

# SCIENCE

---

A WEEKLY JOURNAL DEVOTED TO THE ADVANCEMENT OF SCIENCE, PUBLISHING THE OFFICIAL NOTICES AND PROCEEDINGS OF THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

---

NEW SERIES. VOLUME XXV.

JANUARY-JUNE, 1907

---

NEW YORK  
THE MACMILLAN COMPANY  
1907

---

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

---

# CONTENTS AND INDEX.

NEW SERIES. VOL. XXV.—JANUARY TO JUNE, 1907.

*The Names of Contributors are printed in Small Capitals.*

- A., C., Fakes and the Press, 391, 469  
Abbot, F. E., Syllogistic Philosophy, R. M. WEN-  
LEY, 854  
ADAMS, C. C., Ortmann on Crawfishes, 897  
Aeronautical Conference, A. L. ROTCH, 841  
Agricultural Research, Commission, 477  
Alcohol from Cacti, R. F. HARE, 348  
ALLEN, J. A., First Species Rule, 546; The Vultur  
Case, 827; Linnaeus as a Zoologist, 953  
American, Assoc. for the Advancement of Science,  
Section B, 1, 521; Section I, 18, 572; N. Y.  
Meeting, 41; Report of Gen. Sec., 46; Opening  
Session, 50; Section H, 125, 653; Fellows,  
155; Section E, 161, 293; Plattsburg Meeting,  
751; Section F, 201, 721; Section G, 259;  
Section K, 332, 693; Section C, 681, and Am.  
Chem. Soc., 401, 452; Section A, 441, 605;  
Museum of Natural History, 754; Assoc. of  
Museums, 755, 996; Universities, A. LAW-  
RENCE LOWELL, 985  
Anasa Tristis, E. B. WILSON, 191  
Anatomists, Points of Importance to, F. P. MALL,  
121  
Anthropological, Exhibits at Amer. Museum of  
Nat. Hist., G. A. DORSEY, 584; H. L. WARD,  
745; of Washington, J. M. CASANOWICZ, 968;  
Assoc. of Iowa, J. H. PAARMANN, 970  
Anthropology at the Amer. Assoc., G. G. MAC-  
CURDY, 653  
Appropriations, Government, for Science, 636  
Archeology, Prehistoric, G. G. MACCURDY, 125  
ARNOLD, R., Geol. Soc. of Washington, 389, 824, 865  
Astronomical, Notes, S. I. BAILEY, 112, 749; and  
Astrophysical Soc., H. JACOBY, 561, 608  
Astronomy, Physics and Chemistry, N. Y. Acad.  
Sci., W. CAMPBELL, 1002  
Austin, M., The Flock, V. L. KELLOGG, 179  
  
B., C. R., Beiträge zur Morphologie, 820  
B., E. W., Works of George William Hill, 933  
B., I., W. M. D. and D. W. J., Current Notes on  
Land Forms, 3, 70, 229, 394, 508, 883, 946  
Bacteriologists, Am., Soc. of, S. C. PRESCOTT, 805  
BAEKELAND, L. H., Recuperative Power, 828;  
Overspecialization, 845  
Bailey, E. H. S., Chemistry, X., 419  
BAILEY, S. I., Astronomical Notes, 112, 749  
BAIN, H. F., Bibliographies of Geology, 498  
Baird, Spencer F., T. D. A. C., 469  
BALDWIN, J. M., Genetic Logic, 274  
Baldwin, J. M., Thought and Things, G. A. TAW-  
NEY, 177  
BANCROFT, F. W., Mayer on Scyphomedusæ, 821  
BARBOUR, E. H., Morrill Geol. Exped., 73; Man in  
Nebraska Loess, 110  
BARNHART, J. H., Torrey Botanical Club, 344  
BARROWS, H. H., Norton's Geology, 224  
BARUS, C., Polarization with White Light, 348;  
Sun Spots, 972  
  
Basin, Tertiary, in N. Alaska, E. M. KINDLE, 506  
Basketry, African, M. L. KISSELL, 828  
BATHER, F. A., First Species Rule, 970  
Bean, White, G. H. SHULL, 792, 828  
Beebe, C. W., The Bird, F. A. L., 142  
BERGEN, J. Y., Recuperative Power, 709  
Bergen, J. Y., and B. M. Davis, Botany, C. E.  
BESSEY, 144  
BERGEN, T. D., Eruptions of Vesuvius, 670  
BERRY, E. W., Gymnosperms, 470  
Berthelot, Pierre Eugène Marcellin, C. G. DORE-  
MUS, 592  
BESSEY, C. E., Postelsia, 62; Botany, J. Y. Bergen  
and B. M. Davis, 144; Botanical Notes, 153,  
472, 631, 875  
Biological, Soc. of Washington, M. C. MARSH, 63,  
105, 304, 424, 580, 743, 862, 905; Expedition,  
Bermuda, E. L. MARK, 838  
Biology and Medicine, Exper., Soc. for, W. J.  
GIES, 421, 739  
BLAKE, W. P., Flanking Detrital Slopes, 974  
BLAKESLEE, A. F., Marchal sur la sexualité des  
spores chez les Mousses dioïques, 272; Sexual  
Differentiation, 366  
BLANCHARD, A. A., Böttger's Amerikanisches Hoch-  
schulwesen, 29  
BOAS, F., Museum Administration, 921  
BOGERT, M. T., Chemical Abstracts, 579  
BORGMEYER, C. J., St. Louis Chem. Soc., 274, 389,  
625  
Botanical, Notes, C. E. BESSEY, 153, 472, 631, 875;  
Society of America, D. S. JOHNSON, 281  
Botany at the Amer. Assoc., T. E. HAZEN, 259  
Böttger, W., Amerikanisches Hochschulwesen, A.  
A. BLANCHARD, 29  
Boyden Premium, 1012  
BRADLEY, J. C., Systematic Zoologist and the Bib-  
liographer, 907  
BRAINERD, E., Seedlings of Violet Hybrids, 940  
BRANNER, J. C., Geol. Survey of Brazil, 510  
BRECKENRIDGE, L. P., Engineering at Univ. of  
Ill., 596  
BRIGHAM, A. P., Assoc. of Geographers, 416  
British Association at Leicester, 753  
Brooke, John M., W. LEC. STEVENS, 115  
BROWN, A. E., Variation or Mutation, 107  
BROWN, B., Gastroliths, 392  
BUMSTEAD, H. A., Lodge on Electrons, 964  
Bursa, Elementary Species and Hybrids of, G. H.  
SHULL, 590  
BUTLER, N. M., C. M. WOODWARD, W. H. WELCH,  
Opening Addresses before the Amer. Assoc., 50  
  
C., T. D. A., Spencer F. Baird, 469  
CAMPBELL, C. M., Insanity, 195  
CAMPBELL, W., Astronomy, Physics and Chem-  
istry, N. Y. Acad. Sci., 1002

- Carnegie, Foundation, T. C. M., 33; Institute, 597; Institution, 56; and a Department of Anthropology, 756
- Carver, T. N., Sociology and Social Progress, L. F. WARD, 27
- CASANOWICZ, J. M., Anthropol. Soc. of Washington, 968
- CASTLE, W. E., Reversion and Cross-breeding, 151
- Cave Deposit, Quaternary, E. L. FURLONG, 392
- Chemical Soc., Amer., President's Address, W. F. HILLEBRAND, 81; and Section C, Amer. Assoc., 401; Northeastern Section, F. H. THORP, 65, 338, 669, 790, 937; N. Y. Section, C. M. JOYCE, 185, 342, 537, 668, 902; of Washington, J. A. LECLERC, 467, 708, 826, 969
- Chemist and Community, A. D. LITTLE, 647; Professional, Education, C. F. MABERY, 681
- Chemistry, Organic, Notes on, J. B. TINGLE, 193, 314, 433, 874; and E. E. GORSLINE, 673; at the Amer. Assoc., C. E. WATERS, 401, 452
- Chemists, Biol., Amer. Soc. of, W. J. GIES, 139
- Claassen, H., Beet-sugar, 104
- CLARK, V. A., Etherization of Peach Trees, 544
- Clements, E. S., Leaf Structure and Physical Factors, T. H. KEARNEY, 102
- Clemson Col. Sci. Club, S. B. EARLE, 625
- Clocks, Ancient and Modern, W. S. EICHELBERGER, 441; of Greenwich and U. S. Naval Observatories, T. LEWIS, 868; W. S. EICHELBERGER, 1003
- COCKERELL, T. D. A., Determinate Variation, 34; Salary and Title in Amer. Univ., 428
- COLE, F. N., Amer. Math. Soc., 95, 420, 789
- Color Inheritance, W. J. SPILLMAN, 313
- COMSTOCK, D. F., Ether, 432
- Comstock, T. B., U. S. Geological Survey, 309
- COOK, O. F., Transmission and Expression Inheritance, 911
- Copepods, Harpacticoid, L. W. WILLIAMS, 225
- Copper Formation, A. C. LANE, 589
- COQUILLETT, D. W., Elimination and First-species Rule, 308; Elimination and First Reviser, 625
- Corals, Rugose, Primary Septa in, C. E. GORDON, 345
- Corolla of Linaria Vulgaris Mill, J. B. TURNER, 1003
- Correction, C. H. GORDON, 191; O. LOEW, 940
- CREW, H., Spectroscopy, 1
- CROOK, A. R., Miller on Minerals, 223; Ill. Acad. of Sci., 545
- CROWELL, J. F., Social and Economic Sci. at the Amer. Assoc., 572
- Czapek, F., Biochemie der Pflanzen, R. H. TRUE, 1001
- D., W. M., D. W. J. and I. B., Current Notes on Land Forms, 70, 229, 394, 508, 833, 946
- DALL, W. H., The Mission Foureau, 895
- DAVENPORT, C. B., Cooperation in Science, 361
- Davenport, C. B., Inheritance in Poultry, T. H. MORGAN, 464
- Davis, B. M., and J. Y. Bergen, Botany, C. E. BESSEY, 144
- DAVIS, H. S., Lowell on Mars, 499
- DAVIS, W. M., Maryland Coastal Plain, 701
- Detrital Slopes, W. P. BLAKE, 974
- Deafness in Animals, L. H. MILLER, 67
- Discussion and Correspondence, 33, 66, 106, 145, 185, 224, 274, 307, 344, 391, 426, 467, 541, 584, 625, 670, 708, 744, 790, 827, 868, 907, 939, 970, 1003
- Doelter, C., Petrogenesis, J. P. IDDINGS, 417
- DOREMUS, C. G., Henri Moissan, 473; Pierre Eugène Marcellin Berthelot, 592
- DORSEY, G. A., Anthropological Exhibit at Amer. Museum, 584; Assoc. of Amer. Museums, 716
- DWIGHT, T., Le Double on Bones of the Face, 28
- DYAR, H. G., Types of Genera, 791
- EARLE, S. B., Clemson College Science Club, 625
- Education Board, Rockefeller's Gift to, 278
- EICHELBERGER, W. S., Clocks—Ancient and Modern, 441, 1003
- Elimination, D. W. COQUILLETT, 308, 625; J. S. KINGSLEY, 939
- Elisha Mitchell Sci. Soc., A. S. WHEELER, 307, 467, 625, 868
- Encyrtus, Parthenogenesis of, W. A. RILEY, 348
- Ether, Reasons for Believing in, D. F. COMSTOCK, 432; P. R. HEYL, 870
- Etherization of Peach Trees, V. A. CLARK, 544
- Ethnological Soc., Amer., Publications of, 116
- Fakes and the Press, C. A., 391
- FARIS, R. L., Philos. Soc. of Washington, 303, 343, 466, 582, 623, 667, 823, 906, 967
- FARR, M. S., Amer. Soc. of Vertebrate Paleontologists, 98
- Fayūm Exped. of Amer. Museum, H. F. O., 513
- Federation of Teachers of Mathematical and Natural Sciences, C. R. MANN, 338
- Fellowships in Engineering at Univ. of Ill., L. P. BRECKENRIDGE, 596
- First-species Rule, J. B. SMITH, 744; J. A. G. REHN, 870; F. A. BATHER, 970; C. W. STILES 145; W. STONE, 147; D. W. COQUILLETT, 308; D. S. JORDAN, 467; J. A. ALLEN, 546; W. STONE, 708
- FISHER, I., Doctrine of Laissez-faire, 18
- Fisheries Lab. at Woods Hole, F. B. SUMNER, 712
- Fossils, Natural Molds of, A. W. SLOCUM, 591
- FRANKLIN, C. L., Magazine Science, 746
- FREEMAN, E. M., Ether Freezing Microtome, 747
- Frog's Eggs, Unfertilized, Development of, M. F. GUYER, 910
- FURLONG, E. L., Quaternary Cave Deposit, 392
- GAGER, C. S., Torrey Botanical Club, 500, 539, 583, 904, 938, 969; Radium in Biological Research, 589; Science and Poetry, 908
- GANONG, W. F., Geographic Board of Canada, 307
- Gastroliths, G. R. WIELAND, 66; B. BROWN, 392
- Genetic Logic, J. M. BALDWIN, 274
- Geographers, Amer., Assoc. of, A. P. BRIGHAM, 416
- Geographic, Soc. National, 74; Board of Canada, W. F. GANONG, 307
- Geological, Soc. of Washington, A. C. SPENCER, 31; F. E. WRIGHT, 181, 620, 965; R. ARNOLD, 389, 824, 865; Morrill Expedition, E. H. BARBOUR, 73; The U. S. Survey, 76; T. B. COMSTOCK, 309; Work in Arkansas by Professor Purdue, C. D. WALCOTT, 109; Survey of Brazil, J. C. BRANNER, 510; Survey at Jamestown, 595; Soc. of Amer., E. O. HOVEY, 761

- Geology, New Mexico, C. H. GORDON, 109; American Contributions to, W. N. RICE, 161; Norton's, H. H. BARROWS, 224; and Geography at Amer. Assoc., E. O. HOVEY, 293; of Sierra Almoloya, R. T. HILL, 710
- GEORGE, R. D., Polished Pebbles, 626
- RIES, W. J., American Soc. of Biological Chemists, 139; Soc. for Exper. Biol. and Medicine, 421, 739; Physiology and Exper. Medicine at the Amer. Assoc., 693
- GIRAUDET, A. A., Bedbug and Kala Azar Disease, 1004
- Glacial Epoch, Causes of, E. W. HILGARD, 350
- Glacier, Malaspina, R. S. TARR, 34
- GORDON, C. E., Primary Septa in Rugose Corals, 345
- GORDON, C. H., New Mexico Geology, 109; A Correction, 191
- GORSLINE, E. E., and J. B. TINGLE, Notes on Organic Chemistry, 673
- GRABAU, A. W., Geology and Mineralogy, N. Y. Acad. of Sciences, 184.
- GRATACAP, L. P., Bulletin of Amer. Museum of Natural History, 99
- GROTH, P., Chemische Krystallographie, E. H. KRAUS, 143
- GUDGER, E. W., The Hammerhead Shark, 1005
- GULLIVER, F. P., Section E of Amer. Assoc., 751
- GUYER, M. F., Development of Unfertilized Frog Eggs, 910
- Guyer, M. F., Animal Micrology, I. HARDESTY, 339; Do Offspring inherit equally from Each Parent? 1006
- Gymnosperms, E. W. BERRY, 470
- H., C. W., Hough and Sedgwick on Human Mechanism, 618
- HARDESTY, I., Guyer's Animal Micrology, 339
- HARE, R. F., Alcohol from Cacti, 348
- HARPER, R. A., Sex-determining Factors in Plants, 379
- Hayford, J. F., Report of Gen. Sec. of Amer. Assoc., 46
- HAZEN, T. E., Botany at the Amer. Assoc., 259
- Heart, Mammalian, C. D. SNYDER, 973
- HERBICK, C. J., Zoology at the Amer. Assoc., 721, 775
- HERRICK, F. H., Symmetry in Lobster, 275
- HEYL, P. R., The Ether, 870
- HIBBEN, J. G., Shearman's Symbolic Logic, 175
- HILGARD, E. W., Glacial Epoch, 350
- HILL, R. T., Geology of Sierra Almoloya, 710
- HILLEBRAND, W. F., The American Chemical Society, 81
- HOBBS, W. H., First Meeting of Committee on Seismology, 838
- HOLT, L. E., Rockefeller Institute for Medical Research, 356
- Hough and Sedgwick, The Human Mechanism, C. W. H., 618
- HOVEY, E. O., Geology and Geography at Amer. Assoc., 293; Geological Society of America, 761
- HOWE, J. L., Morgan's Qualitative Analysis, 535
- Hybrid, Sheep-goat, W. J. SPILLMAN, 791
- IIDDINGS, J. P., Doelter on Petrogenesis, 417
- Iddings, J. P., Rock Minerals, G. P. MERRILL, 617
- Illinois State Acad. of Sci., A. R. CROOK, 545
- Inheritance, Transmission and Expression, O. F. COOK, 911
- Insanity, C. M. CAMPBELL, 195
- Iowa Acad. of Sci., L. S. ROSS, 860
- Isolation in Origin of Species, C. A. KOFOID, 500
- J., D. W., W. M. D. and I. B., Current Notes on Land Forms, 3, 70, 229, 394, 508, 833, 946
- JACOBY, H., John Krom Rees, 475; Astronomical and Astrophysical Soc. of Amer., 561, 608; Astronomical Photographs, 944
- JAMES, W., Energies of Men, 321
- JASTROW, J., Pillsbury on Attention, 785
- JEFFERSON, M. S. W., Rainfall, 909
- JENNINGS, H. S., Organische Zweckmässigkeit, P. Jensen, 665
- JENSEN, CHARLES A., Effects of Tree Roots and Grasses on Soils, 871
- JOHNSON, D. S., Botanical Soc. of Amer., 281
- JOHNSON, D. W., River Capture, 428
- Jones, H. C., Radioactivity, R. A. MILLIKAN, 300; Hydrates in Aqueous Solution, L. KAHLENBERG, 962
- JORDAN, D. S., 'First Species' and 'First Reviser,' 467
- JOYCE, C. M., N. Y. Sect. of Am. Chem. Soc., 185, 342, 537, 668, 902
- JULIEN, A. A., Geology and Mineralogy, N. Y. Acad. of Sci., 538, 868
- Kala Azar Disease, A. A. GIRAUDET, 1004
- KAHLENBERG, L., Hydrates in Aqueous Solution, H. C. Jones, 962
- KEARNEY, T. H., Clements's Leaf Structure, 102
- KELLOGG, V. L., Austin on The Flock, 179
- KINDLE, E. M., Tertiary Basin in Northern Alaska, 506
- KINGSLY, J. S., Elimination or First Species, 939
- KIRKALDY, G. W., Misleading Titles, 670
- KISSELL, M. L., African Basketry, 828
- KOFOID, C. A., Isolation in Origin of Species, 500
- KRAUS, E. H., Groth's Chemische Krystallographie, 143
- L., F. A., Beebe on The Bird, 142
- Labels for Museums, H. I. SMITH, 67
- Lamarek Monument, 795
- Land Forms, Notes on, W. M. D., D. W. J., I. B., 70, 229, 394, 508, 833, 946
- LANE, A. C., Solid and Fluid, 190; Lake Superior Copper, 589
- LAUFER, B., Study of History of Medicine and Natural Sciences 889
- LECLERC, J. A., Chem. Soc. of Washington, 467, 708, 826, 969
- Le Double's Les variations des os de la face, T. DWIGHT, 28
- Left-handed Aborigines, A. B. REAGAN, 909
- LEWIS, T., Observatory Clocks, 868
- LILLIE, F. R., Sexual Differentiation, 372
- Limulus Blood Ash, H. McGUIGAN, 68
- LINNAEUS, Bicentenary, 676, 949; and N. Y. Acad. of Sci., 877; as a Zoologist, J. A. ALLEN, 953
- LITTLE, A. D., Chemist and Community, 647
- Lobster, Symmetry in, F. H. HERRICK, 275

- Lock, R. H., Variation, Heredity and Evolution, F. RAMALEY, 340  
 LUCY, W. A., Reid on Heredity, 60  
 Lodge, O., Electrons, H. A. BUMSTEAD, 964  
 LOEW, O., A Correction, 940  
 Lorentz, H. A., Physik, A. P. WILLS, 384  
 LOWELL, A. LAWRENCE, American Universities, 985  
 Lowell, P., Mars, H. S. DAVIS, 499  
 LUSK, G., Starke on Alcohol, 787
- M., O. T., Pitt-Rivers on Evolution of Culture, 665  
 M., T. C., Carnegie Foundation, 33  
 MABERY, C. F., The Professional Chemist, 681  
 McCALLIE, S. W., Blowing Springs and Wells, 226  
 MACCURDY, G. G., Prehistoric Archeology, 125; Anthropology at the Amer. Assoc., 653  
 Macfadyen, Allan, 635  
 McGuigan, H., Limulus Blood Ash, 68  
 McMURRICH, J. P., Present-day Conditions and Responsibilities of the University, 641  
 McNAIR, F. W., Deep Mining, 13  
 Maine, University of, P. L. R., 545  
 MALL, F. P., Points of Importance to Anatomists, 121  
 Man in Nebraska Loess, E. H. BARBOUR, 110  
 MANN, C. R., Federation of Teachers of Mathematical and Natural Sciences, 338  
 Mansfield, G. R., The Roxbury Conglomerate, S. L. W., 418  
 Marchal, E., Sexualité des spores chez les Mousses dioïques, A. F. BLAKESLEE, 272  
 MARK, E. L., Bermuda Biol. Expedition, 838  
 MARSH, M. C., Biol. Soc. of Washington, 63, 105, 304, 424, 580, 743, 862, 905  
 MASON, W. P., Chemical Laboratory at Rensselaer, 633; Whipple on Pure Water, 787  
 Mastodon, Great Inferior Tusked, C. H. STERNBERG, 971  
 Mathematical, Soc., Amer., F. N. COLE, 95, 420, 789; Exhibit, 232  
 Mathematics and Astronomy at the Amer. Assoc., L. G. WELD, 605  
 Mayer, A. G., Scyphomedusae, F. W. BANCROFT, 821  
 Medical Lectures at Harvard, 75  
 Medicine, and Natural Sciences, History of, B. LAUFER, 889  
 MELTZER, S. J., Safety in Animal Structure and Animal Economy, 481  
 Men, Energies of, W. JAMES, 321  
 MENDEL, L. B., Amer. Physiol. Soc., 96, 861  
 Mendel Monument, W. J. SPILLMAN, 469  
 MERRILL, G. P., Iddings on Rock Minerals, 617  
 MERRITT, E., Amer. Physical Soc., 580  
 METCALF, H., Peglion's Le mallattie crittogramiche delle Piante coltivate, 273  
 Meteorology, Notes on, R. DEC. WARD, 114, 277, 315, 354, 434, 554, 674, 794, 979  
 Microtome, Ether Freezing, E. M. FREEMAN, 747  
 MILLER, D. C., Physics at the Amer. Assoc., 521  
 MILLER, G. A., Pierpont on Functions of Real Variables, 299  
 MILLER, L. H., Deafness in Animals, 67  
 Miller, W. G., Minerals, A. R. CROOK, 223  
 MILLIKAN, R. A., Jones on Electrical Nature of Matter and Radioactivity, 300  
 Mining, Deep, in Lake Superior Copper District, F. W. MCNAIR, 13  
 Moissan, Henri, C. G. DOREMUS, 473  
 MORGAN, T. H., Sex-determining Factors in Animals, 382; Davenport on Inheritance in Poultry, 464  
 Morgan, W. C., Qualitative Analysis, J. L. HOWE, 535  
 Mosquito Habits, J. B. SMITH, 311  
 Museum Administration, G. A. DORSEY, 584; F. BOAS, 921  
 Museums, Amer. Assoc. of, 755, 996; G. A. DORSEY, 716  
 Mutation Theory, A. E. ORTMANN, 185  
 Naples, Table for American Women, 355  
 National Academy of Sciences, 666  
 Naturalists, Amer. Soc. of, 361; Central Branch, 477  
 Necturus Maculosus, L. STEJNEGER, 190  
 NEEDHAM, J. G., Woodworth's Wing Veins of Insects, 218  
 Newell, William Wells, A. M. T., 316  
 New York Acad. of Sci., Geology and Mineralogy, A. W. GRABAU, 184; A. A. JULIEN, 538, 868; Astronomy, Physics and Chemistry, W. CAMPBELL, 1002  
 Nutrition, Human, Experiments on, 675  
 O., H. F., Fayûm Expedition of Amer. Museum of Natural History, 513  
 ORTMANN, A. E., The Mutation Theory, 185  
 Ortmann, A. E., Crawfishes, C. C. ADAMS, 897  
 Overspecialization, L. H. BAEKELAND, 845  
 PAARMANN, J. H., Iowa Anthropological Assoc., 970  
 Paleontologists, Vertebrate, Amer. Soc. of, M. S. FARRE, 98  
 Parasitism and Host, H. B. WARD, 201  
 Pebbles, Polished, R. D. GEORGE, 626  
 Peglion, V., Le mallattie crittogramiche delle Piante coltivate, H. METCALF, 273  
 PENHALLOW, D. P., Wieland on American Fossil Cycads, 856  
 Philosophical Soc., Amer., 145, 801; of Washington, C. K. WEAD, 183; R. L. FARIS, 303, 343, 466, 582, 623, 667, 823, 906, 967  
 Photographs, of Faint Stars, E. C. PICKERING, 435; Astronomical Formulas for Comparison of, H. JACOBY, 944  
 Physical Soc., Amer., E. MERRITT, 580  
 Physics at the Amer. Assoc., D. C. MILLER, 521  
 Physiological Soc., Amer., L. B. MENDEL, 96, 861  
 Physiologists, Congress of, 477  
 Physiology, Expansion of, W. T. SEDGWICK, 332; and Exper. Medicine at the Amer. Assoc., W. J. GIES, 693  
 PICKERING, E. C., Photographs of Faint Stars, 435  
 Pierpont, J., Theory of Functions of Real Variables, G. A. MILLER, 299  
 Pillsbury, W. B., L'Attention, J. JASTROW, 785  
 Pitt-Rivers, A. L. F., Evolution of Culture, O. T. M., 665  
 Plants, Variations of, J. B. POLLOCK, 881  
 Plant-tumor, Bacterial, E. F. SMITH, C. O. TOWNSEND, 671

- Polarization and Interference Phenomena with White Light, C. BARUS, 348  
POLLOCK, J. B., Physiological Variations of Plants, 881  
Polyembryony, W. A. RILEY, 106  
PRESCOOT, S. C., Soc. of Amer. Bacteriologists, 805  
Press, Associated, Fakes, C. A., 469; and News-paper Science, M. E. STONE, 545  
  
Quotations, 69, 195, 507, 630, 832, 978, 1011  
  
R., P. L., University of Maine and State Legisla-ture, 545  
Radium in Biological Research, C. S. GAGER, 589  
Rainfall, M. S. W. JEFFERSON, 909  
RAMALEY, F., Lock on Variation, Heredity and Evolution, 340  
REAGAN, A. B., Left-handed Aborigines, 909  
Recuperative Power, J. Y. BERGEN, 709; L. H. BAEKELAND, 828  
Rees, John Krom, H. JACOBY, 475  
REHN, J. A. G., First Species Rule, 870  
Reid, G. A., Heredity, W. A. LOCY, 60  
Rensselaer Chemical Laboratory, W. P. MASON, 633  
Respiration, C. H. SHAW, 627  
Reversion and Cross-breeding, W. E. CASTLE, 151; Q. I. and J. P. SIMPSON, 426  
RICE, W. N., Contributions of America to Geology, 161  
Ries, H., Clays, E. A. SMITH, 999  
RILEY, W. A., Polymbyrny and Sex-determi-nation, 106; Parthenogenesis of Encyrtus, 348  
River Capture, D. W. JOHNSON, 428  
Rockefeller Institute for Medical Research, L. E. HOLT, 356  
Ross, L. S., Iowa Acad. of Sci., 860  
ROTCH, A. L., Aeronautical Conference, 841; Pocketbook of Aeronautics, 936  
  
Safety, Factors of, in Animal Structure, S. J. MELTZER, 481  
St. Louis Chemical Soc., C. J. BORGMEYER, 274, 389, 625  
Salaries, Academic, 980; and Minnesota, 1011  
Salary and Title, J. M. STILLMAN, 241; T. D. A. COCKERELL, 428  
Sanitary Engineering N. Y. City, G. A. SOPER, 601  
Schwann, Theodor, Monument to, 196  
Science, Trust, W., 344; Cooperation in, C. B. DAVENPORT, 361; Magazine, C. L. FRANKLIN, 740; and Poetry, C. S. GAGER, 908  
Scientific Books, 27, 60, 99, 142, 175, 218, 272, 299, 339, 384, 417, 464, 498, 535, 579, 617, 665, 701, 737, 785, 820; 854, 895, 933, 962, 999; Jour-nals and Articles, 30, 104, 145, 224, 274, 302, 341, 387, 419, 537, 619, 787, 822, 859, 901, 1001; Notes and News, 37, 76, 117, 156, 197, 236, 279, 317, 356, 396, 437, 477, 516, 557, 597, 637, 677, 717, 757, 797, 839, 877, 915, 949, 981, 1013  
SEDGWICK, W. T., Expansion of Physiology, 332  
Seismological Soc. of Amer., 437  
Seismology, Committee on, W. H. HOBBS, 838  
Sex, Biological Significance and Control of, A. F. BLAKESLEE, 366; F. R. LILLIE, 372; E. B. WILSON, 376; R. A. HARPER, 379; T. H. MORGAN, 382  
Shaler Memorial Fund, 555  
Shark, Hammerhead, E. W. GUDGER, 1005  
SHAW, C. H., Respiration, 627  
Shearman, A. T., Symbolic Logic, J. G. HIBBEN, 175  
Sheffield Lecture Course, 156  
SHULL, G. H., Species and Hybrids of Bursa, 590; Latent Characters, 792, 828  
SIMMONS, F. W., Texas Acad. of Sci., 707  
SIMPSON, Q. I., and J. P., Reversion and Cross-breeding, 426  
SLOCOM, A. W., Natural Molds of Fossils, 591  
SMITH, E. A., Clays, H. RIES, 999  
SMITH, E. F., and C. O. TOWNSEND, Bacterial Plant-tumor, 671  
SMITH, H. I., Labels for Museums, 67  
SMITH, J. B., Mosquito Habits, 311; First Species Rule, 744  
Smithsonian Inst., Nat. Acad. of Sci. and the Amer. Assoc., 716  
SNYDER, C. D., The Mammalian Heart, 973  
Social and Economic Science at Amer. Assoc., J. F. CROWELL, 572  
Societies and Academies, 31, 63, 105, 145, 181, 274, 303, 342, 388, 420, 466, 500, 537, 580, 620, 666, 707, 739, 789, 823, 860, 902, 937, 965, 1002  
Soils, Effects of Tree Roots and Grasses on, CHARLES A. JENSEN, 871  
Solenodon, A. E. VERRILL, 1004  
Solid and Fluid, A. C. LANE, 190  
SOOPER, G. A., Sanitary Engineering in N. Y. City, 601  
Special Articles, 34, 68, 110, 151, 191, 225, 275, 311, 348, 392, 428, 470, 500, 546, 590, 627, 671, 710, 747, 792, 828, 871, 910, 940, 972, 1004  
Species, First Reviser of, S. W. WILLISTON, 790; First, Types of Genera by, H. G. DYAR, 791  
Spectroscopy, H. CREW, 1  
SPENCER, A. C., Geol. Soc. of Washington, 31  
SPILLMANN, W. J., Color Inheritance in Mammals, 313; Monument to Mendel, 469; Inheritance of Belt in Hampshire Swine, 541; Sheep-goat Hybrid, 791  
Sponges artificially reared, H. V. WILSON, 912  
Springs, Blowing, S. W. McCALLIE, 226  
Starke, J., Alcohol, G. LUSK, 787  
STEJNEGER, L., Specific Name of *Necturus Macu-lous*, 190  
Steno, Concerning, C. K. W., 972  
STERNBERG, C. H., Great Inferior Tusked Mastodon, 971  
STEVENS, W. LEC., John M. Brooke, 115  
STILES, C. W., First Species Rule, 145  
STILLMAN, J. M., Salary and Title in American Universities, 241  
STONE, M. E., Associated Press and Newspaper Science, 545  
STONE, W., First Species Rule versus Elimination, 147; as it affects Genera of North American Birds, 708  
SUMNER, F. B., Fisheries Laboratory at Woods Hole, 712  
Sun Spots, C. BARUS, 972; Zones, J. A. UDDEN, 827  
Swine, Hampshire, Inheritance of Belt in, W. J. SPILLMAN, 541  
T., A. M., William Wells Newell, 316  
TARR, R. S., Advancing Malaspina Glacier, 34

- TAWNEY, G. A., Baldwin's Thought and Things, 177  
 Texas Acad. of Sci., F. W. SIMONDS, 707
- THORP, F. H., Northeastern Sec. of Amer. Chem. Soc., 65, 388, 669, 790, 937,  
 Thrusts and Recumbent Folds, B. WILLIS, 1010
- TINGLE, J. B., Notes on Organic Chemistry, 193,  
 314, 433, 874; and E. E. GORSLINE, 673;
- Title, The Misleading, G. W. KIRKALDY, 670
- TOMBO, JR., R., University Registration Statistics, 347
- Torrey Botanical Club, J. H. BARNHART, 344; C. S. GAGER, 500, 539, 583, 904, 938, 969
- TOWNSEND, C. O., and E. F. SMITH, Bacterial Plant-tumor, 671
- Tree-roots and Soils, J. B. TINGLE, 871
- TRUE, R. H., Biochemie der Pflanzen, F. Czapek, 1001
- TURNER, T. B., Corolla of *Linaria Vulgaris* Mill, 1003
- UDDEN, J. A., Sunspot Zones, 827
- University, and Educational News, 40, 80, 120,  
 160, 200, 240, 280, 319, 359, 400, 440, 480,  
 520, 560, 600, 640, 680, 719, 760, 800, 840,  
 879, 919, 952, 984, 1015; Registration Statistics, R. TOMBO, JR., 347; Responsibilities, J. P. McMURRICH, 641
- Variation, Determinate, T. D. A. COCKERELL, 34;  
 or Mutation, A. E. BROWN, 107
- Veins, Wing, of Insects, C. W. WOODWORTH, 543
- VERRILL, A. E., The Solenodon, 1004
- Vesuvius, Eruptions of, T. D. BERGEN, 670
- Violet Hybrid Seedlings, E. BRAINERD, 940
- Vultur Case, J. A. ALLEN, 827
- W., Science Trust, 344
- W., C. K., Concerning Steno, 972
- W., S. L., Mansfield on the Roxbury Conglomerate, 418
- WALCOTT, C. D., Geological Work in Arkansas by Professor Purdue, 109
- WARD, H. B., Parasitism and the Host, 201;  
 Wellcome Research Laboratories, 737
- WARD, H. L., Anthropological Exhibits in Amer. Museum, 745
- WARD, L. F., Carver's Sociology, 27
- WARD, R. DEC., Notes on Meteorology, 114, 277,  
 315, 354, 434, 554, 674, 794, 979
- WATERS, C. E., Chemistry at the Amer. Assoc., 401, 452
- Waterways Commission, Inland, 556
- WEAD, C. K., Philosophical Soc. of Washington, 183
- WELCH, W. H., C. M. WOODWARD, N. M. BUTLER, addresses before the Amer. Assoc., 50
- WELD, L. G., Mathematics and Astronomy at Amer. Assoc., 605
- WENLEY, R. M., Abbot's Syllogistic Philosophy, 854
- WHEELER, A. S., Elisha Mitchell Sci. Soc., 307, 467, 625, 868
- Whipple, G. C., Pure Water, W. P. MASON, 787
- WIECHMANN, F. G., Claassen's Beet-sugar Manufacture, 104
- WIELAND, G. R., Gastroliths, 66
- Wieland, G. R., American Fossil Cycads, D. P. PENHALLOW, 856
- WILLIAMS, L. W., Harpacticoid Copepods, 225
- WILLIS, B., Thrusts and Recumbent Folds, 1010
- WILLISTON, S. W., First Reviser of Species, 790
- WILLS, A. P., Lorentz's Abhandlungen ueber theoretische Physik, 384
- WILSON, E. B., Case of *Anasa Tristis*, 191; Sex-determination in Relation to Fertilization and Parthenogenesis, 376
- WILSON, H. V., Sponges artificially reared, 912
- Wistar Institute of Anatomy, 836
- WOODWARD, C. M., N. M. BUTLER, W. H. WELCH, Opening Addresses at the Amer. Assoc., 50
- Woodward, R. S., Annual report of the Carnegie Institution, 56
- WOODWORTH, C. W., Wing Veins of Insects, 543
- Woodworth, C. W., Wing Veins of Insects, J. G. NEEDHAM, 218
- WOODWORTH, J. B., 1671 Version of Nicolaus Steno's *de solidio intra solidum naturaliter contento*, 738
- WRIGHT, F. E., Geol. Soc. of Washington, 181, 620, 965
- X., Bailey's Sanitary and Applied Chemistry, 419
- Zoological Congress, International, 795
- Zoologist, Systematic, and the Bibliographer, J. C. BRADLEY, 907
- Zoology at the Amer. Assoc., C. J. HERRICK, 721, 775