

THE GRAND CANON

A WORLDWIDE BIBLIOGRAPHY OF THE GRAND CANYON AND LOWER COLORADO RIVER REGIONS
IN THE UNITED STATES AND MEXICO

Appendix V

Illustrated Reference List of Atlas Sheets in Clarence E. Dutton's *Tertiary History of the Grand Cañon District (1882, 1885)*

Compiled by Earle E. Spamer

Illustrations from the Library of Congress

[Go to Dutton listings in bibliography](#)

CLARENCE EDWARD DUTTON (1841–1912) was a career soldier who was also a geologist assigned to John Wesley Powell's geological and topographical surveys operating principally in Utah and northern Arizona. Even though he became one of the great geologists who set the stage for modern geological studies, he is probably most well known—certainly with respect to this bibliography—for his *Tertiary History of the Grand Cañon District* (U.S. Geological Survey Monograph 2, 1882, and initially reprinted in 1885 by the U.S. House of Representatives). Its great double-folio *Atlas*, comprising five geologic maps on 12 sheets, adding geologically significant scenic views by William Henry Holmes and Thomas Moran, is one of the most-sought publications by aficionados of the American West—with prices attending to the demand. Many copies of the *Atlas* have been disbound over the years and its plates reused or made available separately. Because of this, and because of the relative scaracity of the *Atlas*, Appendix V lists and illustrates these valuable maps and scenes to assist bibliographers, librarians, booksellers, and collectors.

APPENDIX V. ILLUSTRATED REFERENCE LIST OF ATLAS SHEETS IN CLARENCE E. DUTTON'S
TERTIARY HISTORY OF THE GRAND CAÑON DISTRICT

To assist users, the bibliographical entries for Dutton's *Tertiary History* are repeated here for convenience. They describe what are essentially two states of this publication, one published in 1882, and reprinted with folded plates in 1885 (sometimes confused because they contain the same 1882 title-pages).

- 1882 21.918 Tertiary history of the Grand Cañon district : with atlas. *U.S. Geological Survey, Monograph 2*, 264 pp. [text, quarto]; *Atlas*, 24 sheets [double folio, sheets 21¼ × 17 inches]. [Atlas collation: title-page, "List of Atlas Sheets" (equivalent to Atlas Sheet I), 22 sheets (Atlas Sheets II-XXIII, comprising tinted and chromo-lithographic maps and scenic views). Atlas title-page: "Department of the Interior United States Geological Survey J.W.Powell Director Atlas to Accompany the Monograph on the Tertiary History of the Grand Cañon District by Capt. Clarence E. Dutton U.S.A. [vignette] Washington 1882 Julius Bien and Co. Lith. New York".)] [Ames (1905, [ITEM NO. 1.5](#)), p. 556, indicates monograph submitted for printing March 1, 1881.]
- 1885 21.7711 Tertiary history of the Grand Cañon district : with atlas. *48th U.S. Congress, 2nd Session, House of Representatives Miscellaneous Document 35*, 264 pp. [text, quarto]; *Atlas*, 24 sheets [folded, laid loose in three-quarter leather folder with cloth ties affixed to boards on three open edges, and spine labels affixed; quarto]. (House series title-page accompanies text volume: *The Miscellaneous Documents of the House of Representatives for the Second Session of the Forty-eighth Congress, 1884-'85. In seventeen volumes. Volume 11.—No. 35. Washington: Government Printing Office. 1885.*) (SPINE TITLE FOR TEXT VOLUME: [top] "HOUSE MISCELLANEOUS DOCUMENTS 2^D SESS., 48TH CONG. 1884-'85 VOL. 11"; [bottom] "DUTTON [rule] TERTIARY HISTORY OF THE GRAND CANON DISTRICT [rule] WITH ATLAS". SPINE TITLE FOR ATLAS: [top] "HOUSE MISCELLANEOUS DOCUMENTS 2^D SESS., 48TH CONG. 1884-'85 VOL. 11"; [bottom] "ATLAS".) • [A re-release of Dutton (1882, [ITEM NO. 21.918](#)), as a part of the collated series of House Miscellaneous Documents for 1884-1885, not mentioned by Farquhar or in earlier editions of this bibliography. Text and Atlas title-pages are the same as for Dutton (1882), retaining date, but text volume adds the House Miscellaneous Documents series title-page (1885) cited above; atlas does not include a separate House Miscellaneous Documents title-page although it is identifiable from its spine labels. Atlas Sheets differ from 1882 publication in that the double-folio sheets are vertically and horizontally folded to accommodate quarto format (vertical fold in center as in original double-folio state, then folded horizontally to achieve quarto size). Quarto format also corroborated in *Checklist of Public Documents, Second Edition* (U.S. Government Printing Office, Superintendent of Documents, 1895, [ITEM NO. 2.27756](#)), p. 76. *Folded Atlas Sheets* each are also stamped with a numeral on the exterior (sheet verso) corner, enumerated 0 to 23, to facilitate identification of Atlas Sheets without having to unfold them: "0" is the title-page, "1" is the "List of Atlas Sheets" (equivalent to Atlas Sheet I), followed by 2-23 (Atlas Sheets II-XXIII, comprising tinted and chromo-lithographic maps and scenic views). Atlas title-page: "Department of the Interior United States Geological Survey J.W.Powell Director Atlas to Accompany the Monograph on the Tertiary History of the Grand Cañon District by Capt. Clarence E. Dutton U.S.A. [vignette] Washington 1882 Julius Bien and Co. Lith. New York".)] [Points relating to physical arrangement are provided with the assistance of Daniel F. Cassidy and Richard D. Quartaroli.]

Although these bibliographical entries are from Part 21 of [THE GRAND CANON](#) (GEOLOGY AND PALEONTOLOGY OF THE GRAND CANYON REGION), this Appendix is provided separately because so many of the *Atlas* plates are acquired for their scenic and aesthetic values rather than for the geological information they convey. The small ("thumbnail") illustrations provided here are to assist users in identifying which plates they seek or wish to corroborate the identity of one that is in front of them. Other than the folded versions that appear with the 1885 reprinting, there are no "variants".

The *Atlas's* Sheet I comprises a table of contents, "List of Atlas Sheets", but which actually summarizes the plates, occasionally grouping several together. So that users may identify the plates precisely, the list that follows gives the title of each plate exactly, with additional information gleaned from the plate.

APPENDIX V. ILLUSTRATED REFERENCE LIST OF ATLAS SHEETS IN CLARENCE E. DUTTON'S
TERTIARY HISTORY OF THE GRAND CAÑON DISTRICT

TITLES AS PRINTED ON ATLAS SHEETS ARE SHOWN HERE IN **BOLD**



Atlas Sheet I

List of Atlas Sheets.

[This summary list does not always reproduce the titles as shown on the Atlas sheets. It also groups some sheets together.]



Atlas Sheet II

Geological Map of the Western Part of the Plateau Province

[scale nearly 1:1,000,000; colored]

[“The topography of the colored portion is compiled by J. H. Renshawe, from data and surveys by the U.S. Geographical and Geological Survey of the Rocky Mountain Region, J. W. Powell in charge, and by the United States Geological Survey, Clarence King, Director. The topography of the uncolored portion is compiled largely from surveys under the direction of Capt. George M. Wheeler, U.S. Engineers. Geology by C. E. Dutton” (*from* Sheet I)]

• THE GRAND CANON •

APPENDIX V. ILLUSTRATED REFERENCE LIST OF ATLAS SHEETS IN CLARENCE E. DUTTON'S
TERTIARY HISTORY OF THE GRAND CAÑON DISTRICT



Atlas Sheet III

Sketch Map of the Western Part of the Plateau Province Showing Faults of the Grand Cañon District and High Plateaus

[scale ca. 1:1,000,000]

["The topography is the same as that of the preceding sheet." (*from* Sheet I)]



Atlas Sheet IV

The Temples and Towers of the Virgin

[Drawn by William H. Holmes]

• THE GRAND CANON •

APPENDIX V. ILLUSTRATED REFERENCE LIST OF ATLAS SHEETS IN CLARENCE E. DUTTON'S
TERTIARY HISTORY OF THE GRAND CAÑON DISTRICT



Atlas Sheet V

Looking Up the Toroweap From Vulcan's Throne
[Two panoramic views] [Drawn by William H. Holmes]



Atlas Sheet VI

The Grand Cañon at the Foot of the Toroweap—Looking East
[Colored] [Drawn by William H. Holmes]

• THE GRAND CANON •

APPENDIX V. ILLUSTRATED REFERENCE LIST OF ATLAS SHEETS IN CLARENCE E. DUTTON'S
TERTIARY HISTORY OF THE GRAND CAÑON DISTRICT



Atlas Sheet VII

[*Note:* Sheets VII–VIII comprise halves of one map.]

Map of the Uinkaret Plateau North Half

[Geologic map, scale 1:63,360; colored] [Topography by J. H. Renshawe;
geology by C. E. Dutton]



Atlas Sheet VIII

Map of the Uinkaret Plateau South Half

[Geologic map, scale 1:63,360; colored] [Topography by J. H. Renshawe;
geology by C. E. Dutton]

• THE GRAND CANON •

APPENDIX V. ILLUSTRATED REFERENCE LIST OF ATLAS SHEETS IN CLARENCE E. DUTTON'S
TERTIARY HISTORY OF THE GRAND CAÑON DISTRICT



Atlas Sheet IX

Views Looking East and South From M^r Trumbull

[Two panoramic views] [Drawn by William H. Holmes]



Atlas Sheet X

Views From M^r Trumbull and M^r Emma

[Two panoramic views] [Drawn by William H. Holmes]

• THE GRAND CANON •

APPENDIX V. ILLUSTRATED REFERENCE LIST OF ATLAS SHEETS IN CLARENCE E. DUTTON'S
TERTIARY HISTORY OF THE GRAND CAÑON DISTRICT



Atlas Sheet XI

[*Note:* Sheets XI–XIV comprise quadrants of one map.]

**Geologic Map of the Southern Part of the Kaibab Plateau (Part I.
North-Western Sheet.)**

[Scale 1:63,360; colored] [Topography by Sumner H. Bodfish; geology by C.
E. Dutton]



Atlas Sheet XII

**Geologic Map of the Southern Part of the Kaibab Plateau (Part II.
North-Eastern Sheet.)**

[Scale 1:63,360; colored] [Topography by Sumner H. Bodfish; geology by C.
E. Dutton]

• THE GRAND CANON •

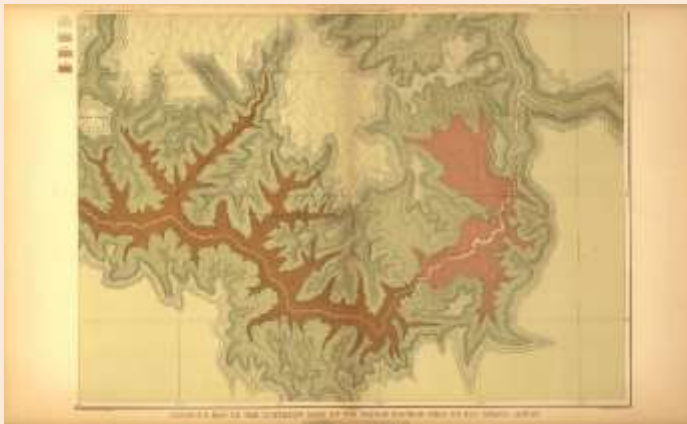
APPENDIX V. ILLUSTRATED REFERENCE LIST OF ATLAS SHEETS IN CLARENCE E. DUTTON'S
TERTIARY HISTORY OF THE GRAND CAÑON DISTRICT



Atlas Sheet XIII

Geologic Map of the Southern Part of the Kaibab Plateau (Part III. South-Western Sheet.)

[Scale 1:63,360; colored] [Topography by Sumner H. Bodfish; geology by C. E. Dutton]



Atlas Sheet XIV

Geologic Map of the Southern Part of the Kaibab Plateau (Part IV. South-Eastern Sheet.)

[Scale 1:63,360; colored] [Topography by Sumner H. Bodfish; geology by C. E. Dutton]

• THE GRAND CANON •

APPENDIX V. ILLUSTRATED REFERENCE LIST OF ATLAS SHEETS IN CLARENCE E. DUTTON'S
TERTIARY HISTORY OF THE GRAND CAÑON DISTRICT



Atlas Sheet XV

[*Note:* Sheets XV–XVII comprise thirds of one panoramic view.]

Panorama From Point Sublime (Part I. Looking East)

[Colored] [Drawn by William H. Holmes]



Atlas Sheet XVI

Panorama From Point Sublime (Part II. Looking South)

[Colored] [Drawn by William H. Holmes]

[*Note:* The Library of Congress copy is imperfect; chipped at the lower portion of center fold.]

• THE GRAND CANON •

APPENDIX V. ILLUSTRATED REFERENCE LIST OF ATLAS SHEETS IN CLARENCE E. DUTTON'S
TERTIARY HISTORY OF THE GRAND CAÑON DISTRICT



Atlas Sheet XVII

Panorama From Point Sublime (Part I. Looking West)

[Colored] [Drawn by William H. Holmes]



Atlas Sheet XVIII

The Transept, Kaibab Division, Grand Cañon An Amphitheater of the Second Order

[Drawn by Thomas Moran; credit on Sheet I]

[*Note:* Some copies of this sheet may be imperfect due to over-inking, with damage resulting from the leaves having had the tendency to stick together (*fide* Richard D. Quartaroli and Daniel F. Cassidy).]

• THE GRAND CANON •

APPENDIX V. ILLUSTRATED REFERENCE LIST OF ATLAS SHEETS IN CLARENCE E. DUTTON'S
TERTIARY HISTORY OF THE GRAND CAÑON DISTRICT



Atlas Sheet XIX

Views of the Marble Cañon Platform From the Eastern Brink of the Kaibab

[Two panoramic views] [Drawn by William H. Holmes]



Atlas Sheet XX

[*Note:* Sheets XX–XXIV comprise contiguous quadrants; XX/XXI abut East–West; XXI/XXIV abut North–South.]

Geologic Map Showing the South-Western Portion of the Mesozoic Terraces and the Vicinity of the Hurricane Fault

[Scale 1:250,000; colored] [Geology by C. E. Dutton]

• THE GRAND CANON •

APPENDIX V. ILLUSTRATED REFERENCE LIST OF ATLAS SHEETS IN CLARENCE E. DUTTON'S
TERTIARY HISTORY OF THE GRAND CAÑON DISTRICT



Atlas Sheet XXI

Geologic Map of the Mesozoic Terraces of the Grand Cañon District and the Southern Portion of the High Plateaus

[Scale 1:250,000; colored] [Geology by C. E. Dutton]



Atlas Sheet XXII

Geologic Map Showing the Kanab, Kaibab, Paria and Marble Cañon Platforms

[Scale 1:250,000; colored] [Geology by C. E. Dutton]

• THE GRAND CANON •

APPENDIX V. ILLUSTRATED REFERENCE LIST OF ATLAS SHEETS IN CLARENCE E. DUTTON'S
TERTIARY HISTORY OF THE GRAND CAÑON DISTRICT



Atlas Sheet XXIII

Geologic Map of the Colorado Plateau and San Francisco Mountains

[Scale 1:250,000; colored] [Geology by C. E. Dutton]