



---

**U.S. GEOLOGICAL SURVEY FIELD RECORDS LIBRARY  
DENVER, COLORADO**

**GROVE KARL GILBERT  
(1843-1918)**

**NOTES, CORRESPONDENCE, PAPERS**

**1896 - 1920**

**(2 linear ft. and 3 map folders)**

One of America's most famous geologists, G.K. Gilbert's studies included stratigraphy, geomorphology, structural geology. He was a geologist with the Powell and Wheeler Surveys (1871-1878), and then worked for the U.S. Geological Survey, 1879-1918. In addition, in 1898 he was one of three U.S. Geological Survey scientists who accompanied the Harriman Expedition to Alaska.

**INVENTORY**

by

Carol A. Edwards  
Revised and Edited by Glenn Cook  
U.S. Geological Survey Field Records Library  
MS 914, Box 25046, Federal Center  
Denver, CO 80225-0046  
October 2002

Location of Field Notebooks CS 21-7

## **CORRESPONDENCE ON VARIOUS GEOLOGIC SUBJECTS. 1904-1917**

Item

Number

Description

- NO-07699 Expandable envelope with:
- folder #1 – letter from Arthur Keith, dated March 3, 1904, regarding the location of batholiths in the southern Appalachians (North and South Carolina);
  - folder #2 – letter from J.J. Stevenson dated October 12, 1901 on deposition;
  - folder #3 – two letters between Gilbert and Charles Van Hise, dated January 5 and 24, 1916,, discussing the relation between ground water and landslides;
  - folder #4 – two letters from J. Harlen Bretz, University of Chicago, dated 1916, regarding Bretz’s work on the Columbia River section of the Cascade Mountains in Oregon and Washington;
  - folder #5 – one letter from R.E. Savage, dated 1917, and one letter to Savage from Sterling B. Talmage dated 1917, regarding several thermal sulfur springs in the vicinity of Salt Lake City, Utah;
  - folder #6 – seven letters and 1 sketch from Harry O. Wood, University of California at Berkeley. Wood discusses investigations of surface rifts related to fault traces, activities at the seismograph laboratory at Berkeley, the central California earthquake of July 1, 1911 and other earthquakes, as well as more mundane aspects of university and daily life.

## **TIDES AND CURRENTS OF GOLDEN GATE-SAN FRANCISCO BAY AREA, CALIFORNIA. 1913-1916**

- NO-07700 Envelope with: Correspondence with R.A. Harris of the Coast and Geodetic Survey; Report on the Tides and Currents of San Francisco Bay.

## **CORRESPONDENCE REGARDING COASTAL FEATURES NEAR ANNISQUAM AND UPSWICH, MASSACHUSETTS, AND AT OTHER LOCATIONS, AND REGARDING RIPPLE MARKS, MASSACHUSETTS, NORTH CAROLINA, AND CANADA. 1911-1916**

- NO-07701 Expandable envelope with:
- folder #1 – typed report, “Observations on riffle-marks, large and small” which gives results of studies made during the summers of 1911 and 1912, of a sand bar at the mouth of the Squam River. The report is accompanied by 6 pencil sketches, and a handwritten summary dated August 16, 1911, of observations made during the summer of 1912;

- folder #2 – letters from J.W. Goldthwaite, Dartmouth College, dated November 24, 1911 and Douglas Wilson Johnson, Harvard University, Dec. 15, 1911, discussing marine cliffs and beaches and related features in Massachusetts. Also, copy of letter from Gilbert to J. Walter Goldthwaite dated November 14, 1911 describing Hog Island and vicinity in the Essex River, Massachusetts. There are also 3 photos of coastal features in Massachusetts, North Carolina, and Canada;
- folder #3 – five typed letters from E.M. Kindle, Geological Survey of Canada, dated 1913, 1914, 1916, plus 10 black and white photographs regarding ripple marks.

### **HYDRAULIC MINING DEBRIS AND TRANSPORTATION OF DEBRIS BY RUNNING WATER, CALIFORNIA AND LOUISIANA. 1903-1918**

- NO-07702      Expandable envelope with:
- folder #1 – copy of letter from J.C. Hoyt to Mr. H.D. McGlashan, of San Francisco, California, dated May 18, 1918, transmitting four packages of pamphlets relating to Gilbert’s debris investigations;
  - folder #2 – 2 letters between Gilbert and E. Lester Jones U.S. Coast and Geodetic Survey, Washington, D.C., 1916, regarding permission to publish information related to hydraulic mining debris obtained from US Coast and Geodetic Survey files;
  - folder #3 – Letter from S.B. Christy, University of California at Berkeley, dated March 4, 1912, regarding equipment used in the mining laboratory;
  - folder #4 – letter from Lyman J. Briggs, US Department of Agriculture, dated March 1, 1913, regarding viscosity of suspensions of clay in water;
  - folder #5 – correspondence between Gilbert and W.T. Ellis of the Marysville (Cal.) Levee Commissioners, regarding water levels and channel cut and fill of the Yuba River at Marysville, California, dated 1905-1915;
  - folder #6 – report titled “The Calibration of a Brass Water-Gate” by J.A. Burgess, May 1906;
  - folder #7 – sketch (in 2 pieces) and notes regarding changes in the Mississippi River mouths due to movements of gravel, sand, clay, etc.;
  - folder #8 – bibliographic notes and notes from publications, relating to detritus and transportation of debris by running water.

### **TEMPERATURE OF THE EARTH’S INTERIOR. 1896-1915**

- NO-07703      Expandable envelope with:
- folder #1 – Typed copy of “The Temperature of the Earth’s Interior” by G.K. Gilbert, read before the Scientific Association of Johns Hopkins University, Jan. 23, 1896;

- folder #2 – Correspondence with Joseph Barrell, Yale University, dated 1914-1915, on factors causing shifts in the earth's pole, crustal strength and deformation;
- folder #3 – letter from Bailey Willis, dated Oct. 26, 1909, on aspects of the temperature of the Earth's interior;
- folder #4 – calculations on figuring temperatures.

MA-01364 Map folder with 5 graphs.

### **LETTERS TO G.K. GILBERT ON THE OCCASION OF HIS 75<sup>TH</sup> BIRTHDAY, MAY 6, 1918**

NO-07704 Two expandable envelopes with: letter dated February 14, 1940, signed by Archibald Marvine Gilbert; also, 86 additional letters, most from individuals, congratulating G.K. Gilbert on his upcoming 75th birthday, May 6, 1918. G.K. Gilbert died May 1, 1918.

### **GEOLOGIC STUDIES OF BASIN-RANGE STRUCTURE, EXFOLIATION, LAKE BONNEVILLE, AND RELATED TOPICS. UTAH, CALIFORNIA, AND OREGON. 1901-1920**

NO-08478 Four document boxes with:

- Folder 1. Seven photographic prints of eight sketches of U.S. Geological Survey (USGS) geologists, artist unknown but attributed to Gilbert. Subjects, as written on sketches, are: Ralph Arnold, Alfred H. Brooks, C.A. Fisher, C. Willard Hayes, Adolph Knopf, P.S. Smith, R.W. Stone. The sketch of Adolph Knopf includes a female figure, presumably Eleanora Bliss Knopf, geologist, and his wife, being the eighth person represented. A handwritten note found with the sketches: "Mrs. [Mary] Rabbitt, These came to Mr. [Thomas] Nolan from Eleanora Knopf, via C.A. Anderson. Now yours, if you want them." Note written on outside of original envelope says, "Hiers thinks Gilbert."
- Folder 2. Correspondence and miscellaneous items. Undated draft of letter to Waldemar G. Schaller requesting examination of specimens; undated, unsigned 10-page draft of letter or article (or copy of article?) regarding "discovery" of a substance which could be used to "learn where the gold lies hidden in the earth" and dilemma of whether to make the "secret" known - at top of first sheet is the name, "I.N. Kogh"; letter from J.C. Jones regarding dips of master faults in the mountains of the Great Basin (Feb. 5, 1916); letter from C.C. Jacob of USGS Water Resources Branch, regarding hot springs in Salt Lake area (Aug. 13, 1917); letter from Chief Geologist David White to Prof. Wm. M. Davis transmitting copy of Wasatch Range chapter from Gilbert manuscript on the Basin Range (Aug. 28, 1920); letter from colleague in Sydney, Australia (8/2/19 - signature unclear); letters to and from Prof. Douglas W. Johnson, Columbia University (1916-1917); letter from F.F.

Hintze regarding his Wasatch Mountains publication (Jan. 22, 1918); letter from David White noting that Gilbert's Paleozoic fossils from Fish Springs and House Ranges are at the National Museum (March 15, 1918); copy of letter to Eliot Blackwelder (Jan. 20, 1916) and letter from Blackwelder (Dec. 8, 1916) discussing Wasatch Mountains; copy of letter to Prof. J. Claude Jones (Jan 20, 1916) regarding Pleasant Valley earthquake and fault scarp; letter from William E. Colby (Nov. 2, 1916) regarding derivation, meaning, and use of terms "fault" and "slickensides"; letter from John P. Buwalda (Feb. 2, 1917) regarding faults in the Mohave region. Also, list of "Separates of G.K. Gilbert in Case No. 3, USGS" giving date and title of article, periodical source, number of copies, drawer location; also, partial listing of contents of Gilbert's photo albums.

- Folder 3. Three letters from N.C. Nelson, Assistant Curator, Dept. of Anthropology, American Museum of Natural History, New York City, to G.K. Gilbert, dated Jan. 7, Jan. 15, and May 15 - all 1914. Also, typed copy of unpublished report by Nelson, "Report on the Archeological Evidence in the Vicinity of Suisun Bay and the Lower Central Section of the Great Valley and Also Observations Relating to the Question of the Recent Vertical Movement of This Region". Report includes photographs and maps.
- Folder 4. Manuscript of unfinished paper, "A Problem in the Mechanics of Exfoliation," left incomplete upon Gilbert's death. Includes corrections and editing by Gilbert, also includes pencil notes by Francois E. Matthes.
- Folder 5. Typed copy of the unfinished manuscript by Gilbert, "A Problem in the Mechanics of Exfoliation."
- Folder 6. Notes on Lake Bonneville. Manuscript by Willard D. Johnson, title in brackets: "The parallel case at the west base of the Wasatch"--which discusses aspects of Gilbert's Lake Bonneville monograph. Also, photo of "The Bonneville shoreline, near Logan, Cache Valley, Utah". Also, 2 sheets of notes from USGS Bulletin 353 on geology of the Taylorsville region, California, by J.S. Diller. Willard D. Johnson worked with Gilbert in the Basin and Range region.
- Folder 7. Section of Salt Lake City area topographic map, from Farmington on the north to Draperville on the south, with geologic annotation along west front of Wasatch Mountains; letter from E.A. Porter, USGS Water Resources Branch, listing gauging stations on streams tributary to Great Salt Lake and giving runoff data for certain streams (Nov. 5, 1914); letter from Gilbert to Porter (Nov. 10, 1914); analysis of water sample of Great Salt Lake collected by Gilbert, Aug. 5, 1914; manuscript - "Recomputation of quantities of salts in Great Sale Lake" (no date); Gilbert's notes of conversation with J.C. Merriam regarding Tertiaries of the Great Basin (Sept. 3, 1916); "Sieve Analysis of Gravel from North Ogden Canyon, Utah. May 16, 1917."
- Folder 8. Draft of letter to Dr. Harris (March 19, 1913); outline - for presentation on Basin Ranges?; 2 pages of notes on the Wasatch Range; 1 page of notes concerning faulting from W. Lindgren's Professional Paper 27 (1904); additional notes in outline form regarding Basin Ranges; 2 sheets titled "Evidence that there is a profound fault at the base of the Wasatch"; 3

typed pages concerning Josiah E. Spurr's paper on Basin Ranges - initials "MGW" typed in upper left corner of page 1; typed carbon copy, "Memorandum by Mr. Gilbert Concerning Mr. Spurr's Paper 'The Origin and Structure of the Basin Ranges' "; typed carbon copy, 'Notes by Mr. Spurr on Mr. Gilbert's Criticism.'" These last two items may relate to an article by Spurr entitled "Origin and Structure of the Basin Ranges," which appears in Geological Society of America Bulletin, v. 12 (1901), p. 217-270.

- Folder 9. Original captions and rough sketches for various illustrations in U.S. Geological Survey Professional Paper 153.
- Folder 10. Professional paper 153. Table of Contents, Lists of illustrations, footnotes. Sheets showing differences among original plus 3 typed copies of Chapter II (author of these sheets unknown). Also, 2 versions of Preface.
- Folder 11. Professional paper 153. Chapter I - Introduction. Typed carbon copy (also original and copy of page 1), with some editing.
- Folders 12-13. Professional paper 153. Chapter II. Wasatch Range. Original manuscript.
- Folders 14-15. Professional paper 153. Chapter II. Wasatch Range. Original typed copy. "Copy 1."
- Folder 16. Professional paper 153. Chapter II. Wasatch Range. Typed carbon copy, pages numbered 1-276. "Copy 2".
- Folder 17. Professional paper 153. Chapter II. Wasatch Range. Typed carbon copy, pages numbered 31-268. "Copy 3".
- Folder 18. Professional paper 153. Chapter III. Fish Springs and House Ranges. Original manuscript, plus typed carbon copy.
- Folder 19. Professional paper 153. Chapter IV. Klamath Lake region, Oregon. Original manuscript, plus original typed copy.
- Folder 20. Professional paper 153. Chapter V. Fault scarp near Bakersfield, California. Original manuscript, plus typed carbon copy.
- Folder 21. Card file box - Bibliographic index cards relating to Gilbert's Basin-Range studies.

MA-01790 Map folder with:

- Fish Springs quadrangle, Utah, scale 1:250,000, dated 1910. No annotations.
- Map of Utah, "compiled from the Official Records of the General Land Office and Other Sources," 1908. No annotations.
- Map of Lake Bonneville, from USGS Monograph 1, by G.K. Gilbert, 1890. No annotations.
- Utah state map - "Rand, McNally & Co.'s Utah", dated 1901. No annotations.
- Copy of "Fish Spring Mountains, Utah (Tracing... August 1901. W.D. Johnson, Topogr.)"
- The House Range, Utah. Original, final version of topographic map by Willard D. Johnson, surveyed in August and September 1901, transferred from original field sheet. In linen slipcase.
- "Preliminary Sketch. The House Range, Utah." Surveyed by W.D. Johnson, August 1901.

- Original plane-table sheet. "House Range, Utah" by Willard D. Johnson, surveyed in August and September 1901.
- Original plane-table sheet, "Teneriffe Buttes - Snake Val., Utah" by Willard D. Johnson, surveyed in August 1901.
- 2 tissue sheets with tracings - one says, "From Map of Weber Co."

Published as: U.S. Geological Survey. Professional Paper 153. 1928. Studies of Basin Range structure.

**MAP OF THE MANZANITA AND AMERICAN HYDRAULIC MINES,  
SWEETLAND, CALIFORNIA. 1905**

MA-02609    1 Planetable sheet of the project mines and photos of the Manzanita mine.