#### SMITHSONIAN MISCELLANEOUS COLLECTIONS

VOLUME 56, NUMBER 18

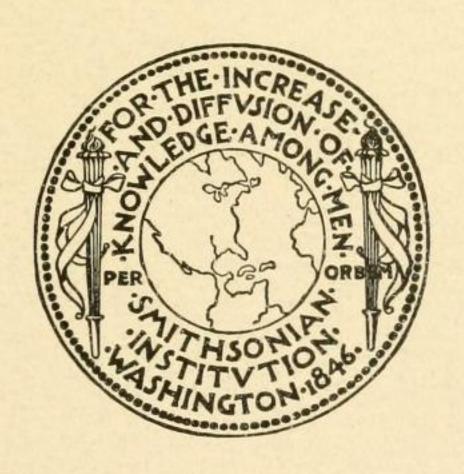
# BIBLIOGRAPHY OF THE SCIENTIFIC WRITINGS OF R. E. C. STEARNS

#### BY MISS MARY R. STEARNS

WITH ONE PLATE

WITH BIOGRAPHICAL SKETCH BY

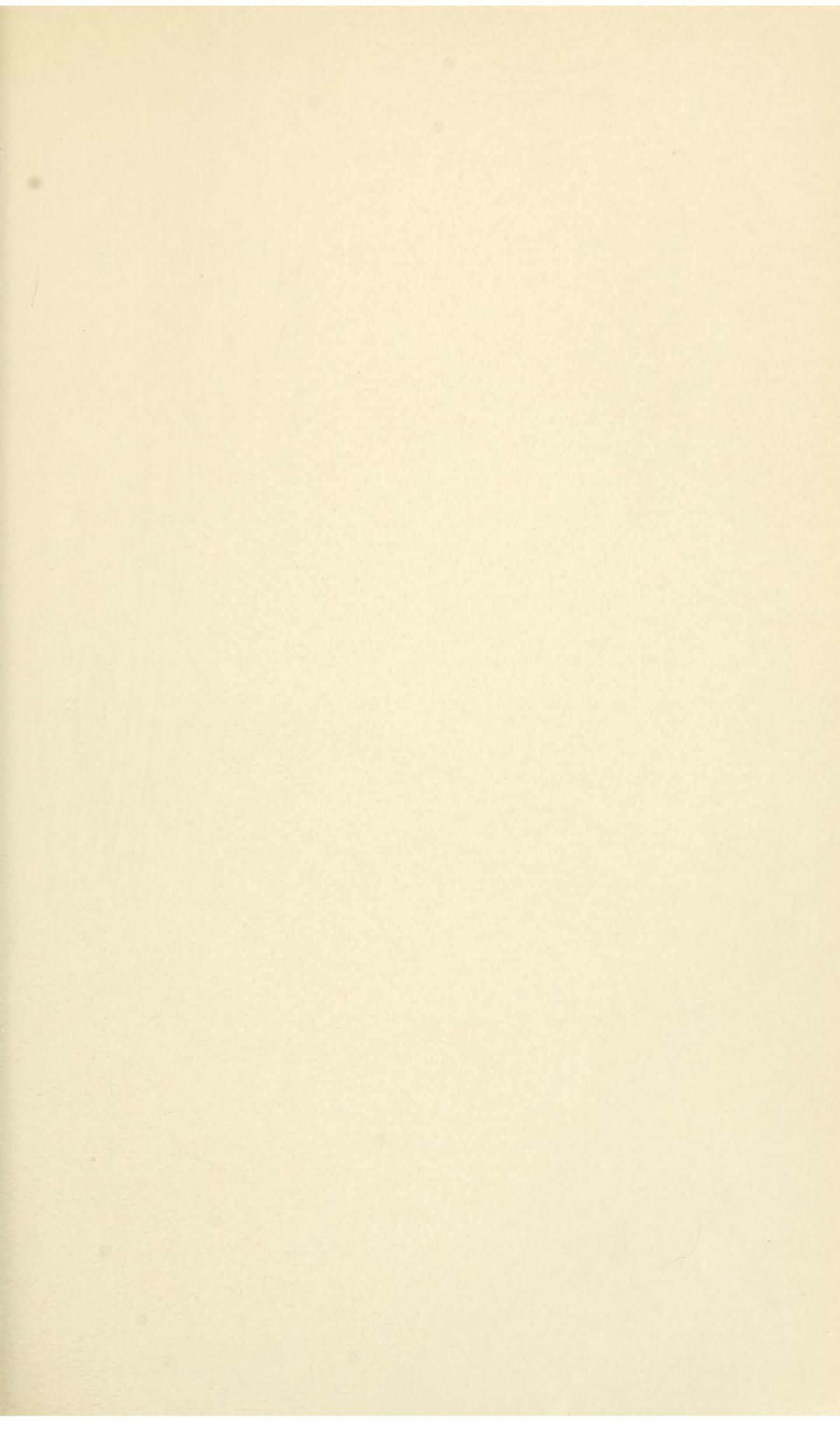
WILLIAM H. DALL

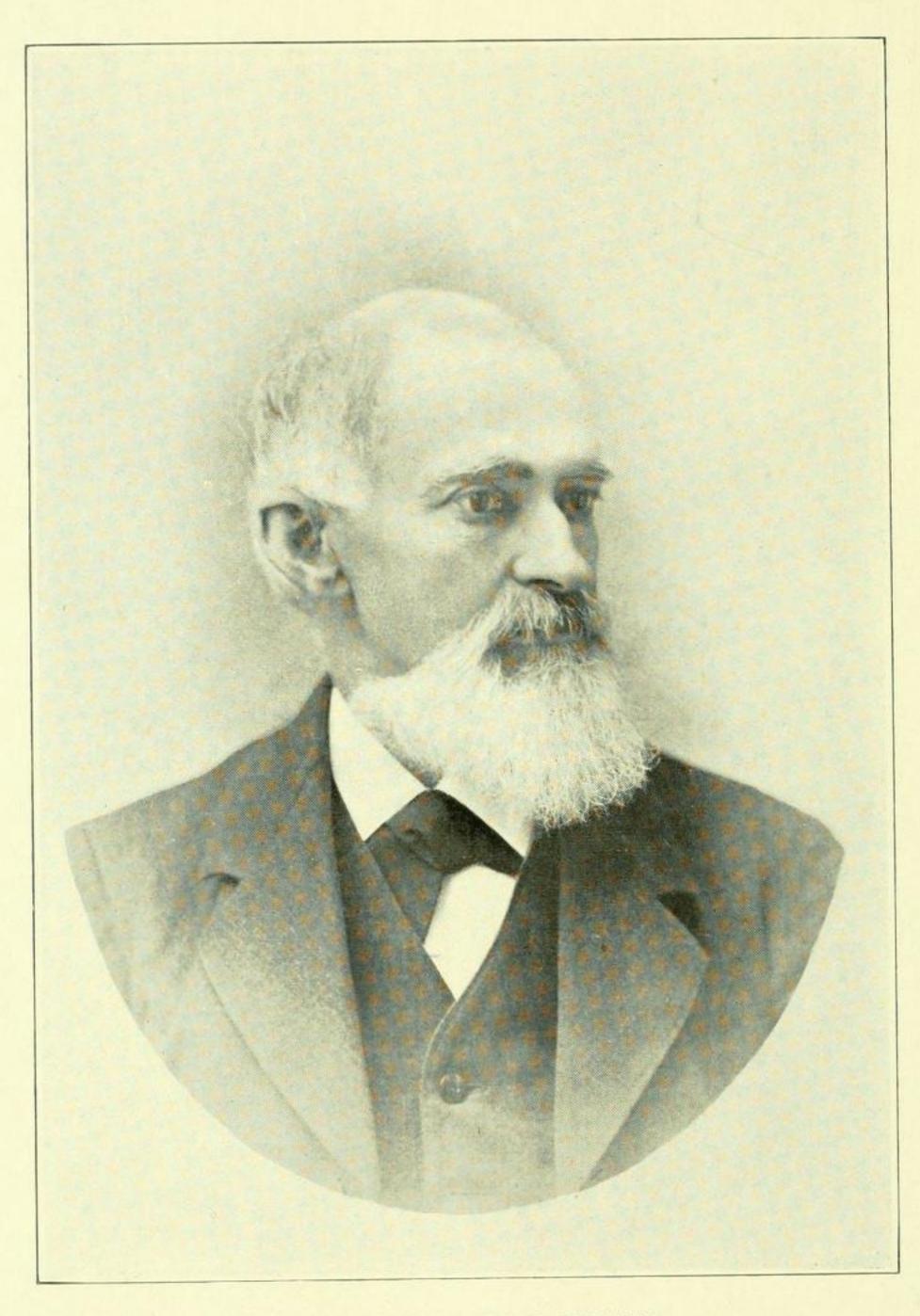


(Publication 2007)

CITY OF WASHINGTON
PUBLISHED BY THE SMITHSONIAN INSTITUTION
1911

The Lord Waltimore Press BALTIMORE, MD., U. S. A.





ROBERT EDWARDS CARTER STEARNS 1827-1909

## BIBLIOGRAPHY OF SCIENTIFIC WRITINGS OF R. E. C. STEARNS

By MISS MARY R. STEARNS

(WITH ONE PLATE)

### I. BIOGRAPHICAL SKETCH OF ROBERT EDWARDS CARTER STEARNS<sup>1</sup>

By Dr. W. H. DALL

Dr. Robert Edwards Carter Stearns died at Los Angeles, Cal., July 27, 1909, in his eighty-third year. He was a native of Boston, Mass., a son of Charles Stearns, and was born February 1, 1827. He was educated in the public schools, followed by a course of mercantile training, and from his earliest years evinced a deep love of nature, fostered by his father, with whom similar tastes led to a degree of comradeship in rambles and hunting expeditions which he always remembered with appreciation. The boy had an unusual artistic ability, and, though his early avocations were services in a bank and on a farm, when only twenty-two years of age he painted a panorama of the Hudson River from the mouth of the Mohawk to Fort William, which was sold and exhibited. He turned his attention to mining, explored the coal fields of southern Indiana, and in 1854 was appointed resident agent of several copper mines in northern Michigan, on Lake Superior. In 1858 he went to California, where he became a partner in a large printing establishment of a brother-in-law of his wife, in San Francisco. This firm published the Pacific Methodist, a weekly religious paper, and in the troubled times preceding the civil war the reverend editor of this journal was obliged to visit the east. Stearns was requested to fill his place during his absence. The fate of California hung in the balance, many of the immigrants from the southern states urged independence for that territory when hostilities broke out. Stearns took the responsibility of making his paper an enthusiastic advocate of the Union cause, and to this call and the eloquence of Thomas Starr King, old Californians believed the decision of the people to

<sup>1</sup> Printed also in Science, N. S. Vol. 30, No. 765, Aug. 27, 1909, pp. 279-80.

stand by the Union in that struggle was due in no small degree. Through the influence of Justice Field, Stearns was appointed deputy clerk of the supreme court of California in 1862, a post which he resigned in the following year to accept the secretaryship of the State Board of Harbor Commissioners, which he was obliged to resign some years later on account of ill health. Coming to the east, he made one of a party, comprising besides himself the late Dr. William Stimpson and Col. Ezekiel Jewett, for the exploration of the invertebrate fauna of southwestern Florida, during which large collections were made for the Smithsonian Institution. He returned to California, and in 1874 was elected secretary of the University of California, being the business executive of that institution under the presidency of the late Dr. Daniel C. Gilman. He served in this capacity for eight years with great approval, and, when ill health again obliged him to retire from service, the university as expressive of their sense of his services to the cause of education in California, and in recognition of his scientific attainments, conferred upon him the degree of doctor of philosophy. Returning to the east after the death of Mrs. Stearns, he was engaged in researches for the U.S. Fish Commission in 1882, was appointed paleontologist to the U.S. Geological Survey by Major Powell in 1884, and assistant curator of mollusks in the National Museum by Professor Baird. His collection of mollusca was acquired by the museum. Age and infirmity obliged him to return to the more genial climate of California in 1892, where he settled in Los Angeles, continuing, as his strength permitted, his researches into the malacology of the Pacific coast. He married March 28, 1850, Mary Anne Libby, daughter of Oliver Libby, of Boston, and is survived by a daughter.

Dr. Stearns was an earnest student of mollusks from boyhood; his early experience led him to interest himself in horticulture and landscape gardening, and his ability in this line is attested by the beauty of the university grounds at Berkeley, which were developed under his superintendence. His knowledge of the Pacific coast mollusca was profound, and a long list of papers on this topic and on the shells of Florida was the result. He also contributed many papers on various branches of horticulture and gardening to the California periodicals devoted to this subject. He was an enthusiastic supporter of the California Academy of Sciences in its early days, and, after the earthquake of 1868, when disaster threatened the society, he, with Professor J. D. Whitney and a few other friends, stood between it and dissolution. He was a member of

numerous scientific societies at home and abroad, and of the Sons of the American Revolution.

Dr. Stearns was a man of sanguine temperament, with a lively sense of humor and high moral character. His reading was wide, his learning never obtrusive, his interest in art, literature and all good causes, intense. He was a staunch friend and, for a righteous object, ever ready to sacrifice his own material interests. His services to Californian science will keep his memory green.

### II. LIST OF SCIENTIFIC PUBLICATIONS BY ROBERT EDWARDS CARTER STEARNS, Ph. D.

Fellow American Association for the Advancement of Science; in 1869, chosen Corresponding Member of the Chicago Academy of Science; 1870, Corresponding Member Lyceum of Natural History in the City of New York, now the New York Academy of Science; September 17, 1873, elected Corresponding Member of Die Kaiserlich Königliche Zoölogisch-Botanische Gesellschaft in Wien, Austria; 1877, Corresponding Member of Academy of Natural Science, Davenport, Iowa; 1887, Correspondent of the Academy of Natural Sciences in Philadelphia.

#### CONCHOLOGY

- 1. List of Shells collected at Baulines Bay, California, June, 1866.—Proc. California Acad. Nat. Sci., Vol. 3, 1866, pp. 275-276. (C. M. I.<sup>1</sup>) Additions to this list, ibid., p. 291, 1867. (C. M. II.)
- 2. List of Shells collected at Santa Barbara and San Diego by Mr. J. Hepburn, in February-March, 1866, with Remarks upon some of the species.—Proc. California Acad. Nat. Sci., Vol. 3, 1866, pp. 283-286. (C. M. I.)
- 3. Remarkable Instance of Vitality in a Snail, Helix veatchii.—Proc. California Acad. Nat. Sci., Vol. 3, 1867, pp. 328-329.
- 4. Shells collected at Santa Barbara by W. Newcomb, M. D., in January, 1867.—Proc. California Acad. Nat. Sci., Vol. 3, 1867, pp. 343-345. (C. M. II.)
- 5. List of Shells collected at Purissima and Lobitas, California, October, 1866.—Proc. California Acad. Nat. Sci., Vol. 3, 1867, pp. 345-346. (C. M. II.)
- 6. List of Shells collected at Bodega Bay, California, in June, 1867.—Proc. California Acad. Nat. Sci., Vol. 3, 1867, pp. 382-383. (C. M. III.)
- 7. Shells collected by the U. S. Coast Survey Expedition to Alaska in the Year 1867.—Proc. California Acad. Nat. Sci., Vol. 3, 1867, pp. 384-385. (C. M. III.)

Also in Report of the Superintendent of the U. S. Coast Survey, for 1867, Appendix No. 18, pp. 291-2; Harford's List, which contains numerous typographical errors, which were not in the original.

This and a number of the following papers were also issued under the title "Conchological Memoranda" by Doctor Stearns and will be referred to as "C. M." in the subsequent annotations. Since the dates of the memoranda were often prior to the publication in serials, it is important that they should be noted, and they are as follows: I, July 16, 1866; II, August 20, 1866; III, December 2, 1867; IV, 1869; V, 1870; VI, May 18, 1871; VII, Aug. 28, 1871; VIII, Oct. 14, 1871; IX, Sept. 4, 1871; X, June 5, 1872; XI, Jan. 17, 1873; XII, April 7, 1873; XIII, Oct. 18, 1875.

- 8. Shell Money.—Amer. Naturalist, Vol. 3, No. 1, March, 1869, pp. 1-5. Contains notes on West American shells, used as Money by the Aborigines of California.
- 9. The Haliotis, or Pearly Ear-shell.—Amer. Naturalist, Vol. 3, No. 5, July, 1869, pp. 250-256, with figures.

Includes notes on California species.

10. Rambles in Florida.—Amer. Naturalist, Vol. 3, Nos. 6, 7, 8 and 9, 1869, 37 pp.

Containing many notes on the Natural History, Ethnology, etc., of Florida, made during a visit in January-March, 1869, in company with the late Dr. William Stimpson and Col. Ezekiel Jewett.

- 11. On a new species of Pedipes, P. naticoides, from Tampa Bay, Florida.—Proc. Boston Soc. Nat. Hist., Vol. 13, 1869, with figure. (C. M. IV.)
- 12. Description of a new species of Monoceros, *M. paucilirata*, from California, with Remarks on the distribution of North American species.—Am. Jour. Conchology, Vol. 7, 1871, pp. 167-171, with figures. (C. M. VI.)
- 13. Description of new California Shells; Ocinebra gracillima and O. circumtexta.—Am. Jour. Conchology, Vol. 7, for 1871, pp. 172-173, with figures, 1872. (C. M. VI.)
- 14. Description of a new species of Veronicella from Nicaragua, V. olivacea.—Conch. Memoranda, VIII, p. 1, October 14, 1871.

This article, intended for the Boston Proceedings, was not printed in them or elsewhere except in this form.

15. On the Habitat and Distribution of the West American species of Cypraeidae, Triviidae and Amphiperasidae.—Proc. California Acad. Sci., Vol. 4, 1872, pp. 186-189. (C. M. IX.)

Being corrections to Mr. Roberts' Catalogues of the "Porcellanidae" and Amphiperasidae.

- 16. Descriptions of new species of Marine Mollusks from the Coast of Florida.—Proc. Boston Soc. Nat. Hist., Vol. 15, pp. 21-24, January 17, 1872.

  Marginella (Glabella) opalina, Marginella (Glabella) aureocincta, Drillia ostrearum,

  Mangelia stellata, Architectonica tricarinata, Siphonaria naufragum, and Cerithidea turrita.
- 17. Description of a new species of Mangelia, Mangelia interlirata, from California.—Proc. California Acad. Sci., Vol. 4, 1872, p. 226, with figure. (C. M. X.)
- 18. Remarks on Marine Faunal Provinces on West Coast of America.— Proc. California Acad. Sci., Vol. 4, 1872, p. 246. (C. M. X.)
- 19. Description of new Species of Shells from California, Siphonaria Brannani and Truncatella Stimpsonii.—Proc. California Acad. Sci., Vol. 4, 1872, p. 249, with figures. (C. M. X.)
- 20. Notes on Purpura canaliculata of Duclos.—Proc. California Acad. Sci., Vol. 4, 1872, pp. 250-251. (C. M. X.)
- 21. A partial comparison of the Conchology of portions of the Atlantic and Pacific coasts of North America.—Proc. California Acad. Sci., Vol. 4, 1872, pp. 271-273. (C. M. X.)
- 22. The Californian Trivia, T. Californica, and some points in its Distribution.—Amer. Naturalist, Vol. 6, December, 1872, pp. 732-734, with figures.

- 23. Descriptions of a new Genus, Lateribranchiaea, and two new Species of Nudibranchiate Mollusks, L. festiva and Triopa Carpenteri, from the Coast of California.—Proc. California Acad. Sci., Vol. 5, 1873, pp. 77-78, with figures. (C. M. XII.)
- 24. Descriptions of new Marine Mollusks from the West Coast of North America.—Proc. California Acad. Sci., Vol. 5, 1873, pp. 78-82, with plate. (C. M. XII.)

Conus Dalli, Ptychatractus occidentalis, Fusus (Chrysodomus?) Harfordii, Pleurotoma (Drillia) Montereyensis, Pleurotoma (Drillia) Hemphillii, Muricidea subangulata, Astyris variegata, and Pholas Pacifica.

- 25. On Xylophagous Marine Animals; Teredo, Limnoria, etc.—California Horticulturist, etc., May, 1873, with figures.
- 26. Remarks on the Nudibranchiate or Naked-gilled Mollusks, with several figures.—California Horticulturist, July, 1873.
- 27. Aboriginal Shell-money.—Proc. California Acad. Sci., Vol. 5, 1873, pp. 113-120, with plate.

Many California species mentioned.

- 28. Shells collected at San Juanico, Lower California, by William M. Gabb.—Proc. California Acad. Sci., Vol. 5, 1873, pp. 131-132.
- 29. Shells collected at Loreto, Lower California, by W. M. Gabb in February, 1867.—Proc. California Acad. Sci., Vol. 5, 1873, p. 132.
- 30. Descriptions of New Marine Shells, Anachis semiplicata, Anachis acuta, Nitidella filosa and Clathurella Jewetti, from the West Coast of Florida.—Proc. Acad. Nat. Sci., Philadelphia, July 27, 1873, pp. 344-347, with figures.
- 31. On the vitality of certain Land Mollusks, *Helix Veatchii* and *Bulimus pallidior*.—Proc. California Acad. Sci., Vol. 6, 1875, pp. 185-187, with plate. Amer. Naturalist, Vol. 11, February, 1877, pp. 100-102. (C. M. XIII.)
- 32. Descriptions of new Fossil Shells, Opalia varicostata and Opalia anomala, from the Tertiary of California.—Proc. Acad. Nat. Sci., Philadelphia, 1875, pp. 463-464, with plate.
- 33. Description of a new species of Dolabella, *Dolabella Californica*, from the Gulf of California, with Remarks on other Rare or Little-known species from the Same Region.—Proc. Acad. Nat. Sci., Philadelphia, 1878, pp. 395-401, pl. 7.
- 34. Remarks on Fossil Shells from the Colorado Desert.—Amer. Naturalist, Vol. 13, 1879, pp. 141-154; several figures.

Personally read before the California Academy of Sciences.

- 35. Description of a new species or variety of Land Snail from California (Helix circumcarinata).—Annals New York Acad. Sci., Vol. 1, 1879, pp. 316-317, 3 figures.
- 36. Comments upon Mr. Calkins' "Marine Shells of Florida."—Science News, New York, April 15, 1879, 2 pp.
- 37. In the Matter of certain Badly-treated Mollusks.—Read before the California Acad. Sci., April 21, 1879. Separately printed, pp. 1-10, cover and title, with many figures.

- 38. Observations on Planorbis; are the Shells of Planorbis dextral or sinistral? On certain aspects of Variation in American Planorbes.—Proc. Acad. Nat. Sci., Philadelphia, 1881, pp. 92-110, with 27 figures.
- 39. Mya arenaria in San Francisco Bay.—Amer. Naturalist, Vol. 15, May, 1881, pp. 362-366.
- 40. On Helix aspersa in California, and the Geographical distribution of certain West American Land-snails, etc.—Annals New York Acad. Sci., Vol. 2, 1881, pp. 129-139.
- 41. Verification of the Habitat of Conrad's Mytilus bifurcatus.—Proc. Acad. Nat. Sci., Philadelphia, 1882, pp. 241-242.
- 42. On the History and Distribution of the Fresh-Water Mussels and the Identity of certain alleged Species.—Proc. California Acad. Sci., November 20, 1882, 21 pp., and figures.

Specially devoted to the Anodons of the Pacific States. Only the separates of this paper were published.

43. On the Shells of the Colorado Desert and the region farther East; Part 1. The Physas of Indio; Part 2. Anodonta californiensis in a new locality.—Amer. Naturalist, Vol. 17, Part 2, October, 1883, pp. 1014-1020, several figures.

Read before the California Acad. of Sci., June 5, 1883.

44. The Edible Clams of the Pacific Coast, and a proposed method of transplanting them to the Atlantic Coast.—Bull. U. S. Fish Com., Vol. 3, 1883, pp. 353-362, with several figures.

Letter to Prof. Spencer F. Baird, U. S. Fish Commissioner, October 14, 1882. Glycimeris generosa, Saxidomus nuttallii and Schizothoerus nuttallii, specially mentioned.

- 45. Description of a New Hydrobiinoid gasteropod, *Pyrgula Nevadensis*, from the Mountain Lakes of Nevada, with remarks on allied species and the Physiographic features of said region.—Proc. Acad. Nat. Sci., Philadelphia, 1883, pp. 171-176, with figures.
- 46. Fresh-Water Pearl-mussels.—Mining and Scientific Press, San Francisco, April 7, 1883; Pacific Rural Press, April 14, 1883.
- 47. The Giant Clams of Puget Sound, Glycimeris generosa or geoduck.— Forest and Stream, May 28, 1885.

Read at the Washington, D. C., meeting of the American Fisheries Society, April, 1885, and published in the report of said meeting.

- 48. The Helicidae of the John Day Fauna. Contained in Dr. Charles A. White's paper, "On Marine Eocene, Fresh-Water Miocene, and other Fossil Mollusca of Western North America."—Bull. U. S. Geol. Surv., No. 18, 1885, pp. 14-18, pl. 3.
- 49. The Teredo, or Ship-worm.—Amer. Naturalist, February, 1886, pp. 132-136, with figures.

From letter to Prof. Spencer F. Baird, Secretary of the Smithsonian Institution.

- 50. A Mammoth Land Snail.—Nautilus, Vol. 3, No. 3, p. 29, Philadelphia, July, 1889.
- 51. Notes on *Physa triticea* of Lea; its relations, and comments on the Variation, etc., of *Physae*.—Nautilus, Vol. 3, No. 5, pp. 49-51, Philadelphia, September, 1889.

- 52. Helix (Stenotrema) hirsuta Say, on the West Coast.—Nautilus, Vol. 3, No. 7, pp. 81-82, Philadelphia, November, 1889.
- 53. Critiques and Comments.—Nautilus, Vol. 3, No. 6, pp. 64-66, Philadelphia, October, 1889.
- Reviews Mr. H. F. Carpenter's article on "The Shell-bearing Mollusca of Rhode Island," in the August, 1889, Nautilus.
- 54. Notice of and comments on the distribution of Planorbis (Helisoma) bicarinatus Say.—West American Scientist, San Diego, California, September, 1889.
- 55. Descriptions of new West American Land, Fresh-Water and Marine shells, etc. Scientific Results of Explorations by the U. S. Fish Commission Steamer "Albatross."—Proc. U. S. Nat. Mus., Vol. 13, 1890, pls. 15-17, pp. 205-225.

Describes Helix (Arionta) coloradoensis, H. (Arionta) magdalenensis, Holospira semisculpta, H. arizonensis, Melania (Goniobasis?) acutifilosa, Cyclothyca corrugata, Mitra (Costellaria?) nodocancellata, Venericardia barbarensis, Lucina aequizonata, Venus (Chione) effeminata, Venericardia ventricosa, Miodon prolongatus, and Periploma discus. Cyclothyca, a new genus, is defined.

- 56. List of American Land and Fresh-water Shells received from the U. S. Department of Agriculture, etc.—Proc. U. S. Nat. Mus., Vol. 15, 1891, pp. 95-106.
- 57. List of Shells collected on the West coast of South America, principally between latitudes 7° 30′ S. and 8° 49′ N., by Dr. W. H. Jones, U. S. Navy.—Proc. U. S. Nat. Mus., Vol. 14, 1891, pp. 307-335.
- 58. Notes on the Sculpture of American Limnaeas, etc.—Nautilus, Vol. 4, No. 11, pp. 121-124, Philadelphia, March, 1891.
- 59. Edible Mollusks, etc., Here and There.—Nautilus, Vol. 5, No. 1, pp. 2-4, Philadelphia, May, 1891.
- 60. Edible Shell Notes, for the Nautilus.—Nautilus, Vol. 5, No. 3, pp. 25-26, Philadelphia, July, 1891.
- 61. Patula strigosa Gould, in Arizona.—Nautilus, Vol. 6, No. 1, pp. 1-2, Philadelphia, May, 1892.
- 62. Preliminary Descriptions of New Molluscan Forms from West American Regions.—Nautilus, Vol. 6, No. 8, pp. 85-89, Philadelphia, December, 1892. Uvanilla regina, Chlorostoma gallina var. multifilosa, Bulimulus (Pleuropyrgus) Habeli, Onchidium Lesliei, Littorina (Tectarius) galapagiensis, Nitidella incerta, Littorina (Tectarius) atyphus.
- 63. Report on the Land and Fresh-water Shells of the Death Valley Expedition.—North Am. Fauna, No. 7, 1893, pp. 269-283. U. S. Dep. Agric., Division of Ornithology and Mammalogy.

Amnicola micrococcus Pilsbry, and Fluminicola merriami Pilsbry and Beecher, described and figured.

- 64. Description of a new species of Nassa (Nassa brunneostoma) from the Gulf of California.—Nautilus, Vol. 7, No. 1, pp. 10-11, Philadelphia, May, 1893.
- 65. Preliminary Report on the Molluscan species collected by the United States Scientific Expedition to West Africa in 1889-1890.—Proc. U. S. Nat. Mus., Vol. 16, 1893, pp. 317-339.

66. On Rare or Little-known Mollusks from the West Coast of North and South America, with Descriptions of New Species.—Proc. U. S. Nat. Mus., Vol. 16, 1893, pp. 341-352, pl. 50.

Onchidella Binneyi, Cypraea isabella-mexicana, Tectarius atyphus, Uvanilla regina, Chlorostoma gallina var. multifilosa, figured.

67. Report on the Mollusk-Fauna of the Galapagos Islands, with descriptions of new species. Scientific Results of Explorations by the U. S. Fish Commission Steamer "Albatross."—Proc. U. S. Nat. Mus., Vol. 16, 1893, pp. 353-450, pls. 51 and 52, map.

Bulimulus (Pleuropyrgus) Habeli, Onchidium Lesliei, Onchidella Steindachneri, Nitidella incerta, and Tectarius galapagiensis, figured. A summary of previous work in the region is given.

- 68. Notes on Recent collections of North American Land, Fresh-water and Marine Shells, received from the U. S. Department of Agriculture.—Proc. U. S. Nat. Mus., Vol. 16, 1894, pp. 743-755.
- 69. Mollusk-Fauna of the Galapagos Islands.—West American Scientist, San Diego, California, April, 1894.
- 70. Triodopsis + Mesodon, distribution, etc.—Nautilus, Vol. 8, No. 1, pp. 6-8, Philadelphia, May, 1894.
- 71. Urosalpinx cinereus in San Francisco Bay.—Nautilus, Vol. 8, No. 2, pp. 13-14, Philadelphia, June, 1894; Vol. 12, No. 10, p. 112, February, 1899.
- 72. Helix (Arionta) coloradoensis—A New Locality.—Nautilus, Vol. 8, No. 3, p. 29, Philadelphia, July, 1894.
- 73. The Shells of the Tres Marias and other Localities along the Shores of Lower California and the Gulf of California, etc.—Proc. U. S. Nat. Mus., Vol. 17, 1894, pp. 139-204.
- 74. A New Variety of Ocinebra circumtexta Stearns (var. aurantia).—Nautilus, Vol. 9, No. 2, p. 16, Philadelphia, June, 1895.
- 75. Purpura lapillus, var. imbricata.—Nautilus, Vol. 10, No. 8, p. 85, Philadelphia, December, 1896.

Not Lamarck's "imbricata," but a finely imbricated form, detected by me sixty years ago in Boston.

76. Uvanilla regina—A new locality.—Nautilus, Vol. 11, No. 1, pp. 1-2, Philadelphia, May, 1897.

San Clemente Island, in the Santa Barbara Channel; previously on Guadaloupe Island.

77. Quarter-Decks and Jingles.—Nautilus, Vol. 11, No. 4, pp. 38-40, Philadelphia, August, 1897.

Local names given to Crepidula fornicata and Anomia simplex. The oystermen use these shells for the purpose of collecting the spat of O. Virginica in the Eastern oyster beds.

78. Modiola plicatula Lamarck—An extinct locality.—Nautilus, Vol. 11, No. 9, pp. 102-103, Philadelphia, January, 1898.

The "Back-bay district," in Boston, the region referred to.

79. Description of new species of Actaeon, A. Traski, from the Quaternary bluffs of Spanish Bight, San Diego, California.—Proc. U. S. Nat. Mus., Vol. 21, 1898, pp. 297-299, with figure.

Also preliminary descriptions in Nautilus, Vol. XI, June, 1897, pp. 14-15.

80. Notes on Cytherea (Tivela) crassatelloides Conrad, with descriptions of many varieties.—Proc. U. S. Nat. Mus., Vol. 21, 1898, pp. 371-378, pls. 23-25.

The varieties named herein rest on the critical examination of over two thousand examples of all ages from specimens under an inch in length to extreme adults.

81. Crepidula convexa Say, var. glauca Say, San Francisco Bay.—Nautilus, Vol. 13, No. 1, p. 8, Philadelphia, May, 1899.

82. Natural History of the Tres Marias Islands, Mexico.—Nautilus, Vol. 13, No. 2, pp. 19-20, Philadelphia, June, 1899.

Also in Science, N. S., Vol 10, July 28, 1899, No. 239, p. 121. A criticism of Nelson and Goldman's paper in N. A. Fauna, No. 14.

83. Donax stultorum Mawe: Conrad's species, Cytherea crassatelloides.—Nautilus, Vol. 13, No. 7, pp. 73-75, Philadelphia, November, 1899.

Contains bibliography of this species, with Dr. Pilsbry's assistance.

84. Abalone Fishery in California: Protective regulation.—Nautilus, Vol. 13, No. 7, pp. 81-82, Philadelphia, November, 1899.

85. Modiola plicatula Lamarck, in San Francisco Bay.—Nautilus, Vol. 13, No. 8, p. 86, Philadelphia, December, 1899.

86. List of Shells collected by Vernon Bailey in Heron and Eagle Lakes, Minnesota, with notes.—Proc. U. S. Nat. Mus., Vol. 22, pp. 135-138, April 7, 1900.

The variation in size, form, and sculpture of Limnaea emarginata is specially indicated.

87. Description of a new variety of Haliotis, *H. fulgens var. walallensis*, from California, with Faunal and Geographical Notes.—Proc. U. S. Nat. Mus., Vol. 22, 1899, pp. 139-142.

Also, Nautilus, Vol. 12, No. 9, January, 1899, pp. 106-107.

88. Mollusca associated with Mastodon remains.—Nautilus, Vol. 13, No. 9, pp. 100-101, Philadelphia, January, 1900.

Fresh-water species near Newburgh, N. Y.

89. Field-notes and Reminiscences [of a collecting trip on the coast of California with the late Dr. W. Newcomb].—Nautilus Vol. 13, No. 10, pp. 115-117, Philadelphia, February, 1900.

90. Exotic Mollusca in California.—Science, N. S., Vol. 11, 1900, No. 278, pp. 655-659.

91. Notes on the distribution of and certain characteristics in the Saxidomi of the West Coast.—Nautilus, Vol. 14, No. 1, pp. 1-3, Philadelphia, May, 1900. Conspicuous hinge characters pointed out and compared.

92. The Fossil Shells of the Los Angeles Tunnel Clays.—Science, N. S., Vol. 12, 1900, No. 294, pp. 247-250.

A satisfactory determination of the form described as Radiolites Hamlini, awaits further material.

93. Vallonia pulchella Müll., in Los Angeles and elsewhere in California.—Nautilus, Vol. 14, No. 6, pp. 65-67, Philadelphia, October, 1900.

94. Fossil Land-shells of the John Day Region, with Notes on related living species.—Proc. Washington Acad. Sci., Vol. 2, 1900, pp. 651-660, pl. 35. Epiphragmophora fidelis antecedens, Polygyra Dalli, Ammonitella Yatesi praecursor, Pyramidula perspectiva simillima described. See also No. 98 of this list.

95. An Abnormal Chiton.—Nautilus, Vol. 15, No. 5, pp. 53-54, Philadelphia, September, 1901.

Ischnochiton (Maugerella) conspicuus Cpr., with only six valves. A three-valved Chiton also mentioned.

96. Japanese Vivipara in California.—Nautilus, Vol. 15, No. 8, p. 91, Philadelphia, December, 1901.

V. stelmaphora Bgt., in San Jose.

97. The Fossil Fresh-water Shells of the Colorado Desert, their distribution, environment and variation.—Proc. U. S. Nat. Mus., Vol. 24, 1901, pp. 271-299, pls. 19-24, and many figures in the text.

The figures of *Paludestrina protea* represent the more conspicuous aspects of variation, selected from over 40,000 specimens. Of the *Physas* more than 2000 were critically examined and compared.

Some idea of the abundance of these shells on the surface of the desert may be formed from the fact, that about a year after the above paper was published, I had in my hands and weighed a bag which contained fourteen pounds of Paludestrina, quite clean and free from sand or any other shells, except a few examples of Amnicola longinqua; in other words seven million three hundred and four individuals. See also Nos. 34, 43, ante.

98. Fossil Shells of the John Day Region.—Science, N. S., Vol. 15, January 24, 1902, No. 369, pp. 153-154.

Helix (Epiphragmophora?) dubiosa nom. prov., Pyramidula Le Contei, and names provisionally Limnaea maxima. Vide previous paper, No. 48.

99. Unio Condoni in the John Day Beds.—Science (as above), March 7, 1902, p. 393.

Correction of omission in the preceding paper.

100. Helix var. circumcarinata and Pyramidula Elrodi.—Nautilus, Vol. 16, No. 6, pp. 61-62, Philadelphia, October, 1902.

101. Pyramidula elrodi and Epiphragmophora circumcarinata.—Nautilus, Vol. 16, No. 7, pp. 83-84, Philadelphia, November, 1902.

102. Mollusks occurring in Southern California.—Nautilus, Vol. 16, No. 12, pp. 133-134, Philadelphia, April, 1903.

Limax flavus, Limax maximus, Punctum conspectum in Los Angeles mentioned

103. Clam-orous Crows.—Nautilus, Vol. 17, No. 10, p. 120, Philadelphia, February, 1904.

Saxidomus giganteus carried by the crows and sometimes dropped on the roofs in Victoria, B. C.

104. Limax maximus and other Slugs in California.—Nautilus, Vol. 18, No. 3, pp. 34-36, Philadelphia, July, 1904. See also Pacific Rural Press, San Francisco, of about the same date.

Limax hewstoni, L. columbianus, L. californicus, and L. maximus mentioned, and remedies suggested for a pest of slugs.

No. 5, p. 58, Philadelphia, September, 1904.

106. Abalones and the Earthquake.—Nautilus, Vol. 20, No. 12, pp. 135-136, Philadelphia, April, 1907.

107. Fossil Mollusca from the John Day and Mascall Beds of Oregon.—Bull. Dep. Geology, Univ. California, Vol. 5, No. 3, pp. 67-70.

Helix (Epiphragmophora?) dubiosa nom. prov.; Pyramidella (Oreohelix) Le Contei n. s.; Limnaea maxima n. s.; described and figured.

108. On the Composition and Decomposition of Fresh-water Mussel Shells, with Notes and Queries.—Proc. Biol. Soc. Washington, June 12, 1907, Vol. 20, pp. 67-70.

Anodonta Nuttalliana and its varieties, of the West Coast, mentioned.

109. Among the Cephalopods.—Nautilus, Vol. 21, No. 2, p. 23, Philadelphia, June, 1907.

110. In re Cytherea petechialis of Carpenter's Mazatlan Catalogue.—Nautilus, Vol. 21, No. 3, p. 29, Philadelphia, July, 1907.

111. The U. S. Coast Survey Expedition to Alaska in the Year 1867.—Nautilus, Vol. 21, No. 3, pp. 29-31, Philadelphia, July, 1907.

#### COELENTERATA

- 112. Remarks on a New Alcyonoid Polyp, from Burrard's Inlet.—Proc. California Acad. Sci., Vol. 5, February 3, 1873; also separately, 8 pp.
- 113. Description of a new species of Alcyonoid Polyp, Pavonaria Blakei.— Mining and Scientific Press (San Francisco), August 9, 1873; also separately.
- 114. Description of a New Genus, Verrillia, and species, V. Blakei, of Alcyonoid Polyp.—Proc. California Acad. Sci., Vol. 5, August 18, 1873; Morning Call, San Francisco, August 12, 1873; Amer. Naturalist, Vol. 7, October, 1873, and Vol. 16, January, 1882.
- 115. Remarks suggested by Dr. J. E. Gray's paper on the "Stick Fish," in "Nature" [Verrillia Blakei], November 6, 1873.—Proc. California Acad. Sci., Vol. 5, March 16, 1874; also separately.
- 116. Verrillia Blakei or Halipteris Blakei.—Amer. Naturalist, January, 1882, pp. 55-56; also separately.
- 117. A new Virgularian Zoöphyte.—Mining and Scientific Press, San Francisco, October 13, 1883.
- 118. Description of a New Genus (Radicipes), and Species (R. pleuro-cristatus), of Alcyonoid Polyp, from Japanese waters, with remarks on the Structure and Habits of related forms, etc.—Proc. U. S. Nat. Mus., Vol. 6, 1883, pp. 96-101, and pl. 7.
- 119. Contributions to the Natural History of the Coelenterata; 4 pp., cover and title, Washington, D. C., October 26, 1889.

Historical Sketch and Bibliography of Halipteris Blakei and Radicipes pleurocristatus, with which copies of the previous papers were included under the same cover.

#### AGRICULTURE, ETC.

120. The Value of the Sugar Beet.—The Pacific, San Francisco, 1859.

If not the first, yet very nearly the first article suggesting the cultivation of the sugar beet as a profitable industry in California. No doubt too far ahead of the time. The first company was organized in 1869 and in November, 1870, the first beet sugar was made, the output the first season being 500,000 pounds. At the present date, 1903, the number of factories is eight with a capacity of 10,050 tons in twenty-four hours; "the capital invested in the factories will aggregate approximately \$12,000,000, to which may be added as a working capital and that invested in land, enough to raise the total amount invested by the companies themselves in the industry to about \$20,000,000." The population of the State being "1,485,053; the consumption of sugar estimated at 101,577,800

pounds and the production 160,000,000 pounds." (Geo. W. Shaw in Bulletin No. 149, Coll. of Agriculture, Univ. of California.)

121. A little more Lime.—The Pacific, San Francisco, 1859.

On the uses of Lime for various purposes in connection with farming.

122. Prolific Joint Corn.—California Horticulturist, November, 1873.

Notes of experiments with the above, and its value as compared with other varieties, for grain or fodder.

123. Ginseng the Chinese Panacea.—Cultivator's Guide, Sacramento, California, October, 1883.

Where found, its export value and possibilities in the way of trade and profitable culture.

124. The Sunflower.—Cultivator's Guide, Sacramento, California, December, 1883.

Its economic value in various ways indicated.

125. The Camass or Kamass.—Cultivator's Guide, Sacramento, California, January, 1884.

Camass esculenta the wild hyacinth of California and elsewhere; use by the Indians, etc.

126. Whitewashing Trees—uses of Lime, etc.—Cultivator's Guide, Sacramento, Çalifornia, August, 1883.

Prevention of moss growth, sap-scald, and pestiferous insects.

127. Parasites in Domestic Animals.—Cultivator's Guide, Vol. 1, pp. 13-14, with figures, Sacramento, California, May 1, 1883.

The sheep rot, flukeworm, etc., their occurrence and metamorphoses.

128. On the care of young Fruit-trees, Orchards, etc.—Cultivator's Guide, Sacramento, California, June, 1883.

The selection of a site, planting out and protection against hot winds, extreme cold, and destructive animals.

129. Parasites in Drinking Water.—Cultivator's Guide, Sacramento, California, May, 1883.

130. Dracaena Australis for Basketry purposes, etc.—Pacific Rural Press, February 21, 1903.

The use of the long, slender tough leaves for basket-work, mats, and similar fabrics, is suggested.

#### FORESTRY, ETC.

131. On the Economic Value of certain Australian Forest Trees, and their cultivation in California.—Proc. California Acad. Sci., Vol. 4, 1872, pp. 236-241.

Also in Annual Report State Board of Health for 1872; the California Horticulturist and the California Farmer; fifteen hundred copies separately published in pamphlet form. Review of the above in the *Nation*, New York, August 22, 1872, by Fred Law Olmsted. The foregoing, it was said at the time, gave an immediate impetus to the planting of these Australian species.

132. On the growth of certain California Forest Trees and the Meteorological inferences suggested thereby.

Read at the Cincinnati meeting of the American Forestry Association, April, 1882; printed separately, 8 pp. 8°.

Portions of above were read before the California Academy of Science, December 5, 1881.

133. Forest Tree Culture in California.—Review of the Decade, 1872-1882.

Read at the Cincinnati meeting of the American Forestry Association, April, 1882;

printed separately, 12 pp., 8°.

This and the preceding published in the Report of the Association for 1882.

134. The Mulberry as a Useful and Ornamental Tree.—Cultivator's Guide, Sacramento, California, August, 1883.

Methods of propagation and care; good varieties mentioned.

135. The Oriental Sycamore as a street tree.—Pacific Rural Press, San Francisco, December 20, 1902.

136. Eucalypts cultivated in the United States.—Science, N. S., Vol. 17, No. 439, 1903, pp. 858-860.

A review and in part, criticism of Prof. A. J. McClatchie's "Eucalypts cultivated in the United States," Bull. No. 35, Bureau of Forestry, U. S. Dep. Agriculture, 1903.

137. Eucalypts in the Philippines.—Science, N. S., Vol. 18, No. 457, 1903, pp. 439-440.

#### ETHNOLOGY, ETC.

138. Remarks on Pre-historic Remains in Florida.—Proc. California Acad. Sci., Vol. 4, March 4, 1872; also separately.

139. The Pectens, or Scallop shells.—Overland Monthly, San Francisco, April, 1873, Vol. 10, pp. 342-345.

As referred to in History and Poetry; also remarks on their Anatomy.

140. Aboriginal Shell-money.—Proc. California Acad. Sci., Vol. 5, July 7, 1873, with plate.

141. Aboriginal Shell-money.—Overland Monthly, San Francisco, September, 1873, with figures.

Also Globus, Braunschweig, Germany, of about same date; without credit.

142. Aboriginal Shell-money.—Amer. Naturalist, Vol. 11, June, 1877, pp. 344-350, with figures and plate.

143. Aboriginal Shell Ornaments, and Mr. E. A. Barber's paper thereon.—Amer. Naturalist, Vol. 11, August, 1877, pp. 473-474.

144. On certain Aboriginal Implements, from Napa County, California.—Amer. Naturalist, March, 1882, pp. 203-209, 9 figures.

Read before the California Academy of Sciences, October 19, 1881.

145. Ethno-Conchology—a Study of Primitive Money.—Rep. U. S. Nat. Mus., 1887, pp. 297-334, pls. 1-9, and numerous text-figures.

The various American and Indo-Pacific species of shells used as money or a medium in trade in past and recent times are mentioned. A lengthy review of the above, 30 pp. by Ed. Jardin, was published in Vol. 17 (2d Series) of the Bulletin of the Société Academique of Brest, in 1892.

146. On the Nishinam Game of "Ha" and the Boston Game of "Props."—Amer. Anthropologist, October, 1890, pp. 353-358, with figures.

Read before the Anthropological Society of Washington, D. C. The Nishinam game was played with acorns, the Boston game with the marine shells, Cypraea moneta.

#### MISCELLANEOUS

147. Form of Seeds as a factor in Natural Selection in Plants.—Amer. Naturalist, July, 1879, pp. 411-420, several figures; also in Pacific Rural Press and mining and Scientific Press, San Francisco, of about same date.

Read before the California Academy of Sciences, July, 1879.

The changes in the Flora between the years 1858 and 1879 in the neighborhood of Berkeley, California, are pointed out.

The botanical forms mentioned are Brassica nigra, Erodium cicutarium and E. moschatum, Geranium maculatum, Hordeum maritimum, Medicago denticulata, Centaurea melitensis, C. solstialis, Madia sativa, etc.

148. On the Botanical relations of *Physianthus albens*, the structure of its flowers, and their peculiarities as an Insect trap.—Pacific Rural Press, San Francisco, November, 1881, with several figures, under the title "A Moth-catching Plant."

Previously read before the California Academy of Sciences.

149. The Acorn-storing habit of the California Woodpecker, Melanerpes formicivorus.—Amer. Naturalist, May, 1882, pp. 353-357; also separately.

150. Instances of the effect of Musical Sounds on Animals.—Amer. Naturalist, Vol. 24, January, February and March, 1890. Also separately, 23 pp., cover and title.

Read before the Biological Society of Washington, D. C., May 1, 1886.

A lengthy notice of above by Catherine C. Hopley, in the Globe, London, England, April 14, 1890.

151. The Distribution of Species.—Forest and Stream, May 13, 1886. Read before the American Fisheries Society, April 14, 1886.

152. On certain Parasites, Commensals and Domiciliares in the Pearl oysters, Meleagrinae.—Ann. Rep. Smithsonian Inst. for 1886, Part 1, pp. 339-344, pls. 1, 3, 1889.

153. Araujia albens as a Moth-trap.—Amer. Naturalist, Vol. 21, June, 1887, pp. 501-507, with numerous figures.

Read before the Biological Society of Washington, D. C., February 19, 1887. The names of the species of Lepidoptera and other insects entrapped are given.

154. On Xylophagous Marine Animals.—California Horticulturist, etc., May, 1873, with figures.

155. Zoölogical Scraps from a Californian Notebook.—Cultivator's Guide, Sacramento, California, July, 1883.

White beavers; a squealing Toad; Protective coloration of the Horned Toads; Sandhill Cranes, mentioned.

156. On Accidentally introduced forms of Animals.—West American Scientist, February, 1891, pp. 107-109.

### GENERA AND SPECIES NAMED FOR ROBERT EDWARDS CARTER STEARNS BY THE AUTHORS

Cetacean: Grampus Stearnsii Dall.

Fish: Roncador Stearnsii Steindachner.

Recent Mollusks:

Voluta (Scaphella) Stearnsii Dall.

Cylindrella Stearnsii Arango.

Lamellaria Stearnsii DALL.

Unio Stearnsiana WRIGHT.

Aesopus Stearnsii Tryon.

Helix Stearnsiana GABB.

Microphysa Stearnsii BLAND.

Bulimus (Anctus?) Stearnsianus Pilsbry.

Callocardia Stearnsii DALL.

Periploma Stearnsii Dall.

Mytilus Stearnsi Pilsbry and Raymond.

Paludestrina Stearnsiana Pilsbry.

Sportella Stearnsii Dall.

Ischnochiton Stearnsii Dall (1902).

Venericardia (Cyclocardia) Stearnsii Dall (1902).

#### Fossil Mollusks:

Scala Stearnsii Dall.

Bulimus Stearnsii DALL.

Vorticifex Stearnsii WHITE, and

Stearnsia, White, for a Generic form of Cretaceous Mollusk.

Coral: Paracyathus Stearnsii VERRILL.