

Title: **Was the Home Insurance Building The “First Skyscraper”?**

Authors: Mir M. Ali, Professor Emeritus, University of Illinois at Urbana-Champaign
Gerald Larson, Professor Emeritus of Architecture, University of Cincinnati

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Was the Home Insurance Building The “First Skyscraper”?

Chicago’s Home Insurance Building, the 12-story office building designed by William Le Baron Jenney, completed in 1885 and demolished in 1931, has frequently been referred to as the “first skyscraper.” However, it is not a settled academic matter. The following is a concise distillation of the central arguments behind an upcoming set of papers in a special proceedings book, and a key discussion in the first session of the “First Skyscrapers | Skyscraper Firsts” Symposium, being held on the fourth day of the 2019 CTBUH 10th World Congress.

✓ YES

Mir M. Ali

*Professor Emeritus, School of Architecture,
University of Illinois at Urbana-Champaign*

The Home Insurance Building in Chicago qualifies as the first skyscraper, due to being an innovative structure emphasizing lightness, ample daylighting and curtain walls. In traditional construction, masonry walls carrying the weight from upper floors needed to be thick and heavy, and reached a practical height limit because of their low carrying capacity. These walls didn’t allow large window openings in the exterior, thereby blocking abundant natural light. With masonry exterior walls and without the skeletal construction, it was practically impossible for any building to evolve to a skyscraper of great height, even though elevators could reach such heights. Skeletal construction singularly paved the way for future skyscraper construction.

For the Home Insurance Building, originally built in 1885 with 10 stories, and to which two stories were added in 1890, William Le Baron Jenney created an iron-framed, lighter structure for much of the building, carrying the building’s loads. In his design, cast-iron box lintels/beams above the wide window openings, precursor of the latter-day “Chicago Window,” framing into columns that were encased in small masonry piers for fireproofing and protection against the climate, rendered the exterior walls non-load bearing. These perimeter lintels/beams carried each story floor by floor,

turning the exterior into a “curtain wall” system, heralding the use of well-developed curtain wall construction in future skyscrapers. This building’s pioneering structural system led to what is known as the “Chicago Skeleton.”

When the building was completed at the corner of LaSalle and Adams Streets, for the first time, a metal skeleton, instead of masonry, formed the primary supporting structural system for a commercial building. It stood out from other buildings of that era as the first skyscraper, because it possessed all the fundamental features of a skyscraper.

✗ NO

Gerald Larson

*Professor Emeritus of Architecture,
University of Cincinnati*

Winston Weisman’s 1953 proposition was that the Equitable Building in New York of 1867 was the first skyscraper. This was because it was the first building designed to exploit the elevator by making its floor heights taller than convention, because stairs were no longer needed. This resulted in a building that towered above its neighbors, due to this extra height. If one cannot accept a seven-story skyscraper as a “first”, but arbitrarily requires a minimum of 10 floors, there were many such buildings constructed in New York and Chicago prior to Jenney’s commission to design the Home Insurance Building in 1884. In Chicago, this type of building was referred to as a “skyscraper” in an 1884

article that identified three skyscrapers that were taller, and which were completed before his commission.

However, if we accept the definition requiring the use of iron skeleton framing, the Home Insurance Building still does not qualify as a skyscraper, because, while its interior structure consisted of iron skeleton framing, its exterior structural system was a polyglot of masonry bearing walls and iron-reinforced masonry piers and lintels. Its two party walls, and even the first two stories of the street elevations, were also load-bearing masonry. Only the piers in floors 3-10 of the street elevations contained iron sections, while the spandrels in these stories consisted of masonry walls sitting on shallow, segmental iron pans. Further evidence, stemming from Jenney’s own details, reveals that he had no intention of creating a “skeleton frame” in the two street fronts.

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Mir Ali & Gerald Larson
will appear in *First Skyscrapers, Part I*,
at the “First Skyscrapers | Skyscraper
Firsts” Symposium on Thursday,
31 October.

