

SCIENCE

A WEEKLY JOURNAL

DEVOTED TO THE ADVANCEMENT OF SCIENCE.

EDITORIAL COMMITTEE: S. NEWCOMB, Mathematics; R. S. WOODWARD, Mechanics; E. C. PICKERING, Astronomy; T. C. MENDENHALL, Physics; R. H. THURSTON, Engineering; IRA REMSEN, Chemistry; J. LE CONTE, Geology; W. M. DAVIS, Physiography; O. C. MARSH, Paleontology; W. K. BROOKS, Invertebrate Zoölogy; C. HART MERRIAM, Vertebrate Zoölogy; S. H. SCUDDER, Entomology; N. L. BRITTON, Botany; HENRY F. OSBORN, General Biology; H. P. BOWDITCH, Physiology; J. S. BILLINGS, Hygiene; J. McKEEN CATTELL, Psychology; DANIEL G. BRINTON, J. W. POWELL, Anthropology.

NEW SERIES. VOLUME I.

JANUARY TO JUNE, 1895.

NEW YORK
41 EAST FORTY-NINTH STREET
1895

THE NEW ERA PRINTING HOUSE,
41 NORTH QUEEN STREET,
LANCASTER, PA.

CONTENTS AND INDEX.

N. S. VOL. I.—JANUARY TO JUNE, 1895.

The Names of Contributors are Printed in Small Capitals.

- ABBE, CLEVELAND, The Needs of Meteorology, 181
 Abbot, W. L., Collections from Pamir, 696
 Abel, J. J., Diethyl Sulphide, 113; Trichloride of Acetonic Acid, 113; Cachexia Tyreopriva, 114
 Academische Revue, 446
 Academy of Science, New York, 28, 84, 220; BASHFORD DEAN, 167, 306; J. F. KEMP, 193, 279, 391, 669, 727; WILLIAM HALLOCK, 447; Texas, 56, 448, 728; Rochester, 83; Iowa, 111; Indiana, 221; Michigan, 250; Philadelphia, 251, 447; National, 449, 477; St. Louis, A. W. DOUGLAS, 503; Wisconsin, 728.
 Adams, Frank D., The Laurentian, 63
 Adams, John Couch, Memorial to, 640
 Adler, Herman, Alternating Generations, a Biological Study of Oak Galls and Gall Flies, C. V. RILEY, 457
 Aeronautical Annual, 56
 Aero-therapeutics, Charles Theodore Williams, 247
 Africa, Map of, 695
 African Folk-Lore and Ethnography, 405
 Agassiz, A., on the Bahamas, 293, 332
 Agricultural Analysis, Harvey W. Wiley, CHARLES PLATT, 359
 Agriculture, Bulletin of Cornell University, 276; Notes on, BYRON D. HALSTED (I.), 376; (II.), 509; (III.), 680; Civil Service Rules in the Department of, 640
 Alabama, The Chunnenuzza Ridge and the Black Prairies of, 295
 Alaska, 219; Gold and Coal Resources of, 470
 Aldrich, T. B., Trichloride of Acetonic Acid, 113
 Alexander, J., Model Engine Construction, R. H. T., 109
 ALLEN, HARRISON, Pithecanthropus erectus, 239, 299; The Classification of Skulls, 381
 Allen, Harrison, Member of Council of Philadelphia Academy of Science, 390; retirement of, 555
 ALLEN, J. A., Pocket Gophers, C. Hart Merriam, 241; Pocket Gophers, Vernon Bailey, 689
 Allen, J. A., On the Species of the Genus Reithrodontomys, C. H. M., 720.
 Alternating Generations, Herman Adler, C. V. RILEY, 457
 American, Journal of Science, 112, 195, 308, 420, 532, 700; Chemical Journal, 139, 196, 308, 420, 532; J. ELLIOTT GILPIN, 642; Anthropologist, 140; Journal of Mathematics, 168, 448; Association, 220, 636; its Table at Wood's Holl Laboratory, 249; at Cold Spring Harbor Laboratory, 277; Museum of Natural History, 249; Geologist, 252, 336, 420; Journal of Psychology, 280; Microscopical Society, 417; Association for the Advancement of Physical Education, 418; Culture, The Origin of Native, 456; Metrological Society, J. K. R., 484; Academy of Medicine, 529; Meteorological Journal, 570; University, Gift to the, 615
 Amherst, Summer School, 530; State College Entomological Department, 555
 Anatomists, The New York Meeting of the Association of American, 295
 Anatomy, 165; the Best Order of Topics in a Two Years' Course in a Medical School, FREDERICK HENRY GERRISH, 312
 Andrée S. A., To the North Pole by Balloon, 642
 Animal as a Machine and Prime Mover, R. H. THURSTON, 365
 Animals and Plants, The Fundamental Difference Between, CHARLES S. MINOT, 311
 Antelopes, The Book of, P. L. Sclater and Oldfield Thomas, C. H. M., 389
 Anthro-geography, 255
 Anthropological Society, Publications of the German, 363.
 Anthropology, 26, 27, 218, 278, 640; Current Notes on, D. G. BRINTON, New Series (I.), 47; (II.), 72; (III.), 126; (IV.), 253; (V.), 404; (VI.), 455; (VII.), 488; (VIII.), 544; (IX.), 649; The Teaching of, 254
 Appalachian Mountain Club, 473
 Apple Failures, Recent, 510
 Archaeological News from Switzerland, 456
 Archaeology, European, 73; A Deductive Science, 127; of Southern Florida, D. G. BRINTON, 207; American School, 556; American School at Heræon of Argos 556; American Institute of, 615
 Area of Land and Water, 568
 Argon, 55, 417, 444; IRA REMSEN, 309; LORD RAYLEIGH, 701; the preparation of, J. E. GILPIN, 582
 Arizona, Memorial to Congress, 249
 Arnold, Carl, Repetitorium der Chemie, EDWARD H. KEISER, 526
 Art, Primitive, 544
 Aryan Cradle Land, 129
 Ashmead, W. H., Lysiognatha, 560
 Astronomical Society in Brussels, 697, and Physical Society of Toronto, THOMAS LINDSAY, 573
 Astronomie und Geophysik, Jahrbuch der, 717
 Astronomy, 692; and Astro-Physics, 56; Native in Mexico and Central America, 72; Elements of, GEORGE W. PARKER, C. A. Y., 415
 Astrophysical Journal, 56, 168, 224, 336, 474; S. B. BARRETT, 615
 Atmosphere, The Earth's, William Coutie, EDWARD HART, 360
 Attraction Spheres and Centrosomes in Vegetable Cells, John H. Schaffner, ALBERT SCHNEIDER, 189

- Auk, The, 196
 AUSTEN, PETER T., On Indiscriminate 'Taking,' 209
 Ayrton, W. E., and E. A. Medley, Tests of Glow-Lamps, T. C. M., 662
- B., D. G., Grundriss der Ethnological Jurisprudenz, Albert Herman Post, 25; *Éthnologische Studien Zur Ersten Entwicklung der Strafe*, S. R. Steinmetz, 25
 B., J. S., Municipal Government, Albert Shaw, 578
 B., N. L., Flora of Nebraska, 25; Grasses of Tennessee, Pt. II., F. Lamson Scribner, 55; Field; Forest and Garden Botany, Asa Gray, 527; Systematic Botany, E. Warming, 550
 B., W. K., Can an Organism Without a Mother be Born from an Egg, 162
 Bach, C., Elasticität und Festigkeit, MANSFIELD MERRIMAN, 688
 Bacillus, The Influence of Certain Agents in Destroying the Vitality of the Typhoid and Colon, JOHN S. BILLINGS and ADELAIDE WARD PECKHAM, 169
 Bacteriology, Outline of Diary, H. L. Russell, H. W. C., 189; A Course of Elementary Practical, A. A. Kanthack and I. H. Drysdale, 416
 Bacteriosis of Rutabaga, 509
 BAILEY, L. H., 'The Plant Individual in the Light of Evolution,' 281
 Bailey, L. H., 82; Appropriation for Horticultural Work, 499; Horticulturalists' Rule Book, 682
 Bailey, Vernon, Pocket Gophers of the United States, J. A. ALLEN, 689
 Baker, Frank, Human Lumbar Vertebrae, 531
 BALDWIN, J. MARK, The Social Sense, 236
 Baldwin, J. Mark, Studies from the Princeton Psychological Laboratory, 643
 Ball, M. V., *Streptococcus pyogenes*, 447
 Ball, Valentine, Death of, 723
 Ballard, Harlan H., The World of Nature, WYATT W. RANDALL, 553
 Ballistic Galvanometer and its Use in Magnetic Measurements, THOMAS GRAY, 533
 Balloon Ascent, 500
 Barber, H. G., *Hypatus bachmanni*, 560
 Barlow, Alfred E., Huronite, 62
 Barnard College, Site for, 695
 Barograph Record During a Tornado, 320
 BARRETT, S. B., *Astrophysical Journal*, 615
 Base Level, Meaning of the Term, 175
 Bastian, Adolph, Some of his later Writings, 73
 Bastin, Edson S., Laboratory Exercises in Botany, S. E. JELLIFFE, 358
 Bateson, William, Materials for the Study of Variation, H. W. CONN, 23
 BAUER, L. A., On the Distribution and the Secular Variation of Terrestrial Magnetism, 673
 Bauer, L. A., On the Secular Motion of a Free Magnetic Needle, 671
 Bayley, W. S., Great Gabbro Mass, 65; Contact Phenomena, 65
 Bays and Fiords, Submerged Valleys, 259
 Beal, F. E. L., Food Habits of Woodpeckers, 304
 BEAL, W. J., Teaching Botany, 355
 Bean, Tarleton H., Deep Sea Fishes, 501
 Bearcamp Water, Frank Bolles; W. T. DAVIS, 80
 Becker, G. F., Gold Fields, 668
 Bedell, F. and A. C. Crehore, Resonance in Transformer Circuits, 671
 Beet-Leaf Spot, 378
 Behrens, H., Anleitung zur Microchemischen Analyse, E. RENOUE, 636
 Bell, Alexander Graham, Gift to Volta Bureau Library, 725
 Bell, Robert, Honeycombed Limestones, 67
 Bépolsky, A., Pulkowa Refractor, 616
 Benton George Willard, A Laboratory Guide for a Twenty Weeks' Course in General Chemistry, W. R. O., 611
 BERGEY, DR. D. H., Summary of Conclusions of a Report by Drs. D. H. Bergey, S. Weir Mitchell and J. S. Billings upon the 'Composition of Expired Air and Its Effects upon Animal Life,' 481
 Berlese, A. N., *Icones fungorum ad usum Sylloges Saccardianæ accommodatæ*, JOSEPH F. JAMES, 528
 Bernthsen, A., Text-book of Organic Chemistry, FELIX LENGFELD, 272
 Berthelot, M., Argon, 444; Banquet in Honor of, 500
 Berthoumieu, M. G. V., *Ichneumonidæ*, 276
 Bertillon, Dr., Identifying Handwriting, 556
 Bertkau, P., and the Review of Entomology, 303
 Bevier Sheet, Report on, Arthur Winslow, J. D. R., 248
 Bibbins, Arthur, Fauna of Potomac Formation, 362
 Bickmore, Albert S., Address by, 695
 BILLINGS, JOHN S., and ADELAIDE WARD PECKHAM, The Influence of Certain Agents in Destroying the Vitality of the Typhoid and Colon Bacillus, 169; A Card Catalogue of Scientific Literature, 406; Degeneration, Max Nordau, 465; Summary of Conclusions of a Report by Dr. D. H. Bergey, S. Weir Mitchell and J. S. Billings upon The Composition of Expired Air and Its Effects upon Animal Life, 481
 Billings, John S., Retirement of, 583
 Billroth, Prof., Statue of, 668
 Biological, 331, 361; Society of Washington, 84, 168; F. A. LUCAS, 304, 418, 502, 586, 725; M. B. WAITE, 334, 531, 698; Laboratory of Cold Spring Harbor, 166; Lectures, Delivered at the Marine Biological Laboratory of Wood's Holl, CHARLES S. DOLLEY, 244; Wood's Holl 1894, 418; Lectures and Addresses, Arthur Milnes Marshall, H. W. CONN, 413; Laboratory, The Marine, 516
 Biology, Introduction to Elementary Practical, Charles Wright Dodge, H. W. CONN, 78; Section of, New York Academy of Science, 84, 167, 306
 Birdcraft, Mabel Osgood Wright, C. H. M., 635
 Birds, of Eastern Pennsylvania and New Jersey, Witmer Stone, C. HART MERRIAM, 187; Visitors' Guide to the Local Collection of, in the Museum of Natural History, New York City, Frank M. Chapman, C. HART MERRIAM, 189; of Eastern North America, Frank M. Chapman, C. HART MERRIAM, 437; Land and Game, of New England, H. D. Minot; C. H. M., 495; Our Native, of Song and Beauty, H. Nehrling, C. H. M., 577; Collection of W. E. D. Scott, 722
 Black Knot of Plums and Cherries, 510
 BOAS, FRANZ, On Dr. William Townsend Porter's Investigations of the Growth of the School Children of St. Louis, 225; Growth of First-born Children, 402
 Boedeker, K., Death of, 364
 Bolles, Frank, At the North of Bearcamp Water, W. T. DAVIS, 80
 Bologna, Gold Medal of Academy of Sciences, 693
 Books for Sale, 166
 Bosanquet, R. C., Craven Studentship, 585
 Boston Society of Natural History, 308, 532, 588

- Botanical, Books at Auction, 666; Gazette, 82, 140, 252, 364, 503, 642; Society of America, 80; Society, Italian, 500; Garden Missouri, WM. TRELEASE, 716
- Botanists, Directory of Living, 696
- Botany, Bibliography of American, 139; Teaching, W. J. BEAL, 355; Laboratory Exercises in, Edson S. Bastin, S. E. JELLIFFE, 358; Memoirs from the Department of Columbia College, 363; Structural, An Introduction to, H. D. Scott, ALBERT SCHNEIDER, 443; Introduction to, Volney M. Spalding, W. P. WILSON, 496; Field, Forest and Garden, Asa Gray, N. L. B., 527, Systematic, E. Warming, N. L. B., 550
- BOWDITCH, H. P., A Card Catalogue of Scientific Literature, 182
- Boyle, David, Primitive Man in Ontario, 218
- BRADBURY ROBERT H., Theoretical Chemistry, W. Nernst, 579
- Brauner, B., Argon, 445
- Bray, Wm. L., Amaranthaceæ, 504
- BRINTON, DANIEL G., The Character and Aims of Scientific Investigation, 3; Current Notes on Anthropology, New Series (I.), 47; (II.), 72; (III.), 126; (IV.), 253; (V.), 404; (VI.), 455; (VII.), 488; (VIII.), 544; (IX.), 649; American Folk-Lore Society, 101; The Archæology of Southern Florida, 207; The Pygmies, A de Quatrefages, 443
- Brinton, Daniel G., A Primer of Mayan Hieroglyphics, 27; FREDERICK STARR, 326; Proto-Historic Ethnography of Western Asia, 696
- Brisson's Genera of Mammals, 1762; C. HART MERRIAM, 375
- British, Association for Advancement of Science, 139, 472, 556, 637; Astronomical Association, 692; Medical Association, 278, 417; Museum, 694
- Britton, N. L., Undescribed Ranunculus, 306
- Brooker, A. and Slingo W., Electrical Engineering for Electric Light Artisans and Students, F. B. CROCKER, 299
- Brooks, Alfred H., Crystalline Rocks, 669
- BROOKS, W. K., An Inherent Error in the Views of Galton and Weismann on Variation, 121; Der Monismus, Ernst Haeckel, 382
- Brooks, W. K., 166 Environment and Variation, 38; Sensory Clubs of Certain Coelenterates, 335; Conrad Gesner, 529
- Brorsen, Theodor, Death of, 667
- Brown, Addison, Address by, 82
- Brummer, Johannes, Death of, 473
- Buchan, Alexander, Oceanic Circulation, 505
- Buchanan, Sir George, Death of, 640
- Buckland, William, The Life and Correspondence of, Mrs. Gordon, A. S. PACKARD, 329
- Bulletin of the American Mathematical Society, 28, 336, 392; of the Torrey Botanical Club, 168, 308, 448, 530, 532; of the St. Petersburg Academy of Sciences, 220
- BUMPUS, HERMON C., Laboratory Teaching of Large Classes Zoology, 41, 260
- Butler, N. M., Addresses, 390, 722
- Butterflies and Moths, W. Furneaux S. H. S., 443
- Byron, John W., Death of, 585
- C., H. W., Dairy Bacteriology, H. L. Russell, 189
- C., J. T., Science in Canada, 379, 628, 653; Sir William Dawson, 446
- Caddis-fly in the Permian Beds of Bohemia, 220
- California, Appropriation for the University of, 499, Food-products, 584
- CALKINS, GARY N., Systematische Phylogenie der Protisten und Pflanzen, Ernst Haeckel, 272
- Call, Richard Ellsworth, The Life and Writings of Constantine Samuel Rafinesque, G. BROWN GOODE, 384
- Calvin, S., Geological Photographs, 390
- Cambridge, University of, 27; Scientific Instrument Company, 696
- Cameil, Louis Florentin, Death of, 499
- Can an Organism without a Mother be Born from an Egg? W. K. B., 162
- Canada, Science in, J. T. C., 379, 628, 653
- Canadian, International Exposition, 390; Royal Society's Annual Meeting, J. T. C., 653
- Cancer, Treatment of, 583
- Cape Canaveral, The Migration of, 606
- CARHART, HENRY S., The Educational and Industrial Value of Science, 393
- Carniverous Plants, 165
- Carolina, Appropriation for the University of N, 333
- Carter, Surgeon-Major, Death of, 615
- Casey, Thomas L., Retirement of, 584
- Catalogue of Scientific Literature, A Card, H. P. BOWDITCH, 182; HENRY ALFRED TODD, 297; W. J. MCGEE, 353; and Congress, An International Scientific, HORATIO HALE, 324; J. S. BILLINGS, 407
- CATTELL, J. MCKEEN, The Princeton Meeting of the American Psychological Association, 42
- Cattell, J. McKeen, Distribution of Exceptional Ability 43; Bodily and Mental Tests, 727
- Catholic University, Washington, Bequest, 556
- Caucasic Linguistic Stock, 455
- Cayley, Arthur, Death of, 166; GEORGE BRUCE HALSTED, 450
- Chagas, Manuel Pinheiro, Death of, 615
- 'Challenger,' Report on, 417
- Chamberlain, Chas. J., Aster Novæ-Angliæ, 643
- Chamberlin, T. C., Glaciation of Newfoundland, 63; Recent Glacial Studies in Greenland, 66
- Chambers, G. F., The Story of the Stars, DAVID P. TODD, 552
- Chapman, Frank M., Visitors' Guide to the Local Collection of Birds in the Museum of Natural History, New York City, C. HART MERRIAM, 189; The Mammals of Florida, F. W. T., 219; A Handbook of the Birds of Eastern North America, C. HART MERRIAM, 437
- Chapman, T. A., Classification of Butterflies, 663
- Charities and Corrections, Conference of, 530
- Chatelier, H. L., Le Grisou, CHARLES PLATT, 79.
- Chemical, Analysis, Fr. Rudorff, EDWARD HART, 137, Analysis, Qualitative, of Inorganic Substances, EDGAR F. SMITH, 415; Society (London), Annual Meeting of, W. W. R., 606
- Chemie, Carl Arnold, EDWARD H. KEISER, 526
- Chemischen Dynamik, Eine Discussion der Kräfte der, Ludwig Stettenheimer, H. C. JONES, 271
- Chemistry, Organic, Carl Schorlemmer, EDGAR F. SMITH, 163; A Laboratory Manual, W. R. Orndorff, FELIX LENGFELD, 469; A Laboratory Guide, George Willard Benton, W. R. O., 611; A Text-book of Organic, A. Bernthsen, FELIX LENGFELD, 272; A Short History of, F. P. Venable, W. A. NOYES, 469; Theoretical, W. Nernst, ROBERT H. BRADBURY, 579
- Chester, A. H., Crystals, 700
- Chicago, University of, Degrees, 722

- Childhood, International Congress on, 220.
 Christie, W. H. M., Honorary Freedom of Spectacle Company, 641
 CLARK, WILLIAM B., The Geological and Natural History Survey of Minnesota, Vol. III., Paleontology, 658
 Clark, William B., Cretaceous Deposits, 64; Marginal Development of the Miocene, 66
 Classification of Skulls, HARRISON ALLEN, 381; G. SERGI, 658
 Cleghorn, Hugh Francis Clarke, Death of, 667
 Clouds, The Motion of, 471
 Cold and Snowfall in Arabia, 568
 Coldspring Harbor Laboratory, A. A. A. S. Tables, 277
 College of the City of New York, Appropriation, 249
 Collet, R., The Norway Lemming, C. H. M., 690
 Color Association with Numerals, E. S. HOLDEN, 576
 Colorado College, Summer School, 722
 Colored Race in the United States, The Future of, 256
 Composition of Expired Air and its Effects upon Animal Life, D. H. BERGEY, S. WEIR MITCHELL, J. S. BILLINGS, 481
 Congrès des Sociétés Savantes, 613
 CONN, H. W., Materials for the Study of Variation, William Bateson, 23; Elementary Practical Biology, Charles Wright Dodge, 78; Biological Lectures and Addresses, Lectures on the Darwinian Theory, Arthur Milnes Marshall, 413
 Connecticut Sandstone Group, C. H. FITCHCOCK, 74
 Conway, William, Karakoram Himalayas, 472
 Cook, A. H., A. E. Shipley, F. R. C. Reed, The Cambridge Natural History, III., W. H. DALL, 610
 Coplin, W. M. L., Appointment of, 584
 Coppée, Henry, Death of, 364
 Correspondence, 182, 239, 297, 324, 353, 381, 406, 433, 457, 490, 519, 546, 575, 608, 632, 656, 682, 716
 Cotton States and International Exposition, 557
 COUES, ELLIOTT, The Genus *Zaglossus*, 610; Illustrations in the Standard Natural History, 682
 Coues, Elliott, Zebulon Montgomery Pike, 640
 Coutie, William, The Earth's Atmosphere, EDWARD HART, 360
 Coville, Frederick V., List of Ferns and Flowering Plants N. E. United States, 419; A Reply, 504
 Cox, C. F., Diatom Structure, 167
 Coxe, Eckley B., Death of, 585
 Crane, Miss Agnes, Brachiopoda, 555
 Craniology, Publications on, 128; Studies in, 405
 Crawford, A. C., Cachexia Tyreopriva in Dogs, 114
 CROCKER, F. B., Electrical Engineering, W. Slingo and A. Brooker, 299
 Croll's Glacial Theory, 570
 CROSS, WHITMAN, Geological Society of Washington, 558, 668
 Cross, Whitman, The Geology of Cripple Creek, 559
 Crowley's Ridge, 605
 Cuneiform Inscriptions, 455
 Cunningham, R. H., Photo-Micrography, 167
 Curtis, J. G., Galen's Treatise on Practical Anatomy and Experimental Physiology, 114
 Cushing, H. P., The Faults of Chazy Township, 58
 Cuspate Capes of the Carolina Coast, 605
 DALL, W. H., The Cambridge Natural History, III., A. H. Cook, A. E. Shipley, F. R. C. Reed, 610
 Dana, Charles N., Address of, 26
 Dana, James D., 333, 472, 489, 545; A Manual of Geology; JOSEPH LE CONTE, 548
 Darton, N. H., Peridotite at Dewitt, 65; Sedimentary Geology, 66; Salina Formation at De Witt, 700
 Darwin, From the Greeks to, Henry Fairfield Osborn; A. S. PACKARD, 21
 Darwinian Theory, Lectures on, Arthur Milnes Marshall; H. W. CONN, 413
 Darwinism and Race Progress, John Berry Haycraft; GEO. ST. CLAIR, 467
 DAVIS, W. M., Current Notes on Physiography (I.), 174 (II.), 257 (III.), 292 (IV.), 318 (V.), 487 (VI.), 505 (VII.), 568 (VIII.), 605 (IX.), 651 (X.), 678; National Geographic Monographs, J. W. Powell, 439; The Education of the Topographer, 546
 DAVIS, W. T., Bearcamp Water, Frank Bolles, 80
 Dawson, George M., Appointment of, 139; Rocky Mountains, 700
 DAWSON, SIR WILLIAM, The Rivers of Eden, 575
 Dawson, Sir William, Retirement of, J. T. C., 446
 Deaf and Dumb Institution, New York, 446
 DEAN, BASHFORD, The New York Academy of Science, 167, 306
 Deane, Walter, My Herbarium, 503
 Decerebrized, The Frog not Brainless but, BURT G. WILDER, 632
 Deer, The Earliest Generic Name of an American, C. HART MERRIAM, 208
 Degeneration, Max Nordau, J. S. BILLINGS, 465
 Density and Diameter of Terrestrial Planets, E. S. WHEELER, 424
 Desmognathus fusca, The Central Nervous System of, Pierre A. Fish, C. H. M., 496
 Detasseling Corn, 510
 Development, National versus Individual, 650
 Devonian Limestone-Breccia in Southwestern Missouri. OSCAR HERSHEY, 676
 Dictionary, An Illustrated, of Medicine, Biology and Allied Sciences; George M. Gould, 216
 DILLER, J. S., Scientific Societies of Washington, 586
 Diphtheria, The New Serum Treatment of, 48, Milk in its Relation to, 164
 Discrimination of Colors, 471
 Distribution of Butterflies, 303; of Animals and Plants, Merriam on the, 318; of the Blow Gun, WALTER HOUGH, 425; Sledges, ORIS T. MASON, 490; and Secular Variation of Terrestrial Magnetism, L. A. BAUER, 673
 Dixon, S. G., Actinomyces, 447
 Dodge, Charles Wright, Introduction to Elementary Practical Biology, H. W. CONN, 78
 Dolbear, A. E., Magnetic Waves, 165
 DOLLEY, CHARLES S., Biological Lectures delivered at the Marine Biological Laboratory, 244
 d'Orleans Duke, Presentation of Collection, 390
 Dorsey, James Owen, W J M, 208
 DOUGLASS, A. W., St. Louis Academy of Science, 503
 Douglass, A. E., Telescope and Dome, 616
 Downing, A. J., Memorial to, 696
 Drysdale, I. H. and A. A. Kanthack, A Course of Elementary, Practical Bacteriology, 416
 DUMBLE, E. T., Volcanic Dust in Texas, 657
 Dumble, E. T., The Cretaceous, 65
 Duner, N. C., *Z Herculis*, 474
 Durham, Arthur E., Death of, 640
 Earthquakes, 695
 Eaton, Darwin G., death of, 364
 Echidna, The Generic Name of the Three Toed T. S. PALMER, 518

- Eden, Where was the Garden of, D. G. BRINTON, 488; The Rivers of, SIR WILLIAM DAWSON, 575
- Educational, Review, 333; National Association, 722
- Egg, Can an Organism without a Mother be Born from an, W. K. B., 162
- Egyptian Publications, 694
- Elasticität und Festigkeit, C. Bach, MANSFIELD MERRIMAN, 688
- Electric Measure, Legal Units of, T. C. MENDENHALL, 9
- Electrical, Engineers. American Institute of, 28; Street Railways, The Testing of, 217; Engineering, W. Slingo and A. Brooker, F. B. CROCKER, 299; Apparatus, 723
- Electriciens, Société Internationale des, 26
- Electricity, and Magnetism, 28; Elementary Lessons in; Sylvanus T. Thompson, T. C. M., 187; One Hundred Years ago and to-day, Edwin J. Houston, T. C. M., 216
- Electrification of Air, LORD KELVIN, 589
- Électriques, Les Oscillations, H. Poincaré, M. I. PUPIN, 102, 131
- Elevation as a Cause of Glaciation, 679
- Elihu Thompson Prize, 190, M., 240
- Ellis, Havelock, Normal Psychology, 418
- Elmira Reformatory, 26
- Elsass, Adolf, Death of, 667
- Emotions, 45
- Engine, Construction, Model, J. Alexander, R. H. T. 109; The Steam and Other Heat Engines, J. A. Ewing, R. H. THURSTON, 136; Steam and the Marine Steam, John Yeo, R. H. THURSTON, 328; New Quadruple Expansion, 664
- Engineering, Magazine, 82; Education, Proceedings of the Society for the Promotion of, R. H. T., 580
- Engineers, American Society of Civil, 84
- Engineer's Pocket Book, The Mechanical, William Kent, R. H. THURSTON, 634
- Englishmen, the Earliest, 126
- Entomological Society, The New York, 84; of Washington, L. O. HOWARD, 560, 726
- Entomologists, Daily Post Card, 191; Losses by fire among, 303
- Entomology, 191, 220, 277, 303, 663
- Entwickelungsmechanik der Organismen, Archiv für, 110
- Ethics, Program for the School of Applied, 557
- Ethnography of Western Asia, 406
- Ethnological Jurisprudenz, Grundriss der, Albert Hermann Post, D. G. B., 25
- Evolution, the Plant Individual in the Light of, L. H. BAILEY, 281
- Ewing, J. A., The Steam Engine and Other Heat Engines, R. H. THURSTON, 136
- Experiment Station Record, 680
- Fairchild, H. L., Glacial Lakes, 61
- Fernald, H. T., Homoplasy, 70
- Ferri, Luigi, Death of, 446
- Finger Prints, 82
- Firth, R. H., Hygiene, 216
- Fish Commissioners Report from Michigan, 361
- Fish, Pierre A., The Central Nervous System of Desmognathus Fusca, C. H. M., 496; Adult Nervous System of the Salamander, 335
- Fiske, John, Lectures on Evolution, 499
- Fitch, Robert, death of
- Fleming, M., Stars Having Peculiar Spectra, 616
- Flora of Nebraska, N. L. B., 25; Origin of Our Vernal, JOHN HARSBERGER, 92; Harshberger on the Origin of Our Vernal, CHARLES ROBERTSON, 371
- 'Fly Belt' in Africa, 568
- Föhn-like East Winds in Africa, 570
- Folk-Lore, The American, Society, D. G. BRINTON, 101; New York Branch, WM. B. TUTHILL, 473
- FONTAINE, WM. M., Mesozoic Plants From Kōsuke Kii, Awa and Tosa, Metajiro Yokoyama, 525
- Forestry and Economic Botany, 275; E. F. S., 557; Forestry Association, 586
- Forests and Torrents, 680
- Fossil, Vertebrates of Argentina, 497; Mammals of the Puerco Beds, Henry Fairfield Osborn and Charles Earle, W. B. SCOTT, 660.
- Foster's, Prof. Michael, Abridged Physiology, 724
- Franklin, C. L., The Retina, 46; The Fovea 115
- Franklin, Fabian, Retirement of, 695
- Franklin, W. S., Magnetic Properties of Iron, 672
- French Opinion, A, 180
- Furneaux, W., Butterflies and Moths, S. H. S., 443
- Galton's Method of Isogens, 257
- Galton, Francis, Organic Stability, 498; honorary degree, 614
- Gannett, Henry, A Manual of Topographic Methods, W. M. DAVIS, 179; MANSFIELD MERRIMAN, 464
- GANONG, W. F., The Laboratory Teaching of Large Classes in Botany, 41, 230
- Ganong, W. F., Cactaceae, 503, 643
- Geikie, Sir Archibald, Memoir of Sir Andrew Crombie Ramsay, JOSEPH LE CONTE, 490; Member of Vienna Academy, 724
- Geikie, James, The Great Ice Age and its Relation to the Antiquity of Man, W. M. DAVIS, 260; C. H. HITCHCOCK, 408
- Generic Names of the Three-Toed Echnida, T. S. PALMER, 518
- Geographic, Distribution of Life, Laws of Temperature Control of the, 53; Monographs, National, 258; J. W. Powell, W. M. DAVIS, 439; Society, 307; National, EVERETT HAYDEN, 501; Annual Business Meeting, 665
- Geographica, Biblioteca, 613
- Geographical, Congress, International, 110, 257; Prizes, 258; Journals, American, 506; Journals, Foreign, 507
- Geographisches Jahrbuch, Wagner's, 507
- Geologic Atlas of the United States, W. M. DAVIS, 259; J. W. Powell, ANDREW C. LAWSON, 717
- Geologischer Querschnitt durch die Ostalpen, A. Rothpletz, ANDREW C. LAWSON, 522
- Geological, Society of America, the Baltimore Meeting of the, J. F. KEMP, 57; of Washington, WHITMAN CROSS, 84, 251, 558, 668; Survey, Appropriations for the U. S., 362; of Maine, 418; The University of Kansas, F. H. SNOW, 576; Society, 698
- Geology, 219, 278; Manual of, James D. Dana, JOSEPH LE CONTE, 548; Columbia Department of, 530; at the University of Chicago, 725
- Geomorphology of the Southern Appalachians, 176
- GERRISH, FREDERICK HENRY, The Best Order of Topics in a Two Years' Course of Anatomy in a Medical School, 312
- Gilbert, G. K., Formation of Lake Basins by Wind, 59, and F. P. Gulliver, The Tepee Buttes, 59; Cretaceous Time, 64; Gravity Measurements, 583
- GILL, THEO., The Lowest of the Vertebrates and their Origin, 645

- Gill, Theo., On the Torpedoes, 502; Ceratodontidae, 725
 GILMAN, D. C. Scriptoribus et Lectoribus, Salutem, 2
 Gilman, D. C., Address of, 39, 390
 GILPIN, ELLIOTT J., The Preparation of Argon, 582;
 The American Chemical Journal, 642
 Gizycki, Georg von, death of, 364
 Glacial Origin of Lake Basins, 651
 Glasgow, Gift to the University, 697
 Glazebrook, R. T., Heat, Light, T. C. MENDENHALL,
 215
 Glogau, G., death of, 446
 Glow Lamps, Tests of, W. E. Ayrton and E. A. Med-
 ley, T. C. M., 662
 GOODE, G. BROWN, America's Relation to the Ad-
 vance of Science, 4; The Life and Writings of
 Constantine Samuel Rafinesque, Richard Ells-
 worth Call, 384; The Ideal Index to Scientific
 Literature, 433
 Goode, G. Brown, Deep Sea Fishes, 501, 531; Location
 and Record of Natural Phenomena, 725
 Gophers, Pocket, C. Hart Merriam, J. A. ALLEN,
 241; Vernon Bailey, J. A. ALLEN, 659
 Gordon, Mrs., The Life and Correspondence of Wil-
 liam Buckland, A. S. PACKARD, 329
 GOULD, B. A., S. NEWCOMB, A. HALL, National Acad-
 emy of Sciences Report of the Watson Trustees
 on the Award of the Watson Medal to Seth C.
 Chandler, 477
 Gould, George M., Illustrated Dictionary of Medi-
 cine, Biology and Allied Sciences, 216
 Graduate Courses, 724
 Graf, Arnold, Leeches, 70; The Excretory System of
 Clepsene and Nephelis, 306
 'Gran Chaco,' The Tribes of, 126
 Grant, U. S. and H. V. Winchell, Preliminary Re-
 port on the Rainy Lake Gold Region, 331
 Grasses of Tennessee, Pt. II., F. Lamson Scribner,
 N. L. B., 55
 Gravity Measurements, HERBERT G. OGDEN, 571; 583
 Gray, Asa, Field, Forest and Garden Botany, N. L.
 B., 527.
 GRAY, THOMAS, The Ballistic Galvanometer and
 its Use in Magnetic Measurements, 533
 Greene, Andrew H., Historic and Scenic Places, 500
 Greenhill, Alfred George, A Treatise on Hydrostatics;
 R. S. WOODWARD, 269
 Gregory, Richard A., The Planet Earth, T. C. M.,
 243
 Grisou Le., H. Le Chatelier, CHARLES PLATT, 79
 Griswold, L. S., Nomenclature of Siliceous Rocks, 62
 Growth, of the School Children of St. Louis, On Dr.
 William Townsend Porter's Investigations of,
 FRANZ BOAS, 225; of First-born Children,
 FRANZ BOAS, 402
 Guatamalian Antiquities, 255
 Haeckel, Dr. Ernst, 28; Systematische Phylogenie
 der Protisten und Pflanzen, GARY N. CALKINS,
 272; Der Monismus als Band zwischen Religion
 und Wissenschaft; Glaubens Bekenntniss eines
 Naturforschers, W. K. BROOKS, 382; DAVID
 STARR JORDAN, 608
 Hageman, S. G., Egyptological Work, 613
 Hale, George E., Solar Corona, 475
 HALE, HORATIO, An International Scientific Cata-
 logue and Congress, 324
 HALL, A., S. NEWCOMB, B. A. GOULD, National
 Academy of Sciences; Report of the Watson Trus-
 tees on the Watson Medal to Seth C. Chandler, 477
 Hall, C. W., The Pre-Cambrian Floor of the North-
 western States, 63
 HALLOCK, WILLIAM, Physics, 247, 248; Physiolog-
 ical Physics, 301; New York Academy of Sciences
 447
 Hallock, William, Photographic Method of Compar-
 ing the State of Vibration of Two Tuning Forks,
 221
 HALSTED BYRON D., Notes on Agriculture, (I.), 376;
 (II.), 509; (III.), 680
 Halsted, Byron D., English Ivy, 530
 HALSTED, GEORGE BRUCE, Tchëbychev, 129; Original
 Research and Creative Authorship the Essence of
 University Teaching, 203; Russian Science Notes,
 277; Arthur Cayley, 450; The International
 Mathematical Congress, 486; James Edward
 Oliver, 544
 Hansen, Hemimerus, 191
 Hanshofer, Karl, Death of, 109
 HARKNESS, WILLIAM, On the the Magnitude of the
 Solar System, 29
 Harrington, Mark W., Rainfall Charts of the United
 States, 319; Climatology, 500
 Harrison, Charles C., Gift to the University of Penn-
 sylvania, 666
 Harrison, J. E., Degree of LL. D., 614
 HARSHBERGER, JOHN, Origin of Our Vernal Flora,
 92
 Harshberger on the Origin of Our Vernal Flora,
 CHARLES ROBERTSON, 371
 HART, EDWARD, Chemical Analysis, Fr. Rudorff,
 137; The Earth's Atmosphere, William Coutie,
 360
 HARTOG, MARCUS, On Certain Habits and Instincts
 of Social Insects, 98
 Harvard University Infirmary, 614
 Haycraft, John Berry, Darwinism and Race Pro-
 gress, GEO. ST. CLAIR, 467
 HAYDEN, EVERETT, National Geographic Society, 501
 Hayes, C. W., Geology of the Cartersville Sheet, 668
 HAZEN, H. A., Magnetism and the Weather, 234
 Heat, R. T. Glazebrook; T. C. M., 215
 Helion, 445, 582
 Helmholtz, H., 55, 333; Memorial, 499, 612, 721,
 HUGO MÜNSTERBERG, 547
 Henry Morris, Death of, 641
 Herbarium of Rousseau, 614
 Herriek, C. L., Modern Algedonic Theories, 672;
 Cerebellum, 672
 HERRICK, FRANCIS H., Notes on the Biology of
 the Lobster, 72, 263, 382
 HERSHEY, OSCAR, On a Devonian Limestone-Breccia
 in Southwestern Missouri, 676
 Hill, R. T., 249, Rica and Panama, 501
 Hirschfeld, Gustav, Death of, 555
 History, of Religions, 27; the Five Books of, J. W.
 POWELL, 157
 HITCHCOCK, C. H., The Connecticut Sandstone Group,
 74; The Great Ice Age and Its Relation to the
 Antiquity of Man, James Geikie, 408
 Hitchcock, C. H., Highland Level Gravels in North-
 ern New England, 60
 Hobbs, W. H., Borneol and Isborneol, 700
 Hodge, C. F., Growth of Yeast, 116; Daily Activity of
 Animals, 116
 HOLDEN, EDWARD S., A Large Reflector for the Lick
 Observatory, 457; A General Subject-index to
 Periodical Scientific Literature, 520; Color Asso-
 ciation with Numerals, 576

- Holden, Edward S., Mars, 529; Decoration, 615
Holm, Theo., Edema of Violet Leaves, 334
Horticultural Congress, 697
Horticulturalists' Rule-Book, L. H. Bailey, 682
Horticulture, Electro, 376
Hospitals, The Cooling of, 192
HOUGH, WALTER, Distribution of Blow Gun, 425
Houston, Edwin J., Electricity One Hundred Years Ago and To-day, T. C. M., 216
HOWARD, L. O., Entomological Society of Washington, 560, 726
Howard, L. O., Some New Scale Parasites, 560
Howe, Henry Marion, Bessemer Gold Medal, 586
HOWE, JAMES LEWIS, The Liquefaction of Gases—A Controversy, 542
Hubbard, Gardiner G., Russia, 555, 686
Huber, G. Carl, Loss of Nerve Substance in Peripheral Nerves, 117
Hudson River Palisades, 530
Huggins, William, Modern Spectroscope, 615
Hulke, J. W., Death of, 304
Humanities, The, J. W. POWELL, 15
Humphrey, J. E., Cell Literature, 643
HYATT, ALPHEUS, The Laboratory Teaching of Large Classes, 197
Hydrostatics, A Treatise on, Alfred George Greenhill, R. S. WOODWARD, 269
Hygiene, 48, I. Lane Nottter and R. H. Firth, 216

Ice Age, The Great, and its Relation to the Antiquity of Man, James Geikie, C. H. HITCHCOCK, 408
Icones fungorum ad usum Sylloges Saccardianæ Accommodatæ, A. N. Berlese, JOSEPH F. JAMES, 528
IHERING, H. VON, On Marine Mollusks from the Pampean Formation, 421
Illustrations in the Standard Natural History, ELLIOTT COUES, C. HART MERRIAM, 682
Index, Medicus, 109; Ideal, to Scientific Literature, G. BROWN GOODE, 433
Indiana Academy of Science, 221
Indiscriminate 'Taking,' PETER T. AUSTEN, 209
Infectious Diseases, Explanation of Acquired Immunity from, GEORGE M. STERNBERG, 346
Ingen, C. van, Cambrian Faunas, 670
Inheritance, A Dynamical Hypothesis of, JOHN A. RYDER, (I.), 597; (II.), 617
Initial Capital, Use of the, in Specific Names of Plants, F. H. KNOWLTON, 423
Insect Life, 584
Insects, On Certain Habits and Instincts of Social, MARCUS HARTOG, 98
Instinct, Lloyd Morgan upon, H. F. O., 712
Institution of Naval Architects, 499
Intestinal Fluke, New Species of, 276
Introductory Note, W. M. DAVIS, 174
Invention, The Evolution of, O. T. MASON, 50; Similar, in Areas Wide Apart, O. T. MASON, 235
Iowa Academy of Sciences, 111
Iron Mountain Sheet, Arthur Winslow, J. D. R. 330

JAMES, JOSEPH F., Descriptions des ravageurs de la vigne, Henri Jolicoeur, 527; Icones fungorum ad usum Sylloges Saccardianæ Accommodatæ, A. N. Berlese, 528
James, Joseph F., Daimonelix and Allied Fossil, 420;
James, W., Unity of Consciousness, 44
Janet, Ch., Myrmica rubra, 303

Japan, Journal of the University, 696
Japanese, The Ethnic Affiliations of, 47
JELLIFFE, S. E., Laboratory Exercises in Botany, Edson S. Bastin, 358
Jenny, W. P., fossil plants, 137
Jewell, Lewis E., Spectrum of Mars, 475
John Dalton and the Rise of Modern Chemistry, Sir Henry E. Roscoe, EDWARD H. KEISER, 686
Johns Hopkins University, Circular, 166; Degrees, 695; Appointments in, 697; Prize, 723; Lectures at, 723; Gifts in Memory of Prof. George H. Williams, 723
John, J. P. D., Resignation of, 615
Joint Commission of the Scientific Societies of Washington, 333; program of the, 390
Jolicoeur, Henri, Descriptions des ravageurs de la vigne, JOSEPH F. JAMES, 527
JONES, H. C., Eine Discussion der Kräfte der Chemischen Dynamik, Ludwig Stettenheimer, 271
JORDAN, DAVID STARR, Haeckel's Monism, 608
Journal, of the American Chemical Society, 252, 280, 392; of Geology, 252, 448; of Morphology, 335; of Comparative Neurology, 672
Julius, P., Systematic Survey of the Organic Coloring Matters, IRA REMSEN, 186

Kansas, Permo-Carboniferous and Permian Rocks of, CHARLES S. PROSSER, 275; University Field Work of, 500
Kanthack, A. A. and I. H. Drysdale, A Course of Elementary Practical Biology, Including Bacteriological Analyses and Chemistry, 416
Karakoram Himalayas, 472
KEELER, JAMES E., Spectroscopic Observations of Saturn at the Allegheny Observatory, 519.
Keeler, James E., Saturn, 616
KEISER, EDWARD H., Repetitorium der Chemie, Carl Arnold, 526; John Dalton and the Rise of Modern Chemistry, Sir Henry E. Roscoe, 686
Keith, Arthur, The Appalachians, 58
KELVIN, LORD, On the Electrification of Air; On the Thermal Conductivity of Rocks at Different Temperatures, 589
Kelvin, Lord, Popular Lectures and Addresses, T. C. MENDENHALL, Vol. II., Geology and General Physics, 50
Kemp, G. T., Extraction of Blood Gases, 117
KEMP, J. F., The Baltimore Meeting of the Geological Society of America, 57; The New York Academy of Sciences, 193, 279, 391, 669, 727
Kemp, J. F., Crystalline Limestones, 63; Petrography of Peridotite at DeWitt, 65; Iron Ore Bodies, 669
Kent, William, The Mechanical Engineer's Pocket Book, R. H. THURSTON, 634
Keyes, Charles R., The Ozark Uplift, 59
Kingsley, J. S., Bibliographical Project, 39; Pauro-pida, 71
Kirkwood, Daniel, Death of, 694
KNOWLTON, F. H., Use of the Initial Capital in Specific Names of Plants, 423
König, Arthur, Discrimination of Colors, 471
Kräfte der Chemischen Dynamik, H. C. JONES, 271
Kreider, D. A., Perchloric Acid, 700
Kulz, Prof., Death of, 220
KÜMMEL, HENRY B., Some Meandering Rivers of Wisconsin, 714
Kundt, death of, 55
Kunz, George F., 109; Seals, 279

- Laboratory Teaching of Large Classes, ALPHEUS HYATT, 40, 197; In Botany, W. F. GANONG, 230; Zoölogy, HERMON C. BUMPUS, 260
- Ladd, G. T., Double Consciousness, 43; Ethical Seminary, 723
- Lagoa Santa, ERWIN F. SMITH, 510
- Lake Superior Mining Institute Excursion, 418
- Lake Zurich, the Origin of, 651
- Land-Birds and Game Birds of New England, H. D. Minot, C. H. M., 495
- Landes und Volkeskunde, Forschungen zur Deutschen, 508
- Lane, Alfred C., The Relation of Grain to Distance from Margin in Certain Rocks, 61; Crystallized Slags from Copper Smelting, 62
- Langley, S. P., Hodgkin Fund Prizes, 109
- Language, the Origin of, 404
- Lankester, E. Ray, Lectures at Royal Institution, 614
- Latitude, Variation of, J. K. REES, 561
- Lauth, Prof., Death of, 304
- Lavoisier, Monument to, 697
- Lawrence, George N., Death of, C. HART MERRIAM, 268
- Law Schools of New York, 557
- LAWSON, ANDREW C., Die Ost Alpen, A. Rothpletz, 522; Geologic Atlas of the United States, 717
- Leaming, Edward, Micro-photographs, 167
- LE CONTE, JOSEPH, Memoir of Sir Andrew Crombie Ramsay, Sir Archibald Geikie, 490; A Manual of Geology, James D. Dana, 548
- LEE, FREDRICK S., Carl Ludwig, 630
- Lee, Frederick S., Equilibrium in Fishes, 118; Appointment of, 585
- Leidy, Joseph, Bust of, 724
- Lemming, The Norway, R. Collett, C. H. M., 690
- LENGFELD, FELIX, Organic Chemistry, A. Bernthsen, 272; A Laboratory Manual in Organic Chemistry, W. R. Orndorff, 469
- Ley's Cloudland, 678
- Libraries of New York, 304, 555
- Library Building at Harvard University, 417
- Lick Observatory, A Large Reflector for, EDWARD S. HOLDEN, 457; 555
- Light, R. T., Glazebrook, T. C. M., 215
- Lillie, Frank, Embryology of the Unionidae, 335
- Lindgren, Waldemar, Gold Quartz Veins, 68
- LINDSAY, THOMAS, The Astronomical and Physical Society of Toronto, 573
- Linnæan Society, 83, 696
- Liquefaction of Gases—A Controversy, JAMES LEWIS HOWE, 542
- Lister, Sir Joseph, Presentation of Albert Medal, 500
- Lobachévsky, Nicolai Ivanovich, A. Vasiliev, ALEXANDER ZIWET, 356
- Lobster, Notes on the Biology of, FRANCIS H. HERBICK, 263, 382
- Locy, William A., Primitive Metamerism, 68; Pineal Sense Organ, 69
- Locusts in Cyprus, 446
- LOMBARD, WARREN P., Proceedings of the American Physiological Society, 113
- Lombard, Dr., Death of, 249
- Lotsy, John P., Gift of Herbarium, 723
- Low, President Seth, A City University, 528; Gift to Columbia College, 554
- Lowest of the Vertebrates and their Origin, THEO. GILL, 645
- Lowell, Percival, Mars, 529, 616, 640
- LUCAS, F. A., Biological Society of Washington, 304, 418, 502, 586, 725
- Lucas, F. A., Abnormal Feet of Mammals, 305
- Ludwig, Carl, Death of, 528; FREDERIC S. LEE, 630
- Lydekker, Richard, The Royal Natural History, C. HART MERRIAM, 387
- M., The Elihu Thompson Prize, 240
- M., C. H., The Book of Antelopes, P. L. Selater and Oldfield Thomas, 389; The Land Birds and Game Birds of New England, H. D. Minot, 495; Desmognathus fusca, Pierre A. Fish, 496; Our Native Birds, H. Nehrling, 577; Birdcraft, Mabel Osgood Wright, 635; The Ornithology of Illinois, Robert Ridgway, 661; The Norway Lemming, R. Collett, 690; The Genus Reithrodontomys, J. A. ALLEN, 720
- M., T. C., Elementary Lessons in Electricity and Magnetism, Sylvanus P. Thompson, 187; Electricity, One Hundred Years Ago and To-day, Edwin J. Houston, 216; The Planet Earth, Richard A. Gregory, 243; Loss of Professor Milne's Seismological Apparatus, Library and Collection, 431; The Physical Review, 475; Tests of Glow Lamps, W. E. Ayrtton and E. A. Medley, 662
- M, W J, James Owen Dorsey, 208
- MCCCLINTOCK, EMORY, Past and Present of the American Mathematical Society, 85
- McDonald, J. Donnell, Expedition of, 139
- McDonald, W. C., Gift to McGill University, 555
- MCGEE, W J, A Catalogue of Scientific Literature, 353
- McGee, W J, Geology of Arizona, 59; Topographical Development of Sonora, 568
- McMurrick, J. Playfair, A Text-Book of Invertebrate Morphology, A. S. PACKARD, 493, 632
- Macdonald, A., Sensitiveness to Pain, 43
- MacFarlane A., on the Units of Light and Radiation, 248; Space Analysis, 302
- MacKenzie, A. S., Attraction of Crystalline and Isotropic Masses, 475
- MACMILLAN CONWAY, The Scientific Method and Modern Intellectual Life, 537
- Magnetic Waves, 165
- Magnetism and the Weather, H. A. HAZEN, 234
- Malarial Map of Italy, 556
- Mammals, Brisson's Genera of, C. HART MERRIAM, 375; of Florida, F. W. T., 219
- Marine Biological Laboratory, 516
- Markham, Clemens R., Antarctic Expedition, 557.
- Marshall, Arthur Milnes, Biological Lectures and Addresses, Lectures on the Darwinian Theory, H. W. CONN, 413
- Martin T. C., Herman von Helmholtz 333
- MASON, O. T., Similar Inventions in Areas Wide Apart, 235; The Distribution of Sledges, 490
- Mason, O. T., Origin of Culture, 640
- Masouty, General de, death of, 390
- Mathematical Society, Past and Present of the American, EMORY MCCCLINTOCK, 85; Annual Meeting of the American, 110; The International Congress, 110; GEORGE BRUCE HALSTEAD, 486; Papers for the, at Kazan, 664
- Mathematics, American Journal of, 168, 448
- Matter, The World of, Harlan H. Ballard, WYATT W. RANDALL, 553
- Matthew, W. D., Effusive and Dike Rocks, 670

- Matthews, A. P., Pancreatic Cell, 71, 118; Excretory Nerves, 118
- Matthews, Edward B., Granites of Pike's Peak, 62
- Mayan Hieroglyphics, Daniel G. Brinton, FREDERICK STARR, 326
- Mazamas, 499
- Maze, l'Abbe, Meteorological Observations, 501
- Mearns, Edgar A., Hares of Mexican Border, 698
- Mechanics, A Treatise on Theoretical, Alexander Ziwet, R. S. W., 20; An Historical Survey of the Science of, R. S. WOODWARD, 141
- Medical Schools, 556, 695; Journals in Russia, 584.
- Mediterranean, The Eastern, 506
- Medley, E. A., and W. E. Ayrton, Tests of Glow Lamps, T. C. M., 662
- Meehan, Thomas, Carniverous Plants, 165
- Meissel, E. D. F., death of, 500
- Meltzer, S. J., Cardio-oesophagoeal movements, 118
- MENDENHALL, T. C., Legal Units of Electric Measure, 9; Popular Lectures and Addresses, Vol. II., Geology and Physics, Lord Kelvin, 50; Heat, Light, R. T. Glazebrook, 215
- Mental Development in the Child and in the Race, 28
- MERRIAM, C. HART, Zoölogical Nomenclature, 18; Unity of Nomenclature in Zoölogy and Botany, 161; Birds of Eastern Pennsylvania and New Jersey, Witmer Stone, 187; Birds in the Museum of Natural History, New York City, Frank M. Chapman, 189; The Earliest Generic Name of an American Deer, 208; Brisson's Genera of Mammals, 378; The Royal Natural History, Richard Lydecker, 387; Birds of Eastern North America, Frank M. Chapman, 437; The Illustrations in the Standard Natural History, 682
- Merriam, C. Hart, Environment and Variation, 38; Temperature and Distribution, 53; Monographic Revision of the Pocket Gophers, J. A. ALLEN, 241; Distribution of Plants and Animals, 318; Mammals of the Pribilof Islands, 698; Short Tailed Shrews, 725
- MERRIMAN, MANSFIELD, A Manual of Topographic Method, Henry Gannett, 464; Elasticität und Festigkeit, C. Bach, 688
- Merritt, Ernest, Absorption of Certain Crystals in the Infra-Red, 671
- Mesopotamian Culture, The Antiquity of, 254
- Mesozoic Flora of Portugal compared with that of the United States, LESTER F. WARD, 337
- Mesozoic Plants from Kōsuka Kii, Awa and Tosa, Metajiro Yokoyama, WM. M. FONTAINE, 525
- Meteorological Reports, Argentine, 321
- Météorologique, Bureau Centrale, 678
- Meteorologische Zeitschrift, 569
- Meteorology, The Needs of, CLEVELAND ABBE, 181; A. L. ROTCH, 302
- Mexican Boundary, Remarking the, O., 349
- Mexican National Exhibition, 390
- Meyer, Lothar von, death of, 530
- Michigan, Academy of Sciences, 250; Bequest to the University, 584
- Microchemischen Analyse, Anleitung zur, H. Behrens, E. RENOUE, 636
- Microscopical Society of Washington, 641; New Jersey State, 699
- Mills, Wesley T., Psychic Development of Young Animals, 43; Cortex of the Brain, 118
- Mineralogical Club, New York, 474
- Minerva, 27
- Minnesota, Academy of Sciences, 473, 588; Publications of, 218; Fortnightly Scientific Club, University of Minnesota, 251; Grant to the Medical Department of the University, 584
- MINOT, CHARLES S., The Fundamental Difference between Animals and Plants, 311
- Minot Charles S., Work of the Naturalist in the World, 39, 530; Olfactory Lobe, 70; The Structural Plan of the Human Brain, 249
- Minot, H. D., Land Birds and Game Birds of New England, C. H. M., 70, 495
- 'Missing Link' Found at Last, 47
- Mississippi, Origin of, 294; Local Displacement of, 487
- Missouri Botanical Garden, 638
- MITCHELL, S. WEIR, Summary of Conclusions of a Report by Drs. D. H. Bergey, S. Weir Mitchell and J. S. Billings upon 'The Composition of Expired Air and its Effects upon Animal Life,' 481
- Mole, Brewer's, The Proper Scientific Name for, FREDERICK W. TRUE, 101
- Mollusks, On Marine, from the Pampean Formation, H. VON IHERING, 421
- Monistic Creed, The Tyranny of the, W. K. BROOKS, 382
- Montague Hyman, Death of, 304
- MONTGOMERY, HENRY, Volcanic Dust in Utah and Colorado, 656
- More, A. G., Death of, 473
- Morgan, C. Lloyd, Lectures on Instinct, 693
- Morgan, T. H., Unsegmented Eggs of Sea Urchins, 71
- Morphologie der Erdoberfläche, Penck's, 508
- Morphology, A Text-book of Invertebrate, J. Playfair McMurriek, A. S. PACKARD, 493, 632
- Mother, Can an Organism without a, be Born from an Egg, W. K. B., 162
- Munich, The Region about, 652
- Municipal Government in Great Britain, Albert Shaw, J. S. B., 578
- MÜNSTERBERG, HUGO, Helmholtz Memorial, 547, 612
- Murray, John, Report on Challenger, 417; Honorary Degree, 697
- Muscardine, Disease of Chinch Bugs, 509
- Naples Zoölogical Station, 249; American Students at the, H. F. OSBORN, 238
- National Academy of Sciences, 449; Report of the Watson Trustees on the Award of the Watson Medal to Seth C. Chandler, S. NEWCOMB, B. A. GOULD, A. HALL, 477
- National, University, A Proposed, 278, Ethnological Exposition, 499
- Natural History, Boston Society of, 84; The Royal, Richard Lydecker, C. HART MERRIAM, 387; 667; The Cambridge, III., A. H. Cook, A. E. Shipley F. R. C. Reed, W. H. DALL, 610
- Natural Science, 498
- Naturalists, The Baltimore Meeting of the American Society of, W. A. SETCHELL, 34; Philadelphia place of next meeting, 499; German Society of, 556; Directory, 695
- Naturforscher und Aerzte, Versammlung der Gesellschaft deutscher, 82
- Nehrling, H., Our Native Birds of Song and Beauty, C. H. M., 577
- Nernst, W., Theoretical Chemistry, ROBERT H. BRADBURY, 579
- Neumann, Franz, Death of, 668

- New Books, 28, 56, 84, 112, 140, 168, 196, 224, 252, 280, 308, 336, 364, 392, 420, 448, 476, 504, 532, 560, 588, 616, 644, 728
- Newark System, ISRAEL C. RUSSELL, 266
- Newbold, W. R., Associate Editor, 390
- NEWCOMB, S., To Our Readers, 1; B. A. GOULD, A. HALL; National Academy of Sciences, Report of the Watson Trustees on the Award of the Watson Medal to Seth C. Chandler, 477
- Newcomb, Simon, Associate of Académie des Sciences 724.
- Newell's Report on Agriculture by Irrigation, 258
- Newell, H. F., Argon, 616
- Newton, John, Death of, 528
- New York, Academy of Sciences, 28, 84, 220; BASHFORD DEAN, 167, 306; J. F. KEMP, 193, 279, 391, 669, 727; Annual Reception of, HENRY F. OSBORN, 321; WILLIAM HALLOCK, 447; Gift to the University of the City of, 640
- Nichols, E. S., and Mary C. Spencer, Influence of Temperature on Transparency of Solutions, 476
- Nomenclature, Zoölogical, C. HART MERRIAN, 18; Unity of, in Zoölogy and Botany, C. HART MERRIAM, 161
- Nordau, Max, Degeneration, JOHN S. BILLINGS, 465
- North Dakota State University, 417
- Notes and News, 26, 55, 80, 109, 137, 164, 190, 217, 249, 275, 303, 331, 361, 390, 416, 444, 470, 497, 528, 554, 581, 612, 636, 663, 692, 721
- Notter, I. Lane, Hygiene, 216
- NOYES, W. A., A Short History of Chemistry, F. P. Venable, 469
- O., Remarking the Mexican Boundary, 349
- O., H. F., Joints in the Vertebrate Skeleton, 581; Lloyd Morgan upon Instinct, 712
- O., W. R., Laboratory Guide, General Chemistry, George Willard Benton, 611
- Oceanic Circulation, Buchan's Challenger Report 505
- ODGEN, HERBERT G., Gravity Measurements, 571
- Oliver, James Edward, GEORGE BRUCE HALSTED, 544
- Onomatology, American, 72
- Organic Coloring Matters, A Systematic Survey of, G. Schultz and P. Julius, IRA REMSEN, 186
- Original Research and Creative Authorship the Essence of University Teaching, GEORGE BRUCE HALSTED, 203
- Orndorff, W. R., A Laboratory Manual Arranged to Accompany Remsen's Organic Chemistry, FELIX LENGFELD, 469
- Ornithology of Illinois, Descriptive Catalogue, Robert Ridgway, C. H. M., 661
- Orthoptera, The Need of a Change of Base in the Study of North American, SAMUEL H. SCUDDER, 19
- OSBORN, HENRY FAIRFIELD, American Students at the Naples Zoölogical Station, 238; Annual Reception of the New York Academy, 321
- Osborn, Henry Fairfield, From the Greeks to Darwin, A. S. PACKARD, 21; Environment and Variation, 35, and Charles Earle, Fossil Mammals of Puerco Beds, W. B. SCOTT, 660
- Owen, Richard, The Life of, Rev. Richard Owen, A. S. PACKARD, 209
- Oxford, University of, 27, 640, 697
- Oysters as a Means of Transmitting Typhoid Fever, 49
- Rev. Richard Owen, 209; The Life and Correspondence of William Buckland, Mrs. Gordon, 329; Invertebrate Morphology, J. Playfair McMurrick, 493, 632
- Packard, A. S., Observations on Siphonaptera, 191
- Paleobotany, 137
- Paleontology, 445, The Geological and Natural History Survey of Minnesota, Vol. III., WILLIAM B. CLARK, 659
- PALMER, T. S., The Generic Name of the Three-toed Echidna, 518
- Parker, George W., Elements of Astronomy, C. A. Y., 415
- Parkman, Francis, Memorial to, 304
- Paronymy, The Progress of, BURT G. WILDER, 515
- Passaic, The Extinct Lake, 487
- Payer, Julius von, Expedition for Polar Research, 640
- Pear Blight, M. B. WAITE, 721
- Pearson, D. K., Gift to Mt. Holyoke College, 667
- Peary Relief Expedition, 614
- Peck, Dr., Death of, 500
- PECKHAM, ADELAIDE WARD, and J. S. BILLINGS, The Influence of Certain Agents in Destroying the Vitality of the Typhoid and of the Colon Bacillus, 169
- Peckham, Mr. and Mrs., Spiders, 191
- Penck's Morphologie der Erdoberfläche, 508
- Peruvian Civilization, The Sources of, 650
- Pestalozzi, Letters of, 697
- Pfaff, Franz, Rhus toxicodendron and Rhus venenata, 119
- Philadelphia Academy of Natural Sciences, 251, 447
- Philips, Jr. Henry, death of, 697
- Philosophical Society of Washington, 251, 307
- Physical Education, Association, 530
- Physical Review, 28, 55, 139, 364; T. C. M., 475, 670
- Physics, 26, 55; WILLIAM HALLOCK, 247
- Physiography, Current Notes on, W. M. DAVIS (I.), 174; (II.), 257; (III.), 292; (IV.), 318; (V.), 487; (VI.), 505; (VII.), 568; (VIII.), 605; (IX), 651; (X), 678
- Physiological Physics, WILLIAM HALLOCK, 301
- Physiological Society, Proceedings of the American, WARREN P. LOMBARD, 113
- Physiologie, Dictionaire de, 110
- Physiology, An American Textbook of, 110; International Congress of, 697
- Pickering, E. C., T Andromedæ, 474; Eclipse of Jupiter's Fourth Satellite, 475
- Pithecanthropus erectus, 193; HARRISON ALLEN, 239, 299
- Plains, Winslow's Explanation of the Missouri, 178
- Planet Earth, Richard A. Gregory, T. C. M., 243
- Plants, Length of Vessels in, ERWIN F. SMITH, 77
- PLATT, CHARLES, Le Grison, H. Le Chatelier, 79; Agricultural Analysis, Harvey W. Wiley, 359
- Poincaré, H., Les oscillations électriques, M. I. PUPIN, 102; II., 131
- Popular Lectures and Addresses, Vol. II., Geology and General Physics, Lord Kelvin, T. C. MENDENHALL, 50
- Popular Science Monthly, 336, 529, 530
- Porter, W. T., Physiology of Respiration, 119
- Posepny, Franz, Death of, 530
- Positions in Toronto, Application for, 694
- Post, Albert Hermann, Grundriss der Ethnologischen Jurisprudenz, D. G. BRINTON, 25
- POWELL, J. W., The Humanities, 15; The Five Books of History, 157

- Powell, J. W., National Geographic Monographs, W. M. DAVIS, 439; History of Culture, 640; Geologic Atlas of the United States, ANDREW C. LAWSON, 717
- Pre-historic Tribes of the Eastern United States, 256
- Preservation of Animals and Plants, 640
- Price, James, Death of, 585
- Price, L. L., The Colleges of Oxford and Agricultural Depression, 697
- Prosser, Charles S., Permo- Carboniferous and Permian Rocks of Kansas, 275
- Protolenus Fauna, 452
- Psyche, 196, 448
- Psychological Association, The Princeton Meeting of the American, J. McKEEN CATTELL, 42; Review, 55, 82, 335, 643; Index, 473
- Psychology, At Chicago, 81; E. B. TITCHENER, 426
- Publications of the University of Wisconsin, 279
- Publishers' Circular, 109
- PUPIN, M. I., Les oscillations électriques, H. Poincaré, 102, II. 131
- Pupin, M. I., Automatic Vacuum Pump, 221
- Purdue University, 585
- Pygmies, A de Quatrefages, D. G. BRINTON, 443
- Quatrefages, A. de, The Pygmies, D. G. BRINTON, 443
- Quick, R. W., C. D. Child, B. S. Lamphear, Thermal Conductivity of Copper, 670
- R., J. D., Bevier Sheet, Arthur Winslow, 248; Iron Mountain Sheet, Arthur Winslow, 330
- R., J. K., American Meteorological Society, 484
- R. W. W., Annual Meeting of the Chemical Society (London), 606
- Raffalovich, M. A., Uranism, 672
- Rafinesque, The Life and Writings of Constantine Samuel, Richard Ellsworth Call, G. BROWN GOODE, 384
- Rainfall, Charts of the United States, Harrington's, 319; Central American, 569
- Rainy Lake Gold Region, H. V. Winchell and U. S. Grant, 331
- Ramsay, Memoir of Sir Andrew Crombie, Sir Archibald Geikie, JOSEPH LECONTE, 490
- RAMSAY, PROF, Helion, 582
- RANDALL, WYATT W., The World of Matter, Harlan, H. Ballard, 553
- Rawlinson, Sir Henry, 304
- RAYLEIGH, LORD, Argon, 701
- Rayleigh, Lord, Waves and Vibrations, 304; Faraday Medal, 418
- Readers, To Our, S. NEWCOMB, 1
- Redfield Memorial, 470
- REES, J. K., Variation of Latitude, 561
- Rees, J. K., Penumbrae of Sun Spots, 221; Astronomy during 1894, 447; Geodetic Theodite, 727
- Reforestation, The Specious Term, 321
- Regression and Organic Stability, 498
- Reid, Harry Fairfield, Variations of Glaciers, 60
- Reighard, Jacob, The Wall-eyed Pike, Artificial Fertilization, 361
- Reithrodontomys, The Genus, J. A. Allen, C. H. M., 720
- Religious Symbolism, The Analogies of, 47
- REMSEN, IRA, Systematic Survey of the Organic Coloring Matters, Drs. G. Schultz and P. Julius, 186; Argon, 309
- Remsen, Ira, Colorides of Orthosulphobenzoic acid, 642
- RENOUF, E., Anleitung zur Microchemischen Analyse, H. Behrens, 636
- Research, Degrees for, 614
- Ridgway, Robert, The Ornithology of Illinois; Descriptive Catalogue, C. H. M., 661
- Ries, Heinrich, Harrison Granite, 279
- RILEY, C. V., Alternating Generations, Herman Adler, 457
- Ritual Calendar of Central America, 649
- Rivers, Graded, 176; Some Meandering of Wisconsin, HENRY B. KÜMMEL, 714
- ROBERTSON, CHARLES, Harshberger on the Origin of Our Vernal Flora, 371
- Robertson, Charles, Flowers and Insects, 503
- Rochester Academy of Science, 83
- Rockhill, W. W., Delegate to the International Geographical Congress, 667
- Roscoe, Sir Henry E., John Dalton and the Rise of Modern Chemistry, EDWARD H. KEISER, 686
- ROTCH, A. L., Meteorology, 302
- Rothpletz, A., Die Ost Alpen, ANDREW C. LAWSON, 522
- Rowland, H. A., New Forms of Galvanometers, 120; Solar Spectrum Wave Length, 474, 616
- Royal Society, 362, 557, 585, 612, 614; Meteorological Society, 529; Botanical Society, 586, 694; Institution, 692; Astronomical Society, 639; Geographical Society, 665, 694; Institute of London, 446
- Royce, Josiah, Psychology of Imitation, 44, 643
- Rudorf, Fr., An Introduction to Chemical Analysis for Beginners, EDWARD HART, 137
- Runic Inscriptions in Eastern America, 488
- Russell, H. L., Outlines of Dairy Bacteriology, H. W. C., 189
- RUSSELL, ISRAEL C., The Newark System, 266
- Ruschenberger, William S. W., Death of, 417
- Russian Science Notes, GEORGE BRUCE HALSTED, 277
- Russian Thistle, 377
- RYDER, JOHN A., A Dynamical Hypothesis of Inheritance, 597, II. 617;
- Ryder, John A., Death of, 417; Unpublished MSS. of, 500; Meeting in Memory of, 613
- S. E. F., Biltmore, 557
- S. H. S., Butterflies and Moths, W. Furneaux, 443
- Sachsse, Rob, death of 615
- St. Andrew's University, 446
- ST. CLAIR, GEO., Darwinism and Race Progress, John Berry Haycraft, 467
- St. John's River, New Brunswick, History of, 294
- St. Louis Academy of Science, A. W. DOUGLAS, 503
- St. Paul Academy of Science, 473
- SALISBURY, ROLLIN D., The Water Supply; Geological Survey of New Jersey, Cornelius Clarkson, Vermeule, 684
- Salisbury, Rollin D., Surface Formations of Southern New Jersey, 67
- Sanford, E. C., Psychological Studies, 42
- Saturn, Spectroscopic Observations of, JAMES E. KEELER, 519
- Savory, Sir William, Death of, 364
- Schaffner, John H., The Nature and Distribution of Attraction Spheres and Centrosomes in Vegetable Cells, ALBERT SCHNEIDER, 189
- Schermerhorn, W. C., Gift to Columbia College, 554
- Schmidt, E. E., Member of Prussian Academy, 446

- Schmidt's, Dr. Emil, Recent Works, 406
 Schmitz, F. N., Death of, 279
 SCHNEIDER, ALBERT, Attraction Spheres and Centriosomes in Vegetable Cells. John H. Schaffner, 189. An Introduction to Structural Botany, H. D. Scott, 443
 Schneider, Albert, Rhizobea, 306
 Schorlemmer Carl, The Rise and Development of Organic Chemistry, EDGAR F. SMITH, 163
 Schultz, G., Systematic Survey of Organic Coloring Matter, IRA REMSEN, 186
 'Science,' 352
 Science, America's Relation to the Advance of, G. BROWN GOODE, 4; (popular), Articles on, 81, 303; The Nature of, and its Relation to Philosophy, E. W. SCRIPTURE, 350; In Canada, J. T. C., 379, 628, 653; The Educational and Industrial Value of, HENRY S. CARHART, 393;
 Scientific, Investigation, The Character and Aims of, DANIEL G. BRINTON, 3; Literature, 20, 50, 78, 102, 131, 162, 186, 209, 241, 269, 299, 326, 356, 382, 408, 437, 457, 490, 522, 548, 577, 610, 634, 658, 684, 717; Societies, of Washington, 26; Secretaries of, 499; J. S. DILLER, 586; Joint Commission, 333; Journals, 28, 82, 112, 139, 168, 195, 224, 251, 280, 308, 335, 364, 392, 420, 448, 474, 503, 532, 615, 642, 670, 700; Method and Modern Intellectual Life, CONWAY MACMILLAN, 537.
 Selater, P. H., and Oldfield Thomas, The Book of Antelopes, C. H. M., 389
 Scott, D. H., An Introduction to Structural Botany, ALBERT SCHNEIDER, 443
 SCOTT, W. B., Fossil Mammals of the Puerco Beds, Henry Fairfield Osborn and Charles Earle, 660
 Scribner, F. Lamson, Grasses of Tennessee, N. L. B. 55
 Scriptoribus et Lectoribus, Salutem, D. C. GILMAN, 2
 SCRIPTURE, E. W., The Nature of Science and its Relation to Philosophy, 350
 Scripture, E. W., Lecture on Psychology, 722
 SCUDDER, S. H., The Need of a Change of Base in the Study of North American Orthoptera, 19
 Seebohn, Henry, Eggs of British Birds, 529
 Seeley, H. G., Skeleton of *Pareiasaurus Baini*, 331
 Seeley, H. J., Reputed Mammals from Karroo Formation, 445
 Seelye, J. M., Death of, 583
 Seismological, Apparatus, Library and Collection, Loss of Professor Milne's, T. C. M. 431; Society in Rome, 697
 SERGI, G., The Classification of Skulls, 658
 SETCHELL, W. A., The Baltimore Meeting of the American Society of Naturalists, 34
 Shaler N. S., Lower Silurian Limestones, 58
 Shaw, Albert, Municipal Government in Great Britain, J. S. B., 578
 Sheldon, Samuel, H. W. Litch and A. N. Shaw, Electrolytic Condensers, 670
 Shepard, William A., death of, 668
 Shields, T. E., Apparatus for Plethysmographic Study of Odors, 120
 Simpson, Charles T., Naiad Classification, 419; Geographical Distribution of Naiades, 587
 Skeleton, Variations in the Human, 253
 Skulls, Classification of, HARRISON ALLEN, 381, G. SERGI, 658
 Slingo, W., and A. Brooker, Electrical Engineering, for Electric Light Artisans and Students, F. B. CROCKER, 299
 SMITH, EDGAR F., Organic Chemistry, Carl Schorlemmer, 163; The Qualitative Chemical Analysis of Inorganic Substances, 415
 SMITH, ERWIN F., Length of Vessels in Plants, 77; Lagoa Santa, 510
 Smith Erwin F., Nomenclature Question, 587; Biology of *Bacillus-tracheiphilus*, 699; Associate editor, 724
 Smith, John B., A Flat-headed Borer, 276
 Smith, Theo., Enterio-hepatitis of Turkeys, 531
 Smyth, C. H., Crystalline Limestone, 63
 Smyth, E. A., Jr., Hawks and Owls, 276
 Soil treatment of Orchards, 577
 SNOW, F. H., Kansas, State Geological Survey, 376
 Social Sense, J. MARK BALDWIN, 236
 Société, Internationale des Electriciens, 26
 Societies and Academies, 28, 56, 83, 110, 166, 193, 220, 250, 279, 304, 334, 391, 418, 447, 473, 501, 531, 558, 586, 663, 698, 725
 Society of Naturalists, The Baltimore Meeting of the American, W. A. SETCHELL, 34
 Sociology, Am. Jour. of, 722
 Solar System, On the Magnitude of the, WILLIAM HARKNESS, 29
 South American Tribes and Languages, 457
 Space Analysis, 302
 Spalding, Volney M., Introduction to Botany, W. P. WILSON, 496
 Spectroscopic, Observations of Saturn, JAMES E. KEELER, 519
 Spelæological Society, 544
 Spencer, Cornelia Phillips, Degree, 724
 Spencer, Herbert, Professional Institutions, 499
 Spencer, J. W., Geographical Evolution of Cuba, 59
 Stanford University, 585, 667
 STARR FREDERICK, A. Primer of Mayan Hieroglyphics, Daniel G. Brinton, 326
 Starr, Frederick, Notes on Mexican Archæology, 219
 Stars, The Story of, G. F. Chambers, DAVID P. TODD 552
 Steinmetz, S. R., Ethnologische Studien zur ersten Entwicklung der Strafe, D. G. B., 25
 Steam Power and Mill Work, Geo. W. Sutcliffe, R. H. T., 581
 STERNBERG, GEORGE M., Explanation of Acquired Immunity from Infectious Diseases, 346
 Sternberg, George M., Explanation of Natural Immunity, 121; President of Association of Military Surgeons, 530
 Stettenheimer, Dr. Ludwig, Eine Discussion der Kräfte der chemischen Dynamik, H. C. JONES, 271
 Stevenson, J. J., Pennsylvania Anthracite, 391
 Stiles, C. W., Cestodes, 68, 334, 419
 Stone Age, Divisions of the, 254
 Stone Age, Subdivisions of, 404
 Stone, Witmer, The Birds of Eastern Pennsylvania and New Jersey, C. HART MERRIAM, 187
 Strafe, Ethnologische Studien zur ersten Entwicklung der, S. R. Steinmetz, D. G. B., 25
 Strasburger, Eduard, Botany in Germany, 642
 Strong, O. S., The Use of Formalin in Golgi's Method, 166; Cranial Nerves of Amphibia, 335
 Stumpf, Carl, Member of Prussian Academy, 446
 Subject Index, A General, to Periodical Scientific Literature, EDWARD S. HOLDEN, 520
 Surface Currents of the Great Lakes, 505
 Survey of Michigan, 219

- Sutcliffe, Geo. W., Steam Power and Mill Work, R. H. T., 581
Sutherland, Charles, Death of, 585
Swinburne, Ralph, Death of, 697
Syracuse University, Appointments in, 696; Gift to, 722
Systematische Phylogenie der Protisten und Pflanzen, Ernst Haeckel, GARY N. CALKINS, 272
T., F. W., The Mammals of Florida, 219
T., R. H., Society for the Promotion of Engineering Education, 580; Steam Power and Mill Work, George W. Sutcliffe, 581
Tarns of the English Lake District, 652
Tartars, The Orotchi, 256
Tchébychev, GEORGE BRUCE HALSTED, 129
Teaching Botany, W. J. BEAL, 355
Technologisches, Wörterbuch, 363
Telescope, for Berlin Industrial Exhibition, 333; for American University, 557
Temperature Control, Laws of, of the Geographic Distribution of Life, 53
Tesla, Nikola, Laboratory destroyed by fire, 390
Texas Academy of Science, 56, 448, 728; Volcanic Dust in, H. W. TURNER, 453
The Evolution of Invention, 50
Thermal Conductivity of Rock at Different Temperatures, LORD KELVIN, 596
Thiersch, Carl, Death of, 584
Thomas, Oldfield, and P. L. Sclater, The Book of Antelopes, C. H. M., 389
Thompson, Sylvanus P., Elementary Lessons in Electricity and Magnetism, T. C. M., 187
Thomson, E., Inter-communication among Wolves, THURSTON, R. H., Model Engine Construction, J. ALEXANDER, 109; The Steam Engine and Other Heat Engines, J. A. Ewing, 136; Steam and the Marine Steam Engine, John Yeo, 328; The Animal as a Machine and Prime Mover, 365; The Mechanical Engineer's Pocket Book, 634
Thurston, R. H., Debt to Inventors, 641
TITCHENER, E. B., Psychology, 426
Toads on the Seashore, FREDERICK W. TRUE, 166
TODD, DAVID P., The Story of the Stars, G. F. Chambers, 552
TODD, HENRY ALFRED, A Card Catalogue of Scientific Literature, 297
Todd, J. E., South Dakota Geological Survey, 219
Tomsa, Dr., Death of, 556
Topographer, MANSFIELD MERRIMAN, 464; The Education of, W. M. DAVIS, 546
Topographic Methods, Gannett's Manual of, 179
Topographical Atlas, 138
Torrey Botanical Club, 28
Tree and the Cone, 650
TRELEASE, WM., Missouri Botanical Garden, 716
Trouvelot, Léopold, Death of, 585
TRUE, FREDERICK W., The Proper Scientific Name for Brewer's Mole, 101; Toads on the Seashore, 166
Tssetsaüt, 218
Tubercular Consumption, Prize for Best Essay, 278
Tuke, D. Hack, Death of, 304
TURNER, H. W., Volcanic Dust in Texas, 453
TUTHILL, WM. B., New York Branch American Folk-Lore Society, 473
Uline, Edwin B., Amaranthaceæ, 504
Units of Light and Radiation, A Macfarlane, 248
University Extension, 724
Upham, Warren, Discrimination of Glacial Accumulation and Invasion, 60; Climatic Conditions, 61; Uplift of the Existing Appalachians, 180
Van Gieson, Ira, Formalin, 167
Vannic Language, 128
Variation, Materials for the Study of, William Bateson, H. W. CONN, 23; An Inherent Error in the Views of Galton and Weismann on, W. K. BROOKS, 121; in Crabs, 498; of Latitude, J. K. REES, 561; Mechanical Interpretation of, 638
Vasiliev, A., Nicolai Ivánovich Lobachévsky, ALEXANDER ZIWET, 356
Vegetation of the Ancient World, 138
Venable, F. P., History of Chemistry, W. A. NOYES, 469
Vermeule, Cornelius Clarkson, Water Supply; Geological Survey, New Jersey, ROLLIN D. SALISBURY, 684
Vertebrate paleontology, Field exploration, 693
Vertebrate Skeleton, H. F. O., 581
Victoria Institute of London, 472, 667
Vienna, Academy of Sciences, Bequest, 278; Historical Exhibition, 303
Vigne, Description des Ravageurs de la, Henri Jolicoeur, JOSEPH F. JAMES, 527
Vogel, H. C., Spectra of the Planets, 474
Vogt, Carl, death of, 555
Volcanic Dust, In Texas, H. W. Turner, 453; In Utah and Colorado, HENRY MONTGOMERY; 656; In Texas, E. T. DUMBLE, 657
W., R. S., Theoretical Mechanics, Alexander Ziwet, 20
WAITE, M. B., The Biological Society of Washington, 334, 531, 698; Remedy for Pear Blight, 721
Waite, M. B., Flora of Washington, 305
Walcott, Charles D., Appalachian Type of Folding, 58; Lower Cambrian Rocks, 64; Bigsby Medal Awarded, 304; U. S. Geological Survey, 530
Waldo, Frank, Wind Velocities, 700
Waltenwyl, Brunner von, Monographie der Pseudophylliden, 663
Walter, Miss Emma, Delaware Water Gap, 390
WARD, LESTER F., The Mesozoic Flora of Portugal compared with that of United States, 337
Ward, Lester F., Vegetation of the Ancient World, 138; Marquis Saporta, 390; Red Hills and Sand Hills of South Carolina, 669; Gama Grass, 725
Warming, E., A Handbook of Systematic Botany, N. L. B., 550
Washburn, L. F., Laboratory Studies, 696
Water Supply, Geological Survey of New Jersey, Cornelius Clarkson Vermeule, ROLLIN D. SALISBURY, 684
Weather Service, New York State, 320
Weed Seeds in Winter Winds, 509
Weed, Walter H., and Louis V. Pirsson, Geology of the High Wood Mountains, Montana, 59; The Shonkin Sag, 559
Weidman, Samuel, Quartz-keratophyre, 67
Weierstrass, Prof., Election of, 363
Weights and Measures, 304
Welding of Iron, 332
Weldon, Prof., Variation, 278
Wellington, Arthur M., Death of, 614
WHEELER, E. S., Density and Diameter of Terrestrial Planets, 424
Wheeler, Dr., Fertilization, 335

- White, David, The Pottsville Series 64
 White, Gilbert, Natural History of Selbourne, 614
 Whitfield, R. P., New Forms of Marine Algae, 67
 Whiting, Harold, death of, 667
 Whitman, C. O., Utilities of Biology, 641
 WILDER, BURT G., The Progress of Paronymy, 515;
 The Frog was not Brainless, but Decerebrized, 632
 Wiley, Harvey W., Principles and Practice of Agri-
 cultural Analysis, CHARLES PLATT, 359
 Willey, Arthur, Amphioxus, 645
 Williams, Charles Theodore, Aero-therapeutics, 247;
 Williams College, bequest to, 584;
 Williams, George Huntington, Memorial to, 219, 723
 Williams, H. S., Devonian Fossils, 64
 Williams, H. W., Death of, 724
 Williston, S. W., North American Diptera, 362
 Wilson, E. B., Environment and Variation, 38; Cen-
 trosomes, 69; Polarity of the Egg in Toxopneus-
 tes, 69; Fertilization, 335; Atlas of Fertilization
 and Karyokinesis, 666
 WILSON, W. P., Introduction to Botany, Volney M.
 Spalding, 496
 Winchel, H. V., and U. S. Grant, Rainy Lake Gold
 Region, 331
 Wine and Beer, Consumption of, 165
 Winslow, Arthur, the Bevier Sheet, J. D. R. 248; the
 Iron Mountain Sheet, J. D. R., 330
 Winter Storms in the North Sea, 679
 Wisconsin Academy of Sciences, Arts and Letters,
 728
 Women at Oxford, 473
 Wood's Holl, Biological Lectures Delivered at the
 Marine Biological Laboratory, CHARLES S. DOL-
 LEY, 244; Biological Laboratory, A. A. A. S.
 Tables at, 249; Biological Lectures for 1894,
 418
 WOODWARD, R. S., An Historical Survey of the Sci-
 ence of Mechanics, 141; A Treatise on Hydro-
 statics, Alfred George Greenhill, 269
 Woodward, R. S., Condition of the Interior of the
 Earth, 193; Smithsonian Geographical Tables,
 292; Variation of Latitude, 638
 Wortman, J. L., Devil's Corkscrews, 306
 Wright, Frederick G., Glacial Phenomena, 60
 Wright, Mable Osgood, Birdcraft, A Field Book of
 Two Hundred, Song, Game and Water Birds, C.
 H. M., 635
 Wylie, Theophilus A., Death of, 723
 Y., C. A., Elements of Astronomy, George W. Parker,
 415
 Yeo, John, Steam and the Marine Steam Engine, R.
 H. THURSTON, 328
 Yokoyama, Metajiro, Mesozoic Plants from Kōsuke,
 Kii, Awa and Tosa, WM. M. FONTAINE, 525
 Zaglossus, The Genus, ELLIOTT COUES, 610
 ZIWET, ALEXANDER, Nicolái Ivánovich Lobachév-
 sky, A. Vasiliev, 356
 Ziwet, Alexander, An Elementary Treatise on Theor-
 etical Mechanics, R. S. W. 20; Card Catalogue,
 557
 Zoölogical Nomenclature, C. HART MERRIAM, 18;
 Picture Puzzle, 55; Congress, International, 217,
 585; Station, American Students at the Naples,
 H. F. OSBORN, 238; Garden in New York, 446,
 530; Zoölogical Society, German, 500; London,
 586

ERRATA:—p. 144, col. 2, line 34: for these, read three. p. 153, col. 2, line 59: for Maupertius, read Maupertuis. p. 212, col. 1, line 11: for plan, read phase. p. 213, col. 1, line 13: for cooking, read working. p. 334, col. 1, line 23: for Styles, read Stiles. p. 457, col. 2, line 23: for cinipidæ, read Cynipidæ.