



THE

EXECUTIVE DOCUMENTS

OF THE

HOUSE OF REPRESENTATIVES

FOR THE

SECOND SESSION OF THE FORTY-NINTH CONGRESS.

1886-'87.

VOLUME 22.—No. 40.

WASHINGTON:
GOVERNMENT PRINTING OFFICE.
1887.

ARCHIVES AND LIBRARY, COAST AND GEODETIC SURVEY OFFICE. REPORT FOR THE FISCAL YEAR
ENDING JUNE 30, 1886.COAST AND GEODETIC SURVEY OFFICE,
Washington, D. C., October 16, 1886.

DEAR SIR: I have the honor to submit the annual report of the receipt and registry in the Archives of original and duplicate records and computations, original topographic and hydrographic sheets, and specimens of sea-bottom, turned in to the office during the fiscal year ending June 30, 1886, as herein enumerated; and of the number of books and pamphlets received in the library during the same time.

I.—Records and Computations.

GEODETIC WORK.

	Number of volumes.		Number of cahiers.	Total.
	Original.	Duplicate.		
Observations of horizontal angles.....	185	163	.....	348
Observations of vertical angles.....	21	23	.....	44
Descriptions of stations.....	21	20	.....	41
Measurement of bases.....	2	.....	.....	2
Spirit leveling.....	19	16	.....	35
Geodetic miscellany.....	17	6	.....	23
Computations.....	.....	.....	145	145
Total.....	265	228	145	638

ASTRONOMICAL WORK.

Observations for latitude.....	11	9	.....	20
Observations for longitude.....	5	11	.....	16
Observations for time.....	12	9	.....	21
Observations for azimuth.....	5	5	.....	10
Computations.....	4	.....	38	42
Total.....	37	34	38	109

MAGNETIC WORK.

	Number of volumes.		Number of cahiers.		Number of sheets.		Total.
	Original.	Duplicate.	Original.	Duplicate.	Original.	Duplicate.	
Observations for terrestrial magnetism.....	4	3	34	29	64	.....	136
Magnetic traces.....	.....	.....	.....	.....	553	547	1,100
Computations.....	.....	.....	3	.....	71	.....	74
Total.....	4	3	37	29	690	547	1,310

HYDROGRAPHIC WORK.

	Number of volumes.		Number of bottles of specimens.	Total.
	Original.	Duplicate.		
Observations for soundings.....	411	269	.....	680
Observations of angles.....	53	31	.....	84
Descriptions of hydrographic signals.....	8	.....	.....	8
Specimens of sea-bottom.....	.....	.....	252	252
Specimen books.....	3	.....	.....	3
Tidal observations.....	142	80	.....	222
Current observations and data.....	27	10	.....	37
Hydrographic miscellany.....	6	5	.....	11
Total.....	650	395	252	1,297

Besides the records enumerated in the preceding table, the following which could not be conveniently entered therein were received and registered:

Tide rolls, 27; specimens of sea-bottom, 1 box; original current observations and data, 15 sheets, 1 package, and 5 cahiers; original hydrographic miscellany, 3 packages and 9 sheets; original chronograph sheets, 2 rolls.

The following-named records were turned into the Office by Assistant C. S. Peirce. They had not been in the Archives before, but are now duly registered. Only a small part of the work to which these records relate was done within the past fiscal year, some of it dating as far back as 1872.

Records turned in by Assistant C. S. Peirce.

	Number of volumes.		Number of sheets, original.	Total.
	Original.	Duplicate.		
Pendulum experiments and observations.....	181	12	.....	193
Observations for time.....	28	.....	.....	28
Time computations and reductions.....	4	.....	.....	4
Comparisons of chronometers and corrections of sidereal clocks.....	4	.....	.....	4
Barometer observations.....	1	.....	.....	1
Micrometrical measures of scales.....	1	1	.....	2
Thermometer book.....	1	.....	.....	1
Instrument corrections, &c.....	1	.....	.....	1
Spectrum meter.....	13	.....	.....	13
Leveling observations.....	3	.....	.....	3
Longitude observations.....	1	.....	.....	1
Latitude observations.....	3	.....	.....	3
Personal equation observations.....	.....	.....	11	11
Chronograph sheets.....	.....	.....	121	121
Total.....	241	13	132	386

Also the following, not included in the above table, were turned in by Assistant Peirce: 1 envelope, 9 rolls, 1 package, and 64 sheets of pendulum work; 2 large envelopes, containing circles, diagrams, and blanks; 1 envelope Time observations; 1 bundle of Time and Pendulum Transits; 1 sheet stars for Latitude observations; 24 sheets pendulum and Star observations; 7 boxes and 3 rolls of Chronograph sheets; 1 box filets.

II.—Topographic and Hydrographic Surveys.

TOPOGRAPHIC WORK.

	No. of sheets.		No. of sheets.
Delaware River from Mayne's Ditch to New Castle, Del.....	1	West Shore Delaware Bay, Mahon's River Light to triangulation station Clark, Del.....	1
Chandler's Bay and Chandler's River, including village of Jonesboro, Me.....	1	West Shore Delaware Bay, from triangulation station Clark, to triangulation station Plum, Del.....	1
North shore of Long Island Sound, Frost Point to Norwalk River and the Norwalk Islands, Conn.....	1	New Jersey Shore, Delaware Bay:	
Shore of Hempstead Bay, Long Island, N. Y.....	1	from the Hummocks to Egg Island Light-house, N. J.....	1
East Hempstead and South Oyster Bay, N. Y.....	1	From near the Hummocks to New England Creek, N. J.....	1
East part South Oyster Bay, western part Great South Bay, &c., N. Y.....	1	Elisabeth Point to below Jacob's Creek, N. J.....	1
Great South Bay and Oak Island Beach, N. Y.....	1	North Shore Long Island Sound, Chapman's to Hammonasset Point, Conn.....	1
Machiasport and vicinity, Me.....	1	Hammonasset Point to Guilford, Conn.....	1
Bar Harbor Village, Mount Desert Island (resurvey), Me.....	1	Possession Sound, Muckilton to Preston's Point, Hawk to Randall triangulation station, Wash. Ter.....	1
Columbia River, Vicinity of Bachelor's Island, Oreg.....	1	West Coast of Florida:	
Machias Bay Entrance, Me.....	1	Big Marco Pass to Cape Romano, Fla.....	1
Shores of Indian River, Fla., Passage, Sebastian Creek to Narrows, Fla.....	1	John's Pass to Big Marco Pass, Fla.....	1
Shores of Willamette River, Swan Island to Ross Island, including Portland, East Portland, and Albina, Oreg.....	1	Wiggins Pass to John's Pass, Fla.....	1
Shore of Delaware River, Saint George's Creek to Bombay Hook Light, Del.....	1	Bowditch Point to Wiggins Pass, Fla.....	1
West shore Delaware River, Bombay Hook Light to Mahon's River Light, Del.....	1	Vicinity Arroyo Hondo to Lompoc Landing, north of Point Concepcion, Cal.....	1
		From Lompoc Landing to Shuman's Cañon, Cal.....	1
		Hood's Canal, Wash. Ter.....	6

Topographic and Hydrographic Surveys—Continued.

TOPOGRAPHIC WORK—Continued.

	No. of sheets.		No. of sheets.
Hood's Canal:		East front of New York and Brooklyn from Red Hook Battery to Blackwell's Island, N. Y.	1
Port Gamble to Hazel Point, Wash. Ter.	1	Beach of the Gulf of Mexico from East Pass eastward, Fla.	1
Dahop and Quilcine Bays, Wash. Ter.	2	Part of Hoosac Mountain, Mass.	1
Dahop Bay, Wash. Ter.	1	P. T. triangulation of Nansemond River, Va.	2
Annas Bay, Wash. Ter.	1	Coney Island, Long Island, N. Y.	1
Columbia River:		Rockaway Beach, Long Island, N. Y.	1
From Willow Bar to foot of Hayden's Island, and the Willamette River from the mouth to the head of Swan Island, Oreg.	1	Rockaway Beach and Burien Island, Long Island, N. Y.	1
Columbia City to Bachelor's Island, Oreg.	1	Santa Maria River, northwest to Arroyo Grande, north of Point Concepcion, Cal.	1
Saint John's River:		Coast of New Jersey southward from Corson's Inlet, N. J.	1
From Racey Point to Cedar Point, Fla.	1	Point Sur, Cal.	1
From Cedar Point to San Mateo, Fla.	1	Yolo Base Line, Cal.	1
The New Jersey Shore of Delaware Bay from Jacob's Creek to Sea Breeze, N. J.	1	Santa Catalina Island, Santa Barbara Channel, Cal.	1
North Shore Long Island Sound:		Shores of Laguna Madre:	
Four Mile River to Oyster River, including mouth of Connecticut River, Conn.	1	From triangulation point Peat Island to Crane Islands, Tex.	1
From Guilford to Johnson's Point, Conn.	1	From triangulation point Griffiths to triangulation Camp No. 2, Tex.	1
From Johnson's Point to South End, Conn.	1	Port Orchard, Puget Sound, Wash. Ter.	1
Gardiner's Island, Long Island Sound, N. Y.	1	Part of coast between Newport Bay and San Juan Capistrano, Cal.	1
Plum Island and Gull Island, Long Island Sound, N. Y.	1	Moro Bay to Toro Point, Cal.	1
South Shore Long Island Sound:		Rosario Strait, Deception Pass to Ship Harbor, Wash. Ter.	1
Oyster Pond Point to Inlet Point, including the villages of Orient and Greenport, N. Y.	1	Blackwell's, Ward's, and Randall's Islands, N. Y.	1
Southold and Horton's Point, N. Y.	1	Little Kennebec Bay and River, Me.	1
Eastern part of League Island, Pa.	2	Total.	7

HYDROGRAPHIC WORK.

Pleasant Bay from entrance to Guard Point, Me.	1	Deep-sea soundings—Continued.	
Narragansett River, Me.	1	Straits of Florida and New Providence Channel, Fla.	1
Harrington Bay and River, including Black Bay and Flat Bay, Me.	1	Reconnaissance of inland passage between Peril Strait and Sitka Harbor, including Saint John Baptist Bay, Alaska.	1
Pico triangulation station to Castro triangulation station, Cal.	1	Reconnaissance of Peril Strait from Point Sulola to Nismen Point, Alaska.	1
Castro triangulation station to Breaker Point, Cal.	1	San Francisco Bar, Cal.	1
Breaker Point northward, Cal.	1	Straits of Juan de Fuca, Wash. Ter.	1
Dredged channel, Mobile Bay, Ala.	2	Schuykill River, Gray's Ferry to Rambo Point, Pa.	1
Portland Canal to Cape Fox, Southeast Alaska.	1	Delaware Bay:	
Tongass Harbor, Southeast Alaska.	1	Mispillion Creek to Murder Kill Creek, Del.	1
Port Chester, Southeast Alaska.	1	Southeastern end, N. J.	1
Wrangell Straits, Southeast Alaska.	1	Entrance, N. J.	1
Vicinity of Port Simpson and northern part of Chatham Sound, Southeast Alaska.	1	Saco Bay, Me. from Spurwink River to Scarborough River, Me.	1
Portland Canal to Cape Fox and Revilla Gigedo Channel, Southeast Alaska.	1	Entrance to Saco River and vicinity, Me.	1
Port Tongass, Southeast Alaska.	1	Humboldt Bay and Bay, Cal.	1
Revilla Gigedo Channel from Duke Point to Bold Island, Southeast Alaska.	1	Saint John's River from Racey Point to San Mateo, Fla.	1
Mary Island Anchorage, Southeast Alaska.	1	Along north shore of Long Island Sound from Southwest Ledge Light-house to Welch's Point, Conn.	1
Revilla Gigedo Channel, Pennoek Island to Hog Rocks, Southeast Alaska.	1	Wadmelaw and Stone Rivers, S. C.	1
Hassler Harbor, Southeast Alaska.	1	Upper Hood's Canal, Wash. Ter.	1
Tongass Narrows, Pennoek Island to Guard Island, Southeast Alaska.	1	Hood's Canal and Dahop Bay, Wash. Ter.	1
Ward Cove, Southeast Alaska.	1	Warecassia Bay, Fla.	1
Revilla Gigedo Channel, Mary Island to Point Higgins, Southeast Alaska.	1	West coast of Florida north of Cape Romano, Fla.	1
Etolin Harbor, Wrangell Island, Southeast Alaska.	1	Pacific coast:	
Portage Bay, Frederick Sound, Southeast Alaska.	1	From Brushy Point triangulation point to Ussal Rock triangulation point, Cal.	1
Deep-sea soundings:		From Ussal Rock triangulation point to White Rock triangulation point, Cal.	1
Straits of Florida, Fla.	1	Pleasant River, Me.	1
		Gulf of Mexico off coast of Louisiana, La.	2
		Sabine Pass and Lake, La. and Tex.	1

Topographic and Hydrographic Surveys, &c.—Continued.

HYDROGRAPHIC WORK—Continued.

	No. of sheets.		No. of sheets.
Entrance to Sabine Pass, showing location of jetties, Tex.	1	Twelve-Mile Arm, called "Eighteen-Mile Arm," Alaska.	1
Meimentau River, La.	1	Karta Bay, Alaska.	1
Calcasieu Pass, La.	1	Tolstoi Bay, Alaska.	1
Dixon Entrance and Clarence Strait, Cape Muzon to Moira Sound, Alaska.	1	Union Bay, Alaska.	1
Clarence Strait, Moira Sound to Union Bay, Alaska.	1	Off Chandelair Islands, La.	1
Niblack Anchorage, Moira Sound, Alaska.	1	Delaware Bay off Cape May Point.	1
Chasina Anchorage, Alaska.	1	Charleston Harbor Bar, S. C.	1
Vallenat Bay and entrance to Tongass Narrows, Alaska.	1	Total.	65
Naha Bay and adjacent waters, Alaska.	1		

The preceding statement shows that there have been registered in the Archives during the past fiscal year, 493 volumes of geodetic observations; 145 cahiers of geodetic computations; 71 volumes of astronomical observations and computations; 38 cahiers of astronomical computations; 7 volumes and 63 cashiers of magnetic observations; 1,100 sheets of magnetic traces; 3 cahiers and 71 sheets of magnetic computations; 1,045 volumes of hydrographic observations; 37 volumes, 5 cahiers, 1 package, and 15 sheets of current observations; 11 volumes, 3 packages, and 9 sheets of hydrographic miscellany; 252 bottles and 1 box specimens of sea-bottom; 27 tide rolls; 75 original topographic sheets; 65 original hydrographic sheets; also, 254 volumes, 221 sheets, 2 packages, 4 envelopes, 12 rolls, and 8 boxes of records relating to gravity research.

There have been received and registered during the past fiscal year 633 volumes, bound and unbound, besides periodicals and scientific publications to be bound hereafter. Of these, 213 volumes were turned into the Library by Assistant Peirce; they had not been in the Library before, and therefore appear on the register as recent acquisitions. The binding of many of these books has been badly damaged by fire and they need rebinding.

During the past fiscal year 25 volumes were bound substantially in library style at the Government bindery.

There are a number of books in the Library that need rebinding, and also many unbound works and periodicals that ought to be bound.

I was appointed Librarian November 14, 1885, the appointment taking effect November 17, 1885. Mr. T. D. Reed was in charge of Archives and Library from the beginning of the past fiscal year up to that date. He was then employed in the Archives and Library as a clerk till April 1, 1886, with the exception of a short time while he was otherwise employed in the Office and when he was absent on leave. While Mr. Reed was occupied elsewhere in the Office, Mr. William B. Mapes, since deceased, was with me a few days.

Mr. J. M. Duesberry was appointed to be a clerk in the Office on April 1, 1886, and assigned to the Archives and Library.

On June 6, 1886, I was taken sick with malaria, and with the exception of a few days, was absent during the remainder of the fiscal year. Mr. Duesberry was in charge during my absence.

Respectfully submitted.

ARTEMAS MARTIN,
Librarian and Custodian of Archives.

MR. B. A. COLONNA,
Assistant in charge of Office.
H. Ex. 40—18