Mutual Life Insurance 1884. Under-window radiators with fresh air inlet ventilation and mechanical exhaust.

HVAC IN HISTORIC BUILDINGS OF USA
PART ONE
NEW YORK CITY

BRIAN ROBERTS
Under-window radiators, sash inlet ventilators and mechanical exhaust 1894. Note external window blinds.
The Heritage Group has recorded details of the history and HVAC engineering services in a variety of early New York buildings, some of which are shown in this booklet.

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BMR, Budleigh Salterton 2021.
METROPOLITAN OPERA HOUSE

Drawing of ventilation system 1883.
Plan of plenum ventilation 1883.
CARNEGIE HALL

Plan of 1891.
NEW YORK MUSIC HALL

The Music Hall was one of three Halls within Carnegie Hall. Drawing of 1891.
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Air Cooling Ventilation Fans, 1891.
Fan Chamber 1891.
BROOKLYN ACADEMY OF MUSIC

Opening Concert, January 1861.
BROOKLYN ACADEMY OF MUSIC
BROOKLYN ACADEMY OF MUSIC

Plan of 1908.
BROOKLYN ACADEMY OF MUSIC

HVAC Plan of 1908.

Ventilating Apparatus and Heating Mains in the Basement.
Original building 1873, shown with 3 floors added 1891. 10 floors 176 ft.
Also known as Victory House.
MUTUAL LIFE INSURANCE

Plan of Mutual Life Insurance Company's Building, New York City—Plans Illustrating the Ventilation

Plan of 1884
MUTUAL LIFE INSURANCE

Plan of 1884
MANHATTAN LIFE INSURANCE

THE MANHATTAN LIFE INSURANCE BUILDING,
NEW YORK CITY.

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NEW YORK STOCK EXCHANGE
Air conditioning plant with ammonia absorption refrigeration 3 x 150 TR (450 TR total), 1905.
Plan of 1905.
NEW YORK STOCK EXCHANGE

Main Floor Plan of the Board Room Showing Air Exhaust System.

Plan of 1905.
WOOLWORTH BUILDING

Certain Basement areas named as "rathskeller, engine room, barber shop and banking rooms are receiving purified 'washed' air through the 'Kinealy' air washers which the company has installed. The 'Kinealy' air washers purify and cool all the air delivered wherever installed."
WANAMAKER DEPARTMENT STORE
WANAMAKER DEPARTMENT STORE

Plans of 1906.
WANAMAKER DEPARTMENT STORE

Plans of 1906.
ELLIS ISLAND IMMIGRATION HALL

FIRST FLOOR PLAN, MAIN BUILDING, ELLIS ISLAND, N.Y.

1901.
ELLIS ISLAND

UNKNOWN PHOTOGRAPHER/IMMIGRANTS ARRIVING AT ELLIS ISLAND, c. 1905/ CULVER PICTURES, INC.

UNKNOWN PHOTOGRAPHER/WAITING AND PROCESSING, ELLIS ISLAND, c. 1910/ NEW YORK PUBLIC LIBRARY
COOPER UNION

Fig. 10.19  The ventilation system of the Great Hall of Cooper Institute, New York City. Measured drawing by Dale Flick for Historic American Engineering Record, 1971.

Drawing of 1971 showing original ventilation system of 1889.
PLAN OF 1900

METROPOLITAN MUSEUM OF ART
ASTOR HOTEL

Opened 1904, 700 rooms.

The Orangerie, part of "one of Manhattan's most fashionable night spots."
ASTOR HOTEL

H&V Drawings from 1907.
(From top): The vast kitchens; The Wine Vaults; The Indian Grill Room.
ASTOR HOTEL

HOTEL ASTOR, TIMES SQUARE, NEW YORK
"The Crossroads of the World"
ANSONIA HOTEL

Opened 1904, 1400 rooms, 18 floors.
1902. (At unknown date was the first New York Hotel to be air conditioned).
HOTEL KNICKERBOCKER

Opened 1906, 330 rooms, 15 floors.
HOTEL KNICKERBOCKER

H&V Plans from 1908.
ANDREW CARNEGIE RESIDENCE
ANDREW CARNEGIE RESIDENCE

Plan of 1902.

Heating System Drawings from 1903.
REFERENCES AND FURTHER READING

Drawing of 1894.

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HVAC System and Equipment Plans, Sections and Drawings are from The Engineering Record magazine of New York. Other information from the Heritage Group Archive and website.