

EARLY SKYSCRAPERS



Typical skyline of a modern city



Early skyscrapers

Park Row (New York City)



New type of building

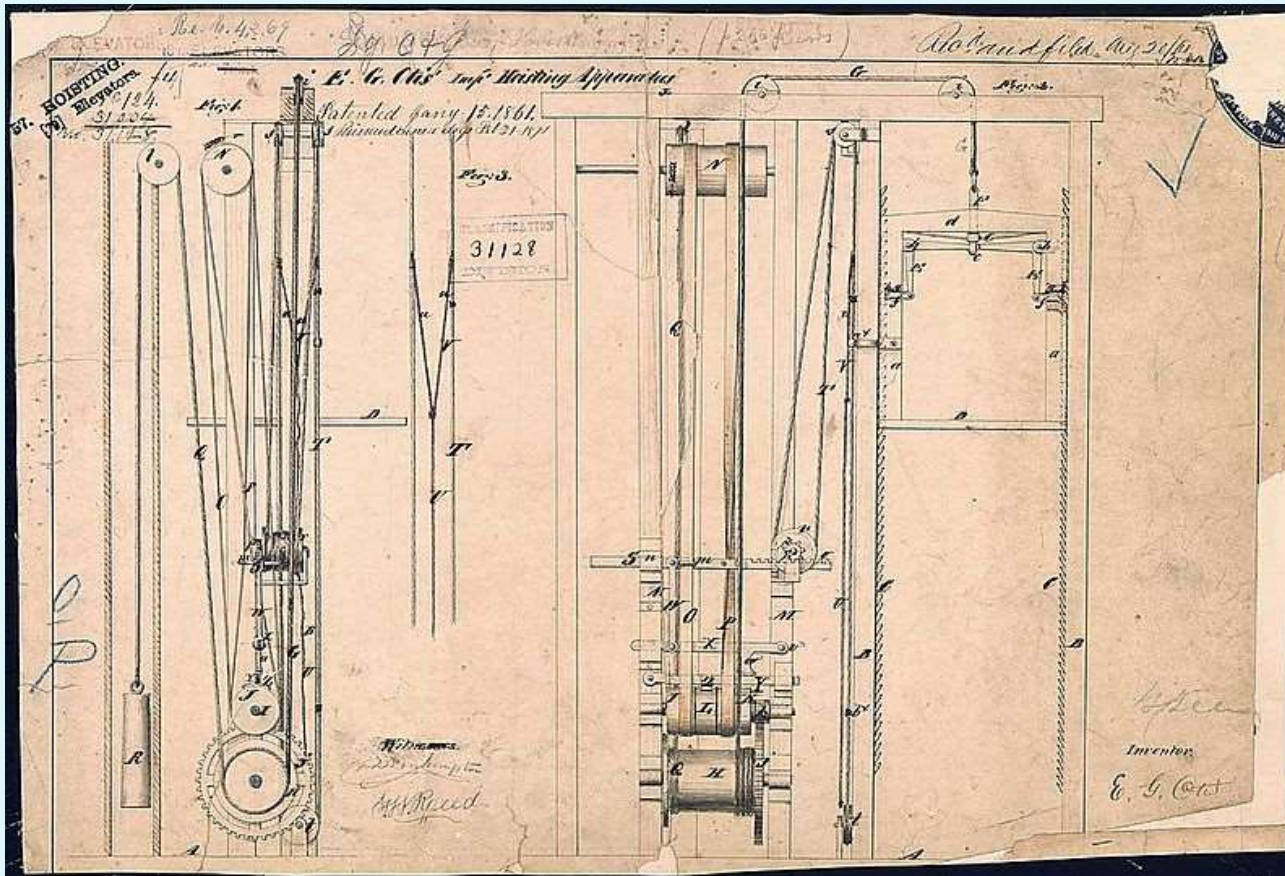
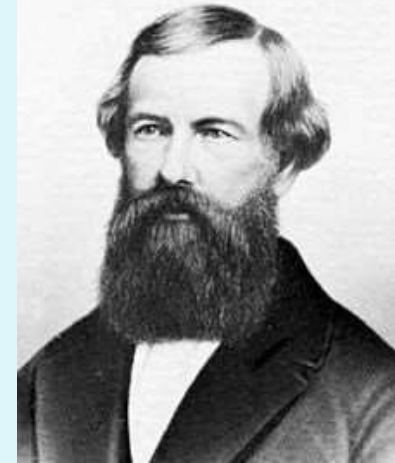


- Safe elevator (driven by steam and later, electricity)
- A new methods of building were introduced

Development of a safe elevator



- Inventor: Elisha Graves Otis



Elisha Otis's
elevator patent drawing,
15 January 1861



A new method of building



- Cause: The Great Chicago Fire



Map of Chicago
(the area destroyed
by the fire)



Aftermath of
the fire

- Henry Bessemer
-discovered a process for making steel cheaply and economically

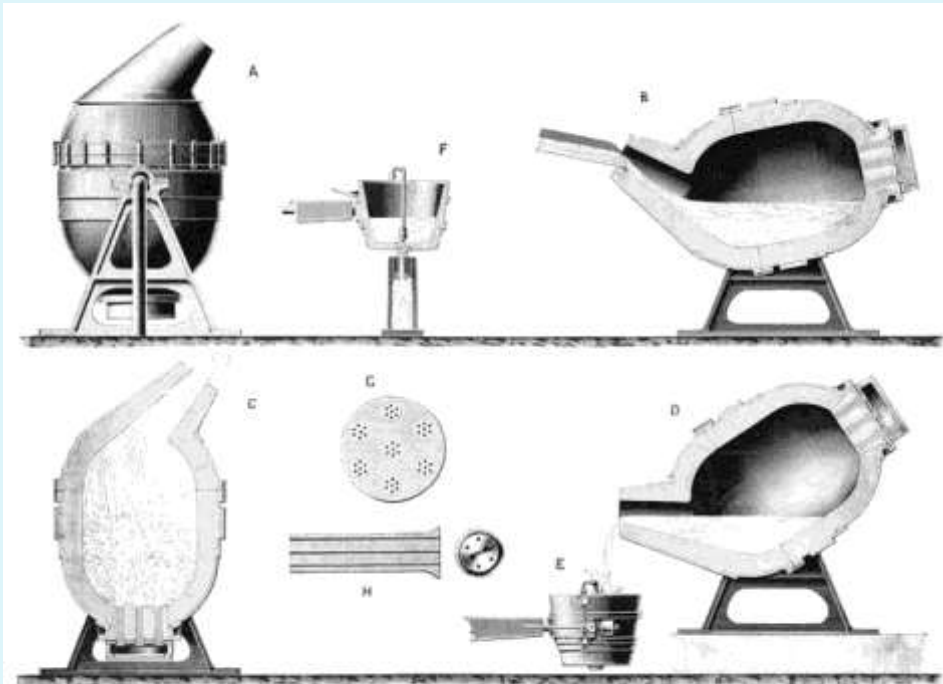


FIG. 45. THE FIRST FORM OF BESSEMER MOVABLE CONVERTER AND LADLE

Bessemer
converter

Building structure



- Support against gravity
- Weather Resistance
- Protection against fire



Hotel Chelsea
(New York)



Home Insurance Building (Chicago)

*1% of floor load was
carried by the walls

Woolworth Building (New York)









Style

- The earliest skyscrapers
 - rectangular shape
 - flat roof
 - Gothic and Roman architecture

New York Life Insurance Building (Chicago)



- Modern and International style
 - simple
 - rectangular shape
 - frequent use of glass

The PSFS Building
(Philadelphia)





- Art Deco
 - emphasis on geometric form
 - decorative motifs

The Fisher Building
(Detroit)

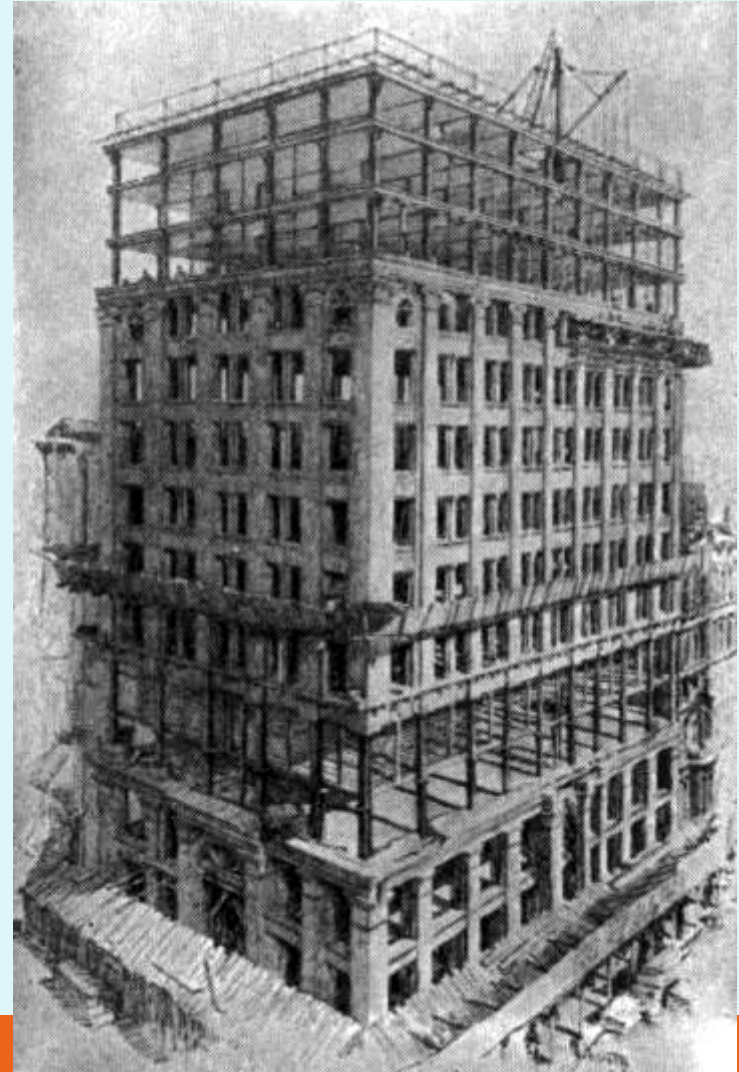


Skyscrapers in Chicago



- Home Insurance Building
(1884)

-the first
skyscraper
-54,9 m



- Wrigley Building
(1920)
-headquarters of the
Wrigley (chewing gum)
company
- 130 m

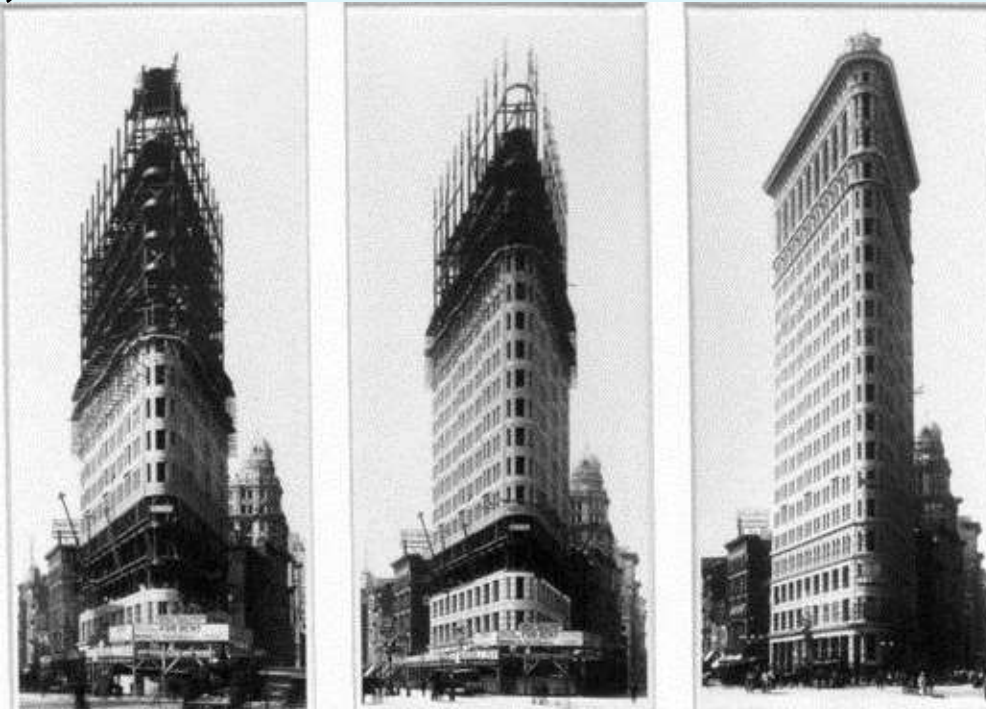


- Park Tower
(2000)
-without a steel structure!!!
-257,3 m



Skyscrapers in New York

- Flatiron building
(1902)
 - One of the world's most iconic skyscrapers
 - 93,6 m



- Chrysler Building

(1930)

- Tallest in the world from May 27, 1930
to April 30, 1931

-319 m





- Empire State Building
(1931)
 - Tallest in the world
from 1931 to 1970
 - 443.2 m



Vocabulary



multi-story building = višekatnica

elevator = dizalo

load bearing capacity = nosivost

curtain wall = pregradni zid

triangular plot = trokutasti komad zemljišta

steel frame/skeleton = čelični okvir

Sources



- http://en.wikipedia.org/wiki/Early_skyscrapers
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