1871: The Great Fire destroyed a quarter of Chicago, but rebuilding gave birth to the skyscraper.

HISTORIC CHICAGO
1885-1974
ARCHITECTURE AND ENGINEERING

BRIAN ROBERTS
Why Chicago? In the 1970s and early 1980s, a small number of "skyscraper" air conditioned office blocks in the UK were topped out at around 400 ft. Nearly fifty years ago, as an air conditioning engineer, I visited the United States to look at their latest air conditioned skyscrapers including the 1973 (later ill-fated twin towers) New York World Trade Centre and the 1974 Chicago Sears Tower. At 1368 ft and 1451 ft respectively they were then, in turn, the tallest buildings in the world. The 1930s famous Chrysler and Empire State buildings were not initially air conditioned. Now there are even taller skyscrapers in many countries around the world. The first skyscraper was built in Chicago in 1885. Others followed. This was possible because Chicago also pioneered the building structural steel frame. I was fortunate to have long-standing friends in Chicago who took me around many other historic buildings, some of which are shown in the following pages.

**THE EARLY SKYSCRAPERS 1885-1929**


**THE LATER SKYSCRAPERS 1964-1974**

Chase: 24, Federal: 3, Hancock: 25, Lake Point 23, Marina City: 22, Sears Tower: 27, Standard Oil: 26

**OTHER HISTORIC BUILDINGS 1883-1953**

12 floors, 180 ft, the first skyscraper, demolished 1931. Architect: William Le Baron Jenney. Provided with steam radiators for heating. One report states also mechanical ventilation with ice-block cooling in summer.
Became Burnham Hotel in 1999.
FISHER BUILDING 1896

Increased to 20 storeys in 1906.
MASONIC TEMPLE 1892

Probably tallest building ever relying on load-bearing brick walls
ROOKERY BUILDING 1888

ROOKERY BUILDING LOBBY 1905

Lobby remodelled by Frank Lloyd Wright in 1905.
AUDITORIUM BUILDING 1889

1000-bed hotel (later Congress Hotel) added 1907. Part air conditioned (Kroeschell 140 TR).
MANHATTAN BUILDING 1889

Oldest skyscraper with "purely skeletal structural system."
OLD COLONY BUILDING 1894

CHICAGO SAVINGS BANK BUILDING 1905

MEDINA ATHLETIC CLUB 1929

TRIBUNE TOWER 1925

Fully air conditioned 1933 (600 TR steam-jet refrigeration), 400 Westinghouse fan-coil units. Air conditioning 1927 in a few special offices (CO2 refrigeration Wittenmeier Machine).
WRIGLEY BUILDING 1924

438 ft (spire), 30 floors (North Tower), 20 floors (South Tower).
Air conditioning 1927 in a few special offices (CO2 refrigeration Wittenmeier Machine).
PITTSFIELD BUILDING 1927

PALMOLIVE BUILDING 1929

Renamed Playboy Building in 1965.
70 floors, 645 ft. Architect: Schipporeit-Heinrich Associates. When completed it was the tallest Apartment Block in the world. "Air conditioning provided by wall units."
CHASE TOWER 1969

JOHN HANCOCK 1969

100 floors, 1127 ft. Architect: Skidmore, Owings & Merrill. Perimeter induction (changeover) air conditioning with interior zone constant volume reheat system. Refrigeration 6900 TR. Interior changed to VAV without reheat.
83 floors, 1136 ft. Architect: Edward Durell Stone. Renamed Amoco, then Aon Centre. The complete marble sheathing replaced by granite slabs after problems.
ST. STANISLAUS KOSTA CHURCH 1881

ST. JOHN CANTIUS CHURCH 1898

Has top-lit natural lighting through stained glass windows in roof and clerestories.
BAHAI HOUSE OF WORSHIP 1925-1953

Height to top of dome 190ft. Located in Wilmette.
Baha'i House of Worship 1925-1953

Architect: Louis Bourgeois, George A. Fuller.
12 floors. Steel-framed fireproof structure.
CARSON PIRIE SCOTT STORE 1890-1904

Architect: Louis Sullivan. Building included a very early fire suppression sprinkler system.
The original store (with steam-powered elevators and gas lighting) was destroyed in the Great Fire of 1871. In the years which followed, Marshall Field had a number of stores in different locations. Architect for Wholesale Store: Henry Hobson Richardson.
The famous State Street Store, altered and added to on a number of occasions.
Architect: Daniel H. Burnham.
Building initially constructed for Chicago Columbian Exposition and taken over when ended.
Housed in the Palace of Fine Arts, built for 1893 Columbian Exposition.
Designed in the Greek Revival style topped with Neo-Classical buildings and colonnades. Major changes in 1973 not universally liked and delisted as an Historic National Monument.
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OAK PARK HOUSES BY FRANK LLOYD WRIGHT
NATHAN G. MOORE HOUSE 1895

EDWARD R. HILLS HOUSE 1883
REFERENCES AND FURTHER READING

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Other information from the Heritage Group Archive and website.