SCIENCE

A WEEKLY JOURNAL
DEVOTED TO THE ADVANCEMENT OF SCIENCE.


NEW SERIES. VOLUME V.
JANUARY - JUNE, 1897.

NEW YORK
THE MACMILLAN COMPANY
1897
THE NEW ERA PRINTING COMPANY,
41 NORTH QUEEN STREET,
LANCASTER, PA.
CONTENTS AND INDEX.

N. S. VOL. V—JANUARY TO JUNE, 1897.

The Names of Contributors are Printed in Small Capitals.

Acquired Characteristics, The Inheritance of, E. D. CoPe, 633; John M. MacFarlane, 935
Adams, F. D., and A. E. Barbour, Laurentian Highlands of Canada, 96, 406, 578
Adaptation in Pathological Processes, William H. Welch, 813
Adler, Cyrus, Goode Memorial Meeting, 365
Agassiz, Louis, William James, 285
Agriculture, Department of, Inadequacy of Salaries, 228; A Director of Scientific Work for the, 267; Report of the Secretary of, 273
Alabama Industrial and Scientific Society, Eugene A. Smith, 72, 926
Aldrich, T. B., Mephitis Mephitica, 911
Allen, E. W., Fleischmann on Milchwirtschaft, 557
Allen, Harrison, Glossophaga Truei, 159; The Effect of Disease and Senility as Illustrated in the Bones and Teeth of Mammals, 289
Allen, J. A., The Discrimination of Species and Sub-species, 877
Allen, J. A., New Species of Mountain Sheep, 618
Allen, T. F., New Species of Nitella, 36
Alloy of Aluminum and Zinc, 396
Ambrosetti on the Monoliths of Taif, 734
American Journal of Science, 33, 228, 406, 589, 738, 888, 998; Association for the Advancement of Science, 496, 653, 965; F. W. Putnam, 739; Academy of Arts and Sciences, 801
Ames, Joseph S., Spectrum Analysis, 319
Anatomie microscopique, Archives d', 183
Andrée, S. A., Carbon Dioxid in the Atmosphere, 789
Andreoli, E., Ozone, 798
Angel's Aurora Borealis, 649
Annuaire du Bureau des Longitudes, 181
Anthony and Brackett, Physics, 805
Antony, U., and T. Benelli, Action of Water on Lead Pipes, 548, and A Luechesi, Mercureous Chlorid and Auric Chlorid, 546
Apprenticeship Question, R. H. Thurston, 290
Archaeological, Report of Ontario, 393; Discoveries made in the Gravels at Trenton, G. Frederick Wright, D. G. Brinton, 586
Arey, Albert L., The Educational Value of the Physical Sciences, 469
Argentaurnum Papers, C. A. Young, 343
Argon in inhaled and exhaled Air, 949
Armstrong, H. E., Osmotic Pressure, 101; Organizing Scientific Opinion, 349
Arsenic Poisoning from Fabrics, 949
Ashmead, Belenocnema tetrac, Mayer, 237; Can- arsia hammondi, 559; Roptronia, 560
Astronomical, Journal, 23; Notes, H. J., 102, 180, 222, 298, 308; Medal, The Bruce, Edward S. Holden, 630; Association, British, 808
Astronomy, Problems of, Simon Newcomb, 777; Beginnings of American, Edward S. Holden, 929; and Physics, N. Y. Academy of Sciences, W. Haillock, 70, 339, 452
Astrophysical, Notes, E. B. F., 726, 754, 896; Journal, 521, 551, 628
Atkinson, Geo. F., Die Bedingungen der Fortpflanzung bei einigen Algen und Pilzen, George Klebs, 333; Analytic Keys to North American Mosses, C. R. Barnes, 519; Diseases of Plants induced by Cryptogamic Parasites, Karl v. Tibeuf, 690
Atoll of Funafuti, 345
Auk, The, 281, 739
Australasian Association for the Advancement of Science, 801
Axe, The Grooved Stone, 914
Ayres, Howard, Brain Cells of the Adult Body, 338
B., H. F., Journal of Geology, 190, 292, 519, 701, 925
Bailey, L. H., The Survival of the Unlike, Charles E. Bessey, 109, 514
Bain, H. F., Geological Bibliographies, 556; Clay Deposits of Miss., H. A. Wheeler, 892
Baker, Frank, Vertebrated Animals in the Zoological Gardens of London, 404
Baker, Frank C. and Frank M. Woodruff, Note on Natrix Grohami, B. & G., 447
Balch, E. S., On Ice Caves, 870
Baldwin, J. Mark, Die Spiele der Thiere, Karl Groos, 347; Organic Selection, 634
Ball, W. W. Rouse, History of Mathematics, E. M. Blake, 352
Balmer, J. J., Wave-lengths of Spectral Lines, 628
Baltzer, A., The Dihuvial Aar Glacier, 508
Bancroft, F. W., Chelyosoma productum, Stimson, 495
Bancoft, Wilder, D., Traité élémentaire de mécanique chimique, P. Duhem, 625
Barbour, E. H., Demonelix, 94
Barnes, C. R., Analytic Key to the Genera and Species of North American Mosses, Geo. F. Atkinson, 519
Barrows, Franklin W., The N. Y. State Science Teachers' Association, 457, 498, 531
Burton, A. E., on the Umanak District, 34
Buschan on Stature and Weight, 409
Buys-Ballot, Monument, A. Lawrence Rotch, 904
Byrnes, E. P., The Eggs of Limax, 391

CAJORI, Florian, History of Elementary Mathematics, 516
CAJORI, Florian, History of Elementary Mathematics, E. M. Blake, 332
California Academy of Sciences, 583
Calvin, S. S., St. Louis Pry Line Museum, 317
Cameron, F. K., Isomorphism and Crystal Structure in Organic Compounds, 774
Campbell, Marius R., Erosion at Baslelevel, 83; Origin of Certain Topographic Forms, 83; Drainage Modifications, 437; and W. C. Mendenhall, Plateau of West Virginia, 947
Candelot, E., Cements and Sea Water, 709
Carbide of Calcium, 545
Carleton, M. A., Stem Rust on Wheat and Oats, 237; Climate in Wheat Environment, 810
Case, E. C., Cranial Region of Dimetrodon, 594
Cattell, J. McKeen, Researches in Progress in the Psychological Laboratory of Columbia University, 190; An Ergometer, 909
Cavins, Frederick A., Quantitative Chemical Analysis, W. A. N., 281
Cerame, H., American, 797
Chadbourne, A. P., Individual Dichromatism, 281; and Frank M. Chapman, Spring Plumage of the Bobolink, 739
Chalmot, G. de, Silicide of Chromium, 137; Silicides of Copper and Iron, 357
Chance, C. A., Pry Line Extension of Greenland Glaciers, 460; Former Extension of Cornell Glacier near the Southern End of Melville Bay, 748; Former Extension of Ice in Greenland, 515
Chamberlin, T. C., Glacial Studies, 701
Chandler, S. C., The Variation of Latitude, 758
Chapman, Frank M., Bird Life, Harry C. Oberholser, 997
Chattelain, Hell, African Life Illustrated, 216
Chemistry, Inorganic, Notes on, J. L. H., 101, 179, 521, 266, 394, 459, 470, 545, 615, 651, 725, 788, 785, 782, 914, 948; in the United States, F. W. Clarke, 117; Inorganic and Organic, 763
Chesnut, V. K., Chemical Society of Washington, 196, 557, 774, 855
Chesnut, V. K., Water Hemlock and Laurier Rose, 337; Poison of the Black Nightshade, 964
Chessin, Alexander S., The Motion of a Physical Pendulum, 100
Child, C. D., The Effect of the Density of the surrounding Gas on the Discharge of Electrically Metal by X-rays, 791
Child, C. M., Centrosome and Sphere in the Ovarian Stromata of Marasmius, 291; Cleavage of the Egg of Arenicolus, 629
Chittenden, J. B., Trigonometry, J. B. Lock, 626
Chittenden, R. H., Microscopic Researches on the Formative Property of Glycogen, Charles Creighton, 517; Internal Secretions from a Chemico-physiological Standpoint, 999
Chittenden, R. H., The Proteolytic Action of Papan, 134, 902; Reaction of some Animal Fluids, 903; Protagon of the Brain, 909
Chree on Work at Kew Observatory, 696
Clara, Alvan G., On supposed Effects of Strain in Geologic Objectives, 768
Clark, W. B., Upper Cretaceous Formations of the Northern Atlantic Coastal Plain, 94
Clarke, F. W., Chemistry in the United States, 117
Classification, A Question of, Robert T. Hill, 921
Claypole, E. W., Human Right Arm, 811
Clayton, H. Helm, Velocity of a Flight of Ducks obtained by Triangulation, 26; The Height and Velocity of the Flight of a Flock of Geese migrating Northward, 983
Clayton, H. Helm, Cloud Heights, 264
Climatic, Features of the Arid Regions, 469; Zones on the Island of Sakhalin, 469
Cloud Observations at Blue Hill, 468
Clouds over a Fire, R. DeC. Ward, 60
Clute, W. N., Scolopendrium, 631
Coast and Geodetic Survey, J., 384
Cockerell, D. T. A., A Study in Insect Parasitism, L. O. Howard, 848; The Virginia Colony of Helix Nematolus, 985
Codice Messicano Vaticano, D. G. Brinon, 555
Cohn, F., Errors of Heliometer Measures, 508
Cole, F. N., American Mathematical Society, 90
Coleman, A. P., Anarthosites, 190
Colon Group of Bacilli, Adelaide Ward Peckham, 981
Color, Photography, 506; Blindness and William Pole, Christine Ladd Franklin, 319
Compliments, E. W. Plagiariam Bisman and Smith, 61, 275, 478; George Bruce Halsted, 152, 344; Arthur Lefevre, 404
Comstock, Geo. C., Wave-length of Starlight, 592
Comstock, W. T., Molecular Rearrangement of the Oximes by Means of Metallic Salts, 926
Cope, E. D., The Inheritance of Acquired Characteristics, 633
Cope, Edward D., Henry F. Osborn, 705; Bequests of the late, 765
Coral Reef Committee, Report of, 258
Cornell Glacier, T. C. Chamberlin, 748
Cornish, Magnetic, On Sand Dunes, 705
COUS, Elliott, A Dictionary of Birds, Alfred Newton, 553
Coville on the Water Hyacinth, 811
Cowen, J. R. K., Tin in Canned Goods, 914
Crampton, Jr., H. E., Fertilization in Gastropods, 330, 391; Ascidian Half Embryo, 395
Creighton, Charles, The Formative Property of Glycogen, R. H. CHITTENDEN, 517
Crook, A. R., Northwestern University Science Club, 160
Crooks, Wm., Deforestation and Climate, 887; Psychics in the Study of Man, 871
Crosby, W. O., Geology of Newport Neck and Conamack Island, 407; and M. L. Fuller on the Origin of Pegmatite, 486
Cross, Whitman, Lencite Hills, Wyo, 301
Culin, Stewart, Divinatory and Calendarial Diagrams, 100, 216; The Game of Mancala, 178
Curtis, H. S., Landscape Photography, 539
Cushing, A. R., Production of Iodovindole Rhythm in the Mammalian Heart, 905
Howell, W. H., Plithysmographic Curves 130; Physiological Effects of Injections of Extracts of the Hypophysis Cerebri, 903
Huxley, G. C., Sym pathetic Ganglia of Vertebrates, 132; Ending of Nerves in Muscle Tissue, 133; in the Viscera, 908; in the Muscle Spindles of Voluntary Muscle, 908
Hubrecht, A. A. W., Relations of Tarsius to the Lemurs and Apes, 550
Hugger, G., Stellar Spectra on a Photograph Plate, 523
Hull on the Glacial Period, 257
Humphreys, W. J., Wave-lengths of the Lines of the Arc Spectra of certain Elements, 521
Hunter, R., The Inhibitory and the Accelerator Nerves of the Heart, 150; Innervation of the Heart of the Opossum, 906; The Lobster's Heart, 907
Huntington, G. S., Lemur Bruneus, 319
Hutchinson, H. N., Prehistoric Man and Beast, D. C., Brinton, 154
Huxley Memorial, 223
Hytatt, Alpheus, Cycle in the Life of the Individual (Ontogeny) and in the Evolution of its own Group (Phylogeny), 101
Hygiene, Public, Report on, in Prussia, 443
Hyslop, James H., Professor Jastrow's Test on Diversity of Opinion, 275
Ice Age, The Coming, C. A. M. Tabor, 658
India, Survey of, 184
Induction Coil, A New Method of driving an Gun, William, Ralph R. Lawrence, 335
Insects, An Essay on the Classification of, John B. Smith, 671
Iowa Academy of Sciences, Herbert Osborn, 317
Iron and Steel, Some present Possibilities in the Analysis of, C. B. Dudley, 241
Irving, J. D., Green River and the Uinta Mountains, 647
J., Coast and Geodetic Survey, 384
J., H., Astronomical Notes, 102, 150, 222, 303
Jackman, Willbur S., Nature Study, Charles Wright Dodge, 188
Jackson, C. L. and M. H. Ittner, Parabromdimetanitrolouol, 157; Sodic Ethylate, 520; and A. M. Comey, Hydroxol, 631; Hydrocobaltocobalticyanic Acid, 664
Jacoby, H., Circumpolar Stars, 359
Jaggar, Jr., T. A., Mountain Building, 703
Jamaican Natural History, Robert T. Hill, 15
James, William, Louis Agassiz, 285
Jastrow, Joseph, A Test on Diversity of Opinion, 26; Outlines of Psychology, Wilhelm Wundt; Edward Bradford Titchener, 892
Johns Hopkins University Science Club, Charles Lane Poor, 218, 667
Johnson, J. B., The Materials of Construction, Mansfield Merriman, 921
Johnson-Lavis, H. J., Highwood Mountains, 256
Johomont, James, The Principles and Practice of Teaching, Charles Wright Dodge, 187
Jones, H. C. and E. Mackay, The Study of Water Solutions and of some of the Alums, 356
Jones, H. L., Seashore Plants, 564
Jordan, Edwin O., Municipal Government in Continental Europe, Albert Shaw, 450
Judson, W. V., Galveston Harbor, 363
Jurassic Wealden (Tithonian) of England, Jules Marcou, 149
Kastle, J. H., Salts of Calcium, Strontium and Barium, 665; and W. A. Beatty, Effect of Light on the Displacement of Bromine and Iodine, 357; Halogens in Organic Halides, 845
Kaysor, H., Spectrum of Zeta Puppis, 591
Keilhack, K., Prof. Geikie's Classification of the North European Glacial Deposits, 519; Thorodssen on Northeast Iceland, 796
Keith on Some Stages of Appalachian Erosion, 507
Kellogg, Vernon L., Researches on Mimericy, Erich Haase, 228
Kelly, D. J., Malt Wine, 774
Kelin, Lord, J. G., Beattie, M. Smoluchowski de Smolian, Electrification of Air by Röntgen Rays, 139
Kemp, G. T., Apparatus to Avoid Explosion in Gas Analysis, 132; Physiological Action of Nitrous Oxide, 906; Gases of the Blood during Nitrous Oxide Anaesthesia, 904
Kemp, J. F., Geological Society of America, 81; N. Y. Academy of Sciences, Geology, 229, 360, 999; Visit of Sir Archibald Geikie, 755
Kemp, J. F., The Leucite Hills, Wyo., 82; The Pre-Cambrian Topography of the Eastern Adirondacks, 92; Ore deposits of Butte, Mont., 891; Geology of the Trail from Redrock to Leesburgh, Idaho, 891
Kendall on Changes in Yorkshire Rivers, 257
Kenyon, F. C., Brain of the Bee, 360; Optic Lobes of a Bee Brain, 428
Kimball, James P., Puget Sound Basin, 854
King, F. H., Movements of Ground Waters, 323
Kingsbury, B. F., The Oblungata in fishes, 773
Kingsley, J. S., Amphiuma and Coelacanth, 436
Klebs, George, Bedingungen der Fortpflanzung bei einigen Algen und Pilzen, Geo. P. Atkinson, 335
Knight, N., Benzamidile, 337
Knowlton, F. H., Flora of Independence Hill, 190
Kober, George, Myxine, 856
Kögler's Entwicklungs geschichte, 342
Krause, E. H. L., Pre-history of N. Europe, 689
Kuhlenbeck, L., Native American Mysticism, 579
Kümmel, Henry B., Newark Formation of Western New Jersey, 93
Kunz, George F., Precious Stones, 184
L., F. A., Color Change in the Plumage of Birds unaccompanied by Molt, 762
Lachman, A., Zinc Ethyl, 584
Landslip, in Switzerland, 21; The Gohna, 437; on the Banks of the Upper Yang-tse, 618
Lane, Alfred C., The Drainage of the Saginaw Valley, 553
Lane, Alfred C., The Grain of Rocks, 97
Langdon, F. E., Peripheral Nervous System of Neris Viens, 427
Langley, S. P., George Brown Goode, 389
Lassar-Cohn, The Chemie im täglichen Leben, W. R. O., 156
Lavoisier Monument, Edgar F. Smith, 403
Lay, W., Mental Imagery, 776
LeBlanc, Max, The Elements of Electrochemistry, Ferdinand G. Wiechmann, 32
Le Bon, Gustave, The Crowd, Franklin H. Giddings, 734
Mayan History, Ancient, 53
Mayer, A. M., Flotation of Disks and Rings of Metal, 589
Mead, A. D., The Centrosomes in the Annelid Egg, 233; on Centrosomes in Chotopterus, 389
Mearns, Edgar A., A New Subgeneric Name for the Water Hares, 369
Medical Inspector in New York Schools, 23; Schools, N. Y. Licensinig examinations of, 107; Association, British, 729, 840, 951; The American, 917; International Congress, 989
Meek, S. E., Naples Zoological Station, 832
Meltzer, S. J., Emil Du Bois-Reymond, 217
Meltzer, S. J., Contraction of the Stomach, 131; Bacterioidal Effects of Lymph from the Thoracic Duct, 130; Deglutition, 901
Mendel, Lafayette B., Professor Eugene Bau- mann, 51
Mercer, H. C., Potter's Wheel in Ancient America, 919
Merriam, C. Hart, A Geographical History of Mammals, R. Lydekker, 36; Charles E. Bendire, 361; The Generic Names Icetes, Arctogalidia, 302; Type Specimens in National History, 331; Suggestions for a New Method of discriminating between Species and Sub-species, 733
Merriam, C. Hart, Pribilof Island Hair Seal, 319
Merrill, G. P., Rock Weathering, 65; Rocks, Rock-Sediment Weathering and Soils, J. B. Woodworth, 995
Merrifield, Mansfield, The Materials of Con- struction, J. B. Johnson, 921
Merritt, Ernest, The Gyroscopic Pendulum, 316
Metabolism in the Human Body, 493
Meteorological and Hydrological Meetings, The International, A. Lawrence Rotch, 17; Con- ference at Paris, A. Lawrence Rotch, 153; Society, The Royal, 274; Society, American, 295; Reprints, R. Dec. Ward, 339, 601; Station, Antarctic, 341; Council of Royal Society, 583; Observatory, The Blue Hill, 613
Metric System, 397, 513, 692, 953; Burt G. Wilder, 587
Miall, L. C., Round the Year, E. S. Morse, 227
Michaelis and Becker on Phosphoric Acid, 949
Michelton, A. A., Earth and Ether, 899
Microbes, The War with the, E. A. de Schwin- nit, 567
Microtomes, Automatic, On two Forms of, Charles Sedgwick Minot, 857
Miller, Jr., Gerit S., Migration of Bats on Cape Cod, Mass., 541
Millet, J. B., Kite-flying, 887
Mills Wesley, The Study of Fear, 153; Psy- chology and Comparative Psychology, 718; Significance of Internal Secretion, 920
Mills, W., Cerebral Cortex 194; Psychic Develop- ment of Young Animals, 309; Personal Ex- periences under Ether, 210
Milne, John, Earthquake Survey of the World, 146; Seismological Investigation Committee, 444
Minot, Charles S., On Certain Problems of Ver- tebrate Embryology, 107; On Two Forms of Automatic Microtomes, 857
Minot, C. S., An Improved Microtome, 106; Lab- oratory Methods, 391
Mixer, W. G., Electrolysis, 999
Molenbroeck, P., Theorie der Quaternionen, Alex- ander Mackarlane, 609
Moler, George S., Synchronous Motor, 485
Mollier, H., The Celts and their Wanderings, 988
Monist, The, 69
Moore, B. E., The Lead Cell, 484; and H. V. Car- penter, The Galvanic Cell, 216
Moore, E. Clarence, Glacial Man in Ohio, 880
Morgan, C. Lloyd, Organic Selection, 994
Morley, Frank, The Construction of a Single Point Covariant with five given Points, 99
Morphological Society, The American, G. H. Parker, 389, 429
Morrill, A. D., The Auditory Epithelium, 358
Morse, E. S., Round the Year, L. C. Miall, 227
Morse, E. S., 'Bow-pullers' of Antiquity, 614
Morse, W. F., Geological Society of Washing- ton, 238, 301, 558, 811, 889; Sir Archibald Geikie on Tertiary Volcanic Succession, 788
Mortillet, G. de, on Small Chipped Flints, 339; European 'Quaternary Man,' 509; L'Origine de la Nation Francaise, 961
Morton on the Phenomena of Fluorescence, 71
Munby, A. E., Bunsen Burner for Acetylene, 914
Muroes, Chas. E., Gun Cotton, 115
Murray, John, 'Balfour Shol,' 727
Museum, South Kensington and Queen Victoria's Jubilee, 397; The National, of Costa Rica, 470; British, Organization of the, 693
Museums, Associations, 850; How retard the Advance of Science, F. A. Bather, 677
N., W. A., Development of the Periodic Law, F. P. Venable, 280; Notes on Qualitative Analy- sis, W. P. Mason, 280; Quantitative Chemical Analysis, Frederick A. Caillns, 281
Nansen's Discovery of the Breeding Grounds of the Rosy Gull, T. S. Palmer, 173
National University, 197; William Threlse, 345; Charles W. Darney, Jr., 573; and the Smithsonian Institution, Benj. Ide Wheeler, 851; Academy of Sciences, 630, 738
Natrix Grohami, B. & G., Frank C. Baker and Frank M. Woodruff, 447
Natural, History, Specimens, Postal Laws concern- ing, 873; History, Cambridge, W. Mc- Woodworth, 858
Nebraska Academy of Sciences, G. D. Swezey, 158
Nedel, E., Antiquities of Bornholm, 888
Neissi, G. von, Paths of 100 Meteors, 737
Neurology, Journal of Comparative, 538, 773; and Neurology, etc., International Congress of, 839
New Books, 72, 116, 240, 284, 320, 394, 408, 488, 534, 560, 590, 668, 704, 746, 812, 892, 964, 1000
Newcomb, S., An Ambitious 'Paradoxer,' 400; The Problems of Astronomy, 777
Newcomb, S., Address by Prof. W. H. Welch in honor of, 690
Newton on the Worship of Meteorites, 33
Newton, Alfred, A Dictionary of Birds, Elliott Coues, 553
New York Academy of Sciences, Astronomy and Physics, W. Hallock, 70, 595, 452; Biology, C. L. Bristol, 71, 319; Bashford Dean, 505; Geology, J. F. Kemp, 239, 360, 999; Psychology and Anthropology, Livingston Farrand, 283, 776; Richard E. Dodge, 590,
0. H. F., The Ganodonta, 611
O., W. R., Die Chemie im täglichen Leben, Lassar-Cohn, 156
Oberrheiser, Harry C., Bird Life, Frank M. Chapman, 607
Oberrheiser, H. C., American Golden Warblers, 740
Oberrheiser, J., The Jewish Physical Type, 650
Opinion, A Test on the Diversity of, Joseph Jas- trow, 26; James H. Hyslop, 375; 513
Osborn, Henry F., Goode as a Naturalist, 573; Origin of the Teeth of the Mammals, 576; Edward D. Cope, 705
Osborn, Herbert, Iowa Academy of Sciences, 317
Organic Selection, J. Mark Baldwin, 634; Robert M. Pierce, 844; C. Lloyd Morgan, 994
Orndorff, W. R., and C. B. Moyer, Naphthalene Tetrabromide, 664
Ortmann, Alfred E., Distribution of Marine Mammals, 957
Palmer, Jr., A. de Forest, The Pressure Coef- ficient of Mercury Resistance, 698
Palmer, T. S., Nansen's Discovery of the Breeding Grounds of the Rosy Gull, 175
Pamment, L. H., Ecological Notes, 362
'Paradoxe,' An Ambitious, S. Newcomb, 400
Parasitism in the Cowbird, O. Widmann, 176
Paredasius Seeley (Cotylosaurus Cope) from the Triasiss of Germany, G. Baur, 720
Paris Exposition of 1900, 693, 698
Parker, G. H., The American Morphological So- ciety, 388, 423
Parker, H. C., Measuring Currents, 70
Pasteur, Manoelum, 56; Interment, 105; Statue, 304
Patents, British, Two Extraordinary, H. Carrin- ton Bolton, 401
Patten, W., Preservation of Cartilage, 392; Visual Centers of Arthropods and Vertebrates, 481
Paul and König on the Behaviour of Bacteria to- wards Solutions of Salts, 440
Paulatechke on the African Dwarfs, 510
Pawlskii on Sulfuryloricidae, 763
Payne, G. F., Mineral Constituents of Watermelon, 102
Peale, A. C., Chemical Society of Washington, 135
Peary's, Lieut., Expedition, Geo. H. Barton, 398
Peckham Adelaide Ward, The Colon Group of Bacilli, 981
Peters, Franz, Angewandte Elektrochemie, Ed- gar F. Smith, 588
Petit on the Action of Waters containing dissolved Salts upon Rocks, 367
Pfaff, Fr., The Secretion and Composition of Bile, 132; Human Pancreatic Fistula, 910
Philippson, A., Geomorphology, 796
Philosophical Society of Washington, Bernard R. Green, 408
Physical, Vectors, The Blackboard Treatment of, C. Barus, 171; and Mental Tests, Report of the Committee on, 211; Review, 315, 484
Laboratory, A British National Physical, 397; Education Review, American, 399; G. W. F., 606; Laboratory, A National, at Washington, 511; Laboratory for India, 728
Physicians and Surgeons, The Fourth Session of American, 441, 547, 761
Physics, Recent Text-books on, 805
Physiography, Current Notes on, W. M. Davis, 20, 177, 263, 336, 437, 507, 577, 647, 723, 795, 899, 945
Physiological Society, The American, Frederic S. Lee, 129, 900
Physiology, Opportunities for Training in, H. P. Bowditch, 446
Pickering, E. C., Method of Determining the Rela- tive Motions of Stars in the Line of Sight, 102; Zeta Puppis, 591, 726
Pickering, Spencer, Electrolytic Dissociation of Salts in Solution, 221
Pierce, Jr., Josiah, Projection of Panoramic Views of Contoured Surfaces, 667
Pierce, Robert M., Organic Selection,' 844
Pilsbry, H. A., Lewis Woolman, Philip P. Calveret, Postage on Specimens of Natural History in the International Mails, 405
Plague, 219, 254, 269, 305, 341, 342, 442, 512
Plant Registration, A Proposed Bureau of, 19
Plateau, Félix, How Flowers attract Insects, 689
Platinum, The Production of, in Russia, 651
Play of Animals: The Fur Seal, F. A. Lucas, 480
Pliocene Man in Britain, 439
Pollard, C. L., A Type in Botany, 487
Poor, Chas. Lane, Scientific Association of the Johns Hopkins University, 192, 318, 667
Poor, Chas. Lane, Mirror and Equatorial Mounting for Reflecting Telescopes, 685
Porter, W. T., Physiology of the Mammalian Heart, 129; The Heart Beat, 905; Recovery of the Mammalian Heart from Fibrillary Contractions, 905; Beat of the Ventricles and Flow of Blood through the Coronary Arteries, 906
Porro, C., Scientific Geography in Italy, 394
Postage, Rates on Specimens of Natural History in the International Mails, H. A. Pilsbry, Lewis Woolman, Philip P. Calveret, 402
Pothomac Passion, Professor Fontaine and Dr. Newberry on the Age of, the Lester F. Ward, 411