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President  
Arthur C. Willard  
Arthur C. Willard Papers, 1900-, 1949, 1951, 1954, 1956

Box 1:

Air, Steam, Water, Oil, Flow of, 1914-34  
Air Conditioning, Air Washing, Humidifying, Cooling, Drying, 1907-32  
Air Conditioning, 1924-34  
Consulting Services  
    Executive Office Building, 1909  
    Columbia Hospital, 1912  
    Keep House, 1908  
    Mann House, 1910  
    St. John's Church, 1913  
    St. Martin's Church, 1911  
    Sedgley House, 1913  
    Southern Illinois State Normal University 1913-14  
    Woodward and Lathrop, 1913  
    Washington and Lee University  
    Army Quartermaster, U.S. - Specifications, 1908-14  
    Army Cantonment, Barracks Heaters, 1917-18  
    Army Posts, Fort Sill and others, Quartermaster General, Correspondence, Charts,  
        Photographs, 1912-17  
    Blueprints, Tracings - Miscellaneous, 1908-27  
    Blueprints, Tracings - Miscellaneous

Box 2:

Consulting Services  
    Chicago Subway, blueprints, 1930  
    Chicago Subway, Correspondence, 1931-32  
    Chicago Subway, Correspondence relating to compensation for consulting service, 1930-32  
    Congress - Ventilation of U.S. House & Senate Chambers, 1927-29  
    Holland Tunnel, Report, 1920-21  
        Printed Reports relating to, 1920-37  
        Bound Reports, 1920-26  
        Computations  
    Photographs - TGI #3, 1921  
    Holland Tunnel, TGI #3, correspondence, 1920-21, 1921, 1921-22  
    Hudson Tunnel, Experimental Duct #3, 1921-24  
    Holland Tunnel, TGI #4, correspondence, 1921  
        TGI #4, correspondence & Blueprints, 1921-26

Box 3:

Consulting Services  
    Photographs, TGI #3, 1922  
    Tunnel Gas Investigation #5, Original MSS, 1923  
    Holland Tunnel, Correspondence relating to TGI #5  
        Report on ventilation tests for, Nov. 1921  
        Blueprints of ventilation test results

## Willard Papers St. Louis Subway General Plans

- Goodenough's Notes, 1921-24
- Goodenough's Notes on Fluid Dynamics - Holland Tunnel, 1921-23
- Holland Tunnel, Correspondence, blueprints, reports, 1920-21
  - Telegrams, 1920-22
  - Duplicate Reports, 1921
  - Time and Material, 1921-24
  - Reports & Original test records; publications on Ventilation, 1922-25

Box 4:

## Consulting Services

- Holland Tunnel, Final Calculation Data - received from Mr. Freeman, 1/8/25
- Holland Tunnel, Photographs (2 folders), 1923-27, 1924-27
  - Photographic Plates, 1924-25
  - Clippings, 1921-28
  - Contracts
  - Correspondence relating to compensation for consulting services, 1921-27
  - Correspondence and related reports, 1924-38
- Hudson Tunnel, Correspondence relating to providing consulting services in Midtown
  - Hudson Tunnel, October 11, 1931
- Midtown Hudson Tunnel, Correspondence & Calculations, 1931-34
- Hudson Tunnel, Reports and blueprints on ventilating calculations for, November 30, 1932
- Midtown Hudson Tunnel, Reports on Ventilation Calculations, 1932
- St. Louis Subway, blueprints, 1930-31
- St. Louis Subway, Ventilation and North American Light and Power Company, correspondence, 1931-32

Heat, Emission, Human body, 1924-33

Losses from buildings, 1933-34

Box 5:

Heat, Losses, Buildings and insulating material, 1907-32

- Transmission of Building Materials, 1912-32
- Losses, Insulation and Weather Stripping, 1923-24
- Measurement and Physical Units
- Transmission, 1914
- Transmission and Direct Radiators, 1909-31
- Transmission, correspondence, reports, reprints of published material, 1912-32
- Exhaust stream, Vacuum Return Pumps, 1907-30

Heating, Central Station, 1907-30

- Commercial Preparation of Sodium Hypochlorite by the Electrolysis of Brine, 1904
- Draft and Chimneys, 1912-27
- Electric, 1907-28
- Fuel and Combustion, 1912-32
- Gravity Indirect, by steam and hot water, 1910-29

Box 6:

Heating, Hot Blast, 1913-33

## Willard Papers St. Louis Subway General Plans

- Direct Hot Water, 1907-32
- Pipe fittings, Valves, coverings, 1907-33
- Radiant - Barker Proposals, 1931-32
- Seasonal Requirements, 1926-30
- Steam Boilers and Hot Water Heaters, 1910-29
- Direct Steam, 1907-27
- Test data, 1903-04
- Temperature and Humidity Control, 1926-33
- Utica Heater Company, 1920-22
- Ventilating, Air Conditioning - bibliographic materials, 1924-33
- Ventilating Codes (2 folders)
- Warm air furnace, 1907-29

### Box 7:

- Heating Catalogues, Warm Air Furnace, ca. 1928
- Water, Steam and Air, papers relating to, 1900-33
- Plans & Specifications, preparation of - Cost of Equipment, 1913-28

### Professional Associations

#### American Society of Heating and Ventilating Engineers

- Air Changes, 1932-33
- Air Conditions and Living Comfort, 1931-32
- Air Conditions and their Relation to Health, 1930
- Armour Institute, Cooperative Agreement with, 1931-32
- Atmospheric Dust and Air Cleaning Devices 1933
- Boilers, rating heating, 1928-29
- Chimney sizes, 1926
- Cleveland Exhibit, 1931-32
- Code of minimum requirements, 1924-31
- Comfort Chart, Special Committee on the, 1932
- Corrosion, 1932-33
- Council of the ASHVE, meetings of the, 1928-29
- Finance Committee, 1932
- Garage Ventilation Project, 1931-33
- Garage Ventilation, 1927-28
- Gas Heating Equipment, 1932
- Guide Book, 1928-30
- Guide, ASHVE - Special Committee, Chapter 3, 1933
- Heat Capacity, 1931
- Heat Transmission, 1931-32
- Heater Code Committee, Unit, 1928-29
- Infiltration of air into buildings, 1925-27
- National Research Council, 1931-33
- Nomenclature, Committee on, 1933-34
- Oil Burners, Investigation of by Prof. Sealy of Yale, 1932

### Box 8:

#### American Society of Heating and Ventilating Engineers

## Willard Papers St. Louis Subway General Plans

- Program Committee, 1930
- Projects, New, 1932-34
- Pip Sizes, 1931-33
- Publication Committee, 1925-27
- Publication Committee, 1928-30
- Radiation, 1926-29
- Research Committee, 1926-30
- Regulations governing the Research Committee, 1932
- Research Committee, 1933-34
- Research laboratory Project at Pittsburgh, 1931-33
- Research Program at Case Institute, 1933
- Sound in Heating and Ventilating, 1931-32
- Temperature Gradients in Large Room, paper by G.L. Larson, 1933
- Special Test on Cooling conducted by J.U. Walker, 1931-32
- Technical Advisory Committees, Appointments to, 1932-33
- Thermal Research, Correlation of, 1932
- Ventilation of automatic substations, 1924-27
- Ventilation Code for legislative purposes, 1926-31
- Ventilation Code, 1931-34
- Wind and weather conditions, effect of, 1929
- National Research Council, Committee on Heat transmission, 1924-31
- Textbook, Harding-Willard, page proofs - Heating, Ventilating and Air Conditioning

Box 9:

- Textbook, Harding-Willard, final proof with corrections for later printings, 1932
- Textbook, Harding-Willard, Heating, Ventilating and Air Conditioning, material for future revision.
- Ventilation, Air Analysis, Ventilation Law, 1919-33
- University, Underground Ventilation, 1925
  - Summer cooling tests, 1930-33
  - Laboratory Course at University of Illinois, M.E. 37, 1915
  - Correspondence, Reprints and Related Papers, 1911-22
  - MSS and reprints, 1919-33
  - MSS articles on home heating for Ladies Home Journal and Successful Farming, 1929-30
- Scrapbooks, University, Newspaper and Magazine Clippings, 1914, 1925-30, 1934-36, 1938-39, 1943-46, 1949, 1951, 1954
- Scrapbooks, University, Building Program at the University of Illinois, 1934-42
  - Legislative Budget, 1935-37 biennium
  - Statistical Material, 1937
  - Printed papers and addresses, 1915, 1925-26, 1930-32, 1934-38, 1941-46

Box 10:

- University, Notes and MSS of addresses (11 folders), 1933-41

Box 11:

- University, Notes and MSS of Addresses (4 folders), 1942-47
  - A.A. Harding, 1948

## Willard Papers St. Louis Subway General Plans

Christmas Cards, 1940

Enger folder, 1956

"University of Illinois Presidents I Have Known" by Albert R. Lee, 1942

Located in UAR 47-2

Oversized Miscellaneous Blueprints and Drawings (chronological)

Plumbing and heating plan for residence of J.R. Retsoff (5 tracings), 1907  
 Heating and ventilating plan for a residence (9 blueprints), 1909  
 Plan of executive offices, Washington, D.C. (3 blueprints), 1909  
 Ventilating plan for Grace Memorial Church (1 blueprint), 1911  
 Plan for Hospital at Fort Sill, Oklahoma (6 blueprints), 1911  
 Plan for Walter Reed Army Hospital (8 blueprints), 1912  
 Ventilating system for Woodward and Lathrop Cash Room, 1917  
 Central heating system - Recruit Depot - Angel Island, California, 1912  
 Heating system for Quartermaster Storehouse, Fort Banks, Mass., 1913  
 Ventilation plan for lecture room in University of Illinois Chemistry Building, 1914  
 Boiler House, Fort Monroe, Va., (3 blueprints), 1914  
 High School building, Mattoon, Ill. (5 blueprints), 1915  
 Specifications for Merchants Illinois National Bank, Peoria, 1915  
 Plans for Lincoln School, Rockford, Ill. (12 blueprints), 1915  
 Kitchen plan for Armory mess hall (1 blueprint, 1 drawing), 1918  
 Heating and ventilation system for University of Illinois Education building, 1919  
 Plans for grade and high school at Vermont, Ill. (1 blueprint), 1924  
 Chart indicating operating results for University of Illinois research residence, 1925  
 Heating and ventilating system of school at Wausau, Wis., 1928  
 Ventilating diagrams of U.S. House of Representatives Chamber (3 diagrams), 1929

Undated blueprints and drawings

Tracing of coal and ash handling machinery  
 Design of a tilting manometer  
 Floor plan of Champaign High School  
 Diagrams illustrating air flow through types of elbows in ventilating ducts (3)  
 Duct system for University of Illinois Armory  
 Plan for a model school building at Southern Illinois State Normal University, Carbondale, Illinois  
 Plans for dining hall at Washington and Lee University, Lexington, Va. (3 blueprints)  
 Plans for residence of Dr. L.T. Gregory, Urbana, Ill. (8 tracings)

Blueprints and Drawings by Subject

Holland Tunnel, approximately 40 blueprints and drawings  
 Chicago Subway, approximately 100 blueprints and drawings  
 St. Louis Subway, approximately 100 blueprints and drawings  
 Loft office Building, St. Louis, MO

Box 12: Chicago Subway Ventilation, 1930-32

Willard Papers St. Louis Subway General Plans

Slides - 23 Lantern slides on Ventilation studies showing equipment and results of tests made at Mechanical Engineering laboratory, 1930-32.

Chicago Subway Ventilation, No. 1, 1931

Draft for Report No. 1

Chicago Subway, 1930

Proposal, correspondence, blueprints and specifications

Experimental Tower, 1930-31

Requisitions, data, specifications, calculations and graphs

Chicago Subway, 1931

Blueprints, photographs and negatives of ventilation equipment (one glass plate)

Chicago Subway Ventilation - Test date, Jan. 13, 1931 - June 13, 1931

Report on certain tests on the performance of a ventilation tower unit for the Chicago Subway, February 13, 1931

Second report, Chicago Subway Ventilation, August 1, 1931

November 1, 1981. Under RBR Uncat. 82 7 the Rare Book Room held a testimonial of appreciation on Willard's retirement in 1946, from the Board of Trustees with hand-illumination by the Scriptorium, Chicago and a 1946 testimonial of appreciation on his retirement, from the Illini Union Board and a 1946 testimonial of appreciation on his retirement, from the faculties and staff of the Chicago Colleges of the University of Illinois. With hand-illumination by the Scriptorium, Chicago.

Box 13:

Materials from Estate of Betsy Ross, A. C. Willard's Niece

Genealogical Correspondence, Clippings and Records, 1903-47

Photographs of A. C. Willard and Ossian Ross

Correspondence of A. C. Willard with Betsy Ross and other family members, 1884-1959

Financial Records, Real Estate Deeds, and Bonds

A. C Willard Speeches (reprints)

Box 14 (Oversize):

Arthur C. Willard Papers, Folder 1 of 4: Chicago Subway Drawings

Box 15 (Oversize):

Arthur C. Willard Papers, Folder 2 of 4: Holland Tunnel Drawings

Box 16 (Oversize):

Arthur C. Willard Papers, Folder 3 of 4: Chicago Subway Drawings

Box 17 (Oversize):

Arthur C. Willard Papers, Folder 4 of 4: Holland Tunnel Drawings

Willard Papers St. Louis Subway General Plans

Box 18 (Oversize):

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Willard Papers St. Louis Subway General Plans

Box 19 (Oversize):

Willard Papers St. Louis Subway Final and Preliminary Ventilation Plans; Details of Concrete Ducts, Steel Details

Box 20 (Oversize):

St. Louis Subway Plans Retaining Walls, Cross Sections, Longitudinal Sections

Box 21 (Oversize):

Blueprints and Drawings by Subject - Loft office building, St. Louis, MO, 1930