

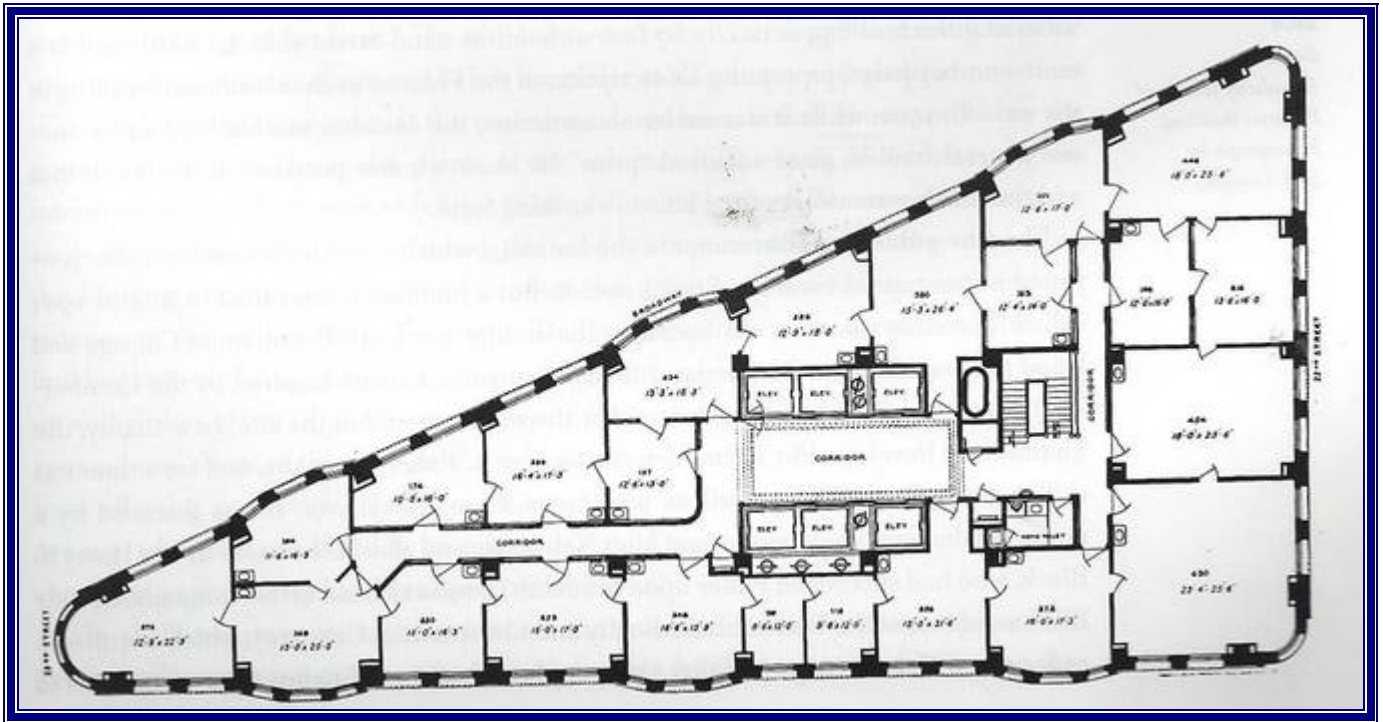
OTIS ELEVATOR COMPANY

By EurIng Brian Roberts, CIBSE Heritage Group

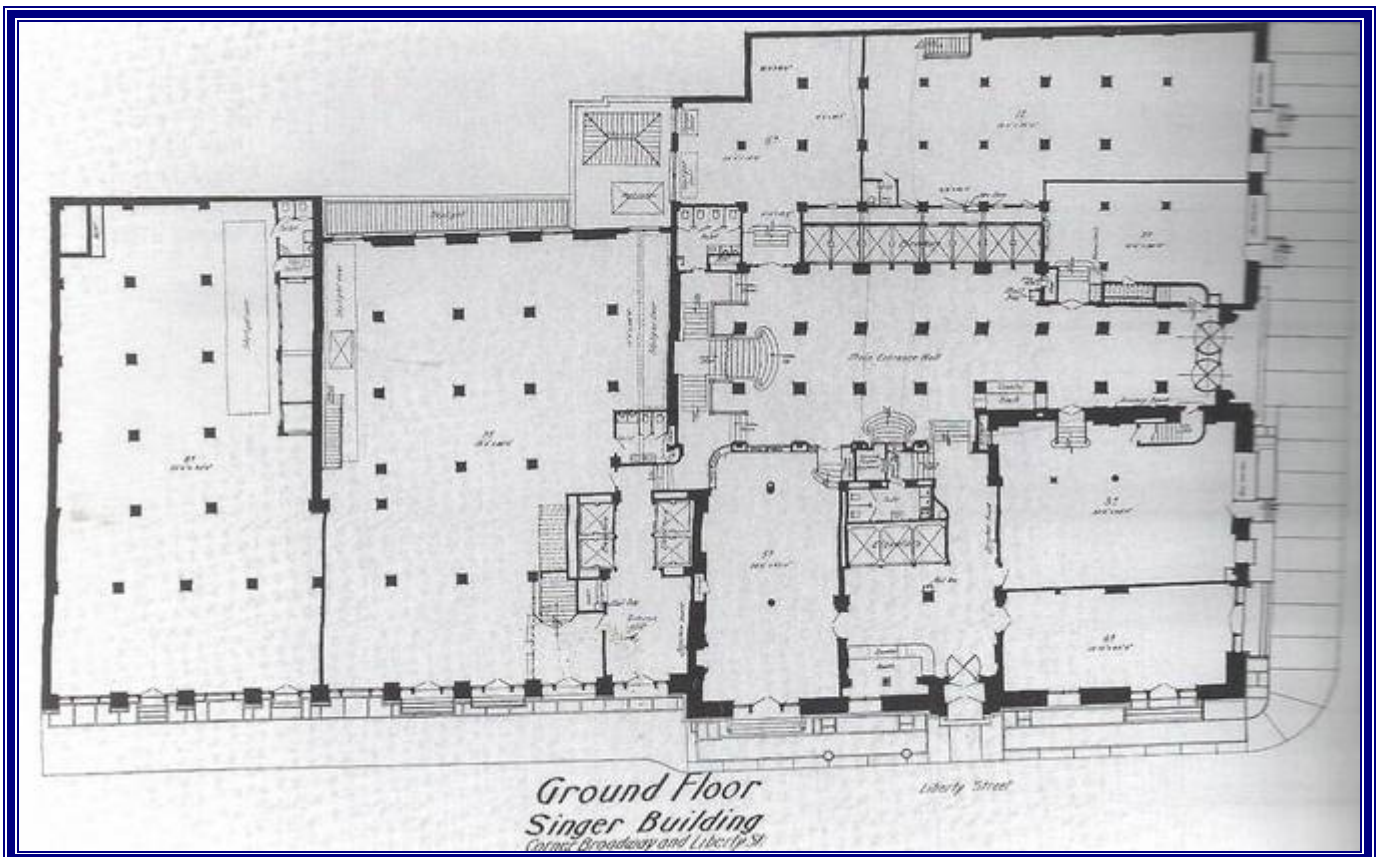
Early 20th Century New York, 1900-1931



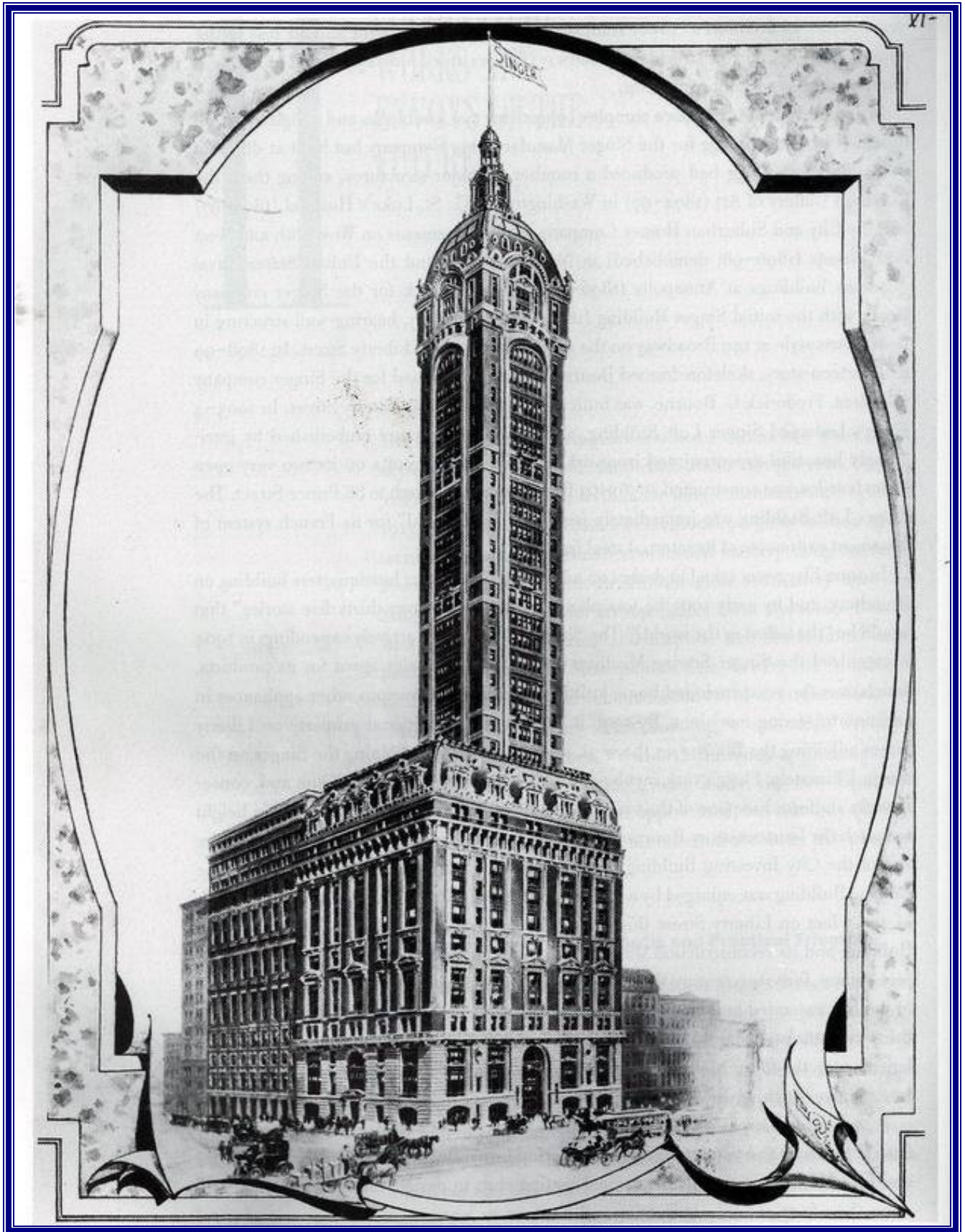
The twenty storeys, 307 feet high, Flatiron Building, 1902: D H Burnham & Co, architects
Provided with 6 Otis rope-gearred Hydraulic elevators



Plan of Flatiron Building showing location of its 6 Otis elevators



Plan of the Singer Tower Building at Ground Level showing 15 of the 16 total Otis electric elevators



At forty seven storeys, 612 feet high, the Singer Tower of 1908 then the tallest skyscraper yet built was overtaken by the Metropolitan Life Tower in 1909. Ernest Flagg was the architect. The building was demolished in 1968.



The Lift Lobby & Entrance Hall of the Singer Tower

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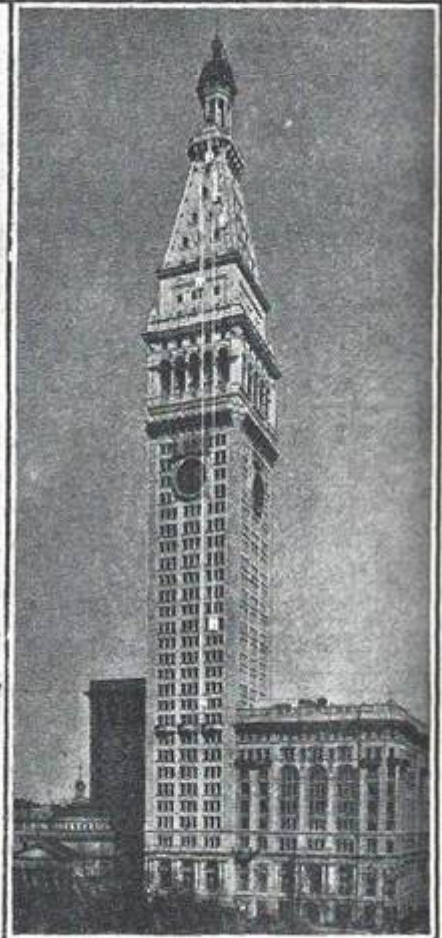
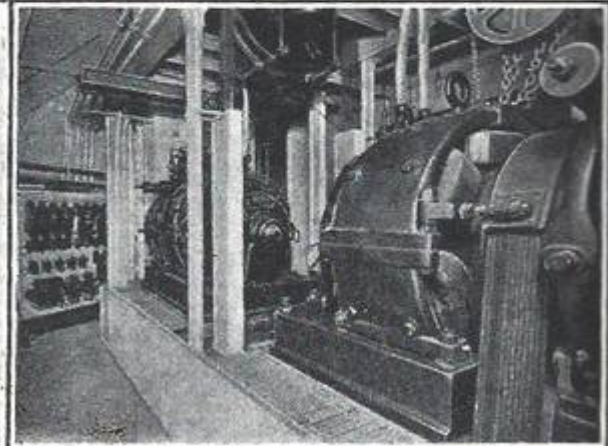
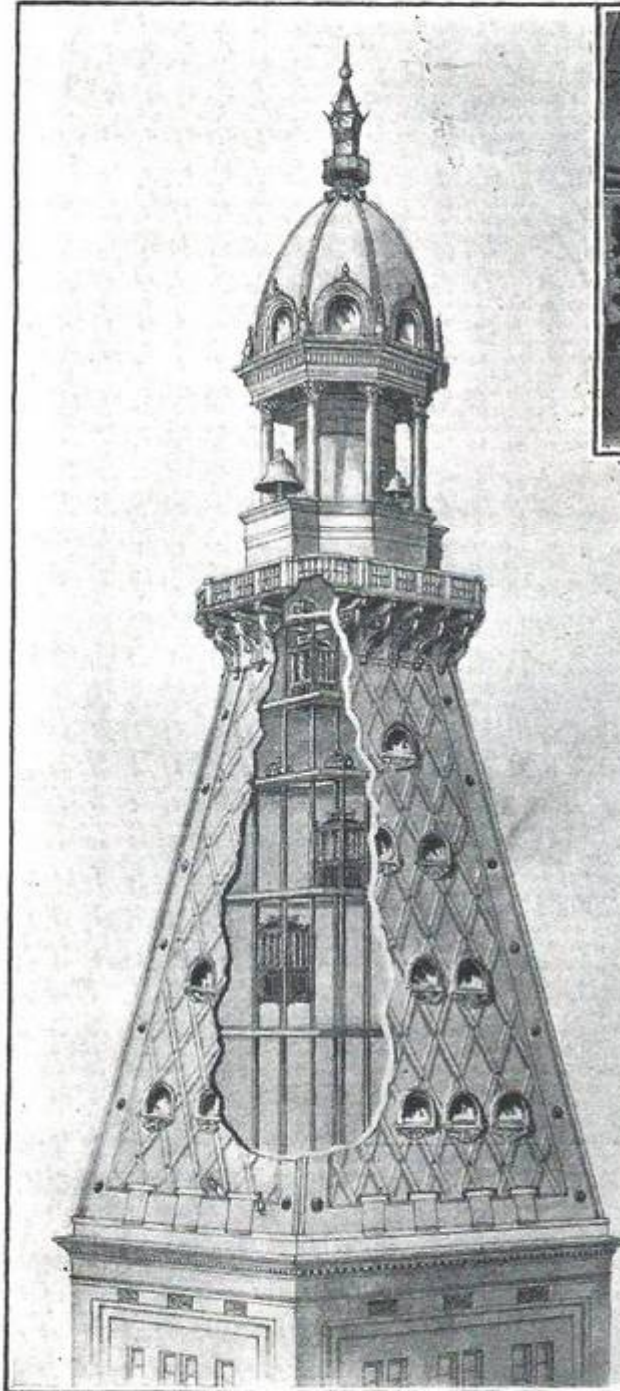
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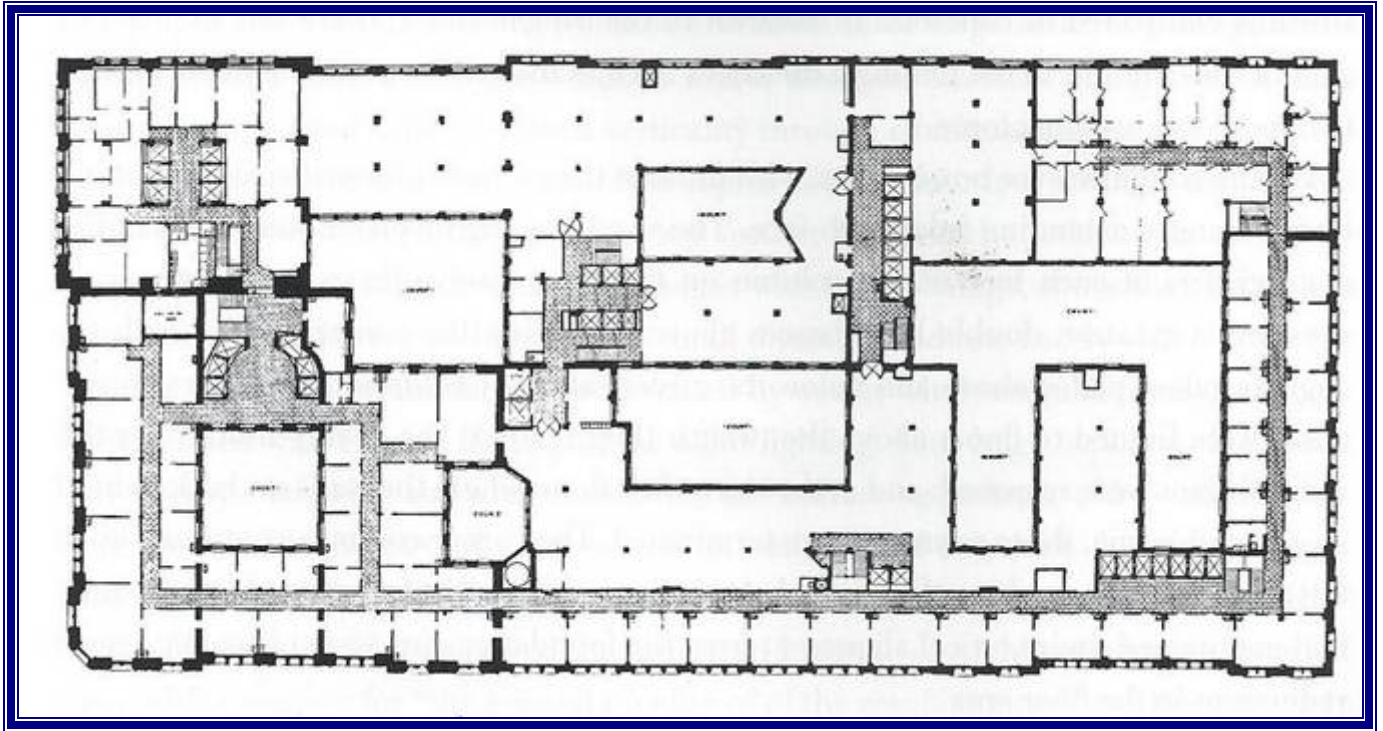
The upper ends of the elevator shafts.

Motors installed at top of tower.

Position of elevators in shafts.

HOW THE PROBLEM OF INSTALLING THE ELEVATORS OF THE METROPOLITAN TOWER WAS SOLVED.—[See page 358.]

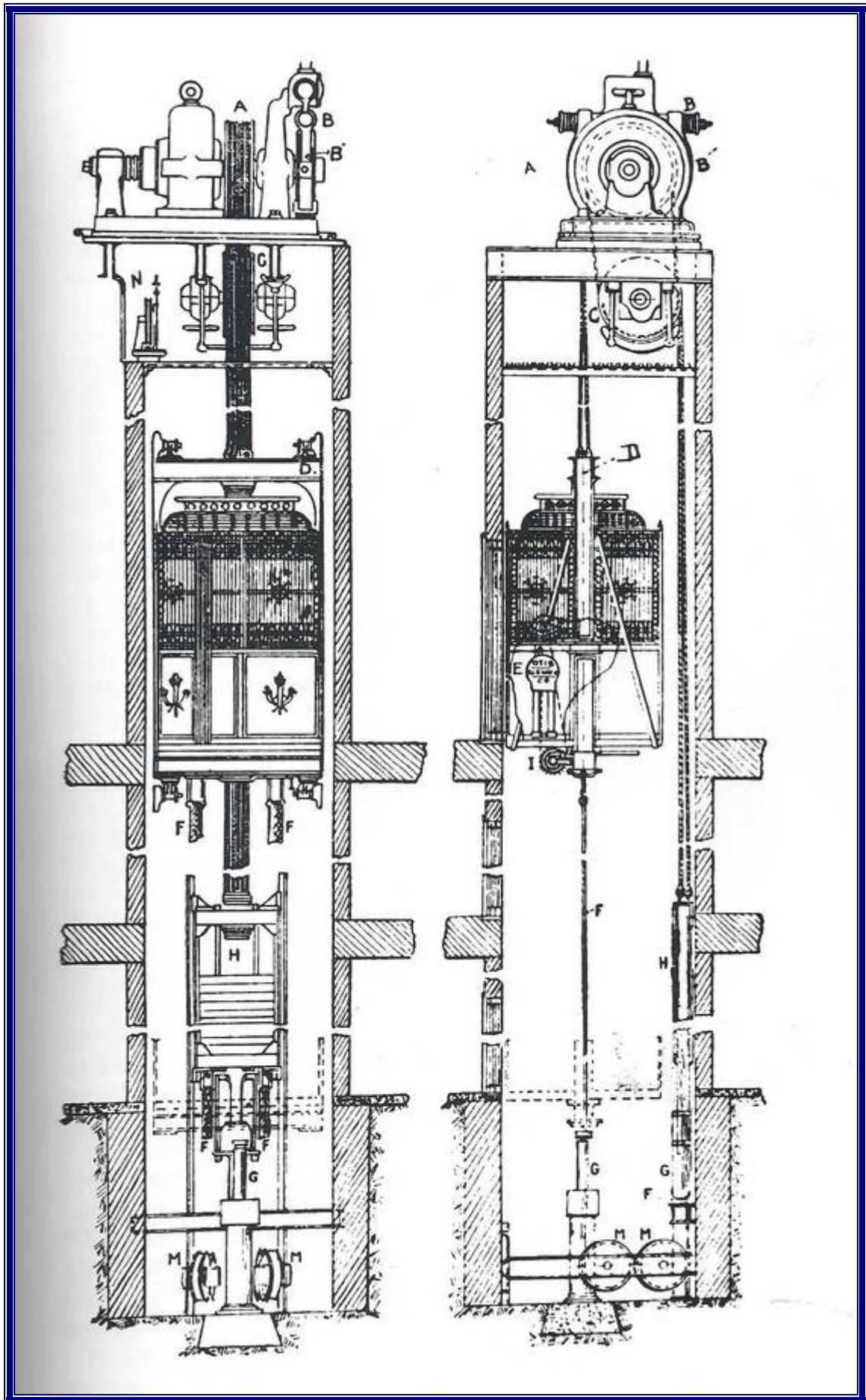
Having fifty storeys, the 700 feet high Metropolitan Life Insurance Company Tower was completed in 1909
The architect was Napoleon Lebrun & Sons.



Typical floor plan of the Metropolitan Life Building: the Tower plan occupies the small square in the upper left hand corner. The Otis elevator types were mixed: 6 overhead electric-traction units in the tower with high speed hydraulic elevators (29 on plan) in the 11-storey base.



The Otis Building in New York City, 1912

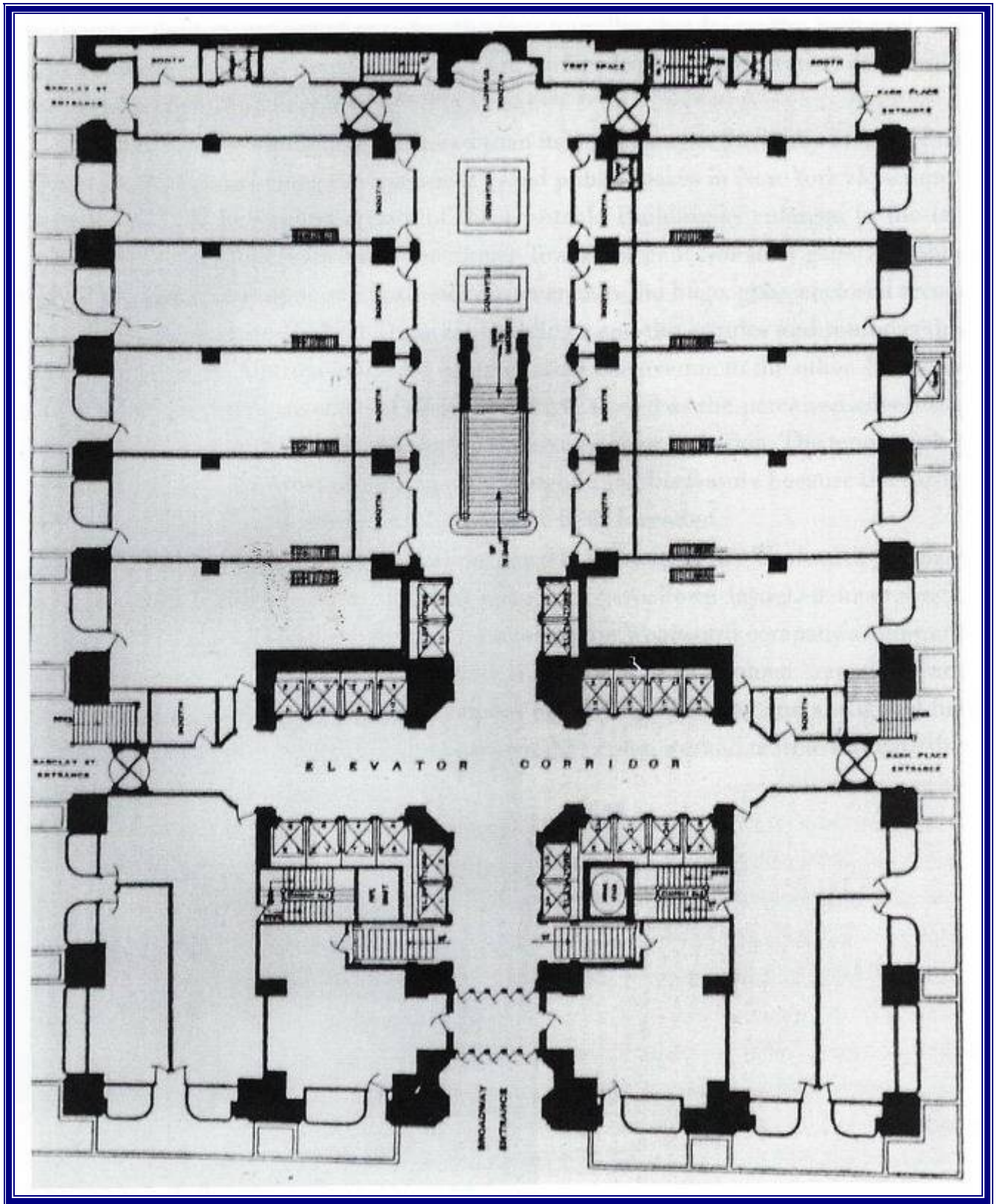


The Otis electric traction elevator of 1909 with its motor and drum at the top of the shaft



At fifty five storeys, 792 feet high, the Woolworth Building, opened in 1913 being provided with 29 Otis electric elevators and would remain the world's tallest building until the 1930's.

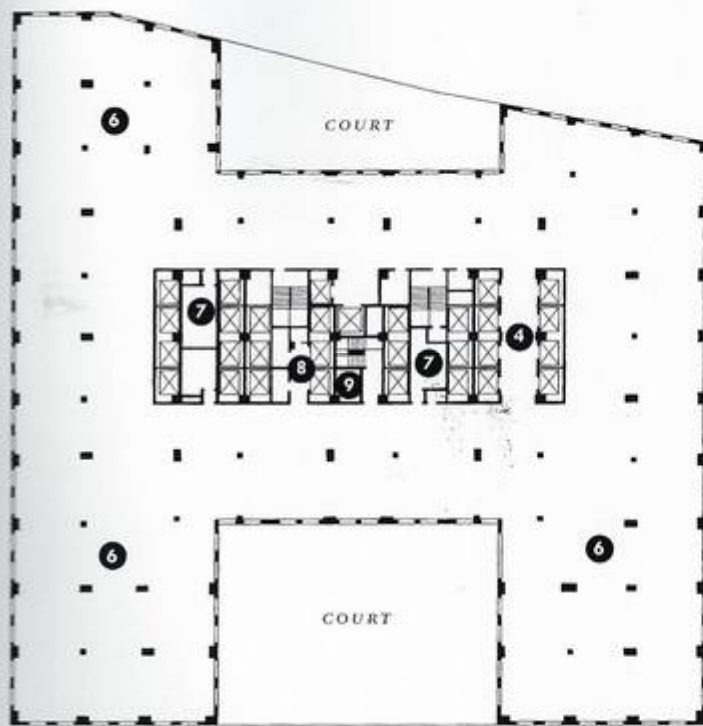
(See separate ebook for details of the Otis installation)



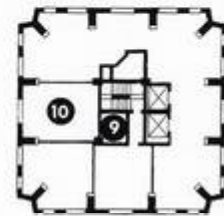
First floor plan of the Woolworth Building showing 24 Otis elevators



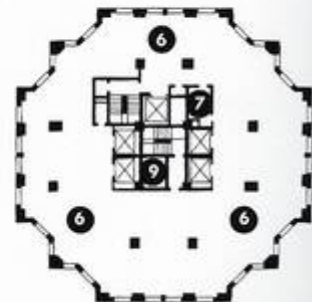
Opened in 1930, designed by architect William Van Alen, standing at 1046 feet, the Chrysler building was, for a short time, the tallest building in the world.



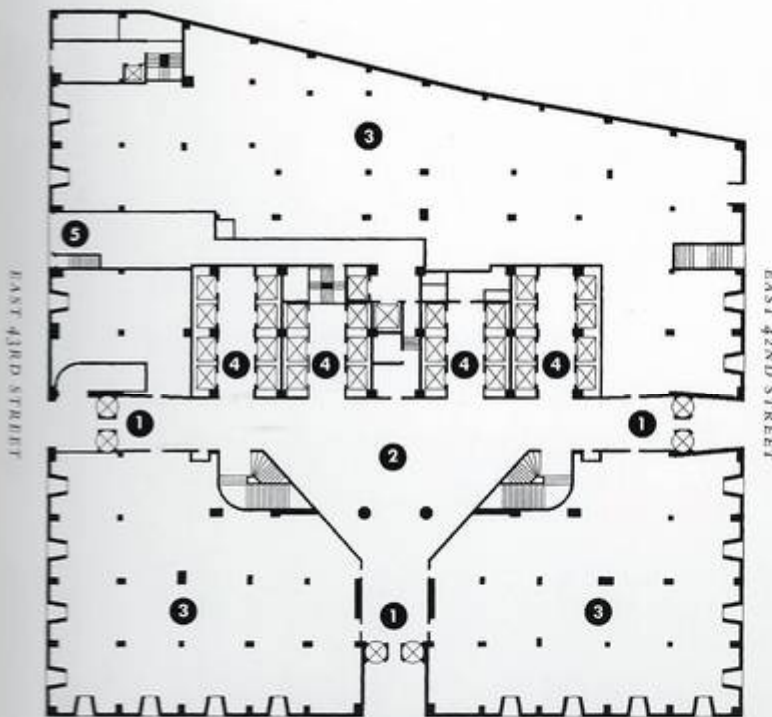
6TH TO 10TH FLOORS



71ST FLOOR

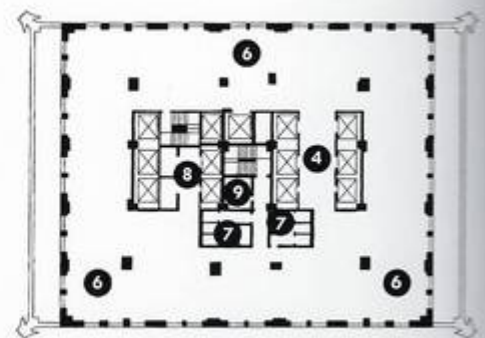


62ND TO 66TH FLOORS



LEXINGTON AVENUE

1ST FLOOR



31ST TO 41ST FLOORS

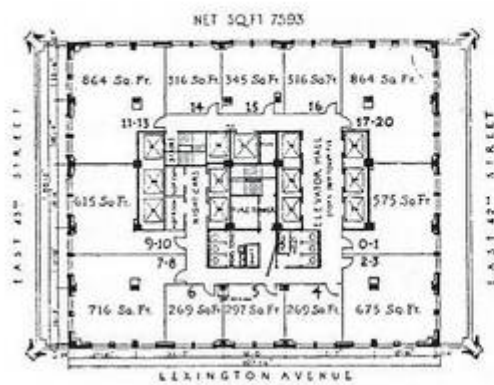
FLOOR PLANS OF THE CHRYSLER BUILDING

- | | |
|---------------------|-----------------|
| 1. Entrance Lobby | 6. Offices |
| 2. Main Concourse | 7. Toilets |
| 3. Shops | 8. Night Cars |
| 4. Elevator Hall | 9. Fire Tower |
| 5. Service Entrance | 10. Observatory |

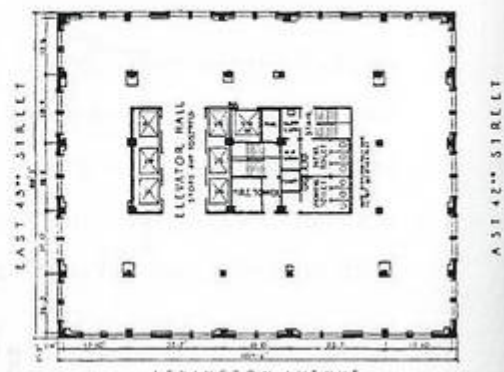


0' 30' 60' 90' 120'

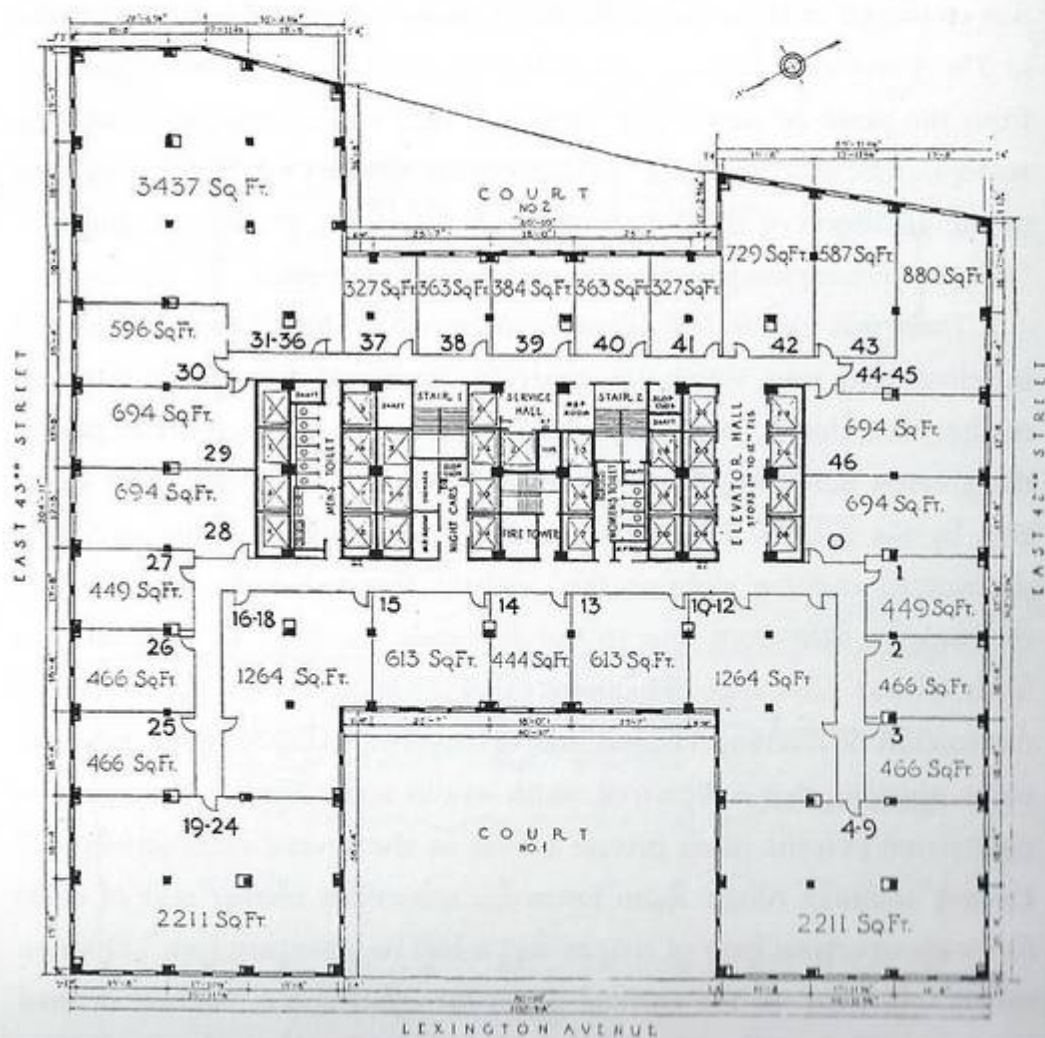
The banks of elevators serve 65 floors of offices. The plan shows 30 elevators at the 1st floor (Ground floor) level.



PLAN, 31ST TO 41ST FLOORS
DIVIDED

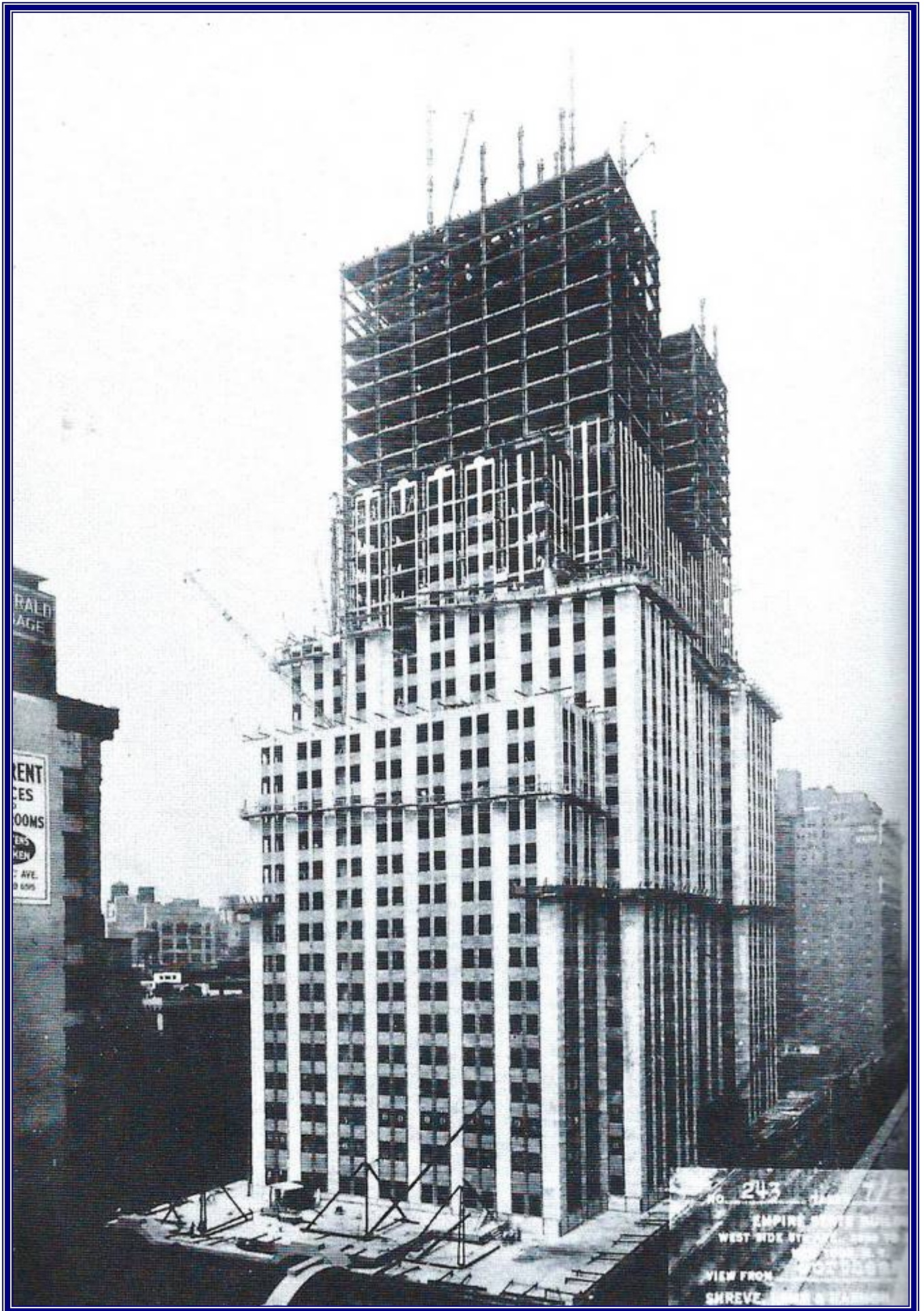


51ST TO 55TH FLOORS

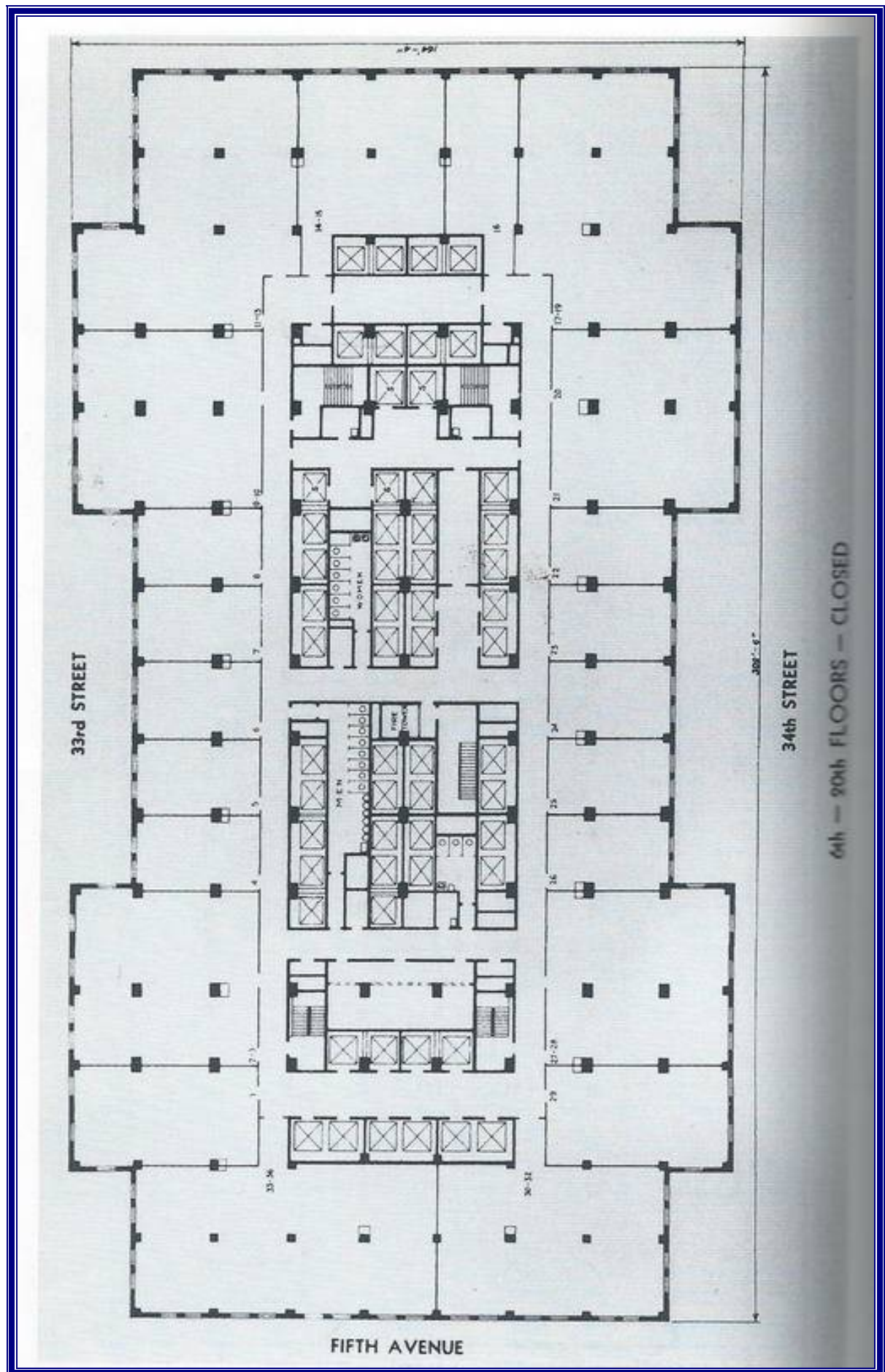


PLAN, 6TH TO 10TH FLOORS, DIVIDED

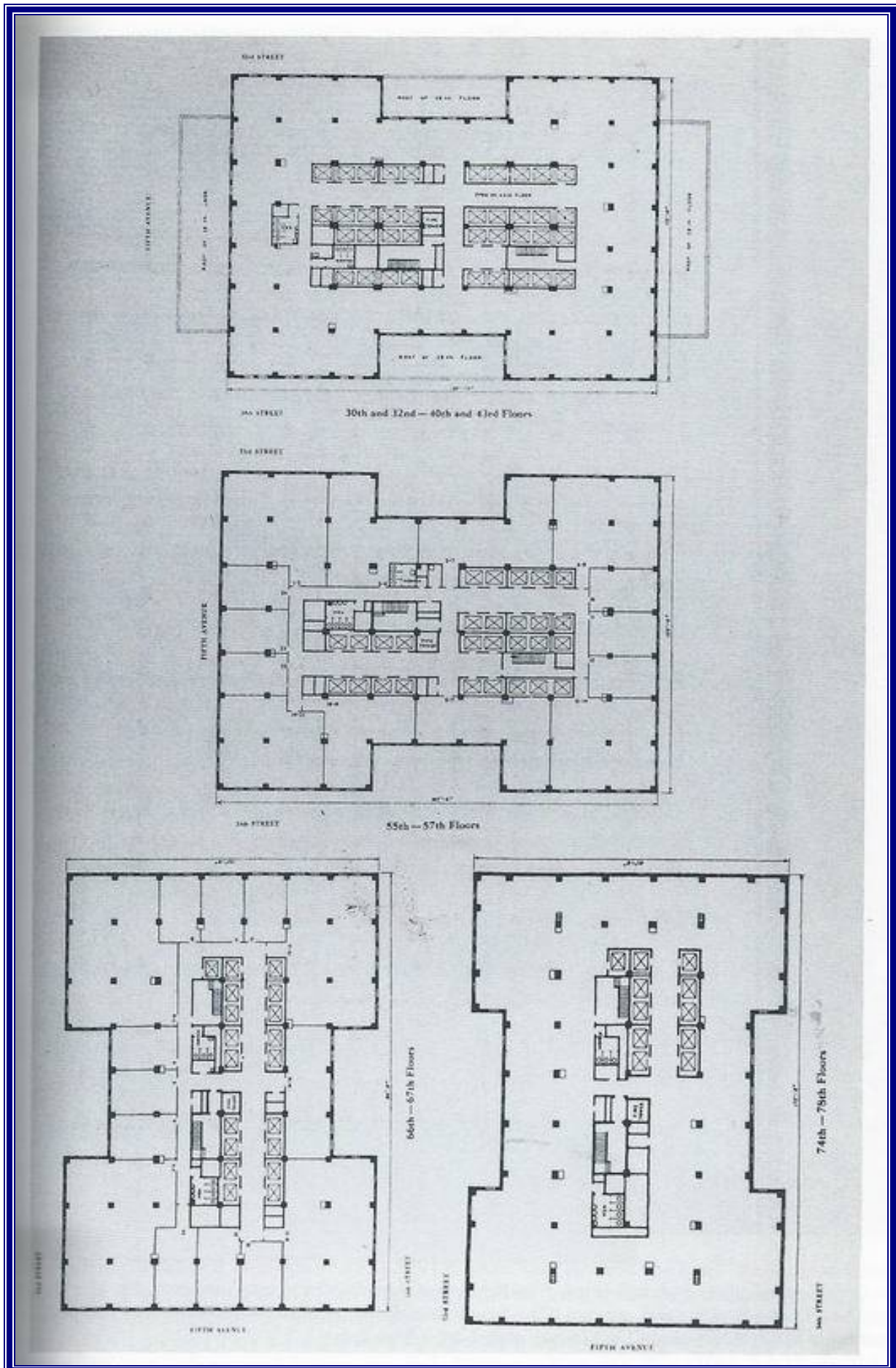
Additional floor plans of the Chrysler Building



The Empire State Building is shown during construction. It opened 1 May 1931.



Plan showing the 58 Otis elevators at street level



Plans of Empire State elevators at higher floor levels



The Empire State Building with 102 floors topped out at 1250 feet. The architects were Shreve, Lamb & Harmon. It remained the world's tallest building until the 1970's when (the now ill-fated) New York's World Trade Centre (1973) and Chicago's Sears Tower (1974) were opened.



Art Deco style elevators in the Chrysler Building

Additional References

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