.
- On the Reducibility of Linear Groups, *ibid.*, 434-36.
- Three Sets of Generational Relations Defining the Abstract Simple Group of Order 504, *Bulletin of the American Mathematical Society*, IX (1903), 194-204.

- Generational Relations Defining the Abstract Simple Group of Order 660, *ibid.*, 204-6.
- The Abstract Group G Simply Isomorphic with the Alternating Group on Six Letters, *ibid.*, 303-6.
- Fields Whose Elements Are Linear Differential Expressions, *ibid.*, X (1903), 30, 31.
- Three Algebraic Notes, *American Mathematical Monthly*, X (1903), 219-26.
- A Generalization of Symmetric and Skew-Symmetric Determinants, *ibid.*, 254-56.
- Determination of All Groups of Binary Linear Substitutions with Integral Coefficients Taken Modulo 3 and of Determinant Unity, *Annals of Mathematics*, Second Series, V (1903), 140-44.
- On the Minimum Degree of Resolvents for the p -Section of the Periods of Hyperelliptic Functions of Four Periods, *Jahresbericht des Deutschen Mathematikervereinigungs*, XIII (1904), 559-60.
- A New Extension of Dirichlet's Theorem on Prime Numbers, *Messenger of Mathematics*, XXXIII (1904), 155-60.
- Application of Groups to a Complex Problem in Arrangements, *Annals of Mathematics*, Second Series, VI (1904), 31-44.
- On the Real Elements of Certain Classes of Geometrical Configurations, *ibid.*, 141-50.
- Memoir on Abelian Transformations, *American Journal of Mathematics*, XXVI (1904), 243-318.
- Two Systems of Subgroups of the Quaternary Abelian Group in a General Galois Field, *Bulletin of the American Mathematical Society*, X (1904), 178-84.
- On the Subgroups of Order a Power of p in the Linear Homogeneous and Fractional Groups in the $GF [p^n]$, *ibid.*, 385-97.
- A Property of the Group $G_2^{2^n}$ All of Whose Operators except Identity Are of Period 2, *American Mathematical Monthly*, XI (1904), 203-6.
- The Subgroups of Order a Power of 2 of the Simple Quinary Orthogonal Group in the Galois Field of Order $p^n = 8l \neq 3$, *Transactions of the American Mathematical Society*, V (1904), 1-38.

- Determination of All the Subgroups of the Known Simple Group of Order 25920, *Transactions of the American Mathematical Society*, V (1904), 126-66.
- The Minimum Degree τ of Resolvents for the p -Section of the Periods of Hyperelliptic Functions of Four Periods, *ibid.*, VI (1905), 48-57.
- Definitions of a Group and a Field by Independent Postulates, *ibid.*, 198-204.
- On Semi-Groups and the General Isomorphism between Infinite Groups, *ibid.*, 205-8.
- The Group of a Tactical Configuration, *Bulletin of the American Mathematical Society*, XI (1905), 177-79.
- On the Class of the Substitutions of Various Linear Groups, *ibid.*, 426-32.
- A General Theorem on Algebraic Numbers, *ibid.*, 482-86.
- Determination of the Ternary Modular Groups, *American Journal of Mathematics*, XXVII (1905), 189-202.
- Subgroups of Order a Power of p in the General and Special m -ary Linear Groups, *ibid.*, 280-302.
- A New System of Simple Groups, *Mathematische Annalen*, LX (1905), 137-50.
- On the Cyclotomic Function, *American Mathematical Monthly*, XII (1905), 86-89.
- Determination of All the Subgroups of the Three Highest Powers of p in the Group of All m -ary Linear Homogeneous Transformations Modulo p , *Quarterly Journal of Mathematics*, XXXVI (1905), 373-84.
- On Hypercomplex Number Systems, *Transactions of the American Mathematical Society*, VI (1905), 344-48.
- Graphical Methods in Trigonometry, *American Mathematical Monthly*, XIII (1905), 129-33.
- Expressions for the Elements of a Determinant in Terms of the Minors of a Given Order: Generalization of a Theorem Due to Studnicka, *ibid.*, 217-21.
- On Finite Algebras, *Göttingen Nachrichten* (1905), 358-93.
- On Quadratic Hermitian and Bilinear Forms, *Transactions of the American Mathematical Society*, VII (1906), 275-92.
- Linear Algebras in Which Division Is Always Uniquely Possible, *ibid.*, 370-90.

- On the Quaternary Linear Homogeneous Group Modulo p of Order a Multiple of p , *American Journal of Mathematics*, XXVIII (1906), 1-18.
- On Commutative Linear Algebras in Which Division Is Always Uniquely Possible, *Transactions of the American Mathematical Society*, VII (1906), 514-22.
- Criteria for the Irreducibility of Functions in a Finite Field, *Bulletin of the American Mathematical Society*, XIII (1906), 1-8.
- On the Theory of Equations in a Modular Field, *ibid.*, 8-10.
- On Linear Algebras, *American Mathematical Monthly*, XIII (1906), 201-5.
- The Abstract Form of the Special Linear Homogeneous Group in an Arbitrary Field, *Quarterly Journal of Mathematics*, XXXVIII (1906), 141-45.
- The Abstract Form of the Abelian Linear Group, *ibid.*, 145-57.
- Invariants of Binary Forms under Modular Transformations, *Transactions of the American Mathematical Society*, VIII (1907), 205-32.
- Modular Theory of Group-Matrices, *ibid.*, 389-98.
- Algebraic Numbers and Forms, *Bulletin of the American Mathematical Society*, XIII (1907), 348-62.
- The Symmetric Group on Eight Letters and the Senary First Hypo-abelian Group, *ibid.*, 386-89.
- Modular Theory of Group Characters, *ibid.*, 477-88.
- Quadratic Forms in a General Field, *ibid.*, XIV (1907), 108-15.
- Invariants of the General Quadratic Form Modulo 2, *Proceedings of the London Mathematical Society*, Second Series, V (1907), 301-24.
- On the Volume of a Tetrahedron in Terms of the Co-ordinates of the Vertices, *American Mathematical Monthly*, XIV (1907), 117, 118.
- The Galois Group of a Reciprocal Quartic Equation, *ibid.*, XV (1908), 71-78.
- On Triple Algebras and Ternary Cubic Forms, *Bulletin of the American Mathematical Society*, XIV (1908), 160-69.
- On Higher Congruences and Modular Invariants, *ibid.*, 313-18.
- Criteria for the Irreducibility of a Reciprocal Equation, *ibid.*, 426-30.

- A Class of Groups in an Arbitrary Field Connected with the Configuration of the 27 Lines on a Cubic Surface (Second Paper), *Quarterly Journal of Mathematics*, XXXIX (1908), 205-9.
- On the Last Theorem of Fermat, *Messenger of Mathematics*, XXXVIII (1908), 14-32.
- Representations of the General Symmetric Group as Linear Groups in Finite and Infinite Fields, *Transactions of the American Mathematical Society*, IX (1908), 121-48.
- On the Canonical Forms and Automorphs of Ternary Cubic Forms, *American Journal of Mathematics*, XXX (1908), 117-28.
- Invariantive Reduction of Quadratic Forms, *ibid.*, 263-81.
- The Abstract Form of the Abelian Linear Groups, *Quarterly Journal of Mathematics*, XXXIX (1908), 205-9.
- On Families of Quadratic Forms in a General Field, *ibid.*, 316-33.
- On the Congruence $x^n + y^n + z^n = 0 \pmod{p}$, *Journal für Mathematik*, CXXXV (1908), 134-41.
- Lower Limit for the Number of Solutions of $x^e + y^e + z^e = 0 \pmod{p}$, *ibid.*, 181-88.
- On the Factorization of Large Numbers, *American Mathematical Monthly*, XV (1908), 217-22.
- On Commutative Linear Groups, *Messenger of Mathematics*, XL (1909), 167-96.
- On the Representation of Numbers by Modular Forms, *Bulletin of the American Mathematical Society*, XV (1909), 338-47.
- Rational Reduction of a Pair of Binary Quadratic Forms; Their Modular Invariants, *American Journal of Mathematics*, XXXI (1909), 103-46.
- Definite Forms in a Finite Field, *Transactions of the American Mathematical Society*, X (1909), 119-22.
- General Theory of Modular Invariants, *ibid.*, 123-58.
- On the Last Theorem of Fermat, *Quarterly Journal of Mathematics*, XL (1909), 27-45.
- On Commutative Linear Groups, *ibid.*, 167-96.
- Combinants, *ibid.*, 349-66.

- On the Representation of Numbers as the Sum of Two Squares, *American Mathematical Monthly*, XVI (1909), 85-87.
- Rational Edged Cuboids with Equal Volumes and Equal Surfaces, *ibid.*, 107-14.
- Modular Invariants of a General System of Linear Forms, *Proceedings of the London Mathematical Society*, Second Series, VII (1909), 430-44.
- Equivalence of Pairs of Bilinear or Quadratic Forms under Rational Transformation, *Transactions of the American Mathematical Society*, X (1909), 347-60.
- A Theory of Invariants, *American Journal of Mathematics*, XXXI (1909), 337-54.
- On Certain Diophantine Equations, *Messenger of Mathematics*, XXXIX (1909-10), 86-87.
- On the Factorization of Integral Functions with p -adic Coefficients, *Bulletin of the American Mathematical Society*, XVII (1910), 19-23.
- On the Negative Discriminants for Which There Is a Single Class of Positive Primitive Binary Quadratic Forms, *ibid.*, 534-37.
- Note on Cubic Equations and Congruences, *Annals of Mathematics*, Second Series, XII (1910), 149-52.
- An Invariantive Investigation of Irreducible Binary Modular Forms, *Transactions of the American Mathematical Society*, XII (1911), 1-18.
- A Fundamental System of Invariants of the General Modular Linear Group with a Solution of the Form Problem, *ibid.*, 75-98.
- Notes on the Theory of Numbers, *American Mathematical Monthly*, XVIII (1911), 109-11.
- Binary Modular Groups and Their Invariants, *American Journal of Mathematics*, XXXIII (1911), 175-92.
- Note on Modular Invariants, *Quarterly Journal of Mathematics*, XLII (1911), 158-61.
- On Non-Vanishing Forms, *ibid.*, 162-71.
- Linear Algebras, *Transactions of the American Mathematical Society*, XIII (1912), 59-73.
- Proof of the Finiteness of Modular Covariants, *ibid.*, XIV (1913), 299-310.

- Amicable Number Triples, *American Mathematical Monthly*, XX (1913), 84-92.
- Theorems and Tables on the Sum of the Divisors of a Number, *Quarterly Journal of Mathematics*, XLIV (1913), 264-96.
- Finiteness of the Odd Perfect and Primitive Numbers with n Distinct Prime Factors, *American Journal of Mathematics*, XXXV (1913), 413-22.
- Even Abundant Numbers, *ibid.*, 423-26.
- On the Rank of a Symmetrical Matrix, *Annals of Mathematics*, Second Series, XV (1913), 27-28.
- The Invariants, Semivariants, and Linear Covariants of the Binary Quartic Modulo 2, *ibid.*, 114-17.
- On Binary Modular Groups and Their Invariants, *Bulletin of the American Mathematical Society*, XX (1913), 132-34.
- Linear Associative Algebras and Abelian Equations, *Transactions of the American Mathematical Society*, XV (1914), 31-46.
- On the Trisection of an Angle and the Construction of Regular Polygons, *American Mathematical Monthly*, XXI (1914), 259-62.
- Invariants in the Theory of Numbers, *Transactions of the American Mathematical Society*, XV (1914), 497-503.
- Modular Invariants of the System of a Binary Cubic, Quadratic, and Linear Form, *Quarterly Journal of Mathematics*, XLV (1914), 373-84.
- The Points of Inflexion of a Plane Cubic Curve, *Annals of Mathematics*, Second Series, XVI (1914), 50-66.
- Projective Classification of Cubic Surfaces Modulo 2, *ibid.*, 139-57.
- Classification of Quartic Curves Modulo 2, *Messenger of Mathematics*, XLIV (1914-15), 189-92.
- Quartic Curves Modulo 2, *Transactions of the American Mathematical Society*, XVI (1915), 111-20.
- Recent Progress in the Theories of Modular and Formal Invariants and in Modular Geometry, *Proceedings of the National Academy of Sciences*, I (1915), 1-4.
- The Straight Lines on Modular Cubic Surfaces, *ibid.*, 248-53.

Invariantive Theory of Plane Cubic Curves Modulo 2, *American Journal of Mathematics*, XXXVII (1915), 107-16.

Geometrical and Invariantive Theory of Quartic Curves Modulo 2, *ibid.*, 337-54.

Invariantive Classification of Pairs of Conics Modulo 2, *ibid.*, 355-58.

Invariants, Semivariants, and Covariants of the Ternary and Quaternary Quadratic Form Modulo 2, *Bulletin of the American Mathematical Society*, XXI (1915), 174-79.

On the Relations between Linear Algebras and Continuous Groups, *ibid.*, XXII (1915), 53-61.

REVIEWS IN: *Bulletin of the American Mathematical Society*, IX, 555-56, 561-62; X, 257-60, 317-21; XI, 159-64, 557-59; XIII, 348-62; XV, 232-39, 249-52; XVII, 23-36, 36-38, 254-56, 371-72; XX, 96-97, 258-59; XXI, 131-32, 355-56; XXII, 303-10.

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Ph.D. Göttingen, 1880; Professor of Mathematics, Luisenstädtische Gymnasium, Berlin, 1880-90; Assistant Professor of Mathematics and Physics, Chicago, 1892-96; Associate Professor of Mathematics, *ibid.*, 1896-1907; Professor, *ibid.*, 1907-8.

On Superosculating Quadric Surfaces, *Transactions of the American Mathematical Society*, III (1902), 482-84.

A Symbolic Treatment of the Theory of Invariants of Quadratic Differential Quantics of η Variables, *ibid.*, IV (1903), 445-69.

A Useful Diagram for Examples in Modern Analytic Geometry, *American Mathematical Monthly*, XII (1905), 193-95.

A Geometrical Problem Connected with the Continuation of a Power-Series, *Annals of Mathematics*, Second Series, VII (1905), 61-64.

Differential Parameters of the First Order, *Transactions of the American Mathematical Society*, VII (1906), 69-80.

The Kronecker-Gaussian Curvature of Hyper-Space, *ibid.*, 81-93.

GEORGE WILLIAM MYERS [1901-], Professor of the Teaching of Mathematics and Astronomy, and Mathematical Supervisor in the School of Education. See under College of Education, p. 480.

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HERBERT ELLSWORTH SLAUGHT [1895-], Professor of Mathematics.

A.B. Colgate, 1883; Ph.D. Chicago, 1898; Sc.D. Colgate, 1911; Assistant Professor of Mathematics, Chicago, 1900-1908; Associate Professor, *ibid.*, 1908-13; Professor, *ibid.*, 1913-.

Editor of a Series of Mathematical Texts for Schools and Colleges, Allyn & Bacon, 1913-; Managing Editor, *American Mathematical Monthly*, 1908-.

Member, Sub-Committee on Preparation for Teaching Mathematics of the International Commission on the Teaching of Mathematics, 1908-10: Report published by the Department of Education, Washington; Chairman of the National Committee of Fifteen, of the National Education Association, on the Geometry Syllabus, 1908-11; publications: *Provisional Report of the National Committee of Fifteen on Geometry Syllabus*. 8vo, 78. Chicago: School Science and Mathematics Publishing Co., 1912; *Final Report of the National Committee of Fifteen on Geometry Syllabus*. 8vo, 88. New York: The Mathematics Teacher, 1912. Also published in the *Proceedings of the National Education Association*, 1912, as a separate document; Special Report to the International Commission on the Teaching of Mathematics: The Teaching of Mathematics in Summer Sessions of Universities and Normal Schools, *American Mathematical Monthly*, XVIII (1911), 147-57.

High School Algebra, Elementary Course (with N. J. Lennes). 8vo, xii+297. Boston: Allyn & Bacon, 1907.

High School Algebra, Advanced Course (with N. J. Lennes). 12mo, vii+194. Boston: Allyn & Bacon, 1908.

Teacher's Manual for High-School Algebra (with N. J. Lennes). Vols. I and II. 8vo, 237, 314. Boston: Allyn & Bacon, 1908, 1909.

The Humanizing of High-School Mathematics. 8vo, 22. Boston: Allyn & Bacon, 1909.

Plane Geometry (with N. J. Lennes). 12mo, viii+280. Boston: Allyn & Bacon, 1910.

Solid Geometry, with Problems and Applications (with N. J. Lennes). 12mo, vi+190. Boston: Allyn & Bacon, 1911.

Teacher's Manual for Plane and Solid Geometry (with N. J. Lennes). Vols. I and II. 12mo, 393, 148. Boston: Allyn & Bacon, 1911, 1912.

- First Principles of Algebra, Elementary Course* (with N. J. Lennes). 8vo, 276+12. Boston: Allyn & Bacon, 1912.
- A Source Book of Problems for Geometry Based on Industrial Design and Architectural Ornament* (with Mabel Sykes and N. J. Lennes). 8vo, v+372. Boston: Allyn & Bacon, 1912.
- First Principles of Algebra, Advanced Course* (with N. J. Lennes). 8vo, 200+7. Boston: Allyn & Bacon, 1912.
- Teacher's Manual for First Principles of Algebra* (with N. J. Lennes). Vols. I and II. 8vo, 352, 315. Boston: Allyn & Bacon, 1912.
- Plane Trigonometry and Applications* (editor, with E. J. Wilczynski). 8vo, xi+265. Boston: Allyn & Bacon, 1914.
- Logarithmic and Trigonometric Tables* (editor, with E. J. Wilczynski). 12mo, xx+97. Boston: Allyn & Bacon, 1914.
- College Algebra with Applications* (editor, with E. J. Wilczynski). 8vo, 507. Boston: Allyn & Bacon, 1916.
- Elementary Algebra* (with N. J. Lennes). 8vo, x+353. Boston: Allyn & Bacon, 1915.
- Teacher's Manual for Elementary Algebra* (with N. J. Lennes). 8vo, 365. Boston: Allyn & Bacon, 1915.
- Intermediate Algebra* (with N. J. Lennes). 8vo, x+249. Boston: Allyn & Bacon, 1916.
- Teacher's Manual for Intermediate Algebra* (with N. J. Lennes). 8vo, 313. Boston: Allyn & Bacon, 1916.
- Ideals in the Teaching of Mathematics, *School Science and Mathematics*, V (1905), 702-8.
- Aims in Teaching Algebra, *ibid.*, VI (1906), 105-10.
- Books Old and New in Mathematics, *School Review*, XIV (1906), 679-85.
- Heinrich Maschke, the Teacher, *University Record*, XII (1908), 155-57.
- Joint Meetings of Mathematicians and Engineers, *Bulletin of the American Mathematical Society*, XIV (1908), 269-82.
- What to Omit and What to Emphasize in High-School Algebra, *School Review*, XVI (1908), 503-16.
- The Teaching of Mathematics in the Colleges, *American Mathematical Monthly*, XVI (1909), 173-77.

The Status of Mathematics in the High School, *Educational Bi-Monthly*, V (1911), 320-32.

The Board of Recommendations for the Appointment of Teachers, *University of Chicago Magazine*, IV (1912), 129-34.

Western Meetings of Mathematicians, *American Mathematical Monthly*, XX (1913), 127-30.

Incentives to Mathematical Activity, *ibid.*, 169-73.

Retrospect and Prospect in Collegiate Mathematics, *ibid.*, XXI (1914), 1-3.

The Promotion of Collegiate Mathematics, *ibid.*, XXII (1915), 251-53.

The Teaching of Mathematics, *ibid.*, 289-92.

REVIEWS IN: *Bulletin of the American Mathematical Society*, XII, 498-501; *School Review*, XVI, 688-89.

ERNEST JULIUS WILCZYNSKI [1910-], Professor of Mathematics.

Ph.D. Berlin, 1897; Assistant Professor of Mathematics, California, 1902-6; Associate Professor, *ibid.*, 1906-7; Associate Professor, Illinois, 1907-10; Associate Professor, Chicago, 1910-14; Professor, *ibid.*, 1914-.

Laureate of the Académie Royale des Sciences, des Lettres et des Beaux-Arts de Belgique, 1909.

Associate Editor, *Transactions of the American Mathematical Society*, 1908-.

Member of Sub-Committee on Preparation for Research of the International Commission on the Teaching of Mathematics, 1908-10.

Projective Differential Geometry (New Haven Mathematical Colloquium). 8vo, 21. New Haven: Yale University Press, 1910.

Plane Trigonometry and Applications (H. E. Slaught, editor). 8vo, xi+265. Boston: Allyn & Bacon, 1914.

Logarithmic and Trigonometric Tables (H. E. Slaught, editor). 12mo, xx+97. Boston: Allyn & Bacon, 1914.

College Algebra with Applications (H. E. Slaught, editor). 8vo, 507. Boston: Allyn & Bacon, 1916.

Projective Differential Geometry of Curved Surfaces (Fifth Memoir), *Transactions of the American Mathematical Society*, XV (1909), 279-96.

Sur la théorie générale des congruences, *Mémoires publiés par la Classe des Sciences de l'Académie royale de Belgique*, III (1911), 1-86.

- One Parameter Families and Nets of Plane Curves, *Transactions of the American Mathematical Society*, XII (1911), 473-510.
- A Forgotten Theorem of Newton's on Planetary Motion, and an Instrumental Solution of Kepler's Problem, *Astronomical Journal*, XXVII (1913), 155-56.
- Note concerning the Instrumental Solution of Kepler's Problem by Means of the Trochoid, *ibid.*, 185.
- Some General Aspects of Modern Geometry, *Bulletin of the American Mathematical Society*, XIX (1913), 331-42.
- Ricerche geometriche intorno al problema dei tre corpi, *Annali di Matematica*, XXI (1913), 1-31.
- On a Certain Class of Self-Projective Surfaces, *Transactions of the American Mathematical Society*, XIV (1913), 421-43.
- Some General Aspects of Modern Geometry, *Bulletin of the American Mathematical Society*, XIX (1913), 331-42. Italian translation in *Bollettino di Bibliografia e Storia delle Scienze Matematiche*, XVI (1914), 97-109.
- On a Certain Completely Integrable System of Linear Partial Differential Equations, *American Journal of Mathematics*, XXXVI (1914), 231-60.
- Ueber Flächen mit unbestimmten Direktrixkurven, *Mathematische Annalen*, LXXVI (1914), 129-60.
- Conjugate Systems of Space Curves with Equal Laplace-Darboux Invariants, *Proceedings of the National Academy of Sciences*, I (1915), 59-61.
- The General Theory of Congruences, *Transactions of the American Mathematical Society*, XV (1915), 311-27.
- Some Remarks on the Historical Development and the Future Prospects of the Differential Geometry of Plane Curves, *Bulletin of the American Mathematical Society*, XXII (1916), 317-29.
- Interpretation of the Simplest Integral Invariant of Projective Geometry, *Proceedings of the National Academy of Sciences*, II (1916), 248-52.

REVIEWS OF: Schlesinger, Vorlesungen über lineare Differentialgleichungen, *Bulletin of the American Mathematical Society*, XVI, 483-89; Darboux, Leçons sur les systèmes orthogonaux et les coordonnées curvilignes, *ibid.*, XX, 247-53. Other reviews in *Bulletin*

of the *American Mathematical Society*, XVII, 514-15; XX, 212; *School Review*, XX, 632-33; and *American Mathematical Monthly*, XXIII, 206-9.

JACOB WILLIAM ALBERT YOUNG [1892-], Associate Professor of the Pedagogy of Mathematics.

A.B. Bucknell, 1887; Ph.D. Clark, 1892; Assistant Professor of Mathematics, Chicago, 1897-1908; Associate Professor of the Pedagogy of Mathematics, *ibid.*, 1908-.

Editor, *Monographs on Topics of Modern Mathematics*. 8vo, viii+416. New York: Longmans, Green, & Co., 1911.

Member, International Commission on the Teaching of Mathematics, 1908-.

In charge (with D. E. Smith and W. F. Osgood) of the preparation of the American Report to the International Commission on the Teaching of Mathematics, 1909-. The following reports, prepared by Professor Young and the others named, have been published: International Commission on the Teaching of Mathematics: Preliminary Report of the American Commissioners, *School Science and Mathematics*, IX (1909), 603-8; also as Commission internationale de l'enseignement mathématique: Rapport préparatoire de la délégation américaine, *L'enseignement mathématique*, XI (1909), 200-204; and *Circulaire No. 1 du comité central à Messieurs les Membres de la Commission internationale de l'enseignement mathématique*, Geneva (1909), 8-12; International Commission on the Teaching of Mathematics: Second Preliminary Report of the American Commissioners, *Bulletin No. 2 of the American Commissioners* (1909), 1-13; also in *School Science and Mathematics*, IX (1909), 777-87; *Report of the American Commissioners of the International Commission on the Teaching of Mathematics*. 8vo, 84. Washington: The Bureau of Education, 1912. Thirteen other reports by various hands have been edited by Professor Young and the others named, and published as Bulletins of the United States Bureau of Education. The following papers and addresses (by Professor Young) are also connected with the work of the Commission: (1) La question de la rigueur dans l'enseignement mathématique moyen, et la question de la fusion des différentes branches mathématiques, *Compte Rendu du Congrès de Milan de la Commission internationale de l'enseignement mathématique* (1911), 35-45; also in *L'enseignement mathématique*, XIII (1911), 471-81; *School Science and Mathematics*, XII (1912), 447-56; and (2) Address of Presen-

- tation of the American Report for the International Commission on the Teaching of Mathematics to the Congress at Cambridge. *Publications du comité central de la Commission internationale de l'enseignement mathématique, Série 2, fasc. 1* (1912), 39-44; also in *L'enseignement mathématique*, XIV (1912), 479-84.
- Arithmetic* (with L. L. Jackson). Books I, II, III. 8vo, viii+234; viii+246; x+245. New York: D. Appleton & Co., 1904, 1905.
- The Teaching of Elementary and Secondary Mathematics*. 8vo, xviii+351. New York: Longmans, Green, & Co., 1906. 2d ed., *ibid.*, 1914. Translated into Russian by A. R. Kulischer and published in 2 vols. Vol. I, 8vo, xvi+192; Vol. II, ix+233. St. Petersburg: Obshtshestvenaja Polza, 1912. 2d ed., Vol. I, 1914; Vol. II, 1915.
- Elementary Algebra* (with L. L. Jackson). 8vo, ix+438. New York: D. Appleton & Co., 1908.
- The Appleton Arithmetics* (with L. L. Jackson). Vols. I, II, III. 8vo, vii+264; vii+232; vii+236. New York: D. Appleton & Co., 1909.
- Second Course in Algebra* (with L. L. Jackson). 8vo, vi+215. New York: D. Appleton & Co., 1910.
- High School Algebra* (with L. L. Jackson). 8vo, x+508. New York: D. Appleton & Co., 1913.
- Plane Geometry* (with L. L. Jackson). 8vo, vi+312. New York: D. Appleton & Co., 1916.
- Concerning the Bibliography of Mathematics, *Yearbook of the Bibliographical Society of Chicago* (1902, 1903), 32-43; *American Mathematical Monthly*, X (1903), 186-91.
- Poincaré, La science et l'hypothèse; Poincaré-Lindemann, Wissenschaft und Hypothèse, *Science*, XX (1904), 833-37.
- Some Recent French Views on Concrete Methods of Teaching Mathematics, *School Review*, XIII (1905), 275-79.
- Die Reformbewegungen im mathematischen Unterricht in d. Ver. Staaten Nord Amerikas, *Jahresbericht d. deutschen Math. Vereinigung* XV (1906), 131-41.
- The Movement for Reform in the Teaching of Mathematics in Prussia, *Bulletin of the American Mathematical Society*, XII (1906), 347-52.

The Movement in Prussia for the Reorganization of the Instruction in Mathematics and the Natural Sciences in the Secondary Schools, *Science*, XXIII (1906), 773-83.

My Struggle with the Italian Language and the Morals I Drew from It for the Teaching of Mathematics, *School Review*, XV (1907), 255-60.

Current Tendencies in Secondary Mathematics in Italy, *School Science and Mathematics*, VII (1907), 352-55.

Current Tendencies in Secondary Mathematics in France, *ibid.*, 489-93.

On Mathematical Induction, *American Mathematical Monthly*, XV (1908), 145-53.

The Theory of Numbers. In *Monographs on Topics of Modern Mathematics*, 305-49. New York: Longmans, Green, & Co., 1911.

Bibliography of Recent Works on the Teaching of Mathematics, *United States Bureau of Education, Bulletin No. 446* (1911), 18-21.

The Fifth International Congress of Mathematicians, at Cambridge, England, 1912, *School Science and Mathematics*, XII (1912), 702-15; also in *American Mathematical Monthly*, XIX (1912); and (in part) *Bulletin of the American Mathematical Society*, XIX (1913), 186-91.

REVIEWS IN: *Bulletin of the American Mathematical Society*, XII, 138-40; XV, 261-64; and *School Review*, XIV, 616-17.

ARTHUR CONSTANT LUNN [1902-], Assistant Professor of Applied Mathematics.

A.B. Lawrence, 1898; Ph.D. Chicago, 1904; Assistant Professor of Applied Mathematics, *ibid.*, 1910-.

The Differential Equations of Dynamics. Doctor's thesis. 4to, 26. Lancaster, Pa.: New Era Printing Co., 1909.

A Biquadratic Equation Connected with the Reduction of a Quadratic Locus, *American Mathematical Monthly*, XV (1908), 5, 6.

On the Zonal Errors in Magnification of the Reflecting Telescope, *Astrophysical Journal*, XXVII (1908), 280-85.

The Deduction of the Electrostatic Equations by the Calculus of Variations, *Bulletin of the American Mathematical Society*, XIV (1908), 477-81.

The Foundations of Trigonometry, *Annals of Mathematics*, Second Series, X (1908), 37-45.

Some Notes on Vector Analysis, *American Mathematical Monthly*, XVI (1909), 1-4.

Geophysical Theory under the Planetesimal Hypothesis, *Publications of the Carnegie Institution of Washington*, No. 107 (1909), 171-231.

A Continuous Group Related to von Seidel's Optical Theory, *Bulletin of the American Mathematical Society*, XVI (1909), 25-30.

The Apparent Size of a Closed Curve, *American Journal of Mathematics*, XXXII (1910), 186-94.

A Theoretical Connection to the Drop Method of Determining the Elementary Charge, *Physical Review*, XXXV (1912), 227-30.

A Geometric Example of an Indeterminate Form, *American Mathematical Monthly*, XIX (1912), 116-17.

REVIEWS IN: *Astrophysical Journal*, XXX, 71; XXXVI, 85; *American Mathematical Monthly*, XX, 132, 310; *Bulletin of the American Mathematical Society*, XIX, 535.

SAUL EPSTEEN [1902-6], Associate in Mathematics; Head of Insurance Commission, Denver, Colo.

S.B. California, 1900; Ph.D. Zürich, 1901; Docent in Mathematics, Chicago, 1902-3; Assistant *ibid.*, 1903-4; Associate, *ibid.*, 1905-6.

Joint Editor, *American Mathematical Monthly*, 1904; Associate Editor, *School Science and Mathematics*, 1905-6.

On Integrability by Quadratures, *Bulletin of the American Mathematical Society*, IX (1902), 152-54.

An Elementary Account of the Picard Vessiot Theory, *American Mathematical Monthly*, IX (1902), 242-52.

On Reducible Groups, *Transactions of the American Mathematical Society*, IV (1903), 249-50.

Semi-reducible Hypercomplex Number Systems, *ibid.*, 437-44.

Untersuchungen über die lineare Differentialgleichung vierter Ordnung und die zugehörigen Gruppen, *American Journal of Mathematics*, XXV (1903), 123-54.

On Linear Differential Congruences, *Bulletin of the American Mathematical Society*, X (1903), 23-30.

Determination of the Group of Rationality of a Linear Differential Equation, *American Mathematical Monthly*, X (1903), 4-8.

- Analog of Sylvester Dialytic Method of Elimination, *American Mathematical Monthly*, X (1903), 63-64.
- On the Definition of Reducible Hypercomplex Number Systems, *American Journal of Mathematics*, XXV (1903), 123-54.
- An Elementary Exposition of the Theory of Finite Differences, *American Mathematical Monthly*, XI (1904), 131-36.
- On the Definition of Reducible Hypercomplex Number Systems, *Transactions of the American Mathematical Society*, V (1904), 105-9.
- On the Linear Homogeneous Difference Equations and Continuous Groups, *Bulletin of the American Mathematical Society*, X (1904), 494-504.
- On the Structure of Hypercomplex Number Systems (with J. H. Maclagan-Wedderburn), *Transactions of the American Mathematical Society*, VI (1905), 172-78.

REVIEWS IN: *American Mathematical Monthly*, XI, 215-17; XII, 57-58; *Bulletin of the American Mathematical Society*, XI, 21-26; *Journal of Political Economy*, XIII, 316-18.

OSWALD VEBLEN [1904-5], Associate in Mathematics; Professor of Mathematics, Princeton University.

A.B. Harvard, 1900; Ph.D. Chicago, 1903; Associate in Mathematics, *ibid.*, 1904-5.

The Theory of Functions of a Real Variable, *Americana*, XVII, under "Real Variable," p. 6.

A System of Axioms for Geometry. Doctor's thesis. *Transactions of the American Mathematical Society*, V (1904), 343-84.

The Heine Borel Theorem, *Bulletin of the American Mathematical Society*, X (1904), 436.

Polar Co-ordinate Proofs of Trigonometric Formulas, *American Mathematical Monthly*, XI (1904), 6-12.

The Transcendence of π and e , *ibid.*, 219-23.

Theory of Plane Curves in Non-Metrical Analysis Situs, *Transactions of the Society*, VI (1905), 83-98.

Definition in Terms of Order Alone of the Linear Continuum and of Well-ordered Sets, *ibid.*, 165-71.

THEOPHIL HENRY HILDEBRANDT [1908-9], Assistant in Mathematics; Assistant Professor of Mathematics, University of Michigan.

A.B. Illinois, 1905; S.M. *ibid.*, 1906; Ph.D. Chicago, 1910; Assistant in Mathematics, *ibid.*, 1908-9.

Note on the Convergence of Sequences of Functions of a Certain Type, *Annals of Mathematics*, Second Series, IX (1907), 123-26.

Existence of a Minimum of a Quadratic Function, *American Mathematical Monthly*, XV (1908), 97-99.

On the Determination of Conics through Two Points, *ibid.*, 177-81.

A Contribution to the Foundations of Fréchet's Calcul Fonctionnel. Doctor's thesis. *American Journal of Mathematics*, XXXIV (1912), 237-90.

RICHARD PHILIP BAKER, PH.D. 1910; Associate Professor of Mathematics, State University of Iowa, Iowa City.

The Problem of the Angle-Bisectors. Doctor's thesis. 4to, iv+99. Chicago: University Press, 1911.

WILLIAM HUNT BATES, PH.D. 1910; Associate Professor of Mathematics, Purdue University.

An Application of Symbolic Methods to the Treatment of Mean Curvatures in Hyperspace. Doctor's thesis. *Transactions of the American Mathematical Society*, XII (1911), 19-39.

GEORGE DAVID BIRKHOFF, PH.D. 1907; Assistant Professor of Mathematics, Harvard University.

Asymptotic Properties of the Solutions of Ordinary Linear Differential Equations Containing a Parameter with Application to Boundary Value and Expansion Problems. Doctor's thesis. *Transactions of the American Mathematical Society*, IX (1908), 219-31, 373-95.

ROBERT LACEY BÖRGER, PH.D. 1907; Professor of Mathematics, Ohio University, Athens.

On the Determination of the Ternary Modular Groups. Doctor's thesis. *American Journal of Mathematics*, XXXII (1910), 289-98.

THOMAS BUCK, PH.D. 1909; Instructor in Mathematics, University of California.

Periodic Orbits of Oscillating Satellites Near the Lagrangian Equilateral-Triangular Points. Doctor's thesis. 4to, 26. Chicago: Privately printed, 1913.

WILLIAM HENRY BUSSEY, PH.D. 1904; Associate Professor of Mathematics, University of Minnesota.

Generational Relations for the Abstract Group Simply Isomorphic with the Linear Fractional Group, LF $[2, p^n]$. Doctor's thesis. *Proceedings of the London Mathematical Society*, Second Series, III (1905), 296-315.

ALLEN FULLER CARPENTER, PH.D. 1915; Assistant Professor of Mathematics, University of Washington, Seattle.

Ruled Surfaces Whose Flecnode Curves Have Plane Branches. Doctor's thesis. *Transactions of the American Mathematical Society*, XVI (1915), 509-32.

EDWARD WILSON CHITTENDEN, PH.D. 1912; Instructor in Mathematics, University of Illinois.

Infinite Developments and the Composition Property $(K_1, B_1)_*$ in General Analysis. Doctor's thesis. *Rendiconti del Circolo Matematico di Palermo*, XXXIX (1915), 81-108.

CHARLES ROSS DINES, PH.D. 1915; Instructor in Mathematics, Dartmouth College.

Functions of Positive Type and Related Topics in General Analysis. Doctor's thesis. *Proceedings of the London Mathematical Society*, Second Series, XV (1916), 243-79.

LLOYD LYNE DINES, PH.D. 1911; Professor of Mathematics, University of Saskatchewan, Saskatoon, Canada.

The Highest Common Factor of a System of Polynomials in One Variable. Doctor's thesis. *American Journal of Mathematics*, XXXV (1913), 129-50.

ARNOLD DRESDEN, PH.D. 1909. See under University High School, p. 492.

CHARLES ALBERT FISCHER, PH.D. 1912; Instructor in Mathematics, Columbia University.

A Generalization of Volterra's Derivative of a Function of a Curve. Doctor's thesis. *American Journal of Mathematics*, XXXV (1913), 369-94.

MEYER GRUPP GABA, PH.D. 1914; Instructor in Mathematics, Cornell University.

A Set of Postulates for General Projective Geometry. Doctor's thesis. *Transactions of the American Mathematical Society*, XVI (1915), 51-61.

WILLIAM LEROY HART, PH.D. 1916; Benjamin Peirce Instructor in Mathematics, Harvard University.

Differential Equations and Implicit Functions in Infinitely Many Variables. Doctor's thesis. *Transactions of the American Mathematical Society*, XVIII (1917), 125-60.

JASPER OLE HASSLER, PH.D. 1915; Instructor in Mathematics, Englewood High School, Chicago.

Plane Nets Periodic of Period 3 under the Laplacian Transformation. *Rendiconti del Circolo Matematico di Palermo*, XL (1915), 273-94.

OLIVE CLIO HAZLETT, PH.D. 1915; Associate in Mathematics, Bryn Mawr College.

Invariantive Characterization of Some Linear Associative Algebras, *Annals of Mathematics*, Second Series, XVI (1914), 1-6.

On the Classification and Invariantive Characterization of Nilpotent Algebras. Doctor's thesis. *American Journal of Mathematics*, XXXVIII (1916), 109-38.

ARCHIBALD HENDERSON, PH.D. 1915; Professor of Pure Mathematics, University of North Carolina, Chapel Hill.

The Twenty-seven Lines upon the Cubic Surface. Doctor's thesis. (Cambridge Tracts in Mathematics and Mathematical Physics, No. 13.) 8vo, 100. Cambridge: University Press, 1911.

LOUIS INGOLD, PH.D. 1907; Assistant Professor of Mathematics, University of Missouri, Columbia.

Vector Interpretation of Symbolic Differential Parameters. Doctor's thesis. *Transactions of the American Mathematical Society*, XI (1910), 449-74.

HERBERT EDWIN JORDAN, PH.D. 1904; Assistant Professor of Mathematics, University of Kansas, Lawrence.

Group-Characters of Various Linear Groups. Doctor's thesis. *American Journal of Mathematics*, XXIX (1907), 387-405.

HAROLD REYNOLDS KINGSTON, PH.D. 1914; Instructor in Mathematics and Astronomy, University of Manitoba, Winnipeg.

Metric Properties of Nets of Plane Curves. Doctor's thesis. *American Journal of Mathematics*, XXXVIII (1916), 407-30.

WILLIAM CHARLES KRATHWOHL, PH.D. 1913; Assistant Professor of Mathematics, Armour Institute of Technology, Chicago.

Modular Invariants of Two Pairs of Cogredient Variables. Doctor's thesis. *American Journal of Mathematics*, XXXVI (1914), 449-60.

NELS JOHANN LENNES, PH.D. 1907; Professor of Mathematics, University of Montana, Missoula.

Curves in Non-Metrical Analysis Situs with an Application in the Calculus of Variations. Doctor's thesis. *American Journal of Mathematics*, XXXIII (1911), 287-326.

THEODORE LINDQUIST, PH.D. 1911; Professor and Head of the Department of Mathematics, State Normal School, Emporia, Kan.

Mathematics for Freshmen Students of Engineering. Doctor's thesis. 8vo, ix+135. Ann Arbor, Mich.: Ann Arbor Press, 1911.

WILLIAM RAYMOND LONGLEY, PH.D. 1906; Assistant Professor of Mathematics, Yale University.

A Class of Periodic Orbits of an Infinitesimal Body Subject to the Attraction of n Finite Bodies. Doctor's thesis. *Transactions of the American Mathematical Society*, VIII (1907), 159-88.

WILLIAM VERNON LOVITT, PH.D. 1914; Assistant Professor of Mathematics, Purdue University.

A Type of Singular Points for a Transformation of Three Variables. Doctor's thesis. *Transactions of the American Mathematical Society*, XVI (1915), 371-86.

THOMAS EMERY MCKINNEY, PH.D. 1905; Professor of Mathematics and Astronomy, University of South Dakota, Vermilion.

Concerning a Certain Type of Continued Fractions Depending on a Variable Parameter. Doctor's thesis. *American Journal of Mathematics*, XXIX (1907), 213-78.

HARRIS FRANKLIN MACNEISH, PH.D. 1909; Instructor in Mathematics, DeWitt Clinton High School, New York City. See under University High School, p. 493.

EGBERT J. MILES, PH.D. 1910; Assistant Professor of Mathematics Yale University.

The Absolute Minimum of a Definite Integral in a Special Field. Doctor's thesis. *Transactions of the American Mathematical Society*, XIII (1912), 35-49.

WILSON LEE MISER, PH.D. 1913; Assistant Professor of Mathematics and Astronomy, University of Arkansas, Fayetteville.

On Multiform Solutions of Linear Differential Equations Having Elliptic Function Coefficients. Doctor's thesis. *Transactions of the American Mathematical Society*, XVII (1916), 109-30.

ROBERT LEE MOORE, PH.D. 1905; Instructor in Mathematics, University of Pennsylvania.

Sets of Metrical Hypotheses for Geometry. Doctor's thesis. *Transactions of the American Mathematical Society*, IX (1908), 487-512.

FRANK MARION MORRISON, PH.D. 1913; Associate Professor of Mathematics, University of Washington, Seattle.

On the Relation between Some Important Notions of Projective and Metrical Differential Geometry. Doctor's thesis. *American Journal of Mathematics*, XXXIX (1917), 199-220.

ELTON JAMES MOULTON, PH.D. 1913; Assistant Professor of Mathematics, Northwestern University.

On Figures of Equilibrium of a Rotating Compressible Fluid Mass; Certain Negative Results. Doctor's thesis. *Transactions of the American Mathematical Society*, XVII (1916), 100-108.

ALFRED LEWIS NELSON, PH.D. 1915; Instructor in Mathematics, University of Michigan.

Plane Nets with Equal Invariants, *Rendiconti del Circolo Matematico di Palermo*, XLI (1916), 238-62.

FREDERICK WILLIAM OWENS, PH.D. 1907; Assistant Professor of Mathematics, Cornell University.

The Introduction of Ideal Elements and Construction of Projective n -Space in Terms of a Planar System of Points Involving Order and Desargue's Theorem. Doctor's thesis. *Transactions of the American Mathematical Society*, XI (1910), 141-71.

ANNA JOHNSON PELL, PH.D. 1910; Associate Professor of Mathematics, Mount Holyoke College, South Hadley, Mass.

I. Biorthogonal Systems of Functions. II. Application of Biorthogonal Systems of Functions to the Theory of Integral Equations. Doctor's thesis. *Transactions of the American Mathematical Society*, XII (1911), 135-80.

ARTHUR DUNN PITCHER, PH.D. 1910; Professor of Mathematics, Adelbert College, Western Reserve University, Cleveland.

Interrelations of Eight Fundamental Properties of Classes of Functions. Doctor's thesis. 8vo, 67. Lancaster, Pa.: New Era Printing Co., 1913.

ARTHUR RANUM, PH.D. 1906; Assistant Professor of Mathematics, Cornell University.

The Group of Classes of Congruent Matrices with Application to the Group of Isomorphisms of Any Abelian Group. Doctor's thesis. *Transactions of the American Mathematical Society*, VII (1906), 71-91.

SAMUEL WATSON REAVES, PH.D. 1915; Professor of Mathematics, University of Oklahoma, Norman.

On the Projective Differential Geometry of Plane Anharmonic Curves, *Annals of Mathematics*, Second Series, XV (1913), 20-26.

RALPH EUGENE ROOT, PH.D. 1911; Professor of Mathematics and Mechanics, United States Naval Academy, Annapolis.

Iterated Limits in General Analysis. Doctor's thesis. *American Journal of Mathematics*, XXXVI (1914), 79-133.

† MILDRED LEONORA SANDERSON, PH.D. 1913.

Formal Modular Invariants with Application to Binary Modular Covariants. Doctor's thesis. *Transactions of the American Mathematical Society*, XIV (1913), 489-500.

ARTHUR RICHARD SCHWEITZER, PH.D. 1916; Chicago.

Les Idées directrices de la logique génétique des mathématiques. Doctor's thesis. *Revue de Métaphysique et de Morale*, XXII (1914-15), 174-96.

MARY EMILY SINCLAIR, PH.D. 1908; Associate Professor of Mathematics, Oberlin College, Oberlin, Ohio.

Concerning a Compound Discontinuous Solution in the Problem of the Surface of Revolution of Minimum Area. Doctor's thesis. *Annals of Mathematics*, Second Series, X (1908), 55-80.

ARTHUR WHIPPLE SMITH, PH.D. 1904; Associate Professor of Mathematics, Colgate University, Hamilton, N.Y.

The Symbolic Treatment of Differential Geometry. Doctor's thesis. 8vo, 27. Lancaster, Pa.: New Era Printing Co., 1905.

DAVID MELVILLE SMITH, PH.D. 1916; Assistant Professor of Mathematics, Georgia School of Technology, Atlanta.

Jacobi's Condition for the Problem of Lagrange in the Calculus of Variations. Doctor's thesis. *Transactions of the American Mathematical Society*, XVII (1916), 459-75.

CHARLES THOMPSON SULLIVAN, PH.D. 1912; Assistant Professor of Mathematics, McGill University, Montreal.

Properties of Surfaces Whose Asymptotic Curves Belong to Linear Complexes. Doctor's thesis. 8vo, 30. Lancaster, Pa.: New Era Printing Co., 1912.

† Deceased.

ANTHONY LISPENARD UNDERHILL, PH.D. 1906; Assistant Professor of Mathematics, University of Minnesota.

Invariants of the Function $F(x, y, x', y')$ in the Calculus of Variations. Doctor's thesis. *Transactions of the American Mathematical Society*, IX (1908), 316-38.

BUZZ M. WALKER, PH.D. 1906; Professor of Mathematics and Director of the School of Engineering, Mississippi Agricultural and Mechanical College.

On the Resolution of Higher Singularities of Algebraic Curves into Ordinary Nodes. Doctor's thesis. 8vo, 52. Lancaster, Pa.: New Era Printing Co., 1906.

MARY EVELYN WELLS, PH.D. 1915; Instructor in Mathematics, Vassar College.

On Inequalities of Certain Types in General Linear Integral Equation Theory. Doctor's thesis. *American Journal of Mathematics*, XXXIX (1917), 163-84.

MARION BALLANTYNE WHITE, PH.D. 1910; Associate Professor of Mathematics and Dean of Women, Michigan State Normal College, Ypsilanti.

The Dependence of Focal Points upon Curvature for Problems of the Calculus of Variations in Space. Doctor's thesis. *Transactions of the American Mathematical Society*, XIII (1912), 175-98.

FORBES BAGLEY WILEY, PH.D. 1914; Professor of Mathematics, Denison University, Granville, Ohio.

A Method of Subdividing the Interior of a Simply Closed Rectifiable Curve, with an Application to Cauchy's Theorem (with G. A. Bliss), *Bulletin of the Scientific Laboratories of Denison University*, XVII (1914), 375-89.

Proof of the Finiteness of the Modular Covariants of a System of Binary Forms and Cogredient Points. Doctor's thesis. *Transactions of the American Mathematical Society*, XV (1914), 431-38.

ALBERT HARRIS WILSON, PH.D. 1911; Associate Professor of Mathematics, Haverford College, Haverford, Pa.

Automorphic Transformations of the Binary Quartic, *American Journal of Mathematics*, XXXIII (1910), 29-36.

The Canonical Types of Nets of Modular Conics. Doctor's thesis. *ibid.*, XXXVI (1914), 187-210.

NORMAN RICHARD WILSON, PH.D. 1907; Professor of Mathematics, University of Manitoba, Winnipeg.

A Certain Type of Isoperimetric Problem, in Particular the Solid of Maximum Attraction. Doctor's thesis. *Proceedings and Transactions of the Royal Society of Canada*, Third Series, I (1907), 39-84.

CHESTER HENRY YEATON, PH.D. 1915; Assistant Professor of Mathematics, Northwestern University.

Surfaces Characterized by Certain Special Properties of Their Directrix Congruences. Doctor's thesis. *Annali di Matematica*, Serie III, XXVI (1916), 1-33.

THE DEPARTMENT OF ASTRONOMY AND ASTROPHYSICS

EDWIN BRANT FROST [1898-], Professor of Astrophysics; Director of the Yerkes Observatory.

A.B. Dartmouth, 1886; Sc.D. (hon.), *ibid.*, 1911; Sc.D. (hon.), Cambridge, 1912; Assistant Professor of Astronomy and Director of the Observatory, Dartmouth, 1892-95; Professor, *ibid.*, 1895-98; Professor of Astrophysics, Chicago, 1898-; Director of Yerkes Observatory, *ibid.*, 1905-.

Associate, Royal Astronomical Society; Member, National Academy of Sciences.

Assistant Editor, *Astrophysical Journal*, 1898-1901; Joint Editor, 1902-; Managing Editor, 1902-12, 1914-. Member, Board of Editors, *Proceedings of the National Academy of Sciences*, 1915-.

Member, Committee on Comets, American Astronomical Society (report published in 1915).

Heliographic Positions of Sun-Spots, Observed at Hamilton College from 1860 to 1870 by C. H. F. Peters. 4to, xiii+189. Washington: Carnegie Institution, 1907.

Wave-Lengths of Certain Lines of the Second Spectrum of Hydrogen, *Astrophysical Journal*, XVI (1902), 100-105.

Wave-Lengths of Certain Oxygen Lines (with Walter S. Adams), *ibid.*, 119, 120.

- Co-operation in Observing Radial Velocities of Selected Stars, *Astrophysical Journal*, XVI (1902), 169-77.
- Five Stars Whose Radial Velocities Vary (with Walter S. Adams), *ibid.*, XVII (1903), 150-53.
- Additional Stars of the Orion Type Whose Radial Velocities Vary (with Walter S. Adams), *ibid.*, 246, 247.
- Two Stars with Variable Radial Velocities (with Walter S. Adams), *ibid.*, 381, 382.
- Spectrographic Observations of Standard Velocity Stars, 1902-1903 (with Walter S. Adams), *ibid.*, XVIII (1903), 237-77.
- Ten Stars Whose Radial Velocities Vary (with Walter S. Adams), *ibid.*, 383-89.
- Eight Stars Whose Radial Velocities Vary (with Walter S. Adams), *ibid.*, XIX (1904), 151-55.
- Observations with the Bruce Spectrograph (with Walter S. Adams), *ibid.*, 350-56.
- Radial Velocity of T Vulpeculae, *ibid.*, XX (1904), 296.
- A Desideratum in Spectrology, *ibid.*, 342-46.
- Wave-Lengths of Certain Silicon Lines (with J. A. Brown), *ibid.*, XXII (1905), 157-60.
- Spectrographic Observations of Certain Variable Stars, *ibid.*, 213-16.
- Spectrographic Observations, *ibid.*, XXIII (1906), 264-69.
- Observations of Radial Velocities, *Science*, XXIII (1906), 449.
- The Observations of Sun-Spots by the Late C. H. F. Peters, *ibid.*, 452.
- The Period of β Cephei, *Astrophysical Journal*, XXIV (1906), 259-62.
- Nine Stars Having Variable Velocities, *ibid.*, XXV (1907), 59-65.
- Hermann Carl Vogel, *ibid.*, XXVII (1908), 1-11.
- On Certain Spectroscopic Binaries, *Astronomische Nachrichten*, CLXXVII (1908), 171-73.
- Spectroscopic Binaries under Observation at Different Institutions, *Astrophysical Journal*, XXVII (1908), 161.
- Spectrum of Comet Morehouse (with J. A. Parkhurst), *ibid.*, XXIX (1909), 55-64.

- Spectrographic Notes, *ibid.*, 233-39.
- Spectrum of Comet Morehouse (with J. A. Parkhurst), *Science*, XXIX (1909), 36, 37.
- Eight Stars Having Variable Radial Velocities (with O. J. Lee), *Astrophysical Journal*, XXX (1909), 62-67.
- Charles Augustus Young, *ibid.*, 323-38; published also in *Memoirs of the National Academy of Sciences*, VII (1909), 91-114.
- Note on the Accuracy of Radial Velocity Determinations, *Astrophysical Journal*, XXXI (1910), 377-81.
- Corrections to the Radial Velocities of Certain Stars of the Orion Type, *ibid.*, 430-32.
- On the Velocity of the Sun's Motion through Space as Derived from the Radial Velocity of the Orion Stars (with J. C. Kapteyn), *ibid.*, XXXII (1910), 83-90.
- Nova Lacertae of 1910, *Popular Astronomy*, XIX (1911), 111-12.
- On the Classification of Stellar Spectra, *Astrophysical Journal*, XXXIII (1911), 273-77.
- Observations of Nova Lacertae at the Yerkes Observatory, *ibid.*, 408-17.
- Preliminary Note on the Sun's Velocity with Respect to Stars of Spectral Type A, *Memorie della Società degli Spettroscopisti Italiani* (2), I (1912), 26-28.
- On the Spectrum of P Cygni, *Astrophysical Journal*, XXXV (1912), 286-93.
- The Spectroscopic Determination of Stellar Velocities Considered Practically, *Popular Astronomy*, XXI (1913), 189-207.
- Stellar Wave-Length of λ 4686 and Other Lines in the Spectrum of ϵ Lacertae (with Frances Lowater), *Astrophysical Journal*, XL (1914), 268-73.
- Julius Scheiner, *ibid.*, XLI (1915), 1-9.
- Note on Two Spectroscopic Binaries, *Popular Astronomy*, XXII (1914), 12-13.
- Objective-Prism Spectra of Nebulae Examined with the Stereo-Comparator (with H. L. Alden), *ibid.*, 136-37.
- Spectrographic Observations, *ibid.*, 568.

Spectroscopic Binary in the Trapezium of Orion, *Popular Astronomy*, XXIII (1915), 361-62.

New Conceptions of the Nebula of Orion (with C. A. Maney), *ibid.*, 485-87.

Radial Velocities within the Great Nebula of Orion, *Proceedings of the National Academy of Sciences*, I (1915), 416.

REVIEW OF: W. W. Campbell, Stellar Motions, *Publications of the Astronomical Society of the Pacific*, XXV, 277-83. Other reviews in *Astrophysical Journal*, XXII, 162-63, 227-28; XXIII, 171-78; XXV, 153-54; XXXI, 279-80; XXXII, 323-26, 402-3; XXXIII, 301-2; XXXV, 294-99; *Publications of the Astronomical Society of the Pacific*, XXIII, 257-60.

GEORGE ELLERY HALE, Professor of Astrophysics and Director of the Yerkes Observatory, 1892-1905-; Non-Resident Professor of Astrophysics, 1905-; Director of the Mount Wilson Solar Observatory of the Carnegie Institution of Washington, Pasadena, Cal.

S.B. Massachusetts Institute of Technology, 1890; Sc.D. (hon.) Western University of Pennsylvania, 1897; LL.D. Beloit, 1904; Sc.D. (hon.) Yale, 1905; Associate Professor of Astrophysics, Chicago, 1892-97; Director of the Yerkes Observatory, *ibid.*, 1895-1905; Professor of Astrophysics, *ibid.*, 1897-1905; Non-Resident Professor of Astrophysics, *ibid.*, 1905-.

Janssen Medal, 1894; Rumford Medal, 1902; Draper Medal, 1903; Gold Medal, Royal Astronomical Society, 1904; Foreign Secretary, National Academy of Sciences; Member, American Philosophical Society; Foreign Member of the Royal Society of London, and of the Academies of Paris, Rome, Vienna, Amsterdam, Christiania, Upsala, etc.

Editor of the *Astrophysical Journal*, 1895-.

The Spectra of Stars of Secchi's Fourth Type (with Ferdinand Ellerman and J. A. Parkhurst). Publications of the Yerkes Observatory, Vol. II. 4to, 135+11 plates. Chicago: University Press, 1903.

The Rumford Spectroheliograph of the Yerkes Observatory (with Ferdinand Ellerman) *ibid.*, Vol. III, Part I. 4to, 26+15 plates. Chicago: University Press, 1903.

Solar Research at the Yerkes Observatory, *Astrophysical Journal*, XVI (1902), 211-33.

Second Note on the Spark Spectrum of Iron in Liquids and Compressed Gases (with Norton A. Kent), *ibid.*, XVII (1903), 154-60.

The New Star in *Gemini*, *ibid.*, 300-305.

The Snow Horizontal Telescope, *ibid.*, 314.

Calcium and Hydrogen Flocculi (with Ferdinand Ellerman), *ibid.*, XIX (1904), 41-52.

The Development of a New Method of Research, *Popular Science Monthly*, LXV (1904), 5-26.

Co-operation in Solar Research, *Astrophysical Journal*, XX (1904), 301-12.

The Work of the Rumford Spectroheliograph, *ibid.*, XXI (1905), 261-70.

REVIEW OF: Kayser, Handbuch der Spectroscopie, *Astrophysical Journal*, XIX, 296-300.

EDWARD EMERSON BARNARD [1895-], Professor of Practical Astronomy; Astronomer in the Yerkes Observatory.

A.M. (*honoris causa*) University of the Pacific, 1889; Sc.D. Vanderbilt, 1893; LL.D. Queen's, 1909; in charge of Observatory, Vanderbilt, 1883-87; Astronomer in the Lick Observatory, 1887-95; Professor of Practical Astronomy, Chicago, and Astronomer in the Yerkes Observatory, 1895-.

Lalande Gold Medal (1892), Arago Gold Medal (1893), Janssen Gold Medal (1900), Académie des Sciences, Paris; Gold Medal, Royal Astronomical Society, 1897; Bruce Gold Medal (1917), Astronomical Society of the Pacific; Vice-President, American Association for Advancement of Science, 1898; Janssen Prize, Société Astronomique de France, 1906; Associate Fellow, American Academy of Arts and Sciences; Hon. Member, Royal Astronomical Society of Canada; Foreign Associate and Fellow, Royal Astronomical Society; Member, Société Astronomique de France; Member, National Academy of Sciences; Member, American Philosophical Society.

Associate Editor, *Astronomical Journal*, 1914-; Associate Editor (Department of Astronomy), Funk & Wagnall's *New Standard Dictionary of the English Language*.

Member, Committee on Comets, American Astronomical Society (report published 1915).

Photographs of the Milky Way and of Comets. Publications of the Lick Observatory, Vol. XI. 4to, 175+130 plates. Sacramento: University of California Press, 1913.

Observation of Comet *b* 1902 (Perrine), *Astronomical Journal*, XXII (1901-2), 174.

Observations of the Aurora Made at the Yerkes Observatory, 1897-1902, *Astrophysical Journal*, XVI (1902), 135-44.

On the Change in the Focus for Nova Persei, *ibid.*, 183-85.

Comment on the Early Harvard Photographs of Nova Persei, *ibid.*, 340, 341.

- Observations of Nova Persei (Ch. 1226), *Astronomische Nachrichten*, CLX (1902), 239.
- Micrometrical Measures of Individual Stars in the Great Globular Clusters, *Publications of the Astronomical and Astrophysical Society of America*, I (1902), 193.
- On Some of the Variable Stars in the Cluster M 5 Librae, *ibid.*, 193-94.
- Phenomena Observed at the Lunar Eclipse, 1902, October 16, *Astronomische Nachrichten*, CLXI (1903), 81-84.
- Diffused Nebulosities in the Heavens (1 plate), *Astrophysical Journal*, XVII (1903), 77-80.
- The South Polar Cap of Mars (2 plates), *ibid.*, 249-57.
- Additional Measures of the Position of Nova Persei (Ch. 1226), *Astronomische Nachrichten*, CLXII (1903), 379-82.
- Observations of Nova Geminorum, *Astrophysical Journal*, XVII (1903), 376-77.
- Photographic Observations of Borrelly's Comet and Explanation of the Phenomenon of the Tail on July 24 (2 plates), *ibid.*, 210-17.
- Observations of Comet *d* 1902 (Giacobini), *Astronomical Journal*, XXIII (1903-4), 8.
- Observation of the Position of Turner's Nova, *ibid.*, 81.
- Micrometer Observations of the Satellite of Neptune in 1901-2 and 1902-3, *ibid.*, 105-8.
- Observations of the Companions of Sirius and Procyon, *ibid.*, 132.
- White Spot on Saturn, *ibid.*, 143-44.
- On the Fifth Satellite of Jupiter, *ibid.*, 149-56.
- On the Apparent Ellipticity of Mars, *ibid.*, 166.
- Observations of the Star Krueger 60, *ibid.*, 169-72.
- The White Spot on Saturn, *ibid.*, 180, 181.
- Wolf's "New Star" in Cygnus, *ibid.*, 190.
- Note on Saturn's Satellite Phoebe (with E. C. Pickering), *Astronomische Nachrichten*, CLXVI (1904), 159.
- Observations of Two Great Meteors, *Astronomical Journal*, XXIV (1904-5), 128, 129.

- Observation of Comet *e* 1904 (Borrelly), *ibid.*, 164.
- Observations of Phoebe, the Ninth Satellite of Saturn, *ibid.*, 165-66.
- Observations of Brooks' Periodic Comet, *ibid.*, 180.
- The Bruce Photographic Telescope of the Yerkes Observatory (4 plates), *Astrophysical Journal*, XXI (1905), 35-48.
- On the Anomalous Tails of Comets (with one plate), *ibid.*, XXII (1905), 249-55.
- Nova Aquilae of 1905, *ibid.*, 358.
- Observations of the Fifth Satellite of Jupiter, *Astronomical Journal*, XXV (1905-8), 25-32.
- Micrometrical Observations of the Satellite of Neptune, *ibid.*, 41-42.
- Observations of Comet *a* 1906 (Brooks), *ibid.*, 60.
- Micrometrical Observations of the Fifth Satellite of Jupiter, *ibid.*, 81-83.
- Secondary Nucleus of Comet *b* 1906 (Kopff), *ibid.*, 83-84.
- Observations of the Satellite of Neptune in the Years 1905-6, *ibid.*, 100.
- Observations of the Satellite of Neptune at the Opposition of 1906-7, *ibid.*, 164.
- Great Photographic Nebula near π and δ Scorpii (1 plate), *Astrophysical Journal*, XXIII (1906), 144-47.
- Note on Professor Newcomb's Observations of the Zodiacal Light, *ibid.*, 168, 169.
- The Annular Nebula of Lyra (M 57), *Monthly Notices of the Royal Astronomical Society*, LXVI (1906), 104-13.
- Periodical Changes in the Size of the Glow Surrounding the Lunar Crater Linné, *Astronomische Nachrichten*, CLXX (1906), 293-96.
- An Unexplained Observation, *ibid.*, CLXXII (1906), 25.
- Observations of the Magnitudes and Position of Nova Geminorum, *Monthly Notices of the Royal Astronomical Society*, LXVI (1906), 355-61.
- The Nebulous Regions of the Milky Way, *Publications of the Astronomical and Astrophysical Society of America*, I (1906), 269-70.
- Photographic Observations of Giacobini's Comet, *ibid.*, 274.

- On the Vacant Regions of the Sky (3 plates), *Popular Astronomy*, XIV (1906), 579-83.
- The Midnight Illumination above the Northern Horizon near the Time of the Summer Solstice, *Astrophysical Journal*, XXIV (1906), 128-29.
- Photographic Observations of Giacobini's Comet (1905 c) (2 plates), *ibid.*, 255-58.
- Observations of the Sixth Satellite of Jupiter, *Astronomische Nachrichten*, CLXXII (1906), 119-22.
- Observations of the Asteroid (13) Egeria, *ibid.*, 121-24.
- On a Planetary Nebula, *ibid.*, 123.
- Observations of Phoebe, the Ninth Satellite of Saturn, *ibid.*, 191, 192.
- Visual Observations of a Variable Star in the Cluster M 3 (N.G.C. 5272), *ibid.*, 345-48.
- On the Hypothetical Disturbing Body in the System of 61 Cygni, *ibid.*, 379-84.
- Observations of the Double Stars Castor, Σ 2398 and μ^1 Herculis, *ibid.*, 383, 384.
- Observations of the Position and Physical Appearance of Nova Sagittarii, *ibid.*, CLXXIII (1906), 113-18.
- Groups of Small Nebulae, *ibid.*, 117-22.
- Group of Small Nebulae, *ibid.*, 121, 122.
- On a Group of Small Nebulae Observed near Comet 1889V on October 28, 1889, *ibid.*, 121-24.
- The Nebula N.G.C. 6302, *ibid.*, 123, 124.
- Reply to Mr. Rudolph Pirovano's Remarks, etc., *ibid.*, 315-18.
- Period and Light-Curve of the Variable Star 7594 RS Aquarii, *ibid.* (1907), 337-46.
- Photographic Observations of an Unknown Comet on July 22 (1905 f) (1 plate), *ibid.*, CLXXIV (1907), 3-8.
- The White Spot near the North Limb of the Third Satellite of Jupiter (*A. N.*, 4147), *ibid.*, 327-28.
- On a Nebulous Groundwork in the Constellation of Taurus (2 plates), *Astrophysical Journal*, XXV (1907), 218-25.

- Nova T Coronae of 1866, *ibid.*, 279-82.
- Photographic Observations of Giacobini's Comet (1905 *c*), *Science*, XXV (1907), 569.
- On the Positions of the Stars BD+1°2720, +1°2722, and +0°2957, *Astronomische Nachrichten*, CLXXV (1907), 313-14.
- Photographic Observations of Mellish's Comet 1907 *b*, *ibid.*, 377-80.
- On the Motion of the Stars in the Cluster Messier 92, *ibid.*, CLXXVI (1907), 17-22, 21-24.
- Micrometer Observations of the Asteroid (588) Achilles, *ibid.*, 89-92.
- Nova Persei of 1901, *ibid.*, 323-26.
- Observations of the Fifth Satellite of Jupiter at the Opposition of 1906-7, *ibid.*, 177-78.
- Some of the Results of Astronomical Photography Pertaining Especially to the Work with a Portrait Lens (6 plates), *Proceedings of the American Philosophical Society*, XLVI (1907), 417-29; same as above (5 plates) reprinted in *Popular Astronomy*, XVI (1908), 286-98.
- On the Owl Nebula, Messier 97=N.G.C. 3587 (1 plate), *Monthly Notices of the Royal Astronomical Society*, LXVII (1907), 543-50.
- Micrometer Observations of Phoebe, *Astronomische Nachrichten*, CLXXVII (1908), 145-48.
- Photographic and Visual Observations of Iapetus, the Eighth Satellite of Saturn, in 1906, *ibid.*, 147-50.
- Observations of a Faint Asteroid 1904 O V^a near the Place of Phoebe on 1904 September 12, *ibid.*, 149-52.
- Some Notes on Nebulae and Nebulosities, *ibid.*, 231-36.
- Observations of Saturn's Ring at the Time of Its Disappearance in 1907, etc. (2 plates), *Monthly Notices of the Royal Astronomical Society*, LXVIII (1908), 346-59.
- Additional Observations of the Disappearances and Reappearances of the Rings of Saturn in 1907-8, etc., *ibid.*, 360-66.
- A Few Observations of the Planet Saturn and His Rings in the Years 1897-1904 (1 plate), *ibid.*, 366-68.
- The Variability of the Nucleus of the Planetary Nebula N.G.C. 7662 (1 plate), *ibid.*, 465-80.

- Observations of Saturn's Rings at Their Disappearances in 1907, with a Suggested Explanation of the Phenomena Presented (1 plate), *Astrophysical Journal*, XXVII (1908), 35-44.
- Photographic Phenomena of Comet *d* 1907 (Daniel) (Abstract), *Science*, XXVII (1908), 162.
- On a Great Bed of Nebulosity in Sagittarius, Photographed with the Bruce Telescope of the Yerkes Observatory (Abstract), *ibid.*, 162-63.
- Comet *c* 1908 (Morehouse) (2 plates), *Astrophysical Journal*, XXVIII (1908), 292-99.
- On the Parallax and Proper Motion of the Double Star Krueger 60 (1 plate), *Monthly Notices of the Royal Astronomical Society*, LXVIII (1908), 629-55.
- On the Photographs of Comet *c* 1908 (Morehouse) (2 plates), *ibid.*, LXIX (1908), 52-54.
- Photographs of Comet *c* 1908 (Morehouse) (1 plate), *ibid.*, 114-15.
- Photographic Observations of a Very Remarkable Comet (2 plates), *Popular Astronomy*, XVI (1908), 591-96.
- The Great Red Spot on Jupiter (1 plate), *Astronomische Nachrichten* CLXXVIII (1908), 389-92.
- Measures of the Sixth Satellite of Jupiter and of Comparison Stars in 1908, *ibid.*, CLXXIX (1908), 17-20.
- On the Change in the Physical Condition of Nova Persei in the Fall of 1902 and Afterwards, *ibid.*, 199-204.
- On the Constancy of the Period of the Variable Star, M 5 (Libra) No. 33, *Publications of the Astronomical and Astrophysical Society of America*, I (1908), 298.
- On a Quick Visual Method of Redetermining the Focus of a Large Visual Refractor When Used for Photography with a Color Screen, *ibid.*, 300.
- On the Focal Changes in Nova Persei and on the Focus of Some of the Wolf-Rayet Stars, *ibid.*, 300-301.
- On the Irregularity of the Proper Motion of the Star Krueger 60, *ibid.*, 303.
- Photographic Observations of Comet *c* 1908 (Morehouse) (8 plates), *Astrophysical Journal*, XXVIII (1908), 384-88; XXIX (1909), 65-71.

- On the Colors of Some of the Stars in the Globular Cluster M 13 Hercules, *ibid.*, 72-75.
- Visual Observations of Halley's Comet, *Astronomical Journal*, XXVI (1909), 43-44.
- Observations of the Satellites of Uranus, *ibid.*, 47-50.
- Additional Observations of Halley's Comet, *ibid.*, 62.
- Observations of the Satellites of Mars, *ibid.*, 69-70.
- Observations of Halley's Comet, *ibid.*, 76-77.
- Observations of the Rings and Satellites of Saturn, *ibid.*, 79-82.
- Observations of Comet *c* 1909 and of Comet *a* 1910, *ibid.*, 86.
- Micrometer Measures of the Fifth Satellite of Jupiter and Miscellaneous Observations of the Planet, *ibid.*, 123-25.
- Micrometer Observations of Comet *a* 1910, *ibid.*, 137.
- Observations of the Companion of Sirius, *ibid.*, 143.
- Observations of the Satellite of Neptune, *ibid.*, 144.
- Recent Observations of the Rings of Saturn and Their Bearing on Some of the Phenomena of the Disappearance of the Rings in 1907, *Monthly Notices of the Royal Astronomical Society*, LXIX (1909), 621-24.
- On the Erroneous Results of Stereoscopic Observations of a Comet, *ibid.*, 624-26. Reprinted in *Popular Astronomy*, XVII (1909), 531-34.
- Suggestions in Respect to Photographing Comets, with Special Reference to Halley's Comet, *Popular Astronomy*, XVII (1909), 597-609.
- Micrometer Observations of the Temple-Swift Comet, etc., *Astronomische Nachrichten*, CLXXX (1909), 159-62.
- Observations of the Fifth Satellite of Jupiter in the Years 1908 and 1909, etc., *ibid.*, CLXXXI (1909), 301-10.
- Observations of the Variable Star RS Aquarii, *ibid.*, 309-12.
- Observations of the Satellite of Neptune, 1907-8, 1908-9, *ibid.*, 321-26.
- Micrometer Observations of Comet 1908 *c* (Morehouse), *ibid.*, 401-2.
- Observations of the Companions of Procyon, *ibid.*, CLXXXII (1909), 13-14.

- Observations of the Companion of Sirius, *Astronomische Nachrichten*, CLXXXII (1909), 13-16.
- On the Motion of Some of the Stars of Messier 92 (1 plate), *ibid.*, 305-8. Reprinted in *Popular Astronomy*, XVIII (1909), 3-7.
- On the Photographs of Comet *c* 1908 (Morehouse), *Publications of the Astronomical and Astrophysical Society of America*, I (1909), 323.
- On Some Experiments in Photographing Enlarged Images of the Planets, Direct with the Forty-Inch Telescope, *ibid.*, 323.
- On the Proper Motion of Some of the Small Stars in the Dense Cluster M 92 Herculis, *ibid.*, 323.
- Introduction to Vol. I, *Science-History of the Universe* (1909), pp. ix-xvi.
- On the Period and Light Curve of the Variable Star, No. 33 M 5 (1 plate), *Astronomische Nachrichten*, CLXXXIV (1910), 273-84.
- Photographic Observations of Halley's Comet (1 plate), *Popular Astronomy*, XVIII (1910), 321-22.
- On a Great Nebulous Region, etc. (3 plates), *Astrophysical Journal*, XXXI (1910), 8-14.
- Observations of the Aurora, Made at the Yerkes Observatory, 1902-1909, *ibid.*, 208-33.
- Photographic Observations of Daniel's Comet (25 plates), *Proceedings of the American Philosophical Society*, XLIX (1910), 3-16.
- On the Acceleration of the Receding Masses in the Tail of Halley's Comet, June 6, 1910, *Publications of the Astronomical and Astrophysical Society of America*, II (1910), 17.
- Observations of Halley's Comet at the Time of Its Nearest Approach to the Earth (1 plate), *Astronomische Nachrichten*, CLXXXV (1910), 229-34.
- Observations of the Minor Planet (403) Cyane, *ibid.*, 325-28.
- On the Acceleration of the Receding Masses in the Tail of Halley's Comet, 1910, June 6, *ibid.*, CLXXXVI (1910), 11-22.
- Prediscovery Photographs of Nova Lacertae, *ibid.*, CLXXXVII (1911), 63-64.
- Observations of Comets, *ibid.*, CLXXXVIII (1911), 118-19.
- Photographs of the Planet Mars, etc. (2 plates), *Monthly Notices of the Royal Astronomical Society*, LXXI (1911), 471-72.

- Luminous Night Haze, *Proceedings of the American Philosophical Society*, L (1911), 246-53.
- The Conjunction of Mars and Saturn, 1911, August 16, *Popular Astronomy*, XIX (1911), 498-501.
- Preliminary Report on the Photographs of Halley's Comet Taken at Honolulu, H.I., by Ferdinand Ellerman in 1910, *Publications of the Astronomical and Astrophysical Society of America*, II (1911), 66-67.
- Photographic Observations of Brooks's Comet, 1911, *ibid.*, 98-99.
- Notes on the Photographs of Halley's Comet Taken at Diamond Head by Ferdinand Ellerman, *ibid.*, 221-27.
- Observations of Halley's Comet, *Astronomische Nachrichten*, CLXXXVIII (1911), 215-16.
- Photographic Observations of the Small Planets (28) Bellona and 1908 MF, *ibid.*, CLXXXIX (1911), 193-94.
- Observations of Wolf's Periodic Comet 1911 a, *ibid.*, CXC (1911-12), 25-28.
- Observations of a New Minor Planet 1912 NV, *ibid.*, 397-98.
- Micrometric Measures of the Fifth Satellite of Jupiter and Miscellaneous Observations of the Planet, *Astronomical Journal*, XXVII (1911-13), 99-104.
- Observations of the Satellites of Uranus, *ibid.*, 104-6.
- The Companions of Procyon and Sirius, *ibid.*, 107-8.
- Observations of the Satellite of Neptune, *ibid.*, 111-12.
- Visual and Photographic Observations of Comet 1911 b (Kieß), *ibid.*, 113-14.
- Micrometric Measures of the Satellites of Saturn, *ibid.*, 116-29.
- Micrometer Positions of Halley's Comet, *ibid.*, 147-52.
- The Companions of Sirius and of Procyon, *ibid.*, 193-94.
- Observations of the Variable Star RS Aquarii, *Astronomische Nachrichten*, CXCI (1912), 181-82.
- The Red Star BD+37°3876=WX Cygni, *ibid.*, 387-90.
- Period of the Variable Star No. 33, M 5 (Libra), *ibid.*, 439-42.
- Observations of Nova Cygni 1876, *Monthly Notices of the Royal Astronomical Society*, LXXII (1912), 525-34.

- Observations of Nova Lacertae (Espin) (1 plate), *Monthly Notices of the Royal Astronomical Society*, LXXII (1912), 659-76.
- Photographic Observations of Comet 1911 c (Brooks) (7 plates), *Astro-physical Journal*, XXXVI (1912), 1-13.
- Gale's Comet a 1912, *Popular Astronomy*, XX (1912), 579-80.
- Schaumasse's Comet, *ibid.*, 608.
- Borrelly's Comet 1912 c, *ibid.*, 672.
- The Minor Planet 21 Lutetia near Jupiter, *Astronomische Nachrichten*, CXCII (1912), 115-16.
- The Total Eclipse of the Moon, 1913, March 21, *Popular Astronomy*, XXI (1913), 277-78.
- The Variable Star R Cygni, *Monthly Notices of the Royal Astronomical Society*, LXXIII (1913), 390-92.
- The Variable Star 97 .1910 Cygni, *ibid.*, 500-518.
- On the Polar Diameter of Saturn and the Minor Axis of the Rings, *ibid.*, 601-5.
- Dark Regions of the Sky Suggesting an Obscuration of Light, *Astro-physical Journal*, XXXVIII (1913), 496-501.
- On the Motion of a Small Star in the Pleiades, *Astronomische Nachrichten*, CXCIV (1913), 7-8.
- Lewis Swift, *ibid.*, 133-36.
- Corrections to the Observations of 588 Achilles in *A.N.*, 4206, *ibid.*, 171-72.
- Visual Observations of Phoebe, the Ninth Satellite of Saturn, *ibid.*, 333-36.
- The Temporary Stars. On the Present Appearance of Some of These Bodies, *ibid.*, 401-8.
- Gain of Definition Obtained by Moving a Telescope, *Nature*, XCI (1913), 214-15.
- The Variable Star No. 33 in the Cluster M 5, *Astronomische Nachrichten*, CXCVI (1913-14), 11-14.
- Change in the Focus of Nova Geminorum, *ibid.*, 167-68.
- Neujmin's Comet, *ibid.*, 181-82.
- Drawing of the Planet Jupiter, *ibid.*, 381-82.

- Observations of the Satellites of Saturn, *Astronomical Journal*, XXVIII (1913-15), 1-9.
- Observations of the Satellite of Neptune, *ibid.*, 10-11.
- Observations of Comet 1913 c (Neujmin), *ibid.*, 137-41.
- Change in the Focus of Nova Geminorum No. 2. Recent Observations of Nova Persei 2, and Nova Geminorum 1, *Astronomische Nachrichten*, CXCVIII (1914), 123-24.
- Explanation of Certain Phenomena of the Tail of Comet Morehouse (III, 1908), *Science*, XL (1914), 769-70.
- Visual Observations of Phoebe, the Ninth Satellite of Saturn, *Astronomische Nachrichten*, CXCVIII (1914), 223-26.
- A Curious Observation, *Observatory*, XXXVII (1914), 416-17.
- Visual Observations of Halley's Comet in 1910 (6 plates), *Astrophysical Journal*, XXXIX (1914), 373-404.
- Photographic Determination of the Colors of Some of the Stars in the Cluster M 13 (Hercules) (2 plates), *ibid.*, XL (1914), 173-81.
- Photographic Measures of Saturn and Its Rings (1 plate), *ibid.*, 259-67.
- On the Identity of Anthelm's New Star of 1670 (11 Vulpeculae), *Astronomische Nachrichten*, CXCIX (1914), 1-4.
- On the Transparency of the Outer Ring of Saturn, *ibid.*, 101-2.
- Delavan's Comet (1 plate), *Popular Astronomy*, XXII (1914), 500.
- Delavan's Comet (1 plate), *ibid.*, 535-36.
- Visual Observations of Some of the Harvard College Observatory Polar Sequence Stars, *ibid.*, 559-60.
- Encke's Comet (1 plate), *ibid.*, 607-10.
- A Great Nebulous Region near Omicron Persei (1 plate), *Astrophysical Journal*, XLI (1915), 253-58.
- The Tail of Encke's Comet, *Popular Astronomy*, XXIII (1915), 14.
- A Mistaken Butterfly, *Nature*, XCV (1915), 174.
- Measures of Small Stars in the Dumbbell Nebula (=N.G.C. 6853 = M 27), *Monthly Notices of the Royal Astronomical Society*, LXXVI (1915), 90-95.
- Measures of the Positions of Faint Comparison Stars near the Variable R Cygni, *ibid.*, 95-97.

- Photographic Comparison of a Bright Nebula with a Dark One, and the Possible Luminosity of Space (Abstract), *Popular Astronomy*, XXIII (1915), 596.
- Sur des grands mouvements propres soupçonnés dans les étoiles voisines de l'amas Messier 11 = N.G.C. 6705, *Comptes Rendus*, CLXI (1915), 411.
- The Great Aurora of June 16, 1915, *Nature*, XCV (1915), 536-37, 703.
- Observations of the Satellites of Saturn, *Astronomical Journal*, XXIX (1915-16), 33-37.
- Observations of the Companion of Sirius, *ibid.*, 38.
- Observations of the Satellite of Neptune, *ibid.*, 39.
- Observations of the Satellites of Uranus, *ibid.*, 39-40.
- Mellish's Comet (1915 a), *ibid.*, 40.
- Observations of the Sixth Satellite of Jupiter, *ibid.*, 73-74.
- A New Variable Star, *ibid.*, 75.
- Observations of the Fifth Satellite of Jupiter, *ibid.*, 77-79.
- Observations of the Double Comets 1915 e (Taylor) and 1915 a (Mellish), *ibid.*, 138.
- A New Variable Star, *ibid.*, 148.
- Observations of the Double Star Krueger 60, *Monthly Notices of the Royal Astronomical Society*, LXXVI (1916), 592-606.
- Some of the Dark Markings of the Sky and What They Suggest (2 plates), *Astrophysical Journal*, XLIII (1916), 1-8.
- REVIEWS OF: Pickering, The Moon, *Astrophysical Journal*, XX, 359-64; Wolf, Die Milchstrasse, *ibid.*, XXIX, 89, 90; Chambers, The Story of the Comets, *ibid.*, XXXI, 92-94.

SHERBURNE WESLEY BURNHAM [1893-1914], Professor of Practical Astronomy, and Astronomer in the Yerkes Observatory. Retired.

A.M. Yale, 1878; Astronomer at the Lick Observatory, 1888-92; Professor of Practical Astronomy, and Astronomer in the Yerkes Observatory, 1893-1914.

Expert Commissioner to test the seeing on Mount Hamilton, Cal. (resulting in the location of the Lick Observatory), 1879; Gold Medal of the Royal Astronomical Society, 1894; Associate of the Royal Astronomical Society, 1898; Lalande Prize in Astronomy, Paris Academy of Science, 1904.

General Catalogue of Double Stars within 121° of the North Pole. 4to, 2 vols. Vol. I, *The Catalogue.* Iv+256. Vol. II, *Notes to the Catalogue.* viii+830. Washington: Carnegie Institution, 1906.

Measures of Proper Motion Stars. 4to, iv+311. Washington: Carnegie Institution, 1913.

Note on the Double Star γ Leonis, *Monthly Notices of the Royal Astronomical Society*, LXIII (1902-3), 419-20.

New Companion to Σ 1594, *ibid.*, 420-21.

Notes on Küstner's Double Star Measures, *Astronomische Nachrichten*, CLXI (1903), 91-92.

Note on the Double Star AOe₂ 17123, *ibid.*, CLXIII (1903), 315.

Note on Schjellerup 8144 and B.D.+5°4556, *ibid.*, 379.

Note on Schjellerup 8144, *ibid.*, CLXIV (1903), 127.

A Lost Double Star, *Popular Astronomy*, XI (1903), 250-52.

θ Bootis, *Astronomische Nachrichten*, CLXXV (1907), 95.

Double Star Measures Made with the 40-Inch Refractor of the Yerkes Observatory, *ibid.*, CLXXXVI (1907), 129.

The Proper Motion of Small Stars, *Monthly Notices of the Royal Astronomical Society*, LXVIII (1907-8), 517-22.

Double Star Measures Made with the 40-Inch Refractor of the Yerkes Observatory, *Astronomische Nachrichten*, CLXXXVIII (1908), 201.

Double Star Measures Made with the 40-Inch Refractor of the Yerkes Observatory, *ibid.*, CLXXX (1909), 65.

Double Star Measures Made with the 40-Inch Refractor of the Yerkes Observatory, *ibid.*, CLXXXII (1909), 133.

Announcement of Visual Discovery and Position of Halley's Comet, *Harvard Observatory Bulletin*, No. 358 (1909); published also in *Astronomische Nachrichten*, CLXXXII (1909), 285.

Double Star Measures Made with the 40-Inch Refractor of the Yerkes Observatory, *ibid.*, CLXXXV (1910), 144-79.

Beobachtungen von Kometen, *ibid.*, 179.

The Proper Motion of the Small Star near γ Lyrae, *Monthly Notices of the Royal Astronomical Society*, LXXI (1910-11), 208-15.

Measures of a Faint Proper Motion Star, *ibid.*, 218.

Measures of the Proper Motion Star β G. C. 6869, *ibid.*, 506.

Measures of a Small Star with a Large Proper Motion, *ibid.*, 508.

Measures of the Proper Motion Star Sh 190, *Monthly Notices of the Royal Astronomical Society*, LXXI (1910-11), 691.

Double Star Measures Made with the 40-Inch Refractor of the Yerkes Observatory, *Astronomische Nachrichten*, CLXXXVI (1911), 389-422

The Proper Motion of B.D. +33°99, *ibid.*, CLXXXVII (1911), 382.

Comparison Stars for Halley's Comet, *ibid.*, CLXXXVIII (1911), 181.

REVIEW OF: Recent Double Star Work, *Popular Astronomy*, XIV, 79-85. Other reviews in *Popular Astronomy*, X, 129-30; XIII, 15-16, 333-34, 472-73; XIV, 523-25; XV, 624-26.

FRANCIS P. LEAVENWORTH, Professor of Astronomy, University of Minnesota; Professor of Practical Astronomy at the Yerkes Observatory, 1914, Summer.

Observations of Comets Made with the 40-Inch Refractor of the Yerkes Observatory, *Astronomical Journal*, XXIX (1915-16), 15.

Micrometrical Measures of Double Stars Made with the 40-Inch Refractor of the Yerkes Observatory, *ibid.*, 17-24.

FOREST RAY MOULTON [1896-], Professor of Astronomy.

A.B. Albion, 1894; Ph.D. Chicago, 1899; Assistant Professor of Astronomy, *ibid.*, 1903-8; Associate Professor, *ibid.*, 1908-12; Professor, *ibid.*, 1912-.

Member, National Academy of Sciences, 1910-; Hon. Corresponding Member, British Association for the Advancement of Science, 1913-; Vice-President, American Mathematical Society, 1915-.

Associate Editor, *Transactions of the American Mathematical Society*, 1908-.

Introduction to Astronomy. 8vo, xviii+557. New York: Macmillan Co., 1906.

Descriptive Astronomy. 8vo, 253. Chicago: American School of Correspondence, 1912.

Introduction to Celestial Mechanics (rev. ed.). 8vo, xvi+437. New York: Macmillan Co., 1914.

Periodic Orbits. Washington: Carnegie Institution. In Press.

Evolution of the Solar System, *Astrophysical Journal*, XXII (1905), 165-81.

Direct Computation of the Expressions for the Coördinates in Elliptic Motion, *Astronomical Journal*, XXV (1905-8), 144-49.

- A Class of Periodic Solutions of the Problem of Three Bodies with Applications to the Lunar Theory, *Transactions of the American Mathematical Society*, VII (1906), 537-77.
- Notes on the Possibility of Fission of a Contracting Rotating Fluid Mass, *Astrophysical Journal*, XXIX (1909), 1-13.
- On Certain Implications of Possible Changes in the Form and Dimensions of the Sun, and Some Suggestions toward Explaining Certain Phenomena of Variable Stars, *ibid.*, 257-80.
- On Certain Relations among the Possible Changes in the Motions of Mutually Attracting Spheres When Disturbed by Tidal Interactions, *Carnegie Institution of Washington*, Publication No. 107 (1909), 79-133.
- Notes on the Possibility of Fission of a Contracting Rotating Fluid Mass, *ibid.*, 137-60.
- The Straight Line Solutions of the Problem of n Bodies, *Annals of Mathematics*, Second Series, XII (1910), 1-17.
- Chapter on Growth of Worlds. In Vol. IV of the *Foundation Library for Young People*. 8vo, 25. New York: Educational Society, 1911.
- On the Solutions of Certain Types of Linear Differential Equations with Periodic Coefficients (with W. D. MacMillan), *American Journal of Mathematics*, XXXIII (1911), 63-96.
- The Influence of Astronomy on Mathematics, *Science*, XXXIII (1911), 357-64.
- The Spherical Pendulum from the Standpoint of Periodic Solutions, *Rendiconti del Circolo Matematico di Palermo*, XXXII (1911), 338-64.
- A Class of Periodic Orbits of Superior Planets, *Transactions of the American Mathematical Society*, XIII (1912), 96-108.
- Capture Theory and Capture Practice, *Popular Astronomy*, XX (1912), 67-82.
- On Certain Expansions of Elliptic, Hyperelliptic, and Related Periodic Functions, *American Journal of Mathematics*, XXXIV (1912), 177-202.
- M. Henri Poincaré, *Popular Astronomy*, XX (1912), 1-14.

Relations among Families of Periodic Orbits in the Restricted Problem of Three Bodies, *Proceedings of the International Congress of Mathematicians*, Cambridge (1912), 1-6.

Closed Orbits of Ejection and Related Periodic Orbits. Painlevé's Theorem, *Proceedings of the London Mathematical Society*, Series 2, Vol. II (1912), 367-97.

The Scientific Importance of Polar Explorations, *Technical World*, XIX (1913), 180-87.

Periodic Oscillating Satellites in the Problem of Three Bodies, *Mathematische Annalen*, LXXIII (1912), 441-79.

On the Solutions of Linear Equations Having Small Determinants, *American Mathematical Monthly*, XX (1913), 242-49.

Memoir on the Theory of Determining Orbits, *Astronomical Journal*, XXVIII (1913-15), Nos. 661, 662, 663 entire.

The Problem of Three Bodies, *Popular Astronomy*, XXII (1914), 197-207.

The Deviations of Falling Bodies, *Annals of Mathematics*, Second Series, XV (1914), 184-94.

Albert Abraham Michelson, *Technical World*, XXI (1914), 328-37.

On the Stability of Direct and Retrograde Satellite Orbits, *Monthly Notices of the Royal Astronomical Society*, LXXV (1914), 40-57.

George Ellery Hale, *Technical World*, XXII.

Solution of an Infinite System of Differential Equations of the Analytic Type, *Proceedings of the National Academy of Sciences*, I (1915), 350-54.

REVIEWS IN: *Science*, XXXIII, 856-57; *Bulletin of the American Mathematical Society*, XX, 384-86; *Popular Astronomy*, XX, 405-6; *Astrophysical Journal*, XXXV, 148.

GEORGES VAN BIESBROECK, Astronome-adjoint, Observatoire Royal de Belgique, Uccle, Brussels; Visiting Professor of Practical Astronomy at the Yerkes Observatory, 1915-16.

Dr. Ing., University of Ghent, 1902; Lauret du Concours Universitaire, 1902-3; Ingénieur de l'Administration des Ponts et Chaussées, Brussels, 1902-8; Volunteer Assistant at the Observatories of Heidelberg, 1905-6, and Potsdam, 1906-7; Astronome-adjoint, Observatoire Royal de Belgique, Uccle, Brussels, 1908-.

Definitive Orbit of Comet 1855 II, *Astronomical Journal*, XXIX (1915-16), 109-18.

Elements of Comet 1916 *a* (Neujmin), *ibid.*, 123.

Zeta Sagittae = *A.G.C.* 11, a Rapid Binary, *ibid.*, 163-64.

Mass-Ratios in Visual Binary Stars, *ibid.*, 173-80.

Observations of Comets at Yerkes Observatory, *ibid.*, 184-88.

KURT LAVES [1893-], Associate Professor of Astronomy.

Abiturientenexamen, Gymnasium at Lyck, Germany, 1886; Ph.D. Berlin, 1891; Assistant Professor of Astronomy, Chicago, 1901-8; Associate Professor, *ibid.*, 1908-.

Die Bedeutung der Hansenschen idealen Koordinaten, vom kinematischen Standpunkt betrachtet, *Astronomische Nachrichten*, CLXI (1903), 277-82.

The Arc Method for Descriptive Astronomy, *Popular Astronomy*, XIV (1906), 217-21.

New Light from Old Records, *ibid.*, 276-87.

Die Auffindung einer vollständigen Lösung der Jacobischen partiellen Differentialgleichung für mechanische Probleme mittelst einer dynamisch-geometrischen Darstellungsform, *Astronomische Nachrichten*, CLXXI (1906), 225-36.

Determination of Orbits of Spectroscopic Binaries, *Astrophysical Journal*, XXVI (1907), 164-71.

A Graphic Method for Lunar Eclipses, *Popular Astronomy*, XV (1907), 533-39.

Ueber den Kreishodographen, *Astronomische Nachrichten*, CLXXVIII (1908), 321-36.

The Moon's Theoretical Spectrographic Velocity, *Astrophysical Journal*, XXXII (1910), 17-23.

Three Hundred Years of Research on the Motions of the Satellites, 1610-1910, *Popular Astronomy*, XXI (1913), 279-91.

Analytische Entwicklung der Störungen der Satelliten, *Encyclopaedie der mathematischen Wissenschaften*, VI. In Press.

REVIEW OF: Buchholz, Theoretische Astronomie, *Vierteljahrsschrift der Astronomischen Gesellschaft*, XLVIII, 13-18. Other reviews in *Bulletin of the American Mathematical Society*, XIII, 516-20; XVIII, 517; XIX, 31-32; XX, 37-39; *Astrophysical Journal*, XXII, 191; XXV, 288-89.

STORRS BARROWS BARRETT [1900-], Assistant Professor of Astrophysics; Secretary and Librarian of the Yerkes Observatory.

A.B. Rochester, 1889; Secretary and Librarian of the Yerkes Observatory, 1900-; Assistant Professor of Astrophysics, *ibid.*, 1914-.

General Index to the "Astrophysical Journal," Vols. I-XXV. 8vo, iii+133. Chicago: University Press, 1908.

Variable Radial Velocities of Two Stars in the Taurus Stream, *Astrophysical Journal*, XXXII (1910), 183.

Notes on Plates of Nova Geminorum of 1912 Taken with the Bruce Spectrograph of the Yerkes Observatory, *Proceedings of the American Philosophical Society*, LI (1912).

Three New Binaries, *Popular Astronomy*, XXII (1914), 233-34.

On the Early Spectrum of Nova Geminorum of 1912, *ibid.*, 560-61.

REVIEWS IN: *Astrophysical Journal*, XVIII, 397-98; XXIV, 367-68; XXV, 362-63; XXXII, 326-27; XXXV, 354.

WILLIAM DUNCAN MACMILLAN [1907-], Assistant Professor of Astronomy.

A.M. Chicago, 1906; Ph.D. *ibid.*, 1908; Assistant Professor of Astronomy, *ibid.*, 1912-.

The Motion of a Particle Attracted toward a Fixed Center by a Force Varying Inversely as the Fifth Power of the Distance, *American Journal of Mathematics*, XXX (1908), 282-306.

Periodic Orbits about an Oblate Spheroid. Doctor's thesis. *Transactions of the American Mathematical Society*, XI (1909), 55-120.

On the Loss of Energy by Friction of the Tides, *Carnegie Institution*, Publication No. 107 (1909), 69-75.

A New Proof of Weierstrass' Factor Theorem, *Bulletin of the American Mathematical Society*, XVII (1910), 116-19.

On the Solutions of Certain Types of Linear Differential Equations with Periodic Coefficients (with F. R. Moulton), *American Journal of Mathematics*, XXXIII (1911), 63-96.

An Integrable Case in the Problem of Three Bodies, *Astronomical Journal*, XXVII (1911-13), 11-13.

An Existence Theorem for Periodic Solutions, *Transactions of the American Mathematical Society*, XIII (1912), 146-58.

- A Reduction of a System of Power Series to an Equivalent System of Polynomials, *Mathematische Annalen*, LXXII (1912), 157-79.
- A Method for Determining the Solutions of a System of Analytic Functions in the Neighborhood of a Branch Point, *ibid.*, 180-202.
- Certain Theorems on Implicit Functions and Differential Equations (with F. R. Moulton). Chap. I in Moulton's *Periodic Orbits*, 1-54.
- A Proof of Wilczynski's Theorem on the Non-Existence of Isosceles Triangular Solutions in the Problem of Three Bodies. Incorporated (pp. 17-31) in the paper by Wilczynski, *Annali di Matematica*, XXI (1913).
- Poincaré's Correction to Bruns's Theorem, *Bulletin of the American Mathematical Society*, XIX (1913), 349-55.
- On Foucault's Pendulum, *American Journal of Mathematics*, XXXVII (1915), 95-106.
- Convergence of the Series $\sum \frac{x^i y^j}{i-j\gamma}$ (γ irrational), *Bulletin of the American Mathematical Society*, XXII (1915), 26-32.
- Reduction of Certain Analytic Differential Equations to an Algebraic Type, *Transactions of the American Mathematical Society*, XVII (1916), 245-58.
- A Theorem Connected with Irrational Numbers, *American Journal of Mathematics*, XXXVIII (1916), 387-96.
- REVIEWS IN: *Science*, XXXVI, 315-17; *Bulletin of the American Mathematical Society*, XVIII, 84-87.
- JOHN ADELBERT PARKHURST [1901-], Assistant Professor of Practical Astronomy, Yerkes Observatory.
S.B. Rose Polytechnic, 1886; S.M. *ibid.*, 1897; A.M. (hon.) Wheaton College, 1906; Assistant Professor of Practical Astronomy, Yerkes Observatory, 1912-.
- The Spectra of Stars of Secchi's Fourth Type* (with George E. Hale and Ferdinand Ellerman.) Publications of the Yerkes Observatory, Vol. II. 4to, 135+11 plates. Chicago: University Press, 1903.
- Researches in Stellar Photometry*. 4to, 192. Washington: Carnegie Institution, 1906.
- The Variable Star X Cephei, *Astrophysical Journal*, XVII (1903), 48-62.
- Nova Geminorum. An Early Photograph, etc., *ibid.*, 373-75.

- The Suspected Variable Star B.D.+68°200, *Astronomical Journal*, XXV (1905-8), 136.
- The Variable Star V Lyrae, *ibid.*, XVIII (1903), 33-49.
- The Variable Star W Aurigae, *ibid.*, 309-23.
- Photometric Magnitudes of Comparison Stars for Nova Geminorum, *Popular Astronomy*, XI (1903), 328-30.
- Faint Stars near the Trapezium in the Orion Nebula, *Astrophysical Journal*, XX (1904), 136, 137.
- Observed Magnitudes of 62.1903 Andromedae, *Astronomical Journal*, XXIV (1904-5), 25.
- Minima of the Algol-Type Variable SY Cygni, *ibid.*, 160.
- Maxima and Minima of Long-Period Variables, *ibid.*, 178, 179.
- The Variable Star Z Geminorum, *ibid.*, 200-202.
- Nova Aquilae of 1905, *Astrophysical Journal*, XXII (1905), 266-70.
- The Suspected Variable Star B.D.+68°200, *Astronomical Journal*, XXV (1905-8), 136.
- Photographic Photometry of Short-Period Variable Stars (with F. C. Jordan), *Astrophysical Journal*, XXIII (1906), 79-91.
- Some Applications of Photography to Astronomy, *Rose Technic*, XV (1906), 91-93.
- Photographic Photometry of Rapidly Changing Variable Stars (with F. C. Jordan), *Science*, XXIII (1906), 447-48.
- Astronomical Photography with Reflecting Telescopes, *Popular Astronomy*, XIV (1906), 449-52.
- Photographic Color Photometry of Short-Period Variable Stars (with F. C. Jordan), *Science*, XXV (1907), 564-65.
- An Absolute Scale of Photographic Magnitudes of Stars (with F. C. Jordan), *Astrophysical Journal*, XXVI (1907), 244-55.
- Henry M. Parkhurst, *Popular Astronomy*, XVI (1908), 231-39.
- The Photographic Determination of Star-Colors and Their Relation to Spectral Type (with F. C. Jordan), *Astrophysical Journal*, XXVII (1908), 169-82.
- Photographic Light-Curve of the Variable Star SU Cassiopeiae, *ibid.*, XXVIII (1908), 278-83.

Spectrum of Comet Morehouse (with E. B. Frost), *ibid.*, XXIX (1908), 55-64.

Spectrum of Comet Morehouse (with E. B. Frost), *Science*, XXIX (1909), 36, 37.

The Evidence from Photographic Color-Filters in Regard to the Absorption of Light in Space, *Astrophysical Journal*, XXX (1909), 33-39.

Precautions Necessary in Photographic Photometry, *ibid.*, XXXI (1910), 15-25.

Spectra and Colors of Red Stars, *ibid.*, XXXV (1912), 125-33.

Visual Observation of Red Variable Stars, *Popular Astronomy*, XX (1912), 222-23.

Changes in the Early Spectrum of Enebo's Nova in Gemini, *ibid.*, 236-38.

Yerkes Actinometry, *Astrophysical Journal*, XXXVI (1912), 169-227.

A Report of the Meeting of the Astronomische Gesellschaft, *Popular Astronomy*, XXI (1913), 494-98.

The Use of Parallel Wire Gratings in Photographic Photometry (with H. L. Alden), *ibid.*, XXII (1914), 634-35.

Visual and Photographic Magnitudes of Stars in the North Polar Sequence (with H. L. Alden), *ibid.*, 635.

Examination of the Star 108 Herculis for Variation in Light, *Astronomische Nachrichten*, CXCVII (1914), 377-78.

Karl Schwarzschild, *Science*, XLIV (1916), 232-44.

REVIEWS IN: *Astrophysical Journal*, XX, 364-67; XXIV, 59-60; XXV, 286-88, 361-62; XXXI, 382-83; XL, 483-85; XLI, 250-51; XLIII, 86-88; *Popular Astronomy*, XXII, 330; XXIV, 75-76; *Science*, XLIII, 501-2.

GEORGE WILLIS RITCHEY [1897-1905], Assistant Professor of Practical Astronomy and Superintendent of Instrument Construction, Yerkes Observatory; Optician of the 100-Inch Reflector of the Mount Wilson Solar Observatory of the Carnegie Institution of Washington.

Optician at Yerkes Observatory, 1897-1900; Superintendent of Instrument Construction, *ibid.*, 1900-1905; Assistant Professor of Practical Astronomy, 1903-5.

On the Modern Reflecting Telescope, and the Making and Testing of Optical Mirrors. 4to, 51. Washington: Smithsonian Institution, 1904.

Comet Photography with the Two-Foot Reflector, *Astrophysical Journal*, XVI (1902), 178-80.

On Methods of Testing Optical Mirrors during Construction, *ibid.*, XIX (1904), 53-69.

FREDERICK SLOCUM [1909-14], Assistant Professor of Astronomy; Professor of Astronomy and Director of the Van Vleck Observatory, Wesleyan University.

A.B. Brown, 1895; Ph.D. *ibid.*, 1898; Assistant Professor of Astronomy, *ibid.*, 1900-1909; Acting Director, Ladd Observatory, *ibid.*, 1904-5; Instructor in Astrophysics, Yerkes Observatory, 1909-11; Assistant Professor of Astronomy, *ibid.*, 1911-14.

A Curious Photograph of the Sun, *Knowledge*, VI (1909), 462.

The Sun-Spots of September 25, 1909, *Astrophysical Journal*, XXXI (1910), 26-29.

A Brilliant Meteor, *Popular Astronomy*, XVIII (1910), 192.

Observations of the Sun, May 18-19, 1910, *Astrophysical Journal*, XXXII (1910), 24-25.

Two Solar Prominences, *ibid.*, 125-29.

Circulation in the Solar Atmosphere as Indicated by Prominences, *ibid.*, XXXIII (1911), 108-14.

Colored Stars near Nova Lacertae, *Astronomische Nachrichten*, CLXXXVIII (1911), 75-76.

Halley's Comet, *Popular Astronomy*, XIX (1911), 282-83.

Parallax of 17 Lyrae C, *Monthly Notices of the Royal Astronomical Society*, LXXI (1911), 579-81.

The Solar Prominence of October 10, 1910, *Astrophysical Journal*, XXXIV (1911), 294-98.

The Parallax of Nova Lacertae (1910), *ibid.*, XXXV (1912), 134-48.

Solar Halos of November 3, 1911, *Popular Astronomy*, XX (1912), 1-3.

The Solar Prominence of June 19-20, 1911, *Astrophysical Journal*, XXXV (1912), 301-3.

The Study of Solar Prominences, *Popular Astronomy*, XX (1912) 409-14.

The Attraction of Sun-Spots for Prominences, *Astrophysical Journal*, XXXVI (1912), 265-68.

Proper Motion and Parallax of a Faint Star, *Astronomische Nachrichten*, CXCIV (1913), 43-46.

Circulation in the Solar Atmosphere as Indicated by Prominences, *Astrophysical Journal*, XXXVII (1913), 354-58.

The Parallax of Nova Geminorum 2, *Monthly Notices of the Royal Astronomical Society*, LXXIII (1913), 437-40.

Stellar Parallaxes from Photographs Made with the 40-Inch Refractor of the Yerkes Observatory (with S. A. Mitchell), *Astrophysical Journal*, XXXVIII (1913), 1-26; published also in *Astronomische Nachrichten*, CXCVII (1913), 81-82.

The International Union for Co-operation in Solar Research, *Astrophysical Journal*, XXXVIII (1913), 301-10.

Winslow Upton, *Popular Astronomy*, XXII (1914), 208-11.

Parallaxes of Three Stars with Parallel Proper Motions, *ibid.*, CXCVIII (1914), 345-48.

Proper Motion and Parallax of B.D. + 48° 739, *ibid.*, 347-48.

Parallaxes of Four Visual Binaries, *Astrophysical Journal*, XLI (1915), 237-46.

Graphical Illustration of Stellar Parallaxes, *Popular Astronomy*, XXIII (1915), 272-76.

REVIEWS IN: *Astrophysical Journal*, XXXI, 278-79; XXXII, 327, 400-403; XXXIII, 187; XXXV, 146-48; XXXVII, 301-2.

WALTER SYDNEY ADAMS [1900-1905], Instructor in Astrophysics; Assistant Director of the Mount Wilson Solar Observatory of the Carnegie Institution of Washington.

A.B. Dartmouth, 1898; Assistant at Yerkes Observatory, 1900-1903; Instructor in Astrophysics, *ibid.*, 1903-5.

Wave-Lengths of Certain Oxygen Lines (with E. B. Frost), *Astrophysical Journal*, XVI (1902), 119, 120.

The Orbit of the Spectroscopic Binary η Orionis, *ibid.*, XVII (1903), 68-71.

Five Stars Whose Radial Velocities Vary (with E. B. Frost), *ibid.*, 150-53.

Additional Stars of the Orion Type Whose Radial Velocities Vary (with E. B. Frost), *ibid.*, 246, 247.

Two Stars with Variable Radial Velocities (with E. B. Frost), *Astrophysical Journal*, XVII (1903), 381, 382.

Some Miscellaneous Radial Velocity Determinations with the Bruce Spectrograph, *ibid.*, XVIII (1903), 67-69.

Spectrographic Observations of Standard Velocity Stars, 1902-3 (with E. B. Frost), *ibid.*, 237-77.

Ten Stars Whose Radial Velocities Vary (with E. B. Frost), *ibid.*, 383-89.

Eight Stars Whose Radial Velocities Vary (with E. B. Frost), *ibid.*, XIX (1904), 151-55.

The Radial Velocities of the Brighter Stars in the Pleiades, *ibid.*, 338-43.

Observations with the Bruce Spectrograph (with E. B. Frost), *ibid.*, 350-56.

The Orbit of the Spectroscopic Binary ζ Tauri, *ibid.*, XXII (1905), 115-18.

REVIEWS IN: *Astrophysical Journal*, XIX, 387-89; XXI, 385-86.

FERDINAND ELLERMAN [1896-1905], Instructor in Astrophysics, Yerkes Observatory; Member of the Staff of the Mount Wilson Solar Observatory of the Carnegie Institution of Washington.

Assistant at Yerkes Observatory, 1896-1904; Instructor in Astrophysics, *ibid.*, 1904-5.

The Spectra of Stars of Secchi's Fourth Type (with George E. Hale and J. A. Parkhurst). Publications of the Yerkes Observatory, Vol. II. 4to, 135+11 plates. Chicago: University Press, 1903.

The Rumford Spectroheliograph of the Yerkes Observatory (with George E. Hale). Publications of the Yerkes Observatory, Vol. III, Part I. 4to, 26+15 plates. Chicago: University Press, 1903.

Calcium and Hydrogen Flocculi (with George E. Hale), *Astrophysical Journal*, XIX (1904), 41-52.

PHILIP FOX [1903-9], Instructor in Astrophysics; Professor of Astronomy, Northwestern University, and Director of the Dearborn Observatory.

S.B. Kansas State Agricultural College, 1897; S.B. Dartmouth, 1902; Carnegie Research Assistant, Yerkes Observatory, 1903-6; Instructor in Astrophysics, *ibid.*, 1906-9.

The Rotation Period of the Sun as Determined from the Motion of the Calcium Flocculi (with George E. Hale). 8vo, 54. Washington: Carnegie Institution, 1908.

- The Spectrum of Lightning, *Astrophysical Journal*, XVIII (1903), 294-96.
- Observations with the Rumford Spectroheliograph, *ibid.*, XXI (1905), 351-55.
- A Large Eruptive Prominence, *ibid.*, XXVI (1907), 155, 156.
- An Investigation of the 40-Inch Objective of the Yerkes Observatory, *ibid.*, XXVII (1908), 237-53.
- Orbit of the Spectroscopic Binary of 13 Ceti, *ibid.*, 372-78.
- Preliminary Note on the Rotation of the Sun as Determined from the Motion of Dark Calcium Flocculi, *ibid.*, XXVIII (1908), 117-20.
- Distribution of Eruptive Prominences on the Solar Disk, *ibid.*, 253-58.
- A Large Prominence (with G. Abetti), *Memorie della Società degli Spettroscopisti Italiani*, XXXVII (1908), 184-85.
- Observations of Comet 1908 c (Morehouse), *Astronomical Journal*, XXVI (1908-11), 38.
- Micrometric Measures of Double Stars, *ibid.*, 87-92.
- Interaction of Sun-Spots (with G. Abetti), *Astrophysical Journal*, XXIX (1909), 40-45.
- REVIEW IN: *Astrophysical Journal*, XXIX, 88-89.

ALFRED HARRISON JOY [1911; 1914-15], Instructor in Practical Astronomy; Professor of Astronomy in the Syrian Protestant College, Beirut (on leave of absence 1911; 1914-); Mount Wilson Solar Observatory, 1915-.

Ph.B. Greenville College, 1903; A.M. Oberlin, 1904; Volunteer Research Assistant in Astronomy, Yerkes Observatory, 1911; Instructor in Practical Astronomy, *ibid.*, 1914-15.

Determinations of Stellar Parallaxes Derived from Plates Taken with the 40-Inch Refractor (with Oliver J. Lee). Publications of the Yerkes Observatory, IV, Part I. Chicago: University Press. In Press; see also *Popular Astronomy*, XXIII (1915), 631.

An Investigation of the Cluster M 37 (N. G. C. 2099) for Proper Motion, *Astronomical Journal*, XXIX (1916), 101-8; published also in *Popular Astronomy*, XXIII (1915), 603.

REVIEW IN: *Astrophysical Journal*, XLIII, 88.

OLIVER JUSTIN LEE [1907-10; 1912-], Instructor in Astronomy at Yerkes Observatory.

A.B. Minnesota, 1907; Ph.D. Chicago, 1913; Computer at Yerkes Observatory, 1907-10, 1912-13; Instructor, *ibid.*, 1914-.

Determinations of Stellar Parallaxes Derived from Plates Taken with the 40-Inch Refractor (with Alfred H. Joy). Publications of the Yerkes Observatory, IV, Part I. Chicago: University Press. In Press; see also *Popular Astronomy*, XXIII (1915), 631.

Observations of Halley's Comet, *Astronomical Journal*, XXVI (1908-11), 53.

Photographic Search for Halley's Comet with the Two-Foot Reflector of the Yerkes Observatory, *Popular Astronomy*, XVII (1909), 160-61.

Variable Radial Velocities of Four Stars in the Taurus Stream, *Astrophysical Journal*, XXIX (1909), 240-42.

Eight Stars Having Variable Radial Velocities (with E. B. Frost), *ibid.*, XXX (1909), 62-67.

Photographs of Halley's Comet (1 plate), *ibid.*, 237-38.

Four Stars Having Variable Radial Velocities, *ibid.*, XXXI (1910), 177-80.

Measures on Nineteen New Spectroscopic Binaries, *ibid.*, XXXII (1910), 300-308.

The Radial Velocity of α Cygni, *ibid.*, XXXIV (1911), 303-7.

Effects of Variations of Vapor Density on the Calcium Lines H, K, and g (λ 4227) (1 plate), *ibid.*, 397-403.

The Spectroscopic System η Camelopardalis. Doctor's thesis. *Ibid.*, XXXVII (1913), 1-24.

Note on a New Spectroscopic Binary, *Astronomische Nachrichten*, CXCIV (1913), 415.

Orbit of the Spectroscopic Binary π^5 Orionis, *Astrophysical Journal*, XXXVIII (1913), 175-80.

The Variable Radial Velocity of ι 13 α Piscium, *ibid.*, 502-4.

Measures of Variable Radial Velocities of Stars, *ibid.*, XXXIX (1914), 39-49.

The Solar Prominence of October 19-21, 1914, *ibid.*, XLI (1915), 168-69.

Preliminary Report on Zone $+45^\circ$ of the Selected Areas, *Popular Astronomy*, XXIII (1915), 630.

The Influence of Quadratic Terms in Reductions of Stellar Parallax, *Astronomical Journal*, XXIX (1915-16), 74-75.

The Solar Prominence of January 7, 1916, *Popular Astronomy*, XXIV (1916), 205.

REVIEWS IN: *Astrophysical Journal*, XXXI, 95-96; XLII, 203.

ROBERT JAMES WALLACE [1903-9], Instructor in Photophysics; Director of the Research Laboratory of the G. Cramer Dry Plate Co., St. Louis, Mo.

Photophysicist, Yerkes Observatory, 1903-6; Instructor in Photophysics, *ibid.*, 1907-9.

The Silver Grain in Photography, *Astrophysical Journal*, XX (1904), 113-22.

Diffraction Grating Replicas, *ibid.*, XXII (1905), 123-30.

Preliminary Note on Orthochromatic Plates, *ibid.*, 153-56.

Second Note on Orthochromatic Plates, *ibid.*, 350-54.

Second Note on Diffraction Grating Replicas, *ibid.*, XXIII (1906), 96-99.

Color Filters for Astronomical Photography with Reflecting Telescopes, *ibid.*, XXIV (1906), 268-77.

Studies in Sensitometry:

I, The Daylight Sensitometry of Photographic Plates and a Suggested Standard Dispersion-Piece, *ibid.*, XXV (1907), 116-50.

II, Orthochromatism by Bathing, *ibid.*, XXVI (1907), 299-325.

III, On the Evaluation of the Reciprocity Law, Basic Fog, and Preliminary Exposure (with H. B. Lemon), *ibid.*, XXIX (1909), 146-56.

The "Autochrom" Plate, *Popular Astronomy*, XVI (1908), 83-91.

A Note on the Relation of Astronomical Secondary Negatives to Their Originals, *ibid.*, 159-63.

The Function of a Color-Filter and "Isochromatic" Plate in Astronomical Photography, *Astrophysical Journal*, XXVII (1908), 106-24.

On the Sensitiveness of Photographic Plates at Different Temperatures, *ibid.*, XXVIII (1908), 39-51.

REVIEW IN: *Astrophysical Journal*, XXVI, 200.

HERBERT MEREDITH REESE [1903-4], Associate at Yerkes Observatory; Assistant Professor of Physics, University of Missouri.

Ph.D. Johns Hopkins, 1900.

A Study of Enhanced Lines of Titanium, Iron, and Nickel, *Astrophysical Journal*, XXI (1904), 322-37.

REVIEW IN: *Astrophysical Journal*, XIX, 300-302.

EDWARD DRAKE ROE, JR. [1915], Research Associate, Yerkes Observatory; Professor of Mathematics, Syracuse University.

New Double Stars and Measures of Double Stars, *Astronomische Nachrichten*, CCII (1916), 99-104.

EMILY ELISABETH DOBBIN [1902-3], Investigator in Solar Physics, Yerkes Observatory; Instructor in Mathematics, Mechanic Arts High School, St. Paul, Minn.

S.B. Chicago, 1902; Investigator in Solar Physics, Yerkes Observatory, 1902-3.

The Orbit of the Fifth Satellite of Jupiter, *Astronomical Journal*, XXIV (1904), 83-88.

Line of Sight Constants for Some Stars of the Orion Type, *Astrophysical Journal*, XIX (1904), 382-84.

FRANK SCHLESINGER [1898, 1903-5], Investigator in Stellar Parallaxes, Yerkes Observatory; Director of the Allegheny Observatory, University of Pittsburgh.

B.S. College of the City of New York, 1890; Ph.D. Columbia, 1899; Volunteer Research Assistant, Yerkes Observatory, 1898; Investigator in Stellar Parallaxes, *ibid.*, 1903-5.

On the Stellar Parallax Plates Taken with the Yerkes Telescope, *Astrophysical Journal*, XX (1904), 123-30.

On Systematic Errors in Determining Variations of Latitude, *Astronomical Journal*, XXIV (1904-5), 183-86.

Photographic Determinations of Stellar Parallax Made with the Yerkes Refractor, *Astrophysical Journal*, XXXII (1910), 372-87; XXXIII (1911), 8-27, 161-84, 237-59, 353-74, 418-30; XXXIV (1911), 26-36.

REVIEWS IN: *Astrophysical Journal*, XIX, 389-90; *Science*, XXI, 574-76.

GIORGIO ABETTI [1908-9], Volunteer Research Assistant, Yerkes Observatory; Astronomo aggiunto, Osservatorio Astronomico del Collegio Romano, Rome.

Ph.D. Padua, 1905; Volunteer Research Assistant in Yerkes Observatory, 1908-9.

A Large Prominence (with Philip Fox), *Memorie della Società degli Spettroscopisti Italiani*, XXXVII (1908), 184, 185.

Interaction of Sun-Spots (with Philip Fox), *Astrophysical Journal*, XXIX (1909), 40-45.

REVIEW IN: *Memorie della Società degli Spettroscopisti Italiani*, XXXVIII, 176-79.

JULIUS ARTHUR BROWN [1904, Summer], Volunteer Research Assistant, Yerkes Observatory; Syrian Protestant College, Beirut.

Wave-Lengths of Certain Silicon Lines (with E. B. Frost), *Astrophysical Journal*, XXII (1905), 157-60.

MARY MURRAY HOPKINS [1912, 1913], Volunteer Research Assistant, Yerkes Observatory; Associate Professor of Astronomy, Smith College.

A.B. Smith, 1899; A.M. *ibid.*, 1911; Ph.D. Columbia, 1915; Volunteer Research Assistant, Yerkes Observatory, 1912, 1913.

The Field of 61 Cygni: A Study of Yerkes Observatory Parallax Photographs. Doctor's thesis, Columbia University. Contributions from the Observatory of Columbia University, No. 29. 8vo, 45.

FRANCES LOWATER [1911, 1913, 1915, 1916], Volunteer Research Assistant in Astrophysics; Instructor in Physics, Wellesley College.

B.Sc. London, 1900; Ph.D. Bryn Mawr, 1906; Professor of Physics, Rockford College; Volunteer Research Assistant in Astrophysics, Yerkes Observatory, Summer Quarters, 1911, 1913, 1915, 1916.

Stellar Wave-Length of $\lambda 4686$ and Other Lines in the Spectrum of 10 Lacertae (with E. B. Frost), *Astrophysical Journal*, XL (1914), 268-73.

The Fraunhofer G Group and the Hydrocarbon Band, *Popular Astronomy*, XXV (1917), 179-95.

JOHN EDWARD MELLISH [1915-16], Volunteer Research Assistant, Yerkes Observatory.

Announcement of the Discovery of Comet 1915 d, *Harvard College Observatory Bulletin*, No. 588, 1914.

SAMUEL ALFRED MITCHELL [1907, 1909, 1910, 1911, 1912-13], Research Associate, Yerkes Observatory; Professor of Astronomy and Director of the Leander McCormick Observatory, University of Virginia.

Volunteer Research Assistant, Yerkes Observatory, 1907, 1909-1910; Research Associate, *ibid.*, 1911, 1912-13.

Seven Spectroscopic Binaries, *Astrophysical Journal*, XXX (1909), 239-42.

Stellar Parallaxes from Photographs Made with the 40-Inch Refractor of the Yerkes Observatory (with Frederick Slocum), *ibid.*, XXXVIII (1913), 1-26; published also in *Astronomische Nachrichten*, CXCVII (1913), 81-82.

Is Radium in the Sun? *Popular Astronomy*, XXI (1913), 321-31.

Wave-Lengths of the Chromosphere from Spectra Obtained at the 1905 Eclipse, *Astrophysical Journal*, XXXVIII (1913), 407-95.

REVIEW IN: *Astrophysical Journal*, XXXIX, 274.

CHARLES ALBERT MANEY [1914-15], Computer at Yerkes Observatory; Instructor in Physics, Alma College.

A.B. Minnesota, 1913; S.M. Chicago, 1915.

New Conceptions of the Nebulae of Orion (with E. B. Frost), *Popular Astronomy*, XXIII (1915), 484-87.

On the System of the Brighter A Stars, as Studied from Spectrographic Determinations of the Solar Velocity, *Astronomical Journal*, XXIX (1915-16), 53-61.

Note on the Brighter "A" Stars, *Astronomical Journal*, XXX (1916-17), 19-20.

DANIEL WALTER MOREHOUSE [1908-9], Volunteer Research Assistant, Yerkes Observatory; Professor of Physics and Astronomy, Drake University, Des Moines, Iowa.

S.B. Chicago, 1902; Professor of Physics and Astronomy, Drake University, 1902-; Volunteer Research Assistant, Yerkes Observatory, 1908-9.

Announcement of Discovery of Comet 1908 *c* at Yerkes Observatory, *Harvard College Observatory Bulletin*, No. 332.

NORTON ADAMS KENT [1900-1902], Assistant at Yerkes Observatory;
Professor of Physics, Brown University.

A.B. Yale, 1895; Ph.D. Johns Hopkins, 1901; Assistant at Yerkes Observatory,
1900-1902.

Second Note on the Spark Spectrum of Iron in Liquids and Compressed
Gases (with George E. Hale), *Astrophysical Journal*, XVII (1903),
154-60.

The Effect of Circuit Conditions on the Wave-Lengths of Spark Lines,
ibid., 286-99.

The Spectrum of the High Potential Discharge between Metallic Elec-
trodes in Liquids and in Gases at High Pressures (with George E.
Hale), *Publications of the Yerkes Observatory*, III, Part II (1907),
27-66.

REVIEW IN: *Astrophysical Journal*, XVIII (1903), 75-76.

HARLAN TRUE STETSON [1908-9], Volunteer Research Assistant, Yerkes
Observatory; Instructor in Astronomy, Harvard University.

Ph.B. Brown, 1908; Ph.D. Chicago, 1915; Volunteer Research Assistant, Yerkes
Observatory, 1908-9.

On the Apparatus and Methods for Thermo-Electric Measurements
in Photographic Photometry with Application to the Determination
of Magnitudes, Spectral Intensities, and the Light-Curves of Variable
Stars. Doctor's thesis. *Astrophysical Journal*, XLIII (1916),
253-85, 325-40.

ARTHUR GRANT STILLHAMER [1905-6], Assistant in Astrophysics, Yerkes
Observatory.

S.B. Illinois Wesleyan, 1898; Assistant in Astrophysics, Yerkes Observatory,
1905-6.

REVIEW OF: C. Riborg Mann, Manual of Optics, *Astrophysical
Journal*, XXIII, 175-76.

ADRIAAN VAN MAANEN [1911-12], Volunteer Research Assistant in
Astronomy; Assistant, Mount Wilson Solar Observatory of the
Carnegie Institution of Washington, Pasadena, Cal.

Sc.D. Utrecht, 1911.

The Relative Proper-Motions of 162 Stars in the Neighborhood of the
Great Nebula in Orion, Derived from Plates Made with the Yerkes
Refractor, *Astronomical Journal*, XXVII (1911-13), 139-46.

DANIEL BUCHANAN, PH.D. 1911; Professor of Astronomy and Mathematics, Queen's University, Kingston, Canada.

Isosceles-Triangle Solutions of the Problem of Three Bodies. Doctor's thesis. *Carnegie Institution of Washington*, Publication No. 161 (1911), 325-56.

HERBERT EARLE BUCHANAN, PH.D. 1909; Professor of Mathematics, University of Tennessee, Knoxville.

Periodic Orbits of Three Finite Bodies near the Lagrangian Straight Line Solutions. Doctor's thesis. *Astrophysical Journal*. In Press.

JOHN WILLIAM CAMPBELL, PH.D. 1915; Lecturer in Mathematics and Physics, Wesley College, Winnipeg, Canada.

Periodic Solution of the Problem of Three Bodies in Three Dimensions. Doctor's thesis. *London Mathematical Society*. In Press.

CURVIN HENRY GINGRICH, PH.D. 1912; Professor of Mathematics and Astronomy, and Dean of Carleton College, Northfield, Minn.

Star Colors and a Method of Verifying Them, *Popular Astronomy*, XIX (1911), 595-601.

A Determination of the Photographic Magnitudes of Comparison Stars in Certain of the Hagen Fields. Doctor's thesis. *Astrophysical Journal*, XXXVIII (1913), 209-40.

FRANK LOXLEY GRIFFIN, PH.D. 1906; Professor of Mathematics, Reed College, Portland, Ore.

Certain Periodic Orbits of K Finite Bodies Revolving about a Relatively Large Central Mass. Doctor's thesis. 8vo, 33. Lancaster, Pa.: New Era Printing Co., 1908.

WILLIAM ALBERT HAMILTON, PH.D. 1903; Professor of Mathematics, Beloit College.

On the Convergency of the Series Used in the Determination of the Elements of Parabolic Orbits and the Errors Introduced in the Elements by Imperfections of the Observations. Doctor's thesis. 8vo, 32. Chicago: Privately printed, 1903.

LOUIS ALLEN HOPKINS, PH.D. 1915; Instructor in Mathematics, University of Michigan.

Analytic Geometry and Principles of Algebra. viii+369. New York: Macmillan Co., 1913.

Elements of Analytic Geometry. vi+280. New York: Macmillan Co., 1916.

On the Theory of the Motion of the Small Planets with a Periodic Orbit for the Hilda Type. Doctor's thesis. *Astronomical Journal*, XXIX (1915-16), 81-97.

FRANK CRAIG JORDAN, PH.D. 1914; Assistant Professor of Astronomy, Allegheny Observatory, University of Pittsburgh.

Photographic Photometry of Short-Period Variable Stars (with J. A. Parkhurst), *Astrophysical Journal*, XXIII (1906), 79-91.

Photographic Photometry of Rapidly Changing Variable Stars (with J. A. Parkhurst), *Science*, XXIII (1906), 447-48.

The Variable RZ Ophiuchi, *Astronomische Nachrichten*, CLXXII (1906), 385-86.

Photographic Color Photometry of Short-Period Variable Stars (with J. A. Parkhurst), *Science*, XXV (1907), 564-65.

An Absolute Scale of Photographic Magnitudes of Stars (with J. A. Parkhurst), *Astrophysical Journal*, XXVI (1907), 244-55.

The Photographic Determination of Star-Colors and Their Relation to Spectral Type (with J. A. Parkhurst), *ibid.*, XXVII (1908), 169-82.

The Color-Changes of Certain Variable Stars of Short Period. Doctor's thesis. *Astrophysical Journal*. In Press.

ARTHUR CONSTANT LUNN, PH.D. 1904; Assistant Professor of Applied Mathematics. See under Department of Mathematics, p. 202.

LLOYD ARTHUR HEBER WARREN, PH.D. 1913; Assistant Professor of Mathematics, University of Manitoba, Winnipeg, Canada.

A Class of Asymptotic Orbits in the Problem of Three Bodies. Doctor's thesis. *American Journal of Mathematics*, XXXVIII (1916), 221-47.

DELONZO TATE WILSON, PH.D. 1905; Assistant Professor of Mathematics, Case School of Applied Science, Cleveland.

Tables for the Computation of the Jupiter Perturbations of the Group of Small Planets Whose Mean Daily Motions Are in the Neighborhood of 750. Doctor's thesis. 8vo, 58. Chicago: Privately printed, 1914.

HAROLD LEE ALDEN, Graduate Student; McCormick Observatory, University of Virginia.

Laboratory Tests of Photographic Plates and Filters for Astronomical Work. Master's thesis. *Popular Astronomy*, XXI (1913), 389-97; published also in *British Journal of Photography*, LX (1913), 648-50.

Objective-Prism Spectra of Nebulae Examined with the Stereo-Comparator (with E. B. Frost), *Popular Astronomy*, XXII (1914), 136-37.

The Use of Parallel Wire Gratings in Photographic Photometry (with J. A. Parkhurst), *ibid.*, 634-35.

Visual and Photographic Magnitudes of Stars in the North Polar Sequence (with J. A. Parkhurst), *ibid.*, 635.

EDWIN POWELL HUBBLE, Graduate Student.

Changes in the Form of the Nebula N.G.C. 2261, *Proceedings of the National Academy of Sciences*, II (1916), 230-31.

Twelve Faint Stars with Sensible Proper Motions, *Astronomical Journal*, XXIX (1915-16), 168.

REVIEW OF: Henry Crew and Alfonso de Salvio, Galileo's Dialogues concerning Two New Sciences, *Astrophysical Journal*, XLII, 283-84.

NAOZA ICHINOHE, Graduate Student; Tokyo Observatory, Tokyo, Japan.

Orbit of the Spectroscopic Binary κ Cancri, *Astrophysical Journal*, XXV (1907), 315-19.

Orbit of the Spectroscopic Binary μ Sagittarii, *ibid.*, XXVI (1907), 157-63.

The Spectroscopic Binary η Virginis, *ibid.*, 282-91.

On the Period of the Variable Star 120.1906, *Astronomical Journal*, XXV (1905-8), 128.

On the Variable Star RY Cassiopeiae, *ibid.*, 140.

The Variable Star 120.1906 Persei, *Astronomische Nachrichten*, CLXXIV (1907), 311-16.

The Algal Variable 27.1907 Monocerotis, *ibid.*, 349-50.

Note on the Variable 26.1907 Draconis, *ibid.*, CLXXV (1907), 203.

The Period and Light Curve of the Variable Star 87.1906 Draconis, *ibid.*, 293-98.

Maximum of α Ceti in 1906, *ibid.*, CLXXVI (1907), 311-14.

HARRIET MCWILLIAMS PARSONS, Graduate Student.

Photo-Visual Magnitudes of the Stars in the Pleiades. Master's thesis. *Astrophysical Journal*. In Press.

JESSIE MAY SHORT, Graduate Student.

REVIEW IN: *Astrophysical Journal*, XLI, 252.

FLORENCE LEVINA BALDWIN, Secretary to the Director of Yerkes Observatory, 1909-.

Flamsteed's Numbers and Bayer's Greek Letters, *Popular Astronomy*, XX (1912), 82-86.

THE DEPARTMENT OF PHYSICS

ALBERT ABRAHAM MICHELSON [1892-], Professor and Head of the Department of Physics.

Ph.D. (hon.) Western Reserve, 1886; Ph.D. (hon.) Stevens Institute, 1887; Ph.D. Leipzig, 1900; Ph.D. Göttingen, 1911; Ph.D. Royal Frederick University, Christiania, 1911; Sc.D. (hon.) Cambridge, 1890; LL.D. Yale, 1901; LL.D. Pennsylvania, 1906; Professor of Physics, Case School of Applied Science, 1883-89; Professor of Physics, Clark, 1889-92; Professor and Head of the Department of Physics, Chicago, 1892-.

Corresponding Member, British Association for the Advancement of Science, 1884; Associate Fellow, American Academy of Arts and Sciences, 1885; Vice-President, American Association for the Advancement of Science, 1887; Member, National Academy of Sciences, 1888; Rumford Medal, 1889; Member, Bureau International des Poids et Mesures, 1892-93; Member, Société Française de Physique, 1893; Fellow, Royal Astronomical Society, 1896; Foreign Member, Société Hollandaise des Sciences, 1897; Hon. Member, Cambridge Philosophical Society, 1897; Member (for the United States), International Committee of Weights and Measures, 1897; Lowell Lecturer, 1899; Membre Correspondant de l'Académie des Sciences, Paris, 1900; Grand Prix, Exposition générale de Paris, 1900; President, American Physical Society, 1900; Member, American Philosophical Society, 1902; Fellow, Royal Society, 1902; Matteucci Medal, Soc.

Italiana, Rome, 1904; Menter, Kungliga Vetenskaps Akademien, Stockholm, 1906; Member, Reale Accademia dei Lincei, Rome, 1906; Copley Medal, 1907; Nobel Prize, 1907; Hon. Member, Royal Irish Academy, 1908; Delegate to Pan-American Scientific Congress, 1908-9; President, American Association for Advancement of Science, 1910-11; Exchange Professor, Göttingen, 1911; Member, Deutsche Physikalische Gesellschaft, Berlin, 1911; Member, Kungliga Fysikografiska Sällskapet, Lund, 1911; Elliott Cresson Medal, Franklin Institute, 1912; Draper Medal, National Academy of Sciences, 1916.

On the Velocity of Light, *Philosophical Magazine*, IV (1902), 330-37.

On the Spectra of Imperfect Gratings, *Astrophysical Journal*, XVIII (1903), 278-86.

The Relative Motion of Earth and Ether, *Philosophical Magazine*, VIII (1904), 716-19.

A Reciprocal Relation in Diffraction, *ibid.*, IX (1905), 506-7.

Report of Progress in Ruling Diffraction Gratings, *Physical Review*, XX (1905), 389-91.

Use of the Concave Mirror with Diffraction Gratings, *ibid.*, 391.

Form Analyses, *Proceedings of the American Philosophical Society*, XLV (1906), 110-16.

Recent Advances in Spectroscopy, *Proceedings of the Royal Academy of Science*, Stockholm (1907), 1-10.

Recent Progress in Spectroscopic Methods, *Science*, XXXIV (1911), 893-902.

Metallic Colouring in Birds and Insects, *Philosophical Magazine*, XXI (1911), 554-67.

Effect of a Moving Mirror on the Velocity of Light, *Astrophysical Journal*, XXXVII (1913), 190-93.

Determination of Periodicities by the Harmonic Analyzer, *ibid.*, XXXVIII (1913), 268-74.

The Ruling and Performance of a Ten-Inch Diffraction Grating, *Proceedings of the National Academy of Sciences*, I (1914), 396.

Preliminary Results of Measurements of the Rigidity of the Earth, *Astrophysical Journal*, XXXIX (1914), 105-33.

The Laws of Elastico-viscous Flow, *Proceedings of the National Academy of Sciences*, III (1917), 319-23.

HENRY GORDON GALE [1899-], Professor of Physics.

A.B. Chicago, 1896; Ph.D. *ibid.*, 1899; Assistant Professor of Physics, *ibid.*, 1907-11; Research Associate of the Carnegie Institution of Washington, Mount Wilson Solar Observatory, 1909, 1910, 1911; Associate Professor, Chicago, 1911-16; Professor, *ibid.*, 1916-.

Joint Editor, *Astrophysical Journal*, 1912-.

Member, International Commission on Annual Tables of Constants and Numerical Data, 1912-.

A Laboratory Course in Physics for Secondary Schools. 1st ed. (with R. A. Millikan), 1906; rev. ed. (with R. A. Millikan and E. S. Bishop), 1914. 8vo, vi+135. Boston: Ginn & Co.

A First Course in Physics (with R. A. Millikan). 1st ed., 1906; rev. ed., 1913. 12mo, x+437. Boston: Ginn & Co., 1913.

Preliminary Paper on the Cause of the Characteristic Phenomena of Sun-Spot Spectra (with G. E. Hale and W. S. Adams), *Astrophysical Journal*, XXIV (1906), 185-213.

The Effect of Temperature on Metallic Spectra, *Physical Review*, XXIV (1907), 118-19.

The Analysis of the Principal Mercury Lines by a Diffraction Grating, and a Comparison with the Results Obtained by Other Methods (with H. B. Lemon), *Astrophysical Journal*, XXXI (1910), 78-87; published also in *Physikalische Zeitschrift*, XI (1910), 209-15.

The Spectrum of the Chromosphere and the Application to It of Some Recent Laboratory Investigations (with W. S. Adams), *Science*, XXXII (1910), 881.

The Spectrum of the Spark under Pressure and an Application of the Results to the Spectrum of the Chromosphere (with W. S. Adams), *Physical Review*, XXXII (1911), 229-30.

The Pressure Shift of the Arc and Spark Lines of Titanium (with W. S. Adams), *ibid.*, 438-40.

The Effect of Gaseous Pressure on the Spectra of Iron and Titanium (with W. S. Adams), *Publications of the Astronomical Society of the Pacific*, XXIII (1911), 264-65.

On the Relation between Pressure-Shift and Wave-Length (with W. S. Adams), *Physical Review*, XXXIV (1912), 78-80.

An Investigation of the Spectra of Iron and Titanium under Moderate Pressures (with W. S. Adams), *Astrophysical Journal*, XXXV (1912), 10-47.

- The Spectrum of Titanium in a Partial Vacuum and the Proportionality of Displacement to Pressure at Moderate Pressures (with W. S. Adams), *Physical Review*, XXXIV (1912), 140.
- The Spectra of Iron and Titanium at Moderate Pressures (with W. S. Adams), *ibid.*, 143-44.
- On the Pressure Shift of Iron Lines (with W. S. Adams,) *Astrophysical Journal*, XXXVII (1913), 391-94.
- On an Experimental Determination of the Earth's Elastic Properties, *Science*, XXXIX (1914), 927-33.
- The Spectrum of the Chromosphere and the Application to It of Some Recent Laboratory Results (with W. S. Adams), *Publications of the Astronomical and Astrophysical Society of America*, II (1915), 27-28.
- On the Pole Effect in a Calcium Arc (with Walter T. Whitney), *Astrophysical Journal*, XLIII (1916), 161-66.
- REVIEWS IN: *Astrophysical Journal*, XXV, 290-91; XXXV, 354-56; XLI, 328-30; *Science*, XXVII, 389-90.

ROBERT ANDREWS MILLIKAN [1896-], Professor of Physics.

A.B. Oberlin, 1891; Ph.D. Columbia, 1895; Sc.D. Oberlin, 1911; Sc.D. Northwestern, 1913; Sc.D. Pennsylvania, 1914; Sc.D. Columbia, 1917; Sc.D. Amherst, 1917; Assistant Professor of Physics, Chicago, 1902-7; Associate Professor, *ibid.*, 1907-10; Professor, *ibid.*, 1910-.

Member, Executive Council, American Physical Society, 1905-9, 1911-; Vice-President, American Association for the Advancement of Science, 1911; Comstock Prize, National Academy of Sciences, 1913; Member, American Philosophical Society, 1913; Fellow, American Academy of Arts and Sciences, 1914; Member, National Academy of Sciences, 1915; President, American Physical Society, 1915-; Vice-Chairman, National Research Council, 1916.

Associate Editor, *Physical Review*, 1903-16, Associate Editor, *Proceedings of the National Academy of Sciences*, 1915-; Joint Editor, "University of Chicago Science Series," 1915-.

Mechanics, Molecular Physics, and Heat. 8vo, 242. Boston: Ginn & Co., 1903.

The Teaching of Physics in Lower College Classes (pamphlet). Chicago: Scott, Foresman & Co., 1903.

A Laboratory Course in Physics for Secondary Schools. 1st ed. (with H. G. Gale), 1906; rev. ed. (with H. G. Gale and E. S. Bishop), 1914. 8vo, vi+135. Boston: Ginn & Co.

A First Course in Physics (with H. G. Gale). 1st ed., 1906; rev. ed., 1913. 12mo, x+437. Boston: Ginn & Co.

- The Relation of High School and College Physics* (pamphlet). 1-16.
Boston: Eastern Association of Physics Teachers, 1908.
- Electricity, Sound, and Light*. 8vo, v+389. Boston: Ginn & Co., 1908.
- The Electron: Its Isolation and Measurement and the Determination of Some of Its Properties*. 12mo, xii+268. Chicago: University Press, 1917.
- Recent Discoveries in Radiation and Their Significance, *Popular Science Monthly*, LXIV (1904), 481-500.
- The Relation between the Radioactivity and the Uranium Content of Certain Minerals, *Proceedings of the International Congress of Arts and Science*, IV (1906).
- The Present Tendencies in the Teaching of Elementary Physics, *School Science and Mathematics*, VI (1906), 119-24; 187-94.
- A Laboratory Experiment upon the Mechanical Equivalent of Heat, *ibid.*, 310-12.
- An Experiment on the Magnifying Power of a Simple Lens, *ibid.*, 450-52.
- An Experiment upon Cooling through Change of State, *ibid.*, 772-75.
- Upon the Discharge of Electrons from Ordinary Metals under the Influence of Ultra-Violet Light, *Physical Review*, XXIV (1907), 116-18.
- The Influence of Temperature upon Photo-Electric Effects in a Very High Vacuum and the Order of Photo-Electric Sensitiveness of the Metals, *Philosophical Magazine*, XIV (1907), 188-210.
- On the Charge Carried by the Negative Ion of an Ionized Gas, *Physical Review*, XXVI (1908), 197-99.
- The Function of the Lecture Demonstration in Secondary School Physics, *Journal of Proceedings and Addresses of the National Education Association* (1908), 985-90.
- The Absence of Photo-Electric Fatigue in a Very High Vacuum, *Physical Review*, XXIX (1909), 85.
- The Aims and Needs of High-School Physics, *School Science and Mathematics*, IX (1909), 162-67.
- The Correlation of High School and College Physics, *ibid.*, 466-73.
- The Transparency of Matter for X-Rays Not Affected by Transverse Radiation from a Second Source, *Journal of the American Medical Association*, LIII (1909), 1026-33.

- A New Modification of the Cloud Method of Determining the Elementary Electrical Charge and the Most Probable Value of That Charge, *Philosophical Magazine*, XIX (1910), 209-28.
- Note on the Cause of the Discrepancy between the Observed and the Calculated Temperatures after Expansion in the Space between the Plates of a Wilson Expansion Apparatus, *Physical Review*, XXX (1910), 186-87.
- Some New Values of the Positive Potentials Assumed by Metals in a High Vacuum under the Influence of Ultra-Violet Light, *ibid.*, 287-88.
- Preliminary Report on the Isolation of an Ion, *Science*, XXXII (1910), 436-88; published also in *Physikalische Zeitschrift*, XI (1910), 1097-1109, and in *Le radium*, VII (1910), 341-61.
- The Unit Charge in Gaseous Ionization, *Transactions of the American Electrochemical Society*, XVIII (1910), 283-88.
- The Isolation of an Ion, a Precision Measurement of Its Charge, and the Correction of Stokes' Law, *Physical Review*, XXXII (1911), 349-97.
- Ursachen der scheinbaren Unstimmigkeiten zwischen neueren Arbeiten über e , *Physikalische Zeitschrift*, XII (1911), 161-63.
- The Question of Valency in Gaseous Ionization, *Philosophical Magazine*, XXI (1911), 697-719.
- The Effect of Prolonged Illumination on Photo-Electric Discharge in a High Vacuum, *Physical Review*, XXXIV (1912), 68-71.
- New Proofs of the Kinetic Theory of Matter and the Atomic Theory of Electricity, *Popular Science Monthly*, LXXX (1912), 417-40.
- The Effect of the Character of the Source upon the Velocities of Emission of Electrons Liberated by Ultra-Violet Light, *Physical Review*, XXXV (1912), 74-76.
- Summary of Results Obtained by the "Oil-Drop" Method of Studying Electrical Phenomena in Gases, *Transactions of the American Electrochemical Society*, XXI (1912), 185-200.
- Ueber die Anfangsgeschwindigkeiten der durch ultraviolette Licht angelösten Elektronen, *Verhandlung der Deutschen Physikalischen Gesellschaft*, XIV (1912), 712-26.
- On the Cause of the Apparent Differences between Spark and Arc Sources in Imparting Initial Speeds to Photo-Electrons, *Physical Review*, New Series, I (1913), 73-75.

Brownian Movements in Gases at Low Pressures, *ibid.*, 218-21; published also in *Le radium*, X (1913), 15-18.

Atomic Theories of Radiation, *Science*, XXXVII (1913), 119-33.

The Structure of the Atom, *General Electric Review*, XVI (1913), 489-97.

Ueber den wahrscheinlichsten Wert des Reibungskoeffizient der Luft, *Annalen der Physik*, XLI (1913), 759-66.

On the Elementary Electrical Charge and the Avogadro Constant, *Physical Review*, New Series, II (1913), 109-43; published also in *Physikalische Zeitschrift*, XIV (1913), 793-812.

Preliminary Report on a Direct Determination of Planck's "h," *Physical Review*, New Series, IV (1914), 73.

Effect of Residual Gases on Contact E.M.F.'s and Photo-Currents (with W. H. Souder), *ibid.*, 73-75.

The Law of Fall of a Droplet through Hydrogen, *ibid.*, 334.

New Tests of Einstein's Photo-Electric Equation, *ibid.*, VI (1915), 55.

The New Physics, *School Review*, XXIII (1915), 607-20.

The Elimination of Waste in the Teaching of Science, *School and Society*, III (1916), 162-69.

Einstein's Photo-Electric Equation and Contact Electromotive Force, *Physical Review*, New Series, VII (1916), 18-32.

Experimental Evidence for the Essential Identity of the Selective and Normal Photo-Electric Effects (with W. H. Souder), *Proceedings of the National Academy of Sciences*, II (1916), 19-24.

Quantum Relations in Photo-Electric Phenomena, *ibid.*, 78-83.

A Direct Photo-Electric Determination of Planck's "h," *Physical Review*, New Series, VII (1916), 355-88.

REVIEWS IN: *Science*, XX, 719-20; XXII, 785-89; XXV, 300-301; XXXIII, 460; XXXVII, 492; XXXVIII, 29-30; *Astrophysical Journal*, XXI, 183-84; XL, 485; XLIII, 86; *Physical Review*, New Series, IV, 84, 560, 716.

CARL KINSLEY [1902-], Associate Professor of Physics.

A.B. Oberlin, 1893; M.E. Cornell, 1894; A.M. Oberlin, 1896; Assistant Professor of Physics, Chicago, 1903-9; Associate Professor, *ibid.*, 1909-.

Wireless Telegraphy in Theory and Practice, Book III in *Telegraph and Telephone*, pp. 1-44. New York and Chicago: World Railway Publishing Co., 1903.

- Short Spark Discharges, *Philosophical Magazine*, IX (1905), 692-706.
- An Examination of Certain Alternating Current Circuits, Including Those Containing Distributed Capacity (Am. Phys. Soc. Abstract), *Science*, XXVII (1908), 566-67.
- Dielectric Losses in Alternating Current Circuits, *Physical Review*, XXVIII (1909), 70.
- A Method of Measuring Alternating Currents (with E. J. Moore), *ibid.*, 72.
- Electrostatic Induction in Long Lines, *ibid.*, XXXIV (1912), 69.
- Telegraph Systems and Apparatus, *United States Patent No. 1,018,115*, February 20, 1912, 1-10.
- A Telegraph System, *Electrical World*, LIX (1912), 520.
- High-Speed Telegraph System, *United States Patent No. 1,053,042*, February 11, 1913, 1-11.
- A High-Speed Printing Telegraph System, *Proceedings of the American Institute of Electrical Engineering*, XXXIII (1914), 1071-81.
- A New Method of Telegraph Operation, *United States Patent No. 1,126,641*, January 26, 1915, 1-14.
- A System of Telegraph Communication, *United States Patent No. 1,126,642*, January 26, 1915, 1-8.
- A High-Speed Relay and Method of Operating, *United States Patent No. 1,126,483*, January 26, 1915, 1-7.
- Methods of Telegraphic Transmission, *United States Patent No. 1,150,272*, August 17, 1915, 1-4.
- REVIEW IN: *Electrical Review*, LXVII, 298.

CHARLES RIBORG MANN [1896-1917], Associate Professor of Physics; Director of Educational Research in the Massachusetts Institute of Technology.

A.B. Columbia, 1890; Ph.D. Berlin, 1895; Assistant Professor of Physics, Chicago, 1902-7; Associate Professor, *ibid.*, 1907-17.

Investigator of Engineering Education, Carnegie Foundation for the Advancement of Teaching, 1914-17.

Physics (with G. R. Twiss). 12mo, x+453. Chicago: Scott, Foresman & Co., 1905.

The Teaching of Physics for Purposes of General Education. 12mo, xxv+304. New York: Macmillan Co., 1912.

- Histories and Bibliographies of Physics, *Science*, XVI (1902), 1016-21.
- On Science Teaching, I-VI, *School Science and Mathematics*, V (1905), 546-51, 617-22, 685-90; VI (1906), 29-35, 194-98, 303-9.
- A New Movement among Physics Teachers, Circular I, *ibid.*, VI (1906), 198-202; published also in *School Review*, XIV (1906), 212-16; Circular II, *ibid.*, 429-37; Circular III, *ibid.*, 652-59; published also in *School Science and Mathematics*, VI (1906), 696-702; Circular IV, *School Review*, XIV (1906), 746-53; published also in *School Science and Mathematics*, VI (1906), 787-94; Circular V, *School Review*, XV (1907), 290-98; published also in *School Science and Mathematics*, VII (1907), 328-34.
- The Aims and Tendencies in Physics Teaching, *ibid.*, VI (1906), 723-30.
- The College Laboratory, *Education*, XXVII (1906), 200-208.
- Science in Civilization and Science in Education, *School Review*, XIV (1906), 664-70.
- The Meaning of the Movement for the Reform of Science Teaching, *Educational Review*, XXXIV (1906), 13-25.
- The American Federation of Teachers of the Mathematical and the Natural Sciences, *Science*, XXV (1907), 338-39.
- The Relation of Nature-Study to Science Teaching, *Nature-Study Review*, IV (1908), 21-24.
- Should We Try to Stem the Tide? *Educational Review*, XXXV (1908), 188-92.
- The Line of Least Resistance, *School and Home Education*, XXVII (1908), 276, 277.
- The History of Science—An Interpretation, *Popular Science Monthly*, LXXII (1908), 313-23.
- The New Movement among Physics Teachers, *School Science and Mathematics*, VIII (1908), 522-25.
- Industrial and Technical Training in Secondary Schools, and Its Bearing on College-Entrance Requirements, *School Review*, XVI (1908), 425-38.
- The Physics Teacher's Problem, *Science*, XXIX (1909), 951-62.
- A Needed Reform in Science Teaching, *Independent*, LXVII (1909), 85-89.

- The Interpretation of the College-Entrance Board's Definition of the Requirement in Physics, *Educational Review*, XXXIX (1909), 150-59.
- Physics Teaching in the Secondary Schools of America, *Science*, XXX (1909), 789-98.
- Physics Teaching as It Is and as It Might Be in Wisconsin Schools, *Bulletin of the Wisconsin State Department of Education* (1910), 1-14.
- Physics in the College Course, *Educational Review*, XL (1910), 472-83.
- The Present Condition of Physics Teaching in the United States. Chap. xix in Hodson's *Broad Lines in Science Teaching*, 227-38. London: Macmillan Co., 1910.
- Changes in Entrance Requirements at the University of Chicago, *Educational Review*, XLII (1911), 186-91.
- Physics and the Daily Life, *Science*, XXXVII (1913), 351-60.
- What Is Industrial Science? *ibid.*, XXXIX (1914), 515-24.
- The Relation of the Administrative Department to the Teacher, *Bulletin of the Society for the Promotion of Engineering Education*, V (1914), 56-62.
- A Report of Progress in the Study of Engineering Education, *ibid.*, VI (1915), 100-109; VII (1916), 125-44.
- REVIEWS OF: Hall, The Teaching of Physics in the Secondary School, *School Review*, XI, 157-63; Drude, The Theory of Optics, *Science*, XVIII, 342-44.
- EDWARD JAMES MOORE [1915-], Extension Associate Professor of Physics; Associate Professor of Physics, Oberlin College, Oberlin, Ohio.
A.B. Oberlin, 1903; A.M. *ibid.*, 1906; Ph.D. Chicago, 1913.
- A Method of Measuring Alternating Currents (with Carl Kinsley), *Physical Review*, XXVIII (1909), 72.
- Reaction Effects Produced by the Discharge of Electricity from Points in Gases, and the Bearing of These Effects on the Theory of the Small Ion. Doctor's thesis. *Ibid.*, XXXIV (1912), 81-95.
- GLENN MOODY HOBBS [1893-1906], Instructor in Physics. See under University High School, p. 493.

HARVEY BRACE LEMON [1911-], Instructor in Physics.

A.B. Chicago, 1906; S.M. *ibid.*, 1911; Ph.D. *ibid.*, 1912; Assistant in Astronomy and Instructor in Mechanical Drawing, Beloit, 1907-8; Assistant in Physics, Chicago, 1911-12; Instructor, *ibid.*, 1912-.

Studies in Sensitometry: III, On the Evaluation of the Reciprocity Law, Basic Fog, and Preliminary Exposure (with R. J. Wallace), *Astrophysical Journal*, XXIX (1909), 146-56.

The Analysis of the Principal Mercury Lines by a Diffraction Grating, and a Comparison with the Results Obtained by Other Methods (with H. G. Gale), *ibid.*, XXXI (1910), 78-87; published also in *Physikalische Zeitschrift*, XI (1910), 209-15.

Spectroscopic Studies on Hydrogen: Ia, The Effect of Temperature upon the Hydrogen Spectrum as Produced by Alternating Current. Doctor's thesis. *Astrophysical Journal*, XXXV (1912), 109-24.

A Polarization Spectrophotometer Using the Brace Prism, *ibid.*, XXXIX (1914), 204-12.

The Teaching of College Physics. A Chapter in *College Teaching* (edited by Paul Klapper). New York: World Book Co., 1917.

On Some Very Large Variations in the Adsorption of Certain Specimens of Charcoal, *Physical Review*, New Series, IX (1917), 336-37.

J. HARRY CLO [1909-11], Assistant in Physics; Professor of Physics, Tulane University, New Orleans.

S.B. Kentucky State, 1904; S.M. *ibid.*, 1905; Ph.D. Chicago, 1911; Instructor in Physics, Washington State College, 1905-7; Instructor in Physics, Virginia, 1907-8; Assistant in Physics, Chicago, 1909-11.

The Effect of Temperature on the Ionization of a Gas. Doctor's thesis. *Astrophysical Journal*, XXXIII (1911), 115-24; published also in *Le radium*, VIII (1911), 108-12.

ARTHUR JEFFERY DEMPSTER [1915-], Assistant in Physics.

A.B. Toronto, 1909; A.M. *ibid.*, 1911; Ph.D. Chicago, 1916; Assistant in Physics, *ibid.*, 1915-.

Ueber die Breite von Spektrallinien, *Annalen der Physik*, XLVII (1915), 791-808.

The Properties of Slow Canal Rays. Doctor's thesis. *Physical Review*, New Series, VIII (1916), 651-62.

WILLIAM ROSS HAM [1908-9], Assistant in Physics; Professor of Physics, Pennsylvania State College.

A.B. Bates, 1901; Ph.D. Chicago, 1909; Instructor in Physics, Maine, 1905-7; Assistant in Physics, Chicago, 1908-9.

Polarization of Röntgen Rays. Doctor's thesis. *Physical Review*, XXX (1910), 96-121.

FRANK BALDWIN JEWETT [1902-3], Research Assistant in Physics; Assistant Chief Engineer, Western Electric Co., New York City.

A.B. Throop Polytechnical Institute, 1898; Ph.D. Chicago, 1902; Research Assistant in Physics, *ibid.*, 1902-3.

Effect of High Temperature on the Change of Resistance of Bismuth in a Magnetic Field, *Physical Review*, XVI (1903), 51-59.

JOHN YIUBONG LEE [1906-14], Assistant in Physics.

S.B. Chicago, 1907; Ph.D. *ibid.*, 1915; Assistant in Physics, *ibid.*, 1906-14.

Determination of the Value of "e," by Millikan's Method, Using Solid Spheres. Doctor's thesis. *Physical Review*, New Series, IV (1914), 420-34.

CARL DANFORTH MILLER [1913, 1914-], Assistant in Physics; Westinghouse Research Laboratory, Pittsburgh.

S.B. Richmond College, 1910; Ph.D. Chicago, 1916; Assistant in Physics, *ibid.*, 1913, 1914-.

A Method for Computing the Bending Stresses Acting on Beams, *American Machinist*, XL (1914), 940.

The Absorption Coefficients of Soft X-Rays. Doctor's thesis. *Physical Review*, New Series, VIII (1916), 329-43.

CHARLES ALBERT PROCTOR [1902-3], Assistant in Physics; Assistant Professor of Physics, Dartmouth College.

A.B. Dartmouth, 1900; Ph.D. Chicago, 1909; Assistant in Physics, Dartmouth, 1900-1901; Assistant in Physics, Chicago, 1902-3.

The Variation with Velocity of e/m for Cathode Rays. Doctor's thesis. *Physical Review*, XXX (1910), 53-61.

WILMER HENRY SOUDER [1914-], Assistant in Physics.

A.B. Indiana, 1910; A.M. *ibid.*, 1911; Ph.D. Chicago, 1916; Assistant in Physics, *ibid.*, 1914-.

Effect of Residual Gases on Contact E.M.F.'s and Photo-Currents (with R. A. Millikan), *Physical Review*, New Series, IV (1914), 73-75.

Experimental Evidence for the Essential Identity of the Selective and Normal Photo-Electric Effects (with R. A. Millikan), *Proceedings of the National Academy of Sciences*, II (1916), 19-24.

The Normal Photo-Electric Effect of Lithium, Sodium, and Potassium as a Function of Wave-Length and Incident Energy. Doctor's thesis. *Physical Review*, New Series, VIII (1916), 310-19.

HAROLD DEFOREST ARNOLD, PH.D. 1911; Research Engineer, Western Electric Co., Inc., New York City.

Limitations Imposed by Slip and Inertia Terms upon Stokes' Law for the Motion of Spheres through Liquids. Doctor's thesis. *Philosophical Magazine*, XXII (1911), 755-75; published also by Taylor & Francis, London.

LOUIS BEGEMAN, PH.D. 1910; Professor of Physics, State Teachers College, Cedar Falls, Iowa.

An Experimental Determination of the Charge of an Electron by the Cloud Method. Doctor's thesis. *Physical Review*, XXXI (1910), 41-54.

†EDWIN SHERWOOD BISHOP, PH.D. 1911. See under University High School, p. 490.

FREDERIC LENDALL BISHOP, PH.D. 1905; Professor of Physics, University of Pittsburgh.

The Thermal Conductivity of Lead. Doctor's thesis. *Proceedings of the American Academy*, XLI (1906), 671-89.

WILLIAM RICHARDS BLAIR, PH.D. 1906; Director, Government Observatory, Mount Weather, Va.

The Change of Phase Due to the Passage of Electric Waves through Thin Plates, and the Index of Refraction of Water for Such Waves, with Applications to the Optics of Thin Films and Prisms. Doctor's thesis. *Physical Review*, XXVI (1908), 61-97.

OLIVER CHARLES CLIFFORD, PH.D. 1907; Associate Professor of Electrical Engineering, Armour Institute of Technology, Chicago.

† Deceased.

The Susceptibility of Copper and Tin and Their Alloys. Doctor's thesis.
Physical Review, XXVI (1908), 424-38.

THOMAS EATON DOUBT, PH.D. 1904; Associate Professor of Physics,
Armour Institute of Technology, Chicago.

The Effect of the Intensity upon the Velocity of Light. Doctor's thesis.
Physical Review, XVIII (1904), 129-34.

HARVEY FLETCHER, PH.D. 1911; Professor of Physics, Brigham Young
University, Salt Lake City, Utah.

A Verification of the Theory of Brownian Movements and a Direct
Determination of the Value of NE for Gaseous Ionization. Doctor's
thesis. *Physical Review*, XXXIII (1911), 81-110.

FANNIE CORNELIA FRISBIE (MRS. FRANK B. JEWETT), PH.D. 1904; New
York City.

The Effect of Pressure upon Magnetic Permeability. Doctor's thesis.
Physical Review, XVIII (1904), 432-43.

LACHLAN GILCHRIST, PH.D. 1913; Instructor in Physics, University of
Toronto.

Absolute Determination of the Viscosity of Air. Doctor's thesis.
Physical Review, New Series, I (1913), 124-40.

LAWRENCE EMERY GURNEY, PH.D. 1906; Assistant Professor of Physics,
University of the Philippines, Manila.

The Viscosity of Water at Very Low Rates of Shear. Doctor's thesis.
Physical Review, XXVI (1908), 98-124.

ERTLE LESLIE HARRINGTON, PH.D. 1916; Missouri State Normal Col-
lege, Cape Girardeau.

A Redetermination of the Coefficient of the Viscosity of Air. Doctor's
thesis. *Physical Review*, New Series, VIII (1916), 738-51.

THOMAS CARLYLE HEBB, PH.D. 1904; Assistant Professor of Physics,
University of British Columbia, Vancouver.

On a New Method of Determining the Velocity of Sound. Doctor's thesis.
8vo, 11. Lancaster, Pa.: New Era Printing Co., 1904.

ALBERT EDWARD HENNINGS, PH.D. 1914; Assistant Professor of Physics, University of Saskatchewan, Saskatoon, Canada.

A Critique and Study on the Nature of the Volta Effect, *Physical Review*, New Series, II (1913), 1-15.

On the Nature of the Volta Effect: A Rejoinder, *ibid.*, IV (1914), 247-51.

A Study of Contact Potentials and Photo-Electric Properties of Metals in Vacuo: and the Mutual Relation between These Phenomena. Doctor's thesis. *Physical Review*, New Series, IV (1914), 228-46.

WILLIAM HENRY KADESCH, PH.D. 1915; Instructor in Physics, United States Naval Academy, Annapolis.

The Energy of Photo-Electrons from Sodium and Potassium as a Function of the Frequency of the Incident Light. Doctor's thesis. *Physical Review*, New Series, III (1914), 367-74.

ANSEL ALPHONSO KNOWLTON, PH.D. 1910; Professor of Physics, Reed College, Portland, Ore.

Preparation and Properties of the Heusler Alloys. Doctor's thesis. *Physical Review*, XXXII (1911), 54-68.

JOHN MATTHIAS KUEHNE, PH.D. 1910; Adjunct Professor of Physics, University of Texas, Austin.

On the Electrostatic Effect of a Changing Magnetic Field. Doctor's thesis. *Philosophical Magazine*, XIX (1910), 461-76.

LEONARD BENEDICT LOEB, PH.D. 1916; The Bureau of Standards, Washington, D.C.

On the Mobilities of Gas Ions in High Electric Fields. Doctor's thesis. *Physical Review*, New Series, VIII (1916), 633-50.

CARLETON JOHN LYNDE, PH.D. 1905; Professor of Physics, Macdonald College, Quebec, Canada.

The Effect of Pressure on Surface Tension. Doctor's thesis. *Physical Review*, XXII (1906), 181-91.

HOWARD WILSON MOODY, PH.D. 1912; Professor and Head of the Department of Physics, Mississippi Agricultural College.

A Determination of the Ratio of the Specific Heats and the Specific Heat at Constant Pressure of Air and Carbon Dioxide. Doctor's thesis. *Physical Review*, XXXIV (1912), 275-95.

ISAIAH MARCH RAPP, PH.D. 1915; Assistant Professor of Physics, University of Oklahoma, Norman.

The Flow of Air through Capillary Tubes. Doctor's thesis. *Physical Review*, New Series, II (1913), 363-82.

BENJAMIN ESTILL SHACKELFORD, PH.D. 1916; The Westinghouse Co., New York City.

Temperature and Blackening Effects in Helical Tungsten Filaments. Doctor's thesis. *Physical Review*, New Series, VIII (1916), 470-78.

OSCAR WILLIAM SILVEY, PH.D. 1915; Professor of Physics, Agricultural and Mechanical College of Texas, College Station.

I. Comparison of the Fall of a Droplet in a Liquid and in a Gas; II. The Fall of Mercury Droplets in a Viscous Medium. Doctor's thesis. *Physical Review*, New Series, VII (1916), 87-111.

NEWLAND FARNSWORTH SMITH, PH.D. 1909; Professor of Physics, Centre College, Danville, Ky.

The Effect of Tension on Thermal and Electrical Conductivity. Doctor's thesis. *Physical Review*, XXVIII (1909), 107-21.

VERNE FRANK SWAIM, PH.D. 1914; Professor of Physics, Bradley Polytechnic Institute, Peoria, Ill.

On the Pressure-Shift of the Lines of the Zinc Spectrum at Low Pressure. Doctor's thesis. *Astrophysical Journal*, XL (1914), 137-47.

GEORGE WINCHESTER, PH.D. 1907; Professor of Physics, Washington and Jefferson College, Washington, Pa.

Effect of Temperature upon the Discharge of Electricity from Metals Illuminated by Ultra-Violet Light. Doctor's thesis. *Physical Review*, XXV (1907), 103-14.

JAMES REMUS WRIGHT, PH.D. 1911; Professor of Physics, University of the Philippines, Manila.

The Positive Potential of Aluminum as a Function of the Wave-Length of the Incident Light. Doctor's thesis. *Physical Review*, XXXIII (1911), 43-52; published also in *Physikalische Zeitschrift*, XII (1911), 338-43.

THE DEPARTMENT OF CHEMISTRY

†JOHN ULRIC NEF [1892-1915], Professor and Head of the Department of Chemistry.

A.B. Harvard, 1884; Ph.D. Munich, 1886; LL.D. Pittsburgh, 1915; Professor of Chemistry and Director of the Chemical Laboratory, Purdue, 1887-89; Assistant Professor of Chemistry and Acting Head of the Chemical Laboratory, Clark, 1889-92; Professor of Chemistry, Chicago, 1892-96; Head of the Department of Chemistry, *ibid.*, 1896-1915.

Fellow, American Academy of Arts and Sciences, 1891; Member, Royal Society of Sciences, Upsala, 1903; Member, National Academy of Sciences, 1904.

Dissociations Vorgänge in der Glycol-Glycerinreihe, *Liebig's Annalen Chemie*, CCCXXXV (1904), 191-333.

On the Fundamental Conceptions Underlying the Chemistry of the Element Carbon, *Journal of the American Chemical Society*, XXVI (1904), 1549-77.

Dissociations-Vorgänge in der Zucker-Gruppe:

Erste Abhandlung: Ueber das Verhalten der Zuckerarten gegen die Fehling'sche Lösung sowie gegen andere Oxydationsmittel. *Liebig's Annalen der Chemie*, CCCLVII (1907), 214-312.

Zweite Abhandlung: Ueber das Verhalten der Zuckerarten gegen Aetzalkalien, *ibid.*, CCCLXXVI (1910), 1-119.

Dritte Abhandlung, *ibid.*, CCCIII (1914), 204-383.

On the Non-equivalence of the Four Valences of the Carbon-Atom, *Journal of the American Chemical Society*, XXX (1908), 645-50.

JULIUS STIEGLITZ [1892-], Professor and Chairman of the Department of Chemistry; Director of the University Laboratories.

Abiturientenexamen, Realgymnasium, Karlsruhe, 1886; Ph.D. Berlin, 1889; Sc.D. Clark, 1909; Assistant Professor of Chemistry, Chicago, 1897-1902; Associate Professor, *ibid.*, 1902-5; Professor, *ibid.*, 1905-; Director of Analytical Chemistry, *ibid.*, 1905-; Director of the University Laboratories, *ibid.*, 1912-.

Hitchcock Lecturer, California, 1909; Member, National Academy of Sciences, 1911-; Member, American Academy of the Arts and Sciences, 1914-; Member, Washington Academy of Sciences, 1914-.

† Deceased.

- Associate Editor, *Journal of the American Chemical Society*, 1910-; Member, Council on Chemistry and Pharmacy of the American Medical Association, 1905-; Member International Commission on Annual Tables of Constants and Numerical Data, 1910-.
- The Elements of Qualitative Chemical Analysis with Special Consideration of the Application of the Laws of Equilibrium, etc.* 2 vols. 8vo. Vol. I, 312; Vol. II, viii+151. New York: Century Co., 1911.
- The "Beckmann Rearrangement," II, *American Chemical Journal*, XXIX (1903), 49-68; III (with Richard B. Earle), *ibid.*, XXX (1903), 399-412; IV (with Richard B. Earle), *ibid.*, 412-21.
- On the Theory of Indicators, *Journal of the American Chemical Society*, XXV (1903), 1112-27.
- A Study of Hydrolysis by Conductivity Methods (with Ira H. Derby), *American Chemical Journal*, XXXI (1904), 449-58.
- The Molecular Rearrangement of Aminophenyl Alkyl Carbonates (with H. T. Upson), *ibid.*, 458-502.
- The Constitution of Purpuric Acid and of Murexide (with Max Slimmer), *ibid.*, 661-79.
- Ueber die Isoharnstoffe (with R. P. Noble), *Berichte der deutschen chemischen Gesellschaft*, XXXVIII (1905), 2243-44.
- On Chloronium Salts (with Edith E. Barnard), *Journal of the American Chemical Society*, XXVII (1905), 1016-19.
- The Relations of Organic Chemistry to Other Sciences: A Study of Catalysis, *Proceedings of the International Congress of Arts and Science of 1904*, IV (1906), 276-84.
- Studies in Catalysis:
- I. The Catalysis of Esters and of Imidoesters by Acids, *American Chemical Journal*, XXXIX (1908), 29-63.
 - II. The Catalysis of Imidoesters, *ibid.*, 164-84.
 - III. The Theories of Esterification and Saponification, *ibid.*, 410-31.
- Note on the Solubility Product, *Journal of the American Chemical Society*, XXX (1908), 946-54.
- Chemical Research in American Universities, *Science*, XXVI (1908), 699-703.
- The Applications of Physical Chemistry to Organic Chemistry, *ibid.*, 768-75.

- The "Syn" and "Anti" Stereoisomerism of Nitrogen Compounds, *American Chemical Journal*, XL (1908), 36-45.
- Catalysis on the Basis of Work with Imidoesters, *Journal of the American Chemical Society*, XXXII (1910), 221-31.
- Ueber Stereoisomere Chlorimido-Ketone (with P. P. Peterson), *Berichte der deutschen chemischen Gesellschaft*, XLIII (1910), 782-87.
- Molecular Rearrangement of Triphenylmethylhydroxylamine (with P. N. Leech, Jr., and G. Reddick), *Proceedings of the Eighth International Congress of Applied Chemistry*, XXV (1912), 443.
- Catalysis on the Basis of Work with Imidoesters: "The Salt Effect," *Journal of the American Chemical Society*, XXXIV (1912), 1687-95.
- Die Umwandlung von Hydrazobenzol in Azobenzol und Anilin, eine Reaktion erster Ordnung (with Geo. O. Curme, Jr.), *Berichte der deutschen chemischen Gesellschaft*, XLVI (1913), 911-20.
- Molekulare Umlagerung von Triphenylmethylhydroxylamin (with P. N. Leech, Jr.), *ibid.*, 2147-51.
- Molekulare Umlagerung von Triphenylmethylbromamin (with I. Vosburgh), *ibid.*, 2151-56.
- Molecular Rearrangement of Triarylmethylhydroxylamines and the "Beckmann" Rearrangement of Ketoximes (with P. N. Leech, Jr.), *Journal of the American Chemical Society*, XXXVI (1914), 272-301.
- Molecular Rearrangements of Triphenylmethane Derivation, I, *Proceedings of the National Academy of Sciences*, I (1915), 196-202; II (with Isabelle Vosburgh, Agnes Fay Morgan, Bert A. Stagner, James K. Senior), *ibid.*, 202-10.

REVIEWS IN: *Journal of the American Chemical Society*, XXVI, 718-19; XXVII, 79-80; XXIX, 1129-30; XXX, 157-59, 906-8, 1795-98; XXXVI, 456; *Journal of the American Medical Association*, XLV, 1426.

WILLIAM DRAPER HARKINS [1912-], Professor of Chemistry.

A.B. Leland Stanford Junior, 1900; Ph.D. *ibid.*, 1907; Professor and Head of the Department of Chemistry, University of Montana, 1901-12; Assistant Professor of Chemistry, Chicago, 1912-14; Associate Professor, *ibid.*, 1914-17; Professor, *ibid.*, 1917-.

Chemist in Smelter Smoke Investigations in Montana, 1902-10; Chemist, United States Department of Justice, 1910-11; Professional Lecturer, Mellon Institute of Industrial Research, Pittsburgh, 1916-17.

Assistant Editor, *Chemical Abstracts*, 1911-.

- The Changes of Mass and Weight Involved in the Formation of Complex Atoms and the Hydrogen-Helium System (with E. D. Wilson), *Proceedings of the National Academy of Sciences*, I (1915), 276-83; published also in *Journal of the American Chemical Society*, XXXVII (1915), 1367-83.
- The Structure of Complex Atoms: The Hydrogen-Helium System (with E. D. Wilson), *ibid.*, 1383-96.
- Recent Work on the Structure of the Atom (with E. D. Wilson), *ibid.*, 1396-1421.
- Binary and Ternary Systems of the Nitrates of the Alkali and Alkaline Earth Metals (with George L. Clark), *ibid.*, 1816-28.
- Energy Changes Involved in the Formation of Complex Atoms (with E. D. Wilson), *Philosophical Magazine*, XXX (1915), 723-34.
- The Surface Tension at the Interface between Two Liquids (with E. C. Humphery), *Proceedings of the National Academy of Sciences*, I (1915), 585-90.
- The Periodic System and the Properties of the Elements (with R. E. Hall), *Journal of the American Chemical Society*, XXXVIII (1916), 169-221.
- The Drop Weight Method for the Determination of Surface Tension, *ibid.*, 228-36.
- Apparatus for the Determination of the Surface Tension at the Interface between Two Liquids (with E. C. Humphery), *ibid.*, 236-42.
- A Simple Apparatus for the Accurate and Easy Determination of Surface Tension, with a Metal Thermoregulator for the Quick Adjustment of Temperature (with F. E. Brown), *ibid.*, 246-52.
- The Abundance of the Elements in Relation to the Hydrogen-Helium Structure of the Atoms, *Proceedings of the National Academy of Sciences*, II (1916), 216-20.
- Wechselseitige electromagnetische Masse und die Struktur des Atoms, *Zeitschrift für anorganische Chemie*, XCV (1916), 1-19.
- Das Wasserstoff-Helium System und die Struktur der komplexen Atome, *ibid.*, 19-38.
- Das Periodische System, *ibid.*, XCVII (1916), 175-240.

Studies on the Cobaltamines: I, Various Ionization Types as Determined by the Freezing Point Lowering in Aqueous Solution, Together with Conductance Measurements (with R. E. Hall and W. A. Roberts), *Journal of the American Chemical Society*, XXXVIII (1916), 2643-58.

The Free Energy of Dilution and the Freezing Point Lowerings in Solutions of Some Salts of Various Types of Ionization, and of Salt Mixtures (with R. E. Hall), *ibid.*, 2658-76.

The Freezing Point Lowerings in Aqueous Solutions of Salts and of a Salt with a Non-electrolyte, *ibid.*, 2676-79.

Ionization and Solubility Relations of Salts of Higher Types: IV, Intermediate Ions in Solutions of Uni-bivalent Salts, and of Lanthanum Nitrate, a Tri-univalent Salt (with W. Tudor Pearce), *ibid.*, 2679-2708.

The Effect of Salts upon the Solubility of Other Salts: VIIIa, The Solubility Relations of a Very Soluble Bi-univalent Salt (with Harry M. Paine), *ibid.*, 2709-14; VIIIb, The Solubility Relations of Extremely Soluble Salts (with W. Tudor Pearce), *ibid.*, 2714-17.

The Structure of the Surfaces of Liquids, and Solubility as Related to the Work Done by the Attraction of Two Liquid Surfaces as They Approach Each Other (with F. E. Brown and E. C. H. Davies), *ibid.*, XXXIX (1917), 354-64.

The Orientation of Molecules in the Surfaces of Liquids, the Energy Relations at Surfaces, Solubility, Adsorption, Emulsification, Molecular Association, and the Effect of Acids and Bases on Interfacial Tension (Surface Energy VIII) (with E. C. H. Davies and George L. Clark), *ibid.*, 364-96.

The Evolution of the Elements and the Stability of Complex Atoms, *ibid.*, 856-79.

HERBERT NEWBY MCCOY [1898-99, 1903-17], Professor of Chemistry.

S.B. Purdue, 1892; Ph.D. Chicago, 1898; Professor of Chemistry and Physics, Fargo, 1894-96; Assistant Professor of Chemistry, Utah, 1890-1901; Associate Professor, *ibid.*, 1901; Assistant Professor, Chicago, 1903-7; Associate Professor, *ibid.*, 1908-11; Professor, *ibid.*, 1911-17.

Ionization Constants of Phenolphthalein, *American Chemical Journal*, XXXI (1904), 503-21.

- Ein verbesserter tragbarer Gasentwicklungs-Apparat, *Berichte der deutschen chemischen Gesellschaft*, XXXVII (1904), 2534-36.
- Ueber das Entstehen des Radiums, *ibid.*, 2641-56.
- Radioactivity as an Atomic Property, *Journal of the American Chemical Society*, XXVII (1905), 391-403.
- The Relation between the Radioactivity and the Composition of Uranium Compounds, *Physical Review*, XX (1905), 381-82.
- The Relation between the Radioactivity and the Composition of Uranium Compounds (second paper), *Philosophical Magazine*, XI (1906), 176-86.
- The Relation between the Radioactivity and the Composition of Thorium Compounds, *American Journal of Science*, XXI (1906), 433-43.
- The Absorption of the Alpha Rays of Uranium (with H. M. Goettsch), *Journal of the American Chemical Society*, XXVIII (1906), 1555-60.
- The Relation between Uranium and Radium (with W. H. Ross), *Physical Review*, XXIV (1906), 124-25.
- The Occurrence of Copper and Lithium in Radium-Bearing Minerals, *Nature*, LXXVII (1907), 79-80.
- The Specific Radioactivity of Uranium, *Journal of the American Chemical Society*, XXIX (1907), 1698-1708.
- The Specific Radioactivity of Thorium (with W. H. Ross), *ibid.*, 1709-18.
- The Inter-Relations of the Elements, *ibid.*, XXX (1908), 467-73.
- Two New Methods of Determining the Secondary Ionization Constants of Dibasic Acids, *ibid.*, 688-94.
- The Experimental Basis of Chemical Formulae, *School Science and Mathematics*, VIII (1908), 441-52.
- The Relation between the Ionizing Power and Dielectric Constants of Solvents, *Journal of the American Chemical Society*, XXX (1908), 1074-77.
- A Standard of Radioactivity (with G. C. Ashman), *American Journal of Science*, XXVI (1908), 521-30.
- Speed of Oxidation, by Air, of Uranous Solutions, with Note on the Volumetric Determination of Uranium (with H. H. Bunzel), *Journal of the American Chemical Society*, XXXI (1909), 367-73.

- Organic Amalgams: Substances with Metallic Properties Composed in Part of Non-metallic Elements (with W. C. Moore), *ibid.*, XXXIII (1911), 273-92.
- Equilibrium between Alkali-Earth Carbonates, Carbon Dioxide, and Water (with Herbert J. Smith), *ibid.*, 468-73.
- Equilibrium between Sodium Carbonate, Sodium Bicarbonate, and Water (with Charles D. Test), *ibid.*, 473-76.
- Synthetic Metals from Non-metallic Elements, *Science*, XXXIV (1911), 138-42.
- The Physical and Chemical Properties of Some Organic Amalgams (with Franklin L. West), *Journal of Physical Chemistry*, XVI (1912), 261-86.
- The Detection and Estimation of Exceedingly Minute Quantities of Carbon Dioxide (with Shiro Tashiro), *Eighth International Congress of Applied Chemistry*, I (1912), 361-66.
- The Chemical Properties and Relative Activities of the Radio-Products of Thorium (with Charles H. Viol), *Philosophical Magazine*, XXV (1913), 333-59.
- The Variation of the Alpha Ionization of Radioactive Solids with the Thickness of the Layer, *Physical Review*, New Series, I (1913), 393-400.
- The Periods of Transformation of Uranium and Thorium, *ibid.*, 400-404.
- Ueber die Zerfallskonstante von Aktinium X (with Edwin D. Leman), *Physikalische Zeitschrift*, XIV (1913), 1280-82.
- The Relation between Alpha Ray Activities and Ranges in the Actinium Series (with Edwin D. Leman), *Physical Review*, New Series, IV (1914), 409-19.
- The Relation between the Alpha Ray Activities and Ranges of Radium and Its Short-lived Products (with Edwin D. Leman), *ibid.*, VI (1915), 184-91.

REVIEWS IN: *Botanical Gazette*, XXXVII, 309-11; *Journal of the American Chemical Society*, XXVII, 324-25; XXIX, 1376; XXX, 476; XXXI, 1106-8; XXXIII, 995-96; XXXVI, 1318-20; XXXVII, 666-67.

ALEXANDER SMITH [1894-1911], Professor and Director of General and Physical Chemistry; Professor of Chemistry, Columbia University.

S.B. Edinburgh, 1886; Ph.D. Munich, 1889; Professor of Chemistry and Mineralogy, Wabash, 1890-94; Assistant Professor of Chemistry, Chicago, 1894-98; Associate Professor, *ibid.*, 1898-1903; Professor and Director of General and Physical Chemistry, *ibid.*, 1903-11.

Laboratory Outline of General Chemistry. 2d ed., 1902; 3d ed., 1907. 8vo, ix+136. New York: Century Co. German ed. by von Stöcker and Haber; Karlsruhe: G. Braun, 1904, 1911. Russian ed. by Leo von Schmöllung; Petrograd: Schmölling-Polustrova, 1908. Italian ed. by Palazzo; Firenze: Bemporod & Figlio, 1910.

English Version of J. H. van't Hoff's *Physical Chemistry in the Service of the Sciences.* 8vo, xviii+126. Chicago: University Press, 1903.

Introduction to Inorganic General Chemistry. 8vo, xviii+780. New York: Century Co., 1906. German ed. by Dr. Ernest Stern; Karlsruhe: G. Braun, 1909. Portuguese ed. by S. Gomez; Coimbra: Universita di Coimbra, 1911. Russian ed. by P. G. Melikov; Odessa: Mathesis, 1911; Russian trans. of German ed. by M. Pisarevski. Odessa: Raspopov, 1911.

General Chemistry for Colleges. 8vo, xiii+529. New York: Century Co., 1908. Italian ed. by Dr. C. Montemartini; Torino: S. T. E. N., 1911.

On Causes Which Determine the Formation of Amorphous Sulphur, *Proceedings of the Royal Society of Edinburgh*, XXIV (1901-2), 342-43.

Ueber den amorphen Schwefel, *Berichte der deutschen chemischen Gesellschaft*, XXXV (1902), 2992-94.

Ueber den amorphen Schwefel:

- I. Der Einfluss des amorphen Schwefels auf den Gefrierpunkt des flüssigen Schwefels (with W. B. Holmes), *Zeitschrift für physikalische Chemie*, XLII (1903), 469-80.
- II. Ueber zwei flüssige Aggregatzustände des Schwefels, S_λ and S_μ, und deren Uebergangspunkt (with E. S. Hall and W. B. Holmes), *ibid.*, LII (1905), 602-25; same article in English, *Journal of the American Chemical Society*, XXVII (1905), 797-820; see also *Proceedings of the Royal Society of Edinburgh*, XXV (1905), 588-89.

III. Ueber das Wesen des amorphen Schwefels und die Einflüsse fremder Körper auf die Vorgänge bei der Unterkühlung geschmolzenen Schwefels, *Zeitschrift für physikalische Chemie*, LIV (1906), 257-93; same article in English, *Journal of the American Chemical Society*, XXVII (1905), 979-1013; see also *Proceedings of the Royal Society of Edinburgh*, XXV (1905), 590-92.

IV. Weitere Untersuchungen der beiden Formen des flüssigen Schwefels als dynamischer Isomeren (with C. M. Carson), *Zeitschrift für physikalische Chemie*, LVII (1907), 685-717.

V. Das System Schwefel-Iod (with C. M. Carson), *ibid.*, LXI (1907), 200-208.

VI. Gefaelter Schwefel (with R. H. Brownlee), *ibid.*, 209-26.

VII. Gefrierpunkte des flüssigen Schwefels (with C. M. Carson), *ibid.*, LXXVII (1911), 661-76.

The Pupil before and after Taking Chemistry, *School Science and Mathematics*, III (1903), 189-207.

Nature Study and High-School Chemistry, *Nature Study Review*, II (1906), 193-98.

The Point of View in Chemistry, *School Science and Mathematics*, VII (1907), 128-35.

High-School Science in Relation to College or University Work, *Educational Bi-Monthly*, I (1907), 328-35.

Comment on "Another Point of View," *School Science and Mathematics*, VII (1907), 508-10.

The Experimental Viewpoint in Chemistry, *ibid.*, VIII (1908), 582-90.

The Rehabilitation of the American College and the Place of Chemistry in It, *Science*, XXX (1909), 457-66.

The Solubilities of Orthophosphoric Acid and Its Hydrates. A New Hydrate (with A. W. C. Menzies), *Journal of the American Chemical Society*, XXXI (1909), 1183-91; published also in *Proceedings of the Royal Society of Edinburgh*, XXX (1909-10), 63-64.

The Electrical Conductivity and Viscosity of Concentrated Solutions of Orthophosphoric Acid (with A. W. C. Menzies), *Journal of the American Chemical Society*, XXXI (1909), 1191-94.

Does Calomel Furnish Another Contradiction of the Theory of Heterogeneous Dissociation Equilibrium? *Journal of the American Chemical Society*, XXXII (1910), 187-89.

Studies in Vapor Pressure (with A. W. C. Menzies), I, *ibid.*, 897-905. II, 907-14; III, 1412-34; IV, 1434-47; V, 1448-59; VI, 1541-55.

A Common Thermometric Error in the Determination of Boiling Points under Reduced Pressure (with A. W. C. Menzies), *ibid.*, 905-7; published also in *Zeitschrift für physikalische Chemie*, LXXV (1910), 498-99.

Dampfdruckuntersuchungen, VII, *ibid.*, LXXVI (1911), 713-20.

Chemistry. In *Encyclopedia of Education*. 4to, 585-96. New York: Macmillan Co., 1911.

REVIEWS IN: *Journal of the American Chemical Society*, XXVIII, 1084-86; XXX, 1319-20; XXXI, 428-29; XXXIII, 87; *Science*, XXVII, 303-6.

ALAN W. C. MENZIES [1910-12], Assistant Professor of Chemistry; Professor of Chemistry, Princeton University.

A.M. Edinburgh, 1897; B.Sc. *ibid.*, 1898; Ph.D. Chicago, 1910; Professor of Chemistry, St. Mungo's College, Glasgow, 1902-8; Instructor in Chemistry, Chicago, 1910-11; Assistant Professor, *ibid.*, 1911-12.

The Solubilities of Orthophosphoric Acid and Its Hydrates: A New Hydrate (with A. Smith), *Journal of the American Chemical Society*, XXXI (1909), 1183-91.

The Electrical Conductivity and Viscosity of Concentrated Solutions of Orthophosphoric Acid (with A. Smith), *ibid.*, 1191-94.

A Method for Determining under Constant Conditions the Boiling-Points of Even Minute Quantities of Liquids and of Non-fusing Solids (with A. Smith), *ibid.*, XXXII (1910), 897-905; published also in *Zeitschrift für physikalische Chemie*, LXXV (1910), 494-97.

A Common Thermometric Error in the Determination of Boiling-Points under Reduced Pressure (with A. Smith), *Journal of the American Chemical Society*, XXXII (1910), 905-7; published also in *Zeitschrift für physikalische Chemie*, LXXV (1910), 498-99.

A Simple Dynamic Method, Applicable to Both Solids and Liquids, for Determining Vapor Pressures, and Also Boiling-Points at Standard Pressures (with A. Smith), *Journal of the American Chemical Society*, XXXII (1910), 907-14; published also in *Zeitschrift für physikalische Chemie*, LXXV (1910), 500-502.

A Quantitative Study of the Constitution of Calomel Vapor (with A. Smith), *Journal of the American Chemical Society*, XXXII (1910), 1541-55; published also in *Zeitschrift für physikalische Chemie*, LXXVI (1911), 251-54.

Der Dampfdruck von getrocknetem Kalomel (with A. Smith), *ibid.*, 713-20.

Studies in Vapor Pressure. Doctor's thesis. *Journal of the American Chemical Society*, XXXII (1910), 1412-59, 1615-28; published also in *Annalen der Physik*, XXXIII (1910), 971-94; and in *Zeitschrift für physikalische Chemie*, LXXVI (1911), 231-40, 355-59.

The Liquidus Surface of the Ternary System Composed of the Nitrates of Potassium, Sodium, and Calcium (with N. N. Dutt), *Journal of the American Chemical Society*, XXXIII (1911), 1366-75.

General Hygiene as a Required College Course, *Science*, XXXV (1912), 609-12.

Disodium Monohydrogen Phosphate and Its Hydrates. Their Solubilities and Transition Temperatures (with E. C. Humphery), *Proceedings of the Eighth International Congress of Applied Chemistry*, II (1912), 175-78.

The Two-Component System, Water-Arsenic Pentoside (with P. D. Potter), *Journal of the American Chemical Society*, XXXIV (1912), 1452-70.

The Vapor Pressures of Some Concentrated Zinc Chloride Solutions (with H. Bovine), *Proceedings of the Eighth International Congress of Applied Chemistry*, XXII (1912), 219-20.

The Critical Temperature of Mercury, *Journal of the American Chemical Society*, XXXIV (1912), 1065-67.

REVIEWS IN: *Journal of the American Chemical Society*, XXXII, 722-24; XXXIII, 995, 1633-34; XXXV, 297, 645-46; *School Review*, XX, 135-37; *Science*, XXXVI, 81.

HERMANN IRVING SCHLESINGER [1907-], Assistant Professor of Chemistry.

S.B. Chicago, 1903; Ph.D. *ibid.*, 1905; Assistant Professor of Chemistry, *ibid.*, 1911-.

Assistant Editor, *Chemical Abstracts*, 1907-.

Studies in Catalysis: VI, The Catalysis of Imidoesters. Doctor's thesis. 8vo, 59. Easton, Pa.: Eschenbach Printing Co., 1908; published also in the *American Chemical Journal*, XXXVIII (1908), 719-71.

On the Chemical Properties of Amanita Toxin (with W. W. Ford), *Journal of Biological Chemistry*, III (1907), 279-83.

Die spezifischen Wärmen von Lösungen, I, *Physikalische Zeitschrift*, X (1909), 210-15.

Studies in Conductivity:

I. The Conductivity of Ammonia in (Anhydrous) Formic Acid I. "Formic Acid Hydrolysis" (with R. P. Calvert), *Journal of the American Chemical Society*, XXXIII (1911), 1924-33.

II. The Conductivity of Some Formates and of Hydrogen Chloride in (Anhydrous) Formic Acid. Cases of Agreement of Strong Electrolytes with the Mass Law (with A. W. Martin), *ibid.*, XXXVI (1914), 1589-1620.

III. Further Studies on the Behavior of the Alkali Metal Formates in (Anhydrous) Formic Acid (with Clyde Coleman), *ibid.*, XXXVIII (1916), 277-80.

Some Sources of Error in Viscosity Measurement (with E. C. Bingham and A. B. Coleman), *ibid.*, 27-41.

REVIEW IN: *Science*, XXVII, 64-65.

HAROLD STANARD ADAMS [1914-16], Instructor in Physiological Chemistry; New Brunswick, N.J. See under Department of Physiology, p. 374.

ERNEST ANDERSON [1909-12], Research Instructor in Chemistry; Professor of Chemistry, Massachusetts Agricultural College, Amherst. A.B. Trinity University, 1903; S.B. Texas, 1903; S.M. *ibid.*, 1904; Ph.D. Chicago, 1909; Research Instructor in Chemistry, *ibid.*, 1909-12.

On the Action of Fehling's Solution on Galactose. Doctor's thesis. 8vo, 33. Easton, Pa.: Eschenbach Printing Co., 1909; also published in the *American Chemical Journal*, XLII (1909), 401-31.

An Empirical Relation between the Configuration and Rotation of Sugars, *Journal of the American Chemical Society*, XXXIII (1911), 1510-14.

The Relation between the Configuration and Rotation of the Lactones in the Sugar and Saccharinic Acid Groups, *ibid.*, XXXIV (1912), 51-54.

†EDITH ETHEL BARNARD [1903-14], Instructor in Chemistry.

S.B. Chicago, 1903; S.M. *ibid.*, 1905; Ph.D. *ibid.*, 1907; Assistant in Chemistry, *ibid.*, 1903-6; Associate, *ibid.*, 1906-7; Instructor, *ibid.*, 1907-14.

On Chloronium Salts (with Julius Stieglitz), *Journal of the American Chemical Society*, XXVII (1905), 1016-19.

F. E. BROWN [1915-16], Instructor in University College.

A Simple Apparatus for the Accurate and Easy Determination of Surface Tension with a Metal Thermoregulator for the Quick Adjustment of Temperature (with W. D. Harkins), *Journal of the American Chemical Society*, XXXVIII (1916), 246-52.

The Structure of the Surfaces of Liquids, and Solubility as Related to the Work Done by the Attraction of Two Liquid Surfaces as They Approach Each Other (with W. D. Harkins and E. C. H. Davies), *ibid.*, XXXIX (1917), 354-64.

THOMAS BRUCE FREAS [1898-1902; 1904-11], Instructor in Chemistry; Associate Professor of Chemistry, Columbia University.

A.B. Leland Stanford Junior, 1896; Ph.D. Chicago, 1911; Curator in Chemistry, *ibid.*, 1904-11; Instructor in Chemistry, *ibid.*, 1910-11.

A Study of Thermostats. Doctor's thesis. 8vo, 49. Easton, Pa.: Eschenbach Printing Co., 1913.

JOHN WILLIAM EDWARD GLATTFELD [1913-], Instructor in Chemistry.

S.B. Dartmouth, 1907; Ph.D. Chicago, 1913; Research Instructor in Chemistry, *ibid.*, 1913-15; Instructor, *ibid.*, 1916-.

On the Oxidation of d-Glucose in Alkaline Solution by Air as Well as by Hydrogen Peroxide. Doctor's thesis. 8vo, 25. Easton, Pa.: Eschenbach Printing Co., 1913.

OSCAR FRED HEDENBURG [1913-16], Research Instructor in Chemistry; Mellon Institute, Pittsburgh.

A.B. Wesleyan, 1909; Ph.D. Chicago, 1915; Research Instructor in Chemistry, *ibid.*, 1913-16.

On the Esters, as Well as the Monomolecular b- and r-Lactones of d-Mannonic and d-Gluconic Acids; on Ortho-bis-d-Galactonic Acid, d-Galactonic r-Lactone and Its Mono-hydrate. Doctor's thesis. 8vo, 30. Easton, Pa.: Eschenbach Printing Co., 1915.

† Deceased.

JOHN CHARLES HESSLER [1899-1907], Instructor in Chemistry; Professor of Chemistry, James Millikin University, Decatur, Ill.

A.B. Chicago, 1896; Ph.D. *ibid.*, 1899; Instructor in Chemistry, *ibid.*, 1899-1907.

On Phenylmalonic Nitrile, *American Chemical Journal*, XXXII (1904), 119-30.

Some Recent Work in Organic Chemistry, *Journal of the American Chemical Society*, XXIX (1907), 88-99.

ANDREW FRIEDLEY McLEOD [1907-9], Research Instructor in Chemistry; Associate Professor of Physical Chemistry, Beloit College.

A.B. Chicago, 1903; Ph.D. *ibid.*, 1906; Instructor in Soils, Wisconsin, 1906-7; Instructor in Organic Chemistry, Chicago, 1907-9.

On Aldol, Pentaerythrose and the Action of Copper Acetate on the Hexoses. Doctor's thesis. 8vo, 33. Easton, Pa.: Eschenbach Printing Co., 1907.

LEMUEL CHARLES RAIFORD [1907-9; 1911-15], Instructor in Chemistry; Professor of Chemistry, Oklahoma Agricultural and Mechanical College, Stillwater.

Ph.B. Brown, 1900; Ph.D. Chicago, 1909; Associate Professor, Mississippi Agricultural and Mechanical College, 1906-7; Associate in Chemistry, Chicago, 1907-9; Instructor in Chemistry, *ibid.*, 1911-15.

On Chlorimidoquinones. Doctor's thesis. 8vo, 42. Easton, Pa.: Eschenbach Printing Co., 1911.

The Action of Halogen on 4-Nitro-*m*-Cresol, *Journal of the American Chemical Society*, XXXVI (1914), 670-80.

4-Bromo-6-Nitro-*m*-Cresol and Some of Its Derivatives (with Gladys Leavell), *ibid.*, 1498-1511.

FREDERICK WILBERT UPSON [1912-13], Research Instructor in Chemistry; Head of Department of Agricultural Chemistry, University of Nebraska, Lincoln.

S.B. Nebraska, 1907; Ph.D. Chicago, 1910; Research Instructor in Chemistry, *ibid.*, 1912-13.

On the Action of Normal Barium Hydroxide on d-Glucose and d-Galactose. Doctor's thesis. 8vo, 23. Easton, Pa.: Eschenbach Printing Co., 1910.

RALPH EDWIN HALL [1915-16], Associate in General Chemistry; Research Chemist, Carnegie Geophysical Laboratory.

S.B. Ohio Wesleyan University, 1907; S.M. *ibid.*, 1909; A.M. Ohio State University, 1911.

The Periodic System and the Properties of the Elements (with W. D. Harkins), *Journal of the American Chemical Society*, XXXVIII (1916), 169-221.

Studies on the Cobaltamines: I, Various Ionization Types as Determined by the Freezing-Point Lowering in Aqueous Solution, Together with Conductance Measurements (with W. D. Harkins and W. A. Roberts), *ibid.*, 2643-58.

The Free Energy of Dilution and the Freezing-Point Lowerings in Solutions of Some Salts of Various Types of Ionization, and of Salt Mixtures (with W. D. Harkins), *ibid.*, 2658-76.

WILLIS BOIT HOLMES [1900-1904; 1905-6], Associate in Chemistry; Chemist, Ames Laboratories, Fremont, Ohio.

A.B. Harvard, 1896; Ph.D. Johns Hopkins, 1899; Research and Laboratory Assistant, Chicago, 1900-1904; Professor of Chemistry, Montana, 1905; Associate in Chemistry, Chicago, 1905-6.

Ueber der amorphen Schwefel: I, Der Einfluss des amorphen Schwefels auf den Gefrierpunkt des flüssigen Schwefels (with A. Smith), *Zeitschrift für physikalische Chemie*, XLII (1903), 469-80; II, Ueber zwei flüssige Aggregatzustände des Schwefels, S_{λ} and S_{μ} , und deren Uebergangspunkt (with A. Smith and E. S. Hall), *ibid.*, LII (1905), 602-25; same article, in English, *Journal of the American Chemical Society*, XXVII (1905), 797-820.

RAYMOND FOSS BACON [1904], Research Assistant; Director of Mellon Institute of Industrial Research, University of Pittsburgh.

S.B. DePauw, 1899; Ph.D. Chicago, 1904.

On the Reactions of Sodium Benzhydrol. Doctor's thesis. 8vo, 32. Easton, Pa.: Eschenbach Printing Co., 1905.

ROY HUTCHISON BROWNLEE [1901-7], Assistant in Chemistry. *See under* University High School, p. 491.

CHARLES MACDONALD CARSON [1906-8], Research Assistant in Chemistry; Professor of Chemistry, Houghton School of Mines, Houghton, Mich.

A.B. Toronto, 1898; Ph.D. Chicago, 1906.

On Amorphous Sulphur: Further Study of the Two Forms of Liquid Sulphur as Dynamic Isomers. Doctor's thesis. 8vo, 21. Easton, Pa.: Chemical Publishing Co., 1907.

GEORGE OLIVER CURME, JR. [1911-13], Assistant in Organic and Analytical Chemistry; Assistant Professor of Chemistry, University of Pittsburgh, and Research Chemist, Mellon Institute of Industrial Research.

A.B. Northwestern, 1909; S.B. Chicago, 1911; Ph.D. *ibid.*, 1913; Assistant in Organic and Analytical Chemistry, *ibid.*, 1911-13.

The Thermal Decomposition of Symmetrical Diarylhydrazines—A Reaction on the First Order. Doctor's thesis. 8vo, 33. Easton, Pa.: Eschenbach Printing Co., 1913.

Die Umwandlung von Hydrazobenzol im Azobenzol und Anilin, eine Reaktion erster Ordnung (with Julius Stieglitz), *Berichte der deutschen chemischen Gesellschaft*, XLVI (1913), 911-20.

IRA HARRIS DERBY [1903-4], Assistant in Quantitative Analysis; Assistant Professor of Chemistry, University of Minnesota.

S.B. Harvard, 1899; Ph.D. Chicago, 1910.

Studies in Catalysis: IV, The Catalysis of Imidoesters. Doctor's thesis. 8vo, 39. Easton, Pa.: Eschenbach Printing Co., 1908.

A Study of Hydrolysis by Conductivity Methods (with Julius Stieglitz), *American Chemical Journal*, XXXI (1904), 449-58.

RICHARD BLAIR EARLE [1902-3] Research Assistant in Chemistry; Research Chemist, Hood Rubber Co., Watertown, Mass.

S.B. Worcester Polytechnic, 1897; Sc.D. Harvard, 1902; Research Assistant in Chemistry, Chicago, 1902-3.

The "Beckmann Rearrangement," III and IV (with Julius Stieglitz), *American Chemical Journal*, XXX (1903), 399-421.

OSKAR ECKSTEIN [1905-7], Research Assistant in Chemistry; Director, Scientific Department, Hoffman-LaRoche Chemical Works, New York City.

Abiturientenexamen, Munich, 1897; Doctor ès Sciences Physiques, Geneva, 1900; Research Assistant in Chemistry, Chicago, 1905-7.

Ueber die Bildung von C. Acylderivaten aus Cyanessigsäure durch Anwendung von Chinolin und Pyridin (with A. Michael), *Berichte der deutschen chemischen Gesellschaft* XXXVIII (1905), 50-53.

A Method of Measuring Electric Currents in Solutions, *Journal of the American Chemical Society*, XXVII (1905), 759-61.

Der Mont Blanc, *Deutsche Alpenzeitung*, V (1905), 20-45.

Ueber Naphtylenoxyde, *Berichte der deutschen chemischen Gesellschaft*, XXXVIII (1905), 3660-64.

Ueber Chinolinchlorhydrat und die Einwirkung von Säurechloriden auf Chinolin, *ibid.*, XXXIX (1906), 2135-38.

ELLIOT SNELL HALL [1904-6], Research Assistant in Chemistry; 127 Forest Ave., Jamestown, N.Y.

A.B. Amherst, 1896; Ph.D. Johns Hopkins, 1904; Research Assistant in Chemistry, Chicago, 1904-6.

Ueber den amorphen Schwefel: II, Ueber zwei flüssige Aggregatzustände des Schwefels, S_{λ} und S_{μ} , und deren Uebergangspunkt (with A. Smith and W. B. Holmes), *Zeitschrift für physikalische Chemie*, LII (1905), 602-25; same article, in English, *Journal of the American Chemical Society*, XXVII (1905), 797-820.

EDMUND CHARLES HUMPHERY [1912-15], Assistant in General Chemistry; Research Chemist, Federal Dyestuff and Chemical Co., Kingsport, Tenn.

S.B. Westminster College, 1909; S.M. Chicago, 1912; Ph.D. *ibid.*, 1915; Assistant in General Chemistry, *ibid.*, 1912-15.

The Drop Weight Method for the Determination of Surface Tension. Doctor's thesis. 8vo, 21. Easton, Pa.: Eschenbach Printing Co., 1916; also published in *Journal of the American Chemical Society*, XXXVIII (1916), 228-46.

Disodium Monohydrogen Phosphate and Its Hydrates: Their Solubilities and Transition Temperatures (with A. W. C. Menzies), *Proceedings of the Eighth International Congress of Applied Chemistry*, II (1912), 175-78.

JAMES WRIGHT LAWRIE [1904-8], Research Assistant in Chemistry; Chief Chemist, Wm. F. Jobbins, Inc., Aurora, Ill.

S.B. Chicago, 1904; Ph.D. *ibid.*, 1906.

The Chemistry of the Acetylidene Compounds. Doctor's thesis. 8vo, 26. Easton, Pa.: Eschenbach Printing Co., 1906.

PAUL NICHOLAS LEECH, JR. [1911-13], Research Assistant in Chemistry; Research Chemist, American Medical Association, Chicago.

A.B. Miami, 1910; S.M. Chicago, 1911; Ph.D. *ibid.*, 1913; Research Assistant in Chemistry, *ibid.*, 1911-13.

A Color Reaction of Hypochlorites with Methylaniline and Ethylaniline. The Molecular Rearrangement of Triarylmethylhydroxylamines and the "Beckmann Rearrangement" of Ketoximes. Doctor's thesis. 8vo, 35. Easton, Pa.: Eschenbach Printing Co., 1914; also published in *Journal of the American Chemical Society*, XXXV (1913), 1042-45; XXXVI (1914), 272-301.

EDWIN DANIEL LEMAN [1912-15], Assistant in Physical Chemistry; Research Chemist, Carnotite Reduction Co., Chicago.

S.B. Chicago, 1912; Ph.D. *ibid.*, 1915; Assistant in Physical Chemistry, *ibid.*, 1912-15.

Ueber die Zerfallskonstante von Aktinium X (with H. N. McCoy), *Physikalische Zeitschrift*, XIV (1913), 1280-82.

The Relation between Alpha Ray Activities and Ranges in the Actinium Series (with H. N. McCoy), *Physical Review*, New Series, IV (1914), 409-19.

The Relation between the Alpha Ray Activities and Ranges of Radium and Its Short-lived Products (with H. N. McCoy), *ibid.*, VI (1915), 184-91.

STEWART JOSEPH LLOYD [1908-10], Assistant in Chemistry; Professor of Chemistry and Metallurgy, University of Alabama.

A.B. Toronto, 1904; Ph.D. Chicago, 1910; Assistant in Chemistry, *ibid.*, 1908-10.

Studies in Radio-Activity. Doctor's thesis. 8vo, 23. Chicago: Privately printed, 1910.

AGNES FAY MORGAN [1913-14], Research Assistant in Chemistry; Assistant Professor of the Chemistry of Nutrition, University of California.

S.B. Chicago, 1904; S.M. *ibid.*, 1905; Ph.D. *ibid.*, 1914; Research Assistant in Chemistry, *ibid.*, 1913-14.

Ash Content of Canned Vegetables, *Journal of Home Economics*, VII, (1915), 72-77.

HERMAN AUGUSTUS SPOEHR [1909-10], Laboratory Assistant in Chemistry; Chemical Plant Physiologist, Carnegie Institution of Washington, Desert Laboratory, Tucson, Ariz.

S.B. Chicago, 1906; Ph.D. *ibid.*, 1909; Laboratory Assistant in Chemistry, *ibid.*, 1909-10.

On the Behavior of the Ordinary Hexoses toward Hydrogen Peroxide in the Presence of Alkaline Hydroxides, as Well as of Various Iron Salts. Doctor's thesis. 8vo, 30. Easton, Pa.: Eschenbach Printing Co., 1910.

CHARLES HERMAN VIOL [1912], Assistant in Physical Chemistry; Director, Radium Research Laboratory, Standard Chemical Co., Pittsburgh.

S.B. Purdue, 1907; Ph.D. Chicago, 1912; Assistant in Physical Chemistry, *ibid.* 1912.

The Chemical Properties and Relative Activities of the Radio-Products of Thorium. Doctor's thesis. 8vo, 27. Chicago: Privately printed, 1914.

ERNEST DANA WILSON [1914-15], Assistant in General Chemistry; Research Chemist, Mellon Institute of Industrial Research, Pittsburgh.

S.B. Nebraska, 1913; Ph.D. Chicago, 1915; Assistant in General Chemistry *ibid.*, 1914-15.

The Structure of the Atom: Part I, Recent Work on the Structure of the Atom; Part II, The Changes of Mass and Weight Involved in the Formation of Complex Atoms; Part III, The Structure of Complex Atoms. The Hydrogen-Helium System. Doctor's thesis. 8vo, 58. Easton, Pa.: Eschenbach Printing Co., 1916.

SOLOMON FARLEY ACREE, Ph.D. 1902; Chief, Section of Derived Products, United States Forestry Products Laboratory, and Professor of Chemistry of Forest Products, University of Wisconsin.

On Sodium Phenyl and the Action of Sodium on Ketones. Doctor's thesis. 8vo, 23. Easton, Pa.: Chemical Publishing Co., 1903.

MAXWELL ADAMS, Ph.D. 1904; Professor of Chemistry, University of Nevada, Reno.

On Some Hydroxylamine Compounds. Doctor's thesis. 8vo, 24. Easton, Pa.: Chemical Publishing Co., 1902.

GEORGE CROMWELL ASHMAN, PH.D. 1908; Professor of Chemistry, Bradley Institute, Peoria, Ill.

Studies in Radio-Activity. Doctor's thesis. 8vo, 22. Peoria, Ill.: Beehive Press, 1908.

WALLACE APPLETON BEATTY, PH.D. 1902.

The Action of Carbon Monoxide on Sodium Alcoholates Alone and in the Presence of Salts of Fatty Acids. Doctor's thesis. *American Chemical Journal*, XXX (1903), 224-44.

ROY HUTCHISON BROWNLEE, PH.D. 1906. *See under* University High School, p. 491.

WILLIAM MCAFEE BRUCE, PH.D. 1904; Manager, Eastern Arkansas Demonstration Farm, Blackton, Ark.

On the Oxygen Ethers of Urea. Doctor's thesis. 8vo, 36. Easton, Pa.: Chemical Publishing Co., 1904.

CLIFFORD DANIEL CARPENTER, PH.D. 1915; Assistant Professor of Chemistry, Teachers College, Columbia University.

The Addition Compounds of Organic Substances with Sulfuric Acid. Doctor's thesis. 8vo, 20. Easton, Pa.: Eschenbach Printing Co., 1914.

EMMA PERRY CARR, PH.D. 1910; Professor of Chemistry, Mount Holyoke College, South Hadley, Mass.

Methods for the Quantitative Analysis of Animal Tissues (with W. Koch), *Journal of the American Chemical Society*, XXXI (1909), 1341-55.

ELBERT EDWIN CHANDLER, PH.D. 1910; Professor of Chemistry, Occidental College, Los Angeles, Cal.

The Ionization Constants of the Second Hydrogen Ion of Dibasic Acids. Doctor's thesis. 8vo, 32. Easton, Pa.: Eschenbach Printing Co., 1908.

REVIEW IN: *Journal of the American Chemical Society*, XXVIII, 1266-67.

CLYDE COLEMAN, PH.D. 1915; Chemist, Federal Dye Stuff and Chemical Co., Kingsport, Tenn.

Studies on the Behavior of the Alkali Metal Formates in (Anhydrous) Formic Acid. Doctor's thesis. Easton, Pa.: Eschenbach Printing Co., 1916; also published in *Journal of the American Chemical Society*, XXXVIII (1916), 277-80.

WILLEY DENIS, PH.D. 1907; Chemist, Massachusetts General Hospital, Boston.

On the Behavior of Various Aldehydes, Ketones and Alcohols toward Oxidizing Agents. Doctor's thesis. 8vo, 36. Easton, Pa.: Eschenbach Printing Co., 1907.

The Rate of Diffusion of the Inorganic Salts of the Blood, *American Journal of Physiology*, XVII (1906), 35-41.

WILLIAM LLOYD EVANS, PH.D. 1905; Professor of Chemistry, Ohio State University, Columbus.

On the Behavior of Benzoyl Carbinol towards Alkalies and Oxidizing Agents. Doctor's thesis. 8vo, 32. Easton, Pa.: Eschenbach Printing Co., 1906.

HENRY MAX GOETTSCH, PH.D. 1906; Associate Professor of Technical Chemistry, University of Cincinnati.

The Absorption Coefficients of Uranium Compounds. Doctor's thesis. 8vo, 25. Easton, Pa.: Eschenbach Printing Co., 1906.

NELLIE ESTHER GOLDTHWAITE, PH.D. 1904.

On Substituted Benzhydrol Derivatives and Bronicyanacetic Ether. Doctor's thesis. 8vo, 26. Easton, Pa.: Chemical Publishing Co., 1903.

LOUIS ALLEN HIGLEY, PH.D. 1907; Professor of Chemistry, New Mexico College of Agriculture and Mechanical Arts, State College, N.M.

The Behavior of Sodium and of Sodium Alcoholates toward Various Esters of Acetic Acid. Doctor's thesis. 8vo, 33. Easton, Pa.: Eschenbach Printing Co., 1907.

WILLIS STOSE HILPERT, PH.D. 1906; The Miner Laboratories, Chicago.

Stereoisomeric Chlorimido Acid Esters. Doctor's thesis. 8vo, 47. Easton, Pa.: Eschenbach Printing Co., 1908.

WINFORD LEE LEWIS, PH.D. 1909; Assistant Professor of Chemistry, Northwestern University.

On the Action of Fehling's Solution on Malt Sugar. Doctor's thesis. 8vo, 21. Easton, Pa.: Eschenbach Printing Co., 1909.

WILLIAM McCracken, PH.D. 1905; Professor of Chemistry, State Normal School, Kalamazoo, Mich.

Studies in Catalysis: V, The Catalysis of Imidoesters. Doctor's thesis. 8vo, 30. Easton, Pa.: Eschenbach Printing Co., 1908.

ARTHUR WESLEY MARTIN, PH.D. 1914. *See under* University High School, p. 494.

WILLIAM CABLER MOORE, PH.D. 1910; Research Chemist, National Carbon Co., Cleveland, Ohio.

Organic Amalgams: Substances with Metallic Properties Composed in Part of Non-metallic Elements. Doctor's thesis. 8vo, 19. Easton, Pa.: Eschenbach Printing Co., 1911.

WILLIAM TUDOR PEARCE, PH.D. 1916.

Ionization and Solubility: I, Relation of Salts of Higher Types, Intermediate Ions in Solutions of Uni-bivalent Salts, and of Lanthanum Iodate, a Triunivalent Salt; II, The Effect of Salts upon the Solubility of Other Salts. The Solubility Relations of Some Extremely Soluble Salts. Doctor's thesis. *Journal of the American Chemical Society*, XXXVIII (1916), 2679-2709, 2714-17.

PETER POWELL PETERSON, PH.D. 1909; Head of the Department of Soils, College of Agriculture, University of Idaho, Moscow.

Stereoisomeric Chlorimido Ketones. Doctor's thesis. 8vo, 21. Easton, Pa.: Eschenbach Printing Co., 1911.

HARLEY MARTIN PLUM, PH.D. 1914; Professor of Agricultural Chemistry, University of Nebraska, Lincoln.

Extraction and Separation of the Radioactive Constituents of Carnotite. Doctor's thesis. 8vo, 23. Chicago: Privately printed, 1915.

PAUL DAVID POTTER, PH.D. 1912; Chief Chemist, Sprague, Warner & Co., Chicago.

The Two-Components System, Water-Arsenic Pentoxide. Doctor's thesis. 8vo, 20. Easton, Pa.: Eschenbach Printing Co., 1912.

WILLIAM HORACE ROSS, PH.D. 1907; Scientist, Bureau of Soils, U.S. Department of Agriculture.

On the Relation between the Radioactivity and the Composition of Thorium and Uranium Minerals. Doctor's thesis. 8vo, 29. Halifax, N.S.: McAlpine Publishing Co., 1907.

EUGENE PAUL SCHOCII, PH.D. 1902; Professor of Physical Chemistry, University of Texas, Austin.

The Red and the Yellow Mercuric Oxides and the Mercuric Oxychlorides. Doctor's thesis. 8vo, 24. Easton, Pa.: Chemical Publishing Co., 1903.

JAMES KUHN SENIOR, PH.D. 1917.

The Molecular Rearrangement of Triarylmethylazides. The Molecular Rearrangement of *sym.-bis*-Triarylmethylhydrazines. Doctor's thesis. *Journal of the American Chemical Society*, XXXVIII (1916), 2718-36.

EDWIN EMERY SLOSSON, PH.D. 1902; Associate, School of Journalism, Columbia University; Literary Editor of *The Independent*.

On Acylhalogenamine Derivatives and the "Beckmann Rearrangement." Doctor's thesis. 8vo, 32. Easton, Pa.: Chemical Publishing Co., 1903.

CLARE CHRISMAN TODD, PH.D. 1914; Professor and Acting Head of the Department of Chemistry, Washington State College, Pullman.

On the Action of Alkaline Hydrogen Peroxide on d-Galactose. Doctor's thesis. 8vo, 27. Easton, Pa.: Eschenbach Printing Co., 1914.

HENRY TABER UPSON, PH.D. 1903; President and Treasurer, Pease Oil Co., Buffalo, N.Y.

The Molecular Rearrangement of Aminophenylalkyl Carbonates. Doctor's thesis. 8vo, 33. Easton, Pa.: Chemical Publishing Co., 1904.

FRANKLIN LORENZO WEST, PH.D. 1911; Professor of Physics, Utah Agricultural College, Logan.

Physical and Chemical Properties of Some Organic Amalgams. Doctor's thesis. 8vo, 28. Easton, Pa.: Eschenbach Printing Co., 1911.

OSWIN WILLIAM WILLCOX, PH.D. 1904; Technical Chemist, New York.

On the Reactions of Ethyl Chlorsulphonate. Doctor's thesis. 8vo, 33. Easton, Pa.: Chemical Publishing Co., 1904.

FRANCIS WILLIAM BUSHONG, Graduate Student.

Esters of Sulphuric Acid and of Chlorsulphonic Acid, *American Chemical Journal*, XXX (1903), 212-24.

R. P. CALVERT, Graduate Student.

Studies in Conductivity; I, The Conductivity of Ammonia in (Anhydrous) Formic Acid I. "Formic Acid Hydrolysis" (with H. I. Schlesinger), *Journal of the American Chemical Society*, XXXIII (1911), 1924-33.

GEORGE L. CLARK, Graduate Student.

Binary and Ternary Systems of the Nitrates of the Alkali and Alkaline Earth Metals (with W. D. Harkins), *Journal of the American Chemical Society*, XXXVII (1915), 1816-28.

The Orientation of Molecules in the Surfaces of Liquids, the Energy Relations at Surfaces, Solubility, Adsorption, Emulsification, Molecular Association, and the Effect of Acids and Bases on Interfacial Tension (Surface Energy VIII) (with W. D. Harkins and E. C. H. Davies), *ibid.*, XXXIX (1917), 364-96.

N. N. DUTT, Graduate Student.

The Liquidus Surface of the Ternary System Composed of the Nitrates of Potassium, Sodium, and Calcium (with A. W. C. Menzies), *Journal of the American Chemical Society*, XXXIII (1911), 1366-75.

MAX DARWIN SLIMMER, Graduate Student.

The Constitution of Purpuric Acid and of Murexide (with Julius Stieglitz), *American Chemical Journal*, XXXI (1904), 661-79.

THE DEPARTMENT OF GEOLOGY AND PALEONTOLOGY

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A.B. Beloit, 1866; Ph.D. Michigan, 1882; Ph.D. Wisconsin 1882; LL.D. Michigan, 1887; LL.D. Beloit, 1899; LL.D. Columbian, 1882; LL.D. Wisconsin, 1904; LL.D. Toronto, 1913; Sc.D. Illinois, 1905; Professor of Natural Science, State Normal School, Whitewater, Wis., 1869-73; Professor of Geology, Beloit, 1873-82; Professor of Geology, Columbian, 1885-87; President, Wisconsin, 1887-92; Professor and Head of the Department of Geology, Chicago, 1892-.

President, Chicago Academy of Sciences, 1897-1915; President, Illinois Academy of Science, 1907; President, American Association for the Advancement of Science, 1908-9; Member, National Academy of Sciences.

Editor in General Charge, *Journal of Geology*, 1893-1912; Joint Editor, *ibid.*, 1913-.

Assistant State Geologist of Wisconsin, 1873-76; Chief Geologist, *ibid.*, 1876-82; Geologist, United States Geological Survey, 1882-1908; Geologist to Peary Expedition, 1894; Consulting Geologist, Wisconsin Geological Survey; Commissioner, Illinois Geological Survey; Investigator of Fundamental Problems of Geology, Carnegie Institution, 1902-9; Research Associate, Carnegie Institution, 1909-; Consulting Geologist, United States Geological Survey, 1908-; Member, Commission for Oriental Educational Investigation, 1908-9.

Geology. Vol. I, *Geologic Processes and Their Results*; Vol. II, *Earth-History: Genesis-Paleozoic*; Vol. III, *Earth History: Mesozoic-Cenozoic* (with R. D. Salisbury). 8vo, xix+654, xxvi+692, xi+624. New York: Henry Holt & Co., 1904, 1906.

College Geology (with R. D. Salisbury). xvi+978. New York: Henry Holt & Co., 1909.

Glacial Map of North America. Chicago: Rand McNally & Co., 1913.

Introductory Geology (with R. D. Salisbury). 8vo, 708. New York: Henry Holt & Co., 1914.

The Origin of the Earth. 12mo, xi+271. Chicago: University Press, 1916.

The Geologic Relations of the Human Relics of Lansing, Kansas, *Journal of Geology*, X (1902), 745-79.

Studies for Students: the Criteria Requisite for the Reference of Relics to a Glacial Age, *ibid.*, XI (1903), 64-85.

- The Methods of the Earth Sciences, *Popular Science Monthly*, LXV (1904), 66-75.
- Fundamental Problems of Geology, *Yearbook of the Carnegie Institution*, III (1905), 117-18.
- Fundamental Problems of Geology: Report of Progress, *ibid.*, IV (1905), 171-90.
- On a Possible Reversal of Deep-Sea Circulation and Its Influence on Geologic Climates, *Publications of the Franklin Bicentennial Celebration, American Philosophical Society*, 1906.
- The Functions of a Scientific Academy (Address at Semi-centennial Celebration of the Academy of Science of St. Louis), *Academy of Science of St. Louis*, 1906.
- The Fault Problem, *Economic Geology*, II (1907), 585-600; 704-24.
- Early Terrestrial Conditions Which May Have Favored Organic Synthesis (with Rollin T. Chamberlin), *Science*, XXVIII (1908), 897-911.
- Supplementary Atmospheres. "Contribution to Symposium on the Atmosphere." *Transactions of the Illinois State Academy of Science*, I (1908), 71-75.
- The Former Rates of Rotation of the Earth and Their Bearings on Its Deformation. "Contributions to Cosmogony and the Fundamental Problems of Geology," *Carnegie Institution of Washington*, Publication No. 107 (1909), 5-59.
- Soil Wastage, *Proceedings of a Conference of Governors in the White House, Washington, D.C., May 13-15, 1908* (1909), 75-83.
- The Bearing of Molecular Activity on Spontaneous Fission in Gaseous Spheroids. "Contributions to Cosmogony and the Fundamental Problems of Geology," *Carnegie Institution of Washington*, Publication No. 107 (1909), 163-67.
- The Chinese Problem, *Transactions of the Illinois State Academy of Science*, III (1910), 1-9.
- Certain Valley Configurations in Low Latitudes (with Rollin T. Chamberlin), *Journal of Geology*, XVIII (1910), 117-24.
- The Reform of the Calendar, *Science*, XXXII (1910), 757-59.
- Soil Productivity, *ibid.*, XXXIII (1911), 225-27.

Certain Phases of Glacial Erosion (with Rollin T. Chamberlin), *Journal of Geology*, XIX (1911), 193-217.

The Bearings of Radioactivity on Geology, *ibid.*, 673-95; see also Vol. IV of the *Transactions of the Illinois State Academy of Science*, 1911.

The Future Habitability of the Earth, *Smithsonian Report* for 1910, 371-89.

Geology, *Cyclopedia of Education*, III (1912), 36-47.

Report of Progress to Carnegie Institution, *Yearbook of the Carnegie Institution*, XII (1913).

The Shelf Seas of the Paleozoic, and Their Relations to Diastrophism and Geological Systems, *Congrès géologique international*, XII (1913), 539-53.

Diastrophism and the Formative Processes:

I. Introduction, *Journal of Geology*, XXI (1913), 517.

II. Shelf Seas and Certain Limitations of Diastrophism, *ibid.*, 523-36.

III. The Lateral Stresses within the Continental Protuberances and Their Relations to Continental Creep and Sea Transgression, *ibid.*, 577-87.

IV. Rejuvenation of the Continents, *ibid.*, 673-82.

V. The Testimony of the Deep-Sea Deposits, *ibid.*, XXII (1914), 131-44.

VI. Foreset Beds and Slope Deposits, *ibid.*, 268-74.

VII. Periodicity of Paleozoic Orogenic Movements, *ibid.*, 315-45.

VIII. The Quantitative Element in Circum-Continental Growth, *ibid.*, 516-28.

Contributions from Allied Sciences to Geologic Fundamentals, *ibid.*, XXI (1913), 279-83.

The Planetesimal Hypothesis, *Scientia*, XVI (1914), 165-86.

Symposium on the Earth: Its Figure, Dimensions, and the Constitution of Its Interior: I. The Interior of the Earth from the View Point of Geology, *Proceedings of the American Philosophical Society*, LIV (1915), 279-89.

The Evolution of the Earth: I, Earth Genesis; II, Earth Growth (third series of lectures on the W. E. Hale Foundation, National Academy of Sciences, 1915), *Scientific Monthly*, II (1916), 417-37, 536-56.

REVIEWS OF: Brower, Kakabikansing, *Journal of Geology*, X, 794-98; Leverett, Comparison of North American and European Glacial Deposits, *ibid.*, XVIII, 470-74. Other reviews in *Journal of Geology*, XII, 753-56; XVI, 191-92; 387-89, 496-99, 777-78; XXII, 286-87; XXIII, 477-78; *Science*, XXXIV, 72-73.

JOSEPH PAXSON IDINGS [1892-1908], Professor of Petrology; United States Geological Survey, Washington, D.C.

Ph.B. Sheffield Scientific School, 1877; Sc.D. Yale, 1907; Associate Professor of Petrology, Chicago, 1892-95; Professor, *ibid.*, 1895-1908.

Member, Board of Editors, *Journal of Geology*, 1893-1909; Associate Editor, *ibid.*, 1912-.

Assistant, United States Geological Survey, 1880-88; Geologist, *ibid.*, 1888-92, 1895.

Rock Minerals. 8vo, xii+548. New York: John Wiley & Sons, 1906.

A Fracture Valley System, *Journal of Geology*, XII (1904), 94-105.

Quartz-Feldspar-Porphry (*Graniphyro Liparose-Alaskose*) from Llano, Texas, *ibid.*, 225-31.

The Isomorphism and Thermal Properties of the Feldspars. Part II, Optical Study, *Carnegie Institution of Washington*, Publication No. 31 (1905), 76-95.

The Texture of Igneous Rocks (with Whitman Cross, L. V. Pirsson, and H. S. Washington), *Journal of Geology*, XIV (1906), 692-707.

RICHARD ALEXANDER FULLERTON PENROSE, JR. [1892-95; absent on leave, 1896-1910], Professor of Economic Geology; Board of Trustees, University of Pennsylvania.

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Associate of University Museum, Harvard, 1903-6; Member, International Jury of Awards in the Gold Section, Department of Mines, St. Louis Exposition, 1904; Member, Committee on Hayden Memorial Award, Academy of Natural Sciences, Philadelphia.

Member, Board of Editors, *Journal of Geology*, 1903-11; Member, Publication Committee of American Philosophical Society, 1906-.

Member, United States Geological Survey, 1894-96.

- The Tin Deposits of the Malay Peninsula, etc., with Special Reference to Those of the Kinta District, *Journal of Geology*, XI (1903), 135-54.
- Gold Mining in Arctic America, *Engineering and Mining Journal*, LXXVI (1903), 807-9; 852-53.
- The Witwatersrand Gold Region, Transvaal, South Africa, as Seen in Recent Mining Developments, *Journal of Geology*, XV (1907), 735-49.
- The Premier Diamond Mine, Transvaal, *Economic Geology*, II (1907), 275-84.
- The Gold Regions of the Strait of Magellan and Tierra del Fuego, *Journal of Geology*, XVI (1908), 683-97.
- Memoir of Persifer Frazer, *Bulletin of the Geological Society of America*, XXI (1909), 5-12.
- The Nitrate Deposits of Chile, *Journal of Geology*, XVIII (1910), 1-32.
- Some Causes of Ore-Shoots, *Economic Geology*, V (1910), 97-133.

ROLLIN D. SALISBURY [1892-], Professor of Geographic Geology and Head of the Department of Geography; Dean of the Ogden Graduate School of Science. *See under* Department of Geography, p. 313.

STUART WELLER [1895-], Professor of Paleontologic Geology.

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Member, Board of Editors, *Journal of Geology*, 1899-.

Paleontologist to Geological Survey of New Jersey, 1899-1907; Geologist, Geological Survey of Illinois, 1906-; Assistant Geologist, United States Geological Survey, 1901-6; Geologist, *ibid.*, 1906-.

A Report on the Paleozoic Paleontology of New Jersey. 8vo, x+462, 53 plates. Geological Survey of New Jersey. Trenton, N.J., 1903.

The Geological Map of Illinois. Pp. 26 and map. Bulletin of the Illinois State Geological Survey, No. 1 (1906); 2d ed., pp. 34 and map, *ibid.*, No. 6 (1907). Urbana: University of Illinois.

A Report on the Cretaceous Paleontology of New Jersey. 8vo, 871, 111 plates. Geological Survey of New Jersey. Trenton, N.J., 1907.

The Mississippian Brachiopoda of the Mississippi Valley Basin. 4to, 503, 83 plates. Illinois State Geological Survey, Monograph I. Urbana: University of Illinois, 1914.

Crotalocrinus Cora (Hall), *Journal of Geology*, X (1902), 532-34.

The Stokes Collection of Antarctic Fossils, *ibid.*, XI (1903), 413-19.

The Classification of the Upper Cretaceous Formations and Faunas of New Jersey, *ibid.*, XIII (1905), 71-84; published also in *Annual Report of the Geological Survey of New Jersey* (1904), 145-59.

A Fossil Starfish from the Cretaceous of Wyoming, *Journal of Geology*, XIII (1905), 257-58.

Paraphorhynchus, a New Genus of Kinderhook Brachiopoda, *Transactions of the St. Louis Academy of Sciences*, XV (1905), 259-61.

The Fauna of the Cliffwood Clays, *Journal of Geology*, XIII (1905), 324-37; published also in *Annual Report of the Geological Survey of New Jersey* (1904), 133-44.

The Northern and Southern Kinderhook Faunas, *Journal of Geology*, XIII (1905), 617-34.

Kinderhook Faunal Studies:

IV. The Fauna of the Glen Park Limestone, *Transactions of the St. Louis Academy of Sciences*, XVI (1906), 435-71, plates VI-VII.

V. The Fauna of the Fern Glen Formation, *Bulletin of the Geological Society of America*, XX (1909), 265-333, plates X-XV.

Descriptions of New Species of Ordovician Fossils from China, *Proceedings of the United States National Museum*, XXXII (1907), 557-63.

The Paleontology of the Niagaran Limestone in the Chicago Area. The Trilobita, *Bulletin of the Natural History Survey of the Chicago Academy of Science*, IV, Part II (1907), 155-281, plates XVI-XXV.

Notes on the Geology of Southern Calhoun County, *Bulletin of the Illinois State Geological Survey*, No. 4 (1907), 219-33.

The Pre-Richmond Unconformity in the Mississippi Valley, *Journal of Geology*, XV (1907), 519-25.

The Salem Limestone, *Bulletin of the Illinois State Geological Survey*, No. 8 (1908), 81-102.

Correlation of the Middle and Upper Devonian, and the Mississippian Faunas of North America, *Journal of Geology*, XVII (1909), 257-85.

Description of a Permian Crinoid Fauna from Texas, *ibid.*, 623-35, 1 plate.

- Internal Characters of Some Mississippian Rhynchonelliform Shells, *Bulletin of the Geological Society of America*, XXI (1910), 497-516.
- Genera of Mississippian Loop-Bearing Brachiopoda, *Journal of Geology*, XIX (1911), 439-48.
- Stratigraphy of the Chester Group in Southwestern Illinois, *Transactions of the Illinois State Academy of Science*, VI (1913), 118-29.
- A Report on Ordovician Fossils Collected in Eastern Asia in 1903-4, *Carnegie Institution of Washington*, Publication No. 54 (1913), 277-94, plates XXV-XXVI.
- Anticlinal Structure in Randolph County, *Bulletin of the Illinois State Geological Survey*, No. 31 (1915), 69-70.
- The Ste. Genevieve Formation and Its Stratigraphic Relations in Southeastern Iowa (with F. M. Van Tuyl), *Proceedings of the Iowa Academy of Science*, XXII (1916), 241-47.
- Atactocrinus*, a New Crinoid Genus from the Richmond of Illinois, *Contributions from Walker Museum*, I, No. 10 (1916), 239-41, plate XV.
- Description of a Ste. Genevieve Limestone Fauna from Monroe County, Illinois, *ibid.*, 243-65, plates XVI-XIX.
- REVIEW IN: *Journal of Geology*, XVII, 300-302.

SAMUEL WENDELL WILLISTON [1902-], Professor of Paleontology; Director of Walker Geological Museum.

S.B. Kansas Agricultural College, 1872; M.D. Yale, 1880; Ph.D. *ibid.*, 1885; Sc.D. *ibid.*, 1913; Professor of Anatomy, Yale, 1886-90; Professor of Historical Geology and Anatomy, and Dean of the Medical School, Kansas, 1890-1902; Professor of Paleontology, Chicago, 1902-; Director of Walker Museum, 1910-.

Member, Kansas State Board of Health and Kansas Board of Medical Examination, 1898-1902; President, Kansas Academy of Science, 1897; Member, National Academy of Sciences.

Member, Board of Editors, *Journal of Geology*, 1904-.

Manual of North American Diptera. 12mo, 412. New Haven: J. T. Hathaway, 1908.

American Permian Vertebrates. 8vo, 145, 39 plates. Chicago: University Press, 1911.

Permian Vertebrates of New Mexico (with E. C. Case and M. G. Mehl). 4to, 80, 4 plates. Carnegie Institution of Washington, Publication No. 181 (1913).

- Water Reptiles of the Past and Present.* 8vo, 251. Chicago: University Press, 1914.
- A Fossil Man from Kansas, *Science*, XVI (1902), 196-97.
- On the Skull of *Nyctodactylus*, An Upper Cretaceous Pterodactyl, *Journal of Geology*, X (1902), 520-35.
- An Arrow-Head Found with Bones of Bison *occidentalis* Lucas in Western Kansas, *American Geologist*, XXX (1902), 313-15.
- The Laramie Cretaceous, *Science*, XVI (1902), 952.
- The Lansing Man, *Transactions of the Western Congress of Americanists* (1902), 85-89.
- On the Occurrence of an Arrow-Head with Bones of an Extinct Bison, *American Geologist*, XXX (1902), 313-315.
- The Fossil Man of Lansing, Kansas, *Popular Science Monthly*, LXII (1903), 463-73.
- The Structure of the Plesiosaur Skull, *Science*, XVII (1903), 219.
- North American Plesiosaurs. Part I, *Publications of the Field Columbian Museum* (Geological Series), II (1903), 1-77, plates I-XXIX.
- On the Osteology of *Nyctosaurus* (*Nyctodactylus*) with notes on American Pterosaurs, *ibid.*, 125-63, plates XL-XLIV.
- Some Osteological Terms, *Science*, XVIII (1903), 829.
- The Fingers of Pterodactyls, *London Geological Magazine* (V), I (1904), 58-59.
- The Temporal Arches of the Reptilia, *Biological Bulletin*, VII (1904), 175-92.
- Stomach Stones of the Plesiosaurs, *Science*, XX (1904), 355.
- The Relationships and Habits of the Mosasaurs, *Journal of Geology*, XII (1904), 43-51.
- Notice of New Reptiles from the Upper Trias of Wyoming, *ibid.*, 688-97.
- The *Hallopus*, *Baptanodon*, and *Atlantosaurus* Beds of Marsh, *ibid.*, XIII (1905), 338-50.
- A New Armored Dinosaur from the Upper Cretaceous of Wyoming, *Science*, XXII (1905), 503, 504.
- American Amphicoelian Crocodiles, *Journal of Geology*, XIV (1906), 1-17.

- North American Plesiosaurs: *Elasmosaurus*, *Cimoliasaurus*, and *Polycotylus*, *American Journal of Science* (1906), 221-36, plates I-IV.
- The Great Plains, *School Science and Mathematics*, VI (1906), 641-51.
- Some Common Errors in the Nomenclature of the Dipterous Wing, *Psyche*, XIII (1906), 154-57.
- The Classification of the Culicidae, *Canadian Entomologist*, XXXVIII (1906), 384-88.
- Dipterological Notes, *Journal of the New York Entomological Society*, XV (1907), 1-2.
- The First Reviser of Species, *Science*, XXV (1907), 790-91.
- On the Skull of *Brachauchenius*, and the Relationships of the Plesiosaurs, *Proceedings of the United States National Museum*, XXXII (1907), 15, 4 plates.
- The Antennae of Diptera: A Study in Phylogeny, *Biological Bulletin*, XIII (1907), 324-32.
- What Is a Species? *American Naturalist*, XLII (1908), 184-94.
- The Cotylosauria, *Journal of Geology*, XVI (1908), 139-48.
- Lysorophus*, a Permian Urodele, *Biological Bulletin*, XV (1908), 229-40.
- North American Plesiosaurs: *Trinacromerum*, *Journal of Geology*, XVI (1908), 715-36.
- The Faunal Relations of the Early Vertebrates, *ibid.*, XVII (1909), 389-402.
- New or Little-known Permian Vertebrates—*Trematops*, *ibid.*, 636-58.
- New or Little-known Permian Vertebrates—*Pariotichus*, *Biological Bulletin*, XVII (1909), 241-55.
- Has the American College Failed to Fulfil Its Function? *Journal of Proceedings and Addresses of the National Education Association* (1909), 526-32.
- The Skull and Extremities of *Diplocaulus*, *Transactions of the Kansas Academy of Science*, XXI (1909), 122-31, plates I-V.
- The Skull of *Labidosaurus*, *American Journal of Anatomy*, X (1910), 69-84, plates I-III.
- Cacops*, *Desmospondylus*, New Genera of Permian Vertebrates, *Bulletin of the Geological Society of America*, XXI (1910), 249-84, plates VII-XIX.

- Dissorophys* Cope, *Journal of Geology*, XVIII (1910), 226-36.
- A Mounted Skeleton of *Platecarpus*, *ibid.*, 237-41.
- New Permian Reptiles: Rhachitomous Vertebrae, *ibid.*, 585-600.
- The Birth-place of Man, *Popular Science Monthly*, LXVI (1910), 585-91.
- A New Family of Permian Reptiles from New Mexico, *American Journal of Science*, XXXI (1911), 378-98.
- Restoration of *Seymouria baylorensis* Broili, an American Cotylosaur, *Journal of Geology*, XIX (1911), 232-37.
- Permian Reptiles, *Science*, XXXIII (1911), 631-32.
- Wing-Finger of Pterodactyls, with Restoration of *Nyctosaurus*, *Journal of Geology*, XIX (1911), 696-705.
- Permo-Carboniferous of Northern New Mexico (with E. C. Case), *ibid.*, XX (1912), 1-12.
- A Description of the Skulls of *Diadectes lentus* and *Animasaurus carinatus* (with E. C. Case), *American Journal of Science*, XXXIII (1912), 339-48.
- Ten Years' Progress in Vertebrate Paleontology: Evolutionary Evidences, *Bulletin of the Geological Society of America*, XXIII (1912), 257-62.
- Restoration of *Limnoscelis*, a Colylosaur Reptile from New Mexico, *American Journal of Science*, XXXIV (1912), 457-68.
- Primitive Reptiles: A Review, *Journal of Morphology*, XXIII (1912), 637-63.
- The Pelycosaurian Mandible, *Science*, XXXVIII (1913), 512.
- Ancestral Lizard from the Permian of Texas, *ibid.*, 825-26.
- Ostodolepis brevispinatus*, a New Reptile from the Permian of Texas, *Journal of Geology*, XXI (1913), 363-66.
- The Primitive Structure of the Mandible in Amphibians and Reptiles, *ibid.*, 625-27.
- Broiliellus*, a New Genus of Amphibians from the Permian of Texas, *ibid.*, XXII (1914), 49-56.
- Restorations of Some American Permocarboniferous Amphibians and Reptiles, *ibid.*, 57-70.

The Osteology of Some American Permian Vertebrates, I, *ibid.*, 364-419; II, *Contributions from Walker Museum*, II, No. 9 (1916), 161-92.

Trimerorhachis, a Permian Temnospondyl Amphibian, *Journal of Geology*, XXIII (1915), 246-55.

New Genera of Permian Reptiles, *American Journal of Science*, XXXIX (1915), 575-79.

Synopsis of the American Permocarboniferous Tetrapoda, *Contributions from Walker Museum*, II, No. 9 (1916), 193-236.

The Skeleton of *Trimerorhachis*, *Journal of Geology*, XXIV (1916), 291-97.

REVIEWS IN: *Science*, XXXIII, 250-52; *Journal of Geology*, XVI, 775-77; XIX, 616-64; XX, 91-94, 288; *Yale Review*, 1914.

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S.B. Chicago, 1897; Ph.D. *ibid.*, 1903; Instructor in Physiography and Mathematics, Lewis Institute, 1897-99; Assistant Professor of Physiography and General Geology, Chicago, 1908-10; Associate Professor, *ibid.*, 1910-13.

Member, Board of Editors, *Journal of Geology*, 1912-.

Assistant Geologist, United States Geological Survey, 1901-9; Geologist, Illinois Geological Survey, 1906-13; Geologist, United States Geological Survey, 1910-13; Member, Illinois State Park Commission, 1911-12.

Physical Geography of the Evanston-Waukegan Region (with J. W. Goldthwait). 8vo, 102, 14 plates. Bulletin of the Illinois State Geological Survey, No. 7, 1908.

Interpretation of Topographic Maps (with R. D. Salisbury). 4to, 84, 170 plates. United States Geological Survey, Professional Paper 60, Washington, 1908.

Glaciation of the Uinta and Wasatch Mountains. Doctor's thesis. 4to, 96. United States Geological Survey, Professional Paper 61, Washington, 1909; see also *Journal of Geology*, XV (1907), 790-804.

The Geology and Mineral Resources of Parts of the Alaska Peninsula. 8vo, 137, 14 plates. Bulletin of the United States Geological Survey, No. 467, Washington, 1911.

The Glaciation of San Francisco Mountain, Arizona, *Journal of Geology*, XIII (1905), 276-79.

- Red Mountain: A Dissected Volcanic Cone, *Journal of Geology*, XIV (1906), 138-46.
- Lakes of the Uinta Mountains, *Bulletin of the American Geographical Society*, XL (1908), 12-17.
- Alaska and Its Wealth, *World To-Day*, XIV (1908), 587-98.
- Mineral Resources of Alaska, *Bulletin of the United States Geological Survey*, No. 379c (1909), 108-52.
- Prospecting in Alaska, *University of Chicago Magazine*, III (1910), 53-57.
- A Selected List of Topographic Maps Illustrating Physiographic Types, *Special Publication of the United States Geological Survey*, 1910.
- The First-Year Science Course in High School, *School Review*, XIX (1911), 119-23.
- Physiographic Studies in the San Juan District of Colorado, *Journal of Geology*, XIX (1911), 449-53.
- A Geographic Study of the Mesa Verde, *Annals of the Association of American Geographers*, I (1912), 95-100.
- The Evidence of Three Distinct Glacial Epochs in the Pleistocene History of the San Juan Mountains, Colorado, *Journal of Geology*, XX (1912), 385-409.
- Some Triassic Fossils from Southeastern Alaska, *ibid.*, 653-55.
- The Atwood Celestial Sphere, *Bulletin of the Chicago Academy of Sciences*, IV (1913), 9-36.
- REVIEW IN: *School Review*, XIX, 576-78.

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Geologist, United States Geological Survey, 1910-15; Member, Committee on Economic Geology, American Institute of Mining Engineers, 1914-; Member, United States Geological Survey, 1904-15.

- Geology and Ore Deposits of the Bullfrog District, Nevada* (with F. L. Ransome and G. H. Garrey). 8vo, 130. Bulletin of the United States Geological Survey, No. 407 (1909).
- Some Ore Deposits in Maine and Milan Mine, New Hampshire*. 8vo, 62. *Ibid.*, No. 432 (1910).
- A Reconnaissance of Some Mining Districts in Elko, Lander, and Eureka Counties, Nevada*. 8vo, 130. *Ibid.*, No. 408 (1910).
- Geology of the Haystack Stock, Cowles, Park County, Montana. Doctor's thesis. *Journal of Geology*, XVI (1908), 193-229.
- Secondary Enrichment in the Granite Bimetallic Mine, Philipsburg, Montana, *Science*, XXVII (1908), 925.
- Gold Deposits of the Little Rocky Mountains, Montana, *Bulletin of the United States Geological Survey*, No. 340 (1908), 96-117.
- A Genetic Classification of Minerals, *Economic Geology*, III (1908), 611-27.
- Some Regionally Metamorphosed Deposits and the So-called Segregated Veins, *Economic Geology*, IV (1909), 755-81.
- Outcrops of Ore Bodies, *Mining and Scientific Press*, XCIX (1909), 751-54, 782-87; published also in *Types of Ore Deposits*, San Francisco (1911), 299-323.
- A Preliminary Report on the Mineral Deposits of Ducktown, Tennessee, *ibid.*, No. 470 (1911), 151-72.
- The Agency of Manganese in the Superficial Alteration and Secondary Enrichment of Gold Deposits in the United States, *Transactions of the American Institute of Mining Engineers*, XLII (1911), 3-73; published also in *Ore Deposits*, New York (1913), 759-828; and in *Journal of Geology*, XIX (1911), 15-46.
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S.B. Illinois, 1894; Ph.D. Johns Hopkins, 1903; Assistant Professor of Petrology, Chicago, 1910-14; Associate Professor, *ibid.*, 1914-.
- Member, Board of Editors, *Journal of Geology*, 1910-.
- Assistant Geologist, United States Geological Survey, 1903-; Acting Chief, Section of Petrology, *ibid.*, 1907-10.
- A *Manual of Petrographic Methods*. 8vo, xxviii+649, 770 figs. New York: McGraw-Hill Book Co., 1914.

Translation of Ernst Weinschenk's *Fundamental Principles of Petrology*, 8vo, x+214, 137 figs., 6 plates. New York: McGraw-Hill Book Co., 1916.

Some Simple Improvements for a Petrographical Microscope, *American Journal of Science*, XXIX (1910), 435-38.

Petrographic Terms for Field Use, *Journal of Geology*, XIX (1911), 317-23.

A Drawing-Board with Revolving Disk for Stereographic Projection, *ibid.*, 752-55.

An Accessory Lens for Observing Interference Figures of Small Mineral Grains, *ibid.*, XXI (1913), 96-98.

Petrographic Analysis of the Bridger, Washakie, and Other Eocene Formations of the Rocky Mountains, *Bulletin of the American Museum of Natural History*, XXXIII (1914), 209-22.

Suggestions for a Quantitative Mineralogical Classification of Igneous Rocks, *Journal of Geology*, XXV (1917), 63-97.

REVIEWS IN: *Journal of Geology*, XVIII, 476-83, 576-78, 580-82; XIX, 181-88, 283, 462-63, 464-65, 466-68; XX, 80-82, 84-88, 89-90, 479; XXII, 189-92, 275-85, 437-40, 529-33, 625-29, 725-28.

J HARLEN BRETZ [1914-], Assistant Professor of Geology.

A.B. Albion, 1905; Ph.D. Chicago, 1913; Assistant Professor of Geology, Washington, 1913-14; Assistant Professor of Geology, Chicago, 1915-.

Glaciation of the Puget Sound Region. Doctor's thesis. 8vo, 244. Bulletin of the Washington Geological Survey, No. 8 (1913). Olympia, Wash.: Frank M. Lamborn.

Pleistocene of Western Washington (abstract), *Bulletin of the Geological Society of America*, XXVI (1915), 131.

ALBERT DUDLEY BROKAW [1912-], Assistant Professor of Mineralogy and Economic Geology.

S.B. Chicago, 1908; Ph.D. *ibid.*, 1913; Assistant Professor of Mineralogy and Economic Geology, *ibid.*, 1914-.

The Solution of Gold in the Surface Alterations of Ore Bodies, *Journal of Geology*, XVIII (1910), 321-26.

The Secondary Precipitation of Gold in Ore Bodies. Doctor's thesis. *Ibid.*, XXI (1913), 251-67.

The Precipitation of Gold by Manganous Salts, *Journal of Industrial and Engineering Chemistry*, V (1913), 560-61; published also in *Mining and Scientific Press*, CVII (1913), 149-50.

Zonal Weathering of a Hornblende Gabbro (with Leon P. Smith), *Journal of Geology*, XXIV (1916), 200-205.

A Stage Attachment for the Metallographic Microscope, *ibid.*, 718-19.

Oil Investigations in Illinois in 1916. Parts of Saline, Williamson, Pope, and Johnson Counties, *Illinois State Geological Survey Bulletin*, No. 35 (1917), 19-37.

REVIEWS IN: *Journal of Geology*, XX, 678-80; XXI, 756-57. Other reviews in *Chemical Abstracts*.

ROLLIN THOMAS CHAMBERLIN [1904-], Assistant Professor of Geology.

S.B. Chicago, 1903; Ph.D. *ibid.*, 1907; Assistant Professor of Geology, *ibid.*, 1914-. Member, Board of Editors, *Journal of Geology*, 1912-.

Assistant Geologist, United States Geological Survey, 1907-; Member, Commission for Oriental Educational Investigation, 1908-9; Member of Brazilian Iron Survey, 1911-12.

The Gases in Rocks. Doctor's thesis. 8vo, 80. Carnegie Institution of Washington, Publication No. 106 (1908).

Notes on Explosive Mine Gases and Dusts, with Special Reference to Explosions in the Monongah, Darr, and Naomi Coal Mines. 8vo, 65. Bulletin of the United States Geological Survey, No. 383 (1909).

The Glacial Features of the St. Croix-Dalles Region, *Journal of Geology*, XIII (1905), 238-56.

Early Terrestrial Conditions Which May Have Favored Organic Synthesis (with T. C. Chamberlin), *Science*, XXVIII (1908), 897-911.

Certain Valley Configurations in Low Latitudes (with T. C. Chamberlin), *Journal of Geology*, XVIII (1910), 117-24.

The Appalachian Folds of Central Pennsylvania, *ibid.*, 228-51.

The Older Drifts in the St. Croix Region, *ibid.*, 542-48.

Travel in the Interior of China, *University of Chicago Magazine*, II (1910), 150-55.

Populous and Beautiful Szechuan, *National Geographic Magazine*, XXII (1911), 1094-1119.

Certain Phases of Glacial Erosion (with T. C. Chamberlin), *Journal of Geology*, XIX (1911), 193-217.

The Physical Setting of the Chilean Borate Deposits, *ibid.*, XX (1912), 763-68.

Periodicity of Paleozoic Orogenic Movements, *ibid.*, XXII (1914), 315-45.

The Geology of Central Minas Geraes, Brazil (with E. C. Harder), Part I, *ibid.*, XXIII (1915), 341-78; Part II, *ibid.*, 385-424.

REVIEWS OF: Joly, Radioactivity and Geology, *Journal of Geology*, XVIII, 568-70; Woodworth, Geological Expedition to Brazil and Chile, *ibid.*, XXI, 284-87. Other reviews in *Journal of Geology*, XVIII, 99-102, 295-96, 391, 566-68; XIX, 91-94, 184, 282, 384, 473-76; XX, 772-73; XXI, 372-73, 375-76; XXII, 91-92; XXIII, 379; XXIV, 298-99; *Astrophysical Journal*, XXXVIII, 204-6; XXXIX, 184.

MAURICE GOLDSMITH MEHL [1915], Instructor in Paleontology; Professor of Geology and Paleontology, University of Oklahoma.

S.B. Chicago, 1911; Ph.D. *ibid.*, 1914; Instructor, *ibid.*, 1915.

Permocarboniferous Vertebrates of New Mexico (with S. W. Williston and E. C. Case). 4to, 80, 4 plates. Carnegie Institution of Washington, Publication No. 181 (1913).

Pantylus Cordatus Cope, *Journal of Geology*, XX (1912), 21-27, 2 figs.

Mranenosaurus? Reedii, Sp. Nov. and *Tricleidus?* Laramiensis Knight, American Jurassic Plesiosaurs, *ibid.*, 344-52, 3 figs.

The *Phytosauria* of the Trias. Doctor's thesis. *Ibid.*, XXIII (1915), 129-65.

EUGENE AUSTIN STEPHENSON [1913-], Instructor in Geology.

S.B. Adrian College, 1905; Ph.D. Chicago, 1915; Assistant in Geology, *ibid.*, 1913; Instructor, *ibid.*, 1914-.

Studies in Hydrothermal Alteration, I. Doctor's thesis. *Journal of Geology*, XXIV (1916), 180-99.

ARTHUR CARLETON TROWBRIDGE [1907-11], Instructor in Geology; Professor of Geology, State University of Iowa, Iowa City.

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Field Assistant, Illinois Geological Survey, Summer, 1907; Geologist, *ibid.*, 1910.

The Interpretation of Topographic Maps (in collaboration with R. D. Salisbury). Laboratory Manual. 12mo, 64. New York: Henry Holt & Co., 1913.

Studies in Geology (with R. D. Salisbury). 12mo, 68. New York: Henry Holt & Co., 1913.

Historical and Structural Geology (with R. D. Salisbury). 12mo, 76. New York: Henry Holt & Co., 1913.

The Terrestrial Deposits of Owens Valley, California. Doctor's thesis. *Journal of Geology*, XIX (1911), 706-47.

The Geology and Geography of the Wheaton Quadrangle, *Bulletin of the Illinois State Geological Survey*, No. 19 (1912), 1-79.

EDSON SUNDERLAND BASTIN [1903-5], Research Assistant in Geology; Geologist, United States Geological Survey, Washington, D.C.

A.B. Michigan, 1902; Ph.D. Chicago, 1909; Research Assistant in Geology, *ibid.*, 1903-5.

Note on Baked Clays and Natural Slags in Eastern Wyoming, *Journal of Geology*, XIII (1905), 408-13.

Chemical Composition as a Criterion in Identifying Metamorphosed Sediment. Doctor's thesis. *Journal of Geology*, XVII (1909), 445-72.

JAMES HAROLD HANCE [1914-15], Assistant in Geology; State University of Iowa, Iowa City.

S.B. Northwestern, 1901; Instructor in Chemistry, Washington, 1905-7; Instructor in Mathematics, *ibid.*, 1906-7; Assistant in Geology, Chicago, 1914-15.

Assistant and Associate Geologist, United States Geological Survey, 1910-15.

Notes on the Occurrence and Use of Flint Clay, *Mineral Resources of the United States*, II (1913), 639-48.

Use of the Slide Rule in the Computation of Rock Analyses, *Journal of Geology*, XXIII (1915), 560-68.

J CLAUDE JONES [1907-10], Research Assistant in Geology; Professor of Geology, University of Nevada, Reno.

A.B. Illinois, 1902; Research Assistant in Geology, Chicago, 1907-10.

Field Assistant, Illinois Geological Survey, 1906-9.

Drainage about Springfield, Illinois, *Bulletin of the Illinois State Geological Survey*, No. 8 (1908), 68-70.

JAMES HENRY LEES [1904-6], Research Assistant in Geology; Assistant State Geologist, Iowa Geological Survey.

A.B. Coe College, 1901; S.M. Iowa, 1903; Ph.D. Chicago, 1915; Research Assistant in Geology, *ibid.*, 1904-6.

The Skull of *Paleorhinus*, a Wyoming Phytosaur, *Journal of Geology*, XV (1907), 121-51.

The Geological History of the Des Moines River Valley. Doctor's thesis. *Iowa Geological Survey*, XXV (1914), 423-615.

RAYMOND CECIL MOORE [1915-16], Assistant in Geology; Professor of Geology, University of Kansas, and Kansas State Geologist.

A.B. Denison, 1913; Ph.D. Chicago, 1916; Assistant in Geology, *ibid.*, 1915-16.

Geology and Coal Resources of the Area Southwest of Custer, Yellowstone and Bighorn Counties, Montana (with G. Sherburne Rogers, Wallace Lee, and A. H. Sloan), *Bulletin of the United States Geological Survey*, No. 541, 316-23.

REVIEWS IN: *Journal of Geology*, XXIV (1916), 98-104, 206-8.

WILLIAM CLINTON ALDEN [1904-12], Docent in Field Geology; Geologist, United States Geological Survey, Washington.

A.B. Cornell, 1893; S.M. Chicago, 1898; Ph.D. *ibid.*, 1903; Docent in Geology, *ibid.*, 1904-12.

Assistant Geologist, United States Geological Survey, 1901-.

The Delavan Lobe of the Lake Michigan Glacier of the Wisconsin Stage of Glaciation and Associated Phenomena. Doctor's thesis. 4to, 106, 15 plates. Bulletin of the United States Geological Survey, Professional Paper 34, 1904.

Description of the Chicago District. Chicago Folio (Illinois-Indiana), No. 81, pp. 1-14, *Geologic Atlas of the United States; United States Geological Survey*, 1902.

ELIOT BLACKWELDER, PH.D. 1914; Professor of Geology, University of Wisconsin.

Post-cretaceous History of the Mountains of Central Western Wyoming. Doctor's thesis. *Journal of Geology*, XXIII (1915), 97-217, 307-40.

EDWIN BAYER BRANSON, PH.D. 1905; Professor of Geology and Chairman of the Department of Geology and Geography, University of Missouri.

Note on Some Carboniferous Cochliodonts, with Descriptions of Seven New Species, *Journal of Geology*, XIII (1905), 20-34, 2 plates.

Structure and Relationships of American Labyrinthodontidae. Doctor's thesis. *Ibid.*, 568-610, 6 plates, 8 figs.

EDWARD MOORE JACKSON BURWASH, PH.D. 1915; 26 Alvin Avenue, Toronto, Canada.

On Some New Species of Marine Invertebrates from the Cretaceous of the Queen Charlotte Islands, *Transactions of the Royal Society of Canada*, 1913, Section IV, 77-89. 3 plates.

Pleistocene Vulcanism of the Coast Range of British Columbia, *Journal of Geology*, XXII (1914), 260-67.

STEPHEN REID CAPPS, JR., PH.D. 1907; Geologist, United States Geological Survey, Washington.

Pleistocene Geology of the Leadville Quadrangle, Colorado. Doctor's thesis. 8vo, 99. Bulletin of the United States Geological Survey, No. 386 (1909).

Pleistocene Geology of the Sawatch Range near Leadville, Colorado (with E. de K. Leffingwell), *Journal of Geology*, XII (1904), 698-706.

The Girdles and Hind Limb of *Holosaurus abruptus* Marsh, *ibid.*, XV (1907), 350-56.

FRED HARVEY HALL CALHOUN, PH.D. 1902; Professor of Geology, Clemson College, South Carolina.

The Montana Lobe of the Keewatin Ice Sheet. Doctor's thesis. 4to, 62, 7 plates. United States Geological Survey, Professional Paper 50. Washington, 1906.

JOEL ERNEST CARMAN, PH.D. 1915; Professor of Geology, Ohio State University.

The Pleistocene Geology of Northwestern Iowa. Doctor's thesis. *Iowa Geological Survey*. In Press.

HAROLD CASWELL COOKE, PH.D. 1912; Geological Survey of Canada, Ottawa.

The Secondary Enrichment of Silver Ores. Doctor's thesis. *Journal of Geology*, XXI (1913), 1-28.

NEVIN M. FENNEMAN, PH.D. 1902; Professor of Geology, University of Cincinnati.

On the Lakes of Southeastern Wisconsin. 8vo, 178, 36 plates. Bulletin of the Wisconsin Geological and Natural History Survey, No. 8 (1902).

ALLEN DAVID HOLE, PH.D. 1910; Professor of Geology and Curator of the Joseph Moore Museum, Earlham College, Richmond, Ind.

Glaciation in the Telluride Quadrangle, Colorado. Doctor's thesis. *Journal of Geology*, XX (1912), 502-29, 605-39, 710-37.

GEORGE FREDERICK KAY, PH.D. 1914; State Geologist and Head of the Department of Geology, State University of Iowa, Iowa City.

The Geology and Ore Deposits of Riddle Quadrangle, Oregon. Doctor's thesis. *United States Geological Survey.* In Press.

KIRTLEY FLETCHER MATHER, PH.D. 1915; Assistant Professor of Geology, Queen's University, Kingston, Canada.

The Fauna of the Morrow Group of Arkansas and Oklahoma. Doctor's thesis. *Bulletin of the Scientific Laboratories of Denison University*, XVIII (1915), 59-284.

ROY LEE MOODIE, PH.D. 1908; Assistant Professor of Anatomy, University of Illinois.

The Relationship of the Turtles and Plesiosaurs. *Science Bulletin of the University of Kansas*, IV (1908), 317-27.

The Ancestry of the Caudate Amphibia, *American Naturalist*, XLII (1908), 361-73.

The Dawn of Quadrupeds in North America, LXXII (1908), 558-66.

Vertebrate Paleontology: The Lysorophidae; Stegocephalia; Cotylosauria; The Oldest Known Reptile; The Age of the Gaskohle; *Bison occidentalis*; Nectosaurus; Callibrachion, *American Naturalist*, XLIII (1909), 116-24.

The Carboniferous Quadrupeds: Those of Kansas, Ohio, Illinois, and Pennsylvania in Their Relation to the Classification of the So-called Amphibia and Stegocephalia, *Transactions of the Kansas Academy of Science*, XXII (1909), 239-47.

- A Contribution to a Monograph of the Extinct Amphibia of North America. New Forms from the Carboniferous. Doctor's thesis. *Journal of Geology*, XVII (1909), 38-82.
- The Microsauria, Ancestors of the Reptilia, *Geological Magazine*, VI (1909), 216-20.
- New or Little-known Forms of Carboniferous Amphibia in the American Museum of Natural History, *Bulletin of the American Museum of Natural History*, XXVI (1909), 347-57.
- ELWOOD S. MOORE, PH.D. 1909; Professor and Head of the Department of Geology and Mineralogy, State College, Pennsylvania.
- Geology of the Onaman Iron Range Area, District of Thunder Bay, Ontario. Doctor's thesis. 8vo, 60. Reprinted from the *Eighteenth Report of the Bureau of Mines, Ontario*, Part I, 1909.
- ALFRED REGINALD SCHULTZ, PH.D. 1905, Geologist, Mineral Division of Land Classification Board, United States Geological Survey, Washington.
- The Underground and Surface Water Supplies of Wisconsin* (with S. Weidman). Doctor's thesis. xxii+664. Bulletin of the Wisconsin Geological and Natural History Survey, No. 35 (1915). Madison, Wis.
- LUTHER CROCKER SNIDER, PH.D. 1915; Oil Geologist, Tulsa, Okla.
- I, *The Geology of a Portion of North-Eastern Oklahoma*; II, *The Palaeontology of the Chester Groups in Oklahoma*. Doctor's thesis. 8vo, 122, 7 plates. Bulletin of the Oklahoma Geological Survey, No. 24, Norman, Okla., 1915.
- CLINTON RAYMOND STAUFFER, PH.D. 1909; Associate Professor of Geology, University of Minnesota.
- The Middle Devonian of Ohio*. Doctor's thesis. 8vo, 204, 17 plates. Bulletin of the Geological Survey of Ohio, Fourth Series, No. 10, Springfield, Ohio, 1909.
- The Devonian Section on Ten Mile Creek, Lucas County, Ohio, *Ohio Naturalist*, VIII (1908), 271-76.

†GEORGE WILLIAM TIGHT, PH.D. 1902.

The Origin and Development of the Ohio River. Doctor's thesis.
United States Geological Survey, Washington, 1904.

JOHN LITTLEFIELD TILTON, PH.D. 1910; Professor of Geology, Simpson College, Indianola, Iowa.

The Pleistocene Deposits in Warren County, Iowa. Doctor's thesis. 8vo, iv+41. Chicago: University Press, 1911.

CHARLES W. TOMLINSON, PH.D. 1916.

The Origin of Red Beds: A Study of the Conditions of Origin of the Permocarboneferous and Triassic Red Beds of the Western United States, I, *Journal of Geology*, XXIV (1916), 153-79; II, *ibid.*, 238-53.

JOSEPH BERTRAM UMPLEBY, PH.D. 1910; Geologist, United States Geological Survey, Washington.

Geology and Ore Deposits of the Republic Mining District. Doctor's thesis. 8vo, 65. Bulletin of the Washington Geological Survey, No. 1 (1910), Olympia, Wash.

FRANK ALONZO WILDER, PH.D. 1902; Mining Engineer, North Holston, Va.

The Age and Origin of the Gypsum of Central Iowa. Doctor's thesis. *Journal of Geology*, XI (1903), 723-48.

HERRICK EAST WILSON, PH.D. 1913; United States National Museum, Washington.

Evolution of the Basal Plates in Monocyclic Crinoidea Camerata, I, *Journal of Geology*, XXIV (1916), 488-510, plates I-III; II, *ibid.*, 533-53; III, *ibid.*, 665-84.

GEORGE CHARLTON MATSON, Graduate Student.

A Contribution to the Study of the Interglacial Gorge Problem, *ibid.*, XII (1904), 133-51.

Peridotite Dikes near Ithaca, New York, *ibid.*, XIII (1905), 264-75.

REVIEWS: *Ibid.*, XIII, 277, 376-77.

† Deceased.

LEON P. SMITH, Graduate Student.

Zonal Weathering of a Hornblende Gabbro (with Albert D. Brokaw),
ibid., 200-205.

ABRAM OWEN THOMAS, Graduate Student.

A New Crinoid Fauna from Monticello, Iowa, *Proceedings of the Iowa Academy of Science*, XXII (1916), 289-91, 1 plate.

Some Unique Niagaran Cephalopods, *ibid.*, 292-300, 2 plates.

THE DEPARTMENT OF GEOGRAPHY

ROLLIN D. SALISBURY [1892-], Professor of Geographic Geology and
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of the Department of Geography, *ibid.*, 1903-.

Joint Editor (with T. C. Chamberlin), *Journal of Geology*, 1893-.

Assistant, United States Geologist, Glacial Division, 1882-92;
Geologist, United States Geological Survey, 1892-; Geologist in
charge of Pleistocene Geology of New Jersey, 1891-1910.

Geology. Vol. I, *Geologic Processes and Their Results*; Vol. II, *Earth
History: Genesis-Paleozoic*; Vol. III, *Earth History: Mesozoic-
Cenozoic* (with T. C. Chamberlin). 8vo, xix+654, xxvi+692, xi+
624. New York: Henry Holt & Co., 1904, 1906.

Physiography. 8vo, xx+770, 707 figs., 26 plates. New York: Henry
Holt & Co., 1907.

Physiography, Briefer Course. viii+531, 469 figs., 24 plates. New
York: Henry Holt & Co., 1908.

The Interpretation of Topographic Maps (with W. W. Atwood). 4to, 84,
170 plates. United States Geological Survey, Professional Paper
60, Washington, 1908.

College Geology (with T. C. Chamberlin). xvi+978. New York: Henry
Holt & Co., 1909.

Physiography, Elementary Course. xi+359. New York: Henry Holt
& Co., 1910.

- Elements of Geography* (with H. H. Barrows and W. S. Tower). 8vo, ix+616. New York: Henry Holt & Co., 1912.
- The Interpretation of Topographic Maps* (with A. C. Trowbridge). Laboratory Manual. 12mo, 64. New York: Henry Holt & Co., 1913.
- Studies in Geology* (with A. C. Trowbridge). 12mo, 68. New York: Henry Holt & Co., 1913.
- Historical and Structural Geology* (with A. C. Trowbridge). 12mo, 76. New York: Henry Holt & Co., 1913.
- Modern Geography* (with H. H. Barrows and W. S. Tower). 8vo, ix+418. New York: Henry Holt & Co., 1913.
- Introductory Geology* (with T. C. Chamberlin). 8vo, 708. New York: Henry Holt & Co., 1914.
- Glaciation in the Big Horn Mountains (with Eliot Blackwelder), *Journal of Geology*, XI (1903), 216-23.
- Pleistocene Formations (New York City District). New York Folio, *Geologic Atlas of the United States; United States Geological Survey*, No. 83 (1904), 11-17.
- New Physiographic Terms, *Journal of Geology*, XII (1904), 707-15.
- The Mineral Matter of the Sea, *Scottish Geographic Magazine*, XXI (1905), 132-36.
- The Mineral Matter of the Sea, with Some Speculations as to the Changes Which Have Been Involved in Its Production, *Journal of Geology*, XIII (1905), 469-84.
- Glacial Geology (Bighorn Mountains), Cloud Peak-Fort McKinney Folio, pp. 9-12, *United States Geological Survey*, 1906.
- Earthquakes and Their Causes, *World To-Day*, X (1906), 614-16.
- The Origin of the Earth, *ibid.*, XV (1908), 750-58.
- Quaternary System (Passaic Region). Passaic Folio (New Jersey-New York), pp. 14-20, *Geologic Atlas of the United States; United States Geological Survey*, 1908.
- Quaternary System (Franklin Furnace Region). Franklin Furnace Folio (New Jersey), pp. 13-18, *ibid.*, 1908.
- Quaternary System (Trenton Region). Trenton Folio (New Jersey-Pennsylvania), pp. 15-17, *ibid.*, 1909.

Quaternary System (Philadelphia Region). In Collaboration with G. N. Knapp. Philadelphia Folio (Pennsylvania-New Jersey-Delaware), pp. 12-15, *ibid.*, 1909.

The Teaching of Geography—A Criticism and a Suggestion, *Educational Bi-Monthly*, III (1909), 356-63.

Physical Geography of the Pleistocene with Special Reference to the Correlation of Pleistocene Formations, *Journal of Geology*, XVII (1909), 589-99.

Physiography in the High School, *Journal of Geography*, IX (1910), 57-63.

The Round Table Conference of the Association of American Geographers, 1910, *Educational Bi-Monthly*, V (1911), 402-6.

Geology of the Quaternary Period (Raritan Region), Raritan (N.J.) Folio, *United States Geological Survey*, 1914.

REVIEWS IN: *Bulletin of the American Geographical Society*, XXXVI, 702-5; *Journal of Geology*, X, 323-24; XII, 176, 563-64, 564-65; XIII, 87-88; XXIII, 380.

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Elements of Geology (with Eliot Blackwelder). 12mo, 475. New York: American Book Co., 1911.

Elements of Geography (with R. D. Salisbury and W. S. Tower). 8vo, ix+616. New York: Henry Holt & Co., 1912.

Modern Geography (with R. D. Salisbury and W. S. Tower). 8vo, ix+418. New York: Henry Holt & Co., 1913.

Geography of the Middle Illinois Valley. xii+125. *Illinois State Geological Survey*, 1910. Springfield, Ill.

Roosevelt Dam and the Salt River Valley, *Journal of Geography*, XI (1913), 277-84.

JOHN PAUL GOODE [1903-], Professor of Geography.

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Lecturer at the Summer Assembly at Baguio, 1911; General Secretary, American Association for the Advancement of Science, 1908; Vice-President of the Association of American Geographers, 1916-.

Associate Editor, *Journal of Geography*, 1901-10; Contributing Editor, *ibid.*, 1911-; Editor, "Regional Geographies of the United States," 1916-.

Member, Chicago Harbor Commission for the Investigation of the Ports of Europe, 1908-9 (Report: *What the Ports of Europe Are Doing; and Chicago's Commercial Opportunity*. 8vo, 103); Convoy for the Commercial Commissioners of Japan in their American tour, 1909.

Lantern Slide Illustrations for the Teaching of Meteorology. Bulletin No. 3, Geographic Society of Chicago (editor with H. J. Cox). 8vo, 130. Chicago: University Press, 1906.

A Series of Outline Maps: (1) The World: on Mercator's projection; (2) North America: on an equal-area projection; (3) South America: Sanson's projection; (4) Europe: conic projection; (5) Asia: Lambert's equal area; (6) Africa: Sanson's projection; (7) Australasia: Mercator's projection; (9) America (U.S.): conic projection; (10) America (U.S.): state outlines only; conic projection; (14) The British Isles: conic projection; (16) Europe, Western and Southern: conic projection; (17) France: conic projection; (18) The Spanish Peninsula: conic projection; (19) Italy: conic projection; (20) Central Europe: conic projection; (21) The German Empire: conic projection; (24) The Levant: conic projection; (32) Map of America (U.S.) showing all counties with names; (33) Chicago and Vicinity. In two sizes: $8 \times 10\frac{1}{2}$, $15 \times 10\frac{1}{2}$ inches. Chicago: University Press, 1912-.

Physical Wall Map of Europe, 66" \times 46". Scale 1:4,500,000 = 70 miles per inch. Chicago: Rand McNally & Co., 1913.

Political Wall Map of Europe, 66" \times 46". Scale 1:4,500,000 = 70 miles per inch. *Ibid.*, 1913.

Physical Wall Map of North America, 46" \times 66". Scale 1:6,167,209 = 97 miles per inch. *Ibid.*, 1914.

Political Wall Map of North America, 46" \times 66". Scale 1:6,167,209 = 97 miles per inch. *Ibid.*, 1914.

Physical Wall Map of Eurasia, 66" \times 46". Scale 1:9,376,330 = 148 miles per inch. *Ibid.*, 1914.

Political Wall Map of Eurasia, 66" \times 46". Scale 1:9,376,330 = 148 miles per inch. *Ibid.*, 1914.

Physical Wall Map of Africa, 66"×46". Scale 123 miles per inch.
Ibid., 1915.

Political Wall Map of Africa, 66"×46". Scale 123 miles per inch.
Ibid., 1915.

Physical Wall Map of South America, 46"×66". Scale 1:6,167,209=
97 miles per inch. *Ibid.*, 1915.

Political Wall Map of South America, 46"×66". Scale 1:6,167,209=
97 miles per inch. *Ibid.*, 1915.

Physical Wall Map of the United States of America, 66"×46". Scale
1:3,000,000=47.6 miles per inch. *Ibid.*, 1915.

Political Wall Map of the United States of America, 66"×46". Scale
1:3,000,000=47.6 miles per inch. *Ibid.*, 1915.

Physical Wall Map of the World on Mercator's Projection, 66"×46".
Scale 1:26,294,400=415 miles per inch. *Ibid.*, 1915.

Political Wall Map of the World on Mercator's Projection, 66"×46".
Scale 1:26,294,400=415 miles per inch. *Ibid.*, 1915.

Physical Map of Australia and the Philippines, 46"×66". Scale
1:5,639,040=89 miles per inch. *Ibid.*, 1916.

Political Wall Map of Australia and the Philippines, 46"×66". Scale
1:5,639,040=89 miles per inch. *Ibid.*, 1916.

Physical Map of the World in Hemispheres, 46"×66". *Ibid.* In Press.

Political Map of the World in Hemispheres, 46"×66". *Ibid.* In Press.

Injuries to the Eye Caused by Intense Light, *Science*, XIV (1902), 433.

Geographical Societies in America, *ibid.*, XV (1902), 592.

Home Geography: A Series of Eight Papers, *School News*, XVI (1902-3).

Geography in the Illinois Schools: Suggestions for a Course of Study,
ibid.

Geographical Societies in America, *Journal of Geography*, II (1903),
342-50.

Rapid Memory Map Work, *New York Teachers' Monographs*, V (1903),
64-70.

Eighth Year Geography: A Series of Eight Papers, *School News*, XVII
(1903-4).

Seventh Year Geography: A Series of Eight Papers, *School News*, XVIII (1904-5).

The Human Response to the Physical Environment, *Journal of Geography*, III (1904), 333-43; published also in *Elementary School Teacher*, IV (1904), 271-82.

Plant Action in the Formation of Caves and Cliffs (with O. W. Caldwell), *School Science and Mathematics*, V (1905), 631-38.

A New Method of Representing the Earth's Surface: The van der Grinten Projection, *Journal of Geography*, IV (1905), 369-73.

A Model Series of Base Maps, *ibid.*, 373-77.

Commercial Geography in Secondary Schools, *ibid.*, 425-32.

Laboratory Work with the Sun, *ibid.*, V (1906), 97-108.

Commercial Geography for Secondary Schools, *School Science and Mathematics*, VII (1906), 569-77.

The Use of the Lantern in Teaching Meteorology, *Monthly Weather Review*, XXXIV (1906), 263-64.

The Commercial Factor and Its Place in General Geography, *Educational Bi-Monthly*, I (1906), 129-32.

The Story of the Manchester Ship Canal, *World To-Day*, XVI (1909), 617-25.

A Study of Tropical Forests, *Science*, XXXII (1910), 23-24.

Some Fundamental Principles of Japanese Education, *School Review*, XVIII (1910), 634-36.

A Permanent Insular Exposition, *Cable-News American*, 1911, pp. 50-97.

The Forests of the Philippines, *Bulletin of the American Geographical Society*, XLIV (1912), 81-89.

The Rio Theodoro, Colonel Roosevelt's New River, *Journal of Geography*, XIV (1915), 7-9.

REVIEWS IN: *School Review*, X, 643-44; XIV, 457-58, 464; XV, 621-22; *Journal of Geology*, XVIII, 565-66; *Science*, XXXII, 906-7, 955-57; *Annals of the American Association of Political and Social Science*, XLII, 358-59, 373-74; *Journal of Political Economy*, XVI, 309-11; *American Journal of Sociology*, XVI, 129-30; *Geographical Record*, I, 68.

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Elements of Geography (with H. H. Barrows and R. D. Salisbury). 8vo, ix+616. New York: Henry Holt & Co., 1912.

Modern Geography (with H. H. Barrows and R. D. Salisbury). 8vo, ix+418. New York: Henry Holt & Co., 1913.

The Paraná River, *Journal of Geography*, XI (1912), 119-26.

The Economic Resources of Chile, *Bulletin of the Pan-American Union*, XXXVI (1913), 207-23.

The Nitrate Fields of Chile, *Popular Science Monthly*, LXXXIII (1913), 209-30.

Notes on the Commercial Geography of South America, *Bulletin of the American Geographical Society*, XLV (1913), 881-901.

The Question of Field Work in Geography, *Journal of Geography*, XII (1914), 345-49.

A Journey through Argentina, *Bulletin of the Geographical Society of Philadelphia*, XII (1914), 89-113.

The Purpose of Political Geography, *School Science and Mathematics*, XV (1915), 134-40.

The Andes as a Factor in South American Geography, *Journal of Geography*, XV (1916), 1-8.

Buying South American Goods as a Factor in Selling to South America, *Journal of Political Economy*, XXIV (1916), 897-902.

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S.B. University of Chicago, 1907; Assistant in Geography, *ibid.*, 1909-11; Instructor, *ibid.*, 1913-16; Assistant Professor, *ibid.*, 1916-

Outline for Field Work in Geography (with Carl O. Sauer), *Bulletin of the American Geographical Society*, XLVII (1915), 520-25.

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Contributing Editor, *Journal of Geography*, 1914-16.

- The Geography of Minnesota, *Encyclopedia for High Schools*. Chicago: Hanson-Bellows Co.
- The Driftless Area of Minnesota, *Journal of Geography*, XIV (1916), 165-67.
- MARY JEAN LANIER [1910-17], Instructor in Geography; Wellesley College.
S.B. Chicago, 1909; Assistant in Geography, *ibid.*, 1910-12; Instructor, *ibid.*, 1913-17.
- The Subject-Matter for an Elementary Course in Economic and Commercial Geography, *Journal of Geography*, XII (1914), 351-54.
- FREDERICK VALENTINE EMERSON, PH.D. 1907; Professor of Geology and Mineralogy, University of Louisiana, and Geologist to the Experiment Station, Baton Rouge, La.
- A Geographic Interpretation of New York City. Doctor's thesis. Part I, *Bulletin of the American Geographical Society*, XL (1908), 587-612; Part II, *ibid.*, 726-38; Part III, *ibid.*, XLI (1909), 3-21.
- ALMON ERNEST PARKINS, PH.D. 1914; Head of the Department of Geography, George Peabody College for Teachers, Nashville, Tenn.
Historical Geography of Detroit. Doctor's thesis. Lansing, Mich.: Michigan Historical Commission. In Press.
- CARL ORTWIN SAUER, PH.D. 1915; Instructor in Geography, University of Michigan.
Geography of the Upper Illinois Valley and the History of Its Development, *Bulletin of the State Geological Survey of Illinois*, 1916, pp. 1-208.
Outline for Field Work in Geography (with W. D. Jones), *Bulletin of the American Geographical Society*, XLVII (1915), 520-25.
- STEPHEN SARGENT VISHER, PH.D. 1914; Professor of Geography, State Normal, Moorhead, Minn.
The Biology of Northwestern South Dakota, *Bulletin of the South Dakota Geological Survey*, No. 6 (1914), 1-103.
The Influence of the Biota and the Significance of Biogeography, *Bulletin of the American Geographical Society*, XLVII (1915), 509-20.

The Biogeography of the Northern Great Plains, *Geographical Review*, II (1916), 89-115.

The Geography of South Dakota. Doctor's thesis. *Bulletin of the South Dakota Geological Survey*. In Press.

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Managing Editor, *Biological Bulletin*, 1902-; Member, Board of Editors, *Journal of Morphology*, 1903-9; Associate Editor, *Journal of Experimental Zoölogy*, 1904-.

Laboratory Outline for the Study of the Embryology of the Chick and the Pig. 1st ed., 1904; 2d ed., 1906; 3d ed., 1913. Chicago: University Press.

The Development of the Chick. An Introduction to Embryology. 8vo, xi+472. New York: Henry Holt & Co., 1908.

Experimental Studies on the Development of the Organs in the Embryo of the Fowl (*Gallus domesticus*):

I. Experiments on the Amnion and the Production of Anamniote Embryos of the Chick, *Biological Bulletin*, V (1903), 92-124.

II. The Development of Defective Embryos and the Power of Regeneration, *ibid.*, VII (1904), 33-54.

Observations and Experiments concerning the Elementary Phenomena of Embryonic Development in *Chaetopterus*, *Journal of Experimental Zoölogy*, III (1906), 153-268; with 76 text figures and 1 plate.

The Biological Significance of Sexual Differentiation—A Zoölogical Point of View, *Science*, XXV (1907), 372-76.

Co-operation in Biological Research, *ibid.*, XXVII (1908), 369-72.

- On the Specific Gravity of the Constituent Parts of the Egg of *Chaetopterus* and the Effect of Centrifuging on the Polarity of the Egg, *Science*, XXVII (1908), 905-7.
- A Contribution toward an Experimental Analysis of the Karyokinetic Figure, *ibid.*, 907-8.
- Polarity and Bilaterality of the Annelid Egg: Experiments with Centrifugal Force, *Biological Bulletin*, XVI (1909), 54-79.
- Karyokinetic Figures of Centrifuged Eggs, *ibid.*, XVII (1909), 101-19.
- The Theory of Individual Development, *Popular Science Monthly*, 1909, pp. 239-52.
- On the Teaching of the Elements of Embryology, *Science*, XXIX (1909), 932-34.
- The Fertilization Membrane of *Nereis*, *ibid.*, XXXI (1910), 464-65.
- Function of the Spermatozoön in Fertilization, from Observations on *Nereis*, *ibid.*, 836.
- Studies of Fertilization in *Nereis*:
- I. The Cortical Changes in the Egg, *Journal of Morphology*, XXII (1911), 361-66.
 - II. Partial Fertilization, *ibid.*, 366-93.
 - III. The Morphology of the Normal Fertilization of *Nereis*, *Journal of Experimental Zoölogy*, XII (1912), 413-27.
 - IV. The Fertilizing Power of Portions of the Spermatozoön, *ibid.*, 427-76.
 - V. The Behavior of Spermatozoa of *Nereis* and *Arbacia* with Especial Reference to Egg-Extractives, *ibid.*, XIV (1913), 515-74.
 - VI. The Mechanism of Fertilization in *Arbacia*, *ibid.*, XVI (1914), 524-90.
 - VII. Analysis of Variations in the Fertilizing Power of Sperm Suspensions of *Arbacia*, *Biological Bulletin*, XXVIII (1915), 18-33.
- Charles Otis Whitman—An Appreciation, *Science*, XXXIII (1911), 54-56.
- Charles Otis Whitman, *Journal of Morphology* (Whitman Memorial Volume), XXII (1911), xv-lxxvi.

- The Penetration of the Spermatozoön and the Origin of the Sperm Aster in the Egg of *Nereis* (abstract), *Science*, XXXV (1912), 471.
- The Production of Sperm Iso-agglutinins by Ova, *ibid.*, XXXVI (1912), 527-30.
- Breeding Habits of the Heteronereis Form of *Nereis limbata* at Woods Hole, Mass. (with E. E. Just), *Biological Bulletin*, XXIV (1913), 147-68.
- The Marine Biological Laboratory at Woods Hole, *Internationale Revue der gesamten Hydrobiologie und Hydrographie*, V (1912), 583-89.
- The Mechanism of Fertilization, *Science*, XXXVIII (1913), 524-28.
- Sperm Agglutination and Fertilization, *Biological Bulletin*, XXVIII (1915), 18-33.
- The Fertilizing Power of Sperm Dilutions of *Arbacia*, *Proceedings of the National Academy of Sciences*, I (1915), 156-60.
- August Weismann (biographical sketch), *American Museum Journal*, XV (1915), 189-93.
- The History of the Fertilization Problem, *Science*, XLIII (1916), 39-53.
- The Theory of the Free-Martin, *ibid.*, 611-13.

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Editor, *Journal of Morphology*, *Biological Bulletin*, and *Biological Lectures*.

- The Impending Crisis in the History of the Marine Biological Laboratory, *Science*, XVI (1902), 529-33.
- A Biological Farm for the Experimental Investigation of Heredity, Variation, and Evolution, and for the Study of Life Histories, Habits, Instincts, and Intelligence, *Biological Bulletin*, III (1902), 214-24; *Science*, XVI (1902), 504-10.

† Deceased.

The Origin and Relationship of the Rock Pigeons as Revealed in Their Color-Patterns, *Biological Bulletin*, VI (1904), 307-8.

Hybrids from Wild Species of Pigeons Crossed Inter-Se and with Domestic Races, *ibid.*, 315-16.

The Problem of the Origin of Species, *Proceedings of the Congress of Arts and Sciences*, V (1904), 41-58.

The Origin of Species, *Bulletin of the Wisconsin Natural History Society*, V (1907), 6-14.

Chequers and Bars in Pigeons and the Direction of Evolution, *Agricultural Magazine*, V (1907), 174-82.

CHARLES MANNING CHILD [1895-], Professor of Zoölogy.

Ph.B. Wesleyan College, Connecticut, 1890; S.M. *ibid.*, 1892; Ph.D. Leipzig, 1894; Assistant Professor of Zoölogy, Chicago, 1905-9; Associate Professor, *ibid.*, 1909-1916; Professor, *ibid.*, 1916-.

Die physiologische Isolation von Teilen des Organismus. 8vo, vi+157. Leipzig: Wilhelm Engelmann, 1911.

Senescence and Rejuvenescence. 8vo, vii+481. Chicago: University Press, 1915.

Individuality in Organisms. 12mo, x+213. Chicago: University Press, 1915.

Abnormalities in the Cestode *Moniezia Expansa*, III, *Biological Bulletin*, III (1902), 95-114, 143-60.

Studies on Regulation:

- I. Fission and Regulation in *Stenostomum*, Parts I and II, *Archiv für Entwicklungsmechanik der Organismen*, XV (1902), 187-237. Part III, *ibid.*, 355-420.
- II. Experimental Control of Form Regulation in *Stenostomum*, *ibid.* (1903), 603-37.
- III. Regulative Destruction of Zoöids and Parts of Zoöids in *Stenostomum*, *ibid.*, XVII (1903), 1-40.
- IV. Some Experimental Modifications of Form Regulation in *Leptoplana*, *Journal of Experimental Zoölogy*, I (1904), 95-133.
- V. The Relation between the Central Nervous System and Regeneration in *Leptoplana*: Posterior Regeneration, *ibid.*, 464-512.

- VI. The Relation between the Central Nervous System and Regulation in *Leptoplana*: Anterior and Lateral Regeneration, *ibid.*, 513-57.
- VII. Further Experiments on Form Regulation in *Leptoplana*, *ibid.*, II (1905), 253-85.
- VIII. Functional Regulation and Regeneration in *Cestoplana*, *Archiv für Entwicklungsmechanik der Organismen*, XIX (1905), 261-94.
- IX. The Positions and Proportions of Parts during Regulation in *Cestoplana* in the Presence of the Cephalic Ganglia, *ibid.*, XX (1905), 48-75.
- X. The Positions and Proportions of Parts during Regulation in *Cestoplana* in the Absence of the Cephalic Ganglia, *ibid.*, 157-86.
- XI. Functional Regulation in the Intestine of *Cestoplana*, *Journal of Experimental Zoölogy*, IV (1907), 357-98.

Form Regulation in Coelenterata and Turbellaria, *Smithsonian Miscellaneous Collection* (Quarterly Issue), XLV (1903), 134-43.

Regeneration of the Appendages in Nymphs of the Agrionidae (with A. M. Young), *Archiv für Entwicklungsmechanik der Organismen*, XV (1903), 543-602.

Form Regulation in *Cerianthus*:

- I. The Typical Course of Regeneration, *Biological Bulletin*, V (1903), 239-60.
- II. The Effect of Position, Size, and Other Factors upon Regeneration, *ibid.*, 304-19; Discussion of Results, *ibid.*, VI (1903), 1-11.
- III. The Initiation of Regeneration, *ibid.* (1904), 56-74.
- IV. The Rôle of Water-Pressure in Regeneration, *ibid.*, 266-86.
- V. The Rôle of Water-Pressure in Regeneration: Further Experiments, *ibid.*, VII (1904), 127-53.
- VI. Certain Special Cases of Regulation and Their Relation to Internal Pressure, *ibid.*, 193-214.
- VII. Tentacle-Reduction and Other Experiments, *ibid.*, 263-79.
- VIII. Supplementary and Partial Discs and Heteromorphic Tentacles, *ibid.*, VIII (1905), 93-122.
- IX. Regulation, Form, and Proportion, *ibid.*, 271-89.

Amitosis in *Moniezia*, *Anatomischer Anzeiger*, XXV (1904), 545-58.

Regeneration in Nudibranchs, *Science*, XXI (1905), 851.

Contributions toward a Theory of Regulation: I, The Significance of the Different Methods of Regulation in *Turbellaria*, *Archiv für Entwicklungsmechanik der Organismen*, XX (1906), 380-426.

The Relation between Regulation and Fission in *Planaria*, *Biological Bulletin*, XI (1906), 113-23, figs. 1-19.

Some Considerations regarding So-called Formative Substances, *ibid.*, 165-81.

The Development of Germ Cells from Differentiated Somatic Cells in *Moniezia*, *Anatomische Anzeiger*, XXIX (1906), 592-97.

The Relation between Functional Regulation and Form Regulation, *Journal of Experimental Zoölogy*, III (1906), 559-82.

Studies on the Relation between Amitosis and Mitosis:

I. Development of the Ovaries and Oögenesis in *Moniezia*, *Biological Bulletin*, XII (1906), 89-114, figs. 1-35.

II. Development of the Testes and Spermatogenesis in *Moniezia*, *ibid.* (1907), 175-225, plates VII-XVI.

III. Maturation, Fertilization, and Cleavage in *Moniezia*, *ibid.*, XIII (1907), 138-60, plates II-VII.

IV. Nuclear Division in the Somatic Structures of the Proglottids of *Moniezia*, *ibid.*, 165-69, plates VIII-X.

V. General Discussion and Conclusions concerning Amitosis and Mitosis in *Moniezia*, *ibid.*, 169-84.

Amitosis as a Factor in Normal and Regulatory Growth, *Anatomischer Anzeiger*, XXX (1907), 271-97.

The Localization of Different Methods of Form Regulation in *Polycheorus caudatus*, *Archiv für Entwicklungsmechanik der Organismen*, XXIII (1907), 227-48.

An Analysis of Form Regulation in *Tubularia*:

I. Stolon Formation and Polarity, *ibid.*, 396-414.

II. Differences in Proportion in the Primordia, *ibid.*, 415-44.

III. Regional and Polar Differences in the Relation between Primordium and Hydranth, *ibid.*, 445-56.

- IV. Regional and Polar Differences in the Time of Hydranth-Formation as a Special Case of Regulation in a Complex System, *ibid.*, XXIV (1907), 1-28.
- V. Regulation in Short Pieces, *ibid.*, 285-316.
- VI. The Significance of Certain Modifications of Regulation: Polarity and Form Regulation in General, *ibid.*, 317-49.
- Some Corrections and Criticisms, *ibid.*, 131-46.
- Form Regulation in *Cerianthus aestuarii*, *Biological Bulletin*, XV (1908), 27-53.
- The Physiological Basis of Restitution of Lost Parts, *Journal of Experimental Zoölogy*, V (1908), 485-502.
- Driesch's Harmonic-Equipotential Systems in Form Regulation, *Biologisches Centralblatt*, XXVIII (1908), 577-623.
- Regulation of *Harenactis attenuata* in Altered Environment, *Biological Bulletin*, XVI (1908), 1-17, figs. 1-16.
- The Regulation of Mutilated Primordia in *Tubularia*, *Archiv für Entwicklungsmechanik der Organismen*, XXVII (1909), 106-18, figs. 1-20.
- Experimental Control of Certain Regulatory Processes in *Harenactis attenuata*, *Biological Bulletin*, XVI (1909), 47-53, figs. 1-6.
- The Regulatory Change of Shape in *Planaria dorotocephala*, *ibid.*, 277-96, figs. 1-20.
- Factors of Form Regulation in *Harenactis attenuata*:
- I. Wound Reaction and Restitution in General and the Regional Factor in Oral Restitution, *Journal of Experimental Zoölogy*, VI (1909), 471-506.
 - II. Aboral Restitution, Heteromorphosis, and Polarity, *ibid.*, VII (1909), 65-96, figs. 1-12.
 - III. Regulation in "Rings," *ibid.*, 353-95, figs. 1-31.
- The Occurrence of Amitosis in *Moniezia*, *Biological Bulletin*, XVIII (1910), 109-19.
- Analysis of Form Regulation with the Aid of Anesthetics, *ibid.*, 161-73.
- Physiological Isolation of Parts and Fission in *Planaria*, *Archiv für Entwicklungsmechanik der Organismen*, XXX (1910), 159-205, figs. 1-14.

The Central Nervous System as a Factor in the Regeneration of Polyclad *Turbellaria*, *Biological Bulletin*, XIX (1910), 333-38, figs. 1-4.

Further Experiments on Adventitious Reproduction and Polarity in *Harenactis*, *ibid.*, XX (1910), 1-13, figs. 1-11.

Studies on the Dynamics of Morphogenesis and Inheritance in Experimental Reproduction:

- I. The Axial Gradient in *Planaria dorocephala* as a Limiting Factor in Regulation, *Journal of Experimental Zoölogy*, X (1911), 265-320, figs. 1-41.
 - II. Physiological Dominance of Anterior over Posterior Regions in the Regulation of *Planaria dorocephala*, *ibid.*, XI (1912), 187-220, figs. 1-21.
 - III. The Formation of New Zoöids in *Planaria* and Other Forms, *ibid.*, 221-80, figs. 1-36.
 - IV. Certain Dynamic Factors in the Regulatory Morphogenesis of *Planaria dorocephala* in Relation to the Axial Gradient, *ibid.*, XIII (1912), 103-52, figs. 1-46.
 - V. The Relation between Resistance to Depressing Agents and Rate of Metabolism in *Planaria dorocephala* and Its Value as a Method of Investigation, *ibid.*, XIV (1913), 153-206.
 - VI. The Nature of the Axial Gradients in *Planaria* and Their Relation to Antero-posterior Dominance, Polarity, and Symmetry, *Archiv für Entwicklungsmechanik der Organismen*, XXXVI (1913), 108-58.
 - VII. The Stimulation of Pieces by Section in *Planaria dorocephala*, *Journal of Experimental Zoölogy*, XVI (1914), 413-41.
 - VIII. Dynamic Factors in Head-Determination in *Planaria*, *ibid.*, XVII (1914), 61-79.
 - IX. The Control of Head-Form and Head Frequency in *Planaria* by Means of Potassium Cyanide, *ibid.*, XX (1916), 101-26.
- A Study of Senescence and Rejuvenescence Based on Experiments with *Planaria dorocephala*, *Archiv für Entwicklungsmechanik der Organismen*, XXXI (1911), 537-616, 14 curves and 1 fig.
- Experimental Control of Morphogenesis in the Regulation of *Planaria*, *Biological Bulletin*, XX (1911), 309-31, figs. 1-37.
- The Regulatory Processes in Organisms, *Journal of Morphology* (Whitman Memorial Volume), XXII (1911), 171-222.

- The Method of Cell Division in *Moniezia*, *Biological Bulletin*, XXI (1911), 280-96, figs. 1-16.
- The Central Nervous System in the Teratophthalmic and Teratomorphic Forms of *Planaria dorotocephala* (with E. V. M. McKie), *ibid.*, XXII (1912), 39-59, figs. 1-31.
- The Process of Reproduction in Organisms, *ibid.*, XXIII (1912), 1-37.
- Certain Dynamic Factors in Experimental Reproduction and Their Significance for the Problems of Reproduction and Development, *Archiv für Entwicklungsmechanik der Organismen*, XXXV (1913), 598-641.
- The Asexual Cycle of *Planaria velata* in Relation to Senescence and Rejuvenescence, *Biological Bulletin*, XXV (1913), 181-203.
- Susceptibility Gradients in Animals, *Science*, XXXIX (1914), 73-76.
- The Axial Gradient in Ciliate Infusoria, *Biological Bulletin*, XXVI (1914), 36-54.
- Starvation, Rejuvenescence, and Acclimation in *Planaria dorotocephala*, *Archiv für Entwicklungsmechanik der Organismen*, XXXVIII (1914), 418-46.
- Asexual Breeding and Prevention of Senescence in *Planaria velata*, *Biological Bulletin*, XXVI (1914), 286-93.
- A Dynamic Conception of the Organic Individual, *Proceedings of the National Academy of Sciences*, I (1915), 164-72.
- Axial Gradients in the Early Development of the Starfish, *American Journal of Physiology*, XXXVII (1915), 203-19.
- Axial Susceptibility Gradients in the Early Development of the Sea Urchin, *Biological Bulletin*, XXX (1916), 391-405.
- The Basis of Physiological Individuality in Organisms, *Science*, XLIII (1916), 511-23.
- Axial Susceptibility Gradients in Algae, *Botanical Gazette*, LXII (1916), 89-114.
- Experimental Control and Modification of Larval Development in the Sea Urchin in Relation to the Axial Gradients, *Journal of Morphology*, XXVIII (1916), 65-116.
- The Basis of Physiological Individuality in Organisms, *Science*, XLIII (1916), 511-23.

Further Observations on Susceptibility Gradients in Algae, *Biological Bulletin*, XXXI (1916), 419-40.

REVIEWS OF: Conklin, The Organization and Cell-Lineage of the Ascidian Egg, *Science*, XXIII, 340-44; Morgan, Experimental Zoölogy, *ibid.*, XXVI, 824-29; Roux, Terminologie der Entwicklungsmechanik der Tiere und Pflanzen, *ibid.*, XXXVII, 102; Benedict, Age Changes in Leaves, *Botanical Gazette*, XLI, 435-38.

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The Biology of Twins (Mammals). 12mo, ix+186. Chicago: University Press, 1917.

The Significance of Scute and Plate Abnormalities in *Chelonia*. Doctor's thesis. *Biological Bulletin*, X (1906), 68-114.

Reply to E. Godlewski's "Bemerkungen von H. H. Newman: 'Further Studies of the Process of Heredity in *Fundulus* Hybrids,'" *Archiv für Entwicklungsmechanik der Organismen*, XXXII (1911), 472-76.

The Limits of Hereditary Control in Armadillo Quadruplets: A Study of Blastogenic Variation (with J. T. Patterson), *Journal of Morphology*, XXII (1911), 855-926, 24 figs.

The Ovum of the Nine-banded Armadillo: Growth of the Ovocytes, Maturation, and Fertilization, *Biological Bulletin*, XXIII (1912), 100-141.

Parthenogenetic Cleavage of the Armadillo Ovum, *ibid.*, XXV (1913), 52-79.

Five Generations of Congenital Stationary Night-Blindness in an American Family, *Journal of Genetics*, III (1913), 26-38.

The Natural History of the Nine-banded Armadillo, *American Naturalist*, XLVII (1913), 513-39.

The Modes of Inheritance of Aggregates of Meristic (Integral) Variates in the Polyembryonic Offspring of the Nine-banded Armadillo, *Journal of Experimental Zoölogy*, XV (1913), 145-92.

Modes of Inheritance in Teleost Hybrids, *ibid.*, XVI (1914), 447-500.

Development and Heredity in Heterogenic Teleost Hybrids, *ibid.*, XVIII (1915), 511-76.

Heredity and Organic Symmetry in Armadillo Quadruplets:

I. Modes of Inheritance of Band Anomalies, *Biological Bulletin*, XXIX (1915), 1-32.

II. Modes of Inheritance of Double Scutes and a Discussion of Organic Symmetry, *ibid.*, XXX (1916), 173-209.

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Associate Editor, *American Naturalist*, 1897-; *Biometrika*, 1901-; *Journal of Experimental Zoölogy*, 1898-; Editor, "Cold Spring Harbor Monographs," 1900-.

The Collembola of Cold Spring Harbor Beach, with Special Reference to the Movements of the Poduridæ, "Cold Spring Harbor Monographs,"

II. 8vo, 32.

Comparison of Some Pectens from the East and the West Coasts of the United States, *Mark Anniversary Volume*, pp. 123-36, plate IX.

Comparison of *Pecten opercularis* from Three Localities of the British Isles, *Proceedings of the American Academy of Arts and Sciences*, XXXIX (1903), 123-59.

Color Inheritance in Mice, *Science*, XIX (1904), 110-14.

Wonder Horses and Mendelism, *ibid.*, 151-53.

Report on the Fresh Water Bryozoa of the United States, *Proceedings of the United States National Museum*, XXVII (1904), 211-21, plate VI.

Studies in the Evolution of *Pecten*: IV, Ray Variability in *Pecten varius* (with Marian E. Hubbard), *Journal of Experimental Zoölogy*, I (1904), 607-16.

ELLIOT ROWLAND DOWNING [1911-], Associate Professor of Natural Science, College of Education. See under College of Education, p. 483.

WILLIAM LAWRENCE TOWER [1901-], Associate Professor of Embryology.

S.B. Chicago, 1902; Assistant in Zoölogy, Harvard College, 1895-96; Professor of Biology and Hoagland Professor of Physiology, Antioch, 1900-1901; Assistant Professor of Embryology, Chicago, 1907-11; Associate Professor, *ibid.*, 1911-.

An Investigation of Evolution in Chrysolimid Beelles of the Genus Leptero-larsa. Large 8vo, x+320, 30 plates. Washington: Carnegie Institution, Publication No. 48, 1906.

Determination of Dominance, *Biological Bulletin*, XVIII (1910), 285-340.

Organic Evolution, *American Yearbook* (1912), 659-65; with J. G. Sinclair (1913), 671-74; (1914), 639-44; (1915), 637-43.

Recent Advances and the Present State of Knowledge concerning the Modification of the Germinal Constitution of Organisms by Experimental Processes. Chap. vii, pp. 141-265, in *Heredity and Eugenics* (University of Chicago Press, 1912).

OSCAR RIDDLE [1904-10], Instructor in Zoölogy; Resident Investigator, Station for Experimental Evolution (of the Carnegie Institution), Cold Spring Harbor, N.Y.

A.B. Indiana, 1902; Ph.D. Chicago, 1907; Laboratory Assistant in Zoölogy, *ibid.*, 1904-7; Associate in Experimental Therapeutics, *ibid.*, 1907-8; Instructor in Experimental Therapeutics and Zoölogy, *ibid.*, 1908-9; Instructor in Zoölogy, *ibid.*, 1909-10.

A Study of Fundamental Bars in Feathers, *Biological Bulletin*, XII (1907), 165-75.

The Blood Pressures of Birds and Their Modification by Drugs (with S. A. Matthews), *American Journal of Physiology*, XIX (1907), 108-16.

The Cause of the Production of Down and Other Down-like Structures in the Plumages of Birds, *Biological Bulletin*, XIV (1908), 163-75.

The Genesis of Fault-Bars in Feathers and the Cause of Alternation of Light and Dark Fundamental Bars. Doctor's thesis. *Ibid.*, 328-70.

Our Knowledge of Melanin Color Formation and Its Bearing on the Mendelian Description of Heredity, *ibid.*, XVI (1909), 316-51.

The Rate of Digestion in Cold-blooded Vertebrates—The Influence of Season and Temperature, *American Journal of Physiology*, XXIV (1909), 447-58.

Experiments on Melanin Color Formation: Against the Current Mendelian Hypothesis of Color Development, *Verhandlungen des Internationalen Zoologen-Kongresses zu Graz*, VIII (1910), 311-19.

Studies with Sudan III in Metabolism and Inheritance, *Journal of Experimental Zoölogy*, VIII (1910), 163-84.

On the Formation, Significance, and Chemistry of the White and Yellow Yolk of Ova, *Journal of Morphology*, XXII (1911), 455-91.

On the Cause of Autotomy in *Tubularia*, *Biological Bulletin*, XXI (1911), 389-95.

On Inducing Hens to Preserve Their Own Eggs, etc., *Science*, XXXIV (1911), 887-89.

VICTOR ERNEST SHELFORD [1905-14], Instructor in Zoölogy; Assistant Professor of Zoölogy, University of Illinois, and Biologist, Illinois State Laboratory of Natural History.

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Animal Communities in Temperate America. 8vo, 375. Chicago: University Press, 1913.

The Distribution of the Tiger Beetles and Its Relation to Plant Succession, *Biological Bulletin*, XIV (1907), 9-14.

Life Histories and Larval Habits of the Tiger Beetles. Doctor's thesis. *Linnaean Society's Journal of Zoölogy*, XXX (1908), 157-84.

Ecological Succession of Fish and Its Bearing on Fish Culture, *Transactions of the Illinois State Academy of Science*, III (1910), 108-10.

Ecological Succession:

I. Stream Fishes and Physiographic Analysis, *Biological Bulletin*, XXI (1911), 9-34.

II. Pond Fishes, *ibid.*, 126-51.

III. A Reconnaissance of Its Causes in Ponds with Particular Reference to Fish, *ibid.*, XXII (1911), 1-38.

IV. Vegetation and the Control of Land Animal Communities, *ibid.*, XXIII (1912), 59-99.

V. Aspects of Physiological Classification, *ibid.*, 331-70.

Physiological Animal Geography, *Journal of Morphology* (Whitman Memorial Volume), XXII (1911), 551-617.

- An Index of Fish Environments (with W. C. Allee), *Science*, XXXVI (1912), 76-77.
- The Reactions of Fishes to Gradients of Dissolved Atmospheric Gases (with W. C. Allee), *Journal of Experimental Zoölogy*, XIV (1913), 207-66.
- Noteworthy Variation in the Elytral Tracheation of *Cicindela*, *Entomological News*, XXIV (1913), 124-25.
- The Life History of *Spogostylum*, *Annals of the Entomological Society of America*, VI (1913), 213-25.
- The Reactions of Certain Animals to Gradients of Evaporating Power of Air, *Biological Bulletin*, XXV (1913), 79-120.
- Rapid Modification of the Behavior of Fishes by Contact with Modified Water (with W. C. Allee), *Journal of Animal Behavior*, IV (1914), 1-30.
- Modification of the Behavior of Land Animals by Contact with Air of High Evaporating Power, *ibid.*, 31-49.
- The Importance of the Measure of Evaporation in Economic Studies of Insects, *Journal of Economic Entomology*, VII (1914), 229-33.
- An Experimental Study of the Behavior Agreement among the Animals of an Animal Community, *Biological Bulletin*, XXVI (1914), 294-315.
- REUBEN MYRON STRONG [1901-2; 1904-14], Instructor in Zoölogy; Professor, Vanderbilt University Medical School, Nashville, Tenn. A.B. Oberlin, 1897; Ph.D. Harvard, 1901; Assistant in Botany and Physiography, Morgan Park Academy, 1901-2; Instructor in Biology, Haverford College, 1902-3; Associate in Zoölogy, Chicago 1904-7; Instructor, *ibid.*, 1907-14.
- Laboratory Guide for Elementary Zoölogy*. 16mo, vi+50. Chicago: University Press, 1914.
- On Regeneration in the Pigmented Skin of the Frog, and on the Character of the Chromatophores (with Leo Loeb), *American Journal of Anatomy*, III (1904), 275-83.
- Causes of Blue and Green in Feathers, *Biological Bulletin*, VIII (1905), 237-38.
- Color Nomenclature, *Science*, XXI (1905), 267-68.
- The Evolution of Color-Producing Structures in Birds, *ibid.*, 380.
- The Redfield Theory of Heredity, *Horseman*, XXVI (1906), 7-8.

- A Litter of Short-tailed Dogs (abstract), *Science*, XXVII (1908), 942.
- Nuptial Plumages of the American Bittern, *Auk*, XXVIII (1911), 367-68.
- On the Olfactory Organs and the Sense of Smell in Birds, *Journal of Morphology*, XXII (1911), 619-60.
- The Sense of Taste in Birds, *ibid.*, 940.
- Some Reminiscences of the Late Professor C. O. Whitman, *Auk*, XXIX (1912), 15-16.
- Some Ideas on Teaching a Bird Course, *Nature-Study Review*, VIII (1912), 195-202.
- Another View of Sex-limited Inheritance, *Science*, XXXVI (1912), 443-45.
- Some Observations on the Life-History of the Red-breasted Merganser, *Auk*, XXIX (1912), 479-88.
- Results of Hybridizing Ring-Doves, Including Sex-linked Inheritance, *Biological Bulletin*, XXIII (1912), 293-320.
- Electrical Heating of Paraffin Baths, *Anatomical Record*, VII (1913), 9-16.
- Some Ideas in Laboratory Equipment, *ibid.*, VIII (1914), 27-31.
- On the Habits and Behavior of the Herring Gull, *Larus argentatus* Pont, *Auk*, XXXI (1914), 22-49, 178-99.

REVIEW OF: Sclater, A History of the Birds of Colorado, *Nature Study Review*, VIII, 340.

MORRIS MILLER WELLS [1912-13; 1915-], Instructor in Zoölogy.

S.B. Chicago, 1912; Ph.D. Illinois, 1915; Assistant in Zoölogy, Chicago, 1912-13; Instructor, *ibid.*, 1915-.

- The Resistance of Fishes to Different Concentrations and Combinations of Oxygen and Carbon Dioxide, *Biological Bulletin*, XXV (1913), 323-47.
- The Reactions and Resistance of Fishes to Temperature, *Transactions of the Illinois State Academy of Science*, VII (1914), 48-59.
- Reactions and Resistance of Fishes in Their Natural Environments to Acidity, Alkalinity, and Neutrality, *Biological Bulletin*, XXIX (1915), 221-57.
- The Reactions and Resistance of Fishes in Their Natural Environments to Salts, *Journal of Experimental Zoölogy*, XIX (1915), 243-83.

Literature for 1915 on Ants and Myrmecophils, *Journal of Animal Behavior*, VI (1916), 400-406.

Starvation and the Resistance of Fishes to Lack of Oxygen and to KCN, *Biological Bulletin*, XXXI (1916), 441-52.

LEWIS VICTOR HEILBRUNN [1913-16], Associate in Zoölogy.

A.B. Cornell, 1911; Ph.D. Chicago, 1914, Laboratory Assistant in Zoölogy, *ibid.*, 1913-14; Associate, *ibid.*, 1914-16.

Studies in Artificial Parthenogenesis: II, Physical Changes in the Egg of *Arbacia*. Doctor's thesis. *Biological Bulletin*, XXIX (1915), 149-203.

The Measurement of Oxidation in the Sea-Urchin Egg, *Science*, XLII (1915), 615-16.

CARL RICHARD MOORE [1915-], Associate in Zoölogy.

S.B. Drury College, 1913; Ph.D. Chicago, 1916; Assistant in Zoölogy, *ibid.*, 1915-16; Associate, *ibid.*, 1916-.

On the Superposition of Fertilization on Parthenogenesis. Doctor's thesis. *Biological Bulletin*, XXXI (1916), 137-80.

CHARLES FREDERICK ADAMS [1904-5], Assistant in the Zoölogical Museum; Independence, Mo.

B.Agr. Missouri, 1897; M.D. Kansas City Medical College, 1902; A.M. Kansas, 1903; Assistant in Entomology, Missouri, 1897; Instructor in Histology, Kansas City Medical College, 1900-1902; Professor of Histology and Bacteriology, Kansas City Dental College, 1902-4; Assistant in the Zoölogical Museum, Chicago, 1904-5.

Notes on and Description of North American Diptera, *University of Kansas Science Bulletin*, II (1904), 433-55.

On the North American Species of *Siphonella*, *Psyche*, XI (1904), 103-4.

Descriptions of New Oscinidae, *Entomological News*, XV (1904), 303-4.

On the North American Species of *Ascinis*, *ibid.*, XVI (1905), 108-11.

WARDER CLYDE ALLEE [1910-12], Laboratory Assistant in Zoölogy; Professor of Biology, Lake Forest College, Lake Forest, Ill.

S.B. Earlham College, 1908; S.M. Chicago, 1910; Ph.D. *ibid.*, 1912; Laboratory Assistant in Zoölogy, *ibid.*, 1910-11.

Seasonal Succession in Old Forest Ponds, *Transactions of the Illinois State Academy of Science*, IV (1911), 216-31.

An Experimental Analysis of the Relation between Physiological States and Rheotaxis in Isopoda. Doctor's thesis. *Journal of Experimental Zoölogy*, XIII (1912), 269-344.

An Index of Fish Environments (with V. E. Shelford), *Science*, XXXVI (1912), 76-77.

The Reactions of Fishes to Gradients of Dissolved Atmospheric Gases (with V. E. Shelford), *Journal of Experimental Zoölogy*, XIV (1913), 207-66.

WALLACE CRAIG [1901-4], Assistant in Zoölogy; Professor of Philosophy, University of Maine, Orono.

S.B. Illinois, 1898; Ph.D. Chicago, 1908; Assistant in Zoölogy, *ibid.*, 1901-4.

The Expressions of Emotion in the Pigeons: I, The Blond Ring Dove (*Turtur risorius*). Doctor's thesis. *Journal of Comparative Neurology and Psychology*, XIX (1909), 29-80.

NEIL STANLEY DUNGAY [1911], Assistant in Zoölogy; Professor of Zoölogy, Carleton College, Northfield, Minn.

A.B. Minnesota, 1904; Ph.D. Chicago, 1913; Instructor in Biology, Carleton College, 1907-10; Acting Professor of Biology, *ibid.*, 1910-11; Assistant in Zoölogy, Chicago, 1911.

A Study of the Effects of Injury upon the Fertilizing Power of Sperm. Doctor's thesis. *Biological Bulletin*, XXV (1913), 213-60.

LIBBIE HENRIETTA HYMAN [1914-], Laboratory Assistant in Zoölogy.

S.B. Chicago, 1910; Ph.D. *ibid.*, 1915; Laboratory Assistant in Zoölogy, *ibid.*, 1914-.

An Analysis of the Process of Regeneration in Certain Microdrilous Oligochaetes. Doctor's thesis. *Journal of Experimental Zoölogy*, XX (1916), 99-165.

On the Action of Certain Substances on Oxygen Consumption, *American Journal of Physiology*, XL (1916), 238-48.

ROBERT KIRKLAND NABOURS [1904-10], Assistant in Zoölogy; Professor of Zoölogy and Zoölogist at the Experimental Station, Kansas Agricultural College, Manhattan.

Ed.B. Chicago, 1905; Ph.D. *ibid.*, 1911; Assistant in Nature-Study, University Elementary School, *ibid.*, 1904-9; Assistant in Zoölogy, *ibid.*, 1909-10.

Studies of Inheritance and Evolution in Orthoptera. Doctor's thesis. *Journal of Genetics*, III (1914), 141-70.

JOHN THOMAS PATERSON [1905-8], Laboratory Assistant in Zoölogy; Professor and Chairman of the School of Zoölogy, University of Texas, Austin.

S.B. Wooster, 1903; Ph.D. Chicago, 1908; Professor of Biology, Buena Vista College, 1903-5; Laboratory Assistant in Zoölogy, Chicago, 1905-8.

The Order of Appearance of the Anterior Somites in the Chick, *Biological Bulletin*, XIII (1907), 121-34.

Amitosis in the Pigeon's Egg, *Anatomischer Anzeiger*, XXXII (1908), 117-25.

A Microscope-Stage Incubator, *Biological Bulletin*, XIV (1908), 324-27.

Gastrulation in the Pigeon's Egg—A Morphological and Experimental Study. Doctor's thesis. *Journal of Morphology*, XX (1909), 65-123.

JOHN GEORGE SINCLAIR [1915-], Assistant in Zoölogy.

S.B. Chicago, 1911; Assistant, Carnegie Institution at Tucson, Ariz., 1913-15; Assistant in Zoölogy, Chicago, 1915-.

Organic Evolution (with W. L. Tower), *American Yearbook* (1913), 671-74.

MAUD SLYE [1908-], Assistant in Zoölogy; Member of the Otho S. A. Sprague Institute. *See under* Department of Pathology, p. 434.

GEORGE WASHINGTON TANNREUTHER [1904-5], Laboratory Assistant in Zoölogy; Instructor in Zoölogy, University of Missouri, Columbia.

A.B. Manchester College, 1900; A.M. Antioch College, 1901; Ph.D. Chicago, 1908; Laboratory Assistant in Zoölogy, *ibid.*, 1904-5.

History of the Germ Cells and Early Embryology of Certain Aphids. Doctor's thesis. *Zoologische Jahrbücher (Anatomie, etc.)*, XXIV (1907), 609-42.

The Development of Hydra, *Biological Bulletin*, XIV (1908), 261-81.

Observations on the Germ Cells of Hydra, *ibid.*, XVI (1909), 205-9.

Budding in Hydra, *ibid.*, 210-14.

Origin and Development of the Wings of Lepidoptera, *Archiv für Entwicklungsmechanik der Organismen*, XXIX (1910), 275-86.

- HARRY LEWIS WIEMAN [1907-8], Laboratory Assistant in Zoölogy; Associate Professor and Head of the Department of Zoölogy, University of Cincinnati.
A.B. Cincinnati, 1905; A.M. *ibid.*, 1906; Ph.D. Chicago, 1909; Laboratory Assistant in Zoölogy, *ibid.*, 1907-8.
- A Study in the Germ Cells of *Leptinotarsa signaticollis*. Doctor's thesis. *Journal of Morphology*, XXI (1910), 135-216.
- JAMES FRANCIS ABBOTT, PH.D. 1906; Professor of Zoölogy, Washington University, St. Louis.
- The Morphology of *Cocloplana*. Doctor's thesis. *Zoologische Jahrbücher (Anatomie, etc.)*, XXIV (1907), 41-70.
- CHARLES CHRISTOPHER ADAMS, PH.D. 1908; Professor of Forest Zoölogy, The New York State College of Forestry, Syracuse University, Syracuse, N.Y.
- The Variations and Ecological Distribution of the Snails of the Genus Io*. Doctor's thesis. *National Academy of Sciences Memoirs*, XII, Part 2 (1915); 8vo, 92, 61 plates.
- BENNETT MILLS ALLEN, PH.D. 1903; Professor of Zoölogy, University of Kansas, Lawrence.
- The Embryonic Development of the Ovary and Testis of the Mammals. Doctor's thesis. *American Journal of Anatomy*, III (1904), 89-146.
- HARRIETT MAY ALLYN, PH.D. 1912; Hackett Medical College, Canton, China.
- The Initiation of Development in *Chaetopterus*. Doctor's thesis. *Biological Bulletin*, XXIV (1912), 21-72.
- GEORGE WILLIAM BARTELMEZ, PH.D. 1910; Assistant Professor of Anatomy. See under Department of Anatomy, p. 347.
- MARY PUTNAM BLOUNT, PH.D. 1908. See under University High School, p. 490.
- LYNDS JONES, PH.D. 1905; Associate Professor of Animal Ecology, Oberlin College, Oberlin, Ohio.
- The Development of Nestling Feathers*. Doctor's thesis. 8vo, 18. Chicago: Privately printed, 1907.

ERNEST EVERETT JUST, PH.D. 1916; Howard University, Washington, D.C.

The Relation of the First Cleavage Plane to the Entrance Point of the Sperm, *Biological Bulletin*, XXII (1912), 239-52.

Breeding Habits of the Heteronereis Form of *Nereis limbata* at Woods Hole, Mass. (with F. R. Lillie), *ibid.*, XXIV (1913), 147-68.

Studies of Fertilization in *Platynereis Megalops*. Doctor's thesis. *Ibid.*, XXVII (1914), 201-27; XXVIII (1915), 93-114; *Journal of Morphology*, XXVI (1915), 217-33.

Initiation of Development in *Nereis*, *Biological Bulletin*, XXVIII (1915), 1-17.

FRANCIS LEROY LANDACRE, PH.D. 1914; Professor of Anatomy, Ohio State University, Columbus.

The Origin of the Cranial Ganglia in *Ameiurus*. Doctor's thesis. *Journal of Comparative Neurology and Psychology*, XX (1910), 311-411.

FRANK EUGENE LUTZ, PH.D. 1907; Curator, American Museum of Natural History, New York.

The Variation and Correlations of Certain Taxonomic Characters of Gryllus. Doctor's thesis. 8vo, 63. Chicago: Privately printed, 1908; also as Publication No. 101 of the Carnegie Institution of Washington.

CHARLES DWIGHT MARSH, PH.D. 1904; United States Department of Agriculture, Washington, D.C.

The Plankton of Lake Winnebago and Green Lake. Doctor's thesis. 8vo, vi+94. Wisconsin Geological and Natural History Survey, Bulletin No. 12, 1903.

BERTHA EDITH MARTIN, PH.D. 1915.

Tooth Development in *Dasypus Novemcinctus*. Doctor's thesis. *Journal of Morphology*, XXVII (1916), 645-83.

WILLIAM J. MOENKHAUS, PH.D. 1903; Professor of Physiology, Indiana University, Bloomington.

The Development of the Hybrids between *Fundulus heteroclitus* and *Menidia notata*, with Especial Reference to the Behavior of the Maternal and Paternal Chromatin. Doctor's thesis. *American Journal of Anatomy*, III (1904), 29-65.

JOHN WILLIAM SCOTT, PH.D. 1904; Professor of Zoölogy, University of Wyoming, Laramie.

Periods of Susceptibility in the Differentiation of Unfertilized Eggs of Amphitrite, *Biological Bulletin*, V (1903), 35-41.

Morphology of the Parthenogenetic Development of Amphitrite. Doctor's thesis. *Journal of Experimental Zoölogy*, III (1906), 49-97.

MARIAN LYDIA SHOREY, PH.D. 1909.

The Effect of the Destruction of Peripheral Areas on the Differentiation of the Neuroblasts. Doctor's thesis. *Journal of Experimental Zoölogy*, VII (1909), 25-63.

CHARLES HENRY TURNER, PH.D. 1907; Sumner High School, St. Louis, Mo.

The Homing of Ants: An Experimental Study of Ant Behavior. Doctor's thesis. *Journal of Comparative Neurology and Psychology*, XVII (1907), 367-434.

A Study of the Rate of Regeneration of the Arms in the Brittle-Star *Ophioglypha Lacertosa*, *Biological Bulletin*, VI (1903), 12-17.

CHARLES ZELENY, PH.D. 1904; Associate Professor of Zoölogy, University of Illinois.

Experiments on the Localization of Developmental Factors in the Nemertine Egg, *Journal of Experimental Zoölogy*, I (1904), 293-329.

Compensatory Regulation. Doctor's thesis. *Ibid.*, II (1905), 1-102.

THE DEPARTMENT OF ANATOMY

ROBERT RUSSELL BENSLEY [1901-], Professor of Anatomy.

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Joint Editor (with Franz Kopsch), *Internationale Monatsschrift für Anatomie und Physiologie*, 1912-.

The Differentiation of the Specific Elements of the Gastric Glands of the Pig (abstract), *American Journal of Anatomy (Proceedings of the Association of American Anatomists)*, II (1903), iii, iv.

- Concerning the Gland of Brunner, *Anatomischer Anzeiger*, XXIII (1903), 497-507.
- Stomach (article), *Reference Handbook of the Medical Sciences* (New York: William Wood & Co., 1903), 461-74.
- An Examination of the Methods for the Microchemical Detection of Phosphorous Compounds Other than Phosphates in the Tissues of Animals and Plants, *Biological Bulletin*, X (1906), 49-65.
- Professor Prenant's Theory of the Nature of the Granule Cells of Paneth, *Anatomical Record*, II (1908), 92-95.
- Observations on the Salivary Glands of Mammals, *ibid.*, 105-7.
- On the Nature of the Canalicular Apparatus of Animal Cells, *Biological Bulletin*, XIX (1910), 179-94.
- The Cardiac Glands of the Mammalian Stomach, *Anatomical Record*, IV (1910), 375-90.
- On the So-called Altmann Granules of Normal and Pathologic Tissues, *Transactions of the Chicago Pathological Society* (1910), 1-6.
- Studies on the Pancreas of the Guinea-Pig, *American Journal of Anatomy*, XII (1911), 297-388.
- Upon the Formation of Hydrochloric Acid in the Foveolae and on the Surface of the Gastric Mucous Membrane, and the Non-Acid Character of the Contents of Gland Cells and Lumina (with B. C. H. Harvey), *Biological Bulletin*, XXIII (1912), 225-49.
- The Formation of Hydrochloric Acid on the Free Surface and Not in the Glands of the Gastric Mucous Membrane (with B. C. H. Harvey), *Transactions of the Chicago Pathological Society* (1913), 1-3.
- The Thyroid Gland of the Opossum, *Anatomical Record*, VIII (1914), 431-40.
- The Structure and Relationships of the Islets of Langerhaus. "Harvey Lectures," Series X (1915), 251-90. Philadelphia: J. B. Lippincott Co.
- The Normal Mode of Secretion in the Thyroid Gland, *American Journal of Anatomy*, XIX (1916), 37-55.
- The Influence of Diet and Iodides on the Hyperplasia of the Thyroid Gland of Opossums in Captivity, *ibid.*, 57-65.

CHARLES JUDSON HERRICK [1907-], Professor of Neurology.

S.B. Cincinnati, 1891; Ph.D. Columbia, 1900; Professor of Natural Sciences, Ottawa University, 1892-93; Assistant Professor of Zoölogy, Denison, 1897-98; Professor, *ibid.*, 1898-1907; Professor of Neurology, Chicago, 1907-.

Managing Editor, *Journal of Comparative Neurology*, 1894-.

Associate in Comparative Neurology, Pathological Institute of the New York State Commission in Lunacy, 1897-1901; Member, International Commission of Brain Research, 1912-.

A Laboratory Outline in Neurology (with Elizabeth Crosby). 8vo, 40. Chicago: Privately printed, 1915.

An Introduction to Neurology. 12mo, 355. Philadelphia: W. B. Saunders Co., 1915.

On the Phylogenetic Differentiation of the Organs of Smell and Taste, *Journal of Comparative Neurology*, XVIII (1908), 157-66.

The Morphological Subdivision of the Brain, *ibid.*, 393-408.

On the Commissura Infima and Its Nuclei in the Brains of Fishes, *ibid.*, 409-31.

Two Recent Tendencies in Cerebral Morphology, *ibid.*, 663-70.

The Nervus Terminalis (Nerve of Pinkus) in the Frog, *ibid.*, XIX (1909), 175-90.

The Criteria of Homology in the Peripheral Nervous System, *ibid.*, 203-10.

The Evolution of Intelligence and Its Organs, *Science*, XXXI (1910), 7-18.

The Relations of the Central and Peripheral Nervous Systems in Phylogeny, *Anatomical Record*, IV (1910), 59-69.

The Morphology of the Cerebral Hemispheres in Amphibia, *Anatomischer Anzeiger*, XXXVI (1910), 645-52.

The Morphology of the Forebrain in Amphibia and Reptilia, *Journal of Comparative Neurology*, XX (1910), 413-547.

An Educational Ideal for the Small College, *Denison Alumni Bulletin*, II (1911), 2, 18.

Notes on the Association Centers, *Journal of Nervous and Mental Disease*, XXXVIII (1911), 750-53.

Some Reflections on the Origin and Significance of the Cerebral Cortex, *Journal of Animal Behavior*, III (1913), 222-36.

The Foundations of Culture (address commemorating the twenty-fifth anniversary of the Denison Scientific Association), *Bulletin of the Scientific Laboratories of Denison University*, XVII (1913), 205-18.

Notes on the Anatomy of a Cyclostome Brain: *Ichthyomyzon concolor* (with Jeannette B. Obenchain), *Journal of Comparative Neurology*, XXIII (1913), 635-75.

Articles in the *Reference Handbook of the Medical Sciences* (3d ed., William Wood & Co., New York):

Brain Anatomy, II (1913), 274-342, 43 figs.

Cranial Nerves, III (1914), 321-39, 33 figs.

Ear: Anatomy of the Auditory (Acoustic) Nerve and Its End-
Organs, *ibid.*, 719-25, 12 figs.

End-Organs, Nervous, IV (1914), 20-27, 21 figs.

Olfactory Nerve, VI (1916), 865-70, 6 figs.

Spinal Cord and Spinal Nerves, VII (1916), 828-55, 38 figs.

The Cerebellum of *Necturus* and Other Urodele Amphibia, *Journal of Comparative Neurology*, XXIV (1914), 1-29.

The Medulla Oblongata of Larval *Amblystoma*, *ibid.*, 343-427.

The Development of Reflex Mechanisms in *Amblystoma* (with G. E. Coghill), *ibid.*, XXV (1915), 65-85.

Introspection as a Biological Method, *Journal of Philosophy, Psychology, and Scientific Methods*, XII (1915), 543-51.

REVIEW OF: Edinger, Lectures on the Central Nervous System, *Anatomical Record*, II, 273-83; Child, Senescence and Rejuvenescence; and (by the same author) Individuality in Organisms, *Journal of Animal Behavior*, VI, 420-25.

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M.B. Toronto, 1890; Associate Professor of Anatomy, Johns Hopkins University, 1897-99; Professor and Head of the Department of Anatomy, Rush Medical College, 1900-1905; Professor of Medicine, *ibid.*, 1900-1905.

Member of the Board of Editors, *American Journal of Anatomy*, 1904-5.

Johns Hopkins Medical Commissioner to the Philippine Islands, 1899; Special Commissioner appointed by the Secretary of the Treasury for the investigation of the plague in San Francisco, 1901.

A Laboratory Manual of Human Anatomy (with D. D. Lewis and D. G. Revell). 8vo, xvi+583. Philadelphia: J. B. Lippincott Co., 1904.

A Case of Diplococcaemia (with H. T. Ricketts), *Transactions of the Chicago Pathological Society*, V (1901-3), 313-14.

The Unveiling of the Cell, *Journal of the American Medical Association*, XXXVIII (1902), 577-82.

Medicine and the Universities, *American Medicine*, IV (1902), 143-47.

Pathology of the Neurone, *Buck's Reference Handbook of the Medical Sciences*, VI (1903), 259-71.

Structure of the Spinal Cord, *ibid.*, VII (1904), 293-327.

Travel Notes: A Series of Thirteen Articles on Medical Conditions in Europe, *Journal of the American Medical Association*, XLIII-XLIV (1904-5).

Der Nachweis der Aminosäuren im Harne (with E. Aberhalden), *Zeitschrift für physiologische Chemie*, XLII (1904), 524-27.

Some Considerations on Proteid Diet, with Especial Reference to Its Content in Amide-Nitrogen, Melanoidin-Nitrogen, Diamino-Nitrogen, and Monamino-Nitrogen (with B. A. Cohoe), *Journal of Biological Chemistry*, I (1906), 229-38.

HENRY HERBERT DONALDSON [1892-1906], Professor and Head of the Department of Neurology; Professor of Neurology, Wistar Institute, Philadelphia.

A.B. Yale, 1879; Ph.D. Johns Hopkins, 1885; Assistant Professor of Neurology, Clark, 1890-92; Professor of Neurology, Chicago, 1892-1906; Dean of the Ogden Graduate School of Science, *ibid.*, 1892-98; Head of the Department of Neurology, *ibid.*, 1896-1906.

A Description of Charts Showing the Areas of Cross Sections of the Human Spinal Cord at the Level of Each Spinal Nerve (with D. J. Davis), *Journal of Comparative Neurology*, XIII (1903), 19-40.

On a Law Determining the Number of Medullated Nerve Fibers Innervating the Thigh, Shank, and Foot of the Frog, *Rana virescens*, *ibid.*, XIII (1903), 223-57.

On the Areas of the Axis Cylinder and Medullary Sheath as Seen in Cross Sections of the Spinal Nerves of Vertebrates (with G. W. Hoke) *ibid.*, XV (1905), 1-16.

Problems in Human Anatomy, *Science*, XXI (1905), 16-26.

Some Aspects of the Endowment of Research, *ibid.*, XXIII (1906), 282-86.

A Comparison of the White Rat with Man in Respect to the Growth of the Entire Body (with J. B. Watson and Elizabeth H. Dunn), *Boas Memorial Volume*, 1906.

BASIL COLEMAN HYATT HARVEY [1901-], Professor of Anatomy.

A.B. Toronto, 1894; M.B. *ibid.*, 1898; Assistant Professor of Anatomy, Chicago, 1908-11; Associate Professor, *ibid.*, 1911-17; Professor, *ibid.*, 1917-.

President, Illinois Demonstrators' Association, 1913-.

The Nature of Vital Processes according to Rignano. 8vo, 56. Chicago: Open Court Co., 1909.

Translation of Eugenio Rignano's *Inheritance of Acquired Characters*. Chicago: Open Court Co., 1911.

An Unusual Peritoneal Anomaly Simulating Retroperitoneal Hernia, *British Medical Journal*, II (1906), 1703.

On the Chromaffine Character of Certain Parietal Cells of the Stomach, *ibid.*, 1703.

A Case of Innervation of the M. Rectus Lateralis Oculi by the N. Oculomotorius, with absence of the N. Abducens, *ibid.*, 1705.

The Structure of the Gastric Glands of the Dog and of the Changes Which They Undergo after Gastroenterostomy and Occlusion of the Pylorus, *American Journal of Anatomy*, VI (1907), 207-43.

Insertion of the Abdominal Part of the M. Pectoralis Major in Man into the Capsule of the Shoulder Joint and the Coracoid Process, *Anatomical Record*, I (1907), 66-67.

Upon the Formation of Hydrochloric Acid in the Foveolae and on the Surface of the Gastric Mucous Membrane, and the Non-Acid Character of the Contents of Gland Cells and Lumina (with R. R. Bensley), *Biological Bulletin*, XXIII (1912), 225-49.

The Formation of Hydrochloric Acid on the Free Surface and Not in the Glands of the Gastric Mucous Membrane (with R. R. Bensley), *Transactions of the Chicago Pathological Society* (1913), 1-3.

REVIEWS IN: *Journal of the American Medical Association*, XLVIII, 961-62; LIV, 905; LXIII, 2065; LXIV, 766; *Science*, XXV, 788-89.

PRESTON KYES [1900-], Associate Professor of Preventive Medicine.

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Editor, *Journal of Immunology*, Baltimore and London, 1916-.

Ueber die Wirkungsweise des Cobragiftes, *Berliner klinische Wochenschrift*, XXXIX (1902), 918-22.

Zur Kenntniss der Cobragiftactivirenden Substanzen (with H. Sachs), *ibid.*, XL (1903), 21-23, 57-59, 82-85.

Ueber die Isolirung von Schlangengift-Lecithiden, *ibid.*, 956-59, 982-84.

Cobragift und Antitoxin, *ibid.*, XLI (1904), 494-97.

Lecithin und Schlangengifte, *Hoppe-Seyler's Zeitschrift für Physiologische Chemie*, XLI (1904), 273-77.

Ueber die Lecithide des Schlangengiftes, *Biochemische Zeitschrift*, IV (1907), 99-123.

Bemerkungen über die Lecithidbildung, *ibid.*, VIII (1908), 42-46.

Venom Hemolysis, *Journal of Infectious Diseases*, VII (1910), 181-284.

The Production of Antibodies to Pneumococci in an Insusceptible Host, *Journal of the American Medical Association*, LVI (1911), 1878-81.

The Physiological Destruction of Erythrocytes, *Internationale Monatschrift für Anatomie und Physiologie*, XXXI (1914), 33.

Morphological Evidences of Intracellular Destruction of Red Blood-Corpuscles, *Anatomical Record*, IX (1915), 97-100.

The Natural Resistance of the Pigeon to the Pneumococcus, *Journal of Infectious Diseases*, XVIII (1916), 277-92.

GEORGE WILLIAM BARTELMIZ [1908-], Assistant Professor of Anatomy.

S.B. New York, 1906; Ph.D. Chicago, 1910; Assistant Professor, *ibid.*, 1915-.

The Poison Glands of *Bufo aqua* (with C. L. Bristol), *Science*, XXVII (1908), 455.

The Bilaterality of the Pigeon's Egg: A Study in Egg Organization from the First Growth Period of the Oöcyte to the Beginning of Cleavage. Doctor's thesis. *Journal of Morphology*, XXIII (1912), 263-326.

The Effects of Mammalian Thyroid and Thymus Glands upon the Development of Certain Amphibian Larvae, *Anatomical Record*, IX (1915), 47-48.

Mauthner's Cell and the Nucleus Motorius Tegmenti, *Journal of Comparative Neurology*, XXV (1915), 87-128.

REVIEW IN: *Journal of the American Medical Association*, LXVI, 835.

ELBERT CLARK [1907-10; 1913-], Assistant Professor of Anatomy.

S.B. Arkansas, 1903; M.D. Rush Medical College, 1916; Assistant Professor of Anatomy, University of the Philippines, 1910-11; Associate Professor, *ibid.*, 1911-12; Assistant Professor of Anatomy, Chicago, 1915-.

The Glands of the Frontal Sinus of the Sheep (abstract), *Anatomical Record*, III (1909), 274-75.

On the Occurrence of an Accessory Naso-Frontal Duct of the Frontal Sinus, *Philippine Journal of Science*, V (1910), 475-80.

Anatomy in the Far East, *Anatomical Record*, VII (1913), 234-45.

The Number of Islands of Langerhaus in the Human Pancreas, *Anatomischer Anzeiger*, XLIII (1913), 81-94.

Regeneration of Medullated Nerves in the Absence of Embryonic Nerve Fibers, Following Experimental Non-traumatic Degeneration, *Journal of Comparative Neurology*, XXIV (1914), 61-111.

Congenital Variation of the Pectoral Muscles, *Journal of Anatomy and Physiology*, XLIX (1914), 155-65.

JOHN GORDON WILSON [1903-8], Assistant Professor of Anatomy; Professor and Head of the Department of Otolaryngology, Northwestern University.

A.M. Edinburgh, 1885; M.B., C.M. *ibid.*, 1889; Assistant Professor of Anatomy, Chicago, 1903-8.

The Relation of the Motor Endings to the Muscle, *Journal of Comparative Neurology*, XIV (1904), 1-16.

The Structure and Function of the Taste-Bulbs of the Larynx, *Brain*, XXVIII (1905), 339-51.

Nasal Reflexes, *Illinois Medical Journal*, IX (1906), 201-3.

Some Anatomical and Physiological Considerations in Regard to the Faucial Tonsil, *Journal of the American Medical Association*, XLVI (1906), 1591-94.

- Present State of Our Knowledge with Regard to the Physiology of the Sinuses Accessory to the Nose, *Illinois Medical Journal*, XII (1907), 410-12.
- Nerves and Nerve Endings in Membrana Tympani, *Journal of Comparative Neurology*, XVII (1907), 459-68.
- Variations of the Ostium Frontale and Their Bearing on Intra-nasal Operations, with a Note in Regard to the Topography of the Cribriform Plate, *Transactions of the American Laryngological Association*, XXX (1908), 178-96.
- The Nerves of the Atrio-ventricular Bundle, *Proceedings of the Royal Society*, London, LXXXI (1909).
- The Present Position of the Theory of Auto-Regeneration of Nerves, *Anatomical Record*, III (1909), 27-39.
- BENSON AMBROSE COHOE [1903-6], Instructor in Anatomy; Associate Professor of Therapeutics, University of Pittsburgh.
A.B. Toronto, 1898; M.B. *ibid.*, 1901; Associate in Anatomy, Chicago, 1903-6.
- Some Considerations on Proteid Diet, with Especial Reference to Its Content in Amide-Nitrogen, Melanoidin-Nitrogen, Diamino-Nitrogen, and Monamino-Nitrogen (with L. F. Barker), *Journal of Biological Chemistry*, I (1906), 229-38.
- The Finer Structure of the Glandula Submaxillaris of the Rabbit, *American Journal of Anatomy*, VI (1907), 167-91.
- EDMUND VINCENT COWDRY [1909-13], Instructor in Anatomy; Associate in Anatomy, Johns Hopkins University.
A.B. Toronto, 1909; Ph.D. Chicago, 1912; Associate in Anatomy, *ibid.*, 1911-12; Instructor, *ibid.*, 1912-13.
- The Colour Changes of *Octopus vulgaris*, *University of Toronto Studies, Biological Series*, No. 10 (1911), 1-53.
- Mitochondria and Other Cytoplasmic Constituents of the Spinal Ganglion Cells of the Pigeon, *Anatomical Record*, VI (1912), 33-38.
- The Relations of Mitochondria and Other Cytoplasmic Constituents in Spinal Ganglion Cells of the Pigeon. Doctor's thesis. *Internationale Monatsschrift für Anatomie und Physiologie*, XXIX (1912), 473-504.
- The Development of the Cytoplasmic Constituents of the Nerve Cells of the Chick. I. Mitochondria and Neurofibrils, *American Journal of Anatomy*, XV (1914), 389-428.

ELIZABETH HOPKINS DUNN [1901-12], Instructor in Anatomy; Research Associate, Marine Biological Laboratory, Woods Hole, Mass.

A.B. Iowa College, 1889; M.D. Northwestern University, Woman's Medical School, 1894; Assistant Professor of Nervous Diseases, *ibid.*, 1901-2; Assistant in Anatomy, Chicago, 1906-7; Associate, *ibid.*, 1907-9; Instructor, *ibid.*, 1909-12.

On the Number and on the Relation between Diameter and Distribution of the Nerve-Fibers Innervating the Leg of the Frog (*Rana virescens brachycephala*, Cope), *Journal of Comparative Neurology*, XII (1902), 297-328.

The Nerve Supply to the Leg of the Frog after Complete Degeneration of the Motor Fibers, *American Journal of Anatomy*, V (1906), viii.

A Comparison of the White Rat with Man in Respect to the Growth of the Entire Body (with H. H. Donaldson and J. B. Watson), *Boas Memorial Volume*, 1906.

Supplemental Report regarding the Innervation of the Leg of *Rana virescens*, *Anatomical Record*, I (1907), 57-58.

Cutaneous Innervation from the Plexus ischio-coccygeus in the Frog, *Rana virescens*, Cope, *ibid.*, 88-90.

A Study of the Gain in Weight for the Light and Heavy Individuals of a Single Group of Albino Rats, *ibid.*, II (1908), 109-11.

The Ischio-coccygeal Plexus as a Pathway for Cutaneous Innervation in the Leopard Frog, *Science*, XXVII (1908), 1916.

A Statistical Study of the Medullated Nerve Fibers Innervating the Legs of the Leopard Frog, *Rana pipiens*, after Unilateral Section of the Ventral Roots, *Journal of Comparative Neurology*, XIX (1909), 685-720.

The Influence of Age, Sex, Weight, and Relationship upon the Number of Medullated Nerve Fibers and on the Size of the Largest Fibers in the Ventral Roots of the Second Cervical Nerve of the Albino Rat, *ibid.*, XXII (1912), 131-57.

EDWIN GARVEY KIRK [1902-10], Instructor in Anatomy; Physician, Chicago.

S.B. Chicago, 1902; Ph.D. *ibid.*, 1907; M.D. Rush Medical College, 1909; Assistant in Anatomy, Chicago, 1905-7; Associate, *ibid.*, 1907-8; Instructor, *ibid.*, 1908-10.

The Adjuvant Action of Serum, Egg Albumin, and Broth on Tetanus Toxin (with H. T. Ricketts), *Journal of Infectious Diseases*, III (1906), 116-27.

The Histogenesis of Gastric Glands. Doctor's thesis. *American Journal of Anatomy*, X (1910), 473-520.

REVIEW IN: *Journal of the American Medical Association*, LII, 324-26.

DEAN DEWITT LEWIS [1901-5], Instructor in Anatomy; Professor of Surgery, Rush Medical College.

A.B. Lake Forest University, 1895; M.D. Rush Medical College, 1899; Assistant in Anatomy, Rush Medical College, 1900-1901; Assistant in Anatomy, Chicago, 1901-2; Associate in Anatomy, *ibid.*, 1902-3; Instructor in Anatomy, *ibid.*, 1903-5.

A Laboratory Manual of Human Anatomy (with L. F. Barker and D. G. Revell). 8vo, xvi+583. Philadelphia: J. B. Lippincott Co., 1904.

The Present Conception of the Perirenal Fascia and Its Rôle in Fixation of the Kidney, *Journal of the American Medical Association*, XLII (1904), 701-5.

The Epithelial Concrescence in the Larynx of the Foetal Pig, *Annals of Otology, Rhinology, and Laryngology*, XIII (1904), 373-83.

The Elastic Tissue of the Human Larynx, *American Journal of Anatomy*, V (1905), 175-93, 5 plates.

PAUL STILWELL MCKIBBEN [1908-13], Instructor in Anatomy; Professor of Anatomy, Western University, London, Canada.

S.B. Denison, 1906; Ph.D. Chicago, 1911; Instructor in Anatomy, 1912-13.

The Nervus Terminalis in Urodele Amphibia. Doctor's thesis. *Journal of Comparative Neurology*, XXI (1911), 261-309.

The Eye-Muscle Nerves in *Necturus*, *ibid.*, XXIII (1913), 153-72.

Mast Cells in the Meninges of *Necturus* Easily Mistaken for Nerve Cells, *Anatomical Record*, VIII (1914), 475-78.

Ganglion Cells of the Nervus Terminalis in the Dogfish (*Mustelus canis*), *Journal of Comparative Neurology*, XXIV (1914), 437-40.

JAMES PATTERSON [1907-11], Instructor in Anatomy; Physician, Chicago.

S.B. Chicago, 1905; Instructor in Anatomy, *ibid.*, 1910-11.

The Fascia on the Upper and Lateral Part of the Thoracic Wall, and Its Relations to the Mm. Scalenus Medius and Serratus Anterior, *Anatomischer Anzeiger*, XXXI (1907), 159-65.

DANIEL GRAISBERRY REVELL [1901-6], Instructor in Anatomy; Professor of Anatomy, University of Alberta, Edmonton, Canada.

A.B. Toronto, 1894; M.B. *ibid.*, 1900; Assistant in Anatomy, Chicago, 1901-2; Associate, *ibid.*, 1902-3; Instructor, *ibid.*, 1903-6.

A Laboratory Manual of Human Anatomy (with L. F. Barker and D. D. Lewis). 8vo, xvi+583. Philadelphia: J. B. Lippincott Co., 1904.

An Anomalous Vena Cava Inferior, *American Journal of Anatomy*, II (1902-3), xvi.

Some Points in the Structure of the Gastric Mucous Membrane of Man, *Anatomical Record*, I (1907), 71.

GEORGE ELMER SHAMBAUGH [1902-], Instructor in Anatomy of the Ear, Nose, and Throat; Professor of Otology and Laryngology, Rush Medical College.

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Wood's Metal Casts of the Ear, *Annals of Otology, Rhinology, and Laryngology*, XIII (1904), 1-8.

Die Verteilung der Blutgefäße im Ohrlabyrinth des Schafes und des Kalbes, *Zeitschrift für Ohrenheilkunde*, XLVIII (1904), 381-89; also in *Archives of Otology*, XXXIV (1905), 71-79.

Communications between the Blood Vessels in the Membranous Labyrinth and the Endosteum and Those Found in the Bony Capsule of the Labyrinth, *Zeitschrift für Ohrenheilkunde*, L (1905), 327-36.

Some Relations in the Blood Supply of the Inner Ear Which Have a Practical Bearing on the Clinical Study of Otology, *Archives of Otology* XXXV (1906), 11-19.

A Re-study of the Minute Anatomy of Structures in the Cochlea, with Conclusions Bearing on the Solution of the Problem of Tone Perception, *American Journal of Anatomy*, VII (1907), 245-57.

The Origin of Cells Found in the Deeper Layer of the Stria Vascularis, *Archives of Otology*, XXXVI (1907), 241-56.

The Construction of the Ethmoid Labyrinth, *Annals of Otology, Rhinology, and Laryngology*, XVI (1907), 771-92.

- Some Important Surgical Relations of the Temporal Bone, *Journal of the American Medical Association*, XLIX (1907), 1991-94.
- The Membrana Tectoria and the Theory of Tone Perception, *Archives of Otolology*, XXXVII (1908), 457-67.
- On the Structure and Function of the Epithelium in the Sulcus Spiralis Externus, *ibid.*, 538-46.
- The Function of the End-Organs in the Vestibule and Semicircular Canals, *Journal of the American Medical Association*, LII (1909), 1077-79.
- Why a Peripheral Tone Analysis Is Necessary to Explain the Phenomena of Tone Perception, *Laryngoscope*, XIX (1909), 481-87.
- Die Physiologie der Schencke (Sammelreferat), *Internationales Zentralblatt für Ohrenheilkunde*, VIII (1910), 297-306.
- The Physiology of Tone Perception, *Annals of Otolology, Rhinology, and Laryngology*, XIX (1910), 983-93.
- Das Verhältnis zwischen der Membrana tectoria und dem cortischen Organ, *Zeitschrift für Ohrenheilkunde und für Krankheiten der Luftwege*, LXII (1910), 235-40.
- The Venous System of the Labyrinth, *Transactions of the American Otological Society* (1910), 505-10.
- Discussion de la théorie de la perception du son au point de vue de l'anatomiste, *Archives internationales de laryngologie, d'otologie et de rhinologie*, XXX (1910), 865-69.
- Die Frage der Tonempfindung, *Archiv für die gesamte Physiologie*, CXXXVIII (1911), 155-58.
- The Origin of Compensatory Tonus after Destruction of the Labyrinth, *Transactions of the American Otological Society* (1912), 508-14.
- Ueber den Bau und die Function der Crista ampullaris, *Zeitschrift für Ohrenheilkunde*, LXV (1912), 23-44.
- Duration of Stimulation of Hair Cells of Crista Ampullaris Compared with Duration of Endolymph Current and the Resulting Nystagmus, *Transactions of the International Otological Congress* (1912), 607-16.
- On Surgical Anatomy of the Ear, chap. iii, pp. 99-124, in Loeb's *Operative Surgery of Nose, Throat, and Ear* (C. W. Mosby & Co., 1914).

CHARLES HENRY SWIFT [1910-], Instructor in Anatomy.

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Origin and Early History of the Primordial Germ-Cells in the Chick. Doctor's thesis. *American Journal of Anatomy*, XV (1914), 483-516.

Origin of the Definitive Sex-Cells in the Female Chick and Their Relation to the Primordial Germ-Cells, *ibid.*, XVIII (1915), 441-70.

Origin of the Sex-Cords and Definitive Spermatogonia in the Male Chick, *ibid.*, XX (1916), 375-410.

EMIL GOETSCH [1907-8], Associate in Anatomy; Associate Surgeon, Johns Hopkins Hospital, Baltimore.

S.B. Chicago, 1903; Ph.D. *ibid.*, 1906; Associate in Anatomy, 1907-8.

The Structure of the Mammalian Oesophagus. Doctor's thesis. *American Journal of Anatomy*, X (1910), 1-40.

RALPH EDWARD SHELDON [1907-9], Associate in Anatomy; Professor of Anatomy, University of Pittsburgh.

A.B. Cornell, 1904; S.M. Harvard, 1907; Ph.D. Chicago, 1908; Assistant in Anatomy, *ibid.*, 1907-9; Associate, *ibid.*, 1909.

The Participation of Medullated Fibers in the Innervation of the Olfactory Mucous Membrane of Fishes, *Science*, XXVII (1908), 915-16.

An Analysis of the Olfactory Paths and Centers in Fishes, *Anatomical Record*, II (1908), 108-9.

The Nervus Terminalis in Teleosts, *ibid.*, III (1909), 257-59.

The Nervus Terminalis in the Carp, *Journal of Comparative Neurology*, XIX (1909), 191-202.

The Reactions of the Dogfish to Chemical Stimuli, *ibid.*, 273-312.

The Phylogeny of the Facial Nerve and Chorda Tympani, *Anatomical Record*, III (1909), 593-617.

The Olfactory Tracts and Centers in Teleosts. Doctor's thesis. *Journal of Comparative Neurology*, XXII (1912), 177-320.

JAMES ROLLIN SLONAKER [1902-3], Associate in Neurology.

S.B. Wisconsin, 1893; Ph.D. Clark, 1896; Assistant Professor of Zoölogy, Indiana, 1896-1901; Assistant in Neurology, Chicago, 1902-3; Associate, *ibid.*, 1903.

The Eye of the Common Mole, *Scalops aquaticus machrinus*, *Journal of Comparative Neurology*, XII (1902), 335-66.

A Convenient Method for Washing, Staining, and Dehydrating Small Specimens, *Journal of Applied Microscopy and Laboratory Methods*, V (1902), 1645-46.

PERCIVAL BAILEY [1914-15], Assistant in Anatomy; Assistant in Anatomy, Northwestern University.

S.B. Chicago, 1914; Assistant in Embryology, *ibid.*, 1914; Assistant in Anatomy, *ibid.*, 1914-15.

Morphology of the Roof-Plate of the Forebrain and the Lateral Choroid Plexuses in the Human Embryo, *Journal of Comparative Neurology*, XXVI (1916), 79-120.

CHARLES BROOKOVER [1908-9], Technical Assistant in Anatomy; Professor of Histology and Embryology, University of Arkansas, Fayetteville.

Ped.B. Ohio University, 1894; S.M. *ibid.*, 1898; Assistant Professor of Biology, Colorado College, 1899-1901; Professor of Natural Science, Buchtel College, 1902; Technical Assistant in Anatomy, Chicago, 1908-9.

Pinkus Nerve in *Amia* and *Lepidosteus*, *Science*, XXVII (1908), 913.

The Olfactory Nerve, the Nervus Terminalis, and the Pre-optic Sympathetic System in *Amia calva* L. Doctor's thesis. *Journal of Comparative Neurology*, XX (1910), 49-118.

LUDWIG AUGUSTUS EMGE [1912-13], Assistant in Anatomy; Instructor in Gynecology and Obstetrics, Medical School, Leland Stanford Junior University.

S.B. Chicago, 1912; Assistant in Anatomy, *ibid.*, 1912-13.

Diffuse, Phlegmonous, "Ideopathic" Gastritis, *Transactions of the Chicago Pathological Society*, IX (1913-15), 82-88.

Sudden Death from Malarial Coma, *ibid.*, 209-15.

Brain Abscess Caused by Fusiform Bacilli, *Journal of the American Medical Association*, LXII (1914), 446-48.

The Thyroid of the Guinea Pig in Experimental Diphtheric Intoxication, *Journal of Infectious Diseases* XVII (1915), 369-75.

Primary Diphtheria of the Skin, *Journal of the American Medical Association*, LXV (1915), 529.

SHINKISHI HATAI [1901-6], Assistant in Neurology; Assistant, Wistar Institute, Philadelphia.

Ph.D. Chicago, 1902; Assistant in Neurology, *ibid.*, 1901-6.

Preliminary Note on the Presence of a New Group of Neurones in the Dorsal Roots of the Spinal Nerves of the White Rat, *Biological Bulletin*, III (1902), 140-42.

On the Presence in Human Embryos of an Interscapular Gland Corresponding to the So-called Hibernating Gland of Lower Mammals, *Anatomischer Anzeiger*, XXI (1902), 369-73.

On the Origin of Neuroglia Tissue from Mesoblast, *Journal of Comparative Neurology*, XII (1902), 291-96.

On the Nature of the Pericellular Network of Nerve Cells, *ibid.*, XIII (1903), 139-47.

The Neurokeratin in the Medullary Sheath of the Peripheral Nerves of Mammals, *ibid.*, 149-56.

On the Increase in the Number of Medullated Nerve Fibers in the Ventral Roots of the Spinal Nerves of the Growing White Rat, *ibid.*, 177-83.

The Effect of Lecithin on the Growth of the White Rat, *American Journal of Physiology*, X (1903), 57-66.

A Note on the Significance of the Form and Contents of the Nucleus in the Spinal Ganglion Cells of the Foetal Rat, *Journal of Comparative Neurology*, XIV (1904), 27-48.

The Effect of Partial Starvation on the Brain of the White Rat, *American Journal of Physiology*, XII (1904), 116-27.

The Excretion of Nitrogen by the White Rat as Affected by Age and Body Weight, *ibid.*, XIV (1905), 120-32.

†CHARLES INGBERT [1904-5], Honorary Research Assistant in Neurology. A.B. North Dakota, 1895; Ph.D. Chicago, 1903; Honorary Research Assistant in Neurology, *ibid.*, 1904-5.

An Enumeration of the Medullated Nerve Fibers in the Dorsal Roots of the Spinal Nerves of Man. Doctor's thesis. *Journal of Comparative Neurology*, XIII (1903), 53-120.

† Deceased.

- On the Density of the Cutaneous Innervation in Man, *ibid.*, 209-22.
- An Enumeration of the Medullated Nerve Fibers in the Ventral Roots of the Spinal Nerves of Man, *ibid.*, XIV (1904), 209-70.
- JOHN ALBERT KEY [1916-], Assistant in Anatomy.
S.B. Alabama Polytechnic Institute, 1913; Instructor in Anatomy, Creighton Medical College, 1915-16.
- Relation of Mitochondris to Zymogen Granules, *Anatomical Record*, X (1916), 215-16.
- JEANNETE BROWN OBENCHAIN [1910-], Assistant in Anatomy.
Ph.B. Chicago, 1906; Assistant in Anatomy, *ibid.*, 1910-.
- Notes on the Anatomy of a Cyclostome Brain: *Ichthyomyzon concolor* (with C. J. Herrick), *Journal of Comparative Neurology*, XXIII (1913), 635-75.
- JOHN SUNDWALL [1905-7], Assistant in Anatomy; Professor of Anatomy, University of Kansas, Lawrence.
Ph.B. Central Utah, 1901; S.B. Chicago, 1905; Ph.D. *ibid.*, 1906; Assistant in Anatomy, *ibid.*, 1905-7.
- The Structure of the Harderian Gland of the Ox, *American Journal of Anatomy*, VI (1907), 72-73.
- RUSSELL MORSE WILDER [1909-10], Assistant in Anatomy; Instructor, Rush Medical College.
S.B. Chicago, 1907, Ph.D. *ibid.*, 1911; Assistant in Anatomy, *ibid.*, 1909-10.
- The Typhus Fever of Mexico (Tabardillo), *Journal of the American Medical Association*, LIV (1910), 463-67.
- The Transmission of Typhus Fever of Mexico (Tabardillo) by Means of the Louse (*Pediculus vestimenti*), *ibid.*, 1304-7.
- The Relation of Typhus Fever (Tabardillo) to Rocky Mountain Spotted Fever, *Archives of Internal Medicine*, V (1910), 361-70.
- The Etiology of Typhus Fever (Tabardillo) of Mexico City, *Journal of the American Medical Association*, LIV (1910), 1373-75.
- Further Investigations regarding the Etiology of Typhus Fever, *ibid.*, LV (1911), 309-11.
- The Problem of Transmission in Typhus Fever. Doctor's thesis. *Journal of Infectious Diseases*, IX (1911), 9-101.

ELIZABETH CAROLINE CROSBY, PH.D. 1915; Principal, High School, Petersburg, Mich.

A Laboratory Outline in Neurology (with C. J. Herrick). 8vo, 40. Chicago: Privately printed, 1915.

The Forebrain of *Alligator mississippiensis*. Doctor's thesis. *Journal of Comparative Neurology*, XXVII (1917), 325-402.

STEPHEN WALTER RANSON, PH.D. 1905; Professor of Anatomy, Northwestern University.

On the Medullated Nerve Fibers Crossing the Site of Lesions in the Brain of the White Rat, *Journal of Comparative Neurology*, XIII (1903), 185-207.

Retrograde Degeneration in the Spinal Nerves. Doctor's thesis. *Ibid.*, XVI (1906), 265-93.

SIDNEY KLEIN, Graduate Student; Physician, Chicago.

On the Nature of the Granule Cells of Paneth in the Intestinal Glands of Mammals, *American Journal of Anatomy*, V (1906), 315-30.

†R. H. WHITEHEAD, Graduate Student.

The Embryonic Development of the Interstitial Cells of Leydig, *American Journal of Anatomy*, III (1904), 167-82.

Studies on the Interstitial Cells of Leydig: II, Their Postembryonic Development in the Pig, *ibid.*, IV (1905), 193-97.

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Associate Editor, *Journal of Biological Chemistry*, 1903-; Associate Editor, *Zeitschrift für kolloide Chemie*, 1906-; Associate Editor, *Internationale Zeitschrift für physikalisch-chemische Biologie*, 1914-.

Member of the Commission for the Study of the Action of Saltpeter on Nutrition, 1908-12 (three volumes [*Studies in Nutrition*] published, one in press).

Physiological Chemistry. 1st ed., 1915; 2d ed., 1916. 8vo, vi+1100. New York: William Wood & Co.

Electrical Polarity in the Hydroids, *American Journal of Physiology*, VIII (1903), 294-99.

The Importance of Mechanical Shock in Protoplasmic Activity (with B. R. Whitcher), *ibid.*, 300-306.

The Nature of Nerve Irritability and of Chemical Stimulation, Part II, *Science*, XVII (1903), 729.

The Importance of Inorganic Salts in Protoplasmic Activities, *Yale Medical Journal* (1903), 1-20.

The Relation between Solution Tension Atomic Volume and the Physiological Action of the Elements, *American Journal of Physiology*, X (1904), 290-323.

The Pharmacological Action of the Iodates, Bromates, Chlorates, etc., and Some Organic Drugs, *ibid.*, XI (1904), 237-49.

The Nature of the Chemical and Electrical Stimulation: I, The Physiological Action of an Ion Depends upon Its Electrical State and Electrical Stability, *ibid.*, 455-96.

The Toxic and Antitoxic Action of Salts, *ibid.*, XII (1905), 419-43.

A Theory of the Nature of Protoplasmic Respiration and Growth, *Biological Bulletin*, VIII (1905), 331-46.

The Tension Coefficient of Salts and the Precipitation of Colloids, *American Journal of Physiology*, XIV (1905), 203-30.

A Contribution to the General Principles of the Pharmacodynamics of Salts and Drugs, *Biological Studies by the Pupils of W. T. Sedgwick* (1906), 81-118; also in *Journal of Infectious Diseases*, III (1906), 572-609.

An Apparent Pharmacological "Action at a Distance" by Metals, *American Journal of Physiology*, XVIII (1907), 39-46.

- The Cause of the Pharmacological Action of Ammonium Salts, *American Journal of Physiology*, XVIII (1907), 58-63.
- A Contribution to the Chemistry of Cell Division, Maturation, and Fertilization, *ibid.*, 89-111.
- The Mechanism of the Oxidation of Glucose by Bromine in Neutral and Acid Solutions (with H. H. Bunzel), *Journal of the American Chemical Society*, XXXI (1909), 464-79.
- Action of Some Amino-Acids on the Development of *Arbacia*, *Biological Bulletin*, XVI (1909), 44-47.
- The Spontaneous Oxidation of the Sugars, *Journal of Biological Chemistry*, VI (1909), 3-20.
- The Spontaneous Oxidation of Cystin (with S. Walker), *ibid.*, 21-28.
- The Action of Cyanides and Nitriles on the Spontaneous Oxidation of Cystin (with S. Walker), *ibid.*, 29-37.
- Spontaneous Oxidation of Cystin (with S. Walker), *ibid.*, 289-98.
- Action of Metals (etc.) on the Oxidation of Cystin (with S. Walker), *ibid.*, 299-311.
- The Toxicity of Martius Yellow and Some Other Aniline Dyes (with E. Longfellow), *Journal of Pharmacology and Experimental Therapeutics*, II (1910), 201-19.
- Action of Ether on an Anaërobic Animal Tissue, *ibid.*, 231-38.
- The Composition of Invertase (with T. A. Glenn), *Journal of Biological Chemistry*, IX (1911), 29-56.
- On Molecular Cohesion, *Science*, XXXVI (1912), 263-66.
- Adaptation from the Point of View of Physiology, *American Naturalist*, LXVII (1913), 90-104.
- A Method of Determining "a" of van der Waals' Equation, *Journal of Physical Chemistry*, XVII (1913), 154-61.
- Relation of "a" of van der Waals to Molecular Weight and Number of Valences, *ibid.*, 181-204.
- Valence of Chlorine, Determined from Cohesion, *ibid.*, 252-63.
- Note on Structure of Ethylene, *ibid.*, 320-21.
- Valence of Oxygen, Sulfur, and Nitrogen, *ibid.*, 331-36.
- Valence of Argon Group, Determined from Cohesion, *ibid.*, 337-43.

Theoretical Significance of Relation of Cohesion to Molecular Weight and Valence, *ibid.*, 481-500.

Do Molecules Attract Inversely as the Square of the Distance? *ibid.*, 500-535.

An Important Chemical Difference between the Eggs of the Starfish and Sea-Urchin, *Journal of Biological Chemistry*, XIV (1913), 465-67.

The Internal Pressures of Liquids, *Journal of Physical Chemistry*, XVII (1913), 603-28.

Relation entre l'attraction de cohésion et l'attraction de gravitation des molécules, *Journal de chimie physique*, XII (1914), 428-31.

The Residual Valence of Anesthetics and Its Importance in Anesthesia. A Contribution to the Chemical Theory of Anesthesia, *Internationale Zeitschrift für physikalisch-chemische Biologie*, I (1914), 433-49.

The Quantity of Residual Valence Possessed by Various Molecules, *Journal of Physical Chemistry*, XVIII (1914), 474-87.

On Eötvös' Surface Tension Law and the Relation between Cohesion and Gravitation, *ibid.*, XX (1916), 554-96.

REVIEWS IN: *Journal of the American Chemical Society*, and *Botanical Gazette*.

ANTON JULIUS CARLSON [1904-], Professor of Physiology; Chairman of the Department of Physiology.

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Member of the Editorial Committee, *American Journal of Physiology*, 1909-15.

The Control of Hunger in Health and Disease. 8vo, vii+319. Chicago: University Press, 1916.

Further Evidence of the Nervous Origin of the Heart-Beat in *Limulus*, *American Journal of Physiology*, XII (1905), 471-98.

The Physiology of Locomotion in Gasteropods, *Biological Bulletin*, VIII (1905), 85-92.

Comparative Physiology of the Invertebrate Heart:

- I. The Innervation of the Heart, *Biological Bulletin*, VIII (1905), 123-60.
- II. Physiology of the Heart Nerves in Mollusca, *American Journal of Physiology*, XIII (1905), 396-426.
- The Nature of Cardiac Inhibition with Special Reference to *Limulus*, *ibid.*, 217-40.
- Further Evidence of the Fluidity of the Conducting Substance in Nerve, *ibid.*, 351-57.
- Physiology of the Cardiac Nerves in Mollusca, *ibid.*, XIV (1905), 16-58.
- Die Ganglienzellen der Bulbus Arterien, *Archiv für die gesammte Physiologie*, CIX (1905), 51-62.
- Conductibilité du cœur à l'état de "water rigor," *Comptes rendus de la société de biologie*, LIX (1905), 414-15.
- Note sur les nerfs de cœur des invertébrés, *ibid.*, LX (1906), 283-84.
- The Mechanism of Co-ordination and Conduction in the Heart, *American Journal of Physiology*, XV (1906), 99-120.
- Physiology of the Cardiac Nerves in the Arthropods, *ibid.*, 127-35.
- On the Direct Relation between Rate of Conduction in Nerve and Rate of Contraction in Muscle, *ibid.*, 136-43.
- Temperature and Heart Activity, *ibid.*, 207-34.
- Osmotic Pressure and Heart Activity, *ibid.*, 357-73.
- The Heart Rhythm of Invertebrates under Normal and Experimental Conditions, *ibid.*, XVI (1906), 47-66.
- The Excitability of the Heart during the Different Phases of the Beat, *ibid.*, 67-84.
- The Relation between the Strength of the Stimulus and the Amplitude of Contraction in the Heart, *ibid.*, 85-99.
- Inhibitory Effects of the Single Induced Shock on the Heart, *ibid.*, 100-110.
- On the Cause of the Cessation of the Rhythm of Automatic Tissues in Isotonic Solutions of Non-electrolytes, *ibid.*, 221-29.
- The Presence of Cardio-Regulative Nerves in the Lampreys, *ibid.*, 230-32.
- The Action of Chloral Hydrate on the Heart, *ibid.*, XVII (1906), 1-7.

- The Nature of the Action of Drugs on the Heart, *ibid.*, 177-210.
- The Chemical Conditions for the Heart Activity, *ibid.*, 378-408.
- The Relation of the Normal Heart Rhythm to the Sodium Chloride Rhythm, *ibid.* (1907), 478-87.
- The Mechanism of the Refractory Period of the Heart, *ibid.*, XVIII (1907), 71-88.
- The Mechanism of the Stimulating Action of Tension on the Heart, *ibid.*, 149-55.
- The Nature of the Inhibition on Direct Stimulation with the Tetanizing Current, *Zeitschrift für allgemeine Physiologie*, VI (1907), 287-314.
- The Action of the Cyanides on the Heart, *American Journal of Physiology*, XIX (1907), 223-32.
- On the Elimination of Water from the Blood in the Active Salivary Glands (with J. R. Greer and F. C. Becht), *ibid.*, 360-87.
- Vaso-dilator Fibres in the Cervical Sympathetic, *ibid.*, 408-17.
- The Relation between the Blood Supply to the Submaxillary Gland and the Character of the Chorda and Sympathetic Saliva (with J. R. Greer and F. C. Becht), *ibid.*, XX (1907), 180-205.
- Relation of Oxygen Supply to the Character of Saliva (with F. C. McLean), *ibid.*, 457-69.
- The Mechanism of the Embryonic Heart Rhythm (with W. J. Meek), *ibid.*, XXI (1908), 1-10.
- Conductivity of the Non-conducting Myocardium in Sodium Chloride, *ibid.*, 11-22.
- Osmotic Concentration of the Blood in Anaesthesia (with A. B. Luckhardt), *ibid.*, 162-68.
- Influence of Lymphagogues on the Bacterio-agglutinins in Lymph (with B. Braude), *ibid.*, 221-29.
- The Relative Resistance of the Heart Tissues to the Action of Drugs, *ibid.*, 230-35.
- Relative Hemolytic Action of Serum and Lymph (with B. Braude), *ibid.*, 236-47.
- Glucose in Saliva (with J. G. Ryan), *ibid.*, 301-9.
- Diastase in Cat's Saliva (with J. G. Ryan), *ibid.*, XXII (1908), 1-15.

- The Excess of Chlorides in Lymph (with J. R. Greer and A. B. Luckhardt), *American Journal of Physiology*, XXII (1908), 91-103.
- The Lymphagogue Action of Lymph (with J. R. Greer and F. C. Becht), *ibid.*, 104-15.
- A Note on the Physiology of the Pulsating Blood Vessels in the Worms, *ibid.*, 353-56.
- The Diastases in the Blood and the Body Fluids (with A. B. Luckhardt), *ibid.*, XXIII (1908), 148-64.
- Vergleichende Physiologie der Herznerven und der Herzganglien bei den Wirbellosen, *Ergebnisse der Physiologie*, VIII (1909), 372-462.
- The Distribution of Antibodies and Their Formation by the Blood (with L. Hektoen), *Journal of Infectious Diseases*, VII (1910), 319-33.
- The Leucocytes of the Lymphs (with B. F. Davis), *American Journal of Physiology*, XXV (1910), 173-90.
- The Ammonia-destroying Power of the Liver in Parathyroid Tetany (with Clara Jacobson), *ibid.*, 403-18.
- The Internal Secretion of the Thyroid Gland (with A. Woelfel), *ibid.*, XXVI (1910), 32-67.
- Relation of Ptyalin Concentration to the Diet, etc. (with A. L. Crittenden), *ibid.*, 169-77.
- The Effects of Nerve-stretching, etc., *ibid.*, XXVII (1911), 223-30.
- Further Studies on the Nature of Parathyroid Tetany (with Clara Jacobson), *ibid.*, XXVIII (1911), 133-60.
- The Local Hemodynamic Action of Tissue Metabolites (with A. Woelfel and H. W. Powell), *ibid.*, 176-89.
- Control of Pancreatic Diabetes in Pregnancy (with F. M. Drennan), *ibid.*, 391-95.
- The Supposed Presence of the Hypophysis Secretion in the Cerebrospinal Fluid (with L. M. Martin), *ibid.*, XXIX (1911), 64-75.
- The Relation of the Pancreas to the Serum and Lymph Diastases (with L. K. Gould), *ibid.*, 165-81.
- The Fixation of Soluble Antigens by the Tissues (with R. T. Pettit), *Journal of Infectious Diseases*, X (1912), 43-47.

- Experimental Hyperthyroidism in Mammals and Birds (with J. R. Rooks and J. F. McKie), *American Journal of Physiology*, XXX (1912), 129-59.
- The Condition of the Digestive Tract in Parathyroid Tetany, *ibid.*, 309-40.
- The Character of the Movements of the Empty Stomach in Man, *ibid.*, XXXI (1912), 151-68.
- The Relation between the Contractions of the Empty Stomach and the Sensation of Hunger, *ibid.*, 175-92.
- The Reflex Inhibition of the Gastric Hunger Contractions from the Mouth Cavity, *ibid.*, 212-24.
- The Influence of the Contractions of the Empty Stomach on the Vasomotor Centre, etc., *ibid.*, 318-28.
- A Note on the Sugar Tolerance in the Pig, *Journal of Biological Chemistry*, XIII (1913), 465-68.
- Ozone: Its Bactericidal, Physiologic, and Deodorizing Action (with E. O. Jordan), *Journal of the American Medical Association*, LXI (1913), 1007-12.
- The Solubility of White Lead in Human Gastric Juice, and Its Bearing on the Hygiene of the Lead Industries (with A. Woelfel), *Journal of Public Health*, III (1913), 753-69.
- The Influence of Stimulation of the Gastric Mucosa on the Hunger Mechanism, *American Journal of Physiology*, XXXII (1913), 245-63.
- The Mechanism of the Gastric Hunger Contraction in Dogs, *ibid.*, 369-88.
- Inhibitory Reflexes from the Gastric Mucosa, *ibid.*, 389-97.
- The Tonus and Hunger Contraction of the Empty Stomach during Parathyroid Tetany, *ibid.*, 398-404.
- Hunger in Prolonged Starvation, *ibid.*, XXXIII (1914), 95-118.
- The Hunger Contractions of the Isolated Stomach Pouch, (with J. S. Orr and L. W. McGrath), *ibid.*, 119-25.
- The Condition of the Oesophagus during the Periods of Gastric Hunger Contraction (with A. B. Luckhardt), *ibid.*, 126-42.
- The Influence of Smoking on Hunger (with J. H. Lewis), *ibid.*, XXXIV (1914), 149-54.

- The Nervous Control of the Gastric Hunger Mechanism, *American Journal of Physiology*, XXXIV (1914), 155-71.
- The Chemical Control of the Gastric Hunger Mechanism (with A. B. Luckhardt), *ibid.*, XXXVI (1914), 37-46.
- The Action of Bitters on the Hunger Mechanism (with Van de Erve, Lewis, and Orr), *Journal of Pharmacology*, VI (1914), 209-20.
- The Sensibility of the Gastric Mucosa (with L. H. Braafladt), *American Journal of Physiology*, XXXVI (1915), 153-70.
- Reflexes from the Intestinal Mucosa to the Stomach (with E. H. Brune-meier), *ibid.*, 191-95.
- The Influence of Pregnancy on Diabetes (with H. Ginsburg), *ibid.*, 217-22.
- Blood Transfusion in Experimental Diabetes (with H. Ginsburg), *ibid.*, 280-93.
- The Secretion of Gastric Juice in Man, *ibid.*, XXXVII (1915), 50-73.
- The Gastric Hunger Contractions of New-born Infants (with H. Ginsburg), *ibid.*, XXXVIII (1915), 29-32.
- The Chemistry of Human Gastric Juice, *ibid.*, 248-68.
- The Action of Bitter Tonics on the Secretion of Gastric Juice, *Journal of the American Medical Association*, LXIV (1915), 15-18.
- Has Secretion a Therapeutic Value? (with J. E. Lebensohn and S. J. Pearlman), *ibid.*, LXVI (1916), 178-85.
- The Action of Commercial Glucose When Fed to Rats (with L. Hektoen and E. R. Le Count), *Journal of the American Chemical Society*, XXXVIII (1916), 930-36.
- The Tonus and Hunger Contractions of the Stomach in Infants with Congenital Pyloric Stenosis (with H. Ginsburg), *American Journal of Physiology*, XXXIX (1916), 310-12.

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- Manual of Physiology*. 5th ed. 8vo, 894. London: Baillière, Tindall & Cox, 1905.
- Differences of Potential between Blood and Serum and between Normal and Laked Blood, *American Journal of Physiology*, IX (1903), 262-64.
- The Permeability of Cells with Special Reference to Haemolysis, *Comptes rendus XIV^e, congrès international de médecine, section de physiologie* (1903), 85-87.
- The Influence of Cold on the Action of Some Haemolytic Agents, *American Journal of Physiology*, IX (1903), 72-96.
- The Influence of the Stromata and Liquid of Laked Corpuscles on the Production of Haemolysins and Agglutinins, *ibid.*, XI (1904), 250-81.
- Further Experiments on the Haemolysinogenic and Agglutininogenic Action of Laked Corpuscles, *ibid.*, XII (1904), 363-73.
- The Effects of Simultaneous Section of Both Vagi (abstract), *Science*, XXI (1905), 889-90.
- The Resuscitation of the Central Nervous System of Mammals (with C. C. Guthrie, R. L. Burns, and F. H. Pike), *Journal of Experimental Medicine*, VIII (1906), 289-321.
- The Maintenance of Cerebral Activity in Mammals by Artificial Circulation (with C. C. Guthrie and F. H. Pike), *American Journal of Physiology*, XVII (1906), 344-49.
- The Automatism of the Respiratory Center (with F. H. Pike), *Proceedings of the Society for Experimental Biology and Medicine*, IV (1907), 83-84.
- Resuscitation of the Respiratory and Other Bulbar Nervous Mechanisms, with Special Reference to the Question of Their Automaticity (with F. H. Pike), *American Journal of Physiology*, XIX (1907), 328-59.
- Further Observations on the Resuscitation of the Respiratory Nervous Mechanism (with F. H. Pike), *ibid.*, XX (1907), 61-73.
- The Automatic Respiratory and Cardiac Mechanism after Complete and Partial Isolation from Extrinsic Nerve Impulses, *ibid.*, 407-38.

Studies in Resuscitation:

- I. The General Conditions Affecting Resuscitation and the Resuscitation of the Blood and of the Heart (with F. H. Pike and C. C. Guthrie), *Journal of Experimental Medicine*, X (1908), 371-418.
- II. The Reflex Excitability of the Brain and Spinal Cord after Cerebral Anaemia (with F. H. Pike and C. C. Guthrie), *American Journal of Physiology*, XXI (1908), 359-71.
- III. The Resuscitation of the Glands and Muscles after Temporary Anaemia (with F. H. Pike and C. C. Guthrie), *ibid.*, XXII (1908), 51-60.
- IV. The Return of Function in the Central Nervous System after Temporary Anaemia (with F. H. Pike and C. C. Guthrie), *Journal of Experimental Medicine*, X (1908), 490-520.

REVIEWS OF: Physiology, *American Year Book of Medicine and Surgery* (Medicine) (1903), 550-75; (1904), 506-29; (1905), 517-44.

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A Laboratory Manual of Physiological Chemistry (with R. W. Webster). 8vo, viii+107. Chicago: University Press, 1903.

Zur Kenntniss des Lecithins, Kephalingen und Cerebrins aus Nervensubstanz, *Zeitschrift für physiologische Chemie*, XXXVI (1902), 134-40.

Some Chemical Observations on the Nervous System in Certain Forms of Insanity, *Archives of Neurology*, III (1907), 331-45.

The Relation of Extractive to Protein Phosphorus in *Aspergillus niger* (with H. S. Reed), *Journal of Biological Chemistry*, III (1907), 49-52.

The Relation of Electrolytes to Lecithin and Kephalin, *ibid.*, 53-56.

The Quantitative Estimation of Extractive and Protein Phosphorus, *ibid.*, 159-64.

† Deceased.

Zur Kenntniss der Schwefelverbindungen des Nervensystems:

I. *Zeitschrift für physiologische Chemie*, LIII (1907), 496-507.

II. Ueber ein Sulfatid aus Nervensubstanz, *ibid.*, LXX (1910), 94-97.

A Comparison of the Chemical Composition of Three Human Brains at Different Ages (with S. A. Mann), *Journal of Physiology*, XXXVI (1907), xxxvi-xxxviii.

A Chemical Study of the Brain in Healthy and Diseased Conditions, with Especial Reference to Dementia Praecox, *Archives of Neurology and Psychiatry*, IV (1909), 1-46.

Phosphorous Compounds as Brain Foods, *Journal of the American Medical Association*, LII (1909), 1381-83.

Methods for the Quantitative Chemical Analysis of Animal Tissues:

(1) General Principles; (2) Collection and Preservation of Material; (3) Estimation of Proximate Constituents; (4) Estimation of the Elements with Special Reference to Sulphur (with S. A. Mann, E. P. Carr, and F. W. Upson), *Journal of the American Chemical Society*, XXXI (1909), 1329-64.

Die Bedeutung der Phosphatide für die lebende Zelle, *Zeitschrift für physiologische Chemie*, LXIII (1909), 432-42.

The Distribution of Sulphur Compounds in Brain Tissue (with F. W. Upson), *Proceedings of the Society for Experimental Biology and Medicine*, VII (1909), 1-2.

Estimation of Chlorine, V, *Science*, XXXII (1910), 477.

Pharmacological Studies in the Phosphatids, *Journal of Pharmacology and Experimental Therapeutics*, II (1910), 239-44.

The Relation of the Phosphatids to the Sodium and Potassium of the Neurones (with F. H. Pike), *ibid.*, 244-48.

The Relation of the Phosphatids to Overton and Meyer's Theory (with F. C. McLean), *ibid.*, 249-52.

The Relation of Brain Phosphatids to Tissue Metabolites (with A. W. Williams), *ibid.*, 253-64.

The Function of Brain Phosphatids in Action of Strychnine (with H. T. Mostrom), *ibid.*, 265-69.

The Nature of the Chemical Combinations of Potassium in the Tissues (with C. C. Todd), *Journal of Biological Chemistry*, IX (1911), 15.

Recent Studies on Lipoids, *Journal of the American Medical Association*, LVI (1911), 799-800.

Chemical Study of the Brain in Cases of Dementia Praecox, *Journal of Experimental Medicine*, XIII (1911), 301-7.

A Comparison of Two Methods of Preserving Nerve-Tissue for Subsequent Chemical Examination (with Mathilde Koch), *Journal of Biological Chemistry*, XIV (1913), 281-82.

The Chemical Differentiation of the Brain of the Albino Rat during Growth (with Mathilde Koch), *ibid.*, XV (1913), 423-48.

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On the Elimination of Water from the Blood in the Active Salivary Glands (with A. J. Carlson and J. R. Greer), *American Journal of Physiology*, XIX (1907), 360-87.

The Relation between the Blood Supply to the Submaxillary Gland and the Character of the Chorda and Sympathetic Saliva (with A. J. Carlson and J. R. Greer), *ibid.*, XX (1907), 180-205.

The Lymphagogue Action of Lymph (with A. J. Carlson and J. R. Greer), *ibid.*, XXII (1908), 104-15.

The Nature of Heat Paralysis in Nervous Tissue, *ibid.*, 456-76.

A Study of the Concentration of Antibodies in the Body Fluids of Normal and Immune Animals (with J. R. Greer). Doctor's thesis. *Journal of Infectious Diseases*, VII (1910), 127-58.

The Relation of the Spleen to the Fixation of Antigens and the Production of Immune Bodies (with A. B. Luckhardt), *American Journal of Physiology*, XXVIII (1911), 257-74.

The Site of Action of Strychnine (with H. McGuigan), *Journal of Pharmacology and Experimental Therapeutics*, V (1914), 469-78.

The Stimulation of the Hypophysis in Dogs (with R. W. Keeton), *American Journal of Physiology*, XXXIX (1915), 109-22.

The Origin of the Antibodies of the Lymph (with A. B. Luckhardt),
ibid., XL (1916), 366-71.

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On the Presence of Histidine in Pig Thyreoglobulin, *Journal of Bio-
logical Chemistry*, IX (1911), 121-22.

On the Nature of the Iodine-Containing Complex in Thyreoglobulin.
Doctor's thesis. *Ibid.*, XIV (1913), 101-16.

The Distribution of Gastrin in the Body (with R. W. Keeton), *American
Journal of Physiology*, XXXVII (1915), 481-504.

DAVID JUDSON LINGLE [1892-], Assistant Professor of Physiology.

S.B. Chicago, 1885; Ph.D. Johns Hopkins, 1892; Assistant Professor of Biology,
Tulane, 1889-90; Instructor in Physiology, Chicago, 1894-1904; Assistant
Professor, *ibid.*, 1904-.

Restorers of the Cardiac Rhythm, *American Journal of Physiology*,
XIV (1905), 433-51.

Artificial Production of Heart Rhythm, *Science*, XXI (1905), 887.

The Mechanism of Tone in Plain Muscle, *American Journal of Physi-
ology*, XXVI (1910), 361-67.

ELIAS POTTER LYON [1901-4], Assistant Professor of Physiology and
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College, 1901-4.

Laboratory Outlines for Physiology: The Nervous System and Senses (with
C. H. Neilson). 16mo, 32. Chicago: Privately printed, 1904.

Experiments in Artificial Parthenogenesis, *American Journal of Physi-
ology*, IX (1903), 308-18.

Rhythms of Susceptibility and of Carbon Dioxide Production in Cleav-
age, *ibid.*, XI (1904), 52-58.

A Biological Examination of Distilled Water, *ibid.*, 198-202.

Rhythms of CO₂ Production in Cleavage, *Science*, XIX (1904), 350-53.

Rheotropism, *American Journal of Physiology*, XI (1904), 52-58.

- ARNO BENEDICT LUCKHARDT [1908-], Assistant Professor of Physiology. S.B. Chicago, 1906; Ph.D. *ibid.*, 1911; M.D. Rush Medical College, 1912; Assistant Professor of Physiology, Chicago, 1914-.
- Osmotic Concentration of the Blood in Anaesthesia (with A. J. Carlson), *American Journal of Physiology*, XXI (1908), 162-68.
- The Excess of Chlorides in Lymph (with A. J. Carlson and J. R. Greer), *ibid.*, XXII (1908), 91-104.
- The Diastases in the Blood and the Body Fluids (with A. J. Carlson), *ibid.*, XXIII (1908), 148-64.
- Additional Notes on the Bacteriology and Pathology of Milksickness, *Journal of Infectious Diseases*, VI (1909), 492-505.
- On the Production of Sanitary Milk (with P. G. Heinemann and A. C. Hicks), *ibid.*, VII (1910), 47-66.
- The Comparative Electrical Conductivity of Lymph and Serum of the Same Animal, and Its Bearing on Theories of Lymph Formation, *American Journal of Physiology*, XXV (1910), 345-53.
- A Study of the Origin of the Immune Bodies by the Method of Organ Transplantation, *Proceedings of the Society for Experimental Biology and Medicine*, VII (1910), 122-25.
- The Relation of the Spleen to the Fixation of Antigens and the Production of Immune Bodies (with F. C. Becht). Doctor's thesis. *American Journal of Physiology*, XXVIII (1911), 257-74.
- The Condition of the Oesophagus during the Periods of Gastric Hunger Contraction (with A. J. Carlson), *ibid.*, XXXIII (1914), 126-42.
- The Cause of the Polyphagia in Pancreatic Diabetes, *ibid.*, 313-23.
- The Chemical Control of the Gastric Hunger Mechanism (with A. J. Carlson), *ibid.*, XXXVI (1914), 37-46.
- The Blood Pressure during Vomiting (with Clyde Brooks), *ibid.*, XXXVI (1915), 104-12.
- The Effect of Dreaming on the Gastric Hunger Contraction, *ibid.*, XXXIX (1916), 330-34.
- The Chief Physical Mechanisms Concerned in the Clinical Methods of Measuring Blood Pressure (with Clyde Brooks), *ibid.*, XL (1916), 49-74.
- The Origin of the Antibodies of the Lymph (with F. C. Becht), *ibid.*, 366-71.

Note on the Movements of the Empty Stomach under Certain Pathological Conditions (with W. W. Hamburger), *Journal of the American Medical Association*, LXVI (1916), 1831-33.

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Action of Solutions of Inorganic Salts in Cases of Locomotor Ataxia (with O. H. Brown), *American Journal of Physiology*, XI (1904), 1.

Inhibition of the Action of Physostigmin by Calcium Chloride (with O. H. Brown), *ibid.*, XII (1904), 173-75.

The Influence of Saccharin on the Digestive Enzymes (with H. McGuigan), *Journal of the American Medical Association*, XLV (1905), 844-47.

The Action of Magnesium Sulphate upon the Heart and the Antagonistic Action of Some Other Drugs (with D. E. Jackson), *American Journal of Physiology*, XIX (1907), 5-14.

The Blood Pressures of Birds and Their Modification by Drugs (with Oscar Riddle), *ibid.*, 108-16.

"Cactin and Cactina": An Examination into Their Physiologic Action, *Journal of the American Medical Association*, XLIX (1907), 1021.

A Further Study of the Action of Magnesium Sulphate on the Heart (with W. de B. MacNider), *American Journal of Physiology*, XX (1907), 323-29.

The Sensory Nerves of the Heart and Blood Vessels as a Factor in Determining the Action of Drugs (with D. E. Jackson), *ibid.*, XXI (1908), 255-58.

Effect of Ligation of the Coronary Arteries in Dogs (with J. L. Miller), *Transactions of the Association of American Physicians and Surgeons*, XXIII (1908), 83.

- Effect on the Heart of Experimental Obstruction of the Left Coronary Artery (with J. L. Miller), *Archives of Internal Medicine*, III (1909), 176-84.
- Is the Duodenum Essential to Life? *Transactions of the Chicago Pathological Society*, VII (1910), 22-24.
- The Action of Magnesium Sulphate (with Clyde Brooks), *Journal of Pharmacology and Experimental Therapeutics*, II (1910), 87-99.
- The Effects on Blood-Pressure of Intravenous Injections of Extracts of the Various Anatomical Components of the Hypophysis, *Archives of Internal Medicine*, VII (1911), 785-800.
- The Effects of Eck-Fistula upon the Liver (Dog's), *Transactions of the Chicago Pathological Society*, VIII (1912), 263-66.
- A Study of the Effect of Changes in the Circulation of the Liver on Nitrogen Metabolism, *Journal of Biological Chemistry*, XV (1913), 87-104.

HAROLD STANARD ADAMS [1914-16], Instructor in Physiological Chemistry; with E. R. Squibb and Sons, New Brunswick, N.J.

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Carbon Dioxide Production from the Nerve Fiber in a Hydrogen Atmosphere (with Shiro Tashiro), *American Journal of Physiology*, XXXIV (1914), 405-13.

Comparison of the Carbon Dioxide Output of Nerve Fibers and Ganglia in *Limulus* (with Shiro Tashiro), *Journal of Biological Chemistry*, XVIII (1914), 329-34.

Studies in Narcosis (with Shiro Tashiro), *Internationale Zeitschrift für physikalisch-chemische Biologie*, I (1914), 450-62.

Studies on Overvoltage. Doctor's thesis. In Press.

CHARLES CLAUDE GUTHRIE [1903-6], Instructor in Physiology; Professor of Physiology and Pharmacology, University of Pittsburgh.

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The Laking of Dried Red Blood-Corpuscles, *American Journal of Physiology*, VIII (1903), 441-46.

- The Influence of Formaldehyde on the Action of Certain Laking Agents and on Coagulation of Blood, *ibid.*, IX (1903), 187-97.
- An Improved Mercury Manometer, *Journal of the American Medical Association*, XLI (1903), 1209.
- A Serviceable Form of Capillary Electrometer, *ibid.*, XLII (1904), 173.
- The Effect of the Intravenous Injection of Formaldehyde and Calcium Chloride on the Haemolytic Power of Serum, *American Journal of Physiology*, XII (1904), 139-48.
- A Contribution to the Clinical Knowledge of Texas Fever, *Journal of Infectious Diseases*, II (1905), 529-54.
- The Effect of Intravenous Injections of Bone Marrow Extracts upon Blood Pressure (with O. H. Brown), *American Journal of Physiology*, XIV (1905), 328-38.
- La transplantation des veines et ses applications chirurgicales, *Presse médicale*, Paris, 1905, 843-44.
- Transplantation biterminale complète d'un segment de veine sur une artère (with A. Carrell), *Comptes rendus de la société de biologie*, LIX (1905), 412-13.
- Extirpation et replantation de la glande thyroïde avec reversion de la circulation (with A. Carrell), *ibid.*, 413-14; also in *Science*, XXII (1905), 535.
- Reversion de la circulation dans les veines valvulées (with A. Carrell), *Comptes rendus de la société de biologie*, LIX (1905), 518-19.
- Transplantation uniterminale des veines sur les artères (with A. Carrell), *ibid.*, 596-97.
- Circulation et sécrétion d'un rein transplanté (with A. Carrell), *ibid.*, 669-70; also in *Science*, XXII (1905), 473.
- Anastomosis and Transplantation of Blood Vessels, *American Medicine*, X (1905), 284-85.
- The Transplantation of Organs, *Journal of the American Medical Association*, XLV (1905), 1645-46.
- Transplantation of Veins and Organs (with A. Carrell), *American Medicine*, X (1905), 1101-2.
- The Resuscitation of the Central Nervous System of Mammals (with G. N. Stewart, R. L. Burns, and F. H. Pike), *Journal of Experimental Medicine*, VIII (1906), 289-321.

- The Reversal of the Circulation in a Limb (with A. Carrell), *Annals of Surgery*, XLIII (1906), 203-15.
- Uniterminal and Biterminal Venous Transplantations, *Surgery, Gynecology, and Obstetrics*, II (1906), 226.
- Results of Replantation of the Thigh (with A. Carrell), *Science*, XXIII (1906), 393-94; also in *Comptes rendus de la société de biologie*, LX (1906), 378-79.
- Successful Transplantation of Both Kidneys from a Dog into a Bitch, with Removal of Both Normal Kidneys from the Latter (with A. Carrell), *Science*, XXIII (1906), 394-95; also in *Comptes rendus de la société de biologie*, LX (1906), 465-66.
- A New Method for the Homoplastic Transplantation of the Ovary, *Science*, XXIII (1906), 591; also in *Comptes rendus de la société de biologie*, LX (1906), 466-68.
- Complete Amputation of the Thigh with Replantation (with A. Carrell), *American Journal of the Medical Sciences*, CXXXI (1906), 297-301.
- Résultats éloignés des transplantations veineuses uniterminales (with A. Carrell), *Comptes rendus de la société de biologie*, LX (1906), 529-30.
- Augmentation artificielle de la circulation dans les glandes pathologiques, *ibid.*, 582-83.
- Artério-sclérose par modification chirurgicale de la circulation (with A. Carrell), *ibid.*, 730-31.
- L'exclusion longitudinale des vaisseaux et ses résultats, *ibid.*, 984-86.
- Résultats du "Patching" des artères, *ibid.*, 1009-11.
- The Relation of Pressure in the Coronary Vessels to the Activity of the Isolated Heart, and Some Closely Related Problems (with F. H. Pike), *Science*, XXIV (1906), 52-54.
- The Effect of Changes in Blood Pressure on Respiratory Movements (with F. H. Pike), *American Journal of Physiology*, XVI (1906), 475-82.
- The Maintenance of Cerebral Activity in Mammals by Artificial Circulation (with F. H. Pike and G. N. Stewart), *ibid.*, XVII (1906), 344-49.
- Respiration Valves, *Journal of the American Medical Association*, XLVIII (1907), 1183.

The Relation of the Activity of the Excised Mammalian Heart to Pressure in the Coronary Vessels, and to Its Nutrition (with F. H. Pike), *American Journal of Physiology*, XVIII (1907), 14-38.

Heterotransplantations of Blood Vessels. Doctor's thesis. *Ibid.*, XIX (1907), 482-520.

Further Observations on the Relation between Blood Pressure and Respiratory Movements (with F. H. Pike), *ibid.*, XX (1908), 451-56.

Further Results of Transplantation of Ovaries in Chickens, *Journal of Experimental Zoölogy*, V (1908), 563-75.

Studies in Resuscitation:

I. The General Conditions Affecting Resuscitation, and the Resuscitation of the Blood and of the Heart (with F. H. Pike and G. N. Stewart), *Journal of Experimental Medicine*, X (1908), 371-418.

II. The Reflex Excitability of the Brain and Spinal Cord after Cerebral Anaemia (with F. H. Pike and G. N. Stewart), *American Journal of Physiology*, XXI (1908), 359-71.

III. The Resuscitation of the Glands and Muscles after Temporary Anaemia (with F. H. Pike and G. N. Stewart), *ibid.*, XXII (1908), 51-60.

IV. The Return of Function in the Central Nervous System after Temporary Anaemia (with F. H. Pike and G. N. Stewart), *Journal of Experimental Medicine*, X (1908), 490-520.

FRANK HENRY PIKE [1906-11], Instructor in Physiology; Associate Professor of Physiology, Columbia University.

A.B. Indiana, 1903; Ph.D. Chicago, 1907; Assistant in Physiology, *ibid.*, 1906-7; Associate, *ibid.*, 1907; Instructor, *ibid.*, 1907-11.

The Resuscitation of the Central Nervous System of Mammals (with G. N. Stewart, R. L. Burns, and C. C. Guthrie), *Journal of Experimental Medicine*, VIII (1906), 289-321.

The Relation of Pressure in the Coronary Vessels to the Activity of the Isolated Heart, and Some Closely Related Problems (with C. C. Guthrie), *Science*, XXIV (1906), 52-54.

The Effect of Changes in Blood Pressure on Respiratory Movements (with C. C. Guthrie), *American Journal of Physiology*, XVI (1906), 475-82.

- The Degenerate Eyes in the Cuban Cave Shrimp, *Palaemonetes eigenmani* Hay, *Biological Bulletin*, XI (1906), 267-76.
- The Maintenance of Cerebral Activity in Mammals by Artificial Circulation (with C. C. Guthrie and G. N. Stewart), *American Journal of Physiology*, XVII (1906), 344-49.
- The Relation of the Activity of the Excised Mammalian Heart to Pressure in the Coronary Vessels, and to Its Nutrition (with C. C. Guthrie), *ibid.*, XVIII (1907), 14-38.
- The Automatism of the Respiratory Center (with G. N. Stewart), *Proceedings of the Society for Experimental Biology and Medicine*, IV (1907), 83-84.
- A Critical and Statistical Study of the Determination of Sex, Particularly in Human Offspring, *American Naturalist*, XLI (1907), 303-22.
- Resuscitation of the Respiratory and Other Bulbar Nervous Mechanisms, with Special Reference to the Question of Their Automaticity (with G. N. Stewart). Doctor's thesis. *American Journal of Physiology*, XIX (1907), 328-59.
- Further Observations on the Resuscitation of the Respiratory Nervous Mechanism (with G. N. Stewart), *ibid.*, XX (1907), 61-73.
- Further Observations on the Relation between Blood Pressure and Respiratory Movements (with C. C. Guthrie), *ibid.* (1908), 451-56.
- Studies in Resuscitation:
- I. The General Conditions Affecting Resuscitation, and the Resuscitation of the Blood and of the Heart (with C. C. Guthrie, and G. N. Stewart), *Journal of Experimental Medicine*, X (1908), 371-418.
 - II. The Reflex Excitability of the Brain and Spinal Cord after Cerebral Anaemia (with C. C. Guthrie and G. N. Stewart), *American Journal of Physiology*, XXI (1908), 359-71.
 - III. The Resuscitation of the Glands and Muscles after Temporary Anaemia (with C. C. Guthrie and G. N. Stewart), *ibid.*, XXII (1908), 51-60.
 - IV. The Return of Function in the Central Nervous System after Temporary Anaemia (with C. C. Guthrie and G. N. Stewart), *Journal of Experimental Medicine*, X (1908), 490-520.

The Histological Changes in Nerve Cells Due to Temporary Anaemia of the Central Nervous System, *ibid.*, XI (1909), 257-65.

Studies in the Physiology of the Central Nervous System: I, The General Phenomena of Spinal Shock, *American Journal of Physiology*, XXIV (1909), 124-52.

The Relation of the Phosphatids to the Sodium and Potassium of the Neurones (with W. Koch), *Journal of Pharmacology and Experimental Therapeutics*, II (1910), 244-48.

The Spinal Vaso-Motor Paths in Spinal Shock. Preliminary Note, *Journal of Nervous and Mental Disease*, XXXVIII (1911), 365.

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A Chemical Sign of Life. 8vo, 142. Chicago: University Press, 1917.

The Detection and Estimation of Exceedingly Minute Quantities of Carbon Dioxide (with H. N. McCoy). Original Communications, *Eighth International Congress of Applied Chemistry*, I (1912), 361-66.

New Method of Detecting Vitality of Seeds, *ibid.*, XXVI (1912), 163.

Carbon Dioxide Production from Nerve Fibers Resting and When Stimulated: Contribution to the Chemical Basis of Irritability. Doctor's thesis. *American Journal of Physiology*, XXXII (1913), 107-36.

A New Method and Apparatus for the Estimation of Exceedingly Minute Quantities of CO₂, *ibid.*, 137-45.

A Chemical Sign of Life, *Biological Bulletin*, XXV (1913), 282-86.

The Metabolic Gradient in the Nerve Fiber (abstract), *American Journal of Physiology*, XXXIII (1914), xxxvii-xxxviii.

CO₂ Production from the Nerve Fiber in a Hydrogen Atmosphere (with H. S. Adams), *ibid.*, XXXIV (1914), 405-13.

CO₂ Apparatus III. Another Special Apparatus for the Estimation of Very Minute Quantities of CO₂, *Journal of Biological Chemistry*, XVI (1914), 485-94.

Comparison of the CO₂ Output of Nerve Fibers and Ganglia in *Limulus* (with H. S. Adams), *ibid.*, XVIII (1914), 329-34.

Some Relation between Rheotaxis and the Rate of CO₂ Production of Isopods (with W. C. Allee), *Journal of Animal Behavior*, IV (1914), 202-14.

Studies on Narcosis: I, Effect of Ethylurethane and Chloral Hydrate on the CO₂ Production of the Nerve Fiber (with H. S. Adams), *Internationale Zeitschrift für physikalisch-chemische Biologie*, I (1914), 450-62.

Metabolism in Ganglionated Cord of the Heart of the King Crab (*Limulus*) at Tortugas (abstract), *Yearbook of the Carnegie Institution of Washington*, XIII (1914), 216-17.

Temperature Coefficient of the Metabolism in the Nerve Fibers (abstract), *ibid.*, 217-18.

Further Evidence for the Increased CO₂ Production in the Nerve Fiber on Stimulation (abstract), *ibid.*, 218.

Tissue Metabolism in the *Medusa cassiopea* (abstract), *ibid.*, 218-19.

Is There Any Free CO₂ in Sea-Water? (abstract), *ibid.*, 219-20.

The Metabolism of Resting Nerve and Its Correlation with the Direction and Rate of Nerve Impulse (abstract), *Proceedings of the American Physiological Society, American Journal of Physiology*, XXXVI (1915), 368-69.

On the Nature of the Nerve Impulse, *Proceedings of the National Academy of Sciences*, I (1915), 110-14.

Further Studies on CO₂ in Sea-Water and CO₂ Production in Tropical Marine Animals, *Yearbook of the Carnegie Institution of Washington*, XIV (1915), 217-19.

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A Note on the Distribution of the Salts in Haemolysis, *Biochemical Journal*, III (1908), 146-54.

An Endeavor to Account for the Transfer of Proteid in Inanition, *Journal of Biological Chemistry*, VI (1909), 189-201.

On the Internal Secretion of the Thyroid Gland (with A. J. Carlson), *American Journal of Physiology*, XXVI (1910), 32-67.

On the Local Hemodynamic Action of Tissue Metabolites (with A. J. Carlson and H. W. Powell), *ibid.*, XXVIII (1911), 176-89.

The Place of Retention or Reconjugaion of the Amino Acids in the Body, *ibid.*, XXIX (1912), xxxviii-xxxix.

The Solubility of White Lead in Human Gastric Juice, and Its Bearing on the Hygiene of the Lead Industries (with A. J. Carlson), *Journal of Public Health*, III (1913), 753-69.

REVIEWS IN: *Biochemisches Centralblatt*, IV; *Biophysikalisches Centralblatt*, I; and *Hygienisches Centralblatt*, I.

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The Control of Experimental Cretinism. Doctor's thesis. *Archives of Internal Medicine*, XVII (1916), 260-78.

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S.B. Chicago, 1911; M.D. Rush Medical College, 1916; Assistant in Physiology, Chicago, 1909-13; Associate, *ibid.*, 1916-.

Further Studies of the Aceto-Nitrile Test for Thyroid Substances in the Blood, *American Journal of Physiology*, XXX (1912), 63-73.

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Laboratory Outlines for Physiology: The Nervous System and Senses (with E. P. Lyon). 16mo, 32. Chicago: Privately printed, 1904.

The Hydrolysis and Synthesis of Fats by Platinum Black. Doctor's thesis. *American Journal of Physiology*, X (1903), 191-200.

The Effects of Ions on the Decomposition of Hydrogen Peroxide by Platinum Black (with O. H. Brown), *ibid.* (1904), 225-28.

The Effects of Ions on the Decomposition of Hydrogen Peroxide, and the Hydrolysis of Butyric Ether by a Watery Extract of Pancreas (with O. H. Brown), *ibid.*, 335-44.

Further Proof of Ion Action in Physiologic Processes (with O. H. Brown), *American Journal of Physiology*, XII (1904), 374-86.

Influence of Alkaloids and Alkaloidal Salts upon Catalysis (with O. H. Brown), *ibid.*, XIII (1905), 427-35.

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Contractions of Rabbit's Stomach during Hunger, *American Journal of Physiology*, XXXVI (1915), 183-90.

Relation between the Digestion Contractions of the Filled, and the Hunger Contractions of the Empty, Stomach, *ibid.*, XXXVIII (1915), 274-84.

The Hunger Mechanism of the Pigeon and Its Relation to the Central Nervous System. Doctor's thesis. *Ibid.*, XLI (1916), 555-70.

The Hunger Mechanism of Birds, *Proceedings of the Society for Experimental Biology*. In Press.

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A Laboratory Manual of Physiological Chemistry (with Waldemar Koch). 8vo, viii+107. Chicago: University Press, 1903.

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A.B. Toronto, 1896; S.M. Chicago, 1904; Assistant in Physiology, *ibid.*, 1905-6; Associate, *ibid.*, 1906-7.

The Measurement of Electrical Conductivity for Clinical Purposes, *American Journal of Physiology*, XIII (1905), 139-53.

The Conductivity and Freezing-Points of Small Quantities of Body Fluids in Health and Disease, *ibid.*, XVI (1906), 438-67.

The Conductivity of Blood in Coagulation, *Biochemical Journal*, II (1907), 377.

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On Conduction and Contraction of Skeletal Muscle in Water Rigor, *American Journal of Physiology*, XVII (1906), 218-22.

The Mechanism of Experimental Glycosuria (with H. McGuigan), *ibid.*, XVIII (1907), 256-66.

Methods for Securing Wholly Normal Manometric Blood Pressure Tracings from the Quiescent Animal, *Heart*, II (1910), 5-8.

The Action of Alcohol on the Intact Unanesthetized Animal, *Journal of the American Medical Association*, LV (1910), 372-75.

The Action of Magnesium Sulphate (with S. A. Matthews), *Journal of Pharmacology and Experimental Therapeutics*, II (1910), 87-99.

The Effect of Lesions of the Dorsal Nerve Roots on the Reflex Excitability of the Spinal Cord. Doctor's thesis. *American Journal of Physiology*, XXVII (1910), 212-24.

A Note on the Absence of Adrenalin in Malignant Renal Hypernephromas, *Journal of Experimental Medicine*, XIV (1912), 550-56.

Persistent Patency of the Ductus arteriosus Botalli in the Dog, *Archives of Internal Medicine*, IX (1912), 44-54.

Blood Pressure in the Normal Animal, *American Journal of Physiology*, XXIX (1912), xxii.

The Blood Pressure during Vomiting (with A. B. Luckhardt), *ibid.*, XXXVI (1915), 104-12.

The Chief Physical Mechanisms Concerned in the Clinical Methods of Measuring Blood Pressures (with A. B. Luckhardt), *ibid.*, XL (1916), 49-74.

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A.B. Kansas, 1901; Ph.D. Chicago, 1905; Assistant in Physiology, *ibid.*, 1903.

The Immunity of Fundulus Eggs and Embryos to Electrical Stimulation, *American Journal of Physiology*, IX (1903), 111-15.

- The Effects of Ions on the Decomposition of Hydrogen Peroxide by Platinum Black (with C. H. Neilson), *American Journal of Physiology*, X (1904), 225-28.
- Effects of Ions on the Decomposition of Hydrogen Peroxide, and the Hydrolysis of Butyric Ether by a Watery Extract of Pancreas (with C. H. Neilson), *ibid.*, 335-44.
- The Effect of Certain Salts on Kidney Excretion, with Special Reference to Glycosuria. Doctor's thesis. *Ibid.*, 378-83.
- A Salt Solution in Locomotor Ataxia (with S. A. Matthews), *ibid.*, XI (1904), 1-4.
- Inhibition of the Action of Physostigmin by Calcium Chloride (with S. A. Matthews), *ibid.*, XII (1904), 173-75.
- Further Proof of Ion Action in Physiologic Processes (with C. H. Neilson), *ibid.*, 374-86.
- Influence of Alkaloids and Alkaloidal Salts upon Catalysis (with C. H. Neilson), *ibid.*, XIII (1905), 427-35.
- The Effect of Intravenous Injections of Bone Marrow Extracts upon Blood Pressure (with C. C. Guthrie), *ibid.*, XIV (1905), 328-38.
- HERBERT HORACE BUNZEL [1907-10], Assistant in Physiological Chemistry; Associate Professor of Physical Chemistry, University of Cincinnati.
- S.B. Chicago, 1906; Ph.D. *ibid.*, 1909; Assistant in Physiological Chemistry, *ibid.*, 1907-10.
- The Rate of Oxidation of Sugars in the Acid Medium, *American Journal of Physiology*, XXI (1908), 23-36.
- Ueber den zeitlichen Verlauf der galvanischen Polarisation, *Annalen der Physik*, XXVII (1908), 436-48.
- The Speed of Oxidation, by Air, of Uranous Solutions, with a Note on the Volumetric Determination of Uranium (with H. N. McCoy), *Journal of the American Chemical Society*, XXXI (1909), 367-73.
- The Mechanism of the Oxidation of Glucose by Bromine in Neutral and Acid Solutions (with A. P. Mathews). Doctor's thesis. *Ibid.*, 464-79.
- The Relative Toxicity of Various Salts and Acids toward Paramecium (with L. L. Woodruff), *American Journal of Physiology*, XXV (1909), 190-94.

The Mechanism of the Oxidation of Glucose by Bromine, *Journal of Biological Chemistry*, VII (1910), 157-69.

FRED MILLER DRENNAN [1910-11], Assistant in Physiology; Physician Presbyterian Hospital, Chicago.

S.B. Chicago, 1910; Assistant in Physiology, *ibid.*, 1910-11.

The Control of Pancreatic Diabetes in Pregnancy (with A. J. Carlson), *American Journal of Physiology*, XXVIII (1911), 391-95.

The Presence of the Internal Secretion of the Pancreas in the Blood, *ibid.*, 396-402.

†HARRY GINSBURG [1914-15], Assistant in Physiology.

S.B. Chicago, 1914; Assistant in Physiology, *ibid.*, 1914-15.

The Influence of Pregnancy on Diabetes (with A. J. Carlson), *American Journal of Physiology*, XXXVI (1915), 217-22.

The Influence of Blood Transfusion on the Hyperglycemia and Glycosuria of Pancreatic Diabetes in Dogs (with A. J. Carlson), *ibid.*, 280-93.

The Gastric Hunger Contractions of New-born Infants (with A. J. Carlson), *ibid.*, XXXVIII (1915), 29-32.

JAMES RICHARD GREER [1907-10], Assistant in Physiology; Instructor in Medicine, Rush Medical College.

S.B. Chicago, 1906; Ph.D. *ibid.*, 1909; Assistant in Physiology, *ibid.*, 1907-10.

On the Elimination of Water from the Blood in the Active Salivary Glands (with A. J. Carlson and F. C. Becht), *American Journal of Physiology*, XIX (1907), 360-87.

The Relation between the Blood Supply to the Submaxillary Gland and the Character of the Chorda and Sympathetic Saliva (with A. J. Carlson and F. C. Becht), *ibid.*, XX (1907), 180-205.

The Excess of Chlorides in Lymph (with A. J. Carlson and A. B. Luckhardt), *ibid.*, XXII (1908), 91-103.

The Lymphagogue Action of Lymph (with A. J. Carlson and F. C. Becht), *ibid.*, 104-15.

† Deceased

The Absence of Adrenalin in Malignant Hypernephromas (with H. G. Wells), *Archives of Internal Medicine*, IV (1909), 291-95.

A Study of the Concentration of the Antibodies in the Body Fluids of Normal and Immune Animals (with F. C. Becht). Doctor's thesis. *Journal of Infectious Diseases*, VII (1910), 127-58.

LEO LEWIS JOHN HARDT [1914-], Assistant in Physiology.

S.B. Chicago, 1914; Assistant in Physiology, *ibid.*, 1914-.

Secretion of Gastric Juice in Cases of Gastric and Duodenal Ulcers, *American Journal of Physiology*, XL (1916), 314-31.

DENNIS EMERSON JACKSON [1906-7], Assistant in Pharmacology; Associate Professor of Pharmacology, Washington University, St. Louis.

A.B. Indiana, 1905; A.M. *ibid.*, 1906; Assistant in Physiology, *ibid.*, 1904-6; Assistant in Physiological Chemistry, Chicago, 1906-7; Assistant in Pharmacology, *ibid.*, 1907.

The Action of Magnesium Sulphate upon the Heart and the Antagonistic Action of Some Other Drugs (with S. A. Matthews), *American Journal of Physiology*, XIX (1907), 5-14.

The Sensory Nerves of the Heart and Blood Vessels as a Factor in Determining the Action of Drugs (with S. A. Matthews), *ibid.*, XXI (1903), 255-58.

CHARLES EDWIN KING [1912-13], Assistant in Physiology; Professor of Physiology, University of North Dakota, Grand Forks.

Ph.B. Heidelberg University, Ohio, 1908; Ph.D. Chicago, 1914; Assistant in Physiology, *ibid.*, 1912-13.

Effect of Pituitary Extract upon Renal Activity, *American Journal of Physiology*, XXXII (1913), 405-16.

Studies on Blood and Urinary Amylase. Doctor's thesis. *Ibid.*, XXXV (1914), 301-31.

GEORGE LESTER KITE [1913-14], Assistant in Pharmacology; Assistant in the Henry Phipps Institute for the Study of Tuberculosis, Philadelphia.

S.B. University of Virginia, 1905; M.D. *ibid.*, 1908; Head of the Department of Biology, Virginia State Normal School, 1908-10; Assistant in Pharmacology, Chicago, 1913-14.

Studies on the Physical Properties of Protoplasm: I, Physical Properties of the Protoplasm of Certain Animal and Plant Cells, *American Journal of Physiology*, XXXII (1913), 146-64.

Studies on the Permeability of the Internal Cytoplasm of Animal and Plant Cells. Doctor's thesis. *Ibid.*, XXXVII (1915), 282-99.

MATHILDE KOCH [1912-13], Research Assistant in Physiological Chemistry; Psychiatric Institute, Ward's Island, N.Y.

S.B. Chicago, 1910; S.M. *ibid.*, 1912; Research Assistant in Physiological Chemistry, *ibid.*, 1912-13.

Contributions to the Chemical Differentiation of the Central Nervous System:

I. A Comparison of the Brain of the Albino Rat at Birth with That of the Fetal Pig, *Journal of Biological Chemistry*, XIV (1913), 267-79.

II. A Comparison of Two Methods of Preserving Nerve-Tissue for Subsequent Chemical Examination (with Waldemar Koch), *ibid.*, 281-82.

III. The Chemical Differentiation of the Brain of the Albino Rat during Growth (with Waldemar Koch), *ibid.*, XV (1913), 423-48.

HUGH MCGUITAN [1904-6], Assistant in Physiological Chemistry; Professor of Pharmacology, Northwestern University.

S.B. North Dakota Agricultural College, 1898; Ph.D. Chicago, 1906; Instructor in Chemistry, North Dakota Agricultural College, 1898-1903; Assistant Professor, *ibid.*, 1903-4; Assistant in Physiological Chemistry, Chicago, 1904-6.

The Relation between the Decomposition Tension of Salts and Their Antifermentative Properties, *American Journal of Physiology*, X (1904), 444-51.

The Influence of Saccharin on the Digestive Enzymes (with S. A. Matthews), *Journal of the American Medical Association*, XLV (1905), 844-47.

The Mechanism of Experimental Glycosuria (with Clyde Brooks), *American Journal of Physiology*, XVIII (1907), 256-66.

Note on the Composition of *Limulus* Blood Ash, *Science*, XXV (1907), 68-69.

The Oxidation of the Various Sugars and the Oxidizing Power of Different Tissues and Solutions. Doctor's thesis. *American Journal of Physiology*, XIX (1907), 175-222.

EDWIN M. MILLER [1910], Assistant in Experimental Therapeutics; Rush Medical College.

A.B. Illinois, 1910; M.D. Rush Medical College, 1913; Assistant in Experimental Therapeutics, Chicago, 1910.

The Effect on Blood Pressure of Organ Extracts, *Journal of Physiology*, XLIII (1911), 242-46.

A Study of the Effect of Changes in the Circulation of the Liver in Nitrogen Metabolism, *Journal of Biological Chemistry*, XV (1913), 87-104.

EVA ORMENTA SCHLEY [1914-], Assistant in Physiology.

S.B. Chicago, 1908; Ph.D. *ibid.*, 1914.

Chemical and Physical Changes in Geotropic Stimulation and Response: I, Preliminary Article, *Botanical Gazette*, LVI (1913), 480-89; II, Doctor's thesis. *Ibid.* In Press.

LEROY HENDRICK SLOAN [1914], Assistant in Physiology.

Origin of the Proteolytic Ferment of the Blood: the Question of the Specific Character of Certain Ferments, *American Journal of Physiology*, XXXIX (1915), 9-19.

OLE OLAFSON STOLAND [1911-13], Assistant in Physiology; Professor of Physiology, University of Kansas, Lawrence.

A.B. South Dakota, 1905; S.M. Chicago, 1911; Ph.D. *ibid.*, 1913; Assistant in Physiology, *ibid.*, 1911-13.

The Abortive Spike of *Botrychium*, *Botanical Gazette*, LIV (1912), 525-31.

The Relative Toxicity of Dogs' Normal and Hypertrophied Thyroids to Animals Susceptible to Thyroid Feeding, *American Journal of Physiology*, XXX (1912), 37-41.

The Effect of Pituitary Extract upon Renal Activity, *ibid.*, XXXII (1913), 405-16.

The Influence of Parathyroid Tetany on the Liver and the Pancreas. Doctor's thesis. *American Journal of Physiology*, XXXIII (1914), 283-99.

STELLA BURNHAM VINCENT [1914], Assistant in Physiology; Instructor in Psychology, Chicago Teachers College. *See under* Department of Psychology, p. 21.

MARY LOUISE FOSTER, PH.D. 1914; Associate Professor of Chemistry, Smith College.

Studies on a Method for the Quantitative Estimation of Certain Groups in Phospholipins. Doctor's thesis. *Journal of Biological Chemistry*, XX (1915), 403-13.

WALTER LEE GAINES, PH.D. 1915; Crete, Ill.

A Contribution to the Physiology of Lactation. Doctor's thesis. *American Journal of Physiology*, XXXVIII (1915), 285-312.

CLARA JACOBSON, PH.D., 1916; Physician, Chicago.

The Ammonia-destroying Power of the Liver in Parathyroid Tetany (with A. J. Carlson), *American Journal of Physiology*, XXV (1910), 403-18.

The Concentration of Ammonia in the Blood, *ibid.*, XXVI (1910), 407-12.

The Rate of Healing of Wounds in Denervated Skin Areas, *ibid.*, 413-20.

Further Studies on the Nature of Parathyroid Tetany (with A. J. Carlson), *ibid.*, XXVIII (1911), 133-60.

The Rate of Disappearance of Ammonia from the Blood, *Journal of Biological Chemistry*, XVIII (1914), 133-37.

FRANKLIN CHAMBERS MCLEAN, PH.D. 1915; Professor of Medicine and Executive Head, Peking Union Medical College, Peking, China.

Relation of Oxygen Supply to the Character of Saliva (with A. J. Carlson), *American Journal of Physiology*, XX (1907-8), 457-69.

The Relation of the Phosphatids to Overton and Meyer's Theory (with W. Koch), *Journal of Pharmacology and Experimental Therapeutics*, II (1910), 249-52.

The Numerical Laws Governing the Rate of Excretion of Urea and Chlorides in Man. Doctor's thesis. *Journal of Experimental Medicine*, XXII (1915), 212-388.

WALTER JOSEPH MEEK, PH.D. 1909; Associate Professor of Physiology, University of Wisconsin.

The Influence of Osmotic Pressure on the Irritability of Skeletal Muscle, *American Journal of Physiology*, XVII (1906), 8-14.

The Mechanism of the Embryonic Heart Rhythm (with A. J. Carlson), *ibid.*, XXI (1908), 1-10.

The Resistance of the Heart Ganglia, the Heart Nerves, and the Heart Muscle to Drugs, *ibid.*, 230-35.

The Regeneration of Nerve and Muscle in the Small Intestine. Doctor's thesis. *Ibid.*, XXV (1910), 367-84.

MAUD LEONORA MENTEN, PH.D. 1916; The Magee Hospital, Pittsburgh, Pa.

The Alkalinity of the Blood in Malignancy and Other Pathological Conditions; Together with Observations on the Relation of the Alkalinity of the Blood to Barometric Pressure. Doctor's thesis. *Journal of Cancer Research*, II (1917), 179-211.

RUSSELL BURTON OPITZ, PH.D. 1905; Associate Professor of Physiology, Columbia University.

The Periodic and Irregular Variations in the Venous Blood-Flow. Doctor's thesis. *American Journal of Physiology*, VII (1902), 435-59+161-85.

WALES HARRISON PACKARD, PH.D. 1908; Professor of Biology, Bradley Polytechnic Institute, Peoria, Ill.

Resistance to Lack of Oxygen in Animals. Doctor's thesis. *American Journal of Physiology*, XV (1905), 30-41; XVIII (1907), 164-80; and XXI (1908), 310-33.

ARTHUR LAWRIE TATUM, PH.D. 1913; Professor of Physiology, University of South Dakota.

Morphological Studies in Experimental Cretinism. Doctor's thesis. *Journal of Experimental Medicine*, XVII (1913), 636-52.

WALTER W. HAMBURGER, S.M. 1904; Physician, Chicago.

The Action of Intravenous Injection of Adrenalin, Peptone, and Various Tissue Extracts on the Blood Pressure. Master's thesis. *American Journal of Physiology*, XI (1904), 282-302.

R. W. KEETON, S.M. 1916; Instructor in Pharmacology, Northwestern University.

The Secretion of Gastric Juice during Tetany, *American Journal of Physiology*, XXXIII (1914), 25-49.

The Distribution of Gastrin in the Body (with F. C. Koch), *ibid.*, XXXVII (1915), 481-504.

The Stimulation of the Hypophysis in Dogs (with F. C. Becht), *ibid.*, XXXIX (1915, 109-22).

G. H. CALDWELL, Graduate Student.

The Influence of Intravenous Injections of Thyroid Pressure Liquid, *ibid.*, XXX (1912), 42-47.

JOHN DEASON AND L. G. ROBB, Graduate Students.

The Pathways for the Bulbar Respiratory Impulses in the Spinal Cord, *ibid.*, XXVIII (1911), 57-63.

C. A. FJELDSTAD, Graduate Student.

The Effect of Thyroidectomy on Active Immunity, *ibid.*, XXVI (1910), 72-78.

H. E. FRENCH, Graduate Student.

The Comparative Toxicity of Animal Tissues, *ibid.*, XXX (1912), 56-62.

CARL L. VON HESS, Graduate Student.

The Relation of the Pancreas to the Lipases of Blood and Lymph, *Journal of Biological Chemistry*, X (1911), 381-98.

CLARENCE J. HICKS AND JOHN W. VISHNER, Graduate Students.

The Mechanism of Regurgitation of Duodenal Contents into the Stomach, *American Journal of Physiology*, XXXIX (1915), 1-8.

JAMES E. LEBENSOHN, Graduate Student.

The Chlorides in Diabetes, *Journal of Biological Chemistry*, XXIII (1915), 513-20.

Has Secretion a Therapeutic Value? (with A. J. Carlson, and S. J. Pearlman), *Journal of the American Medical Association*, LXVI (1916), 178-85.

LOUIS D. MOORHEAD, Graduate Student.

The Action of Bitter Tonics on the Secretion of Gastric Juice, *Journal of Pharmacology and Experimental Therapeutics*, VII (1915), 577-89.

H. J. MUSTARD, Graduate Student.

Certain Tonic and Reflex Nervous Impulses as Factors in Parathyroid Tetany, *American Journal of Physiology*, XXIX (1912), 311-16.

W. H. OLDS, JR., Graduate Student.

The Influence of Thyroidectomy on the Resistance to Poisons, *ibid.*, XXVI (1910), 354-60.

H. OTTEN AND T. C. GALLOWAY, Graduate Students.

The Relation of the Pancreas to the Blood Diastases, *ibid.*, XXVI (1910), 347-53.

THOMAS L. PATTERSON, Graduate Student.

The Cause of the Variations of Hunger with Age, *ibid.*, XXXVII (1915), 316-29.

ISIDORE RABENS AND JACOB LIFSCHITZ, Graduate Students.

On the Secretary Innervation of the Hypophysis, *ibid.*, XXXVI (1914), 47-56.

J. G. RYAN, Graduate Student.

Diastase in Cat's Saliva (with A. J. Carlson), *ibid.*, XXII (1908), 1-15.

The Variations in the Enzyme Concentration with the Variation in the Blood-Flow to the Secreting Gland, *ibid.*, XXIV (1909), 234-43.

E. L. SCOTT, Graduate Student.

The Influence of Pancreas Extracts on Diabetes, *ibid.*, XXIX (1912), 306-11.

ELIZABETH W. TOWLE, Graduate Student.

A Study of the Effects of Certain Stimuli, Single and Combined, upon Paramoecium, *ibid.*, XII (1904-5), 220-36.

J. VAN DE ERVE, Graduate Student.

The Rôle of the Kidneys in the Regulation of the Serum Diastase, *ibid.*, XXIX (1911), 182-87.

The Action of Bitters on the Hunger Mechanism (with A. J. Carlson, J. H. Lewis, and J. S. Orr), *Journal of Pharmacology and Experimental Therapeutics*, VI (1914), 209-20.

CLYDE F. WATTS, Graduate Student.

The Iodine Content of the Thyroid Gland following Changes in the Blood-Flow through the Gland, *American Journal of Physiology*, XXXVIII (1915), 356-68.

THE DEPARTMENT OF BOTANY

JOHN MERLE COULTER [1896-], Professor and Head of the Department of Botany.

A.B. Hanover, 1870; Ph.D. Indiana, 1881; LL.D. Illinois College, 1913; Professor of National Sciences, Hanover, 1874-79; Professor of Biology, Wabash, 1879-91; President and Professor of Botany, Indiana, 1891-93; President, Lake Forest, 1893-96; Professor and Head of the Department of Botany, Chicago, 1896-.

Vice-President, American Association for the Advancement of Science, 1891; President, American Botanical Society, 1897-98; Member, National Academy of Sciences; Associate Fellow, American Academy of Arts and Sciences; President, Illinois Academy of Sciences, 1910; Corresponding Fellow, Botanical Society of Edinburgh; Foreign Member, Linnaean Society; President, Chicago Academy of Sciences, 1915; President, American Botanical Society, 1915; Chairman, Committee on Botany, National Research Council, 1916-.

Editor, *Botanical Gazette*, from its foundation (1875) to the present; Botanical Editor, *Proceedings of the National Academy*, 1915-; Botanical Editor, *New International Encyclopedia*, 1913-; Joint Editor of volume *Heredity and Eugenics* (8vo, vii+315. Chicago: University Press, 1912); Member of the Editorial Committee of the "University of Chicago Science Series," 1914-.

Morphology of Angiosperms (with C. J. Chamberlain). 8vo, x+348. New York: D. Appleton & Co., 1903.

Plant Studies. 8vo, ix+392. New York: D. Appleton & Co., 1904.

Plant Structures (2d ed., rev.). 8vo, ix+348. New York: D. Appleton & Co., 1904.

- Plant Relations* (3d ed., rev.). 8vo, ix+266. New York: D. Appleton & Co., 1905.
- A Textbook of Botany*. 16mo, vii+365. New York: D. Appleton & Co., 1906.
- New Manual of Rocky Mountain Botany*. 8vo, 646. New York: American Book Co., 1909.
- A Textbook of Botany*. 8vo, vii+484. New York: American Book Co., 1910.
- Morphology of Gymnosperms* (with C. J. Chamberlain). 8vo, xi+458. Chicago: University Press, 1910.
- Plants in General*. 8vo, 300. New York: D. Appleton & Co., 1913.
- Plants in Cultivation*. 8vo, 200. New York: D. Appleton & Co., 1913.
- Fundamentals of Plant-Breeding*. 8vo, xiv+347. New York: D. Appleton & Co., 1914.
- The Evolution of Sex in Plants*. 8vo, ix+140. Chicago: University Press, 1914.
- Evolution, Heredity, and Eugenics*. "School Science Series," No. 5. 16mo, iv+133. Bloomington, Ill., 1916.
- The Embryogeny of *Zamia* (with C. J. Chamberlain), *Botanical Gazette*, XXXV (1903), 184-94, plates VI-VIII.
- Regeneration in *Zamia*, *ibid.*, XXXVIII (1904), 452-58.
- Botany as a Factor in Education, *School Review*, XII (1904), 609-17.
- The Contribution of Germany to Higher Education, *University Record*, VIII (1904), 348-52.
- Development of Morphological Conceptions, *Science*, XX (1904), 617-24.
- The Influence of a Teacher's Research Work upon His Teaching of Biology in Secondary Schools, *Science and Mathematics*, V (1905), 94-103.
- Gametophytes and Embryo of *Torreya* (with W. J. G. Land), *Botanical Gazette*, XXXIX (1905), 161-78.
- Principles of Nature Study, *Nature-Study Review*, I (1905), 57-60.
- Public Interest in Research, *Popular Science Monthly*, LXVII (1905), 306-12.

- Charles Darwin, *Chautauquan*, XLV (1906), 66-74.
- The Scientific Spirit, *Educational Bi-Monthly*, I (1907), 293-99.
- Relation of Megaspores to Embryo Sacs in Angiosperms, *Botanical Gazette*, XLV (1908), 361-66.
- Embryo Sac and Embryo of *Gnetum Gnenom*, *ibid.*, XLVI (1908), 43-49.
- Some Problems in Education, *Normal Education*, XXIII (1908), 1-16.
- Recent Advances in the Study of Vascular Anatomy, *American Naturalist*, XLIII (1909), 219-30.
- What the University Expects of the High School, *School Review*, XVII (1909), 73-84.
- The Theory of Natural Selection from the Standpoint of Botany. Contribution (pp. 57-72) to memorial volume, *Fifty Years of Darwinism* (New York: Henry Holt & Co., 1909).
- Evolutionary Tendencies among Gymnosperms, *Botanical Gazette*, XLVIII (1909), 81-97.
- North American Umbelliferae, *United States National Herbarium*, XXI (1909), 441-51.
- Charles Reid Barnes, *Botanical Gazette*, XLIX (1910), 321-24.
- Charles Reid Barnes, *University of Chicago Magazine*, II (1910), 148-49.
- Practical Science, *Science*, XXXI (1910), 881-89.
- Melchior Treub, *Botanical Gazette*, LI (1911), 141-42.
- An American *Lepidostrobis* (with W. J. G. Land), *ibid.*, 449-53.
- The Endosperm of Angiosperms, *ibid.*, LII (1911), 380-85.
- History of Gymnosperms, *Popular Science Monthly*, LXXX (1912), 197-203.
- Problems of Plant Breeding, *Transactions of the Illinois State Academy of Science*, IV (1912), 28-39.
- Recent Developments in Heredity and Evolution: General Introduction. Chap. i (pp. 3-21) in volume *Heredity and Eugenics* (Chicago: University Press, 1912).
- The Physical Basis of Heredity and Evolution from the Cytological Standpoint. Chap. ii (pp. 22-35), *ibid.*
- Morphology and Paleobotany, *American Year Book* (1912), 671-73.

- The Religion of a Scientist, *Biblical World*, XLI (1913), 80-85.
- What Biology Has Contributed to Religion. *Ibid.*, 219-23.
- Increasing Plant Population, *Breeder's Gazette*, LXIV (1913), 823-24.
- The Origin of Monocotyledony: I (with W. J. G. Land), *Botanical Gazette*, LVII (1914), 509-19; II, Anniversary Volume, *Missouri Botanical Garden*, II (1915), 175-83.
- Regeneration in Plants, *Biblical World*, XLIII (1914), 377-81.
- Jesus' Attitude toward a New Religious Movement, *Homiletic Review*, LXVII (1914), 175-77.
- Jesus' Attitude toward the Organized Church, *ibid.*, 360-62.
- Botanical articles in the *New International Encyclopedia* (Dodd, Mead & Co., 1914).
- The Mission of Science in Education, *School Review*, XXIII (1915), 1-8.
- Charles E. Bessey, *Science*, XLI (1915), 599-600.
- The Attitude of Jesus toward Religion, *Homiletic Review*, LXX (1915), 183-85.
- A Suggested Explanation of "Orthogenesis" in Plants, *Science*, XLII (1915), 859-63.
- REVIEWS IN: *Botanical Gazette*, XXXIV, 67-68; XXXV, 60-61; XXXVII, 313-14, 393, 471-72; XXXVIII, 149-50, 220, 463-64; XXXIX, 301; XL, 74, 312; XLII, 222, 393-94, 494-96; XLIII, 138-39, 420-23; XLIV, 147-51, 310-11; XLV, 417-18; XLVI, 56-58, 148-50, 231-32, 308; XLVIII, 308-9; XLIX, 60-61, 225-26; L, 470; LI, 68-69, 395; LII, 158-59; LIII, 71-72, 253-54, 256-57; LIV, 329; LVI, 231, 343; LVII, 332; LVIII, 187-88; LIX, 334; LX, 495-96.
- †CHARLES REID BARNES [1898-1910], Professor of Plant Physiology.
- A.B. Hanover, 1877; Ph.D. *ibid.*, 1886; Professor of Natural History, Purdue, 1882-85; Professor of Botany and Geology, *ibid.*, 1885-87; Professor of Botany, Wisconsin, 1887-98; Professor of Plant Physiology, Chicago, 1898-1910; Examiner for the Colleges, *ibid.*, 1904-10.
- General Secretary, American Association for the Advancement of Science, 1895-96; Vice-President, *ibid.*, 1899; Secretary, Botanical Society of America, 1894-98; President, *ibid.*, 1903-4.
- Joint Editor, *Botanical Gazette*, 1883-1910.
- The Theory of Respiration, *Botanical Gazette*, XXXIX (1905), 81-98.

†Deceased.

The Vienna Botanical Congress, *ibid.*, XL (1905), 68-73.

The Contribution of Science to Religious Education, *Biblical World*, XXVII (1906), 313-18.

Illustrating Botanical Papers, *Botanical Gazette*, XLIII (1907), 59-63.

Bryological Papers (with W. J. G. Land):

I. Origin of Air-Chambers, *ibid.*, XLIV (1907), 197-213, 22 figs.

II. The Origin of the Cupule of *Marchantia*, *ibid.*, XLVI (1908), 401-9, 14 figs.

The Nature of Physiological Response, *American Naturalist*, XLIV (1910), 321-32.

REVIEWS IN: *Botanical Gazette*, XXXV, 438-39; XXXVI, 143-45, 231-32; XXXVII, 150, 390-91; XXXVIII, 73, 386-87, 468-70; XXXIX, 153-54, 223-24; XL, 230-31, 459-64; XLI, 300, 448-49; XLII, 61-62, 148-50, 311, 395-97, 493-94; XLIII, 68-69, 140, 215-17, 345-47, 420-21; XLIV, 228-31, 307-10, 384, 386, 457-58; XLV, 137-38, 200-202, 272-74, 341-43; XLVI, 58-60, 62-63, 305-6, 387-88; XLVII, 242-43, 414-18; *American Journal of Theology*, XI, 356-58.

OTIS WILLIAM CALDWELL [1907-16], Professor of Botany and Supervisor of Natural Science in the School of Education; Professor of Education and Director of the Lincoln School, Teachers College, Columbia University. See under College of Education, p. 478.

CHARLES JOSEPH CHAMBERLAIN [1897-], Professor of Morphology and Cytology.

A.B. Oberlin, 1888; Ph.D. Chicago, 1897; Assistant Professor of Botany, *ibid.*, 1907-11; Associate Professor, *ibid.*, 1911-15; Professor, *ibid.*, 1915-.

Editor of "Current Botanical Literature" in *Journal of Applied Microscopy*, 1899-1903; American Editor of the department of Cytology, *Botanisches Centralblatt*, 1902-; Editor of the department of Botany, *United Editor's Encyclopedia*, 1909; of Cytology, the *Encyclopedia Americana*, 1904.

Morphology of Angiosperms (with John M. Coulter). Svo, x+348. New York: D. Appleton & Co., 1903.

Methods in Plant Histology. 2d ed., 1905; 3d ed., 1915. Svo, xi+314. Chicago: University Press.

Morphology of Gymnosperms (with John M. Coulter). Svo, xi+458. Chicago: University Press, 1910.

- The Embryogeny of *Zamia* (with John M. Coulter), *Botanical Gazette*, XXXV (1903), 184-94, plates VI-VIII.
- Mitosis in *Pellia*, *ibid.*, XXXVI (1903), 28-51, plates XII-XIV.
- Alternation of Generations in Animals from a Botanical Viewpoint, *ibid.*, XXXIX (1905), 137-44.
- Alternation of Generation in Animals. A Reply to Criticism and Also a Further Presentation of the Subject, *Science*, XXII (1905), 208-11.
- Megaspore or Macrospore, *ibid.*, XXIII (1906), 819.
- The Ovule and Female Gametophyte of *Dioon*, *Botanical Gazette*, XLII (1906), 321-58.
- Preliminary Note on *Ceratozamia*, *ibid.*, XLIII (1907), 137.
- Monte Alban and Mitla as the Tourist Sees Them, *Popular Science Monthly*, LXXIII (1908), 392-402.
- Spermatogenesis in *Dioon edule*, *Botanical Gazette*, XLVII (1909), 215-36.
- Dioon spinulosum*, *ibid.*, XLIX (1909), 401-13.
- Nuclear Phenomena of Sexual Reproduction in Gymnosperms, *American Naturalist*, XLIV (1910), 595-603.
- Fertilization and Embryogeny in *Dioon edule*, *Botanical Gazette*, L (1910), 415-29.
- A Convenient Microtome Knife, *ibid.*, LI (1911), 298-300.
- The Adult Cycad Trunk, *ibid.*, LII (1911), 81-104.
- Morphology of *Ceratozamia*, *ibid.*, LIII (1912), 1-19.
- Eduard Strasburger, *ibid.*, LIV (1912), 68-72.
- A Round-the-World Botanical Excursion, *Popular Science Monthly*, LXXXI (1912), 417-33.
- Two Species of *Bowenia*, *Botanical Gazette*, LIV (1912), 419-23.
- Macrozamia Moorei*, a Connecting Link between Living and Fossil Cycads, *ibid.*, LV (1913), 141-54.
- The Oriental Cycads in the Field, *Science*, XXXVIII (1913), 164-67.
- A Phylogenetic Study of Cycads, *Proceedings of the National Academy of Sciences*, I (1915), 86-90.
- Stangeria paradoxa*, *Botanical Gazette*, LXI (1916), 353-72.

REVIEW OF: Strasburger, Ueber die Individualität der Chromosomen und die Pfropfhybridenfrage, *Jahrbücher für wissenschaftliche Botanik*, XLIV, 482-555; and many other reviews in the *Botanical Gazette*, *Botanisches Centralblatt*, and *Journal of Applied Microscopy*.

HENRY CHANDLER COWLES [1898-], Professor of Plant Ecology.

A.B. Oberlin, 1893; Ph.D. Chicago, 1898; Professor of Natural Sciences, Gates College, 1894-95; Assistant Professor of Plant Ecology, Chicago, 1907-11; Associate Professor, *ibid.*, 1911-15; Professor, *ibid.*, 1915-.

President, Association of American Geographers, 1910; Vice-President, American Association for the Advancement of Science, 1913.

A Textbook of Botany. Vol. II. *Ecology*. 8vo, x+480. New York: American Book Co., 1912.

The International Phytogeographical Excursion in the United States: A Handbook. 6o. Chicago: University Press, 1913.

A Spring Flora for High Schools (with J. G. Coulter), 144. New York: American Book Co., 1915.

Recent Studies upon Regeneration, *Botanical Gazette*, XXXIV (1902), 464-66.

Recent Contributions to American Phytogeography, *ibid.*, XXXV (1903), 147-49.

The Desert Botanical Laboratory, *ibid.*, XXXVII (1904), 307-9.

The Work of the Year 1903 in Ecology, *Science*, XIX (1904), 879-85.

A Remarkable Colony of Northern Plants along the Apoladinola River, Florida, and Its Significance, *Report of the Eighth International Geographical Congress* (1904), 599.

Importance of the Physiographic Standpoint in Plant Geography, *ibid.*, 600.

Insects and Flower Colors, *Botanical Gazette*, XXXIX (1905), 68-70.

An Ecological Aspect of the Conception of Species, *American Naturalist*, XLII (1908), 265-71.

The Response of Plants to Soil and Climate, Salisbury's *Physiography for High Schools* (1908), 462-73.

The Trend of Ecological Philosophy, *American Naturalist*, XLIII (1909), 356-68.

The Fundamental Causes of Succession among Plant Associations, *Report of the British Association for the Advancement of Science* (1909), 668-70.

Charles Reid Barnes, *Science*, XXXI (1910), 532-33.

A Fifteen-Year Study of Advancing Sand Dunes, *Report of the British Association for the Advancement of Science* (1911), 565.

Causes of Vegetative Cycles, *Botanical Gazette*, LI (1911), 161-83.

Impressions of the International Phytogeographical Excursion in the British Isles, *New Phytologist*, XI (1912), 25-26.

The International Phytogeographical Excursion in the British Isles, *Plant World*, XV (1912), 46-48.

Conservation of Our Forests, *Transactions of the Illinois State Academy of Science*, V (1912), 48-53.

REVIEWS IN: *Botanical Gazette*, XXXIV, 309-10; XXXV, 293-94; XXXVI, 394-95; XXXVII, 392-93; XXXVIII, 146-48; XL, 148-49, 381-82; XLIV, 456-58; XLV, 55, 56, 279-80; XLVII, 73-75; XLVIII, 149-53, 307-8; XLIX, 305-7, 382-83; L, 312; LI, 65-67, 395.

WILLIAM CROCKER [1906-], Associate Professor of Plant Physiology.

A.B. Illinois, 1902; Ph.D. Chicago, 1906; Assistant Professor of Plant Physiology, *ibid.*, 1911-15; Associate Professor, *ibid.*, 1915-.

Collaborator and Plant Physiologist, Bureau of Plant Industry, United States Department of Agriculture.

Rôle of Seed Coats in Delayed Germination. Doctor's thesis. *Botanical Gazette*, XLII (1906), 265-91.

Germination of Seeds of Water Plants, *ibid.*, XLIV (1907), 375-80.

Effect of Illuminating Gas and Ethylene upon Flowering Carnations (with L. I. Knight), *ibid.*, XLVI (1908), 259-76.

Effect of Illuminating Gas and Its Constituents upon Flowering Carnations (with L. I. Knight), *Plant World*, XII (1909), 83-88.

Longevity of Seeds, *Botanical Gazette*, XLVII (1909), 69-72.

A New Method of Detecting Traces of Illuminating Gas (with L. I. Knight and R. C. Rose), *Science*, XXXI (1910), 635-36.

The Peg of the Cucurbitaceae (with L. I. Knight and Edith Roberts), *Botanical Gazette*, L (1910), 321-39.

Toxicity of Smoke (with L. I. Knight), *ibid.*, LV (1913), 337-71.

The Effects of Advancing Civilization upon Plants, *School Science and Mathematics*, XIII (1913), 277-89.

Delayed Germination in the Seed of *Alisma Plantago* (with Wilmer E. Davis), *Botanical Gazette*, LVIII (1914), 285-321.

A Method of Prophesying the Life Duration of Seeds (with J. F. Groves), *Proceedings of the National Academy of Sciences*, I (1915), 152-55.

Significance of Colloidal Chemistry in Physiology, *Transactions of the Illinois State Academy of Science*, VIII (1915), 47-68.

Mechanics of Dormancy in Seeds, *American Journal of Botany*, III (1916), 99-120.

REVIEWS IN: *Botanical Gazette*, XLII, 70-72; XLIII, 290; XLVII, 82, 164, 170, 249, 252, 339-44, 482; XLIX, 230-31, 238, 239, 319, 390, 393, 395, 397, 399, 465, 469, 472, 474; L, 73, 75, 77, 78, 154, 155, 159, 230, 233, 234, 237, 238, 240, 312-13, 315, 317, 320, 321, 398; LI, 70, 76, 77, 79, 156, 158, 239, 304, 310, 314, 315, 318-20, 393-94, 400, 469, 470, 474, 478-80; LII, 66-67, 241, 243, 245, 247, 320, 322, 328, 343-44; LIII, 74-75, 83, 86, 88, 361, 362, 363, 364, 452; LIV, 171, 263, 435, 543; LV, 167-68, 233, 237, 253-54; LVI, 86, 155-57, 164, 231-32, 244, 341, 343; LVII, 334, 437, 543-44; LVIII, 91; LIX, 57, 59, 62, 67; LX, 74, 325, 328-30, 421, 423, 502; LXI, 345-46, 347-48, 349-52; LXII, 82-83, 86-87, 164-65, 165-66, 168, 242, 244-46, 248, 325-28, 334, 336, 421-22.

WILLIAM JESSE GOAD LAND [1904-], Associate Professor of Plant Morphology.

S.B. Chicago, 1902; Ph.D. *ibid.*, 1904; Instructor in Botany, *ibid.*, 1908-11; Assistant Professor, *ibid.*, 1911-15; Associate Professor, *ibid.*, 1915-.

A Morphological Study of *Thuja*. Doctor's thesis. *Botanical Gazette*, XXXVI (1902), 249-59.

Spermatogenesis and Oögenesis in *Ephedra trifurca*, *ibid.*, XXXVIII (1904), 1-18.

Gametophytes and Embryo of *Torreya* (with J. M. Coulter), *ibid.*, XXXIX (1905), 161-78.

Bryological Papers (with C. R. Barnes):

I. The Origin of Air-Chambers, *ibid.*, XLIV (1907), 197-213, 22 figs.

II. The Origin of the Cupule of *Marchantia*, *ibid.*, XLVI (1908), 401-9, 14 figs.

Fertilization and Embryogeny in *Ephedra trifurca*, *ibid.*, XLIV (1907), 273-92.

An American *Lepidostrobus* (with J. M. Coulter), *ibid.*, LI (1911), 449-53.

An Electrical Constant Temperature Apparatus, *Botanical Gazette*, LII (1911), 391-99.

A Protocorm of *Ophioglossum*, *ibid.*, 478-79.

Vegetative Reproduction in an *Ephedra*, *ibid.*, LV (1913), 439-45.

The Origin of Monocotyledony (with J. M. Coulter), *ibid.*, LVII (1914), 509-19.

A Method of Controlling the Temperature of the Paraffin Block and Microtome Knife, *ibid.*, 520-23.

Microtechnical Methods, *ibid.*, LIX (1915), 397-401.

Chloroform as a Paraffin Solvent in the Imbedding Process, *ibid.*, LXI (1916), 251.

REVIEWS IN: *Botanisches Centralblatt*, CI, 163-64; *Botanical Gazette*, XLV, 349-50, 359; XLVII, 487; XLVIII, 77; XLIX, 393, 399; L, 77; LI, 159-60, 238-39; LIII, 356-57; LIV, 85-86; LVI, 244-45, 447-48, 518-20; LIX, 168, 258-59, 344; LX, 497-99, 502-3, 504; LXI, 347, 348, 447, 448, 451, 531.

BRADLEY MOORE DAVIS [1895-1906], Assistant Professor of Plant Morphology; Professor of Botany, University of Pennsylvania.

A.B. Leland Stanford Junior, 1892; Ph.D. Harvard, 1895; Instructor in Botany, Chicago, 1898-1902; Assistant Professor of Plant Morphology, *ibid.*, 1902-6.

The Origin of the Archegonium, *Annals of Botany*, XVII (1903), 477-92.

The Origin of the Sporophyte, *American Naturalist*, XXXVII (1903), 411-29.

The Evolution of Sex in Plants, *Popular Science Monthly*, LXII (1903), 300-9.

Tilletia in the Capsule of Bryophytes, *Botanical Gazette*, XXXVI (1903), 306-7.

Oögenesis in *Vaucheria*, *ibid.*, XXXVIII (1904), 81-98.

The Relationships of Sexual Organs in Plants, *ibid.*, 241-64.

Structure of the Plant Cell, *American Naturalist*, XXXVIII (1904), 367-95.

The Activities of the Plant Cell, *ibid.*, 431-69.

Highly Specialized Plant Cells and Their Peculiarities, *ibid.*, 571-94, 725-60.

Fertilization in the Saprolegniales, *Botanical Gazette*, XXXIX (1905), 61-64.

The Sexual Organs and Sporophyte Generation of the Rhodophyceae, *ibid.*, 64-66.

Cell Unions and Nuclear Fusions in Plants, *American Naturalist*, XXXIX (1905), 217-68.

Cell Activities at Critical Periods of Ontogeny in Plants, *ibid.*, 449-99, 555-99.

Comparative Morphology and Physiology of the Plant Cell, *ibid.*, 695-740.

REVIEWS IN: *Botanical Gazette*, XXXIII, 242, 386; XXXIV, 70, 72, 152, 153, 156, 221, 460, 475; XXXV, 221, 223, 229, 298, 299, 368; XXXVI, 68, 69, 70, 72, 73, 155, 307, 398; XXXVII, 72, 74; XXXVIII, 313, 463, 468, 472; XXXIX, 71, 301, 375, 380; XL, 157, 158, 159, 233, 475; XLI, 71, 79, 146, 157, 367.

JESSE MORE GREENMAN [1908-13], Assistant Professor of Botany; Professor of Botany, Washington University, St. Louis.

S.B. Pennsylvania, 1893; S.M. Harvard, 1899; Ph.D. Berlin, 1901; Assistant Curator of Botany, Field Museum of Natural History, Chicago, 1905-13; Assistant Professor of Botany, Chicago, 1908-13.

The Generic Name *Goldmania*, *Botanical Gazette*, XLV (1908), 198.

Notes on the Genus *Senecio*, *Rhodora*, X (1908), 68-69.

Revision of the Genus *Senecio*, Gray's *New Manual of Botany* (7th ed.), 1908, 852-55.

Some Hitherto Undescribed Plants from Oregon, *Botanical Gazette*, XLVIII (1909), 146-48.

Some Canadian *Senecios*, *Ottawa Naturalist*, XXV (1911), 114-18.

Sir Joseph Dalton Hooker (with portrait), *Botanical Gazette*, LIII (1912), 438-40.

Some Plants of Western America, *ibid.*, 510-12.

REVIEWS OF: Gray, *New Manual of Botany*, 7th ed., *Botanical Gazette*, XLVII, 153-54; Coulter and Nelson, *New Manual of Botany of the Central Rocky Mountains*, *ibid.*, XLIX, 307-8. Other reviews in *Botanical Gazette*, XLVII, 157-59, 467; XLVIII, 156, 311-12, 394-95, 465, 475; XLIX, 69, 153-54, 226-27, 385-86, 464; L, 231, 470-72; LI, 72, 305-6, 394-95.

LEE IRVING KNIGHT [1910-], Assistant Professor of Botany.

A.B. Illinois, 1902; Ph.D. Chicago, 1913; Assistant in Botany, *ibid.*, 1910-13; Instructor, *ibid.*, 1913-16; Assistant Professor, *ibid.*, 1916-.

Associate in Horticulture, West Virginia Agricultural Experiment Station, 1914-.

Effect of Illuminating Gas and Ethylene upon Flowering Carnations (with Wm. Crocker), *Botanical Gazette*, XLVI (1908), 259-76.

Effect of Illuminating Gas and Its Constituents upon Flowering Carnations (with Wm. Crocker), *Plant World*, XII (1909), 83-88.

The Peg of the Cucurbitaceae (with Wm. Crocker and Edith Roberts), *Botanical Gazette*, L (1910), 321-39.

A New Method of Detecting Traces of Illuminating Gas (with Wm. Crocker and R. C. Rose), *Science*, XXXI (1910), 635-36.

Toxicity of Smoke (with Wm. Crocker), *Botanical Gazette*, LV (1913), 337-71.

Chemical Changes in Buds of Trees Accompanying Cessation of Dormancy. Doctor's thesis. *Ibid.* In Press.

SOPHIA HENNING ECKERSON [1911-], Instructor in Plant Physiology.

A.B. Smith, 1905; Ph.D. Chicago, 1911; Assistant in Plant Physiology, *ibid.*, 1911-16; Instructor, *ibid.*, 1916-.

A Physiological and Chemical Study of After-Ripening. Doctor's thesis. *Botanical Gazette*, LV (1913), 286-99.

Thermotropism of Roots, *ibid.*, LVIII (1914), 254-63.

GEORGE DAMON FULLER [1909-], Instructor in Ecology.

A.B. McGill, 1901; S.M. Chicago, 1912; Ph.D. *ibid.*, 1913; Assistant in Ecology, *ibid.*, 1909-13; Instructor, *ibid.*, 1913-.

Editor, articles on ecology, *New International Encyclopedia*, New York, 1915-16.

Evaporation and Plant Succession, *Botanical Gazette*, LII (1911), 193-208.

Range of Evaporation and Soil Moisture in the Oak Forest (with Wade McNutt), *Transactions of the Illinois State Academy of Science*, V (1912), 127-37.

Germination and Growth of the Cottonwood on the Sand Dunes near Chicago, *ibid.*, 137-43.

Soil Moisture in the Cottonwood Dune Association of Lake Michigan, *Botanical Gazette*, LIII (1912), 512-14.

Evaporation and the Stratification of Vegetation, *ibid.*, LIV (1912), 424-26.

Reproduction by Layering in *Picea mariana*, *ibid.*, LV (1913), 452-57.

The Stratification of Atmospheric Humidity in the Forest (with J. R. Locke and Wade McNutt), *Proceedings of the Illinois State Academy of Science*, VI (1913), 100-102.

Soil Moisture and Plant Succession, *ibid.*, VII (1914), 68-73.

Evaporation and Soil Moisture in Relation to the Succession of Plant Associations. Doctor's thesis. *Botanical Gazette*, LVIII (1914), 183-234.

Comparisons of Some Rocky Mountain Grasslands with the Prairies of Illinois, *Proceedings of the Illinois State Academy of Science*, VIII (1915), 121-30.

Thuja occidentalis upon the Sand Dunes of Michigan, *ibid.* In Press

REVIEW OF: Shreve, A Montane Rain Forest, *Botanical Gazette*, LX, 237-40. Other reviews, *ibid.*, LV, 252-53, 328-29, 333-35; LVI, 79, 91; LIX, 60, 257, 410-11.

CLIFTON DURANT HOWE [1903-4; 1907-], Extension Instructor in Botany; Assistant Professor of Botany and Forestry, University of Toronto.

A.B. Vermont, 1898; S.M. *ibid.*, 1901; Ph.D. Chicago, 1904; Assistant in Botany *ibid.*, 1903-4; Member of the Faculty, University of Toronto, 1908-; Extension Instructor in Botany, Chicago, 1907-.

Associate Editor, *Forest Quarterly*; Engaged in forest-survey work for the Commission of Conservation, Canada, 1909-.

The Reforestation of Sand Plains in Vermont. Doctor's thesis. *Botanical Gazette*, XLIX (1910), 126-48.

WANDA MAY PFEIFFER [1909-16], Instructor in Plant Pathology.

S.B. Chicago, 1904; Ph.D. *ibid.*, 1908; Assistant in Botany, *ibid.*, 1909-14; Instructor in Plant Pathology, *ibid.*, 1914-16.

Differentiation of Sporocarps in *Azolla*, *Botanical Gazette*, XLIV (1907), 445-54.

The Morphology of *Leitneria floridana*. Doctor's thesis. *Ibid.*, LIII (1912), 189-203.

BURTON EDWARD LIVINGSTON [1902-5], Associate in Botany; Professor and Director of the Laboratory of Plant Physiology, Johns Hopkins University.

S.B. Michigan, 1898; Ph.D. Chicago, 1901; Assistant in Botany, *ibid.*, 1902-4; Associate, *ibid.*, 1904-5.

Member, Michigan Geological Survey, 1901-2; Collaborator, Bureau of Forestry, United States Department of Agriculture, 1902-3; Research Assistant, Carnegie Institution of Washington, 1904; Special Soil Expert, United States Bureau of Soils, 1904-5.

Studies on the Properties of an Unproductive Soil (with J. C. Britton and F. R. Reid), 8vo, 39. United States Department of Agriculture, Bureau of Soils, Bulletin 28. Washington, 1905.

The Relation of Desert Plants to Soil Moisture and to Evaporation. 8vo, 78. Carnegie Institution of Washington, Publication No. 50, 1906.

The Soils and Vegetational Possibilities of the Michigan Forestry Reserve, *Annual Report of the Michigan Forestry Commission* (1902), 38-40.

The Relation of Soils to Natural Vegetation in Roscommon and Crawford Counties, Michigan, *Annual Report of the Michigan Geological Survey* (1903), 9-30.

Physical Properties of Bog Water, *Botanical Gazette*, XXXVII (1904), 383-85.

An Experiment on the Relation of Soil Physics to Plant Growth, *ibid.*, XXXVIII (1904), 67-71.

The Relation of Soils to Natural Vegetation in Roscommon and Crawford Counties, Michigan, *ibid.*, XXXIX (1905), 22-41.

Chemical Stimulation of a Green Alga, *Bulletin of the Torrey Botanical Club*, XXXII (1905), 1-34.

Notes on the Physiology of *Stigeoclonium*, *Botanical Gazette*, XXXIX (1905), 297-300.

Physiological Properties of Bog Water, *ibid.*, 348-55.

Relation of Transpiration to Growth in Wheat, *ibid.*, XL (1905), 178-95.

Note on the Relation between the Growth of Roots and of Tops in Wheat, *ibid.*, XLI (1906), 139-43.

A Simple Method for Experiments with Water Cultures, *Plant World*, IX (1906), 13-16.

Paraffined Wire Pots for Soil Cultures, *ibid.*, 62-66.

FLORENCE MAY LYON (MRS. STRONG V. NORTON) [1903-7], Associate in Botany.

S.B. Chicago, 1897; Ph.D. *ibid.*, 1901; Associate in Botany, *ibid.*, 1903-7.

Two Megasporengia in *Selaginella*, *Botanical Gazette*, XXXVI (1903), 308, fig. 1.

The Evolution of the Sex Organs in Plants, *ibid.*, XXXVII (1904), 280-93, figs. 16.

The Spore Coats of *Selaginella*, *ibid.*, XL (1905), 285-95.

LEONAS LANCELOT BURLINGAME [1907-8], Assistant in Botany; Associate Professor of Botany, Leland Stanford Junior University.

Ph.B. Ohio Northern University, 1901; A.B. Chicago, 1906; Ph.D. *ibid.*, 1908; Assistant in Botany, *ibid.*, 1907-8.

The Sporangium of the Ophioglossales, *Botanical Gazette*, XLIV (1907), 34-56.

The Staminate Cone and Male Gametophyte of *Podocarpus*. Doctor's thesis. *Ibid.*, XLVI (1908), 161-78.

REVIEW OF: Campbell, Ophioglossaceae, *ibid.*, XLV, 68.

REGINALD RUGGLES GATES [1908-9], Assistant in Morphology; with the British Army.

A.B. Mount Allison University, 1903; S.B. McGill University, 1906; Ph.D. Chicago, 1908; Assistant in Morphology, *ibid.*, 1908-9; Assistant in Botany, Marine Biological Laboratory, 1908-9.

Preliminary Note on Pollen Development in *Oenothera lata* DeVries and Its Hybrids, *Science*, XXV (1907), 259-60.

Pollen Development in Hybrids of *Oenothera lata* × *O. Lamarckiana* and Its Relation to Mutation, *Botanical Gazette*, XLIII (1907), 81-115, plates II-IV.

Hybridization and Germ Cells of *Oenothera* Mutants, *ibid.*, XLIV (1907), 1-21, 3 figs.

Further Studies on the Chromosomes of *Oenothera*, *Science*, XXVII (1908), 335.

A Study of Reduction in *Oenothera rubrinervis*. Doctor's thesis. *Botanical Gazette*, XLVI (1908), 1-34, plates I-III.

The Chromosomes of *Oenothera*, *Science*, XXVII (1908), 193-95.

A Preliminary Account of Studies in the Variability of a Unit Character in *Oenothera*, *Science*, XXVII (1908), 209.

A Litter of Hybrid Dogs, *ibid.*, XXIX (1909), 744-47.

The Stature and Chromosomes of *Oenothera gigas* DeVries, *Archiv für Zellforschung*, III (1909), 525-52.

Studies of Inheritance in the Evening Primrose, *Chicago Medical Recorder* (1909), 126-31.

Some Variations and Hybrids of *Oenothera*, *Science*, XXIX (1909), 906.

The Behavior of the Chromosomes in *Oenothera lata* × *O. gigas*, *Botanical Gazette*, XLVIII (1909), 179-99, plates XII-XIV.

REVIEWS IN: *Botanical Gazette*, XLIII, 146; XLIV, 238; XLV, 61-63, 68-69; XLVII, 79-81, 82-83, 84, 154-56, 168-70, 246-47, 250, 251-52, 273-77, 480-81, 486; XLVIII, 61-62, 72, 477-80.

HEINRICH HASSELBRING [1903-7], Assistant in Botany; Plant Physiologist, United States Department of Agriculture, Washington.

S.B. Cornell, 1897; Ph.D. Chicago, 1905; Assistant in Botany, *ibid.*, 1903-7.

Articles in *Cyclopedia of American Horticulture* and *Standard Cyclopedia of Horticulture*, 1906.

The Appressoria of the Anthracoses, *Botanical Gazette*, XLII (1906), 135-42.

Gravity as a Form-Stimulus in Fungi, *ibid.*, XLIII (1907), 251-58.

The Carbon Assimilation of *Penicillium*. Doctor's thesis. *Ibid.*, XLV (1908), 176-93.

REVIEWS IN: *Botanical Gazette*, XXXVI, 147-48, 236, 313, 393; XXXVII, 226, 474, 481; XXXVIII, 225, 226, 231, 391, 467, 477; XXXIX, 76, 312-14, 318, 371, 427; XL, 389, 465, 468, 474; XLI, 72, 75, 77, 152, 156, 157, 361, 366; XLII, 62, 63, 65, 76, 78, 153, 154, 159, 226, 231, 313, 315, 497.

WILLIAM BURNETT MCCALLUM [1905-6], Assistant in Botany.

B.S.A. Toronto, 1894; Ph.D. Chicago, 1904; Assistant in Botany, *ibid.*, 1905-6.

Regeneration in Plants. Doctor's thesis. *Botanical Gazette*, XL (1905), 97-120.

FLORENCE ANNA McCORMICK [1909-13], Technical Assistant in Botany; Instructor in Botany, University of Nebraska, Lincoln.

A.B. Tennyson, 1897; S.M. *ibid.*, 1900; Ph.D. Chicago, 1914; Technical Assistant in Botany, *ibid.*, 1909-13.

A Study of *Symphygyna aspera*. Doctor's thesis. *Botanical Gazette*, LVIII (1915), 401-18.

GEORGE HARRISON SHULL [1903-5], Assistant in Plant Physiology; Professor of Botany and Genetics, Princeton University.

S.B. Antioch College, 1901; Ph.D. Chicago, 1904; Assistant in Plant Physiology, *ibid.*, 1903-5.

Geographic Distribution of *Isoetes saccharata*, *Botanical Gazette*, XXXVI (1903), 187-202.

Place-Constants for *Aster prenanthoides*. Doctor's thesis. *Ibid.*, XXXVIII (1904), 333-75.

Statistical Comparison of *Onagra (Oenothera) Lamarckiana* with Two of Its Mutants, *Publications of the Station for Experimental Evolution*, II (1905), 36-50.

Galtonian Regression in the "Pure Line," *Torreyia*, V (1905), 21-25.

Stages in the Development of *Sium cicutæfolium*, *Publications of the Station for Experimental Evolution*, III (1905), 1-28.

REVIEWS OF: DeVries, Species and Varieties: Their Origin by Mutation, *Torreyia*, V, 89-93; Davenport, Statistical Methods (2d ed.), *Botanical Gazette*, XXXVIII, 465-66.

HARRY NICHOLS WHITFORD [1903-4], Assistant in Botany: Director of Forestry Investigations, Victoria, British Columbia.

S.B. Kansas State Agricultural College, 1890; S.M. *ibid.*, 1900; Ph.D. Chicago, 1903; Assistant in Botany, *ibid.*, 1903-4.

The Forests of the Flathead Valley, Montana. Doctor's thesis. *Botanical Gazette*, XXXIX (1905), 99-122; 194-218; 276-96.

ROBERT BRADFORD WYLIE [1904-5], Assistant in Botany; Professor of Morphological Botany, State University of Iowa.

S.B. Upper Iowa University, 1897; Ph.D. Chicago, 1904; Assistant in Botany, *ibid.*, 1904-5.

The Morphology of *Elodea canadensis*. Doctor's thesis. *Botanical Gazette*, XXXVII (1904), 1-22.

SHIGÉO YAMANOUCHI [1907-9; 1911-14], Assistant in Plant Morphology; Professor of Botany, Tokyo Teachers College, Japan.

S.M. Tokyo Teachers College, 1898; Ph.D. Chicago, 1907; Sc.D. Rigakuhakushi, Imperial University, Tokyo, 1911; Technical Assistant in Botany, Chicago, 1907-8; Assistant in Botany, *ibid.*, 1908-9; Assistant in Morphology, *ibid.*, 1911-14.

The Life-History of *Polysiphonia*, *Botanical Gazette*, XLII (1906), 401-49.

Sporogenesis in *Nephrodium*, *ibid.*, XLV (1908), 1-30.

Spermatogenesis, Oogenesis, and Fertilization in *Nephrodium*, *ibid.*, 145-75.

Apogamy in *Nephrodium*. Doctor's thesis. *Ibid.*, 289-318.

Mitosis in *Fucus*, *ibid.*, XLVII (1909), 173-97.

Cytology of *Culleria* and *Aglaosonia*, *ibid.*, XLVIII (1909), 380-86.

Chromosomes in *Osmunda*, *ibid.*, XLIX (1910), 1-12.

The Life History of *Culleria*, *ibid.*, LIV (1912), 441-502.

Hydrodictyon africanum, a New Species, *ibid.*, LV (1913), 74-79.

The Life-History of *Zanardinia*, *ibid.*, LVI (1913), 1-34.

HANNAH CAROLINE AASE, PH.D. 1914; Instructor in Botany, State College, Pullman, Wash.

Vascular Anatomy of the Megasporophylls of Conifers. Doctor's thesis. *Botanical Gazette*, LX (1915), 277-313.

CHARLES ORVAL APPLEMAN, PH.D. 1910; Plant Physiologist, Maryland Agricultural Experiment Station, College Park, Md.

Some Observations on Catalase. Doctor's thesis. *Botanical Gazette*, L (1910), 182-92.

Physiological Behavior of Enzymes and Carbohydrate Transformations in After-Ripening of the Potato Tuber, *ibid.*, LII (1911), 306-15.

REVIEW: *Ibid.*, L, 150-51.

WINFRED MCKENZIE ATWOOD, PH.D. 1913; Associate Professor of Botany and Plant Pathology, Oregon Agricultural College, Corvallis.

A Physiological Study of the Germination of *Avena fatua*. Doctor's thesis. *Botanical Gazette*, LVII (1914), 386-414.

MELVIN AMOS BRANNON, PH.D. 1912; President of Beloit College.

Osmotic Pressure in Potatoes, *Botanical Gazette*, LVI (1913), 433-38.

The Salton Sea: The Action of Salton Sea Water on Vegetable Tissues.

Doctor's thesis. *Carnegie Institution of Washington*, Publication No. 193 (1914), 71-78.

Fasciation, *Botanical Gazette*, LVIII (1914), 518-26.

GEORGE SMITH BRYAN, PH.D. 1914; Instructor in Botany, University of Wisconsin.

The Archegonium of *Sphagnum subsecundum*. Doctor's thesis. *Botanical Gazette*, LIX (1915), 40-56.

JOSEPH STUART CALDWELL, A.M. 1904; PH.D. 1914; Plant Physiologist, Washington Agricultural Experiment Station, Pullman, Wash.

The Effects of Toxic Agents upon the Action of Bromelin, *Botanical Gazette*, XXXIX (1905), 409-19.

The Relation of Environmental Conditions to the Phenomena of Permanent Wilting in Plants, *Physiological Research*, I (1913), 1-56.

A Study of Physiologically Balanced Solutions. Doctor's thesis. *Botanical Gazette*. In Press.

REVIEWS IN: *Botanical Gazette*, LIX, 498-502; LX, 158-63.

GRACE MIRIAM CHARLES, PH.D. 1910; Assistant Professor of Botany, University of Kansas, Lawrence.

The Anatomy of the Sporeling of *Marattia alata*. Doctor's thesis. *Botanical Gazette*, LI (1911), 81-100.

REVIEW: *Ibid.*, LIV, 81-83.

MINTIN ASBURY CHRYSLER, PH.D. 1904; Professor of Biology, University of Maine, Orono.

Anatomical Notes on Certain Strand Plants, *Botanical Gazette*, XXXVII (1904), 461-64.

The Development of the Central Cylinder of Araceæ and Liliaceæ.

Doctor's thesis. *Ibid.*, XXXVIII (1904), 161-84.

Regeneration in *Zamia*, *ibid.*, 452-58.

GRACE LUCRETIA CLAPP, PH.D. 1911; Instructor in Botany, Smith College.

The Life History of *Aneura Pinguis*. Doctor's thesis. *Botanical Gazette*, LIV (1912), 177-93.

WILLIAM SKINNER COOPER, PH.D. 1911; Instructor in Plant Physiology and Ecology, University of Minnesota.

Reproduction by Layering among Conifers, *Botanical Gazette*, LII (1911), 369-79.

The Ecological Succession of Mosses, as Illustrated upon Isle Royale, Lake Superior, *Plant World*, XV (1912), 197-213.

A List of Mosses Collected upon Isle Royale, Lake Superior, *Bryologist*, XVI (1913), 3-8.

The Climax Forest of Isle Royale, Lake Superior, and Its Development. Doctor's thesis. *Botanical Gazette*, LV (1913), 1-44, 115-40, 189-235.

REVIEW: *Ibid.*, LIV, 166-67.

FRANK EARL DENNY, PH.D. 1916.

Permeability of Certain Plant Membranes to Water. Doctor's Thesis. *Botanical Gazette*, LXIII (1917), 373-97.

HERMANN BACHER DEUTSCH, PH.D. 1915; Civil Service News, Chicago.

A Study of *Targionia hypophylla*, *Botanical Gazette*, LIII (1912), 492-503.

Light and Germination of Fern Spores. Doctor's thesis. *Ibid.* In Press.

SISTER HELEN ANGELA DORETY, PH.D. 1909; Professor of Botany, St. Elizabeth College, Convent Station, N.J.

The Embryo of *Ceratozamia*, a Physiological Study, *Botanical Gazette*, XLV (1908), 412-16.

The Seedling of *Ceratozamia*. Doctor's thesis. *Ibid.*, XLVI (1908), 203-20.

Vascular Anatomy of the Seedling of *Microcycas calocoma*, *ibid.*, XLVII (1909), 139-47.

The Extrafascicular Cambium of *Ceratozamia*, *ibid.*, 150-52.

SARAH LUCINDA DOUBT, PH.D. 1915; Instructor in Biology, Winona Federated College, Winona Lake, Ind.

Some Common Diseases of the Potato Plant and Tuber, *Nebraska State Horticulture Report*, 1903.

The Response of Plants to Illuminating Gas. Doctor's thesis. *Botanical Gazette*, LXIII (1917), 209-24, 6 figs.

THEODORE CHRISTIAN FRYE, PH.D. 1902; Professor of Botany, University of Washington, Seattle.

The Embryo Sac of *Casuarina stricta*, *Botanical Gazette*, XXXVI (1903), 101-13.

LAURA CAMPBELL GANO, PH.D. 1911; Richmond, Ind.

A Study in Physiographic Ecology in Northern Florida. Doctor's thesis. *Botanical Gazette*, LXIII (1917), 337-72.

JOHN FREDERICK GARBER, PH.D. 1903; Head of Department of Botany, Yeatman High School, St. Louis.

Dimorphism in *Blissus leucopteris*, *Biological Bulletin*, V (1903), 330-35.

The Life-History of *Ricciocarpus natans*. Doctor's thesis. *Botanical Gazette*, XXXVII (1904), 161-77.

JAMES FREDERICK GROVES, PH.D. 1915; Assistant Professor, State University of Wyoming, Laramie.

Evaporation and Soil Moisture in Forests and Cultivated Fields, *Transactions of the Illinois State Academy of Science*, VII (1914), 59-67.

Temperature and Life Duration of Seeds. Doctor's thesis. *Botanical Gazette*, LXIII (1917), 168-89.

STELLA MARY HAGUE, PH.D. 1912; Instructor in Botany, University of Illinois.

A Morphological Study of *Diospyros virginiana*. Doctor's thesis. *Botanical Gazette*, LII (1911), 34-44.

EDWARD MARIS HARVEY, PH.D. 1914; Bureau of Plant Industry, United States Department of Agriculture, Washington.

Evaporation and Soil Moisture on the Prairies of Illinois, *Transactions of the Illinois State Academy of Science*, VI (1913), 92-99.

- The Action of the Rain-Correcting Atmometer, *Plant World*, XVI (1913), 89-93.
- The Castor Bean Plant and Laboratory Air, *Botanical Gazette*, LVI (1913), 439-42.
- The Effects of Illuminating Gas on Root Systems (with R. Catlin Rose), *ibid.*, LX (1915), 27-44.
- Some Effects of Ethylene on the Metabolism of Plants. Doctor's thesis. *Ibid.*, 193-214.
- LEROY HARRIS HARVEY, PH.D. 1908; Professor of Biology, Western State Normal School, Kalamazoo, Mich.
- Floral Succession in the Prairie-Grass Formation of Southeastern South Dakota. Doctor's thesis. *Botanical Gazette*, XLVI (1908), 81-108, 277-98.
- ANSEL FRANCIS HEMENWAY, PH.D. 1912; Professor of Biology, Transylvania College, Lexington, Ky.
- Studies on the Phloem of the Dicotyledons: II, Evolution of the Sieve-Tube. Doctor's thesis. *Botanical Gazette*, LV (1913), 236-43.
- JOHN BENJAMIN HILL, PH.D. 1913; Associate Professor of Botany, Pennsylvania State College, State College, Pa.
- The Anatomy of Six Epiphytic Species of *Lycopodium*. Doctor's thesis. *Botanical Gazette*, LVIII (1914), 61-85.
- RACHEL EMILIE HOFFSTADT, PH.D. 1915; Assistant Professor of Botany, Milwaukee-Downer College, Milwaukee.
- The Vascular Anatomy of *Piper methysticum*, *Botanical Gazette*, LXII (1916), 115-32.
- GEORGE MELLINGER HOLFERTY, PH.D. 1903; Central High School, St. Louis.
- The Archegonium of *Mnium-cuspidatum*. Doctor's thesis. *Botanical Gazette*, XXXVII (1904), 106-26.
- ANDREW HENDERSON HUTCHINSON, PH.D. 1915; Assistant Professor of Botany, University of British Columbia, Vancouver.
- The Male Gametophyte of *Abies balsamea*, *Botanical Gazette*, LVII (1914), 148-53.

The Male Gametophyte of *Picea canadensis*, *ibid.*, LIX (1915), 287-300, plates XV-XIX.

The Gametophyte of *Pellia epiphylla*, *ibid.*, LX (1915), 134-43, plates I-IV.

Fertilization in *Abies balsamea*. Doctor's thesis. *Ibid.*, 457-72, plates XVI-XX.

HEMMING GERHARD JENSEN, PH.D. 1906; Associate Professor of Plant Physiology, State College, Pullman, Wash.

Toxic Limits and Stimulation Effects of Some Salts and Poisons on Wheats. Doctor's thesis. *Botanical Gazette*, XLIII (1907), 11-44.

LESLIE ALVA KENOYER, PH.D. 1916; Professor of Biology, Ewing Christian College, Allahabad, India.

Environmental Influences on Nectar Secretion. Doctor's thesis. *Botanical Gazette*, LXIII (1917), 249-65.

NIELSINE JOHANNA KILDAHL, PH.D. 1909; Maza, N.D.

Development of the Walls in the Proembryo of *Pinus Laricio*, *Botanical Gazette*, XLIV (1907), 102-7.

The Morphology of *Phyllocladus alpinus*. Doctor's thesis. *Ibid.*, XLVI (1908), 339-48, 464-65.

GEORGE KONRAD KARL LINK, PH.D. 1916; Associate Professor of Agricultural Botany, University of Nebraska, Lincoln.

A Dry Rot of the Irish Potato Tuber (with E. M. Wilcox and V. W. Pool). 8vo, 85. Lincoln, Neb.: Nebraska Agricultural Experiment Station, 1913.

A Handbook of Nebraska Grasses (with E. M. Wilcox and V. W. Pool). 8vo, 120. *Ibid.*, 1915.

A Physiological Study of Two Strains of *Fusarium* in Their Causal Relation to Tuber Rot and Wilt of Potato. Doctor's thesis. *Botanical Gazette*, LXII (1916), 169-209, 13 figs.

MILLARD S. MARKLE, PH.D. 1915; Instructor in Botany, Earlham College, Richmond, Ind.

The Root Systems of Certain Desert Plants. Doctor's thesis. *Botanical Gazette*. In Press.

JOHN NATHAN MARTIN, PH.D. 1913; Professor of Botany, Iowa State College, Ames.

Comparative Morphology of Some Leguminosae. Doctor's thesis. *Botanical Gazette*, LVIII (1914), 154-67.

LULA PACE, PH.D. 1907; Professor of Botany, Baylor University, Waco, Tex.

Fertilization in *Cypripedium*, *Botanical Gazette*, XLIV (1907), 353-73.

The Gametophyte of *Calopogon*. Doctor's thesis. *Ibid.*, XLVIII (1909), 126-37.

Some Peculiar Fern Prothallia, *ibid.*, L (1910), 49-58.

Parnassia and Some Allied Genera, *ibid.*, LIV (1912), 306-29.

Apogamy in *Atamosco*, *ibid.*, LVI (1913), 376-94.

Two Species of *Gyrostachys*, *Baylor University Bulletin*, XVII (1914), 1-16.

LOREN CLIFFORD PETRY, PH.D. 1913; Instructor in Botany, Syracuse University.

A Protocorm of *Ophioglossum*, *Botanical Gazette*, LV (1913), 155-66.

The Anatomy of *Ophioglossum pendulum*. Doctor's thesis. *Ibid.*, LVII (1914), 169-92.

Branching in the Ophioglossaceae, *ibid.*, LIX (1915), 345-65.

NORMA ETTA PFEIFFER, PH.D. 1913; Assistant Professor of Botany, University of North Dakota.

Abnormalities in Prothallia of *Pteris longifolia*, *Botanical Gazette*, LIII (1912), 436-38.

Morphology of *Thismia americana*. Doctor's thesis. *Ibid.*, LVII (1914), 122-35.

REVIEWS IN: *Botanical Gazette*, LI, 313; LII, 166; *Quarterly Journal of the University of North Dakota*, IV, 188.

GEORGE BURTON RIGG, PH.D. 1914; Assistant Professor of Botany, University of Washington, Seattle.

Decay and Soil Toxins. Doctor's thesis. *Botanical Gazette*, LXI (1916), 295-310.

EDITH ADELAIDE ROBERTS, PH.D. 1916; State Specialist, Home Demonstration Work, Blacksburg, Va.

The Peg of the Cucurbitaceae (with Wm. Crocker and L. I. Knight), *Botanical Gazette*, L (1910), 321-39.

The Plant Succession of the Holyoke Range, *ibid.*, LVIII (1914), 432-44.

The Distribution of Beach Plants, *ibid.*, LX (1915), 406-11.

The Epidermal Cells of Roots. Doctor's thesis. *Ibid.*, LXII (1916), 488-506, 17 figs.

MABEL LEWIS ROE, PH.D. 1915; Pittsburgh, Pa.

The Development of the Conceptacle in *Fucus*. Doctor's thesis. *Botanical Gazette*, LXI (1915), 231-46.

EVA ORMENTA SCHLEY, PH.D. 1914; Assistant in Physiology. See under Department of Physiology, p. 388.

LESTER WHYLAND SHARP, PH.D. 1912; Assistant Professor of Botany, New York State College of Agriculture, Ithaca.

Spermatogenesis in *Equisetum*. Doctor's thesis. *Botanical Gazette*, LIV (1912), 89-119.

The Orchid Embryo Sac, *ibid.*, 372-85.

Spermatogenesis in *Marsilia*, *ibid.*, LXVIII (1914), 419-31.

CHARLES HOUSTON SHATTUCK, PH.D. 1908; Professor of Forestry and Botanical Morphology, University of Idaho, Moscow.

A Morphological Study of *Ulnus americana*, *Botanical Gazette*, XL (1905), 209-23.

The Origin of Heterospory in *Marsilia*. Doctor's thesis. *Ibid.*, XLIX (1910), 19-40.

EARL EDWARD SHERFF, PH.D. 1916.

Studies in the Genus *Bidens*, III. Doctor's thesis. *Botanical Gazette*, XLI (1916), 495-506.

CHARLES ALBERT SHULL, PH.D. 1915; Associate Professor of Plant Physiology and Genetics, University of Kansas, Lawrence.

Life-History and Habits of *Anthocharis* (*Synchloe*) *olympia* Edwards, *Entomological News*, IX (1907), 73-82.

Some Abnormalities and Regeneration of Pleiopods of *Cambarus* and Other Decapoda, *Biological Bulletin*, XVI (1909), 297-312.

Oxygen Pressure and the Germination of Xanthium Seeds, *Botanical Gazette*, XLVII (1909), 387-90.

The Oxygen Minimum and the Germination of Xanthium Seeds, *ibid.*, LII (1911), 453-77.

Semipermeability of Seed Coats, *ibid.*, LVI (1913), 169-99.

Rôle of Oxygen in Germination, *ibid.*, LVII (1914), 64-69.

Measurement of the Surface Forces in Soils. Doctor's thesis. *Botanical Gazette*, LXII (1916), 1-31.

REVIEWS: *Ibid.*, LII, 325, 326-27, 491-92; LIV, 433-34; LVI, 444-45.

ETOILE BESSIE SIMONS, PH.D. 1905; with Fred Harvey, Employment and Welfare, Eighteenth Street and Wentworth Avenue, Chicago.

A Morphological Study of *Sargassum filipendula*. Doctor's thesis. *Botanical Gazette*, XLI (1906), 161-82, plates X and XI.

FRANCES GRACE SMITH, PH.D. 1906; Associate Professor of Botany, Smith College.

Morphology of the Trunk and Development of the Microsporangium of Cycads. Doctor's thesis. *Botanical Gazette*, XLIII (1907), 187-204.

LAETITIA M. SNOW, PH.D. 1904; Associate Professor of Botany, Wellesley College.

The Effects of External Agents on the Production of Root Hairs, *Botanical Gazette*, XXXVII (1904), 143-45.

The Development of Root Hairs. Doctor's thesis. *Ibid.*, XL (1905), 12-48.

ANNA MORSE STARR, PH.D. 1911; Instructor in Botany, Mount Holyoke College, South Hadley, Mass.

The Microsporophylls of Ginkgo, *Botanical Gazette*, XLIX (1910), 51-54, 1 plate.

Comparative Anatomy of Dune Plants. Doctor's thesis. *Ibid.*, LIV (1912), 265-305.

Poisoning by Ginkgo, *ibid.*, LV (1913), 251.

FRANK LINCOLN STEVENS, PH.D. 1900; Professor of Plant Pathology, University of Illinois.

Studies in the Fertilization of Phycomycetes, *Botanical Gazette*, XXXIV (1902), 420-26.

Some Improvements upon Apparatus for Water Analysis, *Journal of Applied Microscopy and Laboratory Methods*, V (1902), 1918-19.

JAMES PALM STOBER, PH.D. 1914; Professor of Biology and Geology, Albright College, Myerstown, Pa.

A Comparative Study of Winter and Summer Leaves of Various Herbs. Doctor's thesis. *Botanical Gazette*, LXIII (1917), 89-109.

ALMA GRACEY STOKEY, PH.D. 1908; Associate Professor of Botany, Mount Holyoke College, South Hadley, Mass.

The Roots of *Lycopodium pithyoides*, *Botanical Gazette*, XLIV (1907), 57-63.

The Anatomy of *Isoetes*. Doctor's thesis. *Ibid.*, XLVII (1909), 311-35.

The Sporangium of *Lycopodium pithyoides*, *ibid.*, L (1910), 218-19.

REINHARDT THIESSEN, PH.D. 1907; Chemist and Microscopist, United States Bureau of Mines, Pittsburgh.

The Vascular Anatomy of the Seedling of *Dioon edule*. Doctor's thesis. *Botanical Gazette*, XLVI (1908), 357-80.

EDITH MINOT TWISS, PH.D. 1909; Professor of Botany, Washburn College, Topeka, Kan.

The Prothallia of *Ancimia* and *Lygodium*. Doctor's thesis. *Botanical Gazette*, XLIX (1901), 168-81.

ARTHUR GIBSON VESTAL, PH.D. 1915; Instructor in Botany, Eastern Illinois State Normal School, Charleston.

An Associational Study of Illinois Sand Prairie, *Bulletin of the Illinois State Laboratory of Natural History*, X (1913), 1-96.

Local Distribution of Grasshoppers in Relation to Plant Associations, *Biological Bulletin*, XXV (1913), 141-80.

Internal Relations of Terrestrial Associations, *American Naturalist*, XLVIII (1914), 413-45.

A Black-Soil Prairie Station in Northeastern Illinois, *Bulletin of the Torrey Botanical Club*, XLI (1914), 357-63.

Prairie Vegetation of a Mountain-Front Area in Colorado, *Botanical Gazette*, LVIII (1914), 377-400.

Foothill Vegetation of the Eastern Mountain-Front in Colorado, *ibid.*
In Press.

The Phytogeography of the Eastern Mountain-Front in Colorado.
Doctor's thesis. *Ibid.* In Press.

MARY SOPHIE YOUNG, PH.D. 1910; Instructor in Botany, University of Texas, Austin.

The Morphology of the Podocarpaceae. Doctor's thesis. *Botanical Gazette*, L (1910), 81-100.

WILMER E. DAVIS, Graduate Student.

The Effect of External Conditions upon the After-Ripening of the Seeds of *Crataegus mollis* (with R. C. Rose), *Botanical Gazette*, LIV (1912), 49-62.

Delayed Germination in the Seed of *Alisma Plantago* (with William Crocker), *ibid.*, LVIII (1914), 285-321.

RIAL CATLIN ROSE, Graduate Student.

A New Method of Detecting Traces of Illuminating Gas (with Wm. Crocker and L. I. Knight), *Science*, XXXI (1910), 635-36.

The Effect of External Conditions upon the After-Ripening of the Seeds of *Crataegus mollis* (with W. E. Davis), *Botanical Gazette*, LIV (1912), 49-62.

The Effects of Illuminating Gas on Root Systems (with E. M. Harvey), *ibid.*, LX (1915), 27-44.

ISABEL SEYMOUR SMITH, Graduate Student.

The Nutrition of the Egg in *Zamia*, *ibid.*, XXXVII (1904), 346-52.

JOSEPH RALPH WATSON, Graduate Student.

Plant Geography of North Central New Mexico, *ibid.*, LIV (1912), 190-217.

THE DEPARTMENT OF PATHOLOGY

HARRY GIDEON WELLS [1901-], Professor of Pathology; Director of the Otho S. A. Sprague Memorial Institute.

Ph.B. Yale, 1895; M.D. Rush Medical College, 1898; Ph.D. Chicago, 1903; A.M. (hon.) Yale, 1912; Assistant Professor of Pathology, Chicago, 1904-9; Attending Pathologist, Cook County Hospital, 1905-; Associate Professor, Chicago, 1909-13; Director of the Otho S. A. Sprague Memorial Institute, 1911-; Professor of Pathology, Chicago, 1913-.

Editor of the department of Pathological Chemistry of the *Abstract Journal of the American Chemical Society*, 1906-; Member of the Editorial Committee, *Journal of Cancer Research*, 1916-; Associate Editor: *Journal of Infectious Diseases*, 1913-; *Journal of Immunology*, 1916-.

Chemical Pathology. 1st ed., 1907; 2d ed., 1914. 8vo, 616. Philadelphia: W. B. Saunders Co.

Fatal Pulmonary Embolism Following Simple Appendectomy, *Transactions of the Chicago Pathological Society*, V (1902), 134-41.

Experimental Cirrhosis of the Liver in Chronic Albumose Intoxication, *ibid.*, (1903), 240-45.

Primary Carcinoma of the Liver, *American Journal of Medical Science*, CXXVI (1903), 403-17.

Fourth of July Tetanus, *American Medicine*, V (1903), 954-58.

The Pathology of "Paratyphoid Fever," *Journal of Infectious Diseases*, I (1904), 72-90.

Thyroid, *Reference Handbook of the Medical Sciences*, VII (1904), 770-80.

Carotid Gland, *ibid.*, VIII (1904), 411.

Hemolysis, *ibid.*, 467-77.

On the Relation of Autolysis to Proteid Metabolism, *American Journal of Physiology*, XI (1904), 351-54.

Pseudoleukaemia Gastrointestinalis (with M. B. Maver), *American Journal of Medical Science*, CXXVIII (1904), 837-55.

Acute Yellow Atrophy of the Liver (with P. Bassoe), *Journal of the American Medical Association*, XLIV (1905), 685-92.

Malignant Renal Hypernephroma, with Vertebral Involvement, *Transactions of the Chicago Pathological Society*, VI (1905), 375-80.

- Versuche über den Transport von iodiertem Fett bei Phosphorvergiftung, *Zeitschrift für physiologische Chemie*, XLV (1905), 411-19.
- Die Monoaminosäuren des Keratins aus Pferdehaaren (with E. Abderhalden), *ibid.*, XLVI (1905), 31-39.
- Delayed Chloroform Poisoning, *Journal of the American Medical Association*, XLVI (1906), 341-43.
- Pathological Calcification, *Journal of Medical Research*, XIV (1906), 491-525.
- The Relation of Autolysis to the Histological Changes Occurring in Necrotic Areas, *ibid.*, XV (1906), 149.
- Healing of Suppurative Appendicitis with Calcification (with C. J. Rowan), *Surgery, Gynecology, and Obstetrics*, III (1906), 503-5.
- On Absorption from the Peritoneal Cavity (with L. B. Mendel), *American Journal of Physiology*, XVIII (1907), 156-63.
- Relation of Thyroid to Autolysis and the Study of Autolysis by Conductivity and Freezing-Point Methods (with R. L. Benson), *Journal of Biological Chemistry*, III (1907), 35-47.
- Chemistry of the Liver in Acute Yellow Atrophy, *Journal of Experimental Medicine*, IX (1907), 627-44.
- Absorption of Bacteria from Peritoneal Cavity (with O. P. Johnstone), *Journal of Infectious Diseases*, IV (1907), 582-94.
- Studies on Calcification and Ossification, I, *Journal of Medical Research*, XIV (1906), 491-525; II (with R. L. Benson), XVII (1907), 15-24; III (with J. H. Mitchell), *ibid.*, XXII (1910), 501-16; IV (with Harriet F. Holmes and Gladys R. Henry), *ibid.*, XXV (1911), 373-92.
- Nature of the Poisonous Element of Proteins in Anaphylactic Reactions, *Journal of the American Medical Association*, L (1908), 527, 728.
- The Present Status of Our Knowledge of the Chemistry of the Processes of Immunity, *Archives of Internal Medicine*, I (1908), 262-76.
- Fats and Lipoids of Malignant Hypernephromas, *Journal of Medical Research*, XVII (1908), 461-69.
- Atypical Forms of Malignant Hypernephromas, *International Clinics*, Eighteenth Series, II (1908), 273-85.
- Autolysis, *Reference Handbook of Medical Science* (1908), 402-5.
- Ductus Arteriosus, *ibid.*, 473-74.

- The Pathological Anatomy of Hydrazine Poisoning, *Journal of Experimental Medicine*, X (1908), 457-64.
- Leiomyoma of the Kidney of a Horse, *Transactions of the Chicago Pathological Society*, VII (1908), 140-41.
- Chloroform Necrosis of the Liver, *Archives of Internal Medicine*, I (1908), 589-601.
- Persistent Patency of Ductus Arteriosus, *American Journal of Medical Science*, CXXXVI (1908), 381-400.
- Chemistry of the Liver in Chloroform Necrosis, *Journal of Biological Chemistry*, V (1908), 129-45.
- Studies on the Chemistry of Anaphylaxis, I, *Journal of Infectious Diseases*, V (1908), 449-83; II, *ibid.*, VI (1909), 506-22; III, Experiments with Isolated Proteins, Especially Those of the Hen's Egg, *ibid.*, IX (1911), 147-71.
- Pathogenesis of Waxy Degeneration of Striated Muscles, *Journal of Experimental Medicine*, XI (1909), 1-9.
- Studies on the Physiology of the Molluscs (with L. B. Mendel), *American Journal of Physiology*, XXIV (1909), 170-77.
- Resistance of the Human Body to Cancer, *Journal of the American Medical Association*, LII (1909), 1731-40.
- Observations on Uricolysis and Uric Acid Infarcts (with H. J. Corper), *Journal of Biological Chemistry*, VI (1909), 321-36.
- Absence of Adrenalin in Malignant Hypernephromas (with J. H. Greer), *Archives of Internal Medicine*, IV (1909), 291-95.
- Alimentary Albuminuria as Shown by the Anaphylaxis Reaction, *Journal of the American Medical Association*, LIII (1909), 863-65.
- Purines and Purine Metabolism of Human Fetus and Placenta (with H. J. Corper), *Journal of Biological Chemistry*, VI (1909), 469-82.
- Purine Metabolism of the Monkey, *ibid.*, VII (1910), 171-82.
- Presence of Iodine in Human Pituitary Gland, *ibid.*, 259-61.
- Some Recent Additions to Our Knowledge of Purine Metabolism and Gout, *International Clinics*, Series XX, I (1910), 76-94.
- The Relation of Fatty Degeneration to the Oxidation of Purines by Liver Cells, *Journal of Experimental Medicine*, XII (1910), 607-15.

- The Study of Autolysis by Physico-Chemical Methods (with R. L. Benson), *Journal of Biological Chemistry*, VIII (1910), 61-76.
- The Biological Reactions of the Vegetable Proteins (with Thomas B. Osborne), *Journal of Infectious Diseases*, VIII (1911), 66-124.
- Calcification and Ossification, *Archives of Internal Medicine*, VII (1911), 721-53.
- The Fat Metabolism of Lipomas, *ibid.*, X (1912), 297-304.
- The Permeability of Tubercles for Iodin Compounds and Proteins (with O. F. Hedenburg), *Journal of Infectious Diseases*, XI (1912), 349-72.
- The Lipase of Bacillus Tuberculosis and Other Bacteria (with H. J. Corper), *ibid.*, 388-96.
- Anaphylaxie und wachsartige Degeneration der Muskeln, *Centralblatt allgemeiner Pathologie*, XXIII (1912), 945-46.
- The Purines and Purine Metabolism of Tumors and the Chemical Relations of Primary and Secondary Tumors (with E. R. Long), *Zeitschrift für Krebsforschung*, XII (1913), 598-611.
- The Effects of Copper on Experimental Tuberculous Lesions (with Lydia M. DeWitt and H. J. Corper), *Journal of the American Medical Association*, LX (1913), 887-89.
- Autolysis, *Reference Handbook of the Medical Sciences*, I (1913), 784-87.
- Is the Specificity of the Anaphylaxis Reaction Dependent on the Chemical Constitution of the Proteins or on Their Biological Reactions (with T. B. Osborne)? *Journal of Infectious Diseases*, XII (1913), 341-58.
- Nucleo-Proteins as Antigens, *Zeitschrift für Immunitätsforschung*, XIX (1913), 599-611.
- A Note on the Fate of Tartrates in the Body (with F. P. Underhill and S. Goldschmidt), *Journal of Experimental Medicine*, XVIII (1913), 317-21.
- Tartrate Nephritis, with Especial Reference to Some of the Conditions under Which It May Be Produced (with F. P. Underhill and S. Goldschmidt), *ibid.*, 322-46.
- A Study of Renal Secretion during Tartrate Nephritis (with F. P. Underhill and S. Goldschmidt), *ibid.*, 347-53.

- The Immunological Relationship of Hordein of Barley and Gliadin of Wheat as Shown by the Complement Fixation, Passive Anaphylaxis, and Precipitin Reactions (with G. C. Lake and T. B. Osborne), *Journal of Infectious Diseases*, XIV (1914), 364-76.
- The Anaphylactogenic Activity of Some Vegetable Proteins (with T. B. Osbörne), *ibid.*, 377-84.
- Studies on the Chemotherapy of Tuberculosis (with Lydia M. DeWitt and H. J. Corper), *Zeitschrift für Chemotherapie*, II (1914), 110-27.
- Über die Purinenzyme der pneumonischen Lunge (with E. R. Long), *Deutsches Archiv für klinische Medizin*, CXIV (1914), 377-79.
- The Purine Enzymes of the Orang-Utan and Chimpanzee (with G. T. Caldwell), *Journal of Biological Chemistry*, XVIII (1914), 157-65.
- The Inhibition of Autolysis by Alcohol (with G. T. Caldwell), *ibid.*, XIX (1914), 57-65.
- The Purine Enzymes of the Opossum (with G. T. Caldwell), *ibid.*, 279-83.
- The Primary Spontaneous Tumors of the Lungs in Mice (with Maud Slye and Harriet F. Holmes), *Journal of Medical Research*, XXX (1914), 417-42.
- The Relations between the Scientist, the Physician, and the Public, *Alcade*, II (1914), 928-38.
- Metastatic Calcification, *Archives of Internal Medicine*, XV (1915), 574-80.
- The Origin of the Proteins in Nephritic Urine (with A. L. Cameron), *ibid.*, 746-53.
- Spontaneous Tumors of the Liver in Mice (with Maud Slye and Harriet F. Holmes), *Journal of Medical Research*, XXXIII (1915), 171-82.
- The Anaphylactic Reaction with So-called Proteoses of Various Seeds (with T. B. Osborne), *Journal of Infectious Diseases*, XVII (1915), 259-75.
- Some Features of Purine Metabolism, *Journal of Laboratory and Clinical Medicine*, I (1916), 3-10.
- Anaphylaxis Reactions between Proteins from Seeds of Different Genera of Plants (with T. B. Osborne), *Journal of Infectious Diseases*, XIX (1916), 183-93.
- Spontaneous Sarcoma in Mice (with Maud Slye and Harriet F. Holmes), *Journal of Cancer Research*, II (1917), 1-28.

PRESTON KYES [1900-], Associate Professor of Preventive Medicine.
See under Department of Anatomy, p. 347.

EDWARD VAIL LAPHAM BROWN [1909-], Assistant Professor of the
Pathology of the Eye.

M.D. Hahnemann, 1897; M.D. Rush Medical College, 1898; S.B. Chicago, 1902;
Assistant Professor of Ophthalmology, Rush Medical College, 1907-; Instructor
in the Pathology of the Eye, Chicago, 1909-12; Assistant Professor, *ibid.*, 1913-.

*Anatomy and Histology of the Human Eyeball in the Normal State: Its
Development and Senescence* (trans. of *Anatomie und Histologie des
menschlichen Augapfels im Normalzustande, seine Entwicklung und
sein Altern*, by Maximilian Salzmann, University of Vienna). Large
8vo, 232. Chicago: Privately printed, 1912.

†HOWARD TAYLOR RICKETTS [1902-10], Assistant Professor of Pathology.

A.B. Nebraska, 1894; M.D. Northwestern, 1897; Assistant in Dermatology,
Rush Medical College, 1899-1901; Associate in Pathology, Chicago, 1902-3;
Instructor, *ibid.*, 1903-7; Assistant Professor, *ibid.*, 1907-10.

Infection, Immunity, and Serum Therapy. 12mo, x+599. Chicago:
American Medical Association Press, 1906.

Lymphatotoxic Serum, etc., *Transactions of the Chicago Pathological
Society*, V (1902), 178-86.

Preliminary Report on the Action of Neurotoxic Serum (with T. Roth-
stein), *ibid.* (1903), 207-11.

A Case of Diplococcaemia (with L. F. Barker), *ibid.*, 313-14.

An Organism from Cutaneous Oidiomycosis (Blastomycosis), *ibid.*, VI
(1904), 113-16.

Our Serotherapeutic Measures, *Journal of the American Medical Associa-
tion*, XLII (1904), 1336-43.

The Reduction of Methylene Blue by Nervous Tissue, *Journal of
Infectious Diseases*, I (1904), 590-98.

Receptor Studies Suggested by the Side-Chain Theory of Immunity,
Transactions of the Chicago Pathological Society, VI (1905), 237-40.

Concerning the Possibility of an Antibody for the Tetanophile Receptor
of Erythrocytes: A Receptor Study, *Journal of Experimental Medi-
cine*, VII (1905), 351-64.

† Deceased.

- Fundamental Principles of Immunity, *American Journal of Obstetrics*, LII (1905), 801-15.
- The Adjuvant Action of Serum, Egg Albumin, and Broth on Tetanus Toxin (with E. G. Kirk), *Journal of Infectious Diseases*, III (1906), 116-27.
- Study of Rocky Mountain Spotted Fever (Tick Fever?) by Means of Animal Inoculations, *Journal of the American Medical Association*, XLVII (1906), 33-36.
- Transmission of Rocky Mountain Spotted Fever by the Bite of the Wood-Tick (*Dermacentor occidentalis*), *ibid.*, 358.
- Further Observations on Rocky Mountain Spotted Fever and *Dermacentor occidentalis*, *ibid.*, 1067-69.
- Observations on the Virus and Means of Transmission of Rocky Mountain Spotted Fever, *Journal of Infectious Diseases*, IV (1907), 141-53.
- The Rôle of the Wood-Tick (*Dermacentor occidentalis*) in Rocky Mountain Spotted Fever, *Journal of the American Medical Association*, XLIX (1907), 24-27.
- Further Experiments with the Wood-Tick in Relation to Rocky Mountain Spotted Fever, *ibid.*, 1278-81.
- A Summary of Investigations of the Nature and Means of Transmission of Rocky Mountain Spotted Fever, *Transactions of the Chicago Pathological Society*, VII (1907), 73-82.
- Studies on Immunity in Rocky Mountain Spotted Fever (with L. Gomez é Piñeda), *Journal of Infectious Diseases*, V (1908), 221-44.
- Recent Studies of Rocky Mountain Spotted Fever in Montana and Idaho, *Medical Sentinel*, XVI (1908), 688-97.
- Spotted Fever Report, No. 2, *Fourth Biennial Report of Montana State Board of Health* (1908-9), 153-91.
- A Micro-Organism Which Apparently Has a Specific Relationship to Rocky Mountain Spotted Fever. A Preliminary Report, *Journal of the American Medical Association*, LII (1909), 379-80.
- GEORGE THOMAS CALDWELL [1913-], Instructor in Pathology.
 A.B. Ohio State, 1910; A.M. *ibid.*, 1913; Research Assistant in Chemical Pathology, Chicago, 1913-14; Associate in Pathology, *ibid.*, 1914-16; Instructor, *ibid.*, 1916-.
- The Purine Enzymes of the Orang-Utan and Chimpanzee (with H. G. Wells), *Journal of Biological Chemistry*, XVIII (1914), 157-65.

- The Inhibition of Autolysis by Alcohol (with H. G. Wells), *Journal of Biological Chemistry*, XIX (1914), 57-65.
- The Purine Enzymes of the Opossum (with H. G. Wells), *ibid.*, 279-83.
- GEORGE FREDERICK DICK [1910-11], Instructor in Pathology; Assistant Professor, Rush Medical College.
M.D. Rush Medical College, 1905; Instructor in Pathology, Chicago, 1910-11.
Revised Editon of Rickett's *Infection, Immunity, and Serum Therapy*. 8vo, xv+785. Chicago: American Medical Association, 1911.
- On Institutional Dysentery, *Journal of Infectious Diseases*, VIII (1911), 386-98.
- EDWIN FREDERICK HIRSCH [1913-], Instructor in Pathology.
A.B. Northwestern, 1910; A.M. Illinois, 1911; Ph.D. Chicago, 1914; M.D. Rush Medical College, 1915; Associate in Pathology, Chicago, 1913-14; Instructor, *ibid.*, 1914-.
- On the Influence of Iodin and Iodids on the Absorption of Granulation Tissue and Fat-free Tubercle Bacilli. Doctor's thesis. *Journal of Infectious Diseases*, XV (1914), 487-500.
- The Double Refractive Fats of the Adrenals in Delirium Tremens, *Journal of the American Medical Association*, XLIII (1914), 2186-90.
- The Species of Paragonimus and Their Differentiation (with H. B. Ward), *Annals of Tropical Medicine and Parasitology*, IX (1915), 109-62.
- The Gastric Mucosa in Delirium Tremens, *Archives of Internal Medicine*, XVII (1916), 354-62.
- A Method for Graphic Demonstration of the Foreign Inorganic Matter and Carbon in Lungs, *Journal of the American Medical Association*, LXIV (1916), 950-51.
- HARRIET FAY HOLMES [1910-], Special Instructor in Pathological Technique; Assistant in Otho S. A. Sprague Memorial Institute.
A.B. Vassar, 1895; Special Instructor in Pathological Technique, Chicago, 1910-; Assistant in Otho S. A. Sprague Memorial Institute, 1914-.
- Experimental Calcification of the Kidney (with H. G. Wells and Gladys R. Henry), *Journal of Medical Research*, XXV (1911), 373-92.
- The Primary Spontaneous Tumors of the Lungs in Mice (with Maud Slye and H. G. Wells), *ibid.*, XXX (1914), 417-42.

Spontaneous Tumors of the Liver in Mice (with Maud Slye and H. G. Wells), *ibid.*, XXXIII (1915), 171-82.

Spontaneous Sarcoma in Mice (with Maud Slye and H. G. Wells), *Journal of Cancer Research*, II (1917), 1-28.

FRANK KAISER BARTLETT [1912], Associate in Pathology; Physician, Ogden, Utah.

S.B. Chicago, 1910; M.D. Rush Medical College, 1912; Associate in Pathology, Chicago, 1912.

Case of Acromegaly and Polyglandular Syndrome, with Special Reference to the Pineal Gland, *Archives of Internal Medicine*, XII (1913), 201-13.

Multiple Primary Malignant Tumors, *ibid.*, XIII (1914), 624-39.

The Independence of the Lobes of the Liver (with E. R. Long and H. J. Corper), *American Journal of Physiology*, XXV (1914), 36-50.

BENJAMIN FRANKLIN DAVIS [1908-11], Assistant in Pathology; Instructor in Surgery, Rush Medical College.

A.B. Wisconsin, 1907; Ph.D. Chicago, 1910; Assistant in Pathology, *ibid.*, 1908-11.

Notes on the Leucocytes in the Neck Lymph, Thoracic Lymph, and Blood of Normal Dogs (with A. J. Carlson), *American Journal of Physiology*, XXV (1910), 173-90.

Syphilis of the Thyroid, *Archives of Internal Medicine*, V (1910), 47-60.

Malignant Tumors of the Adrenal, *Transactions of the Chicago Pathological Society*, VIII (1911), 135-38.

Immunological Reactions of Oidoimycosis (Blastomycosis) in the Guinea-Pig. Doctor's thesis. *Journal of Infectious Diseases*, VIII (1911), 190-240.

Malignant Tumors of the Adrenal, *Archives of Internal Medicine*, VIII (1911), 60-74.

Complement Deviation in Rocky Mountain Spotted Fever (with W. F. Petersen), *Journal of Infectious Diseases*, VIII (1911), 330-38.

Unfinished Experiments of Dr. Howard T. Ricketts on Rocky Mountain Spotted Fever. Pp. 409-18, in Ricketts' *Contributions to Medical Science* (Chicago: University Press, 1911).

CHESTER H. ELLIOTT [1914-15], Research Assistant in Pathology; Pathologist, City and County Hospital, Denver, Colo.

S.M. Chicago, 1914.

The Antigenic Properties of the Glyco-Proteins, *Journal of Infectious Diseases*, XV (1914), 501-17.

OSCAR JACOB ELSESSER [1915-16], Assistant in Pathology; Student, Rush Medical College.

S.B. Chicago, 1913; Ph.D. *ibid.*, 1916; Assistant in Pathology, *ibid.*, 1915-16.

The Effect of Experimental Partial Stenosis of the Pylorus on the Motility of the Stomach, *American Journal of Physiology*, XXXIX (1916), 303-8.

The Specificity of the Abderhalden Reaction with Vegetable Proteins. Doctor's thesis. *Journal of Infectious Diseases*, XIX (1916), 655-81.

FRANK J. HALL [1906], Assistant in Pathology; Physician, Kansas City, Mo.

Hypernephroma, *Archives of Internal Medicine*, II (1908), 355-91.

HARRY LEE HUBER [1913-], Laboratory Assistant in Pathology.

S.B. Chicago, 1913; S.M. *ibid.*, 1916; Laboratory Assistant in Pathology, *ibid.*, 1914-.

The Ammonia of the Gastric Juice, *American Journal of Physiology*, XLII (1916), 404-21.

GLEASON CHANDLER LAKE [1912-13], Laboratory Assistant in Pathology; Hygienic Laboratories, Washington, D.C.

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The Immunological Relationship of Hordein of Barley and Gliadin of Wheat as Shown by the Complement Fixation, Passive Anaphylaxis, and Precipitin Reactions (with T. B. Osborne and H. G. Wells), *Journal of Infectious Diseases*, XIV (1914), 364-76.

The Immunological Reactions of the Proteins of the Human Placenta, with Special Reference to the Production of a Therapeutic Serum for Malignant Chorion-Epitheliomata, *ibid.*, 385-401.

ESMOND RAY LONG [1911-13], Assistant in Pathology.

A.B. Chicago, 1911; Assistant in Pathology, *ibid.*, 1911-13.

The Purines and Purine Metabolism of Tumors and the Chemical Relations of Primary and Secondary Tumors (with H. G. Wells), *Zeitschrift für Krebsforschung*, XII (1913), 598-611.

On the Presence of Adenase in the Human Body, *Journal of Biological Chemistry*, XV (1913), 449-61.

The Purines and Purine Metabolism of Some Tumors in Domestic Animals, *Journal of Experimental Medicine*, XVIII (1913), 512-26.

Relation between the Fat Content of the Bile and Fatty Changes in the Liver (with E. R. LeCount), *ibid.* (1914), 234-38.

Über die Purinenzyme der pneumonischen Lunge (with H. G. Wells), *Deutsches Archiv für klinische Medizin*, CXIV (1914), 377-79.

The Independence of the Lobes of the Liver (with F. K. Bartlett and H. J. Corper), *American Journal of Physiology*, XXV (1914), 36-50.

JAMES HERBERT MITCHELL [1908-11], Assistant in Pathology; Fellow in Dermatology, Rush Medical College.

S.B. Chicago, 1907; M.D. Rush Medical College, 1913; Research Assistant in Chemical Pathology, Chicago, 1908-9; Laboratory Assistant in Pathology, *ibid.*, 1909-11; Assistant in Pathology, *ibid.*, Summer Quarter, 1911.

Studies on Calcification and Ossification, III (with H. G. Wells), *Journal of Medical Research*, XXII (1910), 501-16.

Calcification of the Pericardium, *Transactions of the Chicago Pathological Society*, VIII (1911), 109-18.

HARRY JOHN CORPER [1904-6; 1911-14], Instructor in Pathology, Otho S. A. Sprague Memorial Institute; Director of Laboratories of the Municipal Tuberculosis Sanitarium, Chicago.

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Myiasis Intestinalis Due to Infection with Three Species of Dipterous Larvae (with E. F. McCampbell), *Journal of the American Medical Association*, LIII (1909), 1160-62.

Observations on Uricolysis and Uric Acid Infarcts (with H. G. Wells), *Journal of Biological Chemistry*, VI (1909), 321-36.

- Purines and Purine Metabolism of Human Fetus and Placenta (with H. G. Wells), *Journal of Biological Chemistry*, VI (1909), 469-82.
- Correlation of the Histological and Chemical Changes in the Spleen during Necrosis and Autolysis. Doctor's thesis. *Journal of Experimental Medicine*, XV (1912), 429-49, plates LXII-LXV.
- Chemistry of the Dog's Spleen under Normal and Pathological Conditions. *Journal of Biological Chemistry*, XI (1912), 27-35.
- Errors in the Quantitative Determination of Cholesterol by Ritter's Method: The Influence of Autolysis upon Cholesterol, *ibid.*, 37-45.
- A Modification of Ritter's Method for the Quantitative Estimation of Cholesterol, *ibid.*, XII (1912), 197-204.
- Intra-vitam* Staining of Tuberculous Guinea-Pigs with Fat-soluble Dyes, *Journal of Infectious Diseases*, XI (1912), 373-87.
- The Lipase of Bacillus Tuberculosis and Other Bacteria (with H. G. Wells), *ibid.*, 388-96.
- Further Observations of the Staining of Tubercle Bacilli with Fat-soluble Dyes, *ibid.*, XII (1913), 274-76.
- The Effects of Copper on Experimental Tuberculous Lesions (with Lydia M. DeWitt and H. G. Wells), *Journal of the American Medical Association*, LX (1913), 887-89.
- Studies on the Chemotherapy of Tuberculosis (with Lydia M. DeWitt and H. G. Wells), *Zeitschrift für Chemotherapie*, II (1914), 110-27.
- The Independence of the Lobes of the Liver (with F. K. Bartlett and E. R. Long), *American Journal of Physiology*, XXV (1914), 36-50.
- The Therapeutic Value of Copper and Its Distribution in the Tuberculous Organism, *Journal of Infectious Diseases*, XV (1914), 487-500.
- The Action of Sodium Sulphocyanate in Tuberculosis, *ibid.*, XVI (1915), 38-46.
- Sodium Tellurite as a Rapid Test for the Viability of Tubercle Bacilli, *ibid.*, 47-53.
- Note on the Subcutaneous Absorption and the Quantitative Estimation of Cholesterol, *Journal of Experimental Medicine*, XXI (1915), 179-84.
- The Tuberculocidal Action of Arsenic Compounds and Their Distribution in the Tuberculous Organism (with Aaron Arkin), *Journal of Infectious Diseases*, XVIII (1916), 335-48.

LYDIA M. DEWITT [1912-], Member of the Otho S. A. Sprague Memorial Institute; Assistant Professor of Pathology.

M.D. Michigan, 1898; B.S. *ibid.*, 1899; A.M. (hon.) *ibid.*, 1913; Assistant City Bacteriologist, St. Louis, Mo., 1910-12; Member of the Otho S. A. Sprague Memorial Institute, 1912-; Assistant Professor of Pathology, Chicago, 1912-.

Preliminary Report of Experiments in the Vital Staining of Tubercles, *Journal of Infectious Diseases*, XII (1913), 68-92.

The Effects of Copper on Experimental Tuberculous Lesions (with H. J. Corper and H. G. Wells), *Journal of the American Medical Association*, LX (1913), 887-89.

Report on Some Experimental Work on the Use of Methylene Blue and Allied Dyes in the Treatment of Tuberculosis, *Journal of Infectious Diseases*, XIII (1913), 378-403.

Therapeutic Use of Certain Azo-Dyes in Experimentally Produced Tuberculosis in Guinea-Pigs, *ibid.*, XIV (1914), 498-511.

Studies on the Chemotherapy of Tuberculosis (with H. J. Corper and H. G. Wells), *Zeitschrift für Chemotherapie*, II (1914), 110-27.

Tuberculocidal Action of Certain Chemical Disinfectants (with Hope Sherman), *Journal of Infectious Diseases*, XV (1914), 245-56.

Vital Staining, *International Association of Medical Museums*, V (1915), 100-104.

Value of Copper in Treatment of Tuberculosis, *National Association for the Study and Prevention of Tuberculosis*, XI (1915), 237-41.

The Anatomy and Physiology of Kidneys, *Reference Handbook of the Medical Sciences*, V (1915), 724-38.

The Pathology of Muscle, *ibid.*, VI (1916), 558-73.

Bactericidal and Fungicidal Action of Copper Salts (with Hope Sherman), *Journal of Infectious Diseases*, XVIII (1916), 368-82.

Present Status of the Chemotherapy of Tuberculosis, *Journal of Laboratory and Clinical Medicine*, I (1916), 677-84.

JULIAN HERMAN LEWIS [1915-], Associate in the Otho S. A. Sprague Memorial Institute.

A. B., Illinois; Ph.D. Chicago, 1915; Associate in the Otho S. A. Sprague Memorial Institute, 1915-.

The Influence of Smoking on Hunger (with A. J. Carlson), *American Journal of Physiology*, XXXIV (1914), 149-54.

- The Nervous Control of the Gastric Hunger Mechanism (with A. J. Carlson and S. J. Orr), *American Journal of Physiology*, XXXIV (1914), 155-71.
- The Action of Bitters on the Hunger Mechanism (with A. J. Carlson, J. Van de Erve, and S. J. Orr), *Journal of Pharmacology and Experimental Therapeutics*, VI (1914), 209-18.
- Inhibitory Action of Heterologous Protein Mixtures on Anaphylaxis. Doctor's thesis. *Journal of Infectious Diseases*, XVII (1915), 241-58.
- The Presence of Epinephrin in Human Fetal Adrenals, *Journal of Biological Chemistry*, XXIV (1915), 249-54.
- HOPE SHERMAN [1912-], Assistant in the Otho S. A. Sprague Memorial Institute.
A.B. Smith, 1911.
- The Behavior of the Tubercle Bacillus toward Fat Dyes, *Journal of Infectious Diseases*, XII (1913), 249-73.
- Tuberculocidal Action of Certain Chemical Disinfectants (with Lydia M. DeWitt), *ibid.*, XV (1914), 245-56.
- The Bactericidal and Fungicidal Action of Copper Salts (with Lydia M. DeWitt), *ibid.*, XVIII (1916), 368-82.
- MAUD SLYE [1908-], Member of the Otho S. A. Sprague Memorial Institute.
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- The Incidence and Inheritability of Spontaneous Cancer in Mice, *Zeitschrift für Krebsforschung*, XIII (1913), 1-5.
- The Incidence and Inheritability of Spontaneous Cancer in Mice (Second Report), *Journal of Medical Research*, XXX (1914), 281-98.
- Primary Spontaneous Tumors of the Lungs in Mice (Fourth Report) (with Harriet F. Holmes and H. G. Wells), *ibid.*, 417-42.
- The Incidence and Inheritability of Spontaneous Cancer in Mice (Third Report), *ibid.*, XXXII (1915), 159-200.
- Spontaneous Tumors of the Liver in Mice (Sixth Report) (with Harriet F. Holmes and H. G. Wells), *ibid.*, XXXIII (1915-16), 171-82.
- The Inheritability of Spontaneous Tumors of Specific Organs and of Specific Types in Mice (Fifth Report), *Journal of Cancer Research*, I (1916), 479-502.

The Inheritability of Spontaneous Tumors in the Liver of Mice (Seventh Report), *ibid.*, 503-22.

Spontaneous Sarcoma in Mice (Eighth Report) (with Harriet F. Holmes and H. G. Wells), *ibid.*, II (1917), 1-28.

AARON ARKIN, PH.D. 1913; Professor of Pathology and Bacteriology, West Virginia University, and Chief Bacteriologist, State Hygienic Laboratory.

The Influence of Chemical Substances on Immune Reactions with Special Reference to Oxidation. Doctor's thesis. *Journal of Infectious Diseases*, XI (1912), 427-32; XIII (1913), 408-24; XVI (1915), 1-12.

The Tuberculocidal Action of Arsenic Compounds and Their Distribution in the Tuberculous Organism (with H. J. Corper), *ibid.*, XVIII (1916), 335-48.

DAVID JOHN DAVIS, PH.D. 1905; Professor of Experimental Medicine, University of Illinois.

The Bacteriology of Whooping-Cough. Doctor's thesis. *Journal of Infectious Diseases*, III (1906), 1-36.

LIBORIO GOMEZ É PIÑEDA, PH.D. 1908; Board of Health, Manila, Philippine Islands.

Studies on Immunity in Rocky Mountain Spotted Fever (with H. T. Ricketts), *Journal of Infectious Diseases*, V (1908), 221-44.

The Anatomy and Pathology of the Carotid Gland, *American Journal of Medical Science*, CXXXVI (1908), 98-110.

Rocky Mountain Spotted Fever in the Rabbit. Doctor's thesis. *Journal of Infectious Diseases*, VI (1909), 383-86.

GEORGE LESTER KITE, PH.D. 1913; Assistant in the Henry Phipps Institute for the Study of Tuberculosis, Philadelphia. See under Department of Physiology, p. 386.

EUGENE FRANKLIN McCAMPBELL, PH.D. 1911; Professor of Preventive Medicine and Dean of the Medical College, Ohio State University, Columbus.

The Toxic and Antigenic Properties of Bacterium *welchii*. Doctor's thesis. *Journal of Infectious Diseases*, VI (1909), 537-63.

Malignant Tumors in Mice, *Journal of Medical Research*, XX (1909), 261-73.

Myiasis Intestinalis Due to Infection with Three Species of Dipterous Larvae (with H. J. Corper), *Journal of the American Medical Association*, LIII (1909), 1160-62.

GUSTAV FERDINAND RUEDIGER, PH.D. 1907; Director of Hygienic Institute for La Salle, Peru, and Oglesby, Ill.

The Mechanism of Natural and Acquired Streptococcus Immunity. Doctor's thesis. 8vo, 27. Chicago, 1907.

Antilytic Actions of Salt Solutions and Other Substances (with L. Hektoen), *Journal of Infectious Diseases*, I (1904), 379-403.

Studies in Phagocytosis (with L. Hektoen), *ibid.*, II (1905), 128-41.

RUSSELL MORSE WILDER, PH.D. 1911; Instructor, Rush Medical College. See under Department of Anatomy, p. 357.

CHARLES L. BEST, Graduate Student.

Boric Acid Poisoning: Report of a Fatal Case with Autopsy, *Journal of the American Medical Association*, XLIII (1904), 805-7.

EMANUEL B. FINK, Graduate Student.

Phlegmonous Gastritis, *Boston Medical and Surgical Journal*, CLXXV (1916), 795-98.

JOSEPH EDGAR TYREE, Graduate Student.

The Pathological Anatomy of General Infection with the Gonococcus, *International Clinics*, Seventeenth Series, II (1907), 281-98.

THE DEPARTMENT OF HYGIENE AND BACTERIOLOGY

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Chief of Serum Division, Memorial Institute for Infectious Diseases, 1905-17; Vice-President, American Association for the Advancement of Science, 1917.

Joint Editor, *Journal of Infectious Diseases*, 1904-; Advisory Editor, *Journal of Bacteriology*, 1916-.

Special Investigator in Chicago Drainage Canal Case, 1904, and Los Angeles Aqueduct Case, 1915; Member of Commission for the Determination of a Standard of Purity for Drinking Water, appointed by the Secretary of Treasury, 1913-.

Analyses of Chicago Market Milk (Report of the Civic Federation of Chicago). Pamphlet. 8vo, 19. Chicago, 1904.

Chicago Drainage Canal Case. Record of Evidence, Supreme Court of the United States, *The State of Missouri vs. The State of Illinois and the Sanitary District of Chicago*, VI, 5805-5997; VII, 6000-6402. Jefferson City, Mo.: Tribune Publishing Co., 1904.

Report on Typhoid Fever in Winnipeg, Manitoba. Pamphlet, 8vo, 1-19. Winnipeg, 1905.

A Textbook of General Bacteriology. 1st ed., 1908; 2d ed., 1910; 3d ed., 1912; 4th ed., 1914; 5th ed., 1916. 8vo, 669. Philadelphia and London: W. B. Saunders Co.

Food Poisoning. 12mo, viii+112. Chicago: University Press, 1917.

The Kinds of Bacteria Found in River Water, *Journal of Hygiene*, III (1903), 1-27.

The Connection between the Alkalinity of Certain Bacterial Filtrates and Their Hemolytic Power, *Journal of Medical Research*, X (1903), 31-41.

The Longevity of the Typhoid Bacillus in Water (with H. L. Russell and F. R. Zeit), *Journal of Infectious Diseases*, I (1904), 641-89.

The Sphere of Bacteriology, *Science*, XX (1904), 657-66.

Observations on the Bionomics of Anopheles (with Mary Hefferan), *Journal of Infectious Diseases*, II (1905), 56-69.

A Thermostabile Hemolytic Precipitate from Nutrient Broth, *ibid.*, 511-13.

The Persistence of Agglutinability in Typhoid Bacilli in Water, *ibid.*, Supplement, No. 1 (1905), 172-74.

The Production of Acid and Alkali by Bacteria, *Science*, XXIII (1906), 220.

Experiments with Bacterial Enzymes, *Biological Studies by the Pupils of William T. Sedgwick* (1906), 124-45.

- The Natural Purification of Streams, *Proceedings of the American Water Works Association* (1906), 201-7.
- The Place of Pathology in the University, *Journal of the American Medical Association*, XLVIII (1907), 917-19.
- The Problems of Sanitation, *Harvey Lectures*, Third Series (1907-8), 17-33; also in *Journal of the American Medical Association*, L (1908), 493-98.
- The Cause of Milksickness or Trembles (with N. MacL. Harris), *ibid.*, 1665-73.
- Milksickness (with N. MacL. Harris), *Journal of Infectious Diseases*, VI (1909), 401-91.
- The School and the Germ Carrier, *Proceedings of the American School Hygiene Association*, III (1909), 168-74.
- Typhoid Fever in Milwaukee and the Water Supply, *Journal of the American Medical Association*, LV (1910), 211-15.
- Profitable and Fruitless Lines of Endeavor in Public Health Work, *Science*, XXXIII (1911), 833-39.
- Three Outbreaks of Typhoid Fever Traced to Milk Infection (with E. E. Irons), *Journal of the American Medical Association*, LVIII (1912), 169-72.
- The Importance of Water Supply Infection, *Engineering News*, LXVII (1912), 1119-20.
- The Rockford (Illinois) Typhoid Epidemic (with E. E. Irons), *Journal of Infectious Diseases*, XI (1912), 21-43.
- The Case for Pasteurization, *Journal of the American Medical Association*, LIX (1912), 1450-57.
- School Diseases, *ibid.*, LX (1913), 409-11.
- The Inhibitive Action of Bile upon B. coli, *Journal of Infectious Diseases*, XII (1913), 326-34.
- The Quincy (Illinois) Typhoid Epidemic (with E. E. Irons), *ibid.*, XIII (1913), 16-29.
- The Bacterial Examination of Water, *Transactions of the Fifteenth International Congress on Hygiene and Demography*, II (1913), 47-50.
- Disease Carriers among School Children, *American Journal of Tropical Diseases and Preventive Medicine*, I (1913), 220-26.

- Ozone: Its Bactericidal, Physiologic, and Deodorizing Action (with A. J. Carlson), *Journal of the American Medical Association*, LXI (1913), 1007-12.
- The Municipal Regulation of Milk-Supply, *ibid.*, 2286-91.
- Typhoid in the Large Cities of the United States, *ibid.*, LXII (1914), 1473-75.
- Typhoid Fever, *ibid.*, 1772-77.
- Bacteriological Standard for Drinking Water, *Public Health Reports, United States Public Health Service*, XXIX (1914), 2959-66.
- Typhoid in the Large Cities of the United States in 1914, *Journal of the American Medical Association*, LXIV (1915), 1322-25.
- Variation in Bacteria, *Proceedings of the National Academy of Sciences*, I (1915), 160-64.
- An Infection with the Paratyphoid Bacillus [B. paratyphosus B] (with E. E. Irons), *Journal of Infectious Diseases*, XVII (1915), 234-40.
- Municipal Sanitation, *Commemoration Volume*, published on the completion of the Panama Canal (1915), 285-97.
- The Purification of Water Supplies, *Journal of the American Medical Association*, LXVI (1916), 467-71.
- The Bacteriology of Foods, *ibid.*, LXVIII (1917), 1080-84.
- The Differentiation of the Paratyphoid-enteritidis Group, I, *Journal of Infectious Diseases*, XX (1917), 457-83.
- NORMAN MACLEOD HARRIS [1903-], Assistant Professor of Bacteriology.
 M.B. Toronto, 1894; M.R.C.S. and L.R.C.P. London, 1895; Assistant Professor of Bacteriology, Chicago, 1907-.
 Captain in the Canadian Army Medical Corps, 1916-.
- Concerning a Case of Suppurative Myositis Caused by Micrococcus gonorrhoeae (Neisser) (with L. W. Haskell, Jr.), *Johns Hopkins Hospital Bulletin*, XV (1904), 395-97.
- Bacillus mortiferus, *Journal of Experimental Medicine*, VI (1905), 519-47.
- Experimental Arthritis, *Transactions of the Chicago Pathological Society*, VI (1905), 303-6.

- A Comparison between the Results of Blood Cultures Taken during Life and after Death (with N. B. Gwyn), *Journal of Infectious Diseases*, II (1905), 514-28.
- The Value of the Voges-Proskauer Reaction, *Science*, XXIII (1906), 219.
- The Relative Importance of Streptococci and Leucocytes in Milk, *Journal of Infectious Diseases*, Supplement No. 3 (1907), 50-62.
- A Method of Preparing the Romanowsky Stain, *Johns Hopkins Hospital Bulletin*, XVIII (1907), 281.
- The Cause of Milksickness or Trembles (with E. O. Jordan), *Journal of the American Medical Association*, L (1908), 1665-73.
- Milksickness (with E. O. Jordan), *Journal of Infectious Diseases*, VI (1909), 401-91.
- Chinosol (abstract), *Journal of the American Medical Association*, LIV (1910), 1801-2.
- The Relation of the Laboratory to Medicine, *Science*, XXXIV (1911), 617-22.
- Intestinal Antisepsis, *Journal of the American Medical Association*, LIX (1912), 1344-49.
- Milksickness, *Reference Handbook of the Medical Sciences*, VI (1916), 522-25.
- Milksickness. In C. E. Marshall's *Microbiology* (2d ed.). In Press.
- REVIEWS IN: *Botanical Gazette*, L, 229-30; LIII, 185-86; LVIII, 529-30; *American Journal of Hygiene*, XX, 444-45; *Journal of the American Public Health Association*, I, 157-58; II, 210-11.
- WILLIAM ERNEST CARY [1914-], Instructor in Hygiene and Bacteriology.
S.B. Earlham College, 1912; Ph.D. Chicago, 1916; Assistant in Bacteriology, Chicago, 1914-16; Instructor, *ibid.*, 1916-.
- The Fate of Foreign Erythrocytes Introduced into the Blood Stream of a Rabbit, *Journal of Infectious Diseases*, XVII (1915), 432-36.
- The Bacterial Examination of Sausages and Its Sanitary Significance, *American Journal of Public Health*, VI (1916), 124-35.
- Studies on Virulence and Toxin Formation in B. Diphtheriae. Doctor's thesis. *Journal of Infectious Diseases*, XX (1917), 244-71.

PAUL GUSTAV HEINEMANN [1906-17], Instructor in Hygiene and Bacteriology; Standard Serum Co., Woodworth, Wisconsin.

S.B. Chicago, 1904; Ph.D. *ibid.*, 1907; Assistant in Bacteriology, *ibid.*, 1906-10; Associate, *ibid.*, 1910-12; Instructor, *ibid.*, 1912-17.

Member of the Committee on Standard Methods of Preparing Diphtheria Antitoxin; report published in *American Journal of Public Health*, II (1912), 43-46.

A Laboratory Guide in Bacteriology. 1st ed., 1905; 2d ed., 1911; 3d ed., 1915. 12mo, xv+210. Chicago: University Press.

The Kinds of Lactic Acid Produced by Lactic Acid Bacteria, *Journal of Biological Chemistry*, II (1906), 603-12.

The Significance of Streptococci in Milk, *Journal of Infectious Diseases*, III (1906), 173-82.

The Pathogenicity of Streptococcus lacticus, *ibid.*, IV (1907), 87-92.

A Substitute for Potato as a Culture Medium, *ibid.*, 282-84.

Säuglings Milch in Chicago, *Milch-Zeitung*, XXXVI (1907), 147-49, 157-59.

Sanitary Milk, *Archives of Pediatrics*, XXV (1908), 436.

Note on the Concentration of Diphtheria Toxin, *Journal of Biological Chemistry*, V (1908), 27.

A Comparison of Practical Methods for Determining the Bacterial Content of Milk, *Journal of Infectious Diseases*, V (1908), 412-20.

Experiments on the Germicidal Action of Cow's Milk, *ibid.*, 534-41.

The Bacteriology of Salt-rising Bread, *Science*, XXIX (1909), 1011.

Lactic Acid as an Agent to Reduce Intestinal Putrefaction, *Journal of the American Medical Association*, LII (1909), 372-76.

A Study of Bacillus bulgaricus, *Journal of Infectious Diseases*, VI (1909), 304-18.

Bleeding to Death in Order to Obtain the Maximum Amount of Antidiphtheritic Serum from Horses, *ibid.*, 616-61.

On the Production of Sanitary Milk (with A. B. Luckhardt and A. C. Hicks), *ibid.*, VII (1910), 47-66.

Can Clean Milk Be Produced at Small Cost? *Hoard's Dairyman*, XLI (1910), 1223-24.

- The Bacterial Content of Separator Cream and Separator Milk (with E. N. Class), *Journal of the American Public Health Association*, I (1911), 209-11.
- The Present Status of Our Knowledge of the Infectiousness of Milk Containing Tubercle Bacilli, *Illinois Medical Journal*, XX (1911), 644-46.
- The Production and Concentration of a Serum for Rocky Mountain Spotted Fever. Preliminary Note, *Journal of the American Medical Association*, LVII (1911), 198.
- Report of the Committee on Throat Cultures (with F. O. Tonney and J. P. Simonds), *ibid.*, 976-77.
- The Bacteriology of "Tätté Melk," *Science*, XXXIII (1911), 630.
- The Best Methods of Collecting and Transporting Milk Destined as Food for Infants, *Transactions of the Second Annual Meeting of the American Association for the Study and Prevention of Infant Mortality*, II (1911), 276-81.
- The Bacterial Content of Separator Cream and Separator Milk (with E. Class), *Journal of the American Public Health Association*, I (1911), 209-13.
- The Dietetic and Therapeutic Value of Fermented Milks Prepared from Commercial Preparations, *Journal of the American Medical Association*, LVIII (1912), 1252-54.
- The Epidemic of Sore Throat in Chicago, *ibid.*, LIX (1912), 716.
- Experimental Therapy of Rocky Mountain Spotted Fever (with J. J. Moore), *Journal of Infectious Diseases*, X (1912), 294-304.
- Concentration of Antistreptococcic and Antigonococcic Sera (with L. C. Gatewood), *ibid.*, 416-20.
- The Problem of City Milk Supplies, *Popular Science Monthly*, LXXXI (1912), 66.
- Cold Storage Problems, *ibid.*, 154.
- Sanitary Aspect of Milk Supplies, *Transactions of the Illinois State Academy of Science*, VI (1913), 60-62.
- Bacteriological Examination of Market Milk, *Transactions of the Fifteenth International Congress on Hygiene and Demography*, II (1913), 133-35.
- The Germicidal Efficiency of Commercial Preparation of Hydrogen Peroxid, *Journal of the American Medical Association*, LX (1913), 1603-6.

The Variability of Two Strains of *Streptococcus lacticus*, *Journal of Infectious Diseases*, XVI (1915), 221-39.

Relation of the Number of *Streptococcus lacticus* to Amount of Acid Formed in Milk and Cream, *ibid.*, 285-91.

The Germicidal Effect of Lactic Acid in Milk, *ibid.*, 479-86.

The Refinement and Concentration of Antitoxins, *ibid.*, XIX (1916), 433-39.

A Study of the Boas-Oppler Bacillus (with E. E. Ecker), *Journal of Bacteriology*, I (1916), 435-44.

REVIEWS IN: *Journal of the American Medical Association*, LII, 986, 1854; LIV, 317, 406; LVI, 1137; LVIII, 808; LIX, 1318; LX, 937.

WILLIAM BARNARD SHARP [1913-14; 1916-], Instructor in Hygiene and Bacteriology; Red Cross Hospital, Shanghai, China, 1916-.

A.B. University of the South, 1910; S.M. Chicago, 1914; M.D. Rush Medical College, 1914; Assistant in Bacteriology, Chicago, 1913-14; Instructor, *ibid.*, 1916-.

The Bacteriology of Vaginitis, *Journal of Infectious Diseases*, XV (1914), 283-92.

SAMUEL HENRY AYERS [1905-6], Assistant in Bacteriology; Bacteriologist, Dairy Division, Bureau of Animal Industry, Department of Agriculture, Washington, D.C.

S.B. Massachusetts Institute of Technology, 1905.

B. coli in Market Oysters, *Biological Studies by the Pupils of William T. Sedgwick* (1906), 300-303.

ROBERT EARLE BUCHANAN [1907-8], Assistant in Pathology and Bacteriology; Professor of Bacteriology and Hygiene, Dean of Division of Industrial Science, Iowa State College, Ames.

S.B. Iowa State College, 1904; Ph.D. Chicago, 1908; Instructor in Bacteriology, Iowa State College, 1904-6; Assistant Professor of Bacteriology, *ibid.*, 1906-7; Assistant in Pathology and Bacteriology, Chicago, 1907-8.

The Morphology of *Bacillus radicolica*. Doctor's thesis. *Centralblatt für Bakteriologie, Parasitenkunde und Infektionskrankheiten*, XXII (1909), 59-91; XXIII (1909), 371-96.

MARY HEFFERAN [1902-12], Assistant and Curator of the Bacteriological Museum; Vice-President and Director of the D. A. Blodgett Home for Children, Grand Rapids, Mich.

A.B. Wellesley, 1896; Ph.D. Chicago, 1903; Curator of the Bacteriological Museum, *ibid.*, 1902-12; Assistant, *ibid.*, 1904-12.

A Comparative and Experimental Study of Bacilli Producing Red Pigment.
Doctor's thesis. 8vo, 55. Jena: Gustav Fischer, 1904.

Observations on the Bionomics of *Anopheles* (with E. O. Jordan),
Journal of Infectious Diseases, II (1905), 56-69.

ERNEST EDWARD IRONS [1902-3], Assistant in Bacteriology; Assistant Professor of Medicine, Rush Medical College.

S.B. Chicago, 1900; Ph.D. *ibid.*, 1912; Assistant in Bacteriology, *ibid.*, 1902-3.

Three Outbreaks of Typhoid Fever Traced to Milk Infection (with E. O. Jordan), *Journal of the American Medical Association*, LVIII (1912), 169-72.

The Rockford (Illinois) Typhoid Epidemic (with E. O. Jordan), *Journal of Infectious Diseases*, XI (1912), 21-43.

Cutaneous Allergy in Gonococcal Infections. Doctor's thesis. *Ibid.*, 77-93.

The Quincy (Illinois) Typhoid Epidemic (with E. O. Jordan), *ibid.*, XIII (1913), 16-29.

An Infection with the Paratyphoid Bacillus [B. paratyphosus B] (with E. O. Jordan), *ibid.*, XVII (1915), 234-40.

ENRIQUE EDUARDO ECKER, PH. D. 1917.

A Study of the Boas-Oppler Bacillus (with P. G. Heinemann), *Journal of Bacteriology*, I (1916), 435-44.

The Pathogenic Effect and Nature of a Toxin Produced by Bacillus Paratyphosus B, *Journal of Infectious Diseases*. In Press.

THOMAS HAIGH GLENN, PH.D. 1910; Director, Fort Dodge Clinical Laboratory, Fort Dodge, Iowa.

Variation and Carbohydrate Metabolism of Bacilli of the Proteus Group.
Doctor's thesis. 8vo, 15. Jena: H. Pohle, 1911.

An Epidemic among English Sparrows Due to *B. cloacae*, *Journal of Infectious Diseases*, VI (1909), 339-45.

†HERBERT MARCUS GOODMAN, PH.D. 1908.

Experimental Studies on Diphtheric Immunity. Doctor's thesis.
Ibid., IV (1907), 509-40; V (1908), 184-202.

Variability in the Diphtheria Group of Bacilli, *ibid.*, 421-42.

EMERY ROE HAYHURST, PH.D. 1916; Assistant Professor of Industrial Hygiene, Ohio State University, Columbus.

Industrial Health-Hazards and Occupational Diseases in Ohio. Doctor's thesis. 8vo, xviii+438. Columbus: F. J. Heer Printing Co., 1915.

KENNETH NOEL ATKINS, Graduate Student; Instructor in Bacteriology, Dartmouth College.

Bacteriology of the Swimming Pool, *Proceedings of the Water Supply Association* (1911), 73-87.

IDA ALBERTINA BENGTON, Graduate Student; Research Assistant, Hygienic Laboratory, Washington, D.C.

A Study of Condensed and Evaporated Milks, *Journal of Home Economics*, VIII (1916), 29-32.

PAUL R. CANNON, Graduate Student; University of Chicago Ambulance Corps No. 3.

A Rapid and Simple Indol Test, *Journal of Bacteriology*, I (1916), 535-36.

DUDLEY WATSON DAY, Graduate Student.

The Relation between Serum Resistance and Virulence, *Journal of Infectious Diseases*, II (1905), 569-76.

KATHERINE HOWELL, Graduate Student.

The Bacterial Contamination of Bread, *American Journal of Public Health*, II (1912), 321-24.

MABEL JONES, Graduate Student.

A Peculiar Micro-organism Showing Rosette Formation, *Centralblatt für Bakteriologie, Parasitenkunde und Infektionskrankheiten*, XIV (1905), 459-63.

† Deceased.

MARY C. LINCOLN, Graduate Student.

Agglutination in the Group of Fluorescent Bacteria, *Journal of Infectious Diseases*, I (1904), 268-79.

G. BERTRAND SMITH, Graduate Student.

Two Cases of Paratyphoid Infection: One Caused by an Aberrant Organism, *Journal of the American Medical Association*, XLI (1903), 1470-72.

DAVID DUKE TODD, Graduate Student.

The Bacterial Integrity of Celloidin and Parchment Membranes, *Journal of Infectious Diseases*, VI (1909), 369-82.

THE DEPARTMENT OF PUBLIC SPEAKING

SOLOMON HENRY CLARK [1894-], Associate Professor of Public Speaking.

Ph.B. Chicago, 1897; Assistant Professor of Public Speaking, *ibid.*, 1897-1901; Associate Professor, *ibid.*, 1901-.

Handbook of Best Readings. 16mo, xxvii+511. New York: Charles Scribner's Sons, 1903.

Interpretation of the Printed Page. 16mo, 317. Chicago: Row, Peterson & Co., 1915.

The Nurse's Voice, *The Nurse*, III (1915), 405-10.

THE DEPARTMENT OF PHYSICAL CULTURE AND ATHLETICS

GERTRUDE DUDLEY [1898-], Associate Professor of Physical Culture.

Dean of Women and Lecturer, School of Physical Education, Yale, Summers, 1905, 1906, 1907; Assistant Professor of Physical Culture, Chicago, 1909-16; Associate Professor, *ibid.*, 1916-.

Athletic Games in the Education of Women (with Frances A. Kellor). 12mo, 263. New York: Henry Holt & Co., 1909.

THE PROFESSIONAL SCHOOLS

THE DIVINITY SCHOOL

THE DEPARTMENT OF OLD TESTAMENT LITERATURE AND INTERPRETATION

See *under* Department of Oriental Languages and Literatures, p. 89.

THE DEPARTMENT OF NEW TESTAMENT AND EARLY CHRISTIAN LITERATURE

See *under* Department of New Testament and Early Christian Literature, p. 105.

THE DEPARTMENT OF SYSTEMATIC THEOLOGY

SHAILER MATHEWS [1894-], Professor of Historical and Comparative Theology and Chairman of the Department of Systematic Theology; Dean of the Divinity School.

A.B. Colby, 1884; D.D. *ibid.*, 1901; D.D. Oberlin, 1908; D.D. Brown 1914; LL.D. Pennsylvania College, 1914; Associate Professor of Rhetoric, Colby, 1887-89; Professor of History and Political Economy, *ibid.*, 1889-94; Associate Professor of New Testament History and Interpretation, Chicago, 1894-97; Professor, *ibid.*, 1897-1905; Professor of Systematic Theology, *ibid.*, 1905-6; Professor of Historical and Comparative Theology, *ibid.*, 1906-; Dean of the Divinity School, *ibid.*, 1908-.

President, Western Economic Society, 1911-; President, Federal Council of the Churches of Christ in America, 1912-16; President, Northern Baptist Convention, 1915-16; Director, Religious Work Department, Chautauqua Institute, 1912-; Trustee, Church Peace Union, 1913-; Lecturer, Haverford Library Foundation, 1907; Earle (Berkeley, Cal.), 1913; William Belden Noble (Harvard), 1916.

Associate Editor, *Biblical World*, 1894-1912; Editor, *ibid.*, 1912-; Associate Editor, *American Journal of Theology*, 1897-; Editor, *Christendom*, 1903; Editor, *World To-Day*, 1903-11; Contributing Editor, *Constructive Quarterly*, 1913-; Editor of: *New Testament Handbooks* (Macmillan Co.), 1899-; *Bible for Home and School* (Macmillan Co.), 1910-; "Social Betterment Series" (Appleton & Co.), 1911-; Publications of Social Service Commission Northern Baptist Convention, 1909-12; Woman Citizen's Library. Chicago: Civics Society, 1913; American Editor, *Hastings' Dictionary of the Bible*, 1 vol., Charles Scribner's Sons, 1909; Joint Editor, "University of Chicago Publications in Religious Education."

Member, Social Service Commission of the Federal Council of the Churches of Christ in America, 1908-; Committee on Social Service, Northern Baptist Convention, 1907-; Representative, Christian Embassy to Japan, Federal Council of the Churches of Christ in America (report published 1915).

Principles and Ideals for the Sunday School (with E. D. Burton). 8vo, viii+208. Chicago: University Press, 1903.

The Messianic Hope in the New Testament. 8vo, xx+338. Chicago: University Press, 1905.

The Church and the Changing Order. 12mo, 255. New York: Macmillan Co., 1907.

The Social Gospel. 12mo, 168. Philadelphia: American Baptist Publishing Society, 1910.

The Gospel and the Modern Man. 12mo, 331. New York: Macmillan Co., 1910.

New Testament Times in Palestine (rev. and enlarged ed.). 12mo, 234. New York: Macmillan Co., 1910.

Scientific Management in the Churches. Chicago: University Press, 1912.

The Making of To-Morrow. 12mo, 193. New York: Eaton & Mains, 1913.

The Individual and the Social Gospel. 16mo, 84. New York: Missionary Education Movement of the United States and Canada, 1914.

The Spiritual Interpretation of History (William Belden Noble Lectures, 1916, Harvard University). 12mo, x+227. Cambridge: Harvard University Press, 1916.

Culture in the West, *World To-Day*, VIII (1905), 191-96.

Uncommercial Chicago, *ibid.*, IX (1905), 984-90.

Education in Thrift, *ibid.*, 1066-70.

Imitation of Jesus, *Biblical World*, XXVI (1905), 455-58.

Men or Institutions? *ibid.*, XXVII (1906), 32-41.

Use of the Bible in the Public Schools, *ibid.*, 59-62.

Parable of the Tares, *ibid.*, 313-15.

"Antiochus," "Brother," "Betrothal," "Day of Christ," "Day of Judgment." In *Dictionary of Christ and the Gospels*. New York: Charles Scribner's Sons, 1906.

The Church and Social Discontent, *Methodist Quarterly*, LVI (1907), 32-51.

Packingtown Today, *World To-Day*, XII (1907), 488-502.

A Positive Method for an Evangelical Theology, *American Journal of Theology*, XIII (1909), 21-46.

The Council at Jerusalem, *Biblical World*, XXXIII (1909), 337-42.

The Awakened Church:

The Church and Scholarship, *World To-Day*, XVI (1909), 57-61.

The Church and Social Service, *ibid.*, 151-56.

The Church and Education, *ibid.*, 625-28.

The State University and the Theological Seminary, *Religious Education*, IV (1909), 179-85.

The Social Task of the Church, *Homiletic Review*, LIX (1910), 92-96.

The Kingdom of God, *Biblical World*, XXXV (1910), 420-27.

The Evolution of Religion, *American Journal of Theology*, XV (1911), 57-82.

The Duty of American Parents, *Religious Education*, VI (1911), 49-54.

Is Belief in the Historicity of Jesus Indispensable to Christian Faith? *American Journal of Theology*, XV (1911), 614-17.

Vocational Efficiency and the Theological Curriculum, *ibid.*, XVI (1912), 165-80.

American Institute of Sacred Literature: "The Efficient Church," *Biblical World*, XXXIX (1912), 116-24, 200-205, 266-81, 346-50, 414-19.

The Social Origin of Theology, *American Journal of Sociology*, XLVIII (1912), 289-317.

The Awakening of American Protestantism, *Constructive Quarterly*, I (1913), 101-25.

- The Beginnings of a New Catholic Unity, *Biblical World*, XLI (1913), 8-10.
- The Sufficiency of the Gospel for the Salvation of Society, *ibid.*, 291-98.
- Contemporary Theological Movements in Germany, *Chautauquan*, LXX (1913), 306-11.
- The Struggle between the Natural and the Spiritual Order as Described in the Gospel of John, *Biblical World*, XLII (1913), 30-35, 76-79, 146-49, 368-72.
- The Pedagogy of the New Testament, *Cyclopedia of Education*, IV (1914), 446-51.
- Missions and the Social Gospel, *International Review of Missions*, III (1914), 432-46.
- Generic Christianity, *Constructive Quarterly*, II (1914), 702-23.
- The Message of Jesus to Our Modern Life (Bible-study course for American Institute of Sacred Literature), *Biblical World*, XLIV (1914), 225-28, 297-300, 367-72, 431-40; XLV (1915), 56-64, 120-28, 185-92, 250-56, 316-24.
- Theology and the Social Mind, *ibid.*, XLVI (1915), 201-48.
- Manufactured Gods. In *University of Chicago Sermons* (edited by T. G. Soares; Chicago: University Press, 1915), pp. 55-70.
- Some Larger Aspects of the Trade in War Materials, *Journal of Political Economy*, XXIV (1916), 14-24.
- The Historical Study of Religion. Chap. ii in *A Guide to the Study of the Christian Religion* (edited by G. B. Smith; Chicago: University Press, 1916), pp. 19-80.
- Theological Seminaries as Schools of Religious Efficiency, *Biblical World*, XLVII (1916), 75-85.
- A Religion for Democracy, *Independent*, LXXXVI (1916), 53-56.

REVIEWS IN: *Biblical World*, XXV, 392, 393; XLI, 137-40; XLII, 120-21; XLIII, 208, 279, 352; XLIV, 364, 429, 430; XLV, 54; XLVI, 127, 387; XLVII, 121, 122, 123; *American Journal of Theology*, X, 712, 714, 715; XIII, 145-46; 624-25; XIV, 127-29; XV, 134-36; XVII, 103-4.

GERALD BIRNEY SMITH [1900-], Professor of Christian Theology.

A.B. Brown, 1891; D.B. Union Theological Seminary, 1898; D.D. Brown, 1909; Assistant Professor of Systematic Theology, Chicago, 1904-6; Associate Professor, *ibid.*, 1906-13; Professor, *ibid.*, 1913-.

Nathaniel W. Taylor Lecturer, Yale Divinity School, 1912.

Managing Editor, *American Journal of Theology*, 1905-; Editor of *A Guide to the Study of the Christian Religion*. 8vo, ix+759. Chicago: University Press, 1916.

Biblical Ideas of Atonement: Their History and Significance (with E. D. Burton and J. M. P. Smith). 8vo, 343. Chicago: University Press, 1909.

Social Idealism and the Changing Theology. 12mo, 247. New York: Macmillan Co., 1913.

Recent Psychological Investigations in the Realm of Religion, *Biblical World*, XXIV (1904), 335-42.

Truthfulness in Teaching the Truth, *ibid.*, XXVIII (1906), 231-39.

The Field of Systematic Theology Today, *ibid.*, XXXII (1908), 113-23.

The Modern-Positive Movement in Theology, *American Journal of Theology*, XIII (1909), 92-99.

The Task and Method of Systematic Theology, *ibid.*, XIV (1910), 215-33.

Biblical Criticism and the Christmas Message, *Biblical World*, XXXVI (1910), 368-78.

Testing the Doctrine of Inspiration, *ibid.*, 152-65.

Can the Distinction between Canonical and Non-Canonical Books Be Maintained? *ibid.*, XXXVII (1911), 19-29.

Theology and Biblical Criticism, *ibid.*, XL (1912), 17-30.

Theology and Religious Experience, *ibid.*, 97-108.

Theology and the History of Religions, *ibid.*, 173-83.

Theology and Scientific Method, *ibid.*, 236-47.

The Function of a Critical Theology, *ibid.*, 307-17.

Christianity and Critical Theology, *ibid.*, 385-96.

Systematic Theology and Ministerial Efficiency, *American Journal of Theology*, XVI (1912), 589-613.

Is Scholarship Hostile to Religion? *Biblical World*, XLII (1913), 9-16.

The Problem of Theological Method, *Biblical World*, XLIV (1914), 274-82.

What Is Christianity? *ibid.*, 341-49.

Christianity and History, *ibid.*, 409-16.

The Christ of Faith and the Jesus of History, *American Journal of Theology*, XVIII (1914), 521-44.

Theology and the Doctrine of Evolution, *Biblical World*, XLV (1915), 37-45.

What Shall the Systematic Theologian Expect from the New Testament Scholar? *American Journal of Theology*, XIX (1915), 383-401.

Systematic Theology and Christian Ethics. Chap. ix in *A Guide to the Study of the Christian Religion* (Chicago: University Press, 1916), pp. 483-578.

REVIEWS OF: Mackintosh, The Doctrine of the Person of Christ, *American Journal of Theology*, XVII, 301-7; Royce, The Problem of Christianity, *ibid.*, 631-39; Ten Broeke, A Constructive Basis for Theology, *ibid.*, XIX, 233-37. Other reviews in *American Journal of Theology*, X, 771-72; XIII, 137-40, 270-73, 470-73; XIV, 133-36, 484-85; XV, 139-41, 297-98, 298-99; XVII, 94-97; XVIII, 309-12, 460-62.

ARTHUR ERASTUS HOLT, PH.D. 1904; Fort Worth, Tex.

The Function of Christian Ethics. Doctor's thesis. 8vo, 48. Chicago: George K. Hazlitt & Co., 1904.

UKICHI KAWAGUCHI, PH.D. 1914.

The Bearing of the Evolutionary Theory on the Conception of God. A Study in Contemporary Interpretations of God in Terms of the Doctrine of Evolution. Doctor's thesis. 8vo, viii+103. Menasha, Wis.: George Banta Publishing Co., 1916.

WILFRED CURRIER KEIRSTEAD, PH.D. 1903; Professor of Philosophy and Economics, University of New Brunswick, Fredericton.

Metaphysical Presuppositions of Ritschl. Doctor's thesis. *American Journal of Theology*, XI (1905), 677-718.

DOUGLAS CLYDE MACINTOSH, PH.D. 1909; Professor of Systematic Theology, Yale School of Religion.

The Reaction against Metaphysics in Theology. Doctor's thesis. 8vo, 86. Chicago: Privately printed, 1911.

HENRY BURKE ROBINS, PH.D. 1912; Professor of the History and Philosophy of Religion and Missions, Rochester Theological Seminary, Rochester, N.Y.

Aspects of Authority in the Christian Religion. viii+151. Philadelphia: Griffith & Rowland Press, 1911.

The Basis of Assurance in Recent Protestant Theologies. Doctor's thesis. 8vo, 92. Kansas City: Charles E. Brown Printing Co., 1912.

WILLIAM ROSS SCHOEMAKER, PH.D. 1903; Clergyman, Des Moines, Iowa.

The Use of אֱלֹהִים in the Old Testament and of πνεῦμα in the New Testament: A Lexicographical Study. Doctor's thesis. 8vo, v+62. New York: *Journal of Biblical Literature*, 1904.

CHARLES MANFORD SHARPE, PH.D. 1912; Assistant Professor of Systematic Theology, Disciples Divinity House, Chicago.

The Normative Use of Scripture by Typical Theologians of Protestant Orthodoxy in Great Britain and America. Doctor's thesis. 8vo, 77. Menasha, Wis.: George Banta Publishing Co., 1912.

ARTHUR CLINTON WATSON, PH.D. 1915; Head of the Department of Philosophy and History of Christianity, Rockford College, Rockford, Ill.

The Logic of Religion. Doctor's thesis. *American Journal of Theology*, XX (1916), 81-101, 244-65.

THE DEPARTMENT OF CHURCH HISTORY

ANDREW CUNNINGHAM McLAUGHLIN [1906-], Professor and Head of the Department of History, and Head of the Department of Church History. *See under* Department of History, p. 54.

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Graduate, Hamilton Theological Seminary, 1861; D.D. Jena, 1869; LL.D. Ottawa University, 1898; President, *ibid.*, 1890-92; Assistant Professor of Church History and Homiletics, Chicago, 1892-94; Associate Professor, *ibid.*, 1894-95; Professor, *ibid.*, 1895-1908; Professor Emeritus, 1908-16.

The Christian's Relation to Evolution: A Question of Gain or Loss. 8vo, 171. New York: Fleming H. Revell Co., 1904.

† Deceased.

The Literary Beauty of the New Testament, *Standard*, LI (1903), 9-10.

The Architecture of the University of Chicago, *ibid.* (1904), 10-12.

The Speaking of Women in the Apostolic Church, *American Journal of Theology*, VIII (1904), 360-64.

A Census of the Early Biblical Populations, *Bible Student and Teacher*, VI (1907), 22-26, 83-94.

REVIEWS IN: *American Journal of Theology*, VI, 606-7, 631, 633, 798-99, 827-28; VII, 163-64, 172-73, 388-404; VIII, 198, 360, 539; IX, 185, 373-86; X, 344-45, 349, 350, 351, 359-61; XI, 335-36, 341-44, 346-51; XII, 291, 299, 304, 306, 307, 308, 312, 313.

†ERI BAKER HULBERT [1892-1907], Professor and Head of the Department of Church History; Dean of the Divinity School.

A.B. Union College, 1863; Graduate, Hamilton Theological Seminary, 1865; A.M. Colgate, 1865, and Union College, 1866; D.D. Baptist Union Theological Seminary, 1880; Professor of Church History, *ibid.*, 1881-92; Acting President, *ibid.*, 1884-85; Professor and Head of the Department of Church History and Dean of the Divinity School, Chicago, 1892-1907.

The English Reformation and Puritanism, with Other Lectures and Addresses. 8vo, 352. Chicago: University Press, 1907.

REVIEWS IN: *American Journal of Theology*, VI, 585-87, 614-15, 632, 791-93; VII, 390-91, 401-2, 404; X, 346-47, 354-59; *Biblical World*, XXV, 316-17.

ERRETT GATES [1910-], Assistant Professor of Church History in the Disciples' Divinity House.

A.B. Chicago, 1899; D.B. *ibid.*, 1900; Ph.D. *ibid.*, 1902; Assistant Professor of Church History in the Disciples' Divinity House, *ibid.*, 1910-; Instructor in History, *ibid.*, 1911-.

The Early Relation and Separation of Baptists and Disciples. 8vo, 124. Chicago: Christian Century Co., 1904.

History of the Disciples of Christ. 12mo, 346. New York: Baker & Taylor Co., 1905.

Growth of Discipleship in the Company of Jesus, *Biblical World*, XXXIII (1909), 314-25.

Pragmatic Elements in Modernism, *American Journal of Theology*, XV (1911), 43-56.

† Deceased.

The New Prussian Heresy Law and Its Workings, *ibid.*, XVI (1912), 241-55.

Another Case of Discipline in the Prussian Church, *ibid.*, XVII (1913), 89-93.

What Jesus Thought of His Own Death. In *University of Chicago Sermons* (edited by T. G. Soares; Chicago: University Press, 1915), pp. 125-41.

The Development of Modern Christianity. In *A Guide to the Study of the Christian Religion* (edited by G. B. Smith; Chicago: University Press, 1916), pp. 431-82.

CURTIS HOWE WALKER [1909-], Assistant Professor of History. See under Department of History, p. 62.

PETER GEORGE MODE [1913-], Instructor in Church History.

A.B. McMaster, 1897; Th.B. *ibid.*, 1899; Ph.D. Chicago, 1914; Professor of History and Church History, Brandon College, Manitoba, 1906-12; Assistant in History, Chicago, 1913; Instructor in Church History, *ibid.*, 1914-.

The Influence of the Black Death on the English Monasteries. Doctor's thesis. 8vo, 104. Menasha, Wis.: George Banta Publishing Co., 1916.

NELS SORENSON LAWDAHL [1893; 1895-1913], Instructor (Danish-Norwegian Theological Seminary) in Church History, History, and Greek; Des Moines College, Des Moines, Iowa.

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History of the Danish Baptists in America. 16mo, 544. Chicago: Privately printed, 1909.

WILLIAM HENRY ALLISON, PH.D. 1905; Professor of Ecclesiastical History, Colgate University, Hamilton, N.Y.

Baptist Councils in America: A Historical Study of Their Origin and the Principles of Their Development. Doctor's thesis. 8vo, 112. Chicago: George K. Hazlitt & Co., 1906.

ROLVIN HARLAN, PH.D. 1906; President of Sioux Falls College, Sioux Falls, S.D.

John Alexander Dowie and the Christian Catholic Apostolic Church in Zion. Doctor's thesis. 8vo, 204. Evansville, Wis.: R. M. Antes, 1906.

ARTHUR HENRY HIRSCH, PH.D. 1915; Professor of History, Morningside College, Sioux City, Iowa.

The Huguenots in South Carolina. 12mo, 350. New York: Macmillan Co. In Press.

CHESTER WILLIAM NEW, PH.D. 1913.

History of the Alien Priories in England to the Confiscation of Henry V. Doctor's thesis. 8vo, x+96. Menasha, Wis.: George Banta Publishing Co., 1916.

THE DEPARTMENT OF PRACTICAL THEOLOGY

THEODORE GERALD SOARES [1906-], Professor of Homiletics and Religious Education, and Head of the Department of Practical Theology.

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Member of the Editorial Committee, *American Journal of Theology*, 1906-; *Biblical World*, 1906-; Joint Editor, "University of Chicago Publications in Religious Education," 1914-; Editor, *University of Chicago Sermons*, 8vo, 348. Chicago: University Press, 1915.

The Week of Our Lord's Passion. 12mo, vi+220. Chicago: Hope Publishing Co., 1907.

Heroes of Israel. 12mo, xvi+388. Chicago: University Press, 1909.

Heroes of Israel, Teacher's Manual. 12mo, xxix+240. Chicago: University Press, 1910.

Lessons from the Great Teachers (with Lillian M. Soares). 8vo, viii+435. Chicago: Howard-Severance Co., 1911.

A Baptist Manual. 12mo, xii+156. Philadelphia: American Baptist Publication Society, 1911.

The Social Institutions and Ideals of the Bible. 8vo, 385. New York: Abingdon Press, 1915.

The Ethical Value of the Old Testament in Modern Life, *Biblical World*, XXVII (1906), 23-31.

How to Teach the Sunday-School Lessons for 1907, *ibid.*, XXVIII (1906), 412-20.

- Expository Studies in the Old Testament, *ibid.*, XXIX (1907), 376-87.
- Social Sins and National Doom, *ibid.*, XXXI (1908), 62-67.
- The Worth of Man, *ibid.*, XXXIII (1909), 107-12.
- Religious Training for the High-School Age, *Religious Education*, IV (1909), 451-57.
- Paul's Missionary Methods, *Biblical World*, XXXIV (1909), 326-36.
- Jesus' Work in Galilee: His Healing Ministry, *ibid.*, XXXV (1910), 117-23.
- Making the Bible Real. Chap. vii in *Applied Ideals in Work with Boys* (New York: Young Men's Christian Association Press, 1910).
- Some Psychological Aspects of Regeneration, *Biblical World*, XXXVII (1911), 78-88.
- The Nature of a Boy's Religion, *American Youth*, I (1912), 6-11.
- Current Moral Standards in Government, *Religious Education*, VII (1912), 414-19.
- Practical Theology and Ministerial Efficiency, *American Journal of Theology*, XVI (1912), 426-43.
- Federation for Religious Leadership, *Religious Education*, VIII (1913), 5-11.
- The Educational Work of the Church, *Biblical World*, XLIII (1914), 123-28, 194-98, 265-68, 333-38, 403-8.
- The Modern Revival of Religion, *Religious Education*, IX (1914), 227-32.
- The Need of Power in American Preaching. In *University of Chicago Sermons*, pp. 3-20.
- The Value of the Old Testament in Religious Education, *Encyclopedia of Sunday Schools and Religious Education*, II (1915), 736-41.
- Methods of Teaching in the Bible, *ibid.*, III (1915), 1088-91.
- The Way to the Unseen. In *University of Chicago Sermons*, pp. 315-30.
- The Study of Religious Education, *Biblical World*, XLVII (1916), 3-15.
- Practical Theology. Chapter X in *A Guide to the Study of the Christian Religion* (edited by G. B. Smith; Chicago: University Press, 1916), pp. 579-676.

The Preaching Task of the Modern Minister, *Biblical World*, XLVII (1916), 124-32; 200-206; 272-78; 344-50; 414-20.

Regeneration. In Hastings' *Dictionary of the Apostolic Church*. In Press.

REVIEWS IN: *American Journal of Theology*, XIII, 481-82; XVII, 458-59; XVIII, 315-17; *Biblical World*, XXXV, 68-69; XXXIX, 356-57.

GALUSHA ANDERSON [1892-], Professor Emeritus of Homiletics; Newton Center, Mass.

A.B. Rochester, 1854; S.T.D. *ibid.*, 1866; LL.D. Rochester and Madison (now Colgate), 1884; Professor of Sacred Rhetoric, Church Polity, and Pastoral Duties, Newton Theological Institution, 1866-73; President of the Old University of Chicago, 1878-85; President of Denison, 1887-90; Professor of Homiletics, Church Polity, and Pastoral Duties, Baptist Union Theological Seminary, 1890-92; Professor and Head of the Department of Homiletics, Chicago, 1892-1904; Professor Emeritus of Homiletics, *ibid.*, 1904-.

Ancient Sermons for Modern Times (a translation). 12mo, 157. Boston: The Pilgrim Press, 1904.

The Story of a Border City during the Civil War. 8vo, viii+385. Boston: Little, Brown & Co., 1908.

Hitherto Untold. 8vo, 157. New York: Cochrane Publishing Co., 1910.

When Neighbors Were Neighbors: A Story of Love and Life in Olden Days. 8vo, vi+355. Boston: Lothrop, Lee & Shepard Co., 1911.

Science and Prayer and Other Papers. 8vo, 259. Boston: Pilgrim Press, 1915.

The Import of John 21:15-17. In a volume of addresses on the Gospel of John, pp. 366-79. Providence, R.I., 1904.

†FRANKLIN JOHNSON [1892-1916], Professor of Church History and Homiletics. See under Department of Church History, p. 455.

HERBERT FRANCIS EVANS [1908-], Extension Professor of Religious Education; Professor of Biblical Literature and Religious Education, Grinnell College, Grinnell, Iowa.

A.B. Leland Stanford Junior, 1902; D.B. Chicago, 1907; Ph.D. *ibid.*, 1909; Extension Professor of Religious Education, *ibid.*, 1913-.

† Deceased.

Keystone Intermediate Graded Sunday-School Lessons. Four Pupils' Texts, 208 pp. each. Four Teachers' Manuals, 250 pp. each. Philadelphia: American Baptist Publication Society, 1910-14.

The Sunday-School Building and Its Equipment. 16mo, xvi+116. Chicago: University Press, 1914.

The Relation of Reading to Moral and Religious Education. Doctor's thesis. In Press.

Sunday School Architecture, *Encyclopedia of Sunday Schools and Religious Education*, I (1915), 28-54.

†BENJAMIN ALLEN GREENE [1909-15], Professorial Lecturer on Practical Theology.

A.B. Brown, 1872; D.D. *ibid.*, 1893; Member, Board of Trustees, Divinity School, Chicago, 1901-15; Professorial Lecturer on Practical Theology, *ibid.*, 1909-15.

The Influence of the Authorized Version on English Literature, *Biblical World*, XXXVII (1911), 391-401.

The Voice of God. In the *University of Chicago Sermons*, pp. 203-15.

ALLAN HOBEN [1908-], Associate Professor of Homiletics.

A.B. New Brunswick, 1895; Ph.D. Chicago, 1901; Associate Professor of Homiletics, *ibid.*, 1908-.

Member of the Editorial Committee, *American Journal of Theology*, 1908-16.

The Minister and the Boy. 12mo, vii+171. Chicago: University Press, 1912.

Psalm 55, Partly Modernized, *Biblical World*, XXIII (1904), 122.

The Land of Jesus, *ibid.*, XXVI (1905), 408-17.

The Merciful Father, *ibid.*, XXVIII (1906), 61-63.

What Has the Church a Right to Demand in Theological Reconstruction? *American Journal of Theology*, XIII (1909), 414-19.

Juvenile Protection, *Woman Citizen's Library*, X (1913), 2468-2504.

The Boy's Religious Needs, *Men and Religion Messages*, IV (1913), 6-16.

The Church and Child Protection, *Biblical World*, XLI (1913), 180-85.

† Deceased.

Juvenile Delinquency:

Its Nature, Extent, and Causes, *ibid.*, XLV (1915), 232-35.

Court and Institutional Treatment, *ibid.*, 299-303.

Voluntary Associations and Church Co-operation, *ibid.*, 363-66.

The Revival of Idealism. In *University of Chicago Sermons*, pp. 107-21.

American Democracy and the Modern Church, *American Journal of Sociology*, XXI (1916), 458-73.

Disturbing the Church, *American Journal of Theology*, XX (1916), 130-32.

OLAF HEDEEN [1896-1912], Assistant Professor (in the Swedish Theological Seminary) of Practical Theology and Exegesis; Pastor, Englewood Swedish Baptist Church, Chicago.

A.B. Upsala, Sweden, 1882; S.M. *Candidatus*, Evangelical Lutheran Augustana Synod, 1885; Assistant Professor (in the Swedish Theological Seminary) of Practical Theology and Exegesis, Chicago, 1896-1912.

Ett religions-samfundets mest brännande fråga. 16mo, 28. Brockton, Mass.: New England Sunday School Association, 1912.

Räddningsanstalter för unga brottslingar, *Vintersol*, XIII (1905), 181-90.

R. A. Torreys lif, *ibid.*, XVI (1908), 175-84.

De amerikanska negrernas främste man, *Vintersol*, XVIII (1910), 141-62.

Codex Argenteus, *Svenska Standaret*, V (1911), 1-2.

Den högre skolverksamhetens betydelse i och för sig och för vår mission, *ibid.*, VI (1912), 1, 3 col.

FRANK OTIS ERB, PH.D. 1913; Associate Editor of *Sunday School Literature*, American Baptist Publication Society, Philadelphia.

The Development of the Young People's Movement. Doctor's thesis. 8vo, vi+122. Chicago: University Press, 1917.

DANIEL JOHNSON FLEMING, PH.D. 1914; Director of the Department of Foreign Service, Union Theological Seminary, New York.

Devolution in Mission Administration as Exemplified by the Legislative History of Five American Missionary Societies in India. Doctor's thesis. 16mo, 310. New York: Fleming H. Revell Co., 1916.

ARTHUR JACKSON HALL, PH.D. 1911; Professor of Psychology, Baylor University, Waco, Tex.

Religious Education in the Public Schools of the State and City of New York; a Historical Study. Doctor's thesis. 8vo, x+111. Chicago: University Press, 1914.

ADRIAN AUGUSTUS HOLTZ, PH.D. 1914; Milwaukee, Wis.

Moral and Religious Elements in American Elementary and Secondary Education up to 1800. Doctor's thesis. 8vo, 86. Menasha, Wis.: George Banta Publishing Co., 1917.

WILLIAM NORMAN HUTCHINS, PH.D. 1913; Margaretville, Nova Scotia.

Graded Social Service for the Sunday School. 16mo, xii+135. Chicago: University Press, 1914.

Social Service in Religious Education. Doctor's thesis. *Biblical World*, XLIV (1914), 65-148.

KATSUJI KATO, PH.D. 1913; College Secretary of the Young Men's Christian Association for Japanese Students, Chicago.

The Psychology of Oriental Religious Experience: a Study of Some Typical Experiences of Japanese Converts to Christianity. Doctor's thesis. 8vo, 102. Menasha, Wis.: George Banta Publishing Co., 1915.

HERBERT FINLEY RUDD, PH.D. 1914; Missionary, American Baptist Foreign Missionary Society, Western China.

Chinese Moral Sentiments before Confucius; a Study in the Origin of Ethical Valuation. Doctor's thesis. 12mo, iii+221. Chicago: Privately printed, 1915.

JESSE FREDERICK STEINER, PH.D. 1915.

The Japanese Invasion. Doctor's thesis. 12mo, xvii+231. Chicago: A. C. McClurg & Co., 1917.

ADDIE GRACE WARDLE, PH.D. 1915; President of the Cincinnati Missionary Training School.

Handwork in Religious Education. 16mo, xviii+143. Chicago: University Press, 1916.

History of the Sunday School in the Methodist Episcopal Church. Doctor's thesis. New York: Methodist Book Concern. In Press.

THE DEPARTMENT OF SOCIOLOGY

(IN THE DIVINITY SCHOOL)

ALBION WOODBURY SMALL [1892-], Professor and Head of the Department of Sociology; Dean of the Graduate School of Arts and Literature. See under the Department of Sociology and Anthropology, p. 68.

†CHARLES RICHMOND HENDERSON [1892-1915], Professor of Sociology and Head of the Department of Sociology in the Divinity School.

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Barrows Lecturer to India, 1912-13.

Associate Editor *American Journal of Sociology*; Member of the Editorial Committee of the *American Journal of Theology* and of the *Biblical World*.

President of the International Prison Commission and of the National Prison Association: *Report of the Proceedings of the Eighth International Prison Congress*, 1910. 8vo, 62. Washington, D.C.: Document, No. 52, House of Representatives, Sixty-third Congress, First session, May 23, 1913; Report on Preventive and Reformatory Work, Proceedings of the National Prison Association (1904), 127-39; Report to the Governor of Illinois on *Outdoor Labor for Convicts*. 8vo, xv+154. Chicago: University Press, 1907; Secretary and Editor of the Mayor's Commission on Unemployment in Chicago: Pamphlet, 1914; Contributor to the *Report of the Royal Commission on the Poor Laws and Relief of Distress*, London, 1908; President of the National Conference of Charities and Correction (1899); President of the National Child Welfare Association; Secretary of the Illinois State Commission on Occupational Diseases (1911), and Editor of the report.

Modern Prison Systems. 8vo, 319. Washington: Government Printing Office, 1903.

Modern Methods of Charity. 8vo, 715. London and New York: Macmillan Co., 1904.

Die Arbeiterversicherung in den Vereinigten Staaten von Nord-America. 4to, 131. Berlin: A. Troschel, 1907; English version: *Industrial Insurance in the United States*. 1st ed., 1909; 2d ed., 1911. 8vo, x+454. Chicago: University Press.

† Deceased.

- Social Duties from the Christian Standpoint.* 12mo, xiv+332. Chicago: University Press, 1909.
- Education with Reference to Sex.* Eighth Yearbook of the National Society for the Study of Education. Parts I and II, 74+89. Chicago: University Press, 1909.
- Social Programmes in the West.* The Barrows Lectures for 1912-13. 8vo, 184. Bombay: Macmillan & Co., Ltd., 1913.
- Citizens in Industry.* 12mo, xviii+341. New York: D. Appleton & Co., 1915.
- The School of Character in a Prison, *Proceedings of the National Prison Association* (1903), 109-16.
- Supervision and Control of Penal Institutions, *ibid.*, 135-54.
- Theory and Practice of Juvenile Courts, *Proceedings of the National Conference of Charities and Correction* (1903), 358-69.
- Definition of a Social Policy Relating to the Dependent Group, *American Journal of Sociology*, X (1904), 315-24.
- Juvenile Courts, *Charities*, XIII (1905), 340-43.
- (1) The National Children's Home Society; (2) Instruction in Philanthropy; (3) Insurance and Relief (in French), *Bulletino d. IV, Congresso internazionale dell assistenza*, etc., July, 1905, 25-29.
- Charity Organization in France, *Charities*, XIV (1905), 1038, 1039.
- Délinquants dangereux; conceptions américaines, *Revue pénitentiaire*, 29^e an. (1905), 942-44.
- Œuvres de bienfaisance aux Etats-Unis, *Rapports du 1^{er} Congrès international d'éducation et de protection de l'enfance dans la famille*, sec. 4 (1905), 221-26.
- The Part of the Home in Religious Education, *Proceedings of the Third Annual Convention of the Religious Education Association*, 1905, 324-29.
- Social Solidarity in France (Poor Law of 1905), *American Journal of Sociology*, XI (1905), 168-82.
- Higher Education, *Proceedings of the Baptist World's Congress*, London, 1905.
- L'Assurance Ouvrière dans les États-Unis, *Congrès International des Accidents du Travail et des Assurances Sociales*, VII, 1 (1905), 85-105; VII, 2 (1905), 489-90.

- What Is the Duty of the Church to the Defective and Dependent Classes? *Proceedings of the Baptist Congress*, 1905, 137-45.
- Workingmen's Insurance, *World To-Day*, X (1906), 145-48.
- La rencontre des races dans la cité américaine, et ses conséquences morales, *Correspondant*, LXXVIII (1906), 1169-73.
- Lois d'assistance publique de l'état d'Indiana, *Revue philanthropique*, XIX (1906), 723-31.
- Ueber die bedingte Entlassung und Ueberwachung in den Vereinigten Staaten, *Blätter für Gefängnis-kunde*, XXXX (1906), 383-87.
- Workingman's Insurance in Illinois, *Proceedings of the American Economic Association*, IX (1908), 183-98.
- Social Duties, *Biblical World*, XXXII (1908), 25-32, 197-204, 349-59.
- The Logic of Social Insurance, *Annals of the American Academy of Political and Social Science*, XXXIII (1909), 41-53.
- La législation américaine concernant l'enfance, *Revue philanthropique*, XXV (1909), 221-39.
- Ethical Problem of Prison Science, *International Journal of Ethics*, XX (1910), 281-95.
- Infant Welfare: Methods of Organization:
- I. In Italy, *American Journal of Sociology*, XVII (1911-12), 289-302.
 - II. In France, *ibid.*, 458-77.
 - III. In Germany, *ibid.*, 669-84.
 - IV. In German Cities and Belgium. General Conclusions, *ibid.*, 783-830.
- Control of Crime in India, *Journal of Criminal Law and Ciminology*, IV (1913), 378-400.
- A Mode of Approach, *International Review of Missions*, II (1913), 765-72.
- Social Significance of Christianity in Modern Asia, *Biblical World*, XLII (1913), 140-45, 200-203, 274-78.
- Penology in the United States, *Bulletin de l'Union internationale de droit pénal*, XXI (1913), 117-33.
- L'Assistance en Chine lors de la dernière famine, *Revue philanthropique*, XXXIV (1913), 25-48.

Unemployment and Unemployment Relief in India, *Bulletin de l'Association internationale pour la lutte contre le chômage*, III (1913), 213-35.

The Direction of Social Advance, *Calcutta Review*, No. 271 (1913), 16-24.

Penology in the United States, *Mitteilungen der internationalen kriminalistischen Vereinigung*, XXI (1914) (Festband), 117-33.

"Social Assimilation": America and China, *American Journal of Sociology*, XIX (1914), 640-48.

How Chicago Met the Unemployment Problem of 1915, *ibid.*, XX (1915), 721-30.

REVIEWS OF: Books on Social Ethics, *American Journal of Theology*, IX, 387-91. Other reviews in *The Dial*, XXXVIII, 154-56; XL, 296-98; LV, 261-64; and in *American Journal of Sociology* and *Journal of Criminal Law and Criminology*.

SCOTT ELIAS WILLIAM BEDFORD [1911-], Associate Professor of Sociology. See under Department of Sociology and Anthropology, p. 74.

ERNEST WATSON BURGESS [1916-], Assistant Professor of Sociology. See under Department of Sociology and Anthropology, p. 77.

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The Church and Young Men. Doctor's thesis. 8vo, xv+233. New York: Fleming H. Revell Co., 1904.

RICHARD ROY PERKINS, PH.D. 1905; Secretary, Young Men's Christian Association, Portland, Ore.

Treatment of Juvenile Delinquents. Doctor's thesis. 8vo, 77. Rockford, Ill.: C. F. McIntosh, 1906.

SAMUEL NICHOLAS REEP, PH.D. 1911; Assistant Professor, University of Minnesota.

The Organization of the Ecclesiastical Institutions of a Metropolitan Community. Doctor's thesis. 8vo, 72. Minneapolis, Minn.: Syndicate Printing Co., 1910.

ALBERT JUDSON STEELMAN, PH.D. 1905; West Caldwell, N.J.

Charities for Children in the City of Mexico (illustrated). Doctor's thesis. 8vo, xii+111. Joliet, Ill.: E. M. Steelman, 1907.

THE LAW SCHOOL

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Director of American Judicature Society, 1913-.

Editor of *American Law and Procedure* (Vols. I-XII). Chicago: DeBower-Chapline Co., 1910.

Constitutional Law (Vol. XII, *American Law and Procedure*). 8vo, xiv+408. Chicago: DeBower-Chapline Co., 1910.

Cases on Constitutional Law. Royal 8vo, xxxii+1452. St. Paul: West Publishing Co., 1913.

Illustrative Cases on Constitutional Law. 8vo, viii+508. St. Paul: West Publishing Co., 1914.

Practice Work and Elective Studies in Law Schools, *Reports of the American Bar Association*, XXVIII (1905), 603-18; also in *American Law School Review*, I (1905), 328-37.

Practice Work in Law Schools, *Green Bag*, XVII (1905), 528-32.

Notes of Cases, *ibid.*, 672; XVIII (1906), 107.

The State Tax on Illinois Central Gross Receipts—Another View, *Illinois Law Review*, II (1907), 21-31.

American Law School Degrees, *Michigan Law Review*, VI (1907), 112-17.

The New University Government Statute, *University of Chicago Magazine*, I (1908), 64-67.

James Bradley Thayer, *Great American Lawyers*, VIII (1909), 345-84.

The Study of Law by Correspondence, *Reports of the American Bar Association*, XXXIV (1909), 798-802; also in the *American Law School Review*, II (1909), 314-16.

The New York Workmen's Compensation Act Decision, *Journal of Political Economy*, XIX (1911), 694-700.

Constitutional Aspects of Federal Regulation of Business, *ibid.*, XX (1912), 473-79.

Constitutionality of a National Reserve Association. Chap. xxiii in *Banking Reform* (Chicago: National Citizens' League, 1912), 386-417.

An Eighteenth-Century Constitution—A Comment, *Illinois Law Review*, VII (1912), 285-90.

Is a Constitutional Convention in Illinois Desirable? *ibid.*, IX (1914), 20-23.

The Selection, Tenure, and Retirement of Judges, *Bulletin of the American Judicature Society*, X (1916), 1-32; also in *Ohio Law Bulletin*, LXI (1916), 29-43; *Ohio Law Reporter*, XIII (1916), 47-72; *Chicago Legal News*, XLVIII (1916), 215-24.

The Force of Precedents in International Law, *International Journal of Ethics*, XXVI (1916), 149-67.

REVIEW OF: Prentice, Federal Power over Carriers and Corporations, *Journal of Political Economy*, XV, 238-42. Other reviews in *Journal of Political Economy*, XII, 131-35; XVI, 114-15; XIX, 506; XXI, 88-89; *Annals of the American Academy of Political and Social Science*, XXV, 198-200; *Harvard Graduates' Magazine*, XVI, 778-79; *Columbia Law Review*, IX, 563; *Harvard Law Review*, XXVI, 280-81.

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A.B. Harvard, 1882; A.M., LL.B. *ibid.* 1887; LL.D., Wisconsin, 1904; LL.D. Chicago, 1904; Lecturer on Law, Harvard, 1891-92; Assistant Professor of Law, *ibid.*, 1893-97; Professor of Law, *ibid.*, 1898-; Professor of Law and Dean of the Law School, Chicago (on leave of absence from Harvard), 1902-4.

Criminal Attempts, *Harvard Law Review*, XVI (1903), 491-507.

Retreat from a Murderous Assault, *ibid.*, 567-82.

Homicide in Self-Defence, *Columbia Law Review*, III (1903), 526-45.

Notes on Consideration, *Harvard Law Review*, XVII (1903), 71-82.

The Taxation of Foreign Corporations, *ibid.* (1904), 248-65.

Corporations of Two States, *Columbia Law Review*, IV (1904), 391-408.

The Enforcement Abroad of Stockholder's or Director's Liability, *Green Bag*, XVI (1904), 387-94.

HARRY AUGUSTUS BIGELOW [1904-], Professor of Law.

A.B. Harvard, 1896; LL.B. *ibid.*, 1899; Assistant Professor of Law, Chicago, 1904-6; Associate Professor, *ibid.*, 1906-9; Professor, *ibid.*, 1909-.

Editor of the third edition of John Wilder May's *Law of Crimes*. 8vo, liv+366. Boston: Little, Brown & Co., 1905.

Two Recent Decisions on Interstate Matrimonial Relations, *Green Bag*, XVIII (1906), 348-54.

Notes of Cases, *ibid.*, XIX (1907), 199.

Insurance. In *American Law and Procedure*, VII, 255-382. Chicago: DeBower-Chapline Co., 1910.

Conditional Deliveries of Deeds of Land, *Harvard Law Review*, XXVI (1913), 565-87; also in *Law Times*, CXXXV (1913), 248-49, 272-73, 307-8, 357-58.

A Brief Review of Criminal Cases in the Supreme Court of Illinois for the Past Year, *Journal of Criminal Law and Criminology*, V (1914), 199-206.

The Contents of Covenants in Leases, *Law Quarterly Review*, XXX (1914), 319-38; also in *Michigan Law Review*, XII (1914), 639-59.

Natural Easements, *Illinois Law Review*, IX (1915), 541-50.

REVIEW IN: *International Journal of Ethics*, XXVI, 120-22.

WALTER WHEELER COOK [1910-16], Professor of Law; Professor of Law, Yale Law School.

A.B. Columbia, 1894; LL.M. *ibid.*, 1901; Assistant Professor of Law, Nebraska, 1902-3; Professor of Law, *ibid.*, 1903-4; Professor of Law, Missouri, 1904-6; Professor of Law, Wisconsin, 1906-10; Professor of Law, Chicago, 1910-16.

Cases on Reformation, Rescission, and Restitution at Law and in Equity. In Press.

The Place of Equity in Our Legal System, *Proceedings of the Association of American Law Schools*, XII (1912), 77-89.

The Powers of Courts of Equity, Parts I, II, and III, *Columbia Law Review*, XV (1915), 37-54, 106-41, 228-52.

ERNST FREUND [1894-], Professor of Jurisprudence and Public Law.

J.U.D. Heidelberg, 1884; Ph.D. Columbia, 1897; Professor of Administrative Law and Municipal Corporations (*locum tenens*), *ibid.*, 1892-93; Assistant Professor of Roman Law and Jurisprudence, Chicago, 1895-1900; Associate Professor of Jurisprudence and Public Law, *ibid.*, 1900-1902; Professor of Law, *ibid.*, 1902-. President of the American Political Science Association, 1915.

Member of the Illinois Commission on Uniformity of Legislation, 1908-; Member, Special Committee of the American Bar Association on Legislative Drafting; Reports: (1) Language and Arrangement of Statutes, *Reports of the American Bar Association*, XXXIX (1914), 632-58; (2) Administrative Regulations, *ibid.*, XL (1915), 537-69; (3) Provisions for Licensing, *American Bar Association Journal*, II (1916), 456-87.

The Police Power. 8vo, cxii+819. Chicago: Callaghan & Co. and University Press, 1904.

Cases on Administrative Law. Royal 8vo, xxi+681. St. Paul: West Publishing Co., 1911.

Das öffentliche Recht der Vereinigten Staaten von Amerika. 8vo, 387. Tübingen: J. C. B. Mohr, 1911.

Standards of American Legislation. 8vo, xx+327. Chicago: University Press, 1917.

Property (Review of Legislation), *New York State Library Review of Legislation*, 1903, e1-e5.

Jurisprudence and Legislation, *Congress of Arts and Sciences, St. Louis*, VII (1904), 619-35.

Limitation of Hours of Labor and the Supreme Court, *Green Bag*, XVII (1905), 411-17.

Review of State Legislation on Property, *New York State Library Bulletin*, 1906, 192-93.

Jurisprudenz und Gesetzgebung, *Jahrbuch des öffentlichen Rechts*, I (1906-7), 137-52.

The Problem of Intelligent Legislation, *Proceedings of the American Political Science Association*, IV (1907), 69-79.

Constitutional Aspects of Employers' Liability Legislation, *Green Bag*, XIX (1907), 80-83.

Some Legal Aspects of the Chicago Charter Act of 1907, *Illinois Law Review*, II (1908), 427-39.

- The Federal Employer's Liability Act, *Charities and the Commons*, XIX (1908), 1662-64.
- Constitutional Aspects of the Ten-Hour Law, *Bulletin of Illinois Bureau of Labor Statistics*, 1909, 4.
- Labor Legislation in the Forty-sixth General Assembly of Illinois, *ibid.*, 202.
- Can the States Co-operate for Labor Legislation? *Survey*, XXII (1909), 409-11.
- The Ten-Hour Law, *Illinois Medical Journal*, XVII (1910), 455-61.
- Review of Legislation on Property, 1907-8, *New York State Library Bulletin*, 1910, 249-54.
- Constitutional Limitation and Labor Legislation, *Publications of the American Association of Labor*, No. 9 (1910), 51-71; also in *Illinois Law Review*, IV (1910), 609-23; *Chicago Legal News*, XLII (1910), 282-84.
- Constitutional Aspect of the Protection of Women in Industry, *Publications of the Academy of Political Science*, I (1910), 162-84.
- Legal Aspects of City Planning, *City Planning Conference*, 1911, 241-48.
- Courts of Appeals Decisions on Workmen's Compensation Law, *Survey*, XXVI (1911), 195-96.
- A Proposed Uniform Marriage Law, *Harvard Law Review*, XXIV (1911), 548-62.
- Unifying Tendencies in American Legislation, *Yale Law Journal*, XXII (1912), 96-113.
- Enforcement Provisions of the Sherman Law, *Journal of Political Economy*, XX (1912), 462-72.
- Constitutional Status of Workmen's Compensation, *Illinois Law Review*, VI (1912), 432-46; also in *American Labor Legislation Review*, II (1912), 43-59.
- Brief on Congressional Legislation concerning Workmen's Compensation. Sixty-second Congress, First session. Senate Document 90, 226-39.
- Report of Special Committee on Situs of Property for Purposes of Taxation, *Reports of the American Bar Association*, XXXVII (1912), 1177-88.

- Supplemental Acts—A Chapter in Constitutional Construction, *Illinois Law Review*, VIII (1913-14), 507-17.
- Problems of the Police Power, *Case and Comment*, XX (1913), 301-4.
- Uniform Marriage and Divorce Legislation, *ibid.*, XXI (1914), 7-9.
- Report of Committee on Taxation (Income Tax Act), *Reports of the American Bar Association*, XXXIX (1914), 533-57.
- Entwicklung des öffentlichen Rechts der Vereinigten Staaten, 1911-13, *Jahrbuch des öffentlichen Rechts*, VIII (1914), 470-91.
- The Problem of Adequate Legislative Powers under a State Constitution, *Proceedings of the American Academy of Political Science*, V (1914), 98-126.
- Housing and the Police Power, *Housing Problem in America*, IV (1915), 27-32.
- Classification and Definition of Crimes, *Journal of Criminal Law and Criminology*, V (1915), 807-26.
- The Substitution of Rule for Discretion in Public Law, *American Political Science Review*, IX (1915), 666-76.
- Principles of Legislation, *ibid.*, X (1916), 1-19.
- The Interpretation of Statutes, *University of Pennsylvania Law Review*, LXV (1916-17), 207-31.

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LL.B. Columbia, 1891; Professor of Law, Missouri; 1904-13; Dean of Law School, *ibid.*, 1912-13; Professor of Law, Chicago, 1913-.

Cases on Trial Practice. 8vo, xiii+783. Chicago: Callaghan & Co., 1915.

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Judge of Circuit Court, Cook County, Illinois, 1903-11; Judge of Appellate Court, First District, Illinois, 1909-11; United States Circuit Judge, 1911-.

Negotiable Instruments Law in Illinois. Some Suggestions on the Proposal to Enact the Uniform, *Illinois Law Review*, I (1907), 592-605.

* On leave of absence, 1911-.

The New Negotiable Instruments Act, *Illinois Law Review*, II (1908), 265-66.

The Nature and Definition of Political Offense in International Extradition, *Proceedings of the Third Annual Meeting of the American Society of International Law* (1909), 144-65.

The Juvenile Court, *Report of the Thirty-second Annual Meeting of the American Bar Association* (1909), 449-76; also in *Harvard Law Review*, XXIII (1909-10), 104-22.

James Bar Ames—His Personal Influence, *ibid.*, 336-38.

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Cases on the Law of Partnership. 3d ed. 8vo, xviii+1104. Chicago: Callaghan & Co., 1906.

Mechem and Gilbert's Cases on Damages. 8vo, xxiii+626. St. Paul: West Publishing Co., 1909.

A Treatise on the Law of Agency (in 2 vols.). Large 8vo, xcvii+2574. Chicago: Callaghan & Co., 1914.

Eligibility to Office—As of What Time Determined, *Michigan Law Review*, I (1903), 17-27.

The Power to Appoint to Office: Its Location and Limits, *ibid.*, 531-56.

The Liability of a Master for the Negligence of a Stranger Assisting His Servant, *ibid.*, III (1905), 198-219.

Constitutional Limitations on Primary Election Legislation, *ibid.*, 364-86; *Publications of Michigan Political Science Association*, VI (1905), 125-49.

The Effect of Ratification as between the Principal and the Other Party, *Michigan Law Review*, IV (1906), 269-83.

The Nature and Extent of an Agent's Authority, *ibid.*, 433-63.

Opportunities and Responsibilities of American Law Schools, *Reports of the American Bar Association*, XXX (1906), 174-86; also in *Michigan Law Review*, V (1906-7), 344-53; *Chicago Legal News*, XXXIX (1907), 354-56.

Delegation of Authority by an Agent, *Michigan Law Review*, V (1906-7), 94-106.

- The Execution of Sealed Instruments by an Agent, *ibid.*, VI (1908), 552-67.
- Implied Authority of Agents to Purchase Personal Property, *Yale Law Journal*, XVII (1908), 257-69.
- Notice to, or Knowledge of, an Agent, *Michigan Law Review*, VII (1908-9), 113-53.
- Employer's Liability, *Chicago Legal News*, XLI (1909), 404-9; also in *Illinois Law Review*, IV (1909), 243-71; *American Law Review*, XLIV (1910), 221-55.
- The Liability of an Undisclosed Principal, *Harvard Law Review*, XXIII (1910), 513-30; 590-602.
- The Liability of a Master for the Wilful or Malicious Acts of His Servant, I, II, *Michigan Law Review*, IX (1910-11), 87-101; 181-204.
- An Agent's Right to Sue upon Contracts, I, II, *University of Pennsylvania Law Review*, LIX (1911), 517-31; 587-617.
- The Liability of an Agent to Third Persons in Tort, *Yale Law Journal*, XX (1911), 239-67.
- The Real Estate Broker and His Commissions, I, II, III, *Illinois Law Review*, VI (1911-12), 145-61; 238-54; 313-33.
- The Liability of a Principal for the Penal or Criminal Acts of His Agent, *Michigan Law Review*, XI (1912), 93-108.
- An Inquiry concerning Justice, *ibid.*, XIV (1915-16), 361-82.

UNDERHILL MOORE [1914-16], Professor of Law; Professor of Law, Columbia Law School.

A.B. Columbia, 1900; LL.B. *ibid.*, 1902; Associate Professor of Law, Kansas, 1906-8; Associate Professor of Law, Wisconsin, 1908-10; Professor of Law, *ibid.*, 1910-14; Professor of Law, Chicago, 1914-16.

Editor of the fourth edition of C. P. Norton's *Handbook of the Law of Bills and Notes*. 8vo, x+732. St. Paul: West Publishing Co., 1914.

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A.B. Leland Stanford Junior, 1893; LL.B. Harvard, 1896; Instructor in Law, Leland Stanford Junior, 1897-99; Assistant Professor, *ibid.*, 1899-1900; Associate Professor, *ibid.*, 1900-1902; Professor of Law, Chicago, 1902-14.

Cases on Common Law Pleading. Parts I and II. 8vo, x+246, v+162. St. Paul: West Publishing Co., 1911, 1912.

Problems of Survivorship, *Green Bag*, XVI (1904), 237-45.

Notes of Cases, *ibid.*, XVIII (1906), 695, 696.

Note, *ibid.*, XIX (1907), 629, 630; 682.

The Theory of a Pleading, *Columbia Law Review*, VIII (1908), 523-40.

Judge Gilbert and Illinois Pleading Reform, *Illinois Law Review*, IV (1909), 174-94.

Motions by the Defendant for Judgment *Non Obstante Veredicto* in Illinois, *ibid.*, 274-79.

Some Inaccurate Statistics in the Teaching of Pleading, *American Law School Review*, VIII (1910), 345-51.

Pleading. In *American Law and Procedure*, XI, 151-315.

Pleading Reform for Illinois, *Chicago Legal News*, XLIII (1910), 30-31.

Objections to Present Illinois Pleading, with Suggested Remedies, *Illinois Law Review*, V (1910), 257-64.

A Bill for an Act concerning Pleadings, *ibid.* (1911), 364-69.

REVIEWS IN: *Columbia Law Review*, V, 68-71, 176-78, 252-55, 412-14; VIII, 423-24; *American Journal of Sociology*, XI, 424-26; *Harvard Law Review*, XIX, 312-14, 550-51; *Illinois Law Review*, I, 133-34, 298; II, 356.

ROSCOE POUND, Professor of Law, 1909-10; Professorial Lecturer on Mining and Irrigation Law, 1910-; Story Professor of Law, Harvard University, 1910-.

A.B. Nebraska, 1888; Ph.D. *ibid.*, 1897; LL.D. Michigan, 1913; LL.M. (hon.) Northwestern, 1908; LL.D. Chicago, 1916; Assistant Professor of Law, Nebraska, 1899-1903; Commissioner of Nebraska Supreme Court, 1901-3; Dean of College of Law, Nebraska, 1903-7; Professor of Law, Northwestern, 1907-9; Professor of Law, Chicago, 1909-10; Professorial Lecturer on Mining and Irrigation Law, *ibid.*, 1910-.

Uniformity of Commercial Law on the American Continent, *Michigan Law Review*, VIII (1909), 91-107.

Law in Books and Law in Action, *American Law Review*, XLIV (1910), 12-36; also in *Report of the Maryland State Bar Association*, XIV (1909), 298-323.

Some Principles of Procedural Reform, *Illinois Law Review*, IV (1910), 388-407; 491-508.

A Practical Program of Procedural Reform, *Proceedings of the Illinois State Bar Association*, XXXIV (1910), 373-404; also in *Green Bag*, XXII (1910), 438-56.

Puritanism and the Common Law, *Proceedings of the Kansas State Bar Association*, XXVII (1910), 45-58; also in *American Law Review*, XLV (1911), 811-29.

REVIEWS IN: *Illinois Law Review*, IV, 605, 671-72; V, 122-23; *Columbia Law Review*, X, 585-87.

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Case Book on Business Law. 8vo, 1200. Chicago: University Press.
In Press.

THE SCHOOL OF EDUCATION

THE GRADUATE DEPARTMENT OF EDUCATION

See under Department of Education, p. 22.

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CHARLES HUBBARD JUDD [1909-], Professor and Head of the Department of Education; Director of the School of Education. *See under* Department of Education, p. 22.

JOHN DEWEY [1893-1904], Professor and Head of the Department of Philosophy; Director of the School of Education; Head of the Department of Philosophy, Columbia University. *See under* Department of Philosophy, p. 5.

FRANKLIN WINSLOW JOHNSON [1905-], Principal of the University High School; Lecturer in Secondary Education. *See under* University High School, p. 489.

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NATHANIEL BUTLER [1893-95; 1901-], Professor of Education; Director of Co-operation with Secondary Schools; Dean of University College. *See under* Department of Education, p. 24.

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Editor of the Botanical department of *School Science and Mathematics*, 1907-10; of Botanical articles in Monroe's *Cyclopedia of Education*, 1912; and of a series of science textbooks for high schools, Ginn & Co., 1909-16.

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Chairman of the Permanent Committee of the Central Association of Science and Mathematics Teachers on the Unified Four-Year Science Course for High Schools; Report in *School Science and Mathematics*, XIV (1914), 165-69; see also *Proceedings of the Central Association of Science and Mathematics Teachers* (1914), 18-21; Chairman of the Committee on Science of the National Education Association's Commission on Reorganization of Secondary Education, 1916-; Member of the Committee on Minimum Essentials of the National Education Association.

Practical Botany (with J. Y. Bergen). 8vo, 545. Boston: Ginn & Co., 1911.

Introduction to Botany (with J. Y. Bergen). 8vo, 368. Boston: Ginn & Co., 1914.

Elements of General Science (with W. L. Eikenberry). 8vo, xiv+308. Boston: Ginn & Co., 1914.

Laboratory Manual of General Science (with W. L. Eikenberry and C. J. Pieper). 8vo, xi+134. Boston: Ginn & Co., 1915.

Essentials of Agriculture (with H. J. Waters). 8vo, 455. Boston: Ginn & Co., 1915.

Microcycas calocoma, *Botanical Gazette*, XLIV (1907), 118-41.

The Teaching of Botany in the High School, *School Review*, XV (1907), 661-70.

The Criteria of Selection of Material for Teaching of Nature-Study and Geography, *Nature-Study Review*, III (1907), 252-59.

The School Garden, *Bulletin of the Eastern Illinois State Normal School*, No. 20 (1908).

The High-School Course in Botany, *Bulletin of the Office of the State Superintendent of Public Instruction, Wisconsin* (1908), 1-8.

The Relation of the Doctorate to Teaching, *University of Chicago Magazine*, I (1908), 58-64.

The Course in Botany, *School Science and Mathematics*, IX (1909), 54-66.

A Study of *Microcycas calocoma* (with 28 figs.), *Reports of the "Estacion Central Agronomica," Cuba*, Part II (1909), 122-32.

- An Investigation of the Teaching of the Biological Subjects in Secondary Schools, *School Science and Mathematics*, IX (1909), 581-97.
- General Science for the First Year of the High School, *Proceedings of the Central Association of Science and Mathematics Teachers* (1909), 115-27.
- Natural History in the Grades (seven articles), *Elementary School Teacher*, X (1909-10), 131-38, 157-62, 270-76, 316-25, 493-500; XI (1910-11), 1-7, 49-62.
- Should the Nature-Study Course Be Organized with Definiteness? *Nature-Study Review*, VI (1910), 187-89.
- Organization in the Course in Nature-Study, *ibid.*, VII (1911), 87-90.
- Botany in the Schools, *American Cyclopaedia of Education*, I (1911), 429-33.
- The Product of Our Botanical Teaching, *Science*, XXXIII (1911), 639-42.
- The Laboratory Method and High-School Efficiency, *Popular Science Monthly*, LXXXII (1913), 243-51.
- The Illinois State Academy of Science, *Science*, XXXVII (1913), 496-98.
- The Course in Botany, *Proceedings of Illinois High-School Conference* (1913), 89-92.
- Rural Extension, *Journal of Home Economics*, VI (1914), 99-109.
- Investigations regarding General Science, *High-School Quarterly*, IV (1916), 94-101.

GEORGE WILLIAM MYERS [1901-], Professor of the Teaching of Mathematics and Astronomy, and Mathematical Supervisor, School of Education.

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Editor, Mathematical department, *School Science and Mathematics*, 1901-9; Astronomical department, *ibid.*, 1901-; Mathematical publications of Scott, Foresman & Co., Chicago; *The School of Education Texts and Manuals* ("University of Chicago Mathematical Series").

The Rational Arithmetics (with Sarah C. Brooks). 8vo, 600. Chicago: Scott, Foresman & Co., 1902, 1904.

- The Myers Arithmetics.* Books I, II, III. 8vo, 777. Chicago: Scott, Foresman & Co., 1905, 1907, 1908.
- Teachers' Manual and Key to Myers' Arithmetics,* 1907. Revised, 1908. 8vo, 200. Chicago: Scott, Foresman & Co.
- First-Year Mathematics for Secondary Schools* (with members of the University High School Faculty), 1907. Revised, 1909. 8vo, 365. Chicago: University Press.
- Geometric Exercises for Algebraic Solution* (with members of the University High School Faculty). 8vo, ix+70. Chicago: University Press, 1907.
- Second-Year Mathematics for Secondary Schools* (with members of the University High School Faculty). 8vo, 282. Chicago: University Press, 1910.
- Teachers' Manual for First-Year Mathematics* (with members of the University High School Faculty). 8vo, x+164. Chicago: University Press, 1911.
- Elementary Algebra* (with G. E. Atwood). 8vo, 287. Chicago: Scott, Foresman & Co., 1916.
- Logarithms in the First Year of the Secondary School, *School Science and Mathematics*, V (1905), 701-11; VI (1906), 99-104.
- Mathematics in the University High School, *School Review*, XIV (1906), 57-64.
- Rapidity in Arithmetic, *Elementary School Teacher*, VI (1906), 253-58.
- Mathematics of the Kindergarten, *Chicago Normal School Bulletin*, I (1906).
- Mathematics in the Grades for Pupils: (a) Leaving School at Eighth Grade; (b) Going On to High School, *ibid.*, II (1906).
- Elementary-School Mathematics for Pupils, *Educational Bi-Monthly*, I (1906), 1-22.
- Mathematics in Elementary School and Kindergarten, *ibid.*, 80-88.
- A Class of Content Problems for High-School Algebra, *School Review*, XIV (1906), 563-77; *School Science and Mathematics*, VII (1907), 19-33.
- A Study of Ideas Organizing and Controlling the Mathematical Work of Elementary Schools, *Educational Bi-Monthly*, II (1908), 295-343.

- The Deeper and the Richer Meanings of Mathematical Teaching in Elementary Schools, *Elementary School Teacher*, VIII (1908), 301-15, 367-80.
- The Year's Progress in University High-School Mathematics, *School Review*, XVII (1909), 99-118.
- Arithmetic in Public Education, *Proceedings of the State Teachers' Association of Texas* (1909), 20.
- Two Year's Progress in Mathematics in the University High School, *School Science and Mathematics*, XI (1911), 64-72.
- Early Impressions of Teaching Secondary-School Mathematics in Paris, *ibid.*, 285-93.
- Teaching Secondary Mathematics in France, *School Review*, XIX (1911), 433-53.
- History of Arithmetic as an Aid in Teaching, *Educational Bi-Monthly*, V (1911), 305-15.
- Unification of Mathematics in Secondary School, *School Science and Mathematics*, XI (1911), 777-90.
- A Plan for Testing Methods of Teaching Mathematics, *School Review*, XXII (1914), 91-98.

REVIEWS IN: *School Review*, XIII, 85-87; XIV, 379; XXI, 71-72, 72-73; XXII, 208-9; *School Science and Mathematics*, VI, 332-33; VII, 74-77, 244, 435-36, 621-25, 711; *Bulletin of the American Mathematical Society*, XIV, 24-29, 35-39.

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State Supervisor of Manual Arts, Massachusetts, 1903-6; Director of Drawing and Manual Training, Boston, 1906-9; Professor of Fine and Industrial Art in Relation to Education, Chicago, 1909-.

Fine and Industrial Arts in Elementary Schools. 8vo, 132. Boston: Ginn & Co., 1912.

How Children Learn to Draw (with Elizabeth E. Miller). 8vo, 264. Boston: Ginn & Co., 1916.

Value of Art in the Industrial School, *Proceedings and Addresses of the National Education Association* (1912), 988-99.

Problems in Experimental Pedagogy in Drawing, *Journal of Educational Psychology*, III (1912), 264-76.

One Contribution Which Art Makes to Religion, *Biblical World*, XLI (1913), 359-65.

Course of Study in Drawing in the Elementary School (with Elizabeth E. Miller and Margaret Gordon), *Elementary School Journal*, XVI (1916), 412-23, 475-90, 533-41.

Art Courses in High Schools, *School Review*, XXIV (1916), 107-15.

Course of Study in Art in the High School, School of Education, the University of Chicago (with Nama A. Lathe), *ibid.*, 409-25.

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A Lesson in Geography—From Chicago to the Atlantic, *Elementary School Teacher*, VII (1907), 458-73.

The Teaching of the Continent of Eurasia, *ibid.*, 518-47.

Lost Opportunities in Teaching Geography, *Journal of Geography*, XIV (1916), 295-98.

The Oceans: Our Future Pastures, *Scientific Monthly*. In Press.

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WALTER FENNO DEARBORN [1909-12], Associate Professor of Education; Professor of Education, Harvard University. See under Department of Education, p. 27.

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Editor, *Nature-Study Review*, 1911-17.

The Formation of the Spermatophore in *Arenicola* and a Theory of the Alternation of Generations in Animals, *Journal of Morphology*, XXII (1911), 1001-43, 4 plates.

Children's Pets, *Nature-Study Review*, VII (1911), 1-15.

Children's Interest in Nature Material, *ibid.*, VIII (1912), 334-37.

The Home Garden and Experimental Plats, *Journal of the Proceedings and Addresses of the National Education Association* (1912), 1381-86.

A Study of an Attempt at Uniformity in Grading Students, *School Science and Mathematics*, XIII (1913), 290-93.

The Beaver, *Guide to Nature*, IV (1914), No. 9.

The Scientific Trend in Secondary Education, *Science*, XLI (1915), 232-35.

Some Data regarding the Teaching of Zoölogy in Secondary Schools, *School Science and Mathematics*, XV (1915), 36-43.

Nature Study and High-School Science, *School Review*, XXIII (1915), 272-75.

Present Requirements in the United States in Instruction in Nature Study and Elementary Agriculture, *Nature-Study Review*, XI (1915), 297-99.

A List of Teachers of Nature Study in the United States, *ibid.*, XII (1916), 69-78.

An Analysis of Zoölogy Texts for Secondary Schools, *School Review*, XXIV (1916), 375-85.

How to Teach Nature Study. A Chapter in *Teaching Elementary School Subjects* (edited by L. W. Raper; New York: Charles Scribner's Sons, 1917), pp. 341-56.

REVIEWS IN: *Nature-Study Review*, VIII, 245, 278; IX, 93; X, 378; XI; and many others in the same journal, 1914-.

FRANK NUGENT FREEMAN [1909-], Associate Professor of Educational Psychology. See under Department of Education, p. 27.

MARCUS WILSON JERNEGAN [1902-6; 1908-], Associate Professor of History. See under Department of History, p. 60.

CARL JOHANNES KROH [1901-7], Assistant Professor of the Teaching of Physical Training, College of Education; Department of Physical Training, Indianapolis Public Schools.

Friedrich Knopp's Institute, Baltimore, 1860-67; Turnlehrer Seminar, Milwaukee, 1878-79; Head of Department of Physical Training, Cook County and Chicago Normal School, 1891-99; Assistant Professor of Physical Training, University of Chicago, 1901-7.

Physical Training a Department of Education, *Elementary School Teacher*, VII (1907), 241-46.

Physical Training—A Question of Judicious Support, *ibid.*, 379-84.

A Review of the Work of Physical Training in the University of Chicago School of Education, *Mind and Body*, XIV (1907), 33-38, 80-84, 119-25.

FRANK MITCHELL LEAVITT [1910-], Associate Professor of Industrial Education and Supervisor of Industrial Education. *See under* Department of Education, p. 29.

GEORGE HERBERT LOCKE [1899-1905], Associate Professor of Education; Dean of the College of Education; Chief Librarian, Public Library, Toronto.

A.B. Toronto, 1893; A.M. *ibid.*, 1896; Instructor in the History and Art of Teaching, Harvard, 1897-99; Instructor in Pedagogy, Chicago, 1899-1901; Assistant Professor of Education, *ibid.*, 1901-4; Associate Professor, *ibid.*, 1904-5.

Editor, *School Review*, 1900-1905.

A Bibliography of Secondary Education. 8vo, 42. Chicago: University Press, 1903.

High School of Commerce, New York City, *School Review*, XI (1903), 555-62.

A Backward Step in English Education, *ibid.*, 606-8.

Non-Conformists and the Relationship between Religion and Education, *ibid.*, 856-59.

The Place of Instruction in the Organization and Administration of Schools and School Systems, *Educational Review*, XXVII (1904), 456-67.

HERMAN CAMPBELL STEVENS [1913-], Associate Professor of Education. *See under* Department of Education, p. 30.

KATHARINE BLUNT [1913-], Assistant Professor of Food Chemistry; Home Economics.

A.B. Vassar, 1898; Ph.D. Chicago, 1907; Assistant in Chemistry, Vassar, 1903-5; Instructor in Chemistry, Pratt Institute, 1907-8; Instructor in Chemistry, Vassar, 1908-13, Assistant Professor of Food Chemistry, Chicago, 1913-.

The Smoking Temperatures of Edible Fats (with Clara M. Feeney), *Journal of Home Economics*, VII (1915), 535-41.

Chemistry as a Field for Women, *Chicago Chemical Bulletin*, III (1916), 48-51.

Recent Work on Normal Adult Nutrition, *Journal of Home Economics*, VIII (1916), 623-34.

Chinese Preserved Eggs, Pidan (with Chi Chi Wang), *Journal of Biological Chemistry*, XXVIII (1916), 125-34.

WILLARD CLARK GORE [1902-16], Assistant Professor of Psychology, College of Education. *See under* Department of Education, p. 31.

WILLIAM SCOTT GRAY [1914-], Assistant Professor of Education; Dean of the College of Education. *See under* Department of Education, p. 31.

ALICE PELOUBET NORTON [1901-13], Assistant Professor of Household Administration. *See under* Household Administration, p. 86.

HAROLD ORDWAY RUGG [1915-], Assistant Professor of Education. *See under* Department of Education, p. 32.

ROLLA MILTON TRYON [1913-], Assistant Professor of the Teaching of History, College of Education.

A.B. Indiana, 1907; Ph.D. Chicago, 1915; Superintendent, City Schools, Madison, Indiana, 1909-11; Instructor in the Teaching of History, Chicago, 1913-15; Assistant Professor, *ibid.*, 1915-.

Materials, Methods, and Administration for History Study in the Elementary Schools of the United States. 8vo, 62. Indiana University Studies, No. 17 (1913).

Household Manufactures in the United States, 1640-1860. A Study in Industrial History. Doctor's thesis. 12mo, xii+413. Chicago: University Press, 1917.

The Teacher's Conception of History, *Educator-Journal*, XIV (1913), 88-93.

Aids for Grammar-Grade History Teachers and Supervisors, *Elementary School Journal*, XV (1915), 400-407.

The Organization of United States History for Teaching Purposes in Grades Seven and Eight, *ibid.*, XVI (1916), 247-56.

History in the Junior High School, *ibid.*, 491-508.

The High-School History Recitation, *History Teachers' Magazine*, VII (1916), 236-43.

LILLIAN CUSHMAN BROWN [1897-]; Instructor in Art.

Ph.B. Chicago, 1909; Instructor in Drawing, Art Institute, 1891; Art Instructor, Kemper Hall, Kenosha, Wis., 1893; Supervisor of Art and Grammar in High Schools, Highland Park, 1897-1902; Instructor in Art, Chicago, 1903-.

Elementary Art Teaching in the Laboratory School, *Elementary School Teacher*, III (1903), 680-85.

A Discussion of Mr. Fenollosa's Theory of Art Development and Its Relation to Certain Problems of Elementary Education, *ibid.*, V (1905), 473-81.

The Art Impulse: Its Early Forms and Relation to Mental Development, *Journal of the Proceedings and Addresses of the National Education Association* (1908), 515-23.

A Report of the Second Annual Meeting of the National Society for the Promotion of Industrial Education, *Elementary School Teacher*, IX (1909), 233-49.

A Test of Efficiency for the Industrial Arts, *Industrial Arts Magazine*, III (1915), 49-51.

CLARA MAY FEENEY, [1913-16], Instructor in Home Economics and Household Art; Director, Institution Economics, Miami University, Oxford, Ohio.

A.B. Miami, 1908; B.S. and Diploma in Teaching Domestic Science, Teachers College, Columbia, 1911; Laboratory Assistant in Zoology, Miami, 1908; Instructor, Stout Institute, 1912; Instructor, Western College for Women, 1913; Instructor in Home Economics and Household Art, Chicago, 1913-16.

Corn and Its Products, *Elementary School Journal*, XVI (1915), 74-81.

The Smoking Temperatures of Edible Fats (with Katharine Blunt), *Journal of Home Economics*, VII (1915), 535-41.

GRACE GORDON HOOD [1913-14], Instructor in Home Economics; Assistant Professor, Domestic Science, Lewis Institute, Chicago.

B.S. Columbia, 1912; A.M. *ibid.*, 1913; Associate in Arts, Lewis Institute, 1907; Associate in Domestic Economy, *ibid.*, 1908; Instructor in Cooking, *ibid.*, 1909-11; Instructor in Cooking, Speyer School, New York, 1911-12; Instructor in Domestic Science and Art, Berkeley Institute, 1912-13; Instructor in Home Economics, Chicago, 1913-14.

Experimental Cooking in the High School, *School Science and Mathematics*, XIV (1914), 613.

IRA BENTON MEYERS [1902-11], Instructor in the Teaching of Natural Science, School of Education; Curator of the Museum.

B.E. Cook County Normal School, 1894; Curator of Chicago Institute, 1900-1901; Instructor, School of Education, 1902-11.

The Evolution of Aim and Method in the Teaching of Nature Study in the Common Schools of the United States, *Elementary School Teacher*, XI (1911), 205-13, 237-48.

JONATHAN FRENCH SCOTT [1910-13], Instructor in the History of Education; Cambridge, Mass. *See under* Department of Education, p. 32.

ELEANOR SMITH [1902-10], Instructor in Music; Hull-House, Chicago.

Instructor in Music, Chicago Kindergarten College, Froebel Kindergarten School, 1893-94; Founder of Hull-House Music School, 1895; Instructor in Music, Chicago, 1902-10.

"Eleanor Smith Music Series": *Manual*, 117 pp.; Book I, 112 pp.; Book II, 151 pp.; Book III, 199 pp.; Book IV, 255 pp., 1906. *Primer*, 112 pp.; Alternate Book II, 160 pp. New York: American Book Co., 1907.

IDA CASSA HEFFERAN [1902], Assistant in Art; Los Angeles, Cal.

Lessons in Chalk Modeling: The New Method of Map Drawing. 12mo, 138. Boston: Educational Publishing Co., 1903.

HOWARD MUMFORD JONES [1914-16], Assistant in English.

A.B. Wisconsin, 1914; A.M. Chicago, 1915; Assistant in English, *ibid.*, 1914-16. Editorial Board, *School Review*, 1914-16.

A Little Book of Local Verse. 16mo, 32. LaCrosse: Inland Printing Co., 1915.

A Mississippi Holiday, *Mid-West Quarterly*, III (1915), 45-58.

Love Divided: A Sequence of Sonnets, *Midland Magazine*, I (1915), 281-308.

Translation of Heine's *Die Nordsee* in the Original Meters. 16 mo., 129. Chicago: Open Court Publishing Co., 1916.

University Sketches, *Poetry*, VIII (1916), 7-12.

The Convocation Ode, *University Record*, New Series, II, (1916), 145-55.

REVIEWS IN: *School Review*, XXIII, 58-59, 210, 351-52, 354-55; XXIV, 82-85, 398-99.

HAZEL BYRDE SMITH [1915-16], Assistant in Music, School of Education.

A Visit to the Gary Public Schools, *Unity*, LXXV (1915), 281-82.

THE UNIVERSITY HIGH SCHOOL

FRANKLIN WINSLOW JOHNSON [1905-], Principal of the University High School; Lecturer in Secondary Education.

A.B. Colby College, 1891; L.H.D. *ibid.*, 1916; Principal, High School, Calais, Me., 1891-94; Principal, Coburn Classical Institute, Waterville, Me., 1894-1905; Principal, Academy for Boys, Morgan Park, 1905-7; Assistant Dean, University High School, Chicago, 1907-9; Principal, *ibid.*, 1909-.

Member of the Editorial Board, *School Review*, 1910-.

The Problems of Boyhood. 12mo, xxv+130. Chicago: University Press, 1914.

The Social Organization of the High School, *School Review*, XVII (1909), 665-80.

A Comparative Study of the Grades of Pupils from Different Elementary Schools in the Subjects of the First Year in High School, *Elementary School Teacher*, XI (1910), 63-78.

The School Party—Its Effect upon Manners and Morals, *Educational Bi-Monthly*, V (1910), 165-68.

A Study of High-School Grades, *School Review*, XIX (1911), 13-24.

Significant Experiments in the State of Illinois, *Religious Education*, V (1911), 704-8.

The Conference on Moral Education, *School Review*, XIX (1911), 347-49.

The New Harvard Entrance Requirements, *ibid.*, 412-13.

The High-School Boys' Morals, *ibid.*, XX (1912), 81-89.

Moral Education through School Activities, *Religious Education*, VI (1912), 493-502.

The Hillegas-Thorndike Scale for Measurement of Quality in English Composition by Young People, *School Review*, XXI (1913), 39-49.

A Preliminary Study in Moral Education, *Religious Education*, VII (1913), 621-25.

Methods of Social Training in High Schools, *ibid.*, VIII (1913), 200-209.

Supervised Study, *University of Illinois Bulletin*, XII (1915), 78-84.

Moral and Social Values of Physical Education in the Secondary Schools, *American Physical Education Review*, XX (1915), 477-87.

The Moral Situation in High Schools, *Religious Education*, X (1915), 515-26.

REVIEWS IN: *School Review*, XVIII, 207-8; XXIII, 276-77; XXIV, 240-41, 241-42.

FRANCES RAMSAY ANGUS, A.B. [1902-], Instructor in French.

Fundamentals of French. 12mo, 280. New York: Henry Holt & Co., 1916.

ARTHUR FAIRCHILD BARNARD, A.B. [1903-], Instructor in History.

Ancient History and the Classics, *School Review*, XV (1907), 78-82.

REVIEW: *Ibid.*, XVI, 482-83.

†EDWIN SHERWOOD BISHOP, PH.D. [1909-16], Instructor in Physics.

A Laboratory Course in Physics for Secondary Schools (with R. A. Millikan and H. G. Gale). 8vo, vi+135. Boston: Ginn & Co., 1914.

Beginnings of Electricity (joint author). ii+66. Chicago: American School of Correspondence, 1916.

Measurement and Application of the Electric Current (joint author). ii+80. Chicago: American School of Correspondence, 1916.

Induced Currents and Electric Power (joint author). ii+87. Chicago: American School of Correspondence, 1916.

An Absolute Determination of the Minimum Ionizing Energy of an Electron, and an Application of the Theory of Ionization by Collision to Mixtures of Gases. Doctor's thesis. *Physical Review*, XXXIII (1911), 325-53.

MARY PUTNAM BLOUNT, PH.D. [1906-12], Instructor in Biology; Instructor in Science, Chicago Normal School.

† Deceased.

The Early Development of the Pigeon's Egg, with Especial Reference to Polyspermy and the Origin of the Periblast Nuclei. Doctor's thesis. *Journal of Morphology*, XX (1909), 1-64.

ARTHUR GIBBON BOVÉE, PH.B. [1911-], Instructor in French.

Phonetic Chart for French Vowel and Consonant Sounds. Privately printed, 1914.

French Phonetic Training in the University High School, *School Review*, XXIV (1916), 675-79.

ERNST RUDOLPH BRESLICH, A.M. [1904-], Instructor in Mathematics.

Geometric Exercises for Algebraic Solution (with G. W. Myers and others). 12mo, x+72. Chicago: University Press, 1907.

First-Year Mathematics for Secondary Schools. 12mo, xxiv+342. Chicago: University Press, 1915.

Second-Year Mathematics for Secondary Schools. 12mo, xx+348. Chicago: University Press, 1916.

Teacher's Guide for First-Year Mathematics. 12mo, 67. Chicago: University Press, 1916.

Teaching High-School Students How to Study, *School Review*, XX (1912), 505-15.

Supervised Study as Supplementary Instruction, *Thirteenth Yearbook of the National Society for the Study of Education* (1913), 32-72. Chicago: University Press.

Supervised Study in Mathematics, *University of Illinois Bulletin*, XII (1915), 247-58.

Course of Study in Secondary Mathematics, *School Review*, XXIV (1916), 1-27.

Forward Movements in Secondary Mathematics, *ibid.*, 283-97.

ROY HUTCHISON BROWNLEE, PH.D. [1901-7], Instructor in Chemistry; President, R. H. Brownlee Laboratory, Pittsburgh.

Qualitative Electrolysis of Hydrochloric Acid. *Journal of the American Chemical Society*, XXIX (1907), 236-38.

On Precipitated Sulphur. Doctor's thesis. *Ibid.*, 1032-52.

WILBERT LESTER CARR, A.M. [1909-], Instructor in Latin and Greek; Assistant to the Principal.

Latin Prose Composition (with W. G. Hale and C. H. Beeson). 16mo, xiii+137. Chicago: Atkinson, Mentzer & Co., 1910.

Syntax in Caesar: The Uses of the Subjunctive, *School Review*, XVII (1909), 564-69.

The Desirability of Latin in the Eighth Grade, *Classical Journal*, IX (1914), 385-394.

JOHN MAXWELL CROWE, A.M. [1903-], Instructor in English.

Report of the Conference Committee on High-School English (with Mrs. E. H. Broadus and J. F. Holic), *School Review*, XVII (1909), 85-88.

REVIEWS: *Ibid.*, XIII, 579, 580; XIV, 698-99; XVI, 674-75; XVIII, 575-77.

ARNOLD DRESDEN, PH.D. [1907-9], Instructor in Mathematics; Assistant Professor of Mathematics, University of Wisconsin.

The Second Derivatives of the Extremal Integral. Doctor's thesis. *Transactions of the American Mathematical Society*, IX (1908), 467-86.

Second-Year Mathematics for Secondary Schools (joint author). 12mo, 296. Chicago: University Press, 1910.

First-Year Mathematics for Secondary Schools (joint author). 3d ed. 12mo, xii+365. Chicago: University Press, 1913.

WILLIAM LEWIS EIKENBERRY, S.B. [1914-16], Instructor in Botany; School of Education, University of Kansas, Lawrence.

Editor of the Botanical department, *School Science and Mathematics*, 1911-.

Elements of General Science (with O. W. Caldwell). 8vo, xiv+308. Boston: Ginn & Co., 1914.

A Laboratory Manual for General Science (with O. W. Caldwell and C. J. Pieper). 8vo, xi+134. Boston: Ginn & Co., 1915.

Variation as a Topic in High-School Botany, *School Science and Mathematics*, XI (1911), 24-37.

Some Notes on the Forests of Ogle County, *Transactions of the Illinois State Academy of Science*, V (1912), 6 pp.

The School and the Community, *Mt. Morris College Bulletin*, I (1912), 6-12.

The General-Science Course in the University High School, *School Review*, XX (1912), 217-27.

The Statistical Investigation of School Grades, *School Science and Mathematics*, XIII (1913), 27-36.

First-Year Science in Illinois High Schools, *School Review*, XXI (1913), 542-48.

Some Facts about the General-Science Situation, *ibid.*, XXIII (1915), 181-91.

Further Discussion of General Science, *School and Society*, I (1915), 417-20.

REVIEWS IN: *School Science and Mathematics*, X, 565; XI, 182, 280, 480, 577, 580; XII, 84, 254, 255, 258, 350, 352, 444; XIII, 368, 460, 551, 552, 842, 844; XIV, 831; XV, 370, 462, 464, 542.

EARL BIXBY FERSON [1903; 1907-14], Instructor in Drawing.

The Tower Clock for the University of Chicago. iv+52. Chicago: American Jeweler, 1903.

GLEN MOODY HOBBS, PH.D. [1893-1906], Instructor in Physics; Secretary and Educational Director, American School of Correspondence, Chicago.

The Relation between P.D. and Spark-Length for Small Values of the Latter. Doctor's thesis. *Philosophical Magazine*, X (1905), 617-31.

SAMUEL CARLISLE JOHNSTON, A.M. [1903-10], Instructor in Greek.

Equal Recognition for Greek without Discrimination, *School Review*, XV (1907), 74-77.

NAMA A. LATHE [1913-], Instructor in Drawing.

Course of Study in Art in the High School, School of Education, the University of Chicago (with Walter Sargent), *School Review*, XXIV (1916), 409-25.

HARRIS FRANKLIN MACNEISH, PH.D. [1903-8], Instructor in Mathematics; Instructor in Mathematics, DeWitt Clinton High School, New York.

First-Year Mathematics for Secondary Schools (joint author). xii+365. Chicago: University Press, 1909.

Linear Polars of the K-hedron in N-space. Doctor's thesis. iii+25.
Chicago: University Press, 1912.

On the Determination of a Catenary with Given Directrix and Passing through Two Given Points, *Annals of Mathematics*, VII (1906), 65-71.

Concerning the Discontinuous Solution in the Problem of the Minimum Surface of Revolution, *ibid.*, 71-80.

ARTHUR WESLEY MARTIN, PH.D. [1913-14], Assistant in Chemistry; Professor of Chemistry and Physics, University of Nanking, Nanking, China.

The Conductivity (and Viscosity) of Some Formates and of Hydrogen Chloride in (Anhydrous) Formic Acid. Cases of Apparent Agreement of Strong Electrolytes with the Mass Law. Doctor's thesis. 8vo, 34.
Easton, Pa.: Eschenbach Printing Co., 1914.

ROBERT MAURICE MATHEWS, A.B. [1909-12], Instructor in Mathematics.

Second-Year Mathematics for Secondary Schools (joint author). 12mo, xi+282. Chicago: University Press, 1911.

Teacher's Manual for First-Year Mathematics (joint author). 12mo, ix+164. Chicago: University Press, 1911.

SARAH LOUISE MITCHELL, PH.B. [1909-13], Librarian; Art Institute, Chicago.

A List of Books Suited to a High-School Library (with instructors in the University High School), *United States Bureau of Education Bulletin*, No. 545, 1913.

WILLIAM JAMES MONILAW, M.D. [1910-], Instructor in Physical Education.

Course of Study in Physical Training, *University of Illinois Bulletin*, XIII (1916), 65-78.

The Effects of Training Down in Weight on the Growing Boy, *School Review*, XXV (1916), 350-60.

WALTER PIETY MORGAN, PH.M. [1908-10], Assistant in Mathematics; President, Western Illinois State Normal School, Macomb, Ill.

Conditional Promotions in the University High School, *School Review*, XIX (1911), 238-47.

REVIEW OF: Slaughter and Lennes' Plane Geometry, *School Science and Mathematics*, X, 566-67.

JULIA ANNA NORRIS, M.D. [1907-12], Instructor in Hygiene and Physical Education; School Physician; Director and Assistant Professor in the Department of Physical Education for Women, University of Minnesota.

A Graded Course in Schoolroom Gymnastics (five articles), *Elementary School Teacher*, XI (1910), 105-18, 186-204; XI (1911), 341-59, 485-95, 505-16.

REVIEW IN: *American Physical Education Review*, XVI, 351.

WILLIAM DAVID REEVE, S.B. [1910-15], Instructor in Mathematics; University High School, University of Minnesota.

A Review of High-School Mathematics (with R. Schorling). 12mo, x+70. Chicago: University Press, 1915.

Exhibit of High-School Mathematics; Its History and Educational Value, *School and Society*, II (1915), 191-97.

Courses in Special Methods of Teaching for High Schools, with Reference to Mathematics, *School Review*, XXIV (1916), 89-106.

Unification of Mathematics in the High School, *School and Society*, IV (1916), 203-12.

LYDIA MARIE SCHMIDT, Ph.B. [1903-], Instructor in German.

A Practical Course in Phonetics, *School Review*, XXIII (1915), 555-58.

REVIEWS: *Ibid.*, XXI, 282-84; XXII, 130-31, 131-32.

RALEIGH SCHORLING, A.B. [1912-17], Instructor in Mathematics; Lincoln School, New York.

A Review of High-School Mathematics (with W. D. Reeve). 12mo, x+70. Chicago: University Press, 1915.

The Problem of Individual Differences, *School Review*, XXIII (1915), 535-49, 649-63.

Mathematics Contests, *School Science and Mathematics*, XVI (1915), 794-97.

HARRY FLETCHER SCOTT, A.M. [1903-], Instructor in Latin.

A Caesar Composition (with C. H. Van Tuyl). 16mo, 120. Chicago: Scott, Foresman & Co., 1910.

A Cicero Composition (with C. H. Van Tuyl). 16mo, 106; 1912. Revised edition, with title *A Latin Composition for the Third Year* (with C. H. Van Tuyl). 16mo, 130; 1917. Chicago: Scott, Foresman & Co.

Elementary Latin. 16mo, 348. Chicago: Scott, Foresman & Co., 1915.

A New Second Latin Book (with Charles H. Beeson). 16mo, 542+117. Chicago: Scott, Foresman & Co., 1916.

A Latin Composition for the Second Year. 16mo, 131. Chicago: Scott, Foresman & Co., 1917.

FRANK HENRY SELDEN [1905-7], Instructor in Shopwork and Drawing; Valley City, S.D.

Elementary Woodwork. 16mo, 206. Chicago: Rand McNally & Co., 1906.

Elementary Turning. 16mo, 197. Rand McNally & Co., 1907.

CHARLES HENRY VAN TUYL, A.B. [1902-13], Instructor in Latin.

A Caesar Composition (with H. F. Scott). 16mo, 120. Chicago: Scott, Foresman & Co., 1910.

A Cicero Composition (with H. F. Scott). 16mo, 106. Chicago: Scott, Foresman & Co., 1912.

First-Year Latin for Correspondence Schools. 170. Chicago: American School of Correspondence, 1912.

Caesar for Correspondence Schools. 160. Chicago: American School of Correspondence, 1913.

WILLIAM ROCKWELL WICKES, A.M. [1903-12], Instructor in Mathematics; Los Angeles, Cal.

First-Year Mathematics for Secondary Schools (joint author). 12mo, 181. Chicago: University Press, 1907.

Geometric Problems for Algebraic Solution (joint author). 12mo, ix+71. Chicago: University Press, 1907.

Second-Year Mathematics for Secondary Schools (joint author). 12mo, xi+282. Chicago: University Press, 1910.

Teacher's Manual for First-Year Mathematics (joint author). 12mo, xi+164. Chicago: University Press, 1911.

HORACE CARPENTER WRIGHT, PH.D. [1914-], Instructor in Mathematics.

Mathematical Equipment and Its Uses, *School Science and Mathematics*, XV (1915), 500-505.

THE UNIVERSITY ELEMENTARY SCHOOL

HARRY ORRIN GILLET, S.B. [1900-], Principal of the University Elementary School.

Practical English (with Potter and Jeschke). Books I and II. 12mo, xv+280, x+413. Boston: Ginn & Co., 1916.

Oral and Written English (with Potter and Jeschke). Books I and II. 12mo, xix+329+xviii, viii+420+xxvi. Boston: Ginn & Co., 1917.

†WILBUR SAMUEL JACKMAN [1901-7], Principal of the University Elementary School; Professor of the Teaching of Natural Science.

State Normal School, California, 1877; A.B. Harvard, 1884; Dean and Head of the Department of Natural Science, Chicago Institute, 1900-1901; Dean of the College of Education, Chicago, 1901-4; Principal of the Elementary School, *ibid.*, 1904-7.

Editor, *Elementary School Teacher*, 1904-7.

Nature Study. Part II of the Third Yearbook of the National Society for Scientific Study of Education. 8vo, 103. Chicago: University Press, 1905.

Fall Planting, *Elementary School Teacher*, V (1904), 114-17.

The University Elementary School, *ibid.*, 585-96.

Relation of Nature Study to Religious Training, *Educational Review*, XXX (1905), 12-30.

William Rainey Harper, *Elementary School Teacher*, VI (1906), 275-77.

The Vernal Equinox, *ibid.*, 398-99.

The Year in Review: 1905-6 in the University Elementary School, *ibid.*, 489-500.

REVIEWS: *Ibid.*, VI, 439-40, 440; VII, 48, 111.

† Deceased.

ANNE ELIZABETH ALLEN [1901-12], Instructor, Kindergarten; Chicago Kindergarten Institute.

The Three Neighbors and Other Stories. 16mo, 104. Springfield, Mass.: Milton Bradley Co., 1910, 1916.

MARGARET MCPHERSON GORDON [1911-], Kindergarten.

Course of Study in Drawing in the Elementary School (with Walter Sargent and Elizabeth Miller), *Elementary School Journal*, XVI (1916), 412-23, 475-90, 533-41.

Out-of-Door Work and Play in the Kindergarten, *Bureau of Education Bulletin*. In Press.

ANNA TALEA SCHERZ GRONOW, PH.B. [1907-], Instructor in German.

Jung Deutschland. 264. Boston: Ginn & Co., 1914.

Für kleine Leute. 194. Boston: Ginn & Co., 1915.

Geschichte und Sage. 350. Boston: Ginn & Co., 1916.

ANNAS HIGGINS, PH.B. [1903-11], Mathematics in Upper Grades; Department of Mathematics, University College.

Plea for Opportunity for Greater Initiative in Solution of Problems, *Educational Bi-Monthly*, V (1911), 344-50.

Survey of Mathematics in the Elementary and High Schools, *Annual Report of the Board of Education of the City of Chicago*, 1914.

The Relation of Mathematics in the Elementary Schools to Mathematics in the High Schools, *Report of the Twenty-seventh Educational Conference of the Academies and High Schools in Relation to the University of Chicago*, 1915.

ELEANOR LALLY, A.B. [1912-], Seventh Grade.

A Type Study in English Composition, *Elementary School Journal*, XVI (1916), 469-74.

MELVA LATHAM [1905-14], Seventh Grade; Instructor in History, State Normal, Los Angeles, Cal.

Course of Study, *Elementary School Teacher*, VI (1906), 542-44; 545-46; VII (1907), 633-36; VIII (1908), 522-23, 532.

Home Economics and the Grade Teacher, *Journal of Home Economics*, III (1911), 431-40.

REVIEW IN: *Elementary School Teacher*, VIII, 466.

MARY ROOT KERN [1898-], Instructor in Music in the Primary Grades. *Child Religion in Song and Story* (with Georgia L. Chamberlin). Vol. I, *The Child in His World*. 8vo, xvi+252. Vol. II, *Walks with Jesus in His Home Country*. 8vo, xviii+256. Chicago: University Press, 1907, 1909.

WADE MCNUTT, S.M. [1912-14], Assistant in Museum.

Evaporation and Soil Moisture in an Oak Forest, *Transactions of the Illinois State Academy of Science*, V (1912), 127-37.

Stratification of Atmospheric Humidity in the Forest (joint author), *Transactions of the Illinois State Academy of Science*, VI (1913), 100-102.

KATHARINE MARTIN [1906-], Instructor in Kindergarten Education.

The Kindergarten, *Public School Methods*, I (1916), 1-100.

ELIZABETH ERWIN MILLER [1910-], Supervisor of Art.

How Children Learn to Draw (with Walter Sargent). 8vo, 264. Boston: Ginn & Co., 1916.

Progressive Drawing for Little Children, I, *School Arts Magazine*, XIII (1913), 266-73; II, *ibid.* (1914), 354-58; III, *ibid.*, 502-7; IV, *ibid.*, 588-91.

Course of Study in Drawing in the Elementary School (with Walter Sargent and Margaret Gordon), *Elementary School Journal*, XVI (1916), 412-23, 475-90, 533-41.

EDITH WHITTEN OSGOOD, A.M. [1913-], Sixth Grade.

The Development of Historical Study in the Secondary Schools of the United States, *School Review*, XXII (1914), 444-54, 511-26.

EDITH PARKER, Ph.B. [1912-], Sixth Grade.

A Sixth-Grade English Unit, *Elementary School Teacher*, XV (1914-15), 82-93.

CHARLES FRANK PHIPPS, S.B. [1910-16], Instructor in Natural History; State Normal School, De Kalb, Ill.

- A Seventh-Grade Soil Experiment, *Nature-Study Review*, VIII (1912), 154-56.
- An Experimental Study of the Behavior of Amphipods with Respect to Light Intensity, Direction of Rays, and Metabolism, *Biological Bulletin*, XXVIII (1915), 210-23.
- Practical Electricity for Seventh and Eighth Grades, *Elementary School Journal*, XV (1915), 407-20.
- CAROLINE MAY PIERCE (MRS. EUGENE BAKER), Ed.B. [1904-7], Associate, Fifth Grade.
- History in the Fifth Grade, *Elementary School Teacher*, V (1905), 540-43.
- Outline of Work for the School Year, Division D, Section 7, *ibid.*, 639-46.
- MYRTLE SHOLTY, PH.B. [1912-13; 1914-], Fifth Grade.
- A Study of the Reading Vocabulary of Children, *Elementary School Teacher*, XII (1912), 272-77.
- JOSETTE EUGÉNIE SPINK [1907-], Instructor in French.
- French Plays for Children*. 12mo, vi+79. Boston: D. C. Heath & Co., 1915.
- Dramatizing the Story of Jeanne d'Arc, *Atlantic Educational Journal*, VIII (1913), 7-9.
- GRACE EMILY STORM, PH.B. [1912-], Fourth Grade.
- Roman History in the Fourth Grade, *Elementary School Journal*, XVI (1915), 132-46.
- AMY RACHEL WHITTIER [1910-13; 1914; 1915], Instructor in Art; Instructor and Supervisor of Normal Methods in the Teaching of Art, Massachusetts Normal Art School, Boston.
- Insurance against Failure in Nature Drawing, *School Arts Magazine*, XIII (1913), 14-18.

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A.B. Rochester, 1863; Graduate Rochester Theological Seminary, 1866; D.D. Old University of Chicago, 1885; LL.D. Rochester, 1913; Secretary, Board of Trustees, University of Chicago, 1890-1913; Registrar, *ibid.*, 1897-1913; Corresponding Secretary, Board of Trustees, 1913-.

A History of the University of Chicago. Founded by John D. Rockefeller: The First Quarter-Century. 8vo, xvii+522. Chicago: University Press, 1916.

TREVOR ARNETT [1901-], University Auditor.

A.B. Chicago, 1898; Fellow in Political Economy, *ibid.*, 1899-1900; University Auditor, *ibid.*, 1901-.

College Finance. Address delivered before the Illinois Federation of Colleges, May, 1915. Published by the Board of Education of the Northern Baptist Convention, 1915.

REVIEW IN: *Journal of Political Economy*, XVII, 166-67.

JOHN MILTON DODSON [1901-], Dean of Medical Students; Professorial Lecturer on Medicine.

A.B. Wisconsin, 1880; M.D. Rush Medical College, 1882; Lecturer on Anatomy and Demonstrator, *ibid.*, 1889-93; Professor of Physiology and Demonstrator of Anatomy, *ibid.*, 1893-94; Professor of Physiology and Histology, *ibid.*, 1894-1904; Professor of Medicine (Pediatrics), *ibid.*, 1900-; Junior Dean, *ibid.*, 1898-99; Dean, *ibid.*, 1899-; Professor of Diseases of Children, Northwestern University Woman's Medical School, 1893-97; Dean of Medical Students, Chicago, 1901-; Professorial Lecturer on Medicine, *ibid.*, 1901-.

The Modern University Medical School: Its Purposes and Methods, *Journal of the American Medical Association*, XXXIX (1902), 521-28.

The Research Idea in Medical Education and Practice, *ibid.*, XLV (1905), 81-87.

The Course Symptoms and Diagnosis of Scarlet Fever, *Illinois Medical Journal*, XII (1907), 522-28.

The Combined Course for the Degrees of A.B., or B.S., and M.D., *Journal of the American Medical Association*, LII (1909), 1636-42.

The Addition of a Fifth Year to the Medical Curriculum, *Journal of the American Medical Association*, LVIII (1912), 968.

The Pedagogics of Pathology, *Science*, XLII (1915), 773-80.

GEORGIA LOUISE CHAMBERLIN [1891-], Secretary, American Institute of Sacred Literature.

Reader, Chautauqua Literary and Scientific Circle, 1882-90; Secretary, Chautauqua Summer Schools, 1883-98; Secretary, American Institute of Sacred Literature, 1891-.

Editor of *Ordered to China*. Letters of W. J. Chamberlin, war correspondent of the *New York Sun*, in the Boxer Rebellion of 1900. 12mo, 200. New York: F. A. Stokes & Co., 1902.

An Introduction to the Bible for Teachers of Children. "Constructive Bible Studies." 12mo, 206. Chicago: University Press, 1904.

Child Religion in Song and Story (with Mary R. Kern). Vol. I, *The Child in His World*. 8vo, xvi+252. Vol. II, *Walks with Jesus in His Home Country*. 8vo, xviii+256. Chicago: University Press, 1907, 1909.

The Origin and Teaching of the Old Testament Books. "American Institute of Sacred Literature Series." 8vo, 70. Chicago: University Press, 1908.

The Hebrew Prophets. "Constructive Studies." 8vo, xviii+238. Chicago: University Press, 1911.

HORACE SPENCER FISKE [1894-], Publication Department, University Press.

A.B. Beloit, 1882; A.M. Michigan, 1885; Extension Lecturer in English Literature, Chicago, 1894-1912; Assistant Recorder, 1903-13; Publication Department, University Press, 1913-.

Literary Editor, *World Review*, 1901-2; Editor, *University Record*, Chicago, 1903-8; Joint Editor, *University of Chicago Magazine*, 1908-14.

Provincial Types in American Fiction. 12mo, vi+264. Chautauqua: Chautauqua Press, 1903.

Chicago in Picture and Poetry. 4to, xv+172. Chicago: R. F. Seymour, 1903.

Poems on the University of Chicago. 16mo, 15. Privately printed.

Rudyard Kipling as a Poet, *Philharmonic*, III (1903), 117.

Recollections of Edward Dowden, *Nation*, XCVI (1913), 520-21.

Poems in *Chautauquan*, XXXV (1902), 223; *ibid.*, XXXVII (1903), 472; *Metropolitan*, XVIII (1903), 360; *Harper's Weekly*, LIII (1909), 17, 31.

†LESTER BARTLETT JONES [1901-10], Associate, and Director of Music.

A. B. Knox, 1897; Associate, and Director of Music, Chicago, 1901-10.

Scripture and Song in Worship (with F. W. Shepardson). 16mo, 144. Chicago: University Press, 1909.

JOSEPHINE ESTABROOK YOUNG [1913-], Assistant Professor of Medicine in Rush Medical College; Medical Adviser for Women.

M.D. Northwestern University Woman's Medical School, 1896; Assistant Professor of Medicine, *ibid.*, 1897-1900; Assistant Professor of Pediatrics, and later of Neurology, Rush Medical College, 1904-13; Assistant Professor of Medicine, *ibid.*, 1913-; Medical Director, University Elementary and High Schools, Chicago, 1913-; Medical Adviser for Women, University of Chicago, 1913-.

Supernormal Environment in Its Relation to the Growing Child, *Transactions of the Fourth International Congress on School Hygiene*, II (1913), 17-30.

† Deceased.



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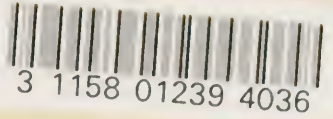
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