

OCCASIONAL PAPERS

OF THE

BERNICE PAUHI BISHOP MUSEUM OF  
POLYNESIAN ETHNOLOGY AND  
NATURAL HISTORY.

VOL. IV.—No. 5.

Director's Report for 1910.

WITH

INDEX TO VOL. IV.

HONOLULU, H. I.  
BISHOP MUSEUM PRESS.

1911

TO THE TRUSTEES OF THE BERNICE PAUAAHI  
BISHOP MUSEUM.

*Sirs:—The present Report is presented in accordance with the new rules adopted by the Trustees on December 15, 1910. These rules read as follows:—*

1. *Director's Annual Report.* While no definite instructions appear of record in the minutes from the Trustees to the Director regarding his Annual Report, the custom exists for the Director each year to present to the Trustees a written report of the work done in the Museum by the Director and the Staff, which report after acceptance by the Trustees is published. The Annual Report of the Director is a record of work accomplished. All recommendations by the Director looking toward the enlargement of the scope of the Museum or any increase in the field of the Staff's activities, should be made the subject of separate reports to the Trustees.

2. *Reports by members of the Staff.* At the close of each Museum year, each Curator shall report in writing to the Director concerning the work done by him or in his department during that year; plans for work in the future; and such other matters as he may desire to comment upon. These reports shall be transmitted to the Trustees by the Director, for filing in the Trustees' office.

*Under these rules this report is submitted.*

WILLIAM T. BRIGHAM,  
Director of the Museum.

Honolulu, May 20, 1911.

(Ordered printed October 19, 1911)

# REPORT

**D**URING the whole year 1910, work on the new Laboratory building continued and on December 31, it was still incomplete. In spite of this necessary disturbance, the various departments made fair progress.

Mr. J. W. Thompson, our Modeler, has continued his very excellent work in casting the fishes and coloring these casts in a way that provoked from so competent a judge as President David Starr Jordan, the statement that these painted casts were far better than any paintings of fish he had seen for study and identification. The same authority pronounced our collection of Hawaiian fishes in casts of the greatest value. Many casts of fruit, and of stone and wooden implements, have also been made.

The record of the Printery is not impressive, although there has been no lack of good work; the only publication issued was the last Annual Report. This, in addition to the report, contained in the appendix illustrated articles on Hawaiian Curved Adzes by the Director; Notes on Hawaiian Petroglyphs, I, by the Curator of Polynesian Ethnology; New Hawaiian Plants, II, by the Curator of Botany. The Press has been busy on the many labels required by a growing Museum, and also on the third volume of the Memoirs, which was not completed by the end of the year, certain studies by the Director, on the Museum collection of kapa, having to await the accommodations of the new workrooms, this entailing a delay of six months in the publication of this volume.

In the Library, the increase has been both considerable and valuable, as may be seen by the list of accessions. Much binding of exchanges and other publications issued in parts, has been

accomplished by the liberal appropriations of the Trustees. In May, we lost the services of Miss Schupp, who had charge of the Library for several years, as she became Mrs. Paul Messchaert. Until September, when her successor took office, Mr. Stokes had charge. I would here record our entire satisfaction with Miss Schupp's work and the regret of the entire Staff at her departure. Miss E. B. Higgins has been Librarian since September, 1910.

In the department of Entomology, Mr. Swezey has done much work in arranging and relabelling the extensive collection of Hawaiian insects. He reports this as in good preservation.

In the department of Ethnology, Mr. Stokes has continued his researches on Hawaiian Fish-ponds and Walled Fish-traps, visiting Molokai and taking measurements and photographs from Kaumanamana to Kaluaaha on the southern coast. This investigation has been extended over the other Hawaiian islands, and by correspondence to the other Polynesian groups. I regard this work as of special importance as modern changes in the methods of fish capture and preservation, and the new demands of commerce and war preparation, are destroying these ancient constructions, and the knowledge of their use is fast vanishing from the memories of the old Hawaiians, and by the correspondence, we find that even on the other groups, little can now be gathered. In addition to the care of the Library as mentioned already, Mr. Stokes had entire charge of the Museum, during the absence of the Director from the islands, for five weeks.

Of the gifts to the Museum, one by Rev. W. D. Westervelt, of specimens in stone and pottery collected by him in Mexico, deserves special mention. Among the loan collections, is a very interesting one of relics of the Alii, deposited by Her Majesty Liliuokalani.

In the department of Pulmonata, Dr. Cooke reports the number of Pulmonata added to the collections during the year, was 24204 catalogued under 1811 numbers; 19501 by the Curator; 2368

by Mr. C. N. Forbes of the Staff; and 2335 by others. Forty-one days were spent in the field, and eighty-six localities visited on Molokai, Kauai and West Maui. Specimens were received from the following collectors:— Prof. H. E. Crampton, J. Waterhouse, I. Spalding, H. Meyer, D. Thaanum, E. Deverill, A. F. Judd, R. von Holt, C. H. and R. A. Cooke. Various papers on conchological subjects, have been contributed to Pilsbry's *Manual of Conchology*.

In the department of Botany, the field work includes a visit to Maui, extending from the latter part of May, to the early part of August, during which a week was spent in camping in the crater of Haleakala, where fine specimens of the Silversword were obtained in flower. The summit peak of West Maui was explored, also the valleys and ridges back of Lahaina and Wailuku and the Hana region, with Nahiku and the country between Keanae and Kipahulu. The Curator Mr. Forbes, reports his work much expedited by the kindness of Messrs. C. J. Austin, W. H. Field, H. J. Howell, C. E. Meyers, L. von Tempsky and W. Weinzheimer. On Oahu the field work has been mainly among the valleys and ridges of the western division. Exchanges have been continued with the Botanic Garden at Sydney, N. S. W., with Mr. E. D. Merrill of the Bureau of Science, Manila; with the Herbarium of Prince Roland Bonaparte, Paris. A valuable collection of 300 Philippine plants was purchased from the collector Mr. A. D. E. Elmer, who is making the most important collections in the Philippine Islands at present. Specimens have been added to the Herbarium also by Messrs J. M. Lydgate and J. W. Thompson.

The attendance for the year is smaller than last year by 834; the total of whites is 734 greater than last year, and there is an increase in all nationalities, except the Japanese who fall behind last year's record by 1885, accounting for the total deficit.

TABLE OF ATTENDANCE.

1910.	Whites.	Hawallians.	Portuguese.	Chinese.	Japanese.	Others.	Open on		Visitors on closed days.	Average Attendance.		Total Visitors.
							Public days.	Other days.		Public days.	Other days.	
January .....	645	118	30	64	191	23	9	3	202	966	67	1071
February .....	728	186	41	352	106	10	9	4	19	156	5	1423
March .....	508	138	27	101	159	17	8	7	70	110	10	960
April .....	418	92	33	121	211	10	10	4	52	83	13	885
May .....	486	111	110	91	124	8	8	6	40	111	7	930
June .....	362	74	27	87	180	7	8	3	34	88	11	737
July .....	494	68	48	114	220	30	10	6	82	89	14	974
August .....	402	106	78	71	163	8	8	5	76	94	15	828
September .....	324	100	58	186	157	32	9	6	52	89	9	857
October .....	400	116	50	80	113	14	9	5	65	79	13	773
November .....	276	109	28	73	397	6	8	3	24	108	3	889
December .....	414	94	25	48	94	20	10	3	15	68	20	695
Totals .....	5457	1402	555	1388	2115	185	95	55	731	114.1	17.2	11,012

## List of Accessions.

### ENTHNOLOGICAL.

#### *Gifts.*

- 9133-9135 Specimens of carving from the Bontoc tribe. Philippine Ids. Given by Mr. A. F. Judd.
- 9136 Devil house. Fiji. Given by Mr. J. A. Wilder.
- 9137 Meat hanger. Fiji. Given by Mr. J. A. Wilder.
- 9138 Club, lotus pattern. Fiji. Given by Master James Wilder.
- 9146 Stone lamp. Molokai, H. I. Given by Mr. Wm. Mutch.
- 9147 Stone mortar. Molokai, H. I. Given by Mr. Wm. Mutch.
- 9150 Tapa. New Guinea Given by Mr. F. Muir.
- 9151-9152 Feather head-dresses. New Guinea. Given by Mr. F. Muir.
- 9154 Cast of New Zealand feeding-funnel. Given by Mr. H. G. Beasley.
- 9708 Stone hammer. Molokai, H. I. Given by Mr. G. P. Cooke.
- 9709 Phallic Stone. Molokai, H. I. Given by Mr. G. P. Cooke.

- 9710 2 Hawaiian cents, 1847. Given by Dr. W. T. Brigham.  
10239 4 Hawaiian torches. Given by Kapiolani Estate Ltd.  
10241-10248 8 Kahili. H. I. Given by Hon. A. S. Cleghorn.

Collection from Mexico. Given by Rev. W. D. Westervelt.

- 10101 8 knives of obsidian.  
10102 4 knives or spear heads.  
10103 4 spear heads.  
10104 2 obsidian flakes.  
10105-10106 Obsidian cores.  
10107 Rubbing stone.  
10108-10109 Axes.  
10110 Spear head, quartz.  
10111 Necklace, stone and shell beads.  
10112-10113 Spinning whorls, or buttons, of stone or clay.  
10114-10121 Spinning whorls, or buttons, of clay.  
10122 Oblong bead.  
10123 3 broken clay cups.  
10124-10125 Tobacco pipes.  
10126-10128 Incense burners.  
10129 Hollow cylinder.  
10130-10134 Handles to clay vessels.  
10135-10155 Small human and animal heads in clay.  
10157-10175 Idols, clay.  
10176 Tortoise, modelled in clay.  
10177-10180 Human figures, modelled in clay.  
10181 Seal.  
10182 Stone implement.  
10183-10184 Tapa beaters of stone.  
10185 Tapa beater of stone (cast).

Collection given by the Hawaiian Board of Missions.

- 10186 Drum. Marquesas Ids.  
10187 Club. Marquesas Ids.  
10188-10189 Staves of office. Marquesas Ids.  
10190 Anklet of human hair. Marquesas Ids.  
10191-10192 Stretchers for looms. Caroline Ids.  
10193-10197 Dance wands. Caroline Ids.  
10198 Dance paddle. Caroline Ids.

- 10199-10206 Spears, tipped with ray stings.  
 10207 Mask for dancing. Mortlock Ids.  
 10208 Fillets of Neritina shells. Mortlock Ids.  
 10209-10210 Baskets. Gilbert Ids.  
 10211 Adze handle. Marshall Ids.  
 10212 Adze. Marshall Ids.  
 10213 Adze or chisel, sharpened both ends.  
 10214 Paddle. Gilbert Ids.  
 10215 Club. Gilbert Ids.  
 10216-10218 Coir armor. Gilbert Ids.  
 10219 Sword. Gilbert Ids.  
 10220 Coconut container.  
 10221 Rattle of 3 Cassis shells.  
 10222 Paddle. Micronesia.  
 10223-10224 Wands. Micronesia.  
 10225 Spear. Solomon Ids.  
 10226 Club. Solomon Ids.  
 10227 6 arrows. Solomon Ids.  
 10228 Mask. New Caledonia.  
 10229-10231 Ie kuku. Hawaiian Ids.  
 10232 Hohoa. Hawaiian Ids.  
 10233 Shells from squid hooks. Hawaiian Ids.  
 10234 Skull.  
 10235 Palm fibre.  
 10236 3 coconut drinking cups.

*Purchases.*

- 9139-9140 Kapa anvils. Hawaiian Ids.  
 9141 Stone sinker. Hawaiian Ids.  
 9142 Kapuahi kuni anaana. Hawaiian Ids.  
 9143-9144 Stone lamps. Hawaiian Ids.  
 9145 Oil dish. Fiji.  
 9711 Ivory comb. Hawaiian Ids.  
 9712-9714 Stone mortars. Hawaii, H. I.  
 9715-9716 Stone lamps. Hawaii, H. I.  
 9717-9718 Stone adzes. Hawaii, H. I.  
 9719 Eho pohaku. Hawaii, H. I.  
 9720 Ulu maika. Hawaii, H. I.  
 10237 Adze. Hawaii, H. I.  
 10238 Cane covered with Hawaiian basketry.

*Exchanges.*

- 9148 Feather dress. New Guinea.  
9149 Basket. South Australia.  
9153 Taiaha. New Zealand.  
9155-9160 Feather dresses. New Guinea.

*Loans.*

Collection from Her Majesty Liliuokalani.

- L. 433 Feather malo, of Kaumualii.  
L. 434-437 Feather lei, of Konia.  
L. 438-443 Lei palaoa.  
L. 444 Stone mirror, of Kalanikauleleiaiwi.  
L. 445-446 Stone mirrors, of Keaweikekahialiikamoku.  
L. 447 Ivory mounted mirror, of Keopuolani.  
L. 448 Ivory handle for cane, left by an officer of Captain Cook's vessel.  
L. 449 Ivory handle for fan, of Keopuolani.  
L. 450 Ivory handle for walking stick, called Kumahumahukolekolekaaka.  
L. 451 Ivory comb, of Keopuolani.  
L. 452 Tortoise shell comb, of Konia.  
L. 453 Jet ear-rings, of Konia.  
L. 454 Hair jewelry, of Konia.  
L. 455-461 Hair jewelry, of Paki.

Collection from Mr. Bruce Cartwright, Jr.

- L. 462 Feather lei, of Queen Emma.  
L. 463-467 Bone fish hooks.  
L. 468 Piece of fish jaw, probably used as a file.  
L. 469 Ivory bead.  
L. 470 Stone adze. Fiji.  
L. 471 Spear. Solomon Ids.  
L. 472 Bow. Solomon Ids.  
L. 473 3 arrows. Solomon Ids.  
L. 474 Pumice for rubbing down wooden bowls.

**BOTANICAL.**

J. M. Lydgate, Hawaiian plants .....	30
J. W. Thompson, Hawaiian plants .....	3
Botanic Garden, Sydney, by exchange, Australian plants..	200
A. D. E. Elmer by purchase, Philippine plants .....	300
Collected, Hawaiian plants.....	1776
Total additions.....	2309

**CONCHOLOGICAL.**

Charles N. Forbes .....	Specimens.....	2368
Others .....	" .....	2335
Curator collected .....	" .....	19501
Total accessions for the year .....		24204

New catalogue numbers 1811.

Specimens were received from those noted in the Director's report.

**ADDITIONS TO THE LIBRARY.**

Accessions denoted by an \* were acquired by exchange.

- \*Academy of Natural Sciences of Philadelphia.—Proceedings, lxi, 3; lxii, 1, 2.—Journal, xiv, 2.
- \*Agricultural Gazette of New South Wales, xxi.
- Aliioli College.—Catalogue 1910-1911. Honolulu. Given by the College.
- American Anthropologist, xi, 4; xii, 1, 2.
- American Association for the Advancement of Science.—Preliminary announcement of 62nd meeting, 1910.
- American Association of Museums.—Proceedings, iii. Charleston, 1909.
- American Geographical Society, New York.—Bulletin, xli, 11.
- \*American Museum of Natural History, New York.—Annual Report, 1909.—Anthropological Papers, iv, 2; v, 1; vi, 1.—Bulletins, xxvii; xxviii.—Memoirs, viii, 2; x, 2; xii, 1; xiii, 1; xiv, 2.—American Museum Journal, x.
- \*American Philosophical Society, Philadelphia.—Proceedings, 193-196.

- Anatomy and Physiology, Journal of.—xliv, 2-4; xlv, 1.
- Anderson, Rufus.—Kapiolani. New York, 1866. Given by Dr. Wm. T. Brigham.
- Annuaire des Établissements Français de l'Océanie, Papeete, 1863.
- \*Anthropologie de Paris, Revue de l'École d', vingtième année.
- \*Anthropologie de Paris, Société de.—Bulletins et Mémoires, v série, ix, 6; x, 1; vi série, i, 1.
- \*Archivio per l'Antropologia e la Etnologia. xxxix; xl, 1, 2.
- \*Asiatic Society of Bengal.—Journal and Proceedings, iv, 5-11.—Memoirs, ii, 5-9.—Journal, lxxiv, 4.
- \*Australian Museum, Sydney.—Report for 1909.—Records, vii, 5; viii, 1.—Memoirs, iii, 9; iv, 12.
- Bailey, F. Manson.—The Queensland Flora. Brisbane, 1899.
- Bailey, Florence Merriam.—The Red-headed Woodpecker.
- Becke, Louis.—Rodman, the boatsteerer. London, 1898. Given by Mr. A. F. Judd.
- The ebbing of the tide. Philadelphia, 1896. Given by Mr. A. F. Judd.
- By reef and palm. Philadelphia, 1896. Given by Mr. A. F. Judd.
- Scènes de la vie polynésienne. Paris, 1903.
- Becke, Louis and Walter Jeffery.—The mutineer. London, 1898. Given by Mr. A. F. Judd.
- A First Fleet Family. New York, 1896. Given by Mr. A. F. Judd.
- Bergh, R.—Untersuchung von Triboniophorus und Philomycus.
- Bernard, A.—L'Archipel de la Nouvelle Calédonie. Paris, 1894.
- Bonwick, James.—Daily life and origin of the Tasmanians. London, 1898.
- \*Boston Public Library.—Bulletin, ii, 4.—Fifty-eighth annual report.
- \*Boston Society of Natural History.—Proceedings, xxxiv, 8-11.
- Brazier, John.—Six papers on mollusca.
- Bronn's Klassen und Ordnungen des Tier-Reichs.—Mollusca, iii, 105-112.
- \*Brooklyn Institute of Arts and Science.—Science Bulletin, i, 17; —Report for 1909.
- Brown, George.—Melanesians and Polynesians. London, 1910.
- Brown, J. MacMillan.—Maori and Polynesian. London, 1907.

- Buschman, J. Ch. Ed.—Textes marquésans et taïtiens. Berlin, 1843.
- Calder, J. E.—Native tribes of Tasmania. Hobart, 1875.
- \*California Academy of Sciences, San Francisco.—Proceedings, iii, pp. 49-72.
- \*Camboué, Rev. P.—Eight scientific papers.
- Caret, François d'Assise.—L'Archipel de Mangaréva.
- Carnegie Foundation for the Advancement of Teaching.—Bulletins, 4, 5; 4th Annual Report.
- Carnegie Institute, Pittsburg.—Founder's day, 1910.
- \*Carnegie Institution of Washington.—Year book, 1909.—Publications, 53, 74 (1, 2), 87 (2), 96 (2), 100, 109, 115, 116, 121-126, 129, 135, 136.—Scope and Organization of the Carnegie Institution, 1909.
- \*Carnegie Museum, Pittsburg.—Annals, vi, 2-4; vii, 1.—Memoirs, iv, 2, 5.—Annual report for 1910.
- Cauvin, Ch.—Mémoire sur les races de l'Océanie. Paris, 1882.
- Christian, F. W.—Eastern Pacific lands. London, 1910.
- Churchill, Hewella Pierce.—Samoa 'Uma. New York.
- Cincinnati Museum.—Annual reports, 1908, 1909.—Exhibitions of American Art, 3 catalogues.
- Collinge, Walter E.—Five papers on mollusca.
- \*Connecticut Academy of Arts and Science, New Haven.—Transactions, xiv, pp. 291-466; xvi, pp. 1-245.—Memoirs, ii.
- Cooke, George.—Te pito te henua. Washington, 1897.
- Cook,—Journal of Cook's last voyage. Philadelphia, 1783.
- Cooper, H. Stonehewer.—Coral lands. London, 1880.
- Cox, James C.—Two papers on mollusca.
- Creagh, S. M.—Loyalty Islands. Hobart, 1892.
- Crocker, H. I.—Hawaiian numerals. San Francisco, 1909. Given by Hon. C. R. Bishop.
- Dictionaries.—Dutch-English, Holtze. Leipzig, 1899.
- English-Greek, Yonge.
- English-Hawaiian, Lahainaluna, 1845.
- English-Latin, Smith and Hall. New York, 1871.
- French-English and English-French, Edgren. New York, 1904.
- German-English and English-German, Flügel. Braunschweig, 1894.

- Greek-English, Liddell and Scott. New York, 1882.
- Harper's Latin. New York, 1907.
- Italian-English and English-Italian, Edgren. New York, 1904.
- Spanish-English and English-Spanish, Velasquez.
- Supplement to the Century Dictionary and Cyclopaedia, New York, 1910.
- Döllinger, J. I.—The Gentile and the Jew. London, 1906.
- The first age of Christianity and the Church. London, 1906.
- \*Dominion Museum, Wellington, N. Z.—Hand-lists: Birds inhabiting New Zealand, parts 1, 2; Lepidoptera of New Zealand.
- Drago, Giovanni del.—Vingt jours à Honolulu. Rome, 1885.
- Duggar, Benjamin Minge.—Fungous diseases of plants. Boston, 1909.
- Durandus, William.—The symbolism of churches. London, 1906.
- Ella, S.—Samoa. Hobart, 1892.
- Ellis, William.—Polynesian researches. London, 1840.
- Ellis, John E.—Life of William Ellis. London, 1873.
- Exporters' Encyclopædia. New York, 1910
- Farmer, Sarah S.—Tonga and the Friendly Islands. London, 1855.
- Fergusson, James.—Rude stone monuments. London, 1872.
- \*Field Museum of Natural History.—Geological Series, iii, 8.—Ornithological Series, i, 6.—Zoological Series, vii, 8-12; x, 2-4.—Report Series, iii, 4.
- Fison, Lorimer.—Group marriage and relationship. Hobart, 1892.
- Fraser, J. G.—Totemism and Exogamy. London, 1910.
- Furness, W. H. 3rd.—The island of stone money. Philadelphia, 1910.
- Geographen Kalender. Gotha, 1909.
- Giglioli, H. H.—Ethnological collection of Dr. Elio Modigliani. Leiden, 1893.
- Glandeaud, Ph.—Les Volcans d'Auvergne. Paris, 1909.
- Grey, G.—Mythology and traditions of the New Zealanders (in Maori). London, 1854.
- Poetry of the New Zealanders (in Maori). Wellington, 1853.
- Hamy, E. T.—Les Races Humaines de Madagascar. Paris, 1895.
- Les Alfoursous de Gilolo. Paris, 1877.

- \*Harvard University Library.—Twelfth report.  
Hawaiian Annual, 1910.
- Hawaiian Entomological Society.—Proceedings, ii, 3. Given by the Society.
- \*Hawaiian Evangelical Association.—Annual report for 1910.  
Hawaiian Legislature, Special session, 1909.—Message of the Governor.
- \*Hawaiian Sugar Planters Association.—Division of Agriculture and Chemistry, Bulletins, 30-35.—Division of Entomology, Bulletins, 8, 9.—Division of Pathology and Physiology, Bulletins, 8, 9.—Report for 1909.
- Hawaii.—Report of the Governor of Hawaii for 1909. Washington, 1909.
- Report of the Milk Commission to the Governor of Hawaii, 1910.
- Report of the Commission on private wharfs and landings to the Governor of Hawaii, 1910.
- Hawaii Collegian, i, 1. Given by Professor Vaughan MacCaughey.
- Heilprin, A.—The eruption of Pelée. Philadelphia, 1908.
- Historisches Museum in Bern.—Jahresbericht, 1909.
- Houston Museum and Scientific Society.—Bulletin, 1.
- Imperial Earthquake Investigation Committee, Tokyo.—Bulletins, i, 1, 2, 4; ii; iii; iv, 1.
- \*Indian Museum, Calcutta.—Annual report, 1908-1909.—Records, ii; iii, 1-3.—Memoirs, i, 4; ii, 1-3.—Echinoderma, part 5.—Ethnographic Survey, Craniological data.—List of Asiatic beetles.
- Inman, Thos.—Ancient Pagan and modern Christian symbolism. New York, 1874.
- Institut de Sociologie, Solvay.—Bulletin, 1.
- \*Instituto Geológico de México.—Bolletín, 25.—Parergones, iii, 3-5.
- \*Instituto de Maguinhos, Rio Janeiro.—Memorias, i, 1; ii, 1.—Trabalhos pelo Dr. Aragao, 5; Dr. Chagas, 4; Dr. Cruz, 4; Dr. Faria, 1; Dr. Fontes, 1; Dr. Horta, 1; Dr. Lima, 1; Dr. Neiva, 2; Dr. Moses, 2; Dr. Peryassu, 1; Dr. Vasconcelles, 1; Dr. S. von Prowazek, 2; Dr. S. von Prowazek and Dr. H. de Beaurepaire, 2.
- \*Jardin Botanique de Buitenzorg.—Icones Bogorienses, iv, 1.
- Jho-Pâle.—Le braconnage en rivières. Paris, 1906.
- Pêches, pêcheurs, pêché. Paris, 1904.

- Job, H. K.—Franklin gull. New York, 1910.
- Ker, Annie.—Papuan fairy tales. London, 1910.
- \*Kongl. Vitterhets Historie och Antiquitets Akademien, Stockholm.—Fornvännen, 1909.
- \*Königl. Zoologisches und Anthropologisch-Ethnographisches Museum, Dresden.—Abhandlungen und Berichte, xiii, 1.
- Krause, Eduard.—Vorgeschichtliche Fischereigeräte. Berlin, 1904.
- Kubary, J. L.—Ethnographische Beiträge, 3te Heft. Leiden, 1895.
- Lang, J. D.—View of the origin and migrations of the Polynesian nation. London, 1834.
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- Laufer, B.—Chinese pottery of the Han dynasty. Leiden, 1909.
- Lawes, W. G.—Motu grammar and vocabulary. Sydney, 1896.
- Le Hon, H.—L'homme fossile en Europe. Bruxelles, 1868.
- \*Leland Stanford Junior University.—University Series, 3, 4.
- Lias, B. de S. P.—Pérak. Paris, 1883.
- \*Linnean Society of New South Wales.—Proceedings, i-vi; xxxiv, 3, 4; xxxv, 1-3.
- \*Liverpool School of Tropical Medicine.—Annals, iii, 5; iv, 1-2.
- Mallet.—Océanie.
- Man, ix, 12; x, 1-10.
- Manual of Conchology, 79-81.
- \*Marine Biological Association.—Journal, viii, 5; ix, 1.
- Marsden, William.—The history of Sumatra. London, 1811.
- Martini und Chemnitz.—Conchylien Cabinet, Lieferungen 539-546.
- Massachusetts Horticultural Society.—Transactions, 1909, 2; 1910, 1. Given by Dr. Wm. T. Brigham.
- Matthews, R. H.—Australian rock pictures. Washington, 1895.
- Australian ground and tree drawings. Washington. 1896.
- McNab, Robert.—Murihiku. Wellington, 1909.
- Microscopical Science, Quarterly Journal, liv, 3, 4; lv.
- \*Missouri Botanical Garden, St. Louis.—Annual report for 1909.
- Moehler, J. A.—Symbolism. London, 1906.
- Morgan, Lewis H.—Ancient society. New York, 1878.
- Murray, A. W.—Forty years mission work in Polynesia and New Guinea. London, 1876.
- \*Museo Nacional de Buenos Aires.—Anales, serie iii, xi; xii.

- \*Museum of Comparative Zoology.—Bulletin, lii, 14-17; liv, 1.  
—Memoirs, xxxix, 1; xli, 1; xli, 1, 2.—Report, 1909-1910.
- \*Museum of Fine Arts, Boston.—Bulletin, viii, 47, 48.
- \*Natal Government Museum.—Catalogue of rocks and minerals, 1909.
- Nature, lxxxii-lxxxv.
- Nautilus, iv-xxiii; xxiv, 1-7.
- Navas, Rev. P. Longinos.—Twenty-six entomological papers.
- \*New South Wales, Department of Fisheries.—Annual report for 1909.—Fisheries of N. S. W., by David G. Stead.
- \*New South Wales, Department of Mines.—Annual report for 1909.—Records of Geological Survey, ix, 1.—Memoirs, Paleontology, no. 5, vol. ii, pt. 2
- \*New York Botanical Garden.—Bulletin, 21, 22, 24.
- \*New Zealand Institute.—Proceedings, 1909, 3, 4; Transactions, xlii.
- Nova Guinea.—Résultats de l'expédition scientifique néerlandaise, viii, 2; ix, 1.
- \*Oahu College.—Catalogue, 1909-1910.—The Oahuan, ix, 2, 5-10.
- Ornithologie, Journal für.—Jahrgang, lviii, 2-4. Sonderheft, Leipzig, 1910.
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**LIST OF EXCHANGES.**

- Adelaide, S. Australia.—Royal Geographical Society of South Australia.  
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 South Australian Museum.
- Amherst, Mass.—Amherst College Library.
- Amsterdam, Holland.—Universiteit van Amsterdam.
- Auckland, N. Z.—Auckland Institute.
- Baltimore, Md.—Johns Hopkins University.  
 Maryland Geological Survey.
- Barcelona, Spain.—Real Academia de Ciencias y Artes de Barcelona.
- Berkeley, Cal.—University of California.
- Berlin, Germany.—Anthropologische Gesellschaft.  
 Königl. Museum für Völkerkunde.
- Berne, Switzerland.—Bern Historisches Museum.
- Boston, Mass.—Boston Public Library.  
 Boston Society of Natural History.  
 Museum of Fine Arts.
- Bremen, Germany.—Museum für Natur-, Völker- und Handelskunde.
- Brisbane, Queensland.—Royal Society of Queensland.
- Brooklyn, N. Y.—Museum of the Brooklyn Institute of Fine Arts and Sciences.
- Brussels, Belgium.—Société Royale Malacologique de Belgique.
- Buda-Pest, Hungary. Museum National Hongrois.
- Buenos Aires, Argentine Republic.—Museo Nacional de Buenos Aires.
- Buitenzorg, Java.—Jardin Botanique de Buitenzorg.
- Calcutta, India.—Asiatic Society of Bengal.  
 Indian Museum.
- Cambridge, Mass.—Harvard University Library.  
 Museum of Comparative Zoology.  
 Peabody Museum.
- Capetown, S. Africa.—South African Museum.
- Chicago, Ill.—Field Museum.
- Christchurch, N. Z.—Canterbury Museum.
- Cologne, Germany.—Rautenstrauch-Joest Museum.
- Copenhagen, Denmark.—Société Royale des Antiquaires du Nord.
- Dresden, Germany.—Königl. Zoologisches und Anthropologisch-Ethnographisches Museum.
- Dublin, Ireland.—Royal Irish Academy
- Edinburgh, Scotland.—Royal Society of Edinburgh.
- Florence, Italy.—Società Italiana di Antropologia.
- Frankfurt on Main, Germany.—Städtisches Völker-Museum.
- Geelong, Victoria.—Gordon Technical College.
- Genoa, Italy.—Museo Civico di Storia Naturale di Genoa.
- Halle, Germany.—Kaiserl. Leop. Carol. Akademie der Naturforscher.
- Hamburg, Germany.—Museum für Völkerkunde.
- Hanover, N. H.—Dartmouth College.
- Hilo, Hawaii.—Hilo Public Library.

*List of Exchanges.*

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- Honolulu, Hawaii.—Board of Agriculture and Forestry.  
College of Hawaii.  
Hawaiian Evangelical Association.  
Hawaiian Historical Society.  
Hawaiian Sugar Planters' Association.  
Honolulu Library Association.  
Oahu College.  
United States Experiment Station.
- Lawrence, Kansas.—University of Kansas.
- Leiden, Holland.—Rijks Ethnographisches Museum.  
Rijks Museum van Natuurlijke Historie.
- Leipzig, Germany.—Museum für Völkerkunde.
- Liverpool, England.—Liverpool School of Tropical Medicine.
- London, England.—Linnean Society of London.  
Royal Anthropological Institute.
- Madras, India.—Government Museum.
- Manila, P. I.—Bureau of Science.  
Ethnological Survey.
- Melbourne, Victoria.—Royal Society of Victoria.
- Mexico.—Instituto Geológico de Mexico.
- Munich, Germany.—Ethnographisches Museum.
- New Haven, Ct.—Connecticut Academy of Arts and Sciences.  
Yale University Library.
- New Plymouth, N. Z.—Polynesian Society.
- New York, N. Y.—American Museum of Natural History.  
Columbia University Library.  
New York Botanical Garden.
- Oberlin, O.—Oberlin College.
- Para, Brazil.—Museu Goeldi.
- Paris, France.—École d'Anthropologie.  
Société d'Anthropologie.
- Philadelphia, Pa.—Academy of Natural Sciences of Philadelphia.  
American Philosophical Society.  
Free Museum of Science and Art.  
The Philadelphia Museums.  
University of Pennsylvania.  
University of Pennsylvania Museum.  
Wagner Free Institute of Science.
- Pietermaritzburg, South Africa.—Natal Government Museum.
- Pittsburg, Pa.—Carnegie Museum.
- Plymouth, England.—Marine Biological Association of the United Kingdom.
- Portici, Italy.—Laboratorio di Zoologia Generale e Agraria.
- Rio de Janeiro.—L'Instituto de Maguinhos.
- Rome, Italy.—Accademia dei Lincei.
- St. Louis, Mo.—Missouri Botanical Garden.
- Salem, Mass.—Peabody Academy of Science.
- San Francisco, Cal.—California Academy of Sciences.

- São Paulo, Brazil.—Museu Paulista.  
 Stanford University, Cal.—Leland Stanford Junior University.  
 Stockholm, Sweden.—Kongl. Vitterhets Historie och Antiquitets Akademien.  
 Sydney, N. S. W.—Australian Museum.  
   Department of Agriculture.  
   Department of Fisheries.  
   Department of Mines.  
   Linnean Society of New South Wales.  
   Royal Society of New South Wales.  
   Technological Museum.  
 Tufts College, Mass.—Tufts College.  
 Vienna, Austria.—Anthropologische Gesellschaft in Wien.  
   K. K. Naturhistorisches Hofmuseum.  
 Wanganui, N. Z.—Public Museum.  
 Washington, D. C.—Bureau of American Ethnology.  
   Carnegie Institution of Washington.  
   Library of Congress.  
   Smithsonian Institution.  
   United States Geological Survey.  
   United States National Museum.  
 Wellington, N. Z.—Dominion Museum.  
   New Zealand Institute.

