



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

FRANK CATHCART CALKINS
(1878-1974)

NOTES, CORRESPONDENCE, PAPERS

1902 - 1962

(8.0 linear ft. and 2 map folders)

Frank C. Calkins was born in East Rockport, Ohio on June 7, 1878 and graduated from the University of California in 1899. He joined the U.S. Geological Survey in 1900. His areas of study included the Precambrian Belt ore deposits in the Coeur d'Alene district, Idaho, ore deposits of the Cottonwood-American Fork area of Utah, the bedrock geology of Yosemite Valley and vicinity, editing strategic minerals studies and other materials, and editing the American Geological Institute's Glossary of Geology.

INVENTORY

By

Clay M. Martin
U.S. Geological Survey Field Records Collection
MS 914, Box 25046, Federal Center
Denver, CO 80225-0046
April 2008

Location of Field Notebooks: CS 23- 9 through 12.

GEOLOGY AND WATER RESOURCES OF A PORTION OF EAST-CENTRAL WASHINGTON. 1902.

<u>Item Number</u>	<u>Description</u>
NO-10521	1902. Field notes. Geologic observations, photographic descriptions, and notes on wells and springs in 8 sections: Section A, Preece's Ranch to Squaw Creek; Section B, Squaw Creek to Craig's; Section C, Craig's to White Bluffs; Section D, Koppen's to Pond's Ranch; Section E, Pond's Ranch to Koppen's; Section F, Koppens to Skuten Springs; Section G, Skooten Springs to Connell, Anderson's; Section H, Anderson's to Hatton & Cunningham's.

GEOLOGIC INVESTIGATIONS OF THE COEUR D'ALENE MINING DISTRICT, IDAHO. 1903-1912.

NO-10522	F.C. Calkins. Field notes on general geology of the Coeur D'Alene District (FCC-1).
NO-10523	F.C. Calkins. Field notes on general geology of the Coeur D'Alene District (FCC-2).
NO-10524	F.C. Calkins. Field notes on general geology of the Coeur D'Alene District (FCC-3).
NO-10525	F.C. Calkins. Field notes on general geology of the Coeur D'Alene District (FCC-4).
NO-10526	F.C. Calkins. Field notes on general geology of the Coeur D'Alene District (FCC-5).
NO-10527	F.C. Calkins. Field notes on general geology of the Coeur D'Alene District (FCC-6).
NO-10528	F.C. Calkins. Field notes on general geology of the Coeur D'Alene District (FCC-7).
NO-10529	F.C. Calkins. Field notes on general geology of the Coeur D'Alene District (FCC-8).
NO-10530	F.C. Calkins. Field notes on general geology of the Coeur D'Alene District (FCC-9).

- NO-10531 F.C. Calkins. Field notes on general geology of the Coeur D'Alene District (FCC-10).
- NO-10532 F.C. Calkins. Field notebook with dissected maps with annotated geologic observations. (FCC-11).
- NO-10533 F.C. Calkins. 3 copies of the U.S.G.S. Coeur D'Alene Special Map (1903), scale 1:62,500, with annotated geologic formation and structure notes. (FCC-12)
- NO-10534 F.C. Calkins and D.F. McDonald. Field notes on general geology of the Coeur D'Alene District (DFMC-1).
- NO-10535 F.C. Calkins and D.F. McDonald. Field notes on general geology of the Coeur D'Alene District (DFMC-2).
- NO-10536 F.C. Calkins and D.F. McDonald. Field notes on general geology of the Coeur D'Alene District (DFMC-3).
- NO-10537 F.C. Calkins and D.F. McDonald. Field notes on general geology of the Coeur D'Alene District (DFMC-4).
- NO-10538 F.C. Calkins and D.F. McDonald. Field notes on general geology of the Coeur D'Alene District (DFMC-5).
- NO-10539 F.C. Calkins and D.F. McDonald. Field notebook with dissected maps with annotated geologic observations. (DFMC-6).
- NO-10540 F.C. Calkins and D.F. McDonald. Field notebook with dissected maps with annotated geologic observations. (DFMC-7).
- NO-10541 F.C. Calkins. Field notes on general geology of the Coeur D'Alene District (WAW-1).
- NO-10542 F.C. Calkins. Field notes on general geology of the Coeur D'Alene District (WAW-2).
- NO-10543 F.C. Calkins. Field notes on general geology of the Coeur D'Alene District (WAW-3).
- NO-10544 F.C. Calkins. Field notebook with dissected maps with annotated geologic observations (WAW-4).

Published as: U.S. Geological Survey. Professional Paper 62. 1908.

**GEOLOGICAL RECONNAISSANCE ACROSS THE CASCADE RANGE
NEAR THE FORTY-NINTH PARALLEL. 1901.**

- NO-06798 Specimen labels and envelope for material collected by F.C. Calkins in 1901.
- NO-10545 Field notebook no.1 with geologic observations and photographs from 1901 field season, June 22 to July 18.
- NO-10546 Field notebook no.2 with geologic observations and photographs from 1901 field season, July 19 to September 8.
- NO-10547 Field notebook no.3 with geologic observations and photographs from 1901 field season, September 20 to October 4.

Published as: U.S. Geological Survey. Bulletin 235. 1904.

**GEOLOGICAL RECONNAISSANCE OF NORTHERN IDAHO AND
NORTHWESTERN MONTANA. 1905.**

- NO-10548 F.C. Calkins. Field notes on general geology from 1905 field season, June 30 to August 5.
- NO-10549 F.C. Calkins. Field notes on general geology from 1905 field season, August 7 to September 11.
- NO-10550 F.C. Calkins. Field notes on general geology from 1905 field season, September 12 to October 23.
- NO-10551 F.C. Calkins and D.F. MacDonald. Field notes on general geology from 1905 field season, July 7 to August 12.
- NO-10552 F.C. Calkins and D.F. MacDonald. Field notes on general geology from 1905 field season, August 16 to September 18.
- NO-10553 F.C. Calkins and D.F. MacDonald. Field notes on general geology from 1905 field season, September 20 to October 4.

Published as: U.S. Geological Survey. Bulletin 384. 1909.

**ORE DEPOSITS OF THE PHILIPSBURG QUADRANGLE, MONTANA.
1906-1908.**

- NO-10554 F.C. Calkins and W.H. Emmons. Field notebook with geologic notes on mines of

the Philipsburg quadrangle, 1906 field season, July 26 to August 8.

- NO-10555 F.C. Calkins and W.H. Emmons. Field notebook with geologic notes on mines of the Philipsburg quadrangle, including some production statistics and mine history. 1906 field season.
- NO-10556 F.C. Calkins and W.H. Emmons. Field notebook with geologic notes on the Granite, Twilight, Montana, and Orphan Boy mines. 1906 field season.
- NO-10557 F.C. Calkins and W.H. Emmons. Field notebook with geologic notes on mines of the Philipsburg quadrangle. 1906 field season.
- NO-10558 F.C. Calkins and W.H. Emmons. Field notebook with geologic notes on mines of the Philipsburg quadrangle, including the Yellow Metal, Red Lion, Nineteen Hundred, Greater New York, Hannah, Trout, Cadgie Taylor, Two Percent, War Eagle, Silver Hill, Okareaka, Silver Moss, Pyrennes, Luxemburg, Reliance, Ontario, Cable, Blue Eyed Nellie, Welcome, Black Chief Iron, Cameron, Jetty, Morgan Evans, Northern Cross, and Silver Reef mines. September 1906.
- NO-10559 F.C. Calkins and W.H. Emmons. Field notebook with geologic notes on mines of the Philipsburg quadrangle, including the Mayflower, Gold Reef, Gold Coin, Nonpareil, and Royal mines. September 1906.
- NO-10560 F.C. Calkins and W.H. Emmons. Field notebook with geologic notes on mines of the Philipsburg quadrangle, including the Powell, Raumbuer, Jefferson, Travania, W.J. Bryan, Sunday, Royal, Mafetic, Silver Queen, John G. Carlisle, Ophir, Eldorado, Clear Grit, Macfarland, Morning Star, Tussle, Blue bird, Mountain Lion, Sunset Placer, Goat Mountain, and Princeton mines. October 1906.
- NO-10561 F.C. Calkins and W.H. Emmons. Field notebook with geologic notes on mines of the Philipsburg quadrangle, including the Royal Metals, Three Metals, Good Hope, Hope, Silver Lode, Pearl, Mystery, Copper Jack, San Francisco, Black Mail, Sanders, and Gem mines. October 1906.
- NO-10562 F.C. Calkins and W.H. Emmons. Field notebook with geologic notes on mines of the Philipsburg quadrangle, including the Hobo, Pauper, Black Mail, Two Percent, Silver Chief, Terrid, Cliff, Cadfie Taylor, Original Hope, Sweet Home, and Trout mines. November 1906.
- NO-10563 F.C. Calkins and W.H. Emmons. Field notebook with geologic notes on mines of the Philipsburg quadrangle, including the Combination, Bunker Hill, Vulcan, Queen, Douglas, Peacock, Last Chance, Durand, Twin Butte, North Star, Sally Mellen, Gold Creek, Royal, and Brooklyn mines. September 1907,
- NO-10564 F.C. Calkins and W.H. Emmons. Field notebook with miscellaneous geologic notes on mines of the Philipsburg quadrangle. 1907.

- NO-10565 F.C. Calkins. Field notebook with miscellaneous geologic notes on the Philipsburg quadrangle. 1906-1908.
- NO-10566 Folders 1-5 of former file 1831-A with:
- Folder #1: D.F. MacDonald field notebook with miscellaneous geologic notes on the Philipsburg quadrangle. 1906-1907.
 - Folder #2: D.F. MacDonald field notebook with miscellaneous geologic notes on the Philipsburg quadrangle. 1906.
 - Folder #3: D.F. MacDonald field notebook with miscellaneous geologic notes on the Philipsburg quadrangle. 1906.
 - Folder #4: D.F. MacDonald field notebook with miscellaneous geologic notes on the Philipsburg quadrangle. 1906.
 - Folder #5: D.F. MacDonald field notebook with miscellaneous geologic notes on the Philipsburg quadrangle. 1906.
- NO-10567 Folders 6-10 of former file 1831-B with:
- Folder #6: D.F. MacDonald field notebook with miscellaneous geologic notes on the Philipsburg quadrangle. 1907.
 - Folder #7: D.F. MacDonald field notebook with miscellaneous geologic notes on the Philipsburg quadrangle. 1907.
 - Folder #8: D.F. MacDonald field notebook with miscellaneous geologic notes on the Philipsburg quadrangle. 1907.
 - Folder #9: W.E. Wrather field notebook with miscellaneous geologic notes on the Philipsburg quadrangle. 1907.
 - Folder #10: W.E. Wrather field notebook with miscellaneous geologic notes on the Philipsburg quadrangle. 1907.
- NO-10568 F.C. Calkins, D.F. MacDonald, W.E. Wratten, and J.T. Pardee. Dissected maps of the Philipsburg quadrangle with geologic annotations. 1906-1908.
- NO-10569 F.C. Calkins, D.F. MacDonald, W.E. Wratten, and J.T. Pardee. Dissected maps of the Philipsburg quadrangle with geologic annotations. 1906-1908.
- NO-10570 F.C. Calkins, D.F. MacDonald, W.E. Wratten, and J.T. Pardee. Compilation geologic data maps of the Philipsburg quadrangle. 1906-1908.
- NO-10571 F.C. Calkins. Loose-leaf sheets with miscellaneous geologic notes on the Philipsburg quadrangle. 1908.
- MA-02714 Map folder with a total of 3 items, including: one copy of the Philipsburg 1:125,000-scale topographic quadrangle, with geology notations by F.C. Calkins, assisted by D.F. MacDonald, J.T. Pardee, and W.E. Wrather; one outline map of the Philipsburg 1:125,000-scale topographic quadrangle showing geologic cross section lines and surface cross section profiles; and one copy of the Philipsburg 1:125,000-scale structure section sheet from U.S.G.S. Geologic Folio 196.

Published as: U.S. Geological Survey. Professional Paper 78. 1913.

Published as: U.S. Geological Survey. Geologic Atlas of the United States, Folio 196. 1915.

GEOLOGY OF THE SUMPTER QUADRANGLE, OREGON. 1908.

NO-10572 F.C. Calkins. Field notebook with miscellaneous geologic notes on the general geology of the Sumpter quadrangle. 1908.

GEOLOGY AND MINERALIZATION OF THE ST. JOE-CLEARWATER REGION, IDAHO. 1911.

NO-10573 F.C. Calkins. Field notebook with miscellaneous geologic and land classification notes, St. Joe-Clearwater region. 1911.

NO-10574 F.C. Calkins. Field notebook with miscellaneous geologic and land classification notes, St. Joe-Clearwater region. 1911.

NO-10575 F.C. Calkins. Field notebook with miscellaneous geologic and land classification notes, St. Joe-Clearwater region. 1911.

NO-10576 F.C. Calkins. Field notebook with miscellaneous geologic and land classification notes, St. Joe-Clearwater region. 1911.

NO-10577 F.C. Calkins and G.F. Loughlin. Field notebook with miscellaneous geologic and land classification notes, St. Joe-Clearwater region. 1911.

NO-10578 F.C. Calkins and G.F. Loughlin. Expandable envelope with miscellaneous geologic notes, sketch maps, and correspondence, St. Joe-Clearwater region. 1911.

NO-10579 F.C. Calkins and G.F. Loughlin. Expandable envelope with photocopies of miscellaneous geologic notes, St. Joe-Clearwater region. 1911.

NO-10586 F.C. Calkins. Field notebook with general geology and land classification notes. 1910.

NO-10587 F.C. Calkins. Field notebook with general geology and land classification notes. 1910.

NO-10588 F.C. Calkins. Field notebook with general geology and land classification notes. 1910.

Published as: U.S. Geological Survey. Bulletin 470. 1911.

Published as: U.S. Geological Survey. Bulletin 530-G. 1912.

ECONOMIC GEOLOGY OF THE REGION AROUND MULLAN, IDAHO, AND SALTESE, MONTANA. 1912.

- NO-10580 F.C. Calkins. Field notebook with geologic notes on the following areas: Wallace, Monitor Mine, Wards Peak, Quartz Creek, Bald Mountain, and Pritchards Cabin. 1912.
- NO-10581 F.C. Calkins. Field notebook with geologic notes on the following areas: Pritchards Cabin, Mullan, Mill Creek, and Snow Storm Mine. 1912.
- NO-10582 F.C. Calkins. Field notebook with geologic notes on the following areas: Snow Storm Mine and Mullan. 1912.

Published as: U.S. Geological Survey. Bulletin 540-E. 1912.

GEOLOGIC STUDIES IN YOSEMITE NATIONAL PARK. 1913-1960.

These field notes include geologic notes and sketches, traverse notes and plots, and notes on specimens and photos. There are also summaries of notes, discussion of "Yosemite Valley Map Problems", and discussion of certain methods for field work. Item NO-8264 includes a page of notes on the Grand Canyon; item NO-8268 includes notes regarding claims near San Diego, California; and item NO-8278 has a description of "Butte N.W. Of San Luis Obispo", California.

- NO-08264 Field notes. 1913. July 11 - November 27. Yosemite. Geologic notes, specimen descriptions, sketches, traverse notes and maps, notes of photos taken. Station location numbers begin anew with each new camp, but specimen numbers are continuous: Camp Glacier Point, 1-88, later in notebook 100-126; Camp at Hopkins Meadows, 1-27; Camp Starr King, 1-47; Camp Tuolumne Meadows, 1-104; Camp Snow Creek, 1-31; Camp Eagle Peak Meadows, 8-109 (scattered), 110-127. Specimen numbers 1-149. On last page: Dec. 1 - Grand Canyon. Notes.
- NO-08265 I. F.C.C. 1914. Yosemite. Notebook. May 30 - August 22. Geologic notes, sketches, notes of specimens and photos. El Capitan camp station nos. 1-174, specimen numbers 1-35; Tenaya Creek camp ("Camp 9") station numbers. 1-86, specimen numbers 36-42; Bridal Veil Creek camp station numbers 1-38, specimen numbers 43-48. Pasted in back is typed "Route Index" giving dates, locations, notebook page numbers.

- NO-08266 II. F.C.C. 1914. Yosemite. Notebook. August 24 - October 29. Geologic notes, sketches, sketch maps of traverses, notes of photos and specimens. Bridal Veil Creek camp continued, station numbers. 39-135, specimen numbers 49-86; Ribbon Creek camp station numbers. 1-52, specimen numbers 87-104. Pasted in back is typed "Route Index" giving dates, locations, notebook page numbers.
- NO-08267 III. F.C.C. 1914. Yosemite. Notebook. October 31 - December 1. Geologic notes, sketches, sketch maps of traverses, notes of photos and specimens. Ribbon Creek camp continued, station numbers. 53-54, specimen numbers 105-109; Yosemite Valley camp station numbers. 1-180, specimen numbers 110-182. Pasted in back is typed "Route Index" giving dates, locations, notebook page numbers.
- NO-08268 F.C.C. '15. Notebook. August 13 - November 1, plus December 16. Geologic notes, sketches, sketch maps of traverses, notes of photos and specimens. Areas examined include valley between Mts. Gibbs and Dana, Tuolumne Meadows, Bridal Veil Creek and Basin, Pohono Trail, Glacier Point road, Peregoy Meadows Trail, Imperial Meadows (or McGurk Meadows), Ostrander Rocks, Dewey Point, Alder Creek Trail, Little Bridal Veil Creek, Meadow Brook and Trail, Sentinel Dome, Three Brothers, Yosemite Creek, Turtleback Massif, Oak Flat Road, south of Fireplace Bluffs. Specimen numbers 1-73. Notes, dated December 16, regarding claims near San Diego, California, including map of Friday mine. Handwritten "Route Index" in back of notebook gives dates, locations.
- NO-08269 F.C. Calkins. 1916. I. Notebook. August 1 - October 19. Geologic notes and sketches, notes of photos and specimens. Areas examined include White Wolf, Yosemite Creek, Harden Lake, Ten Lakes, Mt. Hoffmann platform, Mt. Colby, Grant Lakes, Hogdon Ranch, Hetch Hetchy Valley, Liberty Cap, Bridal Veil chute, Bridal Veil Canyon, Half Dome, Cathedral Rocks, El Capitan, Three Brothers, Old Inspiration Point, Cathedral Spires, Taft Point. Specimen numbers 1-63. Pasted in back is typed "Route Index" giving dates, locations, notebook page numbers.
- NO-08270 F.C. Calkins. 1916, II. Notebook. Generalized notes on traverse of Yosemite Valley Railway from El Portal to Merced Falls. General impressions on the railway section between El Portal and Briceburg (October 24), Vicinity of El Portal and Crane Creek (Traverses of October 22-23), The Barite mine, Merced River Section below Briceburg, below Bagby (October 27), Jasper and below (October 28), Pleasant Valley to Merced Falls (October 29-30).
- NO-08271 F.C. Calkins. 1916. III. Notebook. October 21 - October 27. Traverse notes on section from El Portal to Merced Falls. Notes of photos, and specimen numbers 64-115. Note dated 1959 in 1916 notebook I (NO-8269), p. 99, says these notes "have been plotted in book marked "Yosemite 30' quad", p. 27 and 39-41. This includes the wagon road from El Portal to McCaulay's ranch." The "Yosemite 30' quad" notebook is item NO-8282 below.

- NO-08272 F.C. Calkins. 1916. IV. Notebook. October 27 - October 30. Continuation of traverse notes from El Portal to Merced Falls. Notes of photos, and specimens 116-136. Note dated 1959 in 1916 notebook I (NO-8269), p. 99, says these notes as well "have been plotted in book marked "Yosemite 30' quad", p. 27 and 39-41. This includes the wagon road from El Portal to McCaulay's ranch." This "Yosemite 30' quad" notebook is item NO-8282 below.
- NO-08273 Carbon copies of typed route indexes; original copies are pasted in 1914 notebooks I, II and III, and in 1916 notebook I.
- NO-08274 Digest of Field Notes - 1913, 1914. Notebook. Chronological digest of 1913 notes, July 11 - November 26. Then follows section on "Age Relations, etc. General Conclusions", with references to specific 1914 notebooks and pages.
- NO-08275 Classified Notes. 1913 - . Yosemite region. First section contains geologic and petrographic notes arranged by topic, including El Capitan Granite, exfoliation, fissures, areal relations of granodiorite with other rocks near Glacier Point, Glacier Point granodiorite, Half Dome monzonite, granodiorite near Eagle Peak Meadows etc., Half Dome granite, pot holes, porphyritic granite, geologic problems at Yosemite, Points for report on bedrock geology of Yosemite region, petrography of Red and Gray Peaks and vicinity, sedimentary rocks near Mt. Clark, weathering of granodiorite and granite, Elevations 1915. Second section is Traverses. Brief notes with sketches. Third section is Field Methods. Includes: General formula for measuring section of inclined strata, with instructions; plan for reducing traverses [when plotting them]; checking elevations; longer discussions of generalization in mapping, geological mapping, traversing and cooperation with a topographer.
- NO-08276 Field Notes. 1914. Partial Summary. Notebook. Chronological summary of notes, with references to original notebook pages and dates. Top of first page: 1914. Nb. II; at October 30, top of page, 1914. Nb. III. Dates August 24 - November 15, 1914.
- NO-08277 Field Notes. 1914. Summarized in Part. Notebook. Begins with specimen descriptions for 1915, specimen numbers 15C22 - 15C73; description of one specimen from 1916, number 16C1, with additional explanatory note. Then are specimen descriptions for 1913, numbers 13C1 - 13C149, followed by apparent summary notes from 1913 on "Mt. Hoffmann granite' and other rocks near Mt. H.". Also, "1914. Notes of Special significance in relation to the Valley map, etc." with scattered dates, June 2 - August 23, and references to original notebook and page.
- NO-08278 Notebook. Begins, "Yosemite Valley Map Problems": Thoughts and comments with page references to 1914-1916 notebooks. Also, notes from September - October 1959. Specimens are double numbered: in ink, 1-30; in red pencil, 35-

64. Also, description of "Buttes N.W. of San Luis Obispo" dated December 27-29, 1959. Also, page labeled "1916. Camps and principal" with listing for July 11 - August 13, followed by apparently similar listing for 1913, August 15 - November 26.

- NO-08279 Notebook. On front: "Field work needed on Yosemite Maps" and "Field Notes. 1960. Yos." Begins with notes and comments with references to 1914 notebooks, on various areas in Yosemite. Then, "Field Notes. 1960. Yosemite Valley." Dates September 27 - September 30, specimen numbers 1-20. Also, "General observations on western part of Valley map area", and a little more than a page of comments on topography.
- NO-08280 Yosemite. Traverse Notes Plotted. Traverse notes and plots, sketch maps with geologic data. Sheets show month and date of notes, but not year. Page numbers added; loose sheets found in 3 groups: added page numbers 1-21, 22-35, 36-53.
- NO-08281 Yosemite Valley. Notebook. Sections of Park map pasted on pages; some sections have colored geologic data added; some have traverse data on opposing page. Color legend in back of notebook. Also, loose sheets (found in front pocket) with traverse data, plots, and sketches.
- NO-08282 Yosemite 30' quad. Notebook. Plotted traverses. Areas listed in Index on p. 1, for which data are entered (map, plotted traverse with geologic data), are: Traverse S. of Hog Ranch; Traverse, Ranger Sta. E-ward; Traverse near White Wolf; Basin of Yosemite Creek; Yosemite Valley Railroad - McCauley's to South Fork; Yosemite Valley Railroad - South Fork to Bagby; Yosemite Valley Railroad - Bagby to Merced Falls.

Published as: U.S. Geological Survey. Miscellaneous Investigations Map I-1639. 1985.

Published as: U.S. Geological Survey. Professional Paper 160. 1930.

GEOLOGIC AND MINERAL INVESTIGATIONS IN NORTH-CENTRAL UTAH. 1917-1962.

Materials in this project include: aerial photographs (many with annotations); geologic, structure, and stratigraphic notes and sketches; mine notes and sketches; notes on specimens. Coworkers with Calkins who also authored materials in this project include: Wilmot H. Bradley, Max D. Crittenden, L.G. Gutierrez, Byron J. Sharp and J.S. Williams.

- NO-05767 Expandable envelope with 102 black and white vertical aerial photographs, all dated 1940, some with annotations:
- folder #1 – 4 sheets of field notes, 1962;
 - folder #2 – COH-1: 1-19, 20 (2 copies), 24 (3 copies), 25 (2 copies), 26-31, 32-34 (2 each), 35-38, 39-41 (2 each), 42 (4 copies), 43 (3 copies), 44-47;

- folder #3 – COH-1: 54, 56, 57-59 (4 each), 60-65 (2 each), 66 (3 copies), 67-68 (2 each), 69-70, 71 (2 copies), 72-74, 75-76 (2 each).
- NO-05768 Document box with 148 black and white vertical aerial photographs, all dated 1940, some with annotations:
- folder #1 – 2 map pieces, notes;
 - folder #2 – COH-1: 104-106, 107 (2 copies), 108-109 (4 each), 110 (3 copies), 111-112 (2 each), 113, 114-124 (2 each), 125, 126-128 (2 each), 129, 130 (2 copies);
 - folder #3 – COH-2: 1-19 (2 each), 20-22 (3 each), 23-26;
 - folder #4 – COH-2: 27-29, 30-31 (3 each), 32-43 (2 each), 44 (3 copies), 45-48 (2 each).
- NO-05769 Document box with 130 black and white vertical aerial photographs, many with annotations:
- folder #1 – AAL-1: 31-38, 43-51. 1937;
 - folder #2 – AAL-4: 1-6, 8-11, 38-42, 62, 65-87, 92-94. 1937;
 - folder #3 – BPK-3: 81-82. 1938;
 - folder #4 – GSH-1: 32-36. 1939, plus index sheet for GSH photos;
 - folder #5 – GSH-2: 30, 32-33, 41-42, 43-44 (2 each), 45, 73, 74-75 (2 each), 76, 77, 99, 100 (2 copies), 101-102. 1939;
 - folder #6 – GSH-10: 4-8, 12-17. 1939;
 - folder #7 – AAL-1B: 37-41, 51-57, 77-86, 91-97. 1946;
 - folder #8 – GSV-1: 06 west ½ (north half?).
- NO-06786. Calkins, F.C. 1917. No. 1. Utah. Geologic, structure, and stratigraphic notes and sketches; photos glued in have captions. Route index in front of notebook. Locales include: East of Superior Gulch, Emma Mine, Alta, Cardiff Mine, Big Cottonwood Creek, Reade and Benson Ridge, Day's Fork, Kennebec Mine area, Flagstaff Mine, Flagstaff Mountain. Specimen numbers 1-39.
- NO-06787 Calkins, F.C. 1917. No. 2. Utah. Geologic, structure, and stratigraphic notes and sketches; notes on mines; notes on photos taken; photos glued in have captions. Route index in front of notebook. Locales include: Flagstaff Mountain, Day's Fork, Michigan-Utah Mine area; City Rock Gulch; Honeycomb Hill; South Hecla Mine; Bodfish Tunnel; Big Cottonwood Creek; Copper King Mine; Davenport Hill; Cottonwood Divide; Alta area; Reade and Benson Ridge; Montezuma fault. Specimen numbers 40-78.
- NO-06788 Calkins, F.C. 1917. No. 3. Cottonwood, Utah. Geologic, structure, and stratigraphic notes and sketches; notes on mines; notes on photos taken; photos glued in have captions. Route index in front of notebook. Locales include: City Rock Gulch; Michigan-Utah Mine area; Davenport Hill; Prince of Wales Mine area; Tom Moore Tunnel; Copper Prince Mine. Specimen numbers 80-106.
- NO-06789 Calkins, F.C. August-September 1919. Ten pages of notes and sketches.

Locales include Pittsburg Bench, Pittsburg fault, near Albion shaft.

- NO-06790 Calkins, F.C. Cottonwood, Utah. 1919. I. August 1-23. Geologic, structure, and stratigraphic notes and sketches; mine notes; notes on photos taken. Route index in front of notebook. Locales include: Traverse A – Prince Hill; Traverse B – spur west of Prince of Wales shaft; head of Silver Fork; through Cleves “Lower” and Solitude tunnels; head of Honeycomb Fork; Solitude Fork; Copper Prince and Silver King tunnels; Michigan-Utah Mine area; Sugarloaf area; Devil’s Castle area; head of Little Cottonwood; Alta area; Pioneer Peak; head of Snake Creek. Specimen numbers 7 - 78.
- NO-06791 Calkins, F.C. Cottonwood, Utah. 1919. II. August 24 – September 12. Geologic, structure, and stratigraphic notes, sections, and sketches; mine notes and sketches; notes on photos taken. Route index in front of notebook. Locales include: Little Cottonwood Basin; near Albion shaft; Albion Hill; Alta; Snake Creek; Baldy; Bog Mine; Twin Peaks; American Fork; Devil’s Castle. Specimen numbers 79 - 90.
- NO-06792 Calkins, F.C. Cottonwood, Utah. 1919. III. September 13 – October 15. Geologic, structure, and stratigraphic notes and sketches; mine notes and sketches; notes on photos taken. Route index in front of notebook. Locales include: Pittsburg bench; Miller Hill; Bog Mine; Silver Dipper Mine area; Dry Fork; Snake Creek; Ant Knolls; Belorphan Mine area; Alta area; Wasatch drain tunnel; Tom Moore tunnel.
- NO-06793 Calkins, F.C. Office notes. No date. Includes: notes from publications; notes on chemical analyses of certain Cottonwood samples; notes on Thayer’s rocks for which thin sections are desirable.
- NO-06794 Calkins, F.C. Typed route indexes for these notebooks: 1917 – 1, 2 and 3; 1919 – 1, 2, and 3; 1920 – 1 and 2; 1921 – 1, 2, and 3.
- NO-06795 Calkins, F.C. 1920. I. Utah. Geologic, structure, and stratigraphic notes and sketches; mine notes; notes on photos taken. Route index in front of notebook. Locales include: American Fork; Bog Mine area; Pacific Mine area; Mill Hill; Devil’s Castle; Dry Fork; Snake Creek; Steamboat Mine area; Whirlwind Tunnel; Mary Ellen Gulch. Specimen numbers 3 - 13.
- NO-06796 Calkins, F.C. 1920. II. Utah. Geologic, Structure, and stratigraphic notes and sketches; mine notes; notes on photos taken. Route index in front of notebook. Locales include: Gad Valley; Collins Gulch; Peruvian Gulch; Mount Baldy; South Hecla Mine; Louise Mine; Alta area; Wasatch Drain tunnel area; Rexall Mine area; Cardiff; Montreal Hill; Montreal Spring; Brighton; Dog Lake; Big Cottonwood Creek; Bonanza prospect. Specimen numbers 15 - 36.

- NO-06797 Bradley, W.H. #1. 1920. Utah – Cottonwood quadrangle. Geologic, structure, and stratigraphic notes; notes on mines and prospects; notes of photos taken. Locales include: Johnson’s Prospect; Dutchman Mine area; Miller Hill; South Hecla Mine area; South Fork Big Cottonwood; Honeycomb Fork; Silver Fork.
- NO-06799 Calkins, F.C. Notes on unconformity at base of the Carboniferous – excerpts from his notes of 1917, 1919, 1920, and 1921; Madison Limestone – excerpts from his notes of 1917, 1919, and 1921; carboniferous limestone near the Pittsburg Mine – excerpts from his 1919 notes.
- NO-06800 Calkins, F.C. 1920. Notes on Big Cottonwood Canyon “placers”, and on Park City trip.
- NO-06801 Calkins, F.C. No date. Utah. Traverse notes, plotted - Tom Moore tunnel.
- NO-06802 Calkins, F.C. Notes on thrust-faulting in Cottonwood District; extracts from field notes; notes on Howell mine; notes west of Peruvian Gulch from 1921 – “old pencil notes copied”; notes on Madison basal beds taken from 1917 field notes; Index to 1951 Notebook 1 – Alta quadrangle; instructions on using single-prism USGS stereoscope (1952).
- NO-06803 Calkins, F.C. 1921. II. Geologic, structure, and stratigraphic notes and sketches; mine notes. Route index in front of notebook. Locales include: northeast corner of quadrangle; Scott Hill; East Fork; Big Cottonwood Valley; Solitude Fork; Belden Mine area; Day’s Fork; Cottonwood Creek; Silver Fork; Mule Gulch; dam-site and section of Park City formation east of Branborg’s; Alta Tunnel; Michigan-Utah Mine area; Honeycomb Fork area; Prince of Wales shaft area; Prince Hill. Specimen numbers 40 - 144.
- NO-06804 Calkins, F.C. 1921. III. Utah. Geologic, structure, and stratigraphic notes and sketches; notes on mines and claims; notes on examining claims for U.S. Forest Service. Route index in front of notebook. Locales include: claims near head of Big Cottonwood Creek; prospects near western Monitor property; Brighton area; Green’s Basin; northwest corner of quadrangle; Cardiff office and nearby; Carbonate Mine; Reed’s Peak Mine; Montreal Hill and area; Reed and Benson Ridge area. Areas examined for Forest Service: Tunnel on Sunflower claim; shaft on Manhattan no. 3 claim; tunnel on Mark Twain No. 2 and Manhattan No. 1 claims. Specimen numbers 145 - 180.
- NO-06805 Calkins, F.C. Mine Notes. A. Notebook 4. n.d. Maps of mine workings with geologic notes. Workings plotted: Tom Moore, Bodfish tunnel, Copper Prince, Silver King, Emma Mine (Bay City level), Buffalo tunnel (no geology), Wasatch drain tunnel.
- NO-06806 Calkins, F.C. Mine notes. B. No date. Maps of mine workings with geologic notes. Workings plotted: Bodfish tunnel; Tar-Baby; Cardiff; Columbus-Rexall;

Columbus.

- NO-06807 Calkins, F.C. Utah. Localities of fossils in the Cottonwood area and specimen number.
- NO-06808 Calkins, F.C. Cottonwood, Utah. Office jottings. 1933-1934. Notes on things in Cottonwood quadrangle that would be good to review in terms of mapping; ideas on organization and content of report text; notes on “Mechanics of mapping. How should the mapping of this area have been done---“; notes, “Impressions on re-reading Cottonwood Ms [manuscript]; Methods – mine maps; Methods of reproducing maps.
- NO-06809 Calkins, F.C. Cottonwood. 1934. I. Geologic, structure, and stratigraphic notes and sketches; mine notes and sketches. Route index in front of notebook. Locales include: Cardiff Mine boarding house area; Baby McKee fissure; Monte Cristo Basin; Mineral Forks; Reed and Benson Ridge; Cardiff Mine; Alta tunnel; Frederick tunnel; Sells fault zone; Peruvian and Collins Gulches area; Collins Gulch; Columbus-Rexall tunnel; Columbus workings; Columbus tunnel; Superior Gulch. Specimen numbers 1 - 51.
- NO-06810 Calkins, F.C. Cottonwood. 1934. II. Geologic, structure, and stratigraphic notes and sketches; mine notes; notes on topographic corrections. Route index in front of notebook. Locales include: Frederick tunnel area; Reed and Benson Ridge; Lampson shaft area; South Hecla Mine area; Collins Gulch; Columbus tunnel and area; Nabob tunnel; Flagstaff tunnel; Drain tunnel; Columbus Mine; Superior Gulch; Bay City tunnel area; Montezuma tunnel area; Montezuma Mine area. Specimen numbers 52 - 82.
- NO-06811 Calkins, F.C. Office notes, 1934-1935, 1937. Includes notes on: Madison limestone; Cambrian quartzite and limestone; Methods of Mapping; faults; fissures; compass needle sensitivity; tillite formation and lithology; breccia; folds; metamorphism; dike rocks; Ophir shale; Powell’s lease; Sampson Mine; moraines and glaciation; lamprophyres – Petrographic summary; Austin’s Jumbo Mine.
- NO-06812 Calkins, F.C. Mine Maps. M. 1934. Maps of mine workings with geologic notes. Workings plotted: Howell, Cardiff, Columbus-Rexall, and Frederick.
- NO-06813 Calkins, F.C. October 1-31, 1941. Cottonwood-American Fork, Utah. Geologic, structure, and stratigraphic notes and sketches; mine notes. Route index in front of notebook. Locales include: South Hecla Mine – East One drift; Tiger Trail fault; South Columbus Tunnel; Columbus-Rexall Mine; Wasatch drain tunnel; Alta area; Burgess tunnel area; Grizzly tunnel with ultraviolet lamp; Tom Moore tunnel; Flagstaff Mine area; dumps in Grizzly Gulch at night; Collins Gulch; American Fork; Pacific Mine; Pittsburg Mine; Dutchman Mine; Whirlwind tunnel; Upper Dutchman tunnel. Specimen numbers 11 - 77.

- NO-06814 Calkins, F.C. November 1-26, 1941. Cottonwood-American Fork. Geologic, structure, and stratigraphic notes and sketches; mine notes. Route index in front of notebook. Locales include: Alta area; Tom Moore tunnel; Patsy Marley Hill; American Fork; Miller Hill; Pittsburg Lake area; Big Cottonwood Canyon; Michigan-Utah Hill; Deer Creek; Columbus-Rexall tunnel; Cardiff tunnel; Kessler's Peak; Bay City tunnel; Columbus workings; Kentucky-Utah Mine. Specimen numbers 78 - 142.
- NO-06815 Calkins, F.C. 1941. Notebook with list of rocks from the Cottonwood quadrangle, including rocks that were disposed of, samples of rocks sent to different places, and list of maps used in investigations. (NOTE: F.C. Calkins' rock samples were given to the Utah State Geological and Mineral Survey, per telephone conversation May 22, 1986 with Edwin Tooker, USGS, Menlo Park, Calif.)
- NO-06816 Calkins, F.C. July 11 – August 18, 1943. I. Notebook. Utah. Geologic, structure, and stratigraphic notes; mine notes; a few sketches. Notes for August 18 include the first references to aerial photograph numbers in this project. Locales include: Never Sweat prospect; Greeley Mine; Albion shaft dump Peruvian Gulch; Collins Gulch; Baldy; South Hecla Mine; White Pine Gulch; Albion Basin; Gad Valley; Twin Peaks; Alta-Superior prospect; Snake Creek; Tintic district; west of Pine Canyon; Dutch Hollow; Quartz Peak; Schneiter's prospect area; Lavinia Creek area; Hot Pots. Specimen numbers 1 - 24.
- NO-06817 Calkins, F.C. 1943 II. August 19 – September 6. Utah. Geologic, structure, and stratigraphic notes and sketches; mine notes. Locales include: Lavinia Creek; Wolverine tunnel; Snake Creek; Bogan Creek and Gulch; Steamboat tunnel area; Heber to Salt Lake City via road east of Timpanogos; Big Cottonwood Creek area; Bogan tunnels; Pine Canyon; Snake Creek Canyon area; Barbens area; Steamboat Rock; Hayte Canyon. Specimen numbers 25 - 33.
- NO-06818 Calkins, F.C. 1943. III. September 6 – October 4. Geologic, structure, and stratigraphic notes; mine notes; a few sketches. Locales include: Bogan Gulch; Snake Creek tunnel; South Hecla mine; Milkmaid tunnel; South Columbus mine; Wellington Hill (tungsten); Albion Basin; Alta area; Rustler area; South Columbus tunnel; Native Copper tunnels. Specimen numbers 34 - 43 (many specimens described are not numbered).
- NO-06819 Calkins, F.C. 1943 IV. October 3 only; 1944. I. July 16 – August 16. Geologic, structure, and stratigraphic notes; mine notes; a few sketches. Includes references to aerial photographs. Locales of 1943 include: Deer Creek; Box Elder Peak. Locales for 1944 include: Peruvian Gulch; South Hecla Mine; Emma dump; Cleves tunnel; Crows Nest tunnel; Native Copper Mine area; Peruvian drain tunnel; Collins Gulch; Old Emma and Montezuma tunnels; Bay City tunnel area; Alta to American Fork traverse; Deer Creek; Alpine Creek area; Major Evans

Gulch; Silver Fork; American Fork Canyon; Tibble Fork area; Silver Creek Basin; Silver Lake trail; Mineral Mountain; Mill Canyon; Mineral Fork and Gulch; Granite Flat area; White Canyon; South Fork. Specimen numbers 1 - 26.

- NO-06820 Calkins, F.C. 1944. II. August 9 – September 4. Route indexes for 1943 notebooks I, II, III and IV; 1944 notebooks I, II, and III. Also, geologic, structure, and stratigraphic notes; mine notes; a few sketches. There are also references to aerial photographs. Locales include: Mt. Timpanogos; Timpanogos Cave and vicinity; American Fork Canyon area; Provo Canyon; American Fork Canyons; Big Cottonwood Canyon; Cave Spur; Wide Hollow Canyon; Larkspur Mountain. Specimen numbers 27 - 35.
- NO-06821 Calkins, F.C. 1944. III. Utah. Geologic, structure, and stratigraphic notes and sketches; notes on fossils; notes on photos taken. Also, references to aerial photographs. Locales include: American Fork near Mile Rock; Deer Creek Basin area; Maxfield Mine area; North Fork; Butler Fork; Mineral Fork. Specimen numbers 36 - 39. There are also notes from J.S. Williams' paper on Carboniferous formations of the Uinta and Northern Wasatch Mountains (GSA Bulletin, v. 54, no. 4 (1943)).
- NO-06822 Calkins, F.C. 1944. IV. September 27 – November 4. Utah. Geologic, structure, and stratigraphic notes; mine notes; a few sketches. Also, references to aerial photographs. Locales include: American Fork; Deer Creek; Dutchman Mine; Yankee Mine; Miller Hill; Lady Ann tunnel; Swinging Bridge Canyon; Bog Mine; Mt. Timpanogos; Alta; South Hecla Mine; Albion Basin; Peruvian Gulch; Third Chance molybdenum prospect; Columbus-Rexall Mine. Specimen numbers 40 - 54.
- NO-06824 Calkins, F.C. Utah. Record of aerial photographs used; list of instruments in Calkins' custody as of August 13, 1943, with notes; list of specimens for 1946, 1947. Also, notes on: ascent of Box Elder Peak, October 3, 1943; summaries dated August 18, 1943, and various dates in August – October 1944.
- NO-06825 Calkins, F.C. Utah. Miscellaneous notes, Alta quadrangle. Includes: passages on geology of Big Cottonwood Canyon from his 1944 notebooks and 1921 notebooks; notes from reports of the U.S. Geological Exploration of the Fortieth Parallel (King). Also, copied and revised notes, 1947, South Fork of Little Willow Creek; notes on approximate scale of photographs; high-temperature Ca minerals; garnets; notes from publications on the Wasatch mountains and on Utah.
- NO-06826 Crittenden, Max D., Jr. August - September 1946. Field notes, covering mostly the headwaters and north ridge of Mill Creek. Geologic traverse notes. Includes index to notes showing date, traverse number, aerial photograph used. Also, cross-index from aerial photographs to notes.

- NO-06827 Calkins, F.C. July 6 – October 22, 1946. Alta quadrangle. Geologic, structure, and stratigraphic notes and some sketches. Includes color scheme for Alta quadrangle map; index showing dates on which a given aerial photograph of series COH was used, and Route Index. Locales include: Dry Fork; Deer Creek; Box Elder Gulch and Creek; Mill D North Fork of Big Cottonwood Creek; Mill Creek Canyon; Parley's Canyon; Lambs Fork; Murdock Peak, near Farmington; Bowman Trail; Neff Canyon; Mt. Raymond area; Porter Fork; Church Fork; Little Cottonwood Creek; Alta; Elbow Fork; Weber Canyon; Henefee; East Canyon; Lambs Canyon; City Creek Canyon; Thayne Fork; Big Water Fork area; Soldier Fork; Little Willow Creek; Ferguson Canyon area; Tracy Wigwam area; Bell Canyon; South Hecla Mine and drain tunnel. Specimen numbers 1 - 74.
- NO-06828 Calkins, F.C. or N.J. Neilson. Utah. 1946. Mine maps with geologic notes: Pacific Lower tunnel, Blue Rock Upper tunnel. Traverse maps, 1946: Mill Creek-Dog Lake; Along Water Pipe West of Church Fork; Neff's Canyon; Mill Creek Canyon; Bowman Trail.
- NO-06829 Calkins, F.C. FCC 1947. Geologic, structure, and stratigraphic notes and a few sketches. Route Index in front of notebook. Notes up to June 25 are rewritten from memory to replace those in the notebook lost on June 25. Also, references to aerial photographs. Locales include: Mill Creek/ Bowman Trail; Porter Fork and Basin; Church Fork; Neff Canyon; Elbow Fork; Thaynes Fork; Big Cottonwood Canyon; Mill B North Fork; Little Willow Basin. Specimen numbers 1 - 21.
- NO-06830 Williams, J.S. August 15-19, 1947. Geologic and stratigraphic notes, notes on fossils and specimens collected while with Calkins in the Cottonwood region.
- NO-06831 Crittenden, Max D., Jr. June 15 – October 20, 1947. Utah. Geologic, structure, and stratigraphic notes and a few sketches. There are also references to aerial photographs. Includes index to field notes giving date, aerial photo number, page, and Index by photos, all of which are in the COH series. Locales include Mill Creek area; Bowman Trail. Specimen numbers 47MC1 –47MC41.
- NO-06832 Calkins, F.C. June 28 – October 26, 1948. Expandable envelope with "Comstock Lode, Nevada and Alta quadrangle, Utah." See Item NO-6823 (not in this inventory) for these Comstock Lode field notes. Geologic, structure, and stratigraphic notes and a few sketches; Route Index; Dates of specimens (specimen numbers 1-40); "Abbreviations, signs, and provisional terms" used in Calkins' field notes; Index to aerial photographs by date of notes. Utah locales include: Mill D North Fork; Beartrap Creek; Lake Desolation area; Reynolds Gulch; Butler Fork and Basin; Mill A Basin; Mineral Fork; Days Fork; Twin Peaks; Kesler Peak; Maxfield Mine area; Snowslide Gulch; Reed's Peak Trail; Mill D South Fork; Doughnut Falls; Ferguson Gulch; Little Willow Creek; Silver Fork area; Honeycomb Fork; Davenport Hill; Reynolds Gulch area; Michigan-Utah Hill; Prince shaft; Grizzly Gulch.

- NO-06833 Crittenden, Max D., Jr. June 23 – November 16, 1948. Big Cottonwood area; Alta quadrangle? Geologic, structure and stratigraphic notes and a few sketches; mine notes; references to aerial photographs. Specimen numbers 48MC1 – 48MC45.
- NO-06834 Crittenden, Max D., Jr. Big Cottonwood Canyon. 1949. Alta quadrangle. Geologic, structure, and stratigraphic notes and sketches, references to aerial photographs. Specimen numbers 49MC1 – 49MC79. Locales include: Ecker Hill; Mt. Olympus; Neff Canyon; Mill B North Fork; Whipple Fork; Ferguson Gulch; Mill B South Fork; Twin Peak area; Little Willow Creek area; Mineral Fork road; Dromedary Peaks; White Pine Fork; City Creek Canyon; Tank Canyon; Silver Fork; Swan Peak; Morgan Valley; Swinging Bridge Canyon; Preston Canyon. Also, maps of the various traverses.
- NO-06835 Notes by R.W. O. 1949. Geologic, structure, and stratigraphic notes and some sketches, references to aerial photographs. Big Cottonwood Canyon? Specimen numbers 49RO1 – 49RO37. Station location numbers 71-99c.
- NO-06836 Crittenden, Max D., Jr. 1950. Geologic, structure, and stratigraphic notes and sketches; measured sections; references to aerial photographs. Big Cottonwood Canyon? Specimen numbers 50MC1 – 50MC21. Locales include: Smith and Morehouse Canyon; Tank Canyon; Box Elder Canyon; Preston Canyon; east of Alpine; Swinging Bridge Canyon; American Fork Canyon.
- NO-06837 Sharp and Gutierrez. 1949-1950. Cottonwood, American Fork area. Geologic, structure, and stratigraphic notes and a few sketches, references to aerial photographs. Specimen numbers 50BS1, and 1BS49 – 11BS49.
- NO-06838 Notes by R.W.O. 1950. Geologic, structure, and stratigraphic notes and sketches; references to aerial photographs. Locales include: Cottonwood-American Fork area; Tan Canyon area; Box Elder Canyon area; Box Elder Peak; areas on Park City sheet. Specimen numbers 50RO1 and 50RO2.
- NO-06839 R.W.O. 1951. Geologic, structure, and stratigraphic notes; references to aerial photographs. Locales include: Butler Fork; Big Cottonwood Canyon; Silver Fork (American Fork) area; Grouse Cliffs; Deer Creek. Specimen numbers 51RO50 – 51RO59.
- NO-06840 Calkins, F.C. FCC. 1951. I. August 8 – October 9. Cottonwood-American Fork area. Geologic, structure, and stratigraphic notes; notes o mines; references to aerial photographs. Route index for all of 1951 in front of notebook. Locales include: Doughnut Falls and area; Days Fork; City Creek Canyon; Rock Canyon; Provo Canyon; Cold Canyon; Butler Fork; Silver Lake area; Mines Mountain; Beer Creek; Miller Mine; New Park Mine; Mirror Lake in Uinta Mountains; Tibble Fork area; Mill Canyon area; Alpine area. Specimen numbers 1 - 25.

- NO-06841 Calkins, F.C. 1951. II. October 10 – November 7. Cottonwood – American Fork area. Geologic, structure, and stratigraphic notes; references to aerial photographs. Locales include: Major Evans Gulch area; Silver Fork area; Mill Creek; Tibble Fork; Porcupine Gulch; Alpine area; Box Elder Gulch; Wadsworth Canyon and area. Specimen numbers 26 - 29.
- NO-06843 Crittenden, Max D., Jr. October 1 – October 10, 1951. Cottonwood-American Fork area. Geologic, structure, and stratigraphic notes and sketches; mine notes; references to aerial photographs. Locales include: Granite Flat area; Alpine area; Preston Canyon area; Major Evans Gulch area; Lone Pine Mine lower adit.
- NO-06844 Crittenden, Max D., Jr. July 2 – August 8, 1952. Cottonwood - American Fork area. Geologic, structure, and stratigraphic notes and sketches; notes on photos taken; references to aerial photographs. Locales include: Flagstaff Mountain area; Deer Creek area; Matterhorn Peak; Silver Creek area; Silver Lake area. Specimen numbers 52MC1 – 52MC45.
- NO-06849 Calkins, F.C. 1956. I. Cottonwood-American Fork area? Geologic, structure, and stratigraphic notes; summary notes; references to aerial photographs. Locales include: Montreal Hill; Brighton Gap area; Guardsman’s Pass; Red Pine Fork; head of Thaynes Canyon; Bonanza Flat area; Big Cottonwood Creek area; Brighton area; Great Western Mine portal area; Clayton Peak. Specimen numbers 11 - 81.
- NO-06850 Calkins, F.C. 1956. II. 1957. Office notes on: Brighton Gap granodiorite porphyry; andesite of Park City district; relations of igneous rocks in the Alta project area; Brighton Gap rock; Summary; Desirable Analyses. Field notes, 1957: geologic, structure, and stratigraphic notes and a few sketches. Locales include: Brighton area; Scottish Chief Mine area; Park City District; American Fork Canyon; Big Cottonwood Canyon; Mill F East Fork area; Little Cottonwood Canyon including Mormon quarry; Mill A Gulch. List of samples for which thin sections desired. Specimen numbers for 1956 are 83 - 93; specimen numbers for 1957 are 1 - 51.
- NO-06852 Calkins, F.C. FCC. 1958. Cottonwood and American Fork areas, Park City area, Brighton area. Geologic, structure, and stratigraphic notes. Locales include: hills north of Parley’s Park; east side of Parley’s Park; from Brighton to top of Mt. Tuscarora and back; Mt. Millicent; east of Lake Catherine; Big Cottonwood Creek; Dog Lake area; Sunset Peak area; Pine Hollow north of Midway; north of Little Cottonwood Canyon; north of Alta. Interspersed are Calkins’ comments on particular fieldwork, which are identified as “P.S.” sections. Also, last page of notes is “Outstanding Problems” – comments by Calkins. Specimen numbers 3 – 61.
- NO-06859 Calkins, F.C. 1962. With Max Crittenden. Geologic, structure, and stratigraphic

notes and a few sketches. Locales include: Little Cottonwood Canyon; Park City area; East Canyon; Morgan area; Big Cottonwood Creek. Also, notes from several publications. Calkins specimen numbers 62FC1 – 62FC4, then he started identifying specimens with letters – a, b, etc. Crittenden specimen numbers 62MC1 – 62MC24.

- MA-01065 Map folder with a total of 11 items, including:
- annotated copy of the Cottonwood special map with 2 pages of explanation
 - cloth-backed copy of Annotated and colored map of the Cottonwood special quadrangle
 - hand drawn, colored geologic map of the northwest corner of the Cottonwood special quadrangle showing the reservoir on the Big Cottonwood Creek, plus 2 pages of notes
 - 1 profile sketch of dam site, Big Cottonwood Creek
 - portion of the southeast corner of the Cottonwood special quadrangle with hand coloring;
 - 1 copy, hand-colored, of the Cottonwood quadrangle (extension)
 - hand-colored copy of the Cottonwood quadrangle extension showing geology

Published as: U.S. Geological Survey. Professional Paper 111. 1920.

Published as: U.S. Geological Survey. Professional Paper 201. 1943.

Published as: U.S. Geological Survey. Geologic Quadrangle Map GQ-534. 1966.

Published as: U.S. Geological Survey. Geologic Quadrangle Map GQ-535. 1966.

POTASH EXPLORATION IN THE MAGNET COVE AREA, HOT SPRINGS COUNTY, ARKANSAS. 1918.

- NO-06870 F.C. Calkins. Field notebook containing “Magnet Cove Memoranda”, notes on the extraction of potash and related methods and problems; and notes on the geology of the Magnet Cove District.
- NO-06871 F.C. Calkins. Field notebook containing general observations and descriptions of rock specimens from the Magnet Cove District.
- NO-06872 F.C. Calkins. Field notebook containing geologic findings from the Diamond Joe Quarry, general impressions of the area around Cove Creek, and descriptions of rock samples.
- NO-06873 F.C. Calkins. Loose notebook pages with field notes on geologic traverses of the Magnet Cove area.
- NO-06874 F.C. Calkins. Loose notebook pages with sketch maps and field notes on geologic

traverses of the Magnet Cove area.

- NO-06875 F.C. Calkins. Loose pages with results of laboratory tests on potash-bearing rocks from the Magnet Cove area.

GEOLOGIC INVESTIGATIONS OF DAM AND RESERVOIR SITES IN IDAHO. 1922.

- NO-06882 F.C. Calkins. Field notebook with geologic notes on sites in Blair, Custer, Elmore, Gooding, Idaho, Lemhi, Lincoln, Power, Twin Falls, and Washington Counties, Idaho. 1922.

GEOLOGIC INVESTIGATIONS IN THE LEADVILLE, KOKOMO-MOSQUITO RANGE, TENMILE, AND ALMA MINING DISTRICTS, COLORADO. 1926.

- NO-10583 F.C. Calkins. Field notebook titled "Topical Digest, Leadville Region, F.C.C., 1926", containing summaries of field notes from 1926 arranged by topic.
- NO-10584 F.C. Calkins. Field notebook with geologic and mine notes and sketches "done during a trip to the Leadville-Kokomo-Tenmile-Alma regions to appraise the accuracy of maps".
- NO-10585 F.C. Calkins. Loose pages from field notebook titled "Field Notes, Book II-IV, Leadville Region, F.C.C., 1926" and consisting of a 1926 route index, a chronological listing including book and page references, and notes and sketches concerning geology, stratigraphy, and mines.

GEOLOGIC INVESTIGATIONS AT THE U.S. POTASH MINE, MITCHELL COUNTY, TEXAS. 1931.

- NO-06880 F.C. Calkins. Field notebook with geology and mineral notes on all levels of the U.S. Potash Mine and dump.

GEOLOGIC INVESTIGATIONS OF THE MARTHA CASH AND CASPER IRON MINES, CORNWALL DISTRICT, PENNSYLVANIA. 1938-1940.

- NO-06879 F.C. Calkins. Field notebook with sketch maps and geologic notes on the Martha Cash Mine and the Casper Iron Mine.

ESSAYS ON WRITING. 1951-1952.

NO-08333 In addition to his scientific research work for the U.S. Geological Survey, Frank C. Calkins served as scientific critic and editor for various USGS publications during 1935-1965. In response to seeing frequent examples of poor writing, he wrote these essays. The first essay, "Punctuation and Cadence" (July 1951), presents principles of construction and punctuation. The second essay, "Relative Clauses" (April 1952), deals with problems of "that" and "which." The essays were distributed informally. This folder includes two typewritten manuscripts for the essay "Punctuation and Cadence and one typewritten manuscript for the essay "Relative Clauses".