



Smithsonian
National Museum of American History
Kenneth E. Behring Center

Guide to the William R. Hutton Papers

by Lindsay Osmun.

2011

This finding aid was generated automatically on June 30, 2015

Archives Center, National Museum of American History
P.O. Box 37012
Suite 1100, MRC 601
Washington, D.C., 20013-7012
Phone: 202-633-3270
archivescenter@si.edu
<http://americanhistory.si.edu/archives/>

Table of Contents

Collection Overview.....	1
Administrative Information	1
Biographical Note.....	3
Scope and Content Note.....	5
Arrangement.....	16
Names and Subject Terms	17
Bibliography.....	20
Container Listing.....	21
Series 1: Letterpress copybooks, 1858-1901.....	21
Series 2: Professional Correspondence, 1861-1901.....	23
Series 3: Personal Correspondence, 1850-1942.....	24
Series 4: Personal Materials, 1835-1946.....	25
Series 5: Diaries, 1866-1901.....	28
Series 6: Notebooks, 1860-1900.....	30
Series 7: Cash Books, 1856-1899.....	32
Series 8: Professional Projects, 1830-1965.....	33
Series 9: Printed Materials, 1850-1913.....	51

Collection Overview

Repository:	Archives Center, National Museum of American History
Creator:	Hutton, William R., 1826-1901
Title:	William R. Hutton Papers
Dates:	1830-1965
Quantity:	30 cubic feet (32 boxes, 21 oversize folders)
Abstract:	The papers document the life and work of William R. Hutton, a civil engineer during the late 1800s to the early 1900s. Materials include diaries, notebooks, correspondence, letterpress copy book, printed materials, publications, specifications, photographs, drawings, and maps that document the construction of several architectural and engineering projects during this period. Most notable are the records containing information related to the construction of the Chesapeake and Ohio Canal, Hudson River Tunnel, the Washington Aqueduct, the Kanawha River Canal, and the Washington/Harlem River Bridge. There are also several records about railroads in the state of Maryland, the District of Columbia and elsewhere, including the Western Maryland Railroad, Baltimore and Ohio Railroad, Colorado Midlands Railway, Baltimore and Drum Point Railroad, the Northern Adirondack Railroad, and the Pittsfield and Williamstown Railroad. The records can be used to track the progression of these projects, and engineering innovation during the late 1800s to the early 1900s.
Language:	Some materials are in Dutch, French, German, Italian, and Spanish.

Administrative Information

Provenance Information

The William R. Hutton papers were initially deposited at the Division of Mechanical and Civil Engineering, now known as the Division of Work and Industry, National Museum of American History in June and September, 1965 and January, April, and May, 1966 and March 1974. They were acquired from four donor sources: Mr. and Mrs. James J. Madine, a relative of Hutton's and last owners of the Woodlands estate, the Department of Forests and Parks, Maryland, Louis Fischer, and Mr. and Mrs. Mayo S. Stuntz. The condition of the papers upon acquisition is noted in the source file. Papers from the Woodlands estate were said to have been located "all over the floor in complete disarray" accounting for the often damaged condition of many of the records. There was also some doubt expressed about the legitimacy of Fischer's ownership of the papers, as the Woodlands estate was missing both doors and window frames and was therefore not secure. Parts of the collection may have also been auctioned off (possibly by the Madines) prior to their donation.

Papers relating to the Chesapeake and Ohio Canal, Woodlands, Guard Lock and Aqueduct at Seneca, Baltimore and Ohio Railroad were donated to the Montgomery County Historical Society in May, 1965.

Correspondence, drawings, and a proposal for a screw steam canal boat were loaned to the U.S. National Park Service in May 1970.

The collection was transferred to the Archives Center from Division of Work and Industry, 2006.

Related Material

Materials in the Archives Center

The Montgomery C. Meigs Papers, 1870-1890, (AC0987). Contains materials relating to the construction of the Washington Aqueduct including a book of drawings illustrating reservoirs, tunnels, culverts, and other structural elements, a Government Senate Document relating to construction progress, scrapbooks created by Meigs that include newspaper clippings about the Washington Aqueduct project, water supply, engineering projects, building construction, architecture and other subjects. Collection is currently unprocessed, but is available for research.

Materials in Other Organizations:

The William Rich Hutton Papers, 1840-1961, are located at the Huntington Library in California (see <http://catalog.huntington.org>).

The collection contains 95 drawings, 13 letters, and 39 facsimile copies of letters and manuscripts. The illustrative material includes both watercolor and pencil drawings of California (including Los Angeles, Monterey, San Francisco, the New Almaden Quicksilver Mine, and the California missions), Baja California, Mexico, and Peru. There are also five pieces in the collection related to the author María Amparo Ruiz de Burton. In 1942, the Huntington Library published *Glances at California 1847--853: Diaries and Letters of William Rich Hutton, Surveyor* and *California 1847--852: Drawings by William Rich Hutton*.

The Hutton family papers are located at the Montgomery County Historical Society, Sween Library (see http://www.montgomeryhistory.org/sites/default/files/Family_Files.pdf).

The collection contains account books from the Woodlands estate, recipe books, livestock records, records of Mary Augusta Hutton (wife), Mary and Rose Hutton (daughters), newspaper clippings (including his obituary), correspondence, record books, deeds, bills and receipts, engineering papers, religious momentos (funeral service cards), and insurance papers.

Processing Information

Processed by Lindsay Osmun (intern), June-August, 2011; supervised by Alison Oswald, archivist.

Preferred Citation

Title and date of item, William R. Hutton Papers, dates, Archives Center, National Museum of American History, Smithsonian Institution, box number X, folder number XX, digital file number XXXXXXXX

Restrictions on Access

The collection is open for research.

Ownership & Literary Rights

Copyright held by the Smithsonian Institution. Collection items available for reproduction, but the Archives Center makes no guarantees concerning copyright restrictions. Other intellectual property rights may apply. Archives Center cost-recovery and use fees may apply when requesting reproductions.

Biographical Note

Not much is known about the history of William Rich Hutton outside of his role in architectural and engineering projects of the late 1800s and early 1900s. In many cases, he is spoken of only in reference to his projects, and the short biographies that have been written read more like a resume than a life story. Because of this lack of information, this note will focus on Hutton's professional accomplishments, but will attempt to make some comments on his personal life.

William Rich Hutton was born on March 21, 1826 in Washington, D.C., the eldest son of James Hutton (died 1843) and his wife, the former Salome Rich (1). He was educated at the Western Academy (Washington, D.C.) from 1837-1840 under George J. Abbot and then at Benjamin Hallowell's School in Alexandria, Virginia, where he received special training in mathematics, drawing, and surveying (2). Hutton began his professional career in California when he, along with his younger brother James, accompanied their uncle William Rich to work for the United States Army. His uncle was a paymaster for the army and Hutton became his clerk. They traveled around the new state paying the various platoons stationed there, but Hutton also occupied his time by drawing the landscapes and structures he saw in the settlements of Los Angeles, San Francisco, La Paz, Mazatlan, Santa Barbara, Monterey, San Pedro, San Diego, and Cape San Lucas (3). These drawings are now held by the Huntington Library in San Marino, California. Hutton held the position of clerk until the spring of 1849, and in July of that year he began working with Lieutenant Edward O.C. Ord and completed the first survey of Los Angeles and its surrounding pueblo lands and islands. Hutton continued surveying in California from 1850-1851. He was hired by William G. Dana to survey the Nipomo Ranch in San Luis Obispo County and also surveyed the ranches Santa Manuela and Huer-Huero, both owned by Francis Z. Branch. After his employment with Dana, he became the county surveyor for San Luis Obispo County, where he prepared the first survey and map of the region. He also continued to survey ranches for Captain John Wilson during this time. In August 1851, he resigned from his position as county surveyor and moved to Monterey where he worked as an assistant to Captain (later General) Henry W. Hallack, superintendent of the New Almaden Quicksilver Mine in Santa Clara County (4). He remained in this position until March, 1853 when he returned to Washington, D.C. by way of Mexico (5).

Hutton began his career as a civil engineer in Washington, D.C. He was first assigned to the position of assistant engineer on a survey of the projected Metropolitan Railroad in 1853, which was chartered to connect Washington, D.C. with the mainline of the Baltimore and Ohio Railroad. In 1855 he began his professional relationship with Montgomery C. Meigs when he was appointed to the position of assistant engineer on the Washington Aqueduct. He also served as division engineer on this project until construction was shut down in 1861 because of the outbreak of the Civil War. Fortunately for Hutton, the construction on the Aqueduct was resumed in 1862, and when Congress transferred the supervision of the aqueduct project from the War Department to the Department of the Interior, Hutton was made chief engineer. By the end of the Civil War, Hutton's reputation as a civil engineer was established (6).

During this decade Hutton also served as the chief engineer for the Annapolis Water Works (1866) and as chief engineer for one of his most famous projects, the Chesapeake and Ohio Canal (1869-1871). Although some historians minimize Hutton as just one of many engineers to work on the Chesapeake and Ohio Canal, he did make one major contribution to its construction: the Georgetown Canal Incline.

Perhaps the final effort of the Chesapeake and Ohio Canal company to compete with the emerging and fast expanding railroad, the Georgetown Incline was designed to allow canal boats to travel through the canal with low water levels and to alleviate canal congestion. Unfortunately, by the time the incline was completed use of the canal had decreased so significantly that it was no longer needed to help control traffic (7). Despite this, Hutton continued to work as a consulting engineer for the Chesapeake and Ohio Canal Company until 1881, when he was let go because of the dwindling fortunes of the company (7).

In the 1870s and 1880s Hutton was busy with several engineering projects. During 1871-1873, he was the chief engineer in the completion of the Western Maryland Railroad to Hagerstown and Williamsport (9). He also practiced as an architect with his brother, the prominent Baltimore architect Nathaniel Henry Hutton, during the years 1873-1880. He relocated to New York in 1880, serving as chief engineer for the Washington Bridge in 1888 and 1889 and the Hudson River Tunnel from 1889 to 1891. In 1886, he became the consulting engineer for the New Croton Aqueduct and served in the same position for the Colorado Midland Railway between the years of 1886-1889 (10).

As his personal and professional correspondence shows, Hutton continued to work on various engineering and architectural projects until his death on December 11, 1901. In addition to these projects, he also invented the innovative system of locks and moveable dams used in the Kanawha River Canal. He was awarded the Diplome d'Honneur for this feat at the Paris Exposition in 1878 (11). His correspondence also demonstrates how Hutton was respected within his professional community. These letters refer to the accuracy of his work, his willingness to help other colleagues and supply them with reference materials and information, and, in addition to all this, his politeness. It seems that these qualities defined not only his personality but also his ideology. In one of the cashbooks in the collection, dated 1899, a hand written note contains a religious parable of "The Straw." The phrase in this parable that speaks most to Hutton's work ethic, and to the spirit of inventors everywhere, is this: "Even so however lowly may be the act, however little opportunities we may have of assisting others, we may still do something. Let us beg to fulfil our duty in this regards by making ourselves useful to others by some little act of thoughtful charity..." (12). Hutton, in his dedication to civil engineering, seems to have lived up to this virtue, and in his work he changed the landscape of Washington, D.C. and New York.

The Fairy Godfather: Hutton's Personal History

His professional records reveal a man who was fiercely dedicated to his work. His obituary references his professional life more than his personal life (13). Despite his reputation in the professional engineering community, his personal records demonstrate that Hutton was also dedicated to his family and children. In 1855, he married Montgomery County native Mary Augusta Clopper (died 1915). Together they lived on her family's estate known as the Woodlands, and had five children: Frank C. Hutton, Mary Hutton, Elizabeth Hutton (later Caulfield), Rosa Hutton, and Annie Salome Hutton (14). It is at this estate that Hutton died and was buried. The personal letters to his wife found in the Woodlands Collection held at the Montgomery County Historical Society show a man in love and willing to take time from his work to write to his wife. His letters to his children show a similar interest and compassion. In the many letters found in this collection from his daughter Elizabeth (Bessie) one can see a father who is interested in not only his daughter's activities abroad, but also in her opinion. This interest also extends to his son Frank Hutton, as their correspondence shows Hutton offering his son advice on his own engineering projects.

Hutton also served as executor to many of his extended family's estates. Many letters show the conflicts that Hutton had to mediate and the dependence of his cousins on him for advice and money. Although his family was wealthy (his cousin was Benjamin H. Hutton whose daughters married into the court of Napoleon III), they were volatile, and his records seem to indicate that he served as a mediator for many of their disputes. In addition to this, as his nickname of Fairy Godfather suggests, Hutton was always willing to lend his family either financial or moral support when needed. Unfortunately, little other documentation concerning Hutton's personal life exists outside of this collection and the one held at the Montgomery County Historical Society.

References:

1. Waters, Willard O., "Introduction," *California 1847-1852* (San Marino: The Huntington Library, 1942).
2. Waters, Willard O., "Memoir," *Glances at California 1847-1853* (San Marino: The Huntington Library, 1942): ix.
3. Waters, Willard O., "Introduction," *California 1847-1852* (San Marino: The Huntington Library, 1942). and Waters, Willard O., "Memoir," *Glances at California 1847-1853* (San Marino: The Huntington Library, 1942): x-xi.
4. Waters, Willard O., "Introduction," *California 1847-1852* (San Marino: The Huntington Library, 1942).
5. Waters, Willard O., "Memoir," *Glances at California 1847-1853* (San Marino: The Huntington Library, 1942): xvii.
6. Waters, Willard O., "Memoir," *Glances at California 1847-1853* (San Marino: The Huntington Library, 1942): xvii-xviii.
7. Skramstad, Harold, "The Georgetown Canal Incline," *Technology and Culture*, Vol. 10, no. 4 (Oct. 1969): 555.
8. Business Correspondence, Chesapeake and Ohio Canal, 22 February 1881, William R. Hutton Papers, 1830-1965, Archives Center, National Museum of American History, Smithsonian Institution, box number 27, folder number 29.
9. "William Rich Hutton," *The Club: A Journal of Club Life for Men and Women*, (July 1894):37
10. Ibid.
11. Monziona, Joseph, "William R. Hutton," *A.P.W.A. Reporter* (Sept. 1977): 7.
12. Cashbook, 1899, William R. Hutton Papers, 1830-1965, Archives Center, National Museum of American History, Smithsonian Institution, box number 23, folder number 5.
13. The Woodlands Collection, Montgomery County Historical Society.

Scope and Content Note

These papers document William R. Hutton's professional career as a civil engineer and his personal affairs. Although the personal materials in the collection provide insight into a man and a family that have been largely forgotten by biographers, it is the professional materials that are perhaps the most interesting to researchers. They provide a compelling narrative of the push to the West that occurred in 19th century America and the internal improvements movement typified by the American System plan proposed by Henry Clay. Perhaps best remembered for the high tariffs that accompanied it, the American System plan was also concerned with the advancement of internal improvements, such as canals, that would unite the East and West in communication, travel, and trade. The Chesapeake and Ohio Canal can be seen as one of the products of this movement (1) and was in fact initially heralded as the first great work of national improvement (2).

The papers in this collection that are related to the construction and maintenance of the Chesapeake and Ohio Canal are an invaluable documentation of efforts during this turbulent time to unite the eastern and western United States. They provide details of the canal from its initial construction to its decline with the incline at Georgetown project. The canal also serves as an example, or perhaps a warning against, federal involvement in state improvement efforts as it was the first project to be directly funded and staffed by the federal government (3). The groundbreaking ceremony was attended by then President John

Quincy Adams whose toast, "to the canal: perseverance," (4) became an ironic omen, as construction of the canal took over twenty-two years to be completed. The Chesapeake and Ohio Canal materials can be used as a case study for the problems encountered during canal building (5). These problems are best typified in the collection by the papers relating to the Georgetown incline. This project was headed by Hutton and was plagued with construction problems, boating accidents, and obsolescence from the moment of its completion. Despite these issues, the Chesapeake and Ohio Canal remains a structure of historical significance in America. As the third and last effort to construct an all-water route to the West (6), the Chesapeake and Ohio Canal is an important artifact of 19th century attitudes and efforts towards commerce, trade, travel, and communication between the eastern and western United States. Other significant canals and water structures represented in the collection are the Kanawha Canal, the Washington Aqueduct, and a large collection of materials relating to the Kingston Water Supply (New York).

One of the most significant internal improvements made during this time was the railroad. The legal conflicts that arose between the canal companies and railroads is also represented in the materials relating to the Chesapeake and Ohio Canal. These materials specifically deal with the legal conflict's between the Chesapeake and Ohio Canal and the Baltimore and Ohio Railroad. The development and construction of the railroads is also represented in the materials documenting the Baltimore and Ohio Railroad, the Baltimore and Drum Point Railroad, the Northern Adirondack Railroad, the Western Maryland Railroad, the Mexican National Railroad, the Colorado Midlands Railroad, and the Columbia Railroad.

The collection also demonstrates the spirit of innovation and invention that was prevalent in the engineering field in the nineteenth century. Joseph Gies writes, "...one of the distinctive characteristics of the great nineteenth century engineering adventurers was their readiness to gamble on the translation of theory into practice" (7). In this quote, he is speaking of the civil engineer Dewitt Clinton Haskins and a project that truly encapsulates engineering invention in the nineteenth century, the Hudson River Tunnel. Responding to the increase in the population of the City of New York in the late nineteenth century from sixty thousand to three and a half million, the Hudson River Tunnel was originally devised as a way to alleviate traffic and to transport train passengers directly across the Hudson River (8). Beginning with records dating from 1881 to 1901, the Hutton papers can be used to document not only the advances in engineering during this time but also the costs of progress. Haskins' initial efforts to build the tunnel using submerged air pressurized caissons were marked by failure and in some cases fatalities. Workers on the tunnel often suffered from what came to be known as "caisson disease" or "the bends," caused by the immense forces of compression and decompression experienced while working in the tunnels (9). This problem was so prevalent that as construction progressed the rate of worker deaths caused by "the bends" rose to twenty-five percent (10). Materials in the collection document worker complaints and deaths resulting from this disease as well as providing a technical record of the construction of the tunnel. The highlight of the materials relating to the Hudson River Tunnel is an album that contains photographs of workers in the tunnel and a detailed daily report of the construction progress on the tunnel that was maintained by Hutton's assistant, Walton Aims. The first hand account in these reports provides insight not only into the construction of the tunnel, but also the problems encountered.

Another project featured in the Hutton collection that was devised in response to the population explosion in the City of New York in the nineteenth century is the Harlem River Bridge, or as it is now known, the Washington Bridge. Known as one of the longest steel arch bridges of its time, the Harlem River Bridge also represents that spirit of invention and innovation that was prevalent in the civil engineering field during the nineteenth century. The collection provides an invaluable resource for those wishing to track the construction of the bridge from early concept drawings and proposals to finalized plans. Also present are photographs of the construction and workers. Societal response to the bridge in the form of newspaper and magazine clippings help to create the narrative of the Washington Bridge, and these are supplemented by correspondence from the builders, suppliers, and planners.

This collection also includes diaries, 1866-1901; letterpress copybooks, 1858-1901; correspondence on the Chesapeake and Ohio Canal, Hudson River Tunnel, Washington Bridge over the Harlem River, and Maryland and Colorado railroads, 1861-1901, and on Hutton's financial and real estate affairs, 1835-1921; construction photographs of the Harlem River, Cairo, Poughkeepsie, Niagara bridges and the Hudson River Tunnel, Washington Aqueduct, and Capitol Dome (in the form of albumen, cyanotype, salted paper print); data and drawings; rolled land profile drawings; canal notes, 1828-1892; Hudson River Tunnel construction reports, 1889-1891; publications, drawings, and maps of railroad routes; pamphlets and reprints on hydraulic works and water supply; road, railway, bridge, and hydraulic construction specifications, 1870-1900; drawings (linen, oil cloth, and heavy drawing paper), and blueprints; account books, 1891-1899; and plans, drawings, field notebooks, and publications on American and European construction projects, especially in Maryland, New York, and France; personal correspondence detailing his role as executor for the estates of Benjamin H. Hutton, Joseph Hutton, Annie Theller, and the Countess H. De Moltke-Hvitfeldt and his relationships with his children, siblings, cousins, and colleagues, 1850-1942.

Materials are handwritten, typed, and printed.

Special note should be made that any materials dated after the year 1901 were added to the collection by another creator who is unidentified. It can be speculated that professional materials added after this date were contributed by his brother and colleague Nathaniel Hutton or his son Frank Hutton. Personal materials contributed after this date may have been added by his wife, daughters, or other members of his extended family.

Series 1, Letterpress Copybooks, 1858-1901, consists of twenty seven letterpress copybooks containing correspondence between Hutton and other engineers, architects, and building suppliers. The letterpress copybooks in this series have been arranged chronologically. The books involve a process by which ink is transferred through direct contact with the original using moisture and pressure in a copy press. The majority of the correspondence is business-related. Some letterpress copybooks are devoted to specific projects such as the Washington/Harlem River Bridge, Chesapeake and Ohio Canal, Baltimore and Drum Point Railroad, Annapolis and Elk Ridge Railroad, and the Baltimore and Ohio Railroad. The letterpress copybooks provide a record of correspondence written by Hutton, which makes it distinctive from the other correspondence in the collection. Most of the other correspondence has Hutton as recipient.

The letterpress copybooks also document Hutton's various residences throughout his life and provide a glimpse into the civil engineering profession at the time by demonstrating how engineers shared ideas and comments about projects. This can be supplemented with the printed materials in the collection as many of the authors also appear in the correspondence. Other topics covered in the letterpress copybooks include business reports (specifically the report of the president and directors of the Baltimore and Drum Point Railroad), records of people and companies involved in projects, pasted in engineering sketches, engineering specifications and notes, travel expenses and estimates, construction histories and progress, legal issues with family estates, tax information, Colorado Railroad, payment certificate schedules, St. Paul Railroad, personal correspondence, title guarantees, Hudson River Tunnel, financial matters, real estate matters, insurance information, sketches and drawings, supply lists, cost estimates, the Memorial Bridge, Coffin Valve Company, engineering expenses, engineering calculations, payroll notes for Kingston Water Supply, proposals, account information, Hutton Park, reservoirs, contract drafts, French Society of Civil Engineers, inspection results (specifically Piedmont Bridge), land descriptions, damage reports, Morse Bridge, Illinois Central Railroad, North Sea Canal, moveable dams, iron works, site histories, Potomac Lock and Dock Company, Kanawha River canal (lock quantities, specifications, payroll information), Pennsylvania Canal, and bills for services.

Series 2, Professional Correspondence, 1861-1901, consists of correspondence that relates to Hutton's architectural and engineering projects. This series is further subdivided into two subseries: Project Correspondence and General Correspondence. Subseries 1, Project Correspondence, 1876-1899, correspondence is divided by project and arranged alphabetically. Subseries 2, General Correspondence,

1861-1901, is arranged chronologically. Both series contain handwritten and typed letters. Some letters are on letterpress copybook pages and are most likely copies. Some materials are in French and Spanish. Special note should be made that this series does not contain all of the professional correspondence in the collection. Some correspondence has been separated according to project and placed in Series 8, Professional Projects, 1830-1965, in order to make it easier for researchers to access materials related to those subjects.

Subseries 1, professional correspondence topics include comparisons between construction projects (specifically comparisons of the Kanawha River Canal to other canals), supply lists, location recommendations, sketches, construction plans and modifications, bills for supplies and works, leaks in the gates, cost estimates, Brooklyn Water Supply, use of lake storage (Ramapo Water Supply), water supply to states and counties, damages to water supply pipes, estimates of water quantities, responses to construction reports, legal issues related to projects, Baltimore and Ohio Railroad, and payment for services.

Subseries 2, general correspondence topics include employment opportunities, committee meetings and elections, land surveys, sketches, engineering plans and ideas, work on projects, dismissal from projects, notes on supplies, Washington Aqueduct, construction progress, land purchases, Civil War, Jones Falls, cost of water pumps, steam drills, lots divisions and prices, repairs, report of the engineering bureau, tidewater connection at Annapolis, bridge construction, construction costs, statement of vessels that entered and cleared Baltimore, technical questions from colleagues, Baltimore and Ohio Railroad, supply costs, letters of introduction, requests for reference, changes to plans and designs, survey reports, St. Andrew's lot, Canal Coal Company, publication process, American Society of Civil Engineers and its members, responses to project inquiries, Graving Dock gross revenue, job offers, specifications, trade figures, contracts, water levels, appointment dates and times, moveable dams, proposals for membership, salaries, Piedmont Coal Lands, maps, land profiles, Washington Bridge, board payments, Nicaragua Canal, Grant Coal Company, statistics, engineering notes, Hartford Bridge, water pressures, coal deposits, Colorado Coal, pipe lines, reservoirs, boat costs for canals, floods, bridges, letters of resignation, engines, Ruxton Viaduct, Colorado and Midland Railroad, Morse Bridge, share values, railroad locations, membership invitations, call for submissions, structural tests, record of accounts for room and board, appointments, water rights (Putnam County), publications, blueprints, visitation programs, cotton compresses, street trenches, pressures in dams, level tests, Portland Transportation bureau, trade information, concrete steel, Chicago drainage canal, ship canals, Augusta Cotton and Compress Company, SooySmith case, Consolidated Gas Company, masonry, book binding, Columbia Railway Company, jetties, land grades, Chesapeake and Delaware canal, water wheels, pneumatic lock, tunnel arches, rifton power, Hutton's health, elevators, Brooklyn Bridge Terminals, girder weights, legal issues and their results, rating table for the Potomac, land profiles, transmission lines, transformers, water turbines, and water power on the Potomac River.

Correspondents for this series include the following: Captain Montgomery C. Meigs, Captain T.W. Symons, William Bryan, Ernest Flagg, John Hurd, Jake Wolfe, J.C. Saunders, J.H. Dolph, Charles J. Allen, G.H. Mendell, Virgil S. Bogue, B.A. Mounnerlyn, Edward Burr, H.G. Prout, R. William, H. Dodge, C.R. Suter, M. Mink, W.R. King, John Lyons, Alex Brown and Sons, John G. Butler, D. Condon, Bernard Carter, R.P. McCormick, D.R. Magruder, Andrew Banks, Isaac Solomon, C.J. Mayer, C.W. Kern, John Herring, James S. Mackie, D.R. Magunde, D. Rittaguide, R.S. Stevens, J.L. Raudolph (Baltimore and Ohio Railroad), J.M. Lane, W.D. Stuart, W.G.P. Palmer (Committee Church of the Ascension), C. Crozet, General W. Hughes, V.R. Maus, J.M. Hood (Western Maryland Railroad Company), Ernest Pontzen, M. Haus, William F. Craighill, Harry Hutton, John W. Pearce, Reverend James A. Harrald, William Watson, A.L. Rives, Thomas Monro, A.F. Croswan (Commander United States Navy), H.R. Garden, William McAlpine, James Forrest, Wm. Bloomsfield, Daniel Ammen, Linel Wells, A. and Otto Sibeth, Alfred Noble, Clemens Hershel, Sidney Warner, E.H. de Rheville, Theodore Cooper, William Findlay Shunk, Lewis S. Wolfe, Rufus Mead, Theodore F. Taylor, John Bogart, J. Whaler, B. Williamson, Colonel F.V. Greene, Robert H. Sayre (Lehigh Valley Railroad Company), Charles W. Pussey, Louis Q. Rissel, V.C. Bogue, H.C. Eckenberger, Melville E.G. Leston, Edwin Parson, Rudolph Hering, R.S. Hale, F.M. Turner, Thosl

Martindale, Justus C. Strawbridge, William M. Ayres, R.L. Austin, A.M. Miller, P. Livingston Dunn, T.J. Cleaver, C.S. Dutton, H.A. Carson, William Bainbridge Jaudon, H.A. Pisset, Thomas H. McCann, Russel Sturgis, H.G. Prout, Alexis H. French, John K. Cowen, F.W. Williams, J. Waldorf, B.H. Byrant, B.H. Jones, M.H. Rogers, J.W. Ogden, General W. Cashing, William Longhudge, A.J. Cameron, T.L. Patterson, J.J. Hagerman, H. Wigglesworth, Charles B. Rowland, E. Bantz, W.G. Lathrop, Clarence King, George Rowland, George A. Tibbals (Continental Iron Works), George N. Vanderbilt, Eugene C. Lewis, F.P. Burt, Colonel John C. Clarke, Lieutenant Thomas Turtle, W.S.M. Scott, E. Bates Dorsey, Bernard Carter, George M. Shriver (Baltimore and Ohio Railroad), Russel Sturgis, Macmillan Publishing, James Abernethy, B. Baker, J.G.W. Fynje, A. Mallet, Jean Hersuy, L.F. Vernon Horcourt, Robert Lilley, A.J. Johnson, F.M. Colby, Henry D. Loney, A.S. Cameron, James A. Harrald, William Watson, John B. Lervis, A.L. Rives, Edwin F. Bidell, Frank H. Stockett, E. McMahon, C.F. Elgin, Enrique Budge, G. Clayton Gardiner, Dwight Porter, William A. Chapman, T.E. Sickels, Theodore Cooper, C.J. Warner, Institution of Civil Engineers, Robert Gordon, United States Coast of Geodetic Survey Office, C.P. Pattun, J.N. Putnam, Sidney B. Warner, H.D. Fisher, Union Pacific Railway Company, Lewis S. Wolle, George E. Waring Junior, The American Exhibition, G.F. Swain, American Society of Civil Engineers, N.H. Whitten, U.S. Engineer Office, Government Works Committee, J.J. Hagerman, D. Jackson, Sterling Iron and Railway Company, E.P. Alexander, E. Williamson, Central Railway Company of New Jersey, William A. Underwood, F. Collingwood, James Dun (Atchison, Topeka and Santa Fe Railroad Company), Henry F. Kilburn, Louis A. Bissell, Virgil G. Boque, H.C. Eckenberger, Melville Egleston, Charles Parson, George Swain, Continental Iron Works, Rudolph Hering, J.B. Gordon, Mayor's Office (Baltimore), Harry Robinson, Pennsylvania Railway Company, W.H. Gahagan, L. Luiggi, B.H. Bryant, T.J. Cleaver (Chesapeake and Delaware Canal Company), H.A. Carson, H.A. Pisset (Department of the Interior, United States Geological Survey), John K. Cowen, Vernon H. Brown, J. Waldorf, B.H. Bryant, L.F. Root, P.W. White, Metropolitan Railroad Company, Charles F. Mayer (Consolidated Coal Company, Cumberland and Pennsylvania Railroad Company), J.M. Lane (Western Maryland Railroad), Dr. R.S. Stewart (Annapolis and Elk Ridge Railroad), Baltimore and Drum Point Railroad (John Lyons, John G. Butler, D. Candon, R.P. McCormick, Andrew Banks), Thomas F. Rowland, J.A. Bensel, Walton Aims, S.D. Coykendall, H.C. Rogers, John F. Ward, T.B. Jewell, H.A. Pressey, C.S. Armstrong, J. Nennett, V.G. Bague.

Series 3, Personal Correspondence, 1850-1942, contains correspondence with immediate and extended family, specifically the heirs to the Benjamin H. Hutton and Joseph Hutton estates and Adele Gorman. Correspondence is primarily arranged chronologically, but some files have been divided based on subject or author (the Deer Park and Adele Gorman files), or by form (the Telegrams, and Cablegrams file). Special note is made of the posthumous correspondence file, which includes correspondence both relating to Hutton's death and correspondence that was written by family members after the years of his death. The series contains both hand written and typed letters. Some correspondence is in French. The correspondence demonstrates his relationship with his children specifically Elizabeth (Bessie) Hutton, and illuminates his role in his family. This series also provides details about nineteenth century upper class society and activities. Special note should be made that this folder does not contain all of the personal correspondence contained in the collection. Some correspondence has been separated according to recipient, or subject in order to make researching these recipients or subjects easier.

Series 3 correspondence topics include: estate payments, distribution of assets, funds transfers, estate lines, conflicts with tenants, sketches, lot maintenance, real estate sales, deeds, real estate sales negotiations, congratulations wishes on new babies, family illnesses, family affairs and travels, traveling directions, personal investments, invitations for social occasions, family debts, professional interests, professional and personal appointments, family issues, requests for money, sketches, advice to children (specifically Frank Hutton), life insurance, books, letters of introduction, legal issues, funeral expenses, charity donations, advertisements, minutes from professional organizations, army enlistment, deaths of friends and family, recipes, estimates of personal expenses, renovations, stock certificates (Great Northern Railway Company, New York), food, social activities, the weather, marriages, real estate and construction plans, and loan agreements.

Correspondents include the following: Frank Hutton, Thomas B. Brookes, J.L. Marcauley, C.M. Matthews, Edward J. Hancy, John M. Wilson, H.A. Carson, William H. Wiley (of John Wiley and Sons Scientific Publishers, New York), Georgina Hutton, Pierre and Jane Casson, George McNaughlin, Henrietta Hutton, Aaron Pennington Whitehead, J.B. Wheeler, B. Williamson, Robert De Forest, Elizabeth (Bessie) Hutton, Grace Beukard, J.C. Saunders, Mary Hutton, William J. Pennington, C.S. Hurd, Henry C. Cooper, Henry J. Segers, S.F. Miller, Annie Theller, Alfred Noble, Maria Burton, Joseph Hobson, E. Lennon, F. Hulberg, Charles Gordon Hutton, Edward C. Ebert, A. William Lewin, E.R. Dunn, William P. Craighill, Theodore Cooper, P.I. Chapelle, Anita McAlpine, Clarence King, Victoria Raymond, and Adele Gorman.

Series 4, Personal Materials, 1835-1946, contains documentation about Hutton's personal finances, role as executor of the Benjamin H. Hutton, Joseph Hutton, Annie Theller, and Countess H. De Moltke-Hvitfeldt estates, Mary Augusta Hutton (wife), Mary Hutton (daughter), Frank Hutton, John Caulfield (son-in-law), and B.F. and C.H. Hutton. The series has been divided into four subseries: Financial Records, 1876-1901, Estate and Real Estate Records, 1835-1921, Other Huttons, 1876-1936, and Personal Material, 1878-1946. Subseries 2, Estate and Real Estate Records, 1835-1921, contains correspondence relating to specific family estates and family members. This correspondence was separated from Series 3, Personal Correspondence, 1850-1942, to make it easier for researchers to access all records relating to the family estates. This series includes hand written, typed, and printed materials. Some materials are in French. All material dated after 1901 has been added to the collection by other creators such as Hutton's wife and children.

Subseries 1, Financial Records, 1876-1901, includes account books, account records, correspondence related to bank accounts, bank statements, financial notes, bills and proofs of payment, rent receipts, tax bills (New York, Flatbush, Montgomery County), checks, money exchanges, receipts for tax payments, real estate receipts, stock and bond certificates, loan agreements, executor accounts, rebate calculation sheet, and tax and insurance payments.

Subseries 2, Estate and Real Estate Records, 1835-1921, includes property maps and information (rent, mortgage costs, deeds), correspondence, notes on estate distribution, estate assets, value of estate and estate payments, account records, loan agreements, receipts, proof of payments, checks, financial records, legal documents, insurance documents, tax bills, auction receipts, and wills relating to the estates of Benjamin H. Hutton, Joseph Hutton, Countess H. de Moltke-Hvitfeldt, Annie Theller, and William R. Hutton. Also included are correspondence, property maps and information, and deeds and mortgages on Hutton properties.

Subseries 2, the estate and real estate records correspondence topics include: Virginia state building codes, construction costs, construction notices, purchasing offers for property, real estate prices, receipts of payments, property lines, real estate purchases and sales, real estate sales negotiations, deeds insurance estimates and costs, loan costs, property estimates, renovation costs, mortgages, property damages and repairs, property tax payments, insurance rates and payments, rent payments, telephone installation, building permits, rental agreements, reports on property condition, contracts of sale, conflicts with tenants, changes of address, deeds, distribution of estate monies, details about the Countess' illness, estate arrangements, changes of address, problems arising out of estate distribution, payment of debts, will details, selling of mortgage shares, accounts, estate settlement, money cables and transfers, dealings with lawyers, rent on Hutton Park property, legal and accounting fees, power of attorney transfer, investments, property security, land appraisals, lists of assets, legacy taxes, mortgages transfers, property management, Flatbush property, property rent and values, and physicians bills.

Correspondents include the following: A.C. Weeks, Walter I. Green, John D. Probsh, A.G. Darwin, Thomas H. McCann, Allan Farguhar, Thomas Dawson, Potter and Crandall Real Estate and Insurance Brokers, George C. Tilyou, H.D. Olephant, F. Winston, Richard E. Calbraith, Frank P. Martin, Henry DeForest, Henry C. Cooper, Metropolitan Telephone and Telegraph Company, John Ecker, C.K. Avevill, Georgina Hutton, Edward J. Hancy, Robert Graham, W.M. Bennett, Willis E. Merriman, Nathan L. Miller, Harry Hutton, Marquise de Portes (Adele Gorman), Annie Theller, Samuel L. Theller, Mrs. R. Locke, Frank Z. Adams, John Palmer (Secretary of State, New York), J.T. Cammeyer, Frank P. Martin, Florence

Theller, Francis H. Seger, Henry C. Cooper, D.W.G. Cammeyer, Campbell W. Adams, Jane Casson, Elizabeth Hutton, Rene de Portes, H.G. Atkins, Grace Beukard, Aaron Pennington Muikhead, J.E. Delapalme, T.H. Powers, Egerton L. Winthrop Junior, George B. Glover, William Jay and Robert W. Candler, B. Williamson, J.E. Knaff, Cornelius C. Vermeule, S.V. Hayden, Charles G. Landon[?], H.A. Hurlbert, F.A. Black, John L. Calwalder, the Health Department of New York, A.G. Darwin, William Laue, Frederick Frelinghuysen, Charles S. Brown, Henrietta Hutton, Edward Gelon.

Subseries 3, Other Huttons, 1874-1936, includes professional drawings and proposals, checks, insurance information, correspondence, tax information, medical information, tax bills, relating to Mary Augusta Hutton (wife), Mary Hutton (daughter), Henry and Harry Hutton, Frank Hutton (son), John Caulfield (son-in-law), B.F. Hutton, and C.H. Hutton.

Subseries 4, Personal Materials, 1878-1946, contains handwritten property notes, school notes, sermons, travel documents, menus, Christmas cards, jewelry box, postal guide, typed religious materials and flyers.

Series 5, Diaries, 1866-1901, contains twenty nine diary books that document both Hutton's personal and professional life. These diaries provide not only a record of Hutton's life, but were also used by Hutton himself as a reference tool. When working on projects he would refer to notes and observations he made in his diary (as evidenced by notes made in his diaries). The first pages of the diaries often list his height, weight and clothing sizes as they varied from year to year. A researcher could probably use the cashbooks (see Series 7) and the diaries in conjunction as both detail the purchases made by Hutton. Many of the diaries also include a short record of accounts in the back. The diaries are arranged chronologically.

Topics found in the diaries include short form accounts of daily activities and appointments, records of the weather, Chesapeake and Ohio Canal project, construction progress on projects, steam pumps, sketches and calculations, extension of Washington railroads, cost of food, work supplies, travel costs, costs of goods and food, work deadlines, home renovations, visits to family, cash accounts, accounts of household duties, produce on Woodlands property, records of deaths, debts owed, account of clearing Woodlands property, church visits, Hancock and Tonoloway Aqueduct, canals, Drum Point Railroad, Montgomery C. Meigs, Washington Aqueduct, Annapolis Water Works, telegram costs, wages for Chesapeake and Ohio Canal project, William Craighill, Morris Canal, Annapolis Railroad and Canal, professional duties (inspections), Kanawha River Canal, travel schedules, professional expenses, cash received from Chesapeake and Ohio Canal project, Baltimore and Ohio Railroad, John's Dam, cathedral construction (St. Patricks?), Piedmont Bridge, Cumberland, account of farm property belonging to Major Campbell Bruns, Cunard Pier, Marquise de Portes, rent costs, Baltimore Canal, Kingston Water Supply, Croton Orange Estate, Pierre Casson, Hudson River Tunnel, Washington/Harlem River Bridge, entertainment costs, Greenwood cemetery, train schedule, notes on illness, real estate sales, Hutton Park, Benjamin H. Hutton estate and heirs, estimates, accounts of correspondence received and sent, Central Railroad, rent on Orange properties, addresses, contracts and building supplies for projects, personal finances, Joseph Hutton property on Vanderbilt Avenue, New York, amounts paid and received, medical appointments, Ramapo Water Company, drawing progress of maps and diagrams, Harbor Board (New York), property repairs, inspection and test reports, reservoirs, lists of birthdays, Boston Tunnel, family financial issues, tax payments, and prayers.

Series 6, Notebooks, 1860-1900, document the engineering and architectural projects worked on by Hutton. The series has been divided into three subseries: Subseries 1, Engineering and Survey Field Notes, 1860-1899; Subseries 2, Notebooks, 1871-1886; and Subseries 3, Notes, 1863-1900. Subseries 1, Engineering and Survey Field Notes, 1860-1899, contains sixteen field notebooks used by Hutton. Subseries 2, Notebooks, 1871-1886, contains seven notebooks. Subseries three, Notes, 1863-1900, contains four documents.

Some notebooks correspond to specific projects such as the Kanawha River Canal (lockgate and Phoenix Waterline), Chesapeake and Ohio Canal, Buffalo Reservoir, Potomac Lock and Dock Company, Northern

Adirondack Railroad account, Washington Aqueduct, Little Rock Bridge, Wilson-Adam Dock, Croten Brick Works, Hutton Park, Centennial Iron Works, Cumberland Canal, Williamsport Aqueduct, Catoctin Aqueduct, Alexandria Canal, Miller's Saw Mill, Seneca Dam, Union Tunnel, Cumberland Waterworks, Victoria Bridge, Welland Canal, North Sea Canal, Ramapo Water Company, Annapolis Water Company, Antietam Aqueduct, Interoceanic Canal, San Quentin Canal, Suez Canal, Amsterdam Canal, Harlem Bulkhead, Morris Canal, Blue Lake Canal, and Nicaragua Canal.

These notebooks should be used in conjunction with the other materials in the collection related to professional projects, as they often provide more detailed accounts of the construction and land surveys. Some of the notebooks contain entries from several different sources. The notebooks were probably shared among the engineers working on these projects. The notebooks also contain looseleaf ephemera such as hand written calculations, newspaper clippings, and blueprints. Languages found in this series are English and French.

Notebook topics include construction projects, supply needs, costs for labor, sketches (Woodland Mills, landscapes, dams, railway cars, Noland Tunnel), costs of crops, survey measurements, cost of livestock, aqueducts, inspections, canal bridges, seed prices, dams, measurements, coffer dam, canal maintenance, worker salaries, calculations, towpath sketches and measurements, shipping rates, worker accidents, water and coal used, geometrical sketches (Washington Aqueduct), locks, damage reports, interactions with other engineers (William Reading), coal shipments on the canal, travel expenses, land survey notes, drafts for correspondence, William Craighill, Victoria docks, lists of personal supplies used, construction time estimates, surveying expenses, telegram costs, sand pump, canal from Sherling to Tuxedo Bay, analysis of several artificial lakes and reservoirs, distances of reservoirs to main pipes, calculations for the Austin Wheel, engine construction, bridges, gauging water depth, results and observations of tests and performance, problems with construction, to-do lists, cost of land surrounding towpaths, Fawcett's Lock, Tarman's Lock, comparison of costs in transporting coal by water and by rail, inspection notes, iron work, drainages, leaks, cost of supplies, watergates, harbor ferries, railroad station distances, flood protection, Panama Canal via the Nicaraguan route, cost of jetties, water levels, pressure of steam, boilers, steam and water cycle, water depth, cement, Great Falls, Virginia, waterflow, soundings, time of floats, flow of currents, rain fall measurements, tunnel measurements, cost of trenching San Francisco water supply, record of livestock, cost of food, rates of sawing woods and mills, preliminary railroad line measurements, profile of final line, and railroad line profiles.

Series 7, Cash Books, 1856-1899, contains seven cashbooks which list prices for personal items purchased by Hutton. Topics include groceries, church dues, clothes, hygiene products, cigars, some short journal entries about his work (Williamstown), concerts, dinners, family addresses, cakes, meals, cars, stamps, office supplies (pencils and papers), valentines, glasses, gloves, fabric, medicine, needles, diapers, tobacco, shoes (adult and childrens), travel expenses, telegrams, candles, newspapers, liquor, coal oil, jewelry, allowances given to family members, bank deposits, monies paid and received, taxes, subscriptions, tailoring costs, deposits and payments into estate trusts, and notes about payments to Benjamin H. Hutton heirs. The cashbooks also contain some personal loose leaf ephemera such as prayers, sketches, and engineering notes collected by Hutton.

Series 8, Professional Projects, 1830-1965, contains documents about engineering and architectural projects throughout Hutton's career, including information about the professional organizations and the legal issues in which he was involved. This series has been divided into eight subseries based on project, document form, and document subject. Some materials are in French and Italian.

Series 8, Professional Projects, also includes correspondence related to specific projects, primarily the Chesapeake and Ohio Canal, the Hudson River Tunnel, the Washington/Harlem River Bridge, and the Georgetown Incline.

Topics include construction and repair to the Chesapeake and Ohio Canal, engineering and use of Chesapeake and Ohio Canal, worker contracts, supply and labor purchases, design plans and proposals, construction and repair costs, supply notes and costs of supplies, water pressure and power, shipping

materials and routes (specifically the shipping of coal), inspections and their findings, condition of canal dam and locks, water supply, drainage, sketches, board proceedings, business meetings, deeds, cost comparisons to other shipping methods, hiring processes, wages, cost estimates, Hutton's consulting fees, measurements and calculations, funding issues, worker conflicts, negotiations with municipal governments, payment schedules, bills for services, air pressure in Hudson River Tunnel, permission for construction, specifications, mortality rate among workers on the Hudson River Tunnel, construction reports, outlet incline, proposals for construction, letters of introduction, railroad versus water for trade, controversy with Tiersey, construction contracts, construction schedules, construction issues, construction progress, construction damage, basis for estimates, supply requests, internal politics, changes to construction plans, contract and price adjustments, issues with suppliers, construction delays, work permits, bills, worker issues, engineering notes, construction excavations, expenses, construction instructions, Union Bridge Company, lighting installations, construction processes, hiring practices, electrical conductors, water proofing, hydraulics, cement, concrete, payment of contributors, processes of approval for construction, meeting dates of the Harlem River Bridge Commission, and contract restrictions.

Correspondents include the following: W.W.M. Kaig, Henry Dodge, E. Mulvany, John Shay, James Clarke, H.D. Whitcomb, Horace Benton, J. Rellan, J.R. Maus, W.E. Merrill, A.P. Gorman, J.H. Staats, Vernon H. Brown, Charles H. Fisher (New York Central and Hudson River Railway Company), B. Baker, John Fowler, Benjamin and John Dos Passos, Charles B. Colby, Charles B. Brush, S. Pearson, Stanford White, Horace E. Golding, R.H. Smith, Daniel Lord, A. Fteley, Herbert Hinds, J.R. Bartlett, D.M. Hirsch, M.H. Bartholomew, Thomas O. Driscoll, W.E. Porter, Thomas F. Rowland, George Edward Harding, R.H. Dames, William Watson, James B. Eads, J.D. Bright, H. Aston, Charles Suley, A.M. Maynard, W.R. Henton, G. Geddes, H.P. Gilbut, Malcolm W. Niver (Secretary of the Harlem River Bridge Commission), J.D. Patterson, George Devin (Assistant Engineer Washington/ Harlem River Bridge), J.B. Wheeler, John Bogart, Charles Burns, J. McClellon, Rob Bassee, B. Williamson, Theodore Cooper, Lewis Cass Ledyard, R.M. Hunt, John Cooper, Henry Wilson, A.A. Caille, Myles Tierney, W. Pentzen, L.B. Cantfield, George Q. Grumstaid Junior, M.J. Funton, George Pierce, W.O. Fayerweather, Noah S. Belthen, Herbert Steward, W.M. Habirsham. **Subseries 1, Chesapeake and Ohio Canal, 1828-1965**, consists of plans, blueprints, land profiles, drawings, boat rates, contract forms, order forms, descriptions of the canal, design information, engineering data, sketches, cost estimates, land titles, microfilm, business papers, supply bills, patent bills, news clippings, reports, specifications, stockholder's reports, receipts, water leases, printed materials, and correspondence.

The Chesapeake and Ohio Canal project was started in 1828 and completed twenty two years later in 1850. The canal's main objective was to connect Georgetown to the coal banks above Cumberland, Maryland, providing a short and cheap trade route between the eastern and western United States. It was also hoped that the canal would provide greater communication and travel between these two regions. Plagued by natural disasters, and construction setbacks, the canal was never completed in time to be useful and became obsolete shortly after its completion. Canal trade was eventually put out of business by the increase of railroads. Although it was an important development in engineering at its inception, the Chesapeake and Ohio Canal is no longer in use and has become what locals affectionately refer to as "the old ditch." The canal was designated a National Historical Park in 1971 and consists of 184.5 miles of hiking and biking trails.

Subseries 2, Hudson River Tunnel, 1887-1901, consists of agreements for construction, certificates, contracts, and cost estimates, construction reports, engineering notebooks, engineering notes, sketches, land profiles, maps, progress profiles, plans, proposals, printed material, statements of expenses, and correspondence.

The Hudson River Tunnel project was started in 1874, and the final tubes were opened in 1910 after several construction setbacks. The tunnel connects Weehawken, New Jersey and Pennsylvania Station in Manhattan, New York City. Today the Hudson River Tunnel, known as the North River Tunnels is used by Amtrak's Northeast Corridor and New Jersey Transit rail lines.

Subseries 3, Harlem River Bridge, 1878-1982, consists of blueprints, printed materials, photographs, engineer's estimates, schedules, costs, reports, proposals, contracts, specifications, and correspondence.

The Harlem River Bridge project was started in 1885 and was completed in 1889. It spans the Harlem River in New York City, New York and connects the Washington Heights section of Manhattan with the Bronx. It was later named and is still known as the Washington Bridge and has been adapted over time to carry highway traffic. These adaptations have allowed the bridge to remain in use today.

Subseries 4, Other Projects, 1858-1832, consists of drawings, maps, blueprints, plans, proposals, cost estimates, bills, correspondence, sketches, land profiles, dimensions, engineering notes, account records, photostats, supply lists, calculations, legal documents, surveys, inspection reports, financial data, and measurements on architectural and engineering projects. Highlights of this subseries include: Western Maryland Railroad, Washington Aqueduct, Panama Canal, Ramapo Water Company, Piedmont Bridge, Northern Adirondack Railroad, Columbia Railroad, Morris Canal, Pittsfield and Williamstown Railroad, Suez Canal, St. Gothard Canal, Tansa Dam, Colorado Midland Railroad Company, Memorial Bridge, Mersey Tunnel, Little Rock Bridge, Kingston Water Supply, Kanawha River Canal, Florida Ship Canal, East Jersey Water Company, Consolidated Coal Company, Dismal Swamp Canal, Boston and Baltimore Tunnels, St. Patrick's Cathedral, Baltimore and Ohio Railroad, Annapolis Water Company, Baltimore and Drum Point Railroad Company, and the Baltimore Beltway.

Subseries 5, Unidentified Project Files, 1872-1900, consists of bills of sale, engineering forms and regulations, cement test results and methods, census bulletin, contracts, cost estimates, correspondence, notes on publications, engineering data and notes, drawings, surveys, sketches, payrolls, photographs, and reports.

Subseries 6, Specifications, 1870-1900, consists of documents related to some of Hutton's projects, including specifications for bridges, reservoirs, canals, viaducts, docks, buildings, water works, and tunnels. Some specifications are more general, and some are blank proposal/specification forms. There are also proposals for estimates and a "call" or advertisement to contractors to bid on certain projects. Many of the specifications deal with projects in New York State, but projects in Pennsylvania, the City of Baltimore, and Europe are represented. The materials are arranged alphabetically by project name. There is one folder of documentation for the Potomac River Bridge (Arlington Memorial Bridge) in Washington, D.C. The Arlington Memorial Bridge was part of the 1901 McMillan Commission's plan for restoring Pierre (Peter) Charles L'Enfant's original plan for the capital. Two decades passed before construction was initiated by the architectural firm McKim, Mead, and White. The documentation for the Memorial Bridge consists of calculations and monetary figures for materials such as granite.

Subseries 7, Legal Documents, 1886, contains documents related to a patent infringement suit for moveable dams involving Alfred Pasqueau vs. the United States. This file contains both a printed version of the case and a handwritten statement from Hutton.

Subseries 8, Professional Organizations, 1870-1902, contains documents related to professional organizations where Hutton held membership. Specific organizations represented are American Institute of Architects, American Society of Civil Engineers, Institution of Civil Engineers, Boston Society of Civil Engineers, Societe des Ingenieurs Civils de France, Librarie Polytechnique, American Agency of "Engineering" in London, Imperial Institute, League of Associated Engineers, Railroad Corporation, American Institute of Mining Engineers, and the Century Association. Material in the subseries includes correspondence, candidates for membership, membership payments, membership lists, meeting minutes, schedule of terms, professional practices, charges, articles of association, invitations for membership, and election notes. Some materials are in French.

Series 9, Printed Materials, 1850-1913, contains a variety of printed materials relating to engineering and architectural projects written by Hutton and fellow engineers. This series can be used to examine not only professional developments of the period and responses to those developments, but also to track how ideas were transferred between engineers across countries and continents. This series should be used

in conjunction with the professional correspondence found in this collection, as many of the authors also appear there. Some materials are in French, German, Spanish, and Italian.

Subseries 1, Printed Materials by Hutton, 1852-1900, includes printed papers on the Missouri flood wave, the Ravine du Sud, the Potomac waterfront, the Colorado midlands, and the application of water supply machinery.

Subseries 2, Printed Materials by Others, 1826-1913, includes printed materials on the Chesapeake and Ohio Canals, Tehuantepec Ship Railway, Interoceanic canals and railways, jetties, Nicaragua Canal, uses of cements, mortars, concretes, steam power, harbors, Niagara Falls, Kanawha River canal, Mississippi River, Hudson River Bridge, sewage disposal, Washington Aqueduct, specifications, construction progress reports, hydraulic experiments, water supply, drainage, road surfacing, sea walls, water-cooling apparatus, pollution reports, bridges, pipes, channels, reservoirs, irrigation, water power, and sewers.

Subseries 2 contains an issue of *The North American Review* in which Hutton has specifically highlighted an article entitled, "The Inter-Oceanic Canal." Please see the container list for names of authors.

Subseries 3, Printed Materials with No Author, 1852-1903, includes printed materials on harbor reports, Annapolis Water Company, Ramapo Water Company, water departments and boards, maps, engineer's reports, sea walls, preservation of structures, annual reports, Coal and Iron Railway Company, sewers, Baltimore and Drum Point Railroad, contract specifications, proposals, social club life, Croton Water Supply, law suits, water supplies, moveable dams, reservoirs, East River Bridge, Eastern Canal, water filtration, Kingston New Water Supply, water pipes, locks, docks, contracts, construction reports, Croton Water Supply, and surveys. Also included are issues of journals such as *Le Correspondant*, *Circular of the Office of Chief Engineers*, *The Club*, *VIII Congres International de Navigation*, *Journal of the Association of Engineering Studies*, and *Journal of the Franklin Institute*.

Subseries 4, Newspaper, Journals and Magazine Clippings, 1873-1900, contains clippings from a variety of newspapers such as *Scientific American*, and *Railroad Gazette*. Subjects included are the Union Tunnel opening in Baltimore, Drum Point Railroad, railroad company conflicts, Washington/Harlem River Bridge, Metropolitan Railroad, Western Maryland Railroad, crop prospects, lumber trade, North Avenue Bridge, Nicaraguan Canal, harbors, river improvements, reactions to engineering projects, Belt tunnel, city transit, Washington, D.C. flood in 1880, tunnel shields, Springfield Bridge, railroad patents, Panama Canal, jetties, Hudson Tunnel, steel boilers, composition and use of cement, and the Brooklyn Bridge.

Subseries 5, Oversized Printed Materials, 1889-1892, contains large printed materials related to the Washington Aqueduct, General Post Office Building, subway arches, cornices, Warwick's Castle, Neuschwanstein Castle, Renaissance paintings, botanical drawings, school buildings, church architecture, the Hospital for the Insane of the Army and Navy and the District of Columbia, the Panama Canal, Morningside Park, and the Mississippi Jetties. Also includes engravings of Hutton, T.N. Talfound, and F. Jeffrey and photographs of Montgomery C. Meigs, and Hutton. Some materials are in German and French.

References:

1. Ward, George Washington, "The Early Development of the Chesapeake and Ohio Canal Project," *Johns Hopkins University Studies in Historical and Political Science* Series XVII, no. 9-11 (1899): 8.
2. *Ibid.*, 88.
3. *Ibid.*, 55.
4. *Ibid.*, 90.

5. Sanderlin, Walter S., "The Great National Project: A History of the Chesapeake and Ohio Canal," *Johns Hopkins University Studies in Historical and Political Science* Series LXIV, no. 1 (1946): 21.
6. *Ibid.*, 282.
7. Gies, Joseph, *Adventure Underground* (Garden City, N.Y.: Doubleday and Company Inc., 1962): 134.
8. *Ibid.*, 131-132.
9. *Ibid.*, 135-136.
10. *Ibid.*, 145.

Arrangement

The collection is arranged into 9 series.

Series 1, Letterpress Copybooks, 1858-1901

Series 2, Professional Correspondence, 1861-1901

Subseries 1, Project Correspondence, 1876-1899

Subseries 2, General Correspondence, 1861-1901

Series 3, Personal Correspondence, 1850-1942

Series 4, Personal Materials, 1835-1946

Subseries 1, Financial Records, 1876-1901

Subseries 2, Estate and Real Estate Records, 1835-1921

Subseries 3, Other Huttons, 1874-1936

Subseries 4, Personal Materials, 1878-1946

Series 5, Diaries, 1866-1901

Series 6, Notebooks, 1860-1900

Subseries 1, Engineering and Survey Field Notes, 1860-1899

Subseries 2, Notebooks, 1871-1886

Subseries 3, Notes, 1863-1900

Series 7, Cashbooks, 1856-1899

Series 8, Professional Projects, 1830-1965

Subseries 1, Chesapeake and Ohio Canal, 1828-1965

Subseries 2, Hudson River Tunnel, 1887-1901

Subseries 3, Harlem River Bridge, 1878-1892

Subseries 4, Other Projects, 1858-1932

Subseries 5, Identified Project Files, 1872-1900

Subseries 6, Specifications, 1870-1900

Subseries 7, Legal Documents, 1886

Subseries 8, Professional Organizations, 1870-1902

Series 9, Printed Materials, 1826-1913

Subseries 1, Printed Materials by Hutton, 1852-1900

Subseries 2, Printed Materials by Others, 1826-1913

Subseries 3, Newspaper, Journals, and Magazine Clippings, 1855-1901

Subseries 4, Oversized Printed Material, 1889-1892

Names and Subject Terms

This collection is indexed in the online catalog of the Smithsonian Institution under the following terms:

Subjects:

- Annapolis Waterworks
- Aqueducts
- Arch bridges
- Architects--19th century
- Architecture--United States
- Architecture--Washington (D.C.)
- Books
- Bridge construction industry--United States
- Bridges--Design and construction
- Bridges--New York (N.Y.)
- Bridges--United States
- Canals
- Canals--Design and construction
- Canals--Maryland
- Canals--Panama
- Canals--Washington (D.C.)
- Civil engineering
- Civil engineers
- Coal--Transportation
- Concrete
- Concrete construction
- Construction equipment
- Construction workers
- Construction--Washington (D.C.)
- Dams

Docks
Domestic and family life
Engineering notebooks
Harlem River Bridge Commission
Hydraulic engineering
Iron and steel bridges
Locks and dams
Patents
Railroad bridges
Railroad companies
Railroad construction
Railroad engineering
Railroads--19th century
Railroads--Maryland
Reservoirs
Sewage disposal
Shipping
Steam engineering
Tunnels
Tunnels--New York (N.Y.)
Underground construction
Underwater tunnels
Washington (D.C.)--19th Century
Water-supply
Waterworks
Western Maryland Railroad

Types of Materials:

Account books--19th century
Administrative records
Albumen prints
Albums
Annual reports
Architectural drawings
Blueprints
Booklets
Books--19th century
Business letters
Business records--19th century
Cashbooks
Christmas cards
Contracts
Correspondence
Correspondence--19th-20th century
Cyanotypes
Deeds
Diaries
Diaries--19th century
Drawings
Drawings--19th century
Family papers--18th century
Financial records--19th century
Harlem River Bridge

Land titles
Legal documents
Letter books
Letterpress copybooks
Letters
Linen tracings
Maps--19th century
Menus
Microfilms
Notebooks
Notes
Photoengravings
Photograph albums
Photographic prints
Photographs
Photographs--19th century
Photostats
Plans (drawings)
Printed material
Receipts
Reports
Salted paper prints
Sketches
Specifications
Stock certificates
Tax records
Technical drawings
Technical literature
Topographic maps

Geographic Names:

Baltimore (Md.)
Chesapeake and Ohio Canal
France
Georgetown (Washington, D.C.)
Hudson River
Hudson River Tunnel
Kanawha River Canal
Maryland
New Croton Aqueduct
New Jersey
New York
New York (N.Y.)
Panama Canal (Panama)
Potomac River--19th Century
Washington Aqueduct
Washington Bridge
Washington Memorial Bridge

Gloves must be worn when handling unprotected photographs and negatives.

Bibliography

- Gies, Joseph. *Adventure Underground*. Garden City, N.Y.: Doubleday and Company Inc., 1962.
- Monziona, Joseph. "William R. Hutton." *A.P.W.A. Reporter* (Sept. 1977): 6-7.
- Sanderlin, Walter S. "The Great National Project: A History of the Chesapeake and Ohio Canal." *Johns Hopkins University Studies in Historical and Political Science* Series LXIV, no. 1 (1946).
- Skamstad, Harold. "The Georgetown Canal Incline." *Technology and Culture* Vol. 10, no. 4 (Oct. 1969): 549-560.
- Ward, George Washington. "The Early Development of the Chesapeake and Ohio Canal Project." *Johns Hopkins University Studies in Historical and Political Science* Series XVII, no. 9-11 (1899).
- Waters, Willard O. "Introduction." *California 1847-1852*. San Marino: Huntington Library, 1942.
- Waters, Willard O. "Memoirs." *Glances at California 1847-1853*. San Marino: Huntington Library, 1942: ix-xx.
- "William Rich Hutton." *The Club: A Journal of Club Life for Men and Women* (July 1894): 37.
- William R. Hutton Papers. 1830-1965. Archives Center. National Museum of American History. Smithsonian Institution.
- The Woodlands Collection. The Montgomery County Historical Society.

Container Listing

Series 1: Letterpress copybooks, 1858-1901

Box 16, Folder 1	1858 November-1871 December
Box 16, Folder 2	1872 May-1873 July
Box 16, Folder 3	1873 January-1874 July
Box 23, Folder 20	Baltimore and Drum Railroad and Annapolis and Elk Ridge Railroad, 1875
Box 23, Folder 21	1875-1876
Box 17, Folder 1	[1875-1880?]
Box 17, Folder 2	Chesapeake and Ohio Canal Company, 1876-1877
Box 17, Folder 3	Chesapeake and Ohio Canal Dam; Baltimore and Ohio Railroad details; Roebing's and Sons; Poole and Hunt, 1877-1879
Box 18, Folder 1	1879-1883
Box 23, Folder 22	1880-1881
Box 18, Folder 2	1883 December-1886 September
Box 23, Folder 23	Harlem River Bridge,, 1887-1888
Box 18, Folder 3	1887-1889
Box 23, Folder 24	1888-1889
Box 19, Folder 2	1889-1890
Box 19, Folder 1	1889 September-1890 November
Box 19, Folder 3	1890 October-1901 September
Box 19, Folder 4	1890 December-1893 January
Box 20, Folder 1	1891-1892
Box 20, Folder 2	1892-1893
Box 20, Folder 3	1893-1894
Box 22, Folder 1	1893-1895
Box 22, Folder 2	1894-1897
Box 22, Folder 3	1895 March-1896 November
Box 22, Folder 4	1896 November- 1898 March

Box 21, Folder 1 1897-1901

Box 21, Folder 2 1901 April-1901 November

Series 2: Professional Correspondence, 1861-1901

Subseries 2.1: Project Correspondence, 1876-1899

Box 32, Folder 1	Baltimore Beltway correspondence, 1894-1897
Box 32, Folder 2	Collected correspondence with Floridian Railroad Companies (International Railroad and Transportation Company, Florida), 1882-1883
Box 32, Folder 3	Collected correspondence with Maryland Railroad Companies (Metropolitan Railroad Company, Consolidation Coal Company of Maryland, Western Maryland Railroad, Baltimore and Ohio Railroad, Annapolis and Elk Ridge Railroad, Cumberland and Pennsylvania Railroad, Baltimore and Drumpoint Railroad), 1871-1885
Box 32, Folder 4	Consolidated Gas Tank correspondence, 1894-1898
Box 32, Folder 5	Cunard Pier correspondence, 1898-1899
Box 32, Folder 6	Kanawha River correspondence, 1876-1882
Box 32, Folder 7	Kingston Water Supply correspondence, 1896-1898
Box 32, Folder 8	<i>Potomac Power Company vs. Vanderwerken Heirs.</i> , 1893-1900, predominantly 1899
Box 32, Folder 9	Ramapo Water Supply correspondence,, 1882-1891

Subseries 2.2: General Correspondence (Chronological), 1861-1901

Box 32, Folder 10	1861-1869 (English and Spanish)
Box 32, Folder 11	1870s (English and French)
Box 32, Folder 12	1880s (English and French)
Box 32, Folder 13	1890s (English, French, and Spanish)
Box 32, Folder 14	1890s (English, French, and Spanish)
Box 32, Folder 15	1900-1901 (English and French)
Box 32, Folder 16	Undated (English and French)

Series 3: Personal Correspondence, 1850-1942

Box 32, Folder 23	Adele Gorman (English and French), 1887-1892
Box 32, Folder 24	Deer Park,, 1888-1889
Box 32, Folder 17	1850-1880
Box 32, Folder 18	1880s
Box 32, Folder 19	1890s
Box 32, Folder 20	1900-1901
Box 32, Folder 21	Posthumous correspondence, 1902-1942
Box 32, Folder 22	undated
Box 32, Folder 25	Telegrams and cablegrams, 1874-1901

Series 4: Personal Materials, 1835-1946

Subseries 4.1: Financial Records, 1876-1901

Box 6, Folder 1	Bank of America special accounts book, 1891-1900
Box 30, Folder 1	Account Books: Manhattan Trust Company, 1893-1894
Box 30, Folder 2	Account Records (with Marquise de Portes, Hudson River Tunnel, Countesse de Moltke, personal bank accounts (cash and deposit), executor accounts, tax and insurance payments), 1884-1900
Box 30, Folder 3	Banking (correspondence, financial notes, loan agreements and interest, real estate receipts, stock and bond certificates), 1883-1901
Box 30, Folder 4	Banking (statements, checks, account records, money exchanges), 1885-1901
Box 30, Folder 13	Bills and proofs of payment: professional life, 1876-1901
Box 31, Folder 11	Receipts, checks and proofs of payment: personal, 1876-1901
Box 31, Folder 12	Receipts for room and board at Angele Morello Hotel, 1889-1899
Box 31, Folder 16	Tax bills: New York, Flatbush, Montgomery County, receipts for tax payments, utility bills (Department of Public Works, New York), rebate calculation sheet, 1880-1900

Subseries 4.2: Estate and Real Estate Records, 1835-1921

Box 6, Folder 2	Benjamin Hutton Estate, map of Hutton Park, Orange, New Jersey, (2 copies),, undated
Box 30, Folder 5	Benjamin Hutton Estate and heirs correspondence, (English and French), 1882-1900
Box 30, Folder 6	Benjamin Hutton Estate and heirs estate notes (notes on distribution of estate, notes on value of estate and assets, estate payments, lists of assets, travel notes), 1889-1901
Box 30, Folder 7	Benjamin Hutton Estate and heirs financial and account records (purchases, expenses, loans, property costs, mortgages, rent, income, receipts, balances, estate payments, capital, treasurer's reports, mortgage accounts), 1884-1900
Box 30, Folder 8	Benjamin Hutton Estate and heirs finances (receipts of payment, loan agreements, checks, money exchanges, cable transfers, bank statements, stock reports, account book (Marquise de Portes), statement of financial conditions, security and bond notices), 1881-1900

- Box 30, Folder 9 Benjamin Hutton Estate and heirs legal documents (settlement of accounts, distribution of estate, master's report, power of attorney, reports on estate assets, deeds, leases, settling of debts), 1860-1900
- Box 30, Folder 10 Benjamin Hutton Estate and heirs real estate (insurance receipts and bills, property notes, Greenwood Cemetery building notes, auction receipts, mortgage details, bills for property appraisal, property maps, mortgage assignments, notice of real estate sale, notes on real estate value, Helath Department of the City of New York notice, property drawings, declarations of sale, list of property assets), 1844-1900
- Box 30, Folder 11 Benjamin Hutton Estate and heirs receipts (for goods, legal and professional services, magazine subscriptions, travel cost, postage costs), 1881-1901
- Box 30, Folder 12 Benjamin Hutton Estate and heirs tax bills (Hoboken and West Orange New Jersey, New York City), 1887-1899
- Box 31, Folder 2 Countess H. De Moltke-Hvitfeldt Estate (accounts, power of attorney, legacy documents, estate payments, auction receipts, debt payments, asset receipts, money exchanges, correspondence), 1878-1901
- Box 31, Folder 5 Joseph Hutton Estate (financial documents, legal documents, wills, checks, insurance policies, receipts, rent and property information), 1881-1894
- Box 31, Folder 6 Joseph Hutton Estate correspondence, 1885-1900
- Box 31, Folder 10 Real estate documents (correspondence, receipts, property notes, insurance information, auction forms, mortgages, rent costs, leases and deeds, building codes, maps, bonds), 1835-1921
- Box 31, Folder 17 Theller Estate (receipts, correspondence, property information, insurance policies, account records), 1890-1895
- Box 31, Folder 19 William Rich Hutton Estate (certificate of executors, receipts, declaration of trust, estate payments, correspondence), 1901-1902

Subseries 4.3: Other Huttons, 1874-1936

- Box 6, Folder 6 Drawing by Frank Hutton ("Annular Torus Car by Plane"), undated
- Box 30, Folder 14 Checks, Henry and Harry Hutton, 1890
- Box 31, Folder 3 Frank Hutton (professional proposals, drawings, receipts, business cards, medical information), 1889-1928
- Box 31, Folder 4 John Caulfield (check, receipts for car and gas), 1932-1936
- Box 31, Folder 7 Mary Hutton (wife) (receipts, insurance information, tax information, correspondence), 1874-1900
- Box 31, Folder 8 Mary Hutton (daughter) (checks, correspondence), 1930-1933

Box 31, Folder 15 Tax bills, B.F. and C.H. Hutton (Hoboken, New Jersey and Brooklyn, New York), 1887-1898

Subseries 4.4: Personal Materials, 1878-1946

Box 30, Folder 15 Handwritten notes [property notes?], 1898, undated

Box 31, Folder 1 School notes (possibly written by W.R. Hutton's children), undated

Box 31, Folder 9 Printed ephemera (French and English), 1878-1946

Box 31, Folder 9 Lid from jewelry box, Joseph K. Davison's Sons Manufacturing Jewelers (Philadelphia), undated

Box 31, Folder 9 *Merchants' Pocket Postal Guide for Foreign Mails* , 1878

Box 31, Folder 9 Menu from Cie Gle Transatlantique Paquebot le Bretagne, 1893

Box 31, Folder 9 Christmas cards, 1946

Box 31, Folder 13 Religious ephemera, undated

Box 31, Folder 13 Typed lines found on a Confederate bank note (poem), undated

Box 31, Folder 13 Flyer for religious reading entitled "Is This the Last Generation?" (Gaithersburg, Maryland), undated

Box 31, Folder 14 Sermons, undated

Box 31, Folder 18 Travel documents (receipts, accounts, request for passage), 1878-1891

Series 5: Diaries, 1866-1901

Box 12, Folder 1	Diary,, 1866
Box 12, Folder 2	Diary,, 1867
Box 12, Folder 3	Diary,, 1868
Box 12, Folder 4	Diary,, 1869
Box 12, Folder 5	Diary,, 1873
Box 12, Folder 6	Diary,, 1874
Box 12, Folder 7	Diary,, 1875
Box 12, Folder 8	Diary,, 1878
Box 12, Folder 9	Diary,, 1879
Box 12, Folder 10	Diary,, 1880
Box 12, Folder 11	Diary,, [1880?]
Box 12, Drawer 12	Diary,, 1881
Box 12, Folder 13	Diary,, 1882
Box 12, Folder 14	Diary,, 1884
Box 13, Folder 1	Diary,, 1885
Box 13, Folder 2	Diary,, 1886
Box 13, Folder 3	Diary,, 1887
Box 13, Folder 4	Diary,, 1888
Box 13, Folder 5	Diary,, 1889
Box 13, Folder 6	Diary,, 1892
Box 13, Folder 7	Diary,, 1893
Box 13, Folder 8	Diary,, 1894
Box 13, Folder 9	Diary,, 1895
Box 13, Folder 10	Diary,, 1896
Box 13, Folder 11	Diary,, 1897
Box 13, Folder 12	Diary,, 1898
Box 14, Folder 1	Diary,, 1899
Box 14, Folder 2	Diary,, 1900

Box 14, Folder 3

Diary,, 1901

Series 6: Notebooks, 1860-1900

Subseries 6.1: Engineering and Survey Field Notes, 1860-1899

Box 14, Folder 15	Survey field notes,, 1860-1863
Box 14, Folder 16	Survey field notes,, 1879
Box 14, Folder 18	Survey field notes for Hudson River Bridge, Hutton Park, and Cunard Piers),, 1898-1899
Box 14, Folder 19	Survey field notes,, undated
Box 14, Folder 4	Engineering field notes,, 1863 and 1869
Box 14, Folder 5	Engineering field notes, 1869 August-1870 April
Box 14, Folder 6	Engineering field notes,, 1870
Box 14, Folder 7	Engineering field notes,, 1873-1874
Box 14, Folder 8	Engineering field notes,, 1874-1886
Box 14, Folder 9	Engineering field notes,, 1877
Box 14, Folder 10	Engineering field notes (English and French), 1878
Box 14, Folder 11	Engineering field notes (Ramapo),, 1880
Box 14, Folder 12	Engineering field notes, 1882
Box 14, Folder 13	Engineering field notes (Ramapo),, 1882
Box 14, Folder 14	Engineering field notes,, 1884
Box 14, Folder 17	Engineering field notes for Morris Canal and Ramapo,, 1884-1887

Subseries 6.2: Notebooks, 1871-1886

Box 23, Folder 12	Notebook listing drawings,, 1871-1877
Box 15, Folder 1	Notebook,, 1871
Box 15, Folder 2	Notebook with sketches,, 1872
Box 15, Folder 3	Notebook,, 1878
Box 15, Folder 4	Notebook of railroad station distances and other calculations,, 1879
Box 15, Folder 8	Notebook about Great Falls, Virginia, water flow,, undated
Box 23, Folder 17	Harlem River Bridge notebook,, 1886 September-1886 December

Subseries 6.3: Notes, 1863-1900

- Box 15, Folder 5 Notes on projects and inter oceanic canal (English and French), 1880-1898
- Box 15, Folder 6 Notes on Pittsfield, Massachusetts to Wiliamstown, Massachusetts,, 1881-1889
- Box 15, Folder 7 Notes for experiments/tests for aqueducts,, 1886
- Box 15, Folder 9 Notes on steam engines,, undated
- Box 23, Folder 9 Architectural elements, sketches and calculations for various projects,, 1863-1874
- Box 23, Folder 15 Buffalo Reservoir, 1875-1877
- Box 23, Folder 19 Calculations for Hutton Park, Continental Iron Works and Nicaraguan Canal,, 1889-1894
- Box 23, Folder 14 Chesapeake and Ohio Canal, 1874-1877
- Box 23, Folder 10 Drawings, calculations and an essay on navigation, Woodlands inventory,, 1863-1868
- Box 23, Folder 11 Index to subjects/topics includes sketches, drawings and calculations,, circa 1870-1890s
- Box 23, Folder 6 [Kanawha River?] and lock gate for Appomattox,, 1874-1878
- Box 23, Folder 7 [Kanawha River?] and Phoenix waterline,, 1875
- Box 23, Folder 8 [Kanawha River?], 1877-1878
- Box 23, Folder 13 Potomac Lock and Dock Company, 1877-1879
- Box 23, Folder 13 Potomac Lock and Dock Company, 1874 October-1876 June
- Box 23, Folder 16 Northern Adirondack Railroad accounts,, 1882-1884
- Box 23, Folder 18 Washington Aqueduct, Northern Adirondack Railroad, Little Rock Bridge, Wilson-Adam Dam, and Croton Bricks Works,, [1885-1900?]

Series 7: Cash Books, 1856-1899

Box 23, Folder 1	Cash Book,, 1856
Box 23, Folder 2	Cash Book,, 1866-1867
Box 23, Folder 3	Cash Books, (contains two different cash books from the same year),, 1887
Box 23, Folder 4	Cash Book,, 1887 and 1889
Box 23, Folder 4	Cash Book, 1889
Box 23, Folder 5	Cash Book,, 1890
Box 23, Folder 5	Cash Book, 1899

Series 8: Professional Projects, 1830-1965

Subseries 8.1: Chesapeake and Ohio Canal, 1828-1965

Map-case 7, Drawer 7, Folder 5	Chesapeake and Ohio Canal and Incline at Georgetown. (plans, blueprints, land profiles), 1876-1878
Box 6, Folder 5	Chesapeake and Ohio Canal and Incline at Georgetown drawings, 1876-1878
Box 27, Folder 1	Boat rates, Chesapeake and Ohio Canal, 1870-1881, undated
Box 27, Folder 2	Baltimore and Ohio Railroad and Chesapeake and Ohio Canal controversy,, undated
Box 27, Folder 3	Chesapeake and Ohio Canal contract corms,, 1837 and undated
Box 7, Oversize 10	Chesapeake and Ohio Canal Ecluse, a plan incline (drawing) (French) (rolled), undated
Box 27, Folder 4	Equipment order forms, Chesapeake and Ohio Canal Incline at Georgetown, 1878
Box 27, Folder 5	Visiting French engineers' description of the Chesapeake and Ohio Canal and program of visit, undated
Box 27, Folder 6	<i>Hill vs. Chesapeake and Ohio Canal</i> , 1867
Box 27, Folder 7	Georgetown Incline (design information), 1873-1880
Box 27, Folder 8	Incline at Georgetown (contracts, drawings, designs, data), 1874-1879
Box 27, Folder 9	Photocopied drawings of Incline at Georgetown and excerpt from publication describing drawings (pages 96-97), 1874-1878
Box 27, Folder 10	Sketches, notes, and cost estimates, Chesapeake and Ohio Canal and Incline at Georgetown,, 1877 and undated
Box 27, Folder 11	Land titles on the Potomac,, undated
Box 27, Folder 12	List of owners of lots occupied by the Chesapeake and Ohio Canal, 1882
Box 27, Folder 13	Microfilm, drawings of Potomac Lock and Dock and Chesapeake and Ohio Canal, made for Robert M. Vogel, Division of Mechanical and Civil Engineering,, 1965
Box 27, Folder 14	Miscellaneous business papers, Chesapeake and Ohio Canal (proposals, salaries, condition reports), 1828-1871
Box 27, Folder 15	Miscellaneous engineering notes and sketches, Chesapeake and Ohio Canal, 1869-1880 and undated
Box 27, Folder 16	Miscellaneous engineering notes, Chesapeake and Ohio Canal, 1872-1881, undated
Box 27, Folder 17	Supply bills, patent bills, cost estimates, 1867-1880

- Box 27, Folder 18 Notes and news articles pertaining to the Washington Canal-Chesapeake and Ohio Canal, 1871?, undated
- Box 27, Folder 19 *Chesapeake and Ohio Canal, copy of an order issued by the Secretary of War, General McClellan, and company* , 1862
- Box 27, Folder 19 *Main's Method of Propelling Steam Canal Boats* , undated
- Box 27, Folder 19 *Statistics of the Cumberland Coal Trade* , 1876
- Box 27, Folder 19 Department of Steam Boiler Inspection certificate of inspection, 1874
- Box 7, Oversize 10 Chesapeake and Ohio Canal Ecluse a plan incline (French) (rolled), undated
- Box 27, Folder 19 Chesapeake and Ohio Canal printed material, 1862-1876
- Box 27, Folder 20 Reports and specifications for reform, Chesapeake and Ohio Canal, 1839-1879
- Box 27, Folder 21 Specifications, Chesapeake and Ohio Canal, 1837-1841
- Box 27, Folder 22 Stockholder's reports and receipt of produce, 1872-1892
- Box 27, Folder 23 Water leases, Chesapeake and Ohio Canal, 1830-1870
- Box 27, Folder 24 Business correspondence, Chesapeake and Ohio Canal, 1861-1870
- Box 27, Folder 25 Business correspondence, Chesapeake and Ohio Canal, 1871-1872
- Box 27, Folder 26 Business correspondence, Washington Canal, Chesapeake and Ohio Canal, 1871-1878
- Box 27, Folder 27 Business correspondence, Chesapeake and Ohio Canal, 1873-1877
- Box 27, Folder 28 Business correspondence, Chesapeake and Ohio Canal Incline at Georgetown, 1873-1893 and undated
- Box 27, Folder 29 Business correspondence, Chesapeake and Ohio Canal,, 1878-1882
- Box 27, Folder 30 Business correspondence, Chesapeake and Ohio Canal, 1883-1895
- Box 27, Folder 31 Incline at Georgetown correspondence (English and French), 1860-1899

Subseries 8.2: Hudson River Tunnel, 1887-1901

- Box 27, Folder 32 Agreements for construction,, 1891-1892
- Box 27, Folder 33 Certificates, contracts, and cost estimates,, 1891, 1893
- Box 27, Folder 34 Cost estimates, Hudson River Tunnel, undated
- Box 27, Folder 35 Daily construction reports by Walter J. Aims,, 1889-1891

Box 27, Folder 36	Engineer notebook,, 1887-1891
Box 27, Folder 37	Engineer notebook,, 1889-1890
Box 27, Folder 38	Engineer notebook,, 1891
Box 27, Folder 39	Engineer notebook (for Walter Fox),, 1891
Box 27, Folder 40	Hudson River Tunnel miscellaneous engineering notes and sketches, 1889-1892
Map-case 7, Drawer 8, Folder 9	Hudson River Tunnel (land profiles, maps, diagrams, sketches), 1890-1891
Box 6, Folder 8	Hudson River Tunnel progress profiles, 1891
Box 28, Folder 1	Photocopy of handwritten document outlining Hudson River Tunnel project, undated
Box 28, Folder 3	Proposed drawings, elevations, and plans for railway terminal (copies),, undated
Box 28, Folder 2	<i>Improved Submarine Armor and Diving Apparatus</i> , undated
Box 28, Folder 2	<i>Construction d'un tunnel en fonte avec bouelior sous l'Hudson</i> (French), 1891
Box 28, Folder 4	Hudson River Tunnel reports (handwritten), 1890-1891
Box 28, Folder 5	Statement of expenses,, 1889
Box 28, Folder 6	Statement of expenses,, 1890
Box 28, Folder 7	Statement of expenses,, 1891
Box 28, Folder 8	Statement of expenses,, 1892
Box 28, Folder 9	Hudson River Tunnel correspondence, 1889
Box 28, Folder 10	Hudson River Tunnel correspondence,, 1890
Box 28, Folder 11	Hudson River Tunnel correspondence, 1891
Box 28, Folder 12	Hudson River Tunnel correspondence, 1892
Box 28, Folder 13	Hudson River Tunnel correspondence, 1893-1895
Box 28, Folder 14	Hudson River Tunnel correspondence, 1897-1901

Subseries 8.3: Printed Materials with an Unknown Author, 1852-1903

Box 3, Folder 1	"Address by Mansfield Merriman," (Folder also contains a letter to Hutton in reference to the document), 1894
-----------------	---

- Box 3, Folder 2 *Amelioration des Rivieres Fond Mobile* (French), undated
- Box 3, Folder 3 Annapolis Water Company, 1867
- Box 3, Folder 4 Annapolis Harbor and Patapsco River, 1879
- Box 3, Folder 5 "Annapolis Harbor and Patapsco River Letter from the Secretary of War,"1879
- Box 3, Folder 6 *Annual Report of the Syracuse Water Board* , 1896
- Box 3, Folder 7 *Annual Report of the Water Department of the City of Baltimore* (two copies),
1859 and 1869
- Box 3, Folder 8 "Aqueduct Commissioners--Engineering Department Monthly
Estimate,"undated
- Box 3, Folder 9 *Journal of the Association of Engineering Studies*, V. XIII, no. 2, 1894
- Box 3, Folder 10 *Ausbau des Wasserstrassen* (German), 1875
- Box 3, Folder 11 "Brief on Behalf of the Ramapo Water Company,"1895
- Box 3, Folder 12 *Buffalo Trunk Sewer Specifications* , 1883
- Box 3, Folder 13 *Charter of the Baltimore and Drum Point Railroad Company and also,
Amendment to the Charter* , 1872
- Box 3, Folder 14 "Circular of the Office of the Chief of Engineers,"1881
- Box 3, Folder 15 *The Club: A Journal of Club Life for Men and Women* , 1894
- Box 3, Folder 16 *Coal and Iron Railway Company Statement, Maps, and Engineer's Report* ,
1882
- Box 3, Folder 17 *Concerning the Preservation of Iron and Steel Structures* , 1891
- Box 3, Folder 18 *Congres International des Methodes d'Essai des Materiaux de Construction* ,
1900
- Box 3, Folder 19 "VIII Congres International de Navigation,"1900
- Box 3, Folder 20 *Contract--Specifications and Proposals for Water Supply--Jersey City* , 1896
- Box 3, Folder 21 *Control of the Flow of the Danube Between the Molday and the Turn-Severin* ,
1880
- Box 3, Folder 22 *Construction of the New Seawall at the U.S. [sic] Naval Academy* , 1898
- Box 3, Folder 23 *Le Correspondant* , 1894
- Box 3, Folder 24 *Court of Claims: Alfred Pasqueau vs. U.S [sic]* , undated
- Box 3, Folder 25 *The Croton Water Supply and its Extensions* , 1880
- Box 3, Folder 26 Printed copy of *Court of Appeals of the State of New York Case of John
O'Brien and Herman Clark vs. the Mayor of New York* , 1893

- Box 3, Folder 27 Department of Docks--New York, 1895
- Box 3, Folder 28 *Differences in cost between the American System of Mechanical Filtration and the European Plan of Sand Filtration* (Albany), 1897
- Box 3, Folder 29 *Disposal of Sewage* , undated
- Box 3, Folder 30 Drawings of Movable Dams, Belgium (6 drawings), 1878
- Box 3, Folder 31 Druid Lake Reservoir, 1868
- Box 3, Folder 32 East Branch Reservoir, 1888
- Box 3, Folder 33 *Form of Notice, Proposal, Contract and Specifications for Constructing the Steel Cables, Suspenders, Etc. of the East River Bridge* , 1899
- Box 3, Folder 33 Sketches of construction and locations of elements, 1896
- Box 3, Folder 33 *Form of Notice, Proposal, Contract, and Specifications for Constructing the Steel Towers and End Spans of the New East River Bridge* , 1899
- Box 3, Folder 33 *Form of Notice, Bid, Contract, Bond and Specifications for Constructing the Steel and Masonry Approach on the Manhattan Side of the New East River Bridge* , 1900
- Box 3, Folder 34 Eastern Canal (French), 1878
- Box 3, Folder 35 Eastern Canal, drawings), 1878
- Box 3, Folder 36 *El Comandante en Gefe de la Division Robles a sus Conciudadanos* (Spanish), 1853
- Box 3, Folder 37 *Etat des Outils, Instruments et Produits en Usage pour le Service du Nettoiement de la voie Publique et des Halles et Marches* (French), undated
- Box 3, Folder 38 *Experiments in Water Filtration at St. Laus* , 1897
- Box 3, Folder 39 "Form of Contract for Building the Jerome Park Reservoir,"1895
- Box 3, Folder 40 *Illustrations of Vessels Built by Lobnitz and Company, Limited* , 1901
- Box 3, Folder 41 *Improvements of the Ohio River, Letter for Secretary of War* , 1874
- Box 3, Folder 42 Improvement of Rivers, 1893
- Box 3, Folder 43 8th International Congress of Island Navigation, 1900
- Box 3, Folder 44 International Maritime Congress, 1893
- Box 3, Folder 45 James River Improvement Committee, 1878
- Box 3, Folder 46 *Joint Standing Committee on Water of the City Council (Baltimore)* , 1855
- Box 3, Folder 47 Jones Falls, 1868
- Box 3, Folder 48 *Journal of the Association of Engineering Studies*, Vol. XIII, 1894

- Box 3, Folder 49 *Journal of the Franklin Institute*, Vol. CXXXVII, no. 819, 1894
- Box 3, Folder 50 Kingston New Water Supply, undated
- Box 3, Folder 51 *Kinipple's Rolling Gate for Locks, Dock, etc* , 1878
- Box 3, Folder 52 *Laying Water Pipe* , 1896
- Box 3, Folder 53 *Leading Engineers and Naval Architects* , undated
- Box 3, Folder 54 *Les Installations Maritimes Belges* (French), 1900
- Box 3, Folder 55 *Les Puits Artesiens* , undated
- Box 3, Folder 56 *Main Drainage and Water Supply* , 1885
- Box 3, Folder 57 Metropolitan Water Board, 1896
- Box 3, Folder 58 Metropolitan Water Board, 1897
- Box 3, Folder 59 "Mobile and Dauphin Island Railroad and Harbor Company Mortgage and Coupons,"1887
- Box 4, Folder 1 I. La Mulatiere Drawings of Locks and Related Installations (ten items), 1877
- Box 4, Folder 2 II. La Mulatiere Drawings of Locks and Related Installations, (seven items), 1877
- Box 4, Folder 3 "Aqueduct Commission to Contractors,"1884
- Box 4, Folder 3 *Section A of the New Croton Aqueduct* , 1884
- Box 4, Folder 3 *Section 16 of the New Croton Aqueduct* , 1888
- Box 4, Folder 3 Form of Contract for Building the New Croton Dam on Croton River, at Cornell Site, 1892
- Box 4, Folder 10 *New York Filter MFG Co. vs. Niagara Falls Waterworks Company* , 1896
- Box 4, Folder 11 New York Harbor, 1884
- Box 4, Folder 12 "Notice-Nettoiemnt-Vole Publique,"1876
- Box 4, Folder 13 Philadelphia Water, undated
- Box 4, Folder 14 *Plans for the Improvement of Ohio River* , 1880
- Box 4, Folder 15 *Present and Proposed Supply (Water?) for (Pennsylvania?)* , circa 1880
- Box 7, Folder 4 Excerpt from "Les Annales des Travaux Publics," (pages 985-992) (French), undated
- Box 7, Folder 4 "Barrages de Poses: Barrages a Rideaux Soutenus par des Parties Mobiles Suspendues a unde Poutre Superieure," (French) (two copies), 1883
- Box 7, Folder 4 "Souterrain des Cabanes: Ligne de Montauban a Brive Section de Cahors a Souillac," (French) (two copies), 1884

Box 7, Folder 4 Excerpt from "The Electrical World,"1888

Box 7, Folder 4 "Chemin de fer du St. Gothard" (French), undated

Box 7, Folder 4 "Types de Barrages" (French), 1884

Box 7, Folder 4 "Le Chemin de fer de L'Arlberg," (French), 1884

Box 7, Folder 4 Printed map of a [college?], drafted by Waring, Chapman and Farquhar, Civil Engineers, undated

Box 7, Folder 4 Automatic Flush Tank, (drawing), undated

Box 7, Folder 4 Receiving Basin (drawing), undated

Box 7, Folder 4 Institution of Civil Engineers membership certificate, 1890

Box 7, Folder 4 Pr. [print?] 4 [Cabon?] John (printed photo), undated

Box 7, Folder 4 "Die Gailflussregulirung Situation der Regulierungsstrecke Wetzmann-Hofling (German), undated

Box 7, Folder 4 "Map of Leadville Mining District in Lake and Park Counties, Colorado,"undated

Box 7, Folder 4 "Les Ports Maritimes de L'Amerique du Nord sur L'Atlantique,"1898

Box 7, Folder 4 Map of Greenwood Cemetery, 1888

Box 7, Folder 4 "Crystal Springs Dam," (San Francisco), 1887

Box 7, Folder 4 Chevalier, Michel, "Histoire et Description des Voies de Communication aux Etats-Unis et des Travaux d'art qui en dependent,"1860

Box 7, Folder 5 "Brooklyn Pumping Engines,"undated

Box 7, Folder 5 "General Map and Details of Main Relief Sewer Section 1,"1889?

Box 7, Folder 5 "Pipe Sewers Running Full,"undated

Box 7, Folder 5 "Drainage Area of Rock Creek" (Maryland), undated

Box 7, Folder 5 "Diagram of Volume Reaching Sewers and Diagram of Capacities of Sewers,"undated

Box 4, Folder 16 *Proceedings of the National Good Roads Convention* , 1903

Box 4, Folder 17 *Projei D'assaimissemem Ville du Haure Systeme Waring*(French), 1884

Box 4, Folder 18 "The Ramapo Water Contract,"1899

Box 4, Folder 19 *Register of the Rensselaer Polytechnic Institute* , 1882-1883

Box 4, Folder 20 *Regulations of the Graving Docks*,, undated

Box 4, Folder 21 *Report of the Architect of Public Buildings* , 1852

- Box 4, Folder 22 *Report of the Baltimore Water Department* , 1863
- Box 4, Folder 23 *Report of the Board of Engineers Upon Changing the Course of Jones' Falls* , 1868
- Box 4, Folder 24 *Report of the Board of Engineers Upon New York and New Jersey Bridge* , 1894
- Box 4, Folder 25 *Report of the Commission for the Construction of the Congressional Library Building* , 1888
- Box 4, Folder 26 *Report of the Commissioners and Chief Engineer of the Charlestown Waterworks* , 1865
- Box 4, Folder 27 *Report on Designs for a Memorial Bridge Across the Potomac River, at Washington, D.C.* , 1900
- Box 4, Folder 28 *A Report of a Plan for Supplementing the Croton Water Supply to the City of New York from the Ramapo District* , 1882
- Box 4, Folder 29 *Report of the Sewage Commission, Baltimore* , 1862
- Box 4, Folder 30 *Report of the State Engineer* , 1880
- Box 4, Folder 31 *Report of the State Engineer to the Legislature of the State of California-- Session of 1880* , 1880
- Box 4, Folder 32 "Report of State of Water Supply of New Jersey," 1884
- Box 4, Folder 33 *Report of the Survey to Determine the Crest Lines of the Falls of Niagara in 1890* (loose leaf excerpt from a larger publication, pages 95-118), 1890
- Box 4, Folder 34 *Report and Plans for a Supply of Water for City of Norfolk* , 1871
- Box 4, Folder 35 *Resolutions of Board of Trade and Other Organizations* , [1892?]
- Box 4, Folder 36 *Revue Generale des Chemins de Fer* (French), 1882
- Box 4, Folder 37 Sanitary District of Chicago, 1896
- Box 4, Folder 38 Sediment Transported by River Waters (chart), undated
- Box 4, Folder 39 *South Brunswick Terminal Railroad Company; South Brunswick and Cordele Railroad Company* , undated
- Box 4, Folder 40 *Specifications for Building the Marine Hospital at Cincinnati, Ohio* , 1856
- Box 4, Folder 41 *Specifications for Building United States Warehouse at Quarantine Station Below New Orleans, Louisiana* , 1859
- Box 4, Folder 42 "Street Cleaning in New York," From *City Government* (excerpt), 1896
- Box 4, Folder 43 *Sur un Systeme de Barrage Mobile*, (French), undated
- Box 4, Folder 44 *Surveys for Continuous Canal Connecting Lake Erie with the Ohio River* , undated

Box 5, Folder 1	Survey of Elk River, West Virginia, 1875
Box 5, Folder 2	<i>System of Sewage Disposal for Isolated Houses</i> , undated
Box 5, Folder 3	"Test of Metals Letter from Secretary of War,"1881
Box 5, Folder 4	<i>Treatise on Water Purification for Cities and Towns</i> , 1897
Box 5, Folder 5	United States Engineer's Office, 1882
Box 5, Folder 6	<i>Verslag aan den Koning over de Openbare Werken in Het Jaar 1884</i> (German), 1885
Box 5, Folder 7	Water Department Report--Baltimore, 1875

Subseries 8.4: Harlem River Bridge, 1878-1892

Map-case 7, Drawer 7, Folder 6	W.R. Hutton, C.C. Schneider, F.A. Leers, E.B. Van Winkle, Jackson Architectural Works, [S. Rouebock ?], Harlem River Bridge blueprints I,, 1886-1888,
Map-case 7, Drawer 8, Folder 7	W.R. Hutton, C.C. Schneider, F.A. Leers, E.B. Van Winkle, Jackson Architectural Works, [S. Rouebock ?], Harlem River Bridge blueprints II,, 1886-1888
Box 6, Folder 7	Harlem River Bridge blueprints,, 1886-1888
Map-case 7, Drawer 8, Folder 8	W.R. Hutton, John Bogart, Harlem River Bridge,, 1886-1892
Box 8, Folder 1	Harlem River Bridge photographs, 1887 April 3 to 1888 May 18
Box 8, Folder 2	Harlem River Bridge photographs (brick and cement work), undated
Box 8, Folder 3	Harlem River Bridge photographs (men at work), undated
Box 8, Folder 4	Harlem River Bridge photographs, (steel work), undated
Box 8, Folder 5	"The Washington Bridge," (printed photograph plates), 1887, undated
Box 24	Photograph album Harlem River Bridge, Poughkeepsie Bridge, Cairo (New York), Hudson River Tunnel (albumen and cyanotypes), 1887-1888
Box 28, Folder 15	Harlem River Bridge engineer's estimates, 1886 August-1889 January
Box 28, Folder 16	<i>The Washington Bridge Over the Harlem River, New York</i> , 1891
Box 28, Folder 16	<i>The Washington Bridge: A Description of its Construction</i> , undated
Box 28, Folder 16	<i>Is the New Washington Bridge Safe?</i> , 1889
Box 28, Folder 16	<i>Hurrying Work on the Bridge</i> , 1889

- Box 28, Folder 16 *The New Manhattan Bridge* , 1889
- Box 28, Folder 16 *World's Fair* , 1889
- Box 28, Folder 16 *The Washington Bridge over the Harlem River, at 181st Street, New York City. A Description of its Construction* , 1889
- Box 28, Folder 16 *The Washington Bridge, A Book which Describes the Beauties of the Magnificent Structure* , 1892
- Box 28, Folder 16 *The Last New Bridge* , undated
- Box 28, Folder 16 *Washington Bridge* , 1889
- Box 28, Folder 16 *Looks Like a Big Job* , 1888
- Box 28, Folder 16 *Work on the New Harlem Bridge* , 1887
- Box 28, Folder 16 *New Publications: Washington Bridge* , 1891
- Box 28, Folder 16 *A Bit of Inside History: Deals Over Contracts for Constructing the Harlem River Bridge* , 1888
- Box 28, Folder 16 *Don't Know Myles Tierney?* , undated
- Box 28, Folder 16 *Sincures Indeed!* , 1891
- Box 28, Folder 17 Schedules, costs, reports, proposals, contracts, specifications, 1886-1889
- Box 28, Folder 18 Harlem River Bridge printed photograph Plates, undated
- Box 28, Folder 19 Harlem River Bridge correspondence, 1878-1889
- Box 28, Folder 20 Harlem River Bridge correspondence, 1886-1889
- Box 28, Folder 21 Harlem River Bridge correspondence, 1886-1897, 1887-1889
- Box 28, Folder 22 Harlem River Bridge correspondence, 1887-1889
- Box 28, Folder 23 Correspondence with Malcolm W. Niver, Secretary, Harlem River Bridge Commission, 1886-1897, 1886-1889

Subseries 8.5: Other Projects, 1858-1932

- Box 9, Bin 3 Profile of line, Annapolis Water Company (rolled), undated
- Box 28, Folder 25 Annapolis Water Company report on boiler and engine pamphlets on water use and charges for Annapolis and Philadelphia, 1866
- Map-case 7, Drawer 7,
Folder 1 Annapolis Water Company (profiles, drawings), 1880

Box 28, Folder 26	Baltimore Beltway (Baltimore and Ohio Canal) (sketches, measurements, engineering data, estimates), 1891-1895
Box 28, Folder 27	Baltimore and Drum Point Railroad Company, initiation of organization and construction of railroad (correspondence, contracts, specifications), 1873
Box 28, Folder 29	Baltimore and Ohio Railroad notes, 1861-1883
Box 6, Folder 3	Blueprints, 1877-1922
Map-case 7, Drawer 7, Folder 2	Blueprints,, 1884-1922
Box 28, Folder 28	Boston and Baltimore Tunnels, (letters-Boston Tunnel, maps, Old Union Tunnel, Baltimore), 1876-1900
Box 29, Folder 1	Church architecture (sketches), undated
Box 6, Folder 4	Church architecture (sketches, plans, drawings, printed photographs), undated
Map-case 7, Drawer 7, Folder 3	Church architecture (sketches, drawings), 1901
Box 7, Folder 11	"3% and 4% Lines through Ute Pass Colorado Midland Railway," Drawn for W.R. Hutton (rolled), undated
Map-case 7, Drawer 7, Folder 4	Colorado Midland Railroad Bridges (Ruxton Creek) (land sketches, Blueprints by Morse Bridge Company), 1885-1896
Box 7, Folder 6	<i>Conduit Appurtenances</i> , 1892
Box 29, Folder 2	Consolidated Coal Company map (Maryland), undated
Box 29, Folder 3	Consolidated Gas Company Tank plans, settlement and account record (not complete),, 1893-1898
Box 29, Folder 4	Copies of maps filed by Scranton and Forest City Railroad, (8 copies), undated
Box 29, Folder 5	Cooper Lake drawings and drawing descriptions,, undated
Box 29, Folder 6	Cornices (reference photos and sketches), 1893
Box 29, Folder 7	Cox's Dam, water supply, undated
Box 29, Folder 8	Cunard Pier, plans, proposal, cost estimates, bills, 1898-1899
Box 29, Folder 9	Supplies required for Deer River Bridge, undated
Box 29, Folder 10	Dismal Swamp Canal (proposal, abstract, calculations), 1872
Box 7, Folder 6	<i>Oak Ridge Gate House</i> , 1892
Box 7, Folder 6	<i>Macopin Intake Details</i> , 1892
Box 7, Folder 6	<i>Conduit Structures</i> , 1892
Box 7, Folder 6	<i>Conduit Appurtenances: Details of Air Valves</i> , 1892,

Box 7, Folder 6	<i>Venturi Water Meter</i> , 1892
Box 7, Folder 6	<i>Superstructure of Gate Houses at Newark Reservoirs</i> , 1892
Box 7, Folder 6	<i>Conduit Details</i> , 1892
Box 7, Folder 6	<i>Discharge Diagrams</i> , 1892
Box 7, Folder 6	<i>Map of Watershed and Pipe Line</i> , 1892
Box 29, Folder 11	Florida Ship Canal and Dam of Suwanee (water supply, filtration, leakage, cost estimates, measurements, drainage, supplies, sketches), undated
Box 29, Folder 12	French Projects, Artesian well at Grenelle, Paris water supply,, undated
Box 29, Folder 13	Copied report on Gracles Sewers of Washington, 1873
Box 29, Folder 14	Investigation of defective brick work, Baltimore City College building (sketches, correspondence, reports of the investigation), 1897
Box 29, Folder 15	Kanawha River Canal, (sketches, dam calculations, estimates, bills, measurements, notes) (English and French), 1876-1878
Box 6, Folder 9	Kanawha River Canal plans, maps, printed material, undated
Map-case 7, Drawer 8, Folder 10	Kanawha River Canal (engineering drawings, land profiles, printed material by C.K. McDermott and Albert M. Campbell), 1877-1893
Box 29, Folder 22	Kingston Water Supply (bids for filters, surveys, engineering notes), 1896-1897
Box 29, Folder 21	Kingston Water Supply (report to commission, water analysis, contracts, prices), 1896
Box 29, Folder 20	Kingston Water Supply financial records, 1896
Box 29, Folder 19	Kingston Water Supply, agreements for work, drawings, water rules, regulations, and rates, 1896-1898
Box 29, Folder 18	Kingston Water Supply, news clippings and ephemera (water rules card), 1897
Box 29, Folder 17	Installation of filter at Kingston Waterworks, 1896-1897
Box 29, Folder 16	Kingston Water Supply (correspondence, proposals, notebook, water analysis certificate), 1882-1898, 1886
Box 11, Bin 6	Kingston Water Supply, profile of pipeline from reservoir number 2 (rolled), undated
Box 11, Bin 5	Sagendorf, W.A., Kingston Water Supply map and profile pipeline reservoir number 1 to number 2 (rolled), undated
Box 11, Bin 4	Kingston Water Supply, profile of creek crossing on pipeline (rolled), 1897
Box 11, Bin 3	Kingston Water Company, contour map of reservoir number 2 (rolled), undated
Box 11, Bin 2	Kingston Water Company, profile of Esopus Creek (rolled), undated

Box 10, Bin 5	Kingston Water Supply trench profiles, (3 sheets) (rolled), undated
Box 10, Bin 4	Kingston Water Supply, changed pipeline station 35 to 44 (rolled), 1897
Box 9, Bin 8	Kingston Water Company, land profile (rolled), undated
Box 9, Bin 6	Profile of Kingston Water Company's pipeline (rolled), 1896
Box 9, Bin 4	Kingston New Water Supply, profile of 20 inch pipeline between reservoirs 1-2 (rolled), 1896-1897
Map-case 7, Drawer 9, Folder 11	Kingston Water Supply (blueprints, maps, printed material, hand drawn profiles), 1898-1899
Box 29, Folder 23	Johnson's Bend, drawings and supplies, undated
Map-case 7, Drawer 9, Folder 12	Lake Roland Reservoir photostat, [1860?]
Box 24, Folder 24	Report on lifting locks, undated
Box 29, Folder 25	Little Rock Bridge, dimensions, undated
Map-case 7, Drawer 9, Folder 13	"Machine storage and cattle barn," plans for Mary Hutton, Charles W. Stang, architect, 1932
Box 28, Folder 24	Map of air and calder navigation-England, 1875
Box 29, Folder 26	Memorial Bridge (photocopies of newspaper clippings, photograph of perspective design, correspondence), 1899-1901
Box 6, Folder 10	Memorial Bridge (maps, sketches, printed photographs), undated
Map-case 7, Drawer 9, Folder 14	Memorial Bridge (sketches), undated
Box 29, Folder 27	Mersey Tunnel (notes and calculations), [189?]
Box 29, Folder 28	Mexican National Construction Company engineering notes on conducting transportation, 1883 and undated
Box 7, Folder 1	Miscellaneous municipal drawings, 1882-1896
Box 7, Folder 2	Miscellaneous residential drawings of Hutton properties(?),, undated
Map-case 7, Drawer 9, Folder 16	Miscellaneous residential drawings of Hutton properties(?), H.J. Hardenbergh, architect (English and French), undated
Box 29, Folder 29	Morris Canal, Newark Water Supply (newsclippings, correspondence, water analysis reports, measurements, cost projections), 1887-1888
Box 29, Folder 30	Navigation of Columbia Railroad from Dalles to Celilo (correspondence), 1892-1893
Box 29, Folder 31	Navigation of the Columbia Railroad from Dalles to Celilo (reports, cost estimates), 1892-1893

Box 29, Folder 32 Navigation of Columbia Railroad from Dalles to Celilo (freight plans, engineering data, organization proceedings), 1881-1893

Map-case 7, Drawer 10, Folder 17 New York City (blueprints, plans), 1897

Box 7, Folder 3 New York City (maps, printed materials), 1897

Box 29, Folder 33 Noord and Lek Dykes, copied abstract from inspection report, undated

Box 29, Folder 34 Northern Adirondack Railroad Company cost estimates, bills, and contracts,, 1882-1883

Box 29, Folder 35 Northern Adirondack Railroad Company engineering sketches, notes, calculations, and work estimates, 1883

Box 29, Folder 36 Northern Adirondack Railroad Company correspondence, 1881-1883

Box 29, Folder 37 Northern Adirondack Railroad Company, contract agreements, 1883

Box 9, Bin 7 Northern Adirondack [Railroad?], St. Regis Falls-North to Aldberg (rolled), 1882

Box 29, Folder 38 Panama Canal, description of lock gates, sea level, calculations, report, 1879-1880

Box 29, Folder 39 Piedmont Bridge, notes and calculations, undated

Box 29, Folder 40 Pittsfield and Williamstown Railroad (notes, correspondence, legal documents, survey results, cost estimates, contracts), 1881

Box 29, Folder 41 Lease of Potomac River Canal land (renewal of previous lease), 1871

Box 10, Bin 1 Profile of Jones Falls (rolled), 1874

Box 10, Bin 3 Profile of Location from Station 3278 to 3570, International Railroad and S.S. Company [sic] (rolled), undated

Box 10, Bin 7 Number 2 profile of location from Station 814 to 1510, (International Railroad of Florida and S.S. Company [sic]) (rolled), undated

Box 10, Bin 6 Profile showing land contours (rolled), undated

Map-case 7, Drawer 10, Folder 19 St. Mary's Canal (printed maps and photographs), 1878-1882

Box 29, Folder 42 Railroad engineering and financial data (Ruxton Viaduct, D. and R.G. [sic] Crossing, miscellaneous), 1873-1892

Box 29, Folder 43 Ramapo Water Supply (reviews, reports, news clippings, measurements, estimates, and sketches), 1883-1888

Box 7, Folder 7 Ramapo Water Company profiles, maps, undated

Map-case 7, Drawer 10, Folder 20 Ramapo Water Company (maps, cross sections), 1891

- Box 29, Folder 44 Riding rates of freights on coal (Baltimore to Coasturss rate), (Georgetown to Coasturss rate), 1881
- Box 7, Folder 8 Roland Lake Reservoir photostats, 1858-1885, 1860
- Box 29, Folder 45 Ruxton Creek Bridge, Colorado Midland Railway Company, and Morse Bridge Company (technical plans and sketches, correspondence, notes, contract forms and cost estimates), 1885-1888
- Box 29, Folder 46 Severn Railway, notes and history (Gloucestershire, England), 1880
- Box 29, Folder 47 St. John Church lots, (Washington, D.C.), undated
- Box 29, Folder 48 St. Gothard Canal (notes and calculations) (Port Said, India), 1880-1889
- Box 29, Folder 49 Suez Canal (notes and measurements), undated
- Box 29, Folder 50 Takoma steel tower and tank Chicago Bridge and Iron Company (blueprints, calculations), 1900-1901
- Box 29, Folder 51 Tansa Dam, Mumbai, India (notes and design proposal), 1893
- Box 29, Folder 52 Washington Aqueduct (correspondence, specifications, progress reports, technical sketches), 1855-1899
- Box 7, Folder 9 Washington Aqueduct plans and printed maps, undated
- Map-case 7, Drawer 10, Folder 21 Washington Aqueduct, (plan), undated
- Box 11, Bin 1 Western Maryland Railroad, calculations of cuts and fills, (16 sheets) (rolled), undated
- Box 10, Bin 8 Western Maryland Railroad, railroad profile, Baltimore end (rolled), undated
- Box 10, Bin 2 Western Maryland Railroad, railroad cut in Baltimore (rolled), undated
- Box 9, Bin 5 Western Maryland Railroad, profile of cuts and fills, Baltimore Division (rolled), undated
- Box 9, Bin 2 Western Maryland Railroad, profile of cuts and fills (rolled), undated
- Box 9, Bin 1 Western Maryland Railroad, Profile of Hagerstown Williamsport (rolled), undated

Subseries 8.6: Unidentified Project Files, 1872-1900

- Box 29, Folder 53 *Johnson's Universal Cyclopedia Biography*, drafts (handwritten and typed on forms provided by publisher), correspondence with contributors, printed reference material (English, French, and Italian), 1892-1896
- Box 5, Folder 39 Bill of sale for surveying instruments,, 1883

- Box 5, Folder 40 Blank engineering forms and regulations, 1885
- Box 5, Folder 41 Cement tests, results and methods, 1886-1890
- Box 5, Folder 42 *Census Bulletins Number 286, Manufacture of Chemicals*, (2 copies), 1880
- Box 5, Folder 43 Contracts (North Carolina Railway, Baltimore and Ohio Railroad, Union Railroad, Western Maryland Railway, transportation of limestone to Rockland, Maine), 1873
- Box 5, Folder 44 Cost estimate for services, undated
- Box 5, Folder 45 *Dictionary of Architecture* (correspondence, table of contents, printed list of contributors), 1897-1900
- Box 5, Folder 46 Discussions of the use of clay for embankments, late [1880s?]-1892
- Box 5, Folder 47 Discussions on earth fill dams,, undated
- Box 5, Folder 48 [Draft of speech?], undated
- Box 5, Folder 49 Locomotive data (Colorado Midland Railroad Company), 1894-1895
- Box 5, Folder 50 Miscellaneous engineering notes and drawings (Gratiot House, River Walls, Mount Royal Station, sewers, Rock Creek Bridge, Takoma Park, fire plug, bills, bolts and nuts) (English and French),, 1882-1900
- Box 5, Folder 51 Miscellaneous experiment notes and tests, undated
- Box 5, Folder 52 Miscellaneous railroad surveys, patrols, bills, sketches (Union Pacific Railway Company, Housatonic Rolling Stock Company, Mexican National Railway, Hancock and Stephantown Route, New England route survey), 1882-1886
- Box 5, Folder 53 Notes on cast iron beam and girder (draft and final version), 1896
- Box 5, Folder 54 Notes on European canals (Ecluse de la Monnaie, Canal St. Martin, Bassin de la Villette, Cofferdam, La Haye, Canal de l'est, Canal St. Quentin, London, Chatham, and Diver Railway) (English and French), 1878
- Box 5, Folder 55 Notes from Europe trip (notes on North Sea Canal, supply costs, sketches, experiment results, river depths, Maasmond), 1873-1885
- Box 5, Folder 56 Pay for June taxes (Goldsboro), 1873-1874
- Box 5, Folder 57 Photographs of projects (Washington Arch),, 1895?
- Box 5, Folder 58 Reports on European canals (Canal St. Martin, Burgundy Canal, Clyde Dyke, Rotterdam Canal), 1872-1879
- Box 5, Folder 59 Water pumps (outlet lock), 1874, undated

Subseries 8.7: Specifications, 1870-1900

Box 5, Folder 8	Arkansas River Bridge, 1884
Box 5, Folder 9	City of Baltimore, Diedging Loch-Raven,, 1895
Box 5, Folder 10	Bridge Over Schuylkill River at Fairmount, 1870-1871
Box 5, Folder 11	Buffalo Reservoir,, 1875
Box 5, Folder 12	For carpentry work on the State Arsenal Building, 1876
Box 5, Folder 13	Construction of Geneva and Lyons Railroad, undated
Box 5, Folder 14	Construction of a mausoleum at Pittsfield, Massachusetts (for Miss Tellinghast), undated
Box 5, Folder 15	Department of Docks, Pier A, North River (New York City),, 1895
Box 5, Folder 16	Department of Public Works, building a reservoir at Williamsbridge, New York City, 1884
Box 5, Folder 17	Department of Public Works, regulating and paving granite - block pavement of Moore Street from Pearl to South Street, 1894
Box 5, Folder 18	Erie Canal retaining wall, 1882
Box 5, Folder 19	General specifications for iron railroad bridges and viaducts,, 1884-1885
Box 5, Folder 20	Harbor Board of Baltimore, excavations, [188?]
Box 5, Folder 21	Home of Miss M. Gwynn, 1740 N St, N.W., Washington, D.C., undated
Box 5, Folder 22	Improving Riverside Avenue, between 72nd Avenue and 130th Street, 1876
Box 5, Folder 23	Improvement of Wicomico River, 1880
Box 5, Folder 24	Increasing the water supply of Washington, D.C., construction of dam, reservoir, and tunnel, 1883
Box 5, Folder 25	New York Central and Hudson River Railroad, grading and fencing, 1873
Box 5, Folder 26	City of New York, Board of Health Plumbing and Drainage,, 1881
Box 5, Folder 27	City of New York, Office of the Commissioner of Street Improvements of 23rd and 24th Wards (grading, setting curbs, sidewalks), 1891
Box 5, Folder 28	New York, Ontario and Western and New York, west shore and Buffalo Railways pile and timber trestle bridging,, undated
Box 5, Folder 29	Patapsco River improvement, 1880
Box 5, Folder 30	Pneumatic tunneling device, undated
Box 5, Folder 31	Potomac River Bridge (Memorial Bridge), Washington, D.C.,, 1900
Box 5, Folder 32	Rapid transit on Madison Avenue, New York City,, 1891
Box 5, Folder 33	Repair of the Dock of Misters Wilson and Adams, undated

- Box 5, Folder 34 Rotterdam Canal (Amsterdam), 1887
- Box 5, Folder 35 Rotterdam Canal (Amsterdam),, 1887
- Box 5, Folder 36 Scranton Gas and Water Company for building a dam and reservoir on Roaring Brook (Pennsylvania), 1887
- Box 5, Folder 37 St. Patrick's Cathedral, undated
- Box 5, Folder 38 Syracuse Water Works,, 1892

Subseries 8.8: Legal Documents

- Box 5, Folder 60 Patent infringement suit for moveable dams, 1886

Subseries 8.9: Professional Organizations, 1870-1902

- Box 5, Folder 61 American Institute of Architects (schedule of terms, professional practices, and charges), 1870
- Box 5, Folder 62 American Society of Civil Engineers, candidates for membership, 1901
- Box 5, Folder 63 American Society of Civil Engineers and Institution of Civil Engineers (meeting minutes and correspondence), 1873-1896
- Box 5, Folder 64 Boston Society of Civil Engineers, constitution and bylaws, 1890
- Box 5, Folder 65 Institution of Civil Engineers, correspondence and session program, 1881-1902
- Box 5, Folder 66 Membership payments (Librarie Polytechnique, American Agency of "Engineering" in London, Imperial Institute, Century Association, Institution of Civil Engineers, American Society of Civil Engineers, Societe des Ingenieurs Civils), (English and French), 1886-1901
- Box 5, Folder 67 Miscellaneous documents (invitations, election notices, articles of association) (Imperial Institute, League of Associated Engineers, Railroad Corporation, American Institute of Mining Engineers), 1876-1898
- Box 5, Folder 68 Societe des Ingenieurs Civils de France (inauguration du nouvel hotel de la societe, members list of the French Society of Engineers visiting America, correspondence) (English and French), 1893-1897

Series 9: Printed Materials, 1850-1913

Subseries 9.1: Printed Materials by Hutton, 1852-1900

Box 1, Folder 1	Hutton, William. <i>A Missouri Flood Wave</i> , , undated
Box 1, Folder 2	Hutton, William. <i>Discussion of Paper No. 478, The Ravine Du Sud</i> , 1852
Box 1, Folder 3	Hutton, William. <i>The Potomac Waterfront at Washington, D.C.</i> , 1882
Box 1, Folder 4	Hutton, William. <i>Report on Colorado Midlands</i> ,, 1885
Box 1, Folder 5	Hutton, William. <i>Second Question on the Application of Machinery to the Water Supply of Canals</i> , 1900
Box 1, Folder 6	Hutton, William. <i>The Flood Discharge of Rivers</i> (2 copies), 1882

Subseries 9.2: Printed Materials by Others, 1826-1913

Box 1, Folder 7	Abert, J.J. (Colonel). <i>Canal to Connect the Chesapeake and Ohio Canal</i> , 1874
Box 1, Folder 8	Adams, Julius. <i>Quaker Bridge Dam</i> , 1884-1886
Box 1, Folder 9	Corthell, E.L. <i>The Tehuantepec Ship Railway</i> ,, 1884
Box 1, Folder 9	Excerpt from <i>The Tehuantepec Ship Railway: The Proposed Atlantic and Pacific Ship Railway</i> ,, 1884
Box 1, Folder 9	McAlpine, William J. <i>The Tehuantepec Inter-Ocean Railroad and Harbours</i> ,, 1881
Box 1, Folder 9	<i>Tehuantepec Ship Railway</i> ,, 1884
Box 1, Folder 9	<i>Letter of Mississippi Bar Pilots on Fort St. Philip Canal and Southwest Pass</i> ,, 1874
Box 1, Folder 9	Howell, C.W. <i>Canal Connecting the Mississippi River with the Gulf of Mexico</i> , 1874
Box 1, Folder 9	Barnard, J.G., H.G. Wright, and B.S. Alexander. <i>Report of a Commission Consisting of J.G. Barnard, H.G. Wright, and B.S. Alexander Upon the Works for the Improvement of the South Pass of the Mississippi River</i> , 1876
Box 1, Folder 9	<i>Annual Report of the Harbor Board to the Mayor and City Council of Baltimore for the Fiscal Year Ended December 31, 1907</i> , 1908
Box 1, Folder 9	Craighill, William P. <i>Survey for a Ship-Canal to Connect the Waters of Delaware and Chesapeake Bays</i> , 1880

- Box 1, Folder 9 *Report of the Sub-Committee of the Committee of One-Hundred, of the Tax-Payers of the District of Columbia on the Harbor Improvement , 1877*
- Box 1, Folder 9 *Testimony before the Select Committee of the Senate Appointed to Investigate and Report as to the Condition of the Potomac River Front of Washington , 1882*
- Box 1, Folder 9 *Newell, F.H. Proceedings of the First Conference of Engineers of the Reclamation Service with Accompanying Papers , 1904*
- Box 1, Folder 9 *Corthell, Elmer L. The Atlantic and Pacific Ship-Railway Across the Isthmus of Tehuantepec, in Mexico, Considered Commercially, Politically, and Constructively , 1886*
- Box 1, Folder 9 *Review of the Proposed Tehuantepec Ship-Railway , 1881*
- Box 1, Folder 9 *Ammen, Daniel. The Errors and Fallacies of the Inter-Oceanic Transit Question To Whom Do They Belong? , [1888?]*
- Box 1, Folder 9 *Eads, James B. "Review of Captain Phelps' Pamphlet Entitled 'Transportation of Ships on Railways,'undated*
- Box 1, Folder 9 *Gamgee, John. Letter to Rear-Admiral Daniel Ammen, U.S.N., on the Inter-Oceanic Ship Canal and the Yellow Fever Zone , 1880*
- Box 1, Folder 10 *Corthell, E.L. The Atlantic and Pacific Ship Railway , 1886*
- Box 1, Folder 10 *Taylor, H.C. (Commander). Waterways to the Pacific , 1888*
- Box 1, Folder 10 *"Letters from Leading Engineers and Naval Architects As to the Practicability of Constructing and Operating a Ship Railway"1882*
- Box 1, Folder 10 *James B. Eads's Proposed Jetty Improvement at the Southwest Pass, Mississippi River , undated*
- Box 1, Folder 10 *Hartley, Charles A. (Sir). "Letter of Sir Charles A. Hartley, M. Institutional? Civil Engineer, on Jetties at the Passes of the Mississippi,"1875*
- Box 1, Folder 10 *Eads, James B. Inter-Oceanic Ship Railway , 1880*
- Box 1, Folder 10 *Preliminary Report of the Isthmian Canal Commission , 1900*
- Box 1, Folder 10 *The Isthmian Ship-Railway, (excerpt), undated*
- Box 1, Folder 10 *The North American Review, number 278, 1880*
- Box 1, Folder 10 *Reed, Edward J. (Sir). "Letter of Sir Edward J. Reed, K.C.B. to Rear Admiral Ammen, U.S.N. on ship railways and canals on the American Isthmus."1881*
- Box 1, Folder 10 *Ammen, Daniel. The Proposed Inter-Oceanic Ship Canal Across the American Isthmus Between Greytown and Brito, via Nicaragua; Its Feasibility as a Commerical Question, and its Advantages as Compared with Other Proposed Routes , 1878*

- Box 1, Folder 10;
Box 1, Folder 9 *Instructions to Rear Admiral Daniel Ammen and Civil Engineer A.G. Menocal, U.S. Navy, Delegates on the Part of the United States to the Interoceanic Canal Congress, Held at Paris, May, 1879, and Reports of the Proceedings at Congress , 1879*
- Box 1, Folder 10 Ammen, Daniel. *American Isthmian Canal Routes , 1889*
- Box 1, Folder 10;
Box 1, Folder 9 *Instructions to Rear Admiral Daniel Ammen and Civil Engineer A.G. Menocal, U.S. Navy, Delegates on the Part of the United States to the Interoceanic Canal Congress, held at Paris, May 1879, and Reports of the Proceedings of the Congress , 1879*
- Box 1, Folder 10 Eads, James B. *Jetty System Explained , 1874*
- Box 1, Folder 10 Heuer, W.H. (Inspecting Officer), *Inspection of the Improvment of South Pass, Mississippi River , 1880*
- Box 1, Folder 10 Eads, James B. *Review of the Mississippi and Galveston Jetties , 1885*
- Box 1, Folder 10 "Letter from the Secretary of War, transportation routes to the seaboard"1877
- Box 1, Folder 10 *With the Gulf of Mexico, (first half of this document is missing), undated*
- Box 1, Folder 11 Allen, Chas J. *Annual Report Upon the Improvement of Potomac River and its Tributaries of James River, Virginia and of Certain Rivers in Virginia on Western Shore of Chesapeake Bay; Protection of Jamestown Island, Virginia , 1897*
- Box 1, Folder 12 Corthell, E.L. "An Exposition of the Errors and Fallacies in Rear-Admiral Ammen's Pamphlet Entitled 'The Certainty of the Nicaragua Canal Contrasted with the Uncertainties of the Eads Ship Railway,'"1886
- Box 1, Folder 12 *Sanitary Notes on the Nicaragua Canal , 1883*
- Box 1, Folder 12 "Nicaragua Canal Discussion for the Advancement of Science, Thirty-Sixth Meeting Held in New York,"1887
- Box 1, Folder 12 *Nicaragua Canal: Description of Route, Estimated Cost and Business , undated*
- Box 1, Folder 12;
Box 1, Folder 11 *The Nicaragua Canal: Expected Earnings.A Study of its Commercial Geography.Effect on Ocean Routes.New Trade Advantages for the United States , undated*
- Box 1, Folder 12;
Box 1, Folder 11 "Hearings on House Bill 35 (On the Nicaragua Canal) Before the Committee on Interstate and Foreign Commerce,"1896
- Box 1, Folder 12 *Nicaragua Canal , 1896*
- Box 1, Folder 12 *Concession Granted by the Republic of Nicaragua to the Provisional Interoceanic Canal Society for a Ship Canal Across that Country , 1880*
- Box 1, Folder 12 Menocal, A.G. *The Nicaragua Canal: Its Design, Final Location, and Work Accomplished , 1890*

- Box 1, Folder 11;
Box 1, Folder 12 "Hearings on House Bill 35 (The Nicaragua Canal) Before the Committee on Interstate and Foreign Commerce,"1896
- Box 1, Folder 12 Ammen, Daniel. "Map of the Nicaragua Canal Route, 1885,"1887
- Box 1, Folder 11;
Box 1, Folder 12 *The Nicaragua Canal: Expected Earnings, A Study of its Commerical Geography, Effect on Ocean Routes, New Trade Advantages for the United States* , undated
- Box 1, Folder 12 Ammen, Daniel. *The Certainty of the Nicaragua Canal Contrasted with the Uncertainties of the Eads Ship-Railway* , undated
- Box 1, Folder 13 Baer, Henry L., J.W. Black, and Edward Ulseth. *Strike Investigation* , 1913
- Box 1, Folder 14 Waddell, J.A.L. "Some Disputed Points in Railway Bridge Designing,"1892
- Box 1, Folder 14;
Box 1, Folder 13 Grant, William H. "Notes on Cements, Mortars, and Concretes,"1891
- Box 1, Folder 14 Barba, W.P., A.A. Blair, I.M. Drown, P.W. Shimer, and C.B. Dudley. "International Standards for the Analysis of Iron and Steel,"undated
- Box 1, Folder 14 Russell, S. Bent. *Neat Tests vs. Sand Tests for Portland Cement* , 1891
- Box 1, Folder 14 Cromwell, J. Foster. "Uniform Practice in Pile-Driving,"1892
- Box 1, Folder 14 Emery, Charles E. "The Cost of Steam Power,"1883
- Box 1, Folder 14;
Box 1, Folder 13 Grant, William H. "Notes on Cements, Mortars and Concretes,"1891
- Box 1, Folder 14 Wisner, George Y. "The Brazos River Harbor Improvement,"1891
- Box 1, Folder 14 "Program: 27th Annual Convention of the American Society of Civil Engineers,"1895
- Box 1, Folder 14 "Transactions of the American Society of Civil Engineers,"1883
- Box 1, Folder 16 Bartlett, John R. "Address Delivered before the New York Board of Fire Underwriters on the Subject of Additional Water Supply for the City of New York,"1887
- Box 1, Folder 17 Bazin, M. *Note sur le Service de Touage a Vapeur Etabi au Souterrain de Pouilly* (French), 1868
- Box 1, Folder 18 Bellasis, E.S. *Roorkee Hydraulic Experiments* , undated
- Box 1, Folder 19 Berges, P. Aristide. *Nouveau Projet*, (French), 1894
- Box 1, Folder 20 Bixby, William H., Edward Burr, and Chas. W. Raymond. *Report of the Board of Engineer Officers as to Maximum Span Practicable for Suspension Bridges* , 1894
- Box 1, Folder 21 Bogart, John. "Map of Crest Lines of Niagara Falls,"1890

- Box 1, Folder 22 Bouscaren, G. *Report of the Progress of Work and Cost of Completing and Maintaining the Cincinnati Southern Railway* , 1880
- Box 1, Folder 23 Bryce, Peter H. *Sewage Disposal [?] Asylum for the Insane [?] London, Ont. [sic]*, (Excerpt), undated
- Box 1, Folder 24 Burr, T.H., Theodore Cooper, and J.J.R. Croes. *Harlem River Driveway* , 1896
- Box 1, Folder 25 Cathels, E.S. *Gas Consumers' Manual* , 1873
- Box 1, Folder 26 Cathels, E.S. *Gas Consumers' Manual*, (cover only), 1873
- Box 1, Folder 27 Cheysson, M., and M. DeLagrene. *Dam Site at Villez-Outline of Works Proposed and Completion of Dam Costs and Specifications* , 1878
- Box 1, Folder 28 Chouliatchenko, M.A.R. *De L'Action de L'Eau de Mer sur Les Mortiers Hydrauliques*, (French), undated
- Box 1, Folder 29 Comstock, C.B. Mississippi River (reports, maps), 1874 and 1876
- Box 1, Folder 30 Considere, M. *Methode D'Epreuve des Constructions en Beton Arme*(French), undated
- Box 1, Folder 31 Cooper, Theodore. *Specifications*, (manual detailing how to write specifications), undated
- Box 1, Folder 32 Cooper, Theodore. *Hudson River Bridge General Specifications for Construction* , 1895
- Box 1, Folder 33 Coxе, Judge. *Niagara Falls Waterworks Company* , 1896
- Box 1, Folder 34 Craighill, William P. *Report to the Commissioners of Jones Falls Development* , 1871
- Box 1, Folder 32;
Box 1, Folder 35 Craighill W.P. *Proposals for Culvert Pipes and Gates for Locks on the Great Kanawha River, West Virginia* , 1876
- Box 1, Folder 32;
Box 1, Folder 35 Craighill, W.P. *Proposals for the Iron Work of a Movable Dam on the Great Kanawha River* , 1877
- Binder 1, Folder 32;
Box 1, Folder 35 Craighill, W.P. *Proposals for the Iron Work of a Movable Dam on the Great Kanawha River* , 1877
- Box 1, Folder 32;
Box 1, Folder 35 Craighill, W.P. *Proposals for the Iron Work of a Movable Dam on the Kanawha River* , 1877
- Box 1, Folder 32;
Box 1, Folder 35 Craighill, W.P. *Proposals for Building a Lock on the Great Kanawha River* , 1875
- Box 1, Folder 32;
Box 1, Folder 35 Craighill, W.P. *Proposals for Building a Lock on the Great Kanawha* , 1875
- Box 1, Folder 35 Craighill, W.P. *Proposals for Building a Dam on the Great Kanawha River* , 1875

- Box 1, Folder 35 Craighill, W.P. *Proposals for Building Lock No. 6, Great Kanawha River, West Virginia* , 1880
- Box 1, Folder 35;
Box 1, Folder 32 Craighill, W.P. *Proposals for Culvert Pipes and Gates for Locks on the Great Kanawha River, West Virginia* , 1876
- Box 1, Folder 35 Craighill, W.P. *Proposals for the Iron Gates for Lock No. 5 on the Great Kanawha River* , 1878
- Box 1, Folder 35 Craighill, W.P. *Proposals for Building a Lock on the Great Kanawha* , 1875
- Box 1, Folder 36 Crosby, Walter. *Macadam Road Surfacing in the Past and for the Future* , 1908
- Box 1, Folder 37 Crozet, C. *Continuation of the Canal* , 1826
- Box 1, Folder 38 Da Silva Ribeiro, Francisco. *Nouvelle Methode pour le Calcul des Profils en travers des Routes et des Chemins de Fer*, (French), 1898
- Box 1, Folder 39 de Smedt, E.J. *The Use of Silca Gravel in Concrete* , undated
- Box 1, Folder 40 Delafield, Richard. *Memoir on Foundations in Compressible Soils with Experimental Tests of Pile-Driving and Formula for Resistance Deduced Therefrom* , 1878
- Box 1, Folder 41 Deprez, Marcel. *Notice on the Scientific Work of*, (French), 1883
- Box 1, Folder 41 Deprez, Marcel. *Scientific Works of*, (French), 1889
- Box 1, Folder 42 Dudley, Charles B. *The Chemical Composition and Physical Properties of Steel Rails* , 1879
- Box 1, Folder 43 Durham, C.W. *House Drainage in U.S.* , 1892
- Box 1, Folder 44 Elliott, George H. *Annual Report Upon the Washington Aqueduct; Increasing Water Supply of the City of Washington; and Erection of Fish Ways at the Great Falls of the Potomac* (two copies), 1893 and 1894
- Box 1, Folder 45 Fanning, J.T. *Report on a Water Supply for New York and other Cities of the Hudson Valley* , 1881
- Box 1, Folder 46 Davis, Chas. E.L.B. *Annual Report Upon the Repair of the Aqueduct Bridge Across Potomac River, at Washington, D.C.* , 1895
- Box 1, Folder 47 Feret, M.R. *Experiences sur les Pouzzolanes* (French), undated
- Box 1, Folder 48 Flagg, Ernest. "Construction of a New Seawall,"1898
- Box 1, Folder 49 Flynn, Benjamin, and Margaret Sandusky. *Maumee, Muskingum, and Miami Drainage Areas in Ohio* , 1904
- Box 1, Folder 50 Forrest, James. *Hydraulic Experiments* , 1882
- Box 1, Folder 51 Freeman, John R. *Digest of Report on New York's Water Supply* , 1900

- Box 1, Folder 52 Frick, William F., J.H. Gordon, and I.N. Steele. *Appellee's Brief Facts and Supplemental Statement of Points* , 1880
- Box 2, Folder 1 Farque, M. *La Largeur de Lit Moyen*, (French), 1882
- Box 2, Folder 2 Gardiner, James T. *State Board of Health, New York: Report to the State Board of Health, on the Methods of Sewerage for Cities and Large Villages, in the State of New York* , undated
- Box 2, Folder 3 Gillmore, Q.A. *Report of Experiments with the Seely and Bethell Processes for the Preservation of Timber, Accompanied by Descriptions of those Processes and of the Hayford Process* , 1879
- Box 2, Folder 4 Gillmore, Q.A., John Newton, and William E. Worthen. *Construction of the River Wall Designed by George S. Greene, Jr. Esq., and in Progress of Erection on the Waterfront Since 1876 and Report* , 1881
- Box 2, Folder 5 Goldmark, Henry. *Locks and Lock Gates for Ship Canals* , 1899
- Box 2, Folder 6 Grover, N.C. *Surface Water Supply Mid Atlantic* , 1906
- Box 2, Folder 7 Hadden, David, B.H. Hutton, and Godfrey Pattison. "Letter to the Honorable Senators and Members of the House of Representatives on the New Tariff Bill,"1840
- Box 2, Folder 8 Hall, William Ham (State Engineer, California), *The Irrigation Question* , 1886
- Box 2, Folder 9 Henrich, Carl. *A Water-Cooling Apparatus* , 1895
- Box 2, Folder 10 Hertle, John C., and Edward Owen. *Report of the Commissioners of Accounts of the City of New York* , 1900
- Box 2, Folder 11 Hilgard, Eugene, and F.V. Hopkins. *Reclamation of Alluvial Basin of the Mississippi River* , 1878
- Box 2, Folder 12 Hirsch, M.J. *Notice sur Elevateurs et Plans Inclines pour Canaux* (French), 1881
- Box 2, Folder 13 Hughes, G.W. *Report on the Memorial of the Directors of the Metropolitan Railroad Company* , 1860
- Box 2, Folder 14 Kirkaldy, David. "To the Members of the Research Committee of the Institution of Mechanical Engineers,"1880
- Box 2, Folder 15 Latrobe, Benjamin. *Report Upon a Reconnoissance for a Railway Route from the Laurel Station on the Washington Branch Railroad to the Baltimore and Ohio Railroad Near the Monocacy River* , 1856
- Box 2, Folder 16 Le Chatelier, M.H. *Sur la Decomposition des Ciments a la Mer*, (French), undated
- Box 2, Folder 17 Leighton, M.O. *Preliminary Report of the Pollution of Lake Champlain* , undated
- Box 2, Folder 18 Leighton, Marshall. *Sewage Pollution in the Metropolitan Area near New York City and its Effect on Inland Water Resources* , 1902

- Box 2, Folder 19 Leighton, Marshall O. *Pollution of Illinois and Mississippi Rivers by Chicago Sewage* , 1907
- Box 2, Folder 20 Lyon. *Bridges and Roads-Special Service for the Rhone (Improvement of the Rhone from Lyon to the Mediterranean Report of the Chief Engineer)* , 1878
- Box 2, Folder 21 Maso, James L. *An Analytical Investigation of the Resistance of Piles to Superincumbent Pressure*, (Reprint. Original Publication date 1850), 1881
- Box 2, Folder 22 Mason, W.P. *Sanitary Problems Connected with Municipal Water Supply* , 1897
- Box 2, Folder 23 McAlpine, William J. *Report of Spring Valley Water Works and a Memoir on the Water Supply of San Francisco* , 1878
- Box 2, Folder 24 McAlpine, William J. *Report Made to the Staten Island Water Supply Company for Supplying the Villages of New Brighton, Edgewater, and Port Richmond, Staten Island with Pure and Wholesome Water* , 1879
- Box 2, Folder 25 McAlpine, William J. (Honorable). *A Supply of Water City of Norfolk* , 1871
- Box 2, Folder 26 McAlpine, William J. *Analysis of the Water from the Different Sources (Troy)*,, 1872
- Box 2, Folder 27 McAlpine, William J. *Remarks of William J. Alpine, Civil Engineer Before the Mayor and Commission on the Projects for an Increased Water Supply, (Croton Water Supply, City of New York)*, 1883
- Box 2, Folder 28 McElroy, Samuel. *Papers on Hydraulic Engineering Corrosion of Cast-Iron Pipes* , 1883
- Box 2, Folder 29 Menocal, G. *Channel Improvement, Washington Navy Yard* , 1882
- Box 2, Folder 30 Morison, George S. *Expansion Bearings for Bridge Super-Structures* , 1894
- Box 2, Folder 31 Florida Ship Canal (map), 1879
- Box 2, Folder 31 Tebbetts, Horace B. *The Maryland and Delaware Ship Canal Company* , 1885
- Box 2, Folder 31 *Isthme de Panama Chemin de fer Interoceanique pour Navires* (French), 1879
- Box 2, Folder 31 *Cuestion de Tehuantepec*, (Spanish), 1852
- Box 2, Folder 31 Roberts, W. Milnor. "Abstract of the Report of the Hydraulic Commission of Brazil,"1880
- Box 2, Folder 31 *Ueberischtskarte der norddeutschen Wasserstrassen nebst Langenschnitten des Rhein-Weser-Elbe, des Berlin-Stettiner und des Masurischen Kanals* (German), 1900
- Box 2, Folder 31 Unidentified title (Dutch), cover page missing, undated
- Box 2, Folder 31 Danube from Nussdorf to Aksier Ebersdorf, 1879
- Box 2, Folder 31 Nourse, J.E. (United States Navy). *The Maritime Canal of Suez, from its Inauguration, November 12, 1869, to the Year 1884* , 1884

- Box 2, Folder 31 *Der Donau-Oder-Canal*, (German), 1872
- Box 2, Folder 31 Ammen, Daniel. "Letter Relating to Isthmus Transits," (two copies), 1881
- Box 2, Folder 31 Ammen, Daniel. "Admiral Ammen Replies," (two copies), 1881
- Box 2, Folder 33 Merrill, M.E. "Letter from Secretary of War, Ohio River Improvement,"1875
- Box 2, Folder 34 Oberholtzer, Francesco (Prof). *Ponto Di Mare Roma* (Italian), 1876
- Box 2, Folder 35 Phelps, Earle Bernard. *Prevention of Steam Pollution by Strawboard Waster* , 1906
- Box 2, Folder 36 Schuyler, M. *Use of Asphaltum for Reservoir Linings* , undated
- Box 2, Folder 37 Sickels, T.E. *Report of Supply of Water for Baltimore* , 1859
- Box 2, Folder 38 Smith, William Sooy. *Progress of Engineering and Improvements Needed in Chicago* , 1893
- Box 2, Folder 39 Soper, George Albert. *Report of the Efficiency and Betterment of the Hudson City Filter Plant* , 1895
- Box 2, Folder 40 Starling, William. *Keeping the Mississippi Within her Banks* , 1891
- Box 2, Folder 41 Stearns, F.P. "American Society of Civil Engineers Experiments on the Flow of Water in a 48 inch Pipe,"1894
- Box 2, Folder 42 Tappan, Charles. *Irrigation from the Yellowstone River* , 1894
- Box 2, Folder 43 Taylor, Thomas U. *Water Powers of Texas* , 1904
- Box 2, Folder 44 Tratman, E.E. Russell. *Report on the Use of Metal Railroad Ties and on Preservative Processes and Metal Tie-Plates for Wooden Ties* , 1894
- Box 2, Folder 45 Trautwine, John. Circular Descriptive of "Journal of the Association of Engineering Societies," (two copies with letter to Hutton from Trautwine describing the circular), 1895
- Box 2, Folder 32 Twining, J.S. *Potomac River Front* , 1879
- Box 2, Folder 46 Verne, Henri. *Le Rhone a Marseille* (French), 1878
- Box 2, Folder 47 Waller, Logan. *The Selection of Materials for Macadam Roads* , 1900
- Box 2, Folder 48 Wariny, George. *Buffalo Trunk Sewer* , 1883
- Box 2, Folder 49 Waring, George E. *De Riroleering Van Den Haag* (German), undated
- Box 2, Folder 50 Waring, George. *Memphis Sewers* , undated
- Box 2, Folder 51 Waring, George A. *Proper Disposal of Sewage* , 1896
- Box 2, Folder 52 Waring, George. *Purification of Sewage* , undated
- Box 2, Folder 53 Waring, George E. *Purification of Sewage by Forced Aeration* , undated

Box 2, Folder 54 Waring, George. *Sewage Disposal* , 1892

Box 2, Folder 55 Waring, George E. *Sewage Disposal at Wayne, P.A.* [sic], 1892

Box 2, Folder 56 Waring, George. *Sewage of Two New Hampshire Towns* , undated

Box 2, Folder 57 Westen, Edmund B. *Report of the Results Obtained with Experimental Filters at the Pettaconset Pumping Station of Providence Water Works* , 1896

Box 2, Folder 58 Winans, Ross. *Minority Report to Examine Sources from which a Supply of Pure Water May be Obtained* (Baltimore), 1853

Subseries 9.3: Newspaper Clippings, 1855-1901

Box 4, Folder 4 1855-1891

Box 4, Folder 4 "First Union Tunnel Opening-Baltimore"1873

Box 4, Folder 4 "Baltimore American"1867

Box 4, Folder 4 "The Drum Point Railroad Again,"1874

Box 4, Folder 4 *Consolidation Coal Company and Cumberland and Pennsylvania Railroad Company vs. the Pennsylvania Railroad Company in Maryland* , 1879

Box 4, Folder 4 "Railroads, Western Maryland Railroad Company,"1875

Box 4, Folder 4 "Points of Pending Suits in Relation to the River Front ecetera,"1880

Box 4, Folder 4 "Metropolitan Railroad,"[1886?]

Box 4, Folder 4 "Metropolitan Railroad,"1855

Box 4, Folder 4 "A Costly Bridge that Nobody Uses" (Harlem River Bridge), 1889

Box 4, Folder 4 "Who Read this Page Without Laughing,"1885

Box 4, Folder 5 1873-1901

Box 4, Folder 5 "Western Crop Prospects, Lumber Trade Situation, Missouri Pacific Plans,"1900

Box 4, Folder 5 "The North Avenue Bridge Question,"1901

Box 4, Folder 5 "The Bridge Terminal Problem,"1901

Box 4, Folder 5 "Build the Canal" (Nicaraguan Canal), 1894

Box 4, Folder 5 *The Railroad Gazette* , 1892

Box 4, Folder 5 "The City's Topographical Map,"1892?

Box 4, Folder 5 "River Improvement,"1892

Box 4, Folder 5	"River and Harbor" (Columbia, District of Columbia), 1892
Box 4, Folder 5	"The End of the Bridge,"1901
Box 4, Folder 5	"Will Save Millions" (Nicaraguan Canal), 1894
Box 4, Folder 5	"Will Save Millions" (Nicaraguan Canal), 1894
Box 4, Folder 5	"Views of an Engineer,"1894?
Box 4, Folder 5	"E.B. Thomas Condemns West Street Scheme,"1901
Box 4, Folder 5	"Economic Canalization" (Nicaraguan Canal), 1894?
Box 4, Folder 5	"The Nicaragua Canal Issue,"1894
Box 4, Folder 5	"Belt Tunnel Suit,"1892
Box 4, Folder 6 (text); Box 4, Folder 5 (text)	"Rapid Transit Extension,"1900
Box 4, Folder 5	"The Canal Problem,"1898
Box 4, Folder 5	"The Flooded District,"1880
Box 4, Folder 5	"Proposed Canal Around Dangerous Cape,"1900
Box 4, Folder 5	"The Spring Field Bridge--A Reply to Mr. Philbrick,"1875
Box 4, Folder 5	"The Development of Tunnel Shields,"1896
Box 4, Folder 5	"The Development of Tunnel Shields,"1896
Box 4, Folder 5	"Plates of Uniform Strength,"1895
Box 4, Folder 5	"Water Works Question Discussed,"1882
Box 4, Folder 5	"Deep Sea Harbor in Southern California,"1896
Box 4, Folder 5	"Annual Statement on Imports and Exports,"1880
Box 4, Folder 6	1874-1896
Box 4, Folder 6	Scrapbook of newspaper clippings (docks, Drum Point, Bridge building, Board Tree Tunnel, Chesapeake and Ohio Canal, Washington Canal, harbor notes, Kanawha River Canal, Great Falls, Kingwood Tunnel, Georgetown locks, Pinjointed Bridge vs. Lattice Bridge, Springfield Bridge), 1877-1888
Box 4, Folder 6	"Mr. Bender's Rejoinder" (Springfield Bridge), 1875
Box 4, Folder 6	"General Railroad News,"1875
Box 4, Folder 6	"Rapid Bridge Construction,"1875
Box 4, Folder 6	Springfield Bridge, 1875

Box 4, Folder 6 "Pin-jointed Bridges versus Riveted Lattice Bridges in America,"1875

Box 4, Folder 6 "English and American Technical Societies,"1875

Box 4, Folder 6 "Double Lattice,"1875

Box 4, Folder 6 "The Coming Railroad Conventions,"1875

Box 4, Folder 6 "The Railroad Gazette, Editorial Announcements,"1874

Box 4, Folder 6 "Kingwood Tunnel,"1874

Box 4, Folder 6 "Patents" (railroads), 1874

Box 4, Folder 6 "Board-Tree Tunnel"1875?

Box 4, Folder 6 "Working the Temporary Steep Gradients on the Baltimore and Ohio,"1874

Box 4, Folder 6 "The Scrap Heap,"1874

Box 4, Folder 7 1880-1894

Box 4, Folder 7 "The Panama Canal,"undated

Box 4, Folder 7 "Lesseps in the Field,"1880

Box 4, Folder 7 "The River Weaver Navigation and the Manchester Ship Canal,"1894?

Box 4, Folder 7 "A Ridiculous Route,"1894

Box 4, Folder 7 "Mississippi Jetties,"undated

Box 4, Folder 8 1889-1895

Box 4, Folder 8 "North Tunnel All Right,"1891

Box 4, Folder 8 "Hudson Tunnel Railway,"1892

Box 4, Folder 8 "Put a Lien on the Tubes" (Hudson Tunnel Railway), 1892

Box 4, Folder 8 "This May Wind Up the Tunnel Company,"1892

Box 4, Folder 8 "Says the Tunnel's All Right,"1890

Box 4, Folder 8 "Crushed in the Tunnel"[1892?]

Box 4, Folder 8 "Twenty Years Labor Lost," (Hudson River Tunnel), 1892

Box 4, Folder 8 "No Danger in the Hudson River Tunnel,"[1892?]

Box 4, Folder 8 "More Trouble for the Poor Old Tunnel" (Hudson River Tunnel), 1891

Box 4, Folder 8 "The Hudson River Tunnel,"1891

Box 4, Folder 8 "Cash Sunk, Indeed" (Hudson River Tunnel), 1891?

Box 4, Folder 8 "The Hudson River Tunnel All Right,"1891

Box 4, Folder 8	"Hudson Tunnel Railway Company of New York,"1894
Box 4, Folder 8	"Hudson Tunnel Railway Company,"1895
Box 4, Folder 8	"Under the Hudson River,"1891
Box 4, Folder 8	"No Money for the Tunnel,"1891?
Box 4, Folder 8	"Under the Hudson,"1889
Box 4, Folder 8	<i>Scientific American</i> , Vol. LXIII, No. 18 (issue focusing on Hudson River Tunnel), 1890
Box 4, Folder 8	"The Great Tunnel Under the Hudson River between New York and New Jersey,"1880
Box 4, Folder 9	Unidentified Year, undated
Box 4, Folder 9	"Steel Boilers in England"undated
Box 4, Folder 9	Composition and Use of Cement, undated
Box 4, Folder 9	"A Report on Puerto Rico,"undated
Box 4, Folder 9	'Sardou to Miss Davenport,"undated
Box 4, Folder 9	Brooklyn Bridge, undated
Box 4, Folder 9	"The Mission Delores,"undated
Box 4, Folder 9	"The Real Port of New York,"undated
Box 4, Folder 9	"The Peabody Institute: Proceedings at a Special Meeting of the Trustees, Held Upon the Occasion of the Death of the President of the Board, S. Teachle Wallis, Esquire,"undated
Box 4, Folder 9	"[...] James March Esquire,"undated
Box 4, Folder 9	"Metropolitan Railroad,"undated
Box 4, Folder 9	"North Boundary Avenue Bridge--A Plain Statement of Facts"undated
Box 4, Folder 9	"Seacoast Defenses [...],"undated
Box 4, Folder 9	"The Loop and the Bridge,"undated
Box 4, Folder 9	"Other Canals,"undated
Box 4, Folder 9	"Build the Canal" (Nicaraguan Canal), undated

Subseries 9.4: Oversized Printed Material, 1889-1892

Box 25, Folder 1	Portrait of Montgomery C. Meigs, undated
------------------	--

Box 25, Folder 2	Portrait of William R. Hutton, undated
Box 25, Folder 3	Portrait of William R. Hutton, undated
Box 25, Folder 4	Apotheosis of Washington Capitol Building Dome, undated
Box 25, Folder 5	Construction of second Washington Capitol Building Dome, 1859
Box 25, Folder 6	Photograph of first dome during the construction of the second Capitol Building Dome, [1855?]
Box 25, Folder 7	Eastern Front Door North Wing of the Washington Capitol Building, 1859?
Box 25, Folder 8	Peristyle of Dome (Washington Capitol Building), 1857
Box 25, Folder 9	Cross section of second Washington Capitol Building dome and elevation of new dome, 1859?
Box 25, Folder 10	Early construction photo of new dome on Washington Capitol Building, old dome visible, 1855?
Box 25, Folder 11	Elevation of Dome of Washington Capitol, 1859
Box 25, Folder 12	Prospectus Drawing of Second Washington Capitol Building Dome, [1854?]
Box 25, Folder 13	Section of Tholus on Dome of United States Capitol (cross section of the Statue of Freedom), 1859
Box 25, Folder 14	Washington Capitol Dome workers next to construction magnet and shanty, 1855-1865?
Box 25, Folder 15	Tholus on Dome of United States Capitol (Statue of Freedom), 1859
Box 25, Folder 16	Washington Aqueduct, construction equipment, [1853-1859?]
Box 25, Folder 17	Washington Aqueduct, construction equipment, 1853-1859
Box 25, Folder 18	Washington Aqueduct, worker's shanty, [1853-1859?]
Box 25, Folder 19	Washington Aqueduct, construction [drill?], 1853-1859?
Box 25, Folder 20	Washington Aqueduct, construction [drill?], 1853-1859
Box 25, Folder 21	Washington Aqueduct, workers and pipes, 1853
Box 25, Folder 22	Washington Aqueduct, construction [drill?], [1853-1859?]
Box 25, Folder 23	Washington Aqueduct, sluice tower recg. [sic] reservoir, [1853-1859?]
Box 25, Folder 24	Washington Aqueduct, [sluice tower?], [1859?]
Box 25, Folder 25	Washington Aqueduct, overfall number 1, [188?]
Box 26, Folder 1	Canal on [Washington Aqueduct?], 1858
Box 26, Folder 2	Washington Aqueduct guard [gate?], 1858

Box 26, Folder 3	Washington Aqueduct, culvert 23, 1858
Box 26, Folder 4	Washington Aqueduct, dam for falls, 1858
Box 26, Folder 5	Men gathered at [Washington Aqueduct?], [1853-1859?]
Box 26, Folder 6	Washington Aqueduct, trench above culvert 15, 1858
Box 26, Folder 7	Washington Aqueduct, culvert number 18 over Reading Run, 1858
Box 26, Folder 8	Tunnel for Washington Aqueduct, 1858
Box 26, Folder 9	Washington Aqueduct, feeder at Great Falls, 1853-[1859?]
Box 26, Folder 10	Washington Aqueduct, bridge number 3, 1858
Box 26, Folder 11	Concept drawing of General Post Office Building, 1858
Box 26, Folder 12	General Post Office Building (under construction), 1858
Box 26, Folder 13	Mechanical drawings and calculations for subway [arch?], undated
Box 26, Folder 14	Engraving of T.N. Talfound by J. Sartain, undated
Box 26, Folder 15	Engraving of F. [Jeffrey?] by J. Sartain, undated
Box 26, Folder 16	Two sided drawing of unidentified church, undated
Box 26, Oversize 17	Cornice drawings, Temple of Pola, Arch of Adrian, Baths of Diocletian, Vesta Tivoli, Jupiter Tonans, Nero, undated
Box 26, Folder 18	Plate of painting containing religious imagery (Virgin Mary and Christ, Saint Benedict(?), and soldier), undated
Box 26, Folder 19	Neuschwanstein Castle, Bavaria, Germany, undated
Box 26, Folder 20	Photograph of painting of blind man with rosary and child, undated
Box 26, Folder 21	Plate of Warwick's Castle from Guy's Tower, Warwickshire, England, undated
Box 26, Folder 22	Printed map of Sardinia,, undated
Box 26, Folder 23	Hand drawn botanical print, Maba Fuliosa, Maba Elliptica, undated
Box 26, Folder 24	Printed concept drawing for school buildings and church for the colored persons [sic: label on drawing] of St. Matthew's Parish,, undated
Box 26, Folder 25	Printed concept drawing for the Hospital for the Insane of the Army and Navy and the District of Columbia,, 1860-1861
Map-folder 18	Printed photograph of Panama Canal, undated
Map-folder 18	Map of Morningside Park, 1887
Map-folder 18	Plan of Mississippi Jetties, 1876
Map-folder 18	German map of waterfront, undated

Repair guide : R button Right Joy-Con. Level : Easy Time : 35 min Author : Alexandre. 890 people have done this repair successfully ! Why not you? The R button is often heavily used in almost all Nintendo Switch games. This heavy use can lead to the button wearing out, and sadly sometimes results in the button breaking. Fortunately, thanks to our repair guide with detailed images and comments, you can repair your Right Joy-Con yourself, and replacing the R button in just a few steps! Problems: R button doesn't work. R button jammed. Some advice before you start. On the shop : Boutons Nint