



HOLLYWOOD & LOS ANGELES THEATRES 1917-31

Part Two: HVAC & R 1927-1931

**Eur Ing BRIAN ROBERTS CEng Hon.FCIBSE
Life Member ASHRAE**

CIBSE HERITAGE GROUP





HOLLYWOOD & LOS ANGELES THEATRES 1917-31

Part Two: HVAC & R 1927-1931

The colour illustrations and photographs featured on opening & closing pages are of Grauman's Chinese Theatre

CIBSE HERITAGE GROUP





HOLLYWOOD & LOS ANGELES THEATRES

Part One

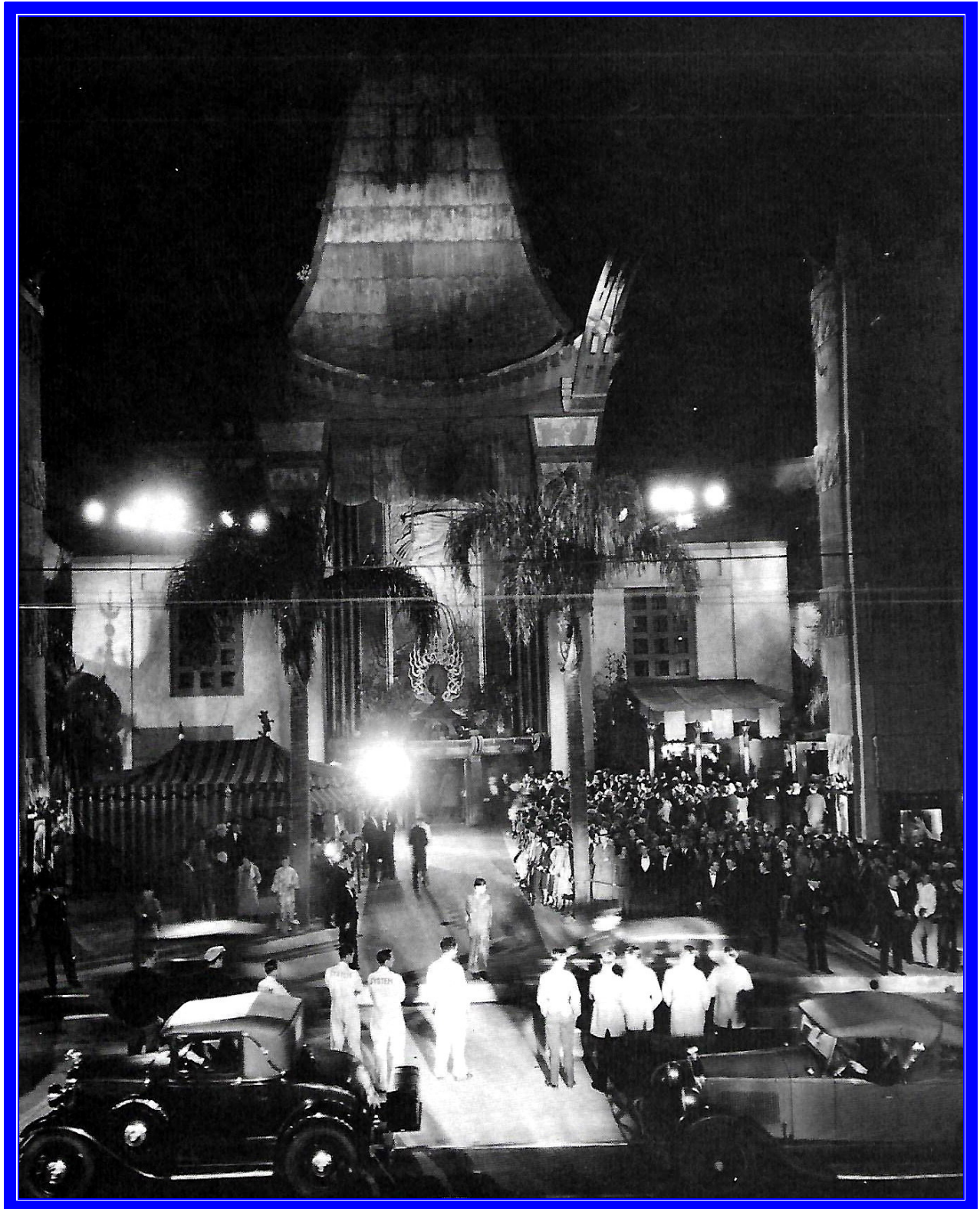
- 1917 Quinn's Rialto Theatre**
- 1918 Million Dollar Theatre**
- 1921 Loew's State Theatre**
- 1922 Grauman's Egyptian Theatre**
- 1923 Metropolitan Theatre**
- 1926 El Capitan Theatre**
- 1926 Orpheum Theatre**

Part Two

- 1927 Grauman's Chinese Theatre**
- 1927 United Artists Theatre**
- 1931 Tower Theatre**
- 1928 Warner Theatre**
- 1930 Pantages Theatre**
- 1931 Los Angeles Theatre**

Note that theatres often changed use, names and seating numbers

GRAUMAN'S CHINESE THEATRE



(American Picture Palaces)

GRAUMAN'S CHINESE THEATRE



**Opened 1927 Seats 2258
Architect: Meyer & Holler**

**Reported as "the first commercial movie
theatre with air conditioning."**

(Los Angeles Times)

GRAUMAN'S CHINESE THEATRE



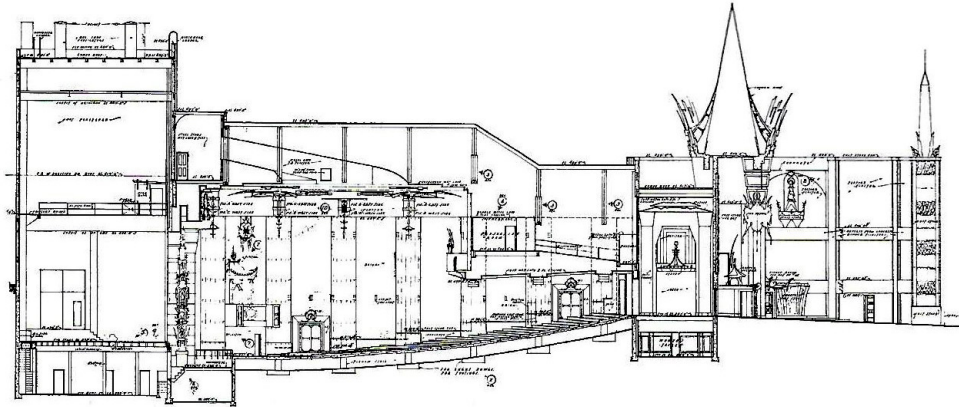
GRAUMAN'S CHINESE THEATRE, HOLLYWOOD, CAL.

MEYER & HOLLER, ARCHITECTS.

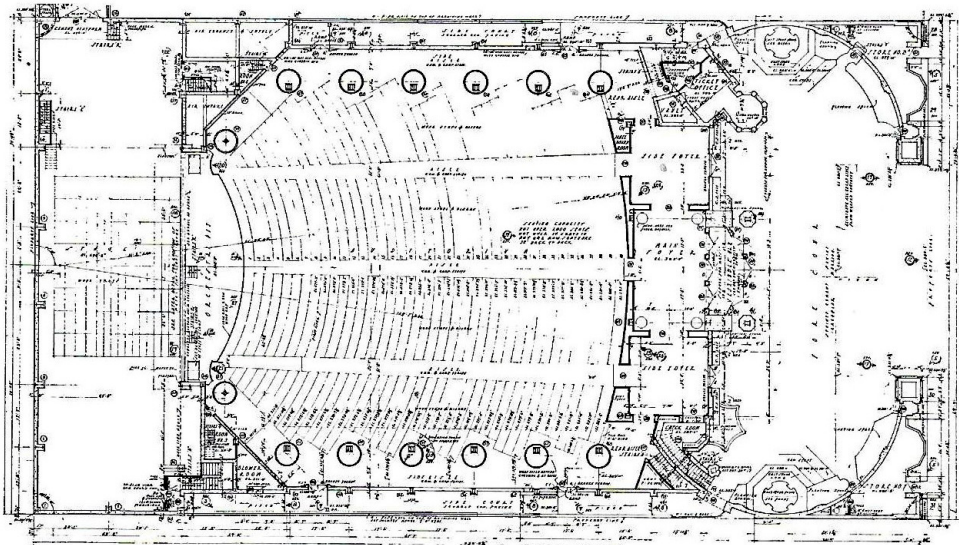
(Courtesy The American Architect.)

(American Theatres of Today)

GRAUMAN'S CHINESE THEATRE



LONGITUDINAL SECTION



PLAN OF AUDITORIUM

GRAUMAN'S CHINESE THEATRE, HOLLYWOOD, CAL.

MEYER & HOLLER, ARCHITECTS.

(American Theatres of Today)

UNITED ARTISTS THEATRE



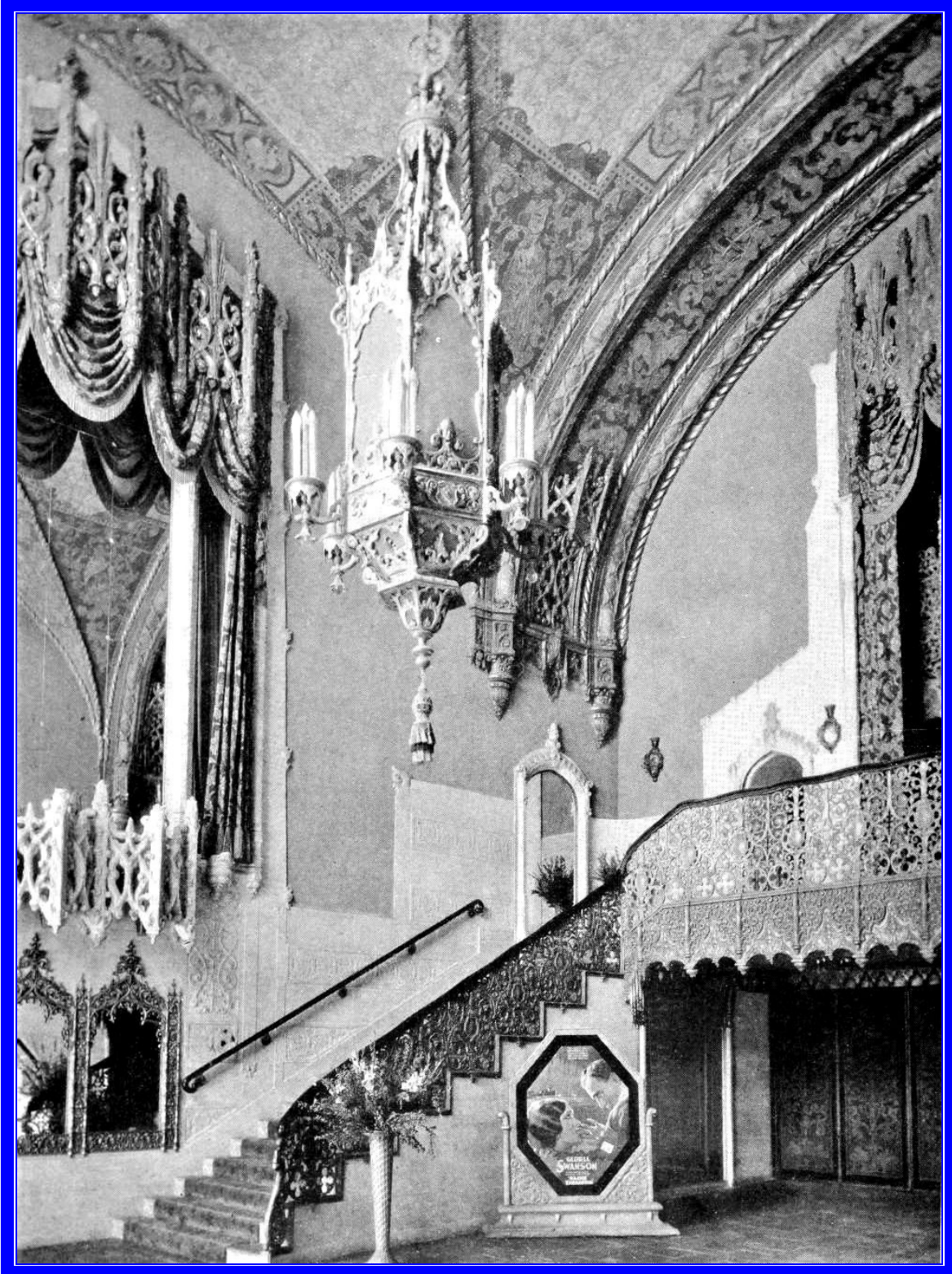
UNITED ARTISTS THEATRE



Opened 1927 Seats 2214
Architect: C Howard Crane

**Air Conditioned by Wittenmeier-Vitolyzed-Air
Washer system with CO₂ refrigeration**

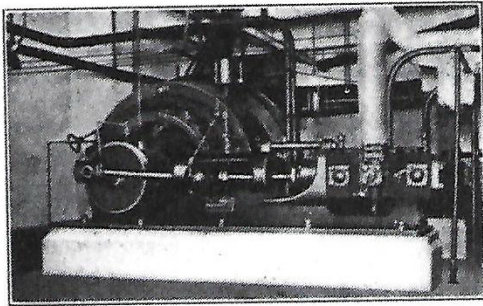
UNITED ARTISTS THEATRE



UNITED ARTISTS THEATRE

Ventilation

Complete Air Conditioning Installations
Cooling—Refrigerating—Washing



Wittenmeier Horizontal Compressor CO₂

A Few Representative Installations

CAPITOL THEATRE, New York, N. Y.
WARNER BROS. THEATRE, New York, N. Y.
KEITH'S FORDHAM, New York, N. Y.
LOEW'S NEW ROCHELLE, New Rochelle, N. Y.
FOX ACADEMY OF MUSIC, New York, N. Y.
UNITED ARTISTS THEATRE, Los Angeles, Calif.
METROPOLITAN THEATRE, Boston, Mass.
PYTHIAN TEMPLE, New York, N. Y.
ELKS CLUB, Union Hill, N. J.
MASONIC TEMPLE, Kansas City, Mo.
ILLINOIS ATHLETIC CLUB, Chicago, Ill.
UNION LEAGUE CLUB, Chicago, Ill.
N. Y. COUNTY COURT HOUSE, New York, N. Y.
FEDERAL RESERVE BANK, Chicago, Ill.
U. S. NAVAL HOSPITALS, San Diego, Calif.
CONCOURSE PLAZA APTS., New York, N. Y.
RALEIGH APTS., New York, N. Y.
WEYLIN HOTEL, New York, N. Y.
MONTAUK POINT HOTEL, Montauk Point, N. Y.
RITZ-CARLTON HOTEL, Boston, Mass.
NEW BEDFORD HOTEL, New Bedford, Mass.
AMBASSADOR HOTEL, Chicago, Ill.
WINDERMERE HOTEL, Chicago, Ill.
AUGUSTINIAN FATHERS, Staten Island, N. Y.
BOARD OF EDUCATION, Chicago, Ill.
N. Y. TELEPHONE COMPANY, New York, N. Y.
NATIONAL CITY BANK, New York, N. Y.
WRIGLEY BUILDING, Chicago, Ill.
TRIBUNE BUILDING, Chicago, Ill.
KINGS COUNTY HOSPITAL, Brooklyn, N. Y.
CITY OF NEW YORK NURSES' HOME, Welfare Island, N. Y.
NORTH COMMUNITY HOSPITAL, Glen Cove, N. Y.
MICHIGAN CHILDREN'S HOSPITAL, Detroit, Mich.
ILLINOIS CENTRAL R. R. HOSPITAL, Paducah, Ky.
NORTHERN PACIFIC HOSPITAL, St. Paul, Minn.
LUCKEY PLATT DEPT. STORE, Poughkeepsie, N. Y.
HORNE DEPT. STORE, Pittsburgh, Pa.
CURTISS CANDY CO., Chicago, Ill.
ALBERT PICK & CO., Chicago, Ill.
TRIANON BALLROOM, Chicago, Ill.

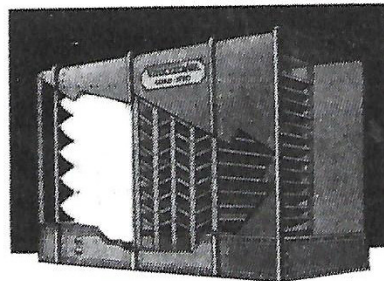
WHEREVER comfort and efficiency require cooled or refrigerated air, Wittenmeier-Vitolyzed-Air equipment delivers it.

In hundreds of theatres, hotels, clubs, restaurants, apartment houses, schools, hospitals, and industrial plants our installations give perfect service.

Simple in design, construction and in operation, once installed they become almost automatic, requiring a minimum of time on the part of mechanic or engineer.

No matter what problem of cooling or refrigeration presents itself to you, we have sometime, somewhere faced and solved a problem similar in its main essentials—and installed the necessary apparatus.

Our experience is at your service. Full information supplied gladly upon request.



Air washer and eliminator as installed by Wittenmeier-Vitolyzed-Air

One Contract---One Responsibility

WITTENMEIER-VITOLYZED-AIR

1926 BROADWAY—NEW YORK CITY

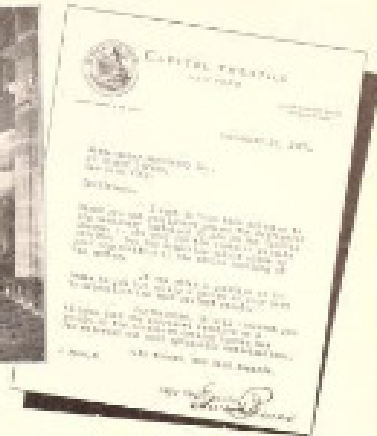
UNITED ARTISTS THEATRE

July 1, 1927

251



The Capital Theatre, Broadway, New York is cooled with a Wittenmeier-Vitolyzed-Air System



About Cooling Your Theatre

The question of cooling your theatre in Summer is not a matter of philanthropy but of cold dollars and cents.

Put yourself in the theatre goer's place for a minute—look at it through his or her eyes and decide what you would do under similar conditions.

Take a steaming hot night in August. Suppose there are two theatres in town—one equipped with air cooling apparatus, the other not. In the unequipped house the thermometer rises steadily up into the nineties. The humidity increases. The perspiration streams down your face and body. Your collar wets. Your handkerchief becomes damp and soggy. So does every stitch on you. You start out for pleasure and end in misery.

In the artificially cooled house, no matter how crowded, no matter how hot out-of-doors, it is delightfully cool and comfortable, no perspiration, no undue humidity, no wilted clothes. You see a good show. You are far more comfortable than you would be out-of-doors or at home. You are highly pleased. You have a kindly feeling in your heart for the theatre and its management and you tell your friends.

To which of these theatres would you go?

You would go to the artificially cooled theatre just as the crowd does.

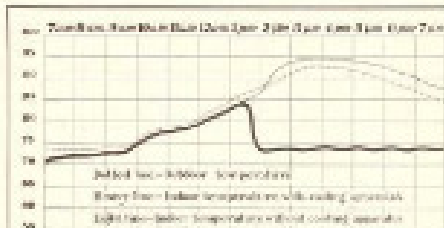
As it is working out, the theatres not having air cooling equipment are paying in lost patronage for the equipment in the theatres that do have it. So, if you are going to pay for it anyway, why not have it?

From coast to coast, all over the country, Wittenmeier-Vitolyzed-Air cooled theatres draw capacity houses. Among the oldest and strongest concerns in the air conditioning field, we have facts, figures and detailed information about theatre cooling and the results it brings that can easily mean many thousands of dollars in increased box office receipts to you each year.

We will furnish it gladly upon request without cost or obligation to you.

A FEW WITTENMEIER-VITOLYZED-AIR INSTALLATIONS

Capital Theatre, New York, N.Y.	United Artists' Theatre, Kansas City, Mo.
Warner Bros. Theatre, New York, N.Y.	Capital Theatre, Philadelphia, N.Y.
Fox Academy of Music, New York, N.Y.	Loew's New Rochelle, New Rochelle, N.Y.
Knox's Fordham, New York, N.Y.	Metropolitan Theatre, Boston, Mass.
Loew's Canal Street, New York, N.Y.	Edwards Theatre, Chicago, Ill.
United Artists' Theatre, Los Angeles, Calif.	Central Park Theatre, Chicago, Ill.
Majestic Theatre, Dallas, Texas	Dixie Theatre, Pittsburgh, Pa.
Loew's State, Memphis, Tenn.	Waldie Theatre, Wichita, Kans.
Loew's Palace, Washington, D.C.	Big Theatre, Birmingham, Ala.
Loew's Palace, Memphis, Tenn.	Loew's State, Los Angeles, Calif.
Paramount-Florenz-Lasker Corp., Long Island, N. Y.	



In the above graph the dotted line represents outdoor temperature on a moderately hot day in summer. The heavy black line shows the corresponding indoor temperature of a theatre equipped with cooling apparatus, which opens its doors at one-half P.M. During the morning while the apparatus is inactive the indoor temperature rises, but at one-half when the cooling system is turned on the temperature sharply drops to any desired degree and then remains. Without cooling apparatus the indoor temperature as indicated by the line line continues to rise to a sufficing degree. Is it any wonder the public prefers artificially cooled theatres?

WITTENMEIER-VITOLYZED-AIR

1926 Broadway, New York—Phone Trafalgar 4522

UNITED ARTISTS THEATRE

**3
FACTS
WORTH
KNOWING
ABOUT**



KNOWLES MUSHROOM AIR DIFFUSERS FOR AUDITORIUMS

These three facts refer to the three results obtained by the use of the Knowles Notch underseat mushrooms in auditoriums

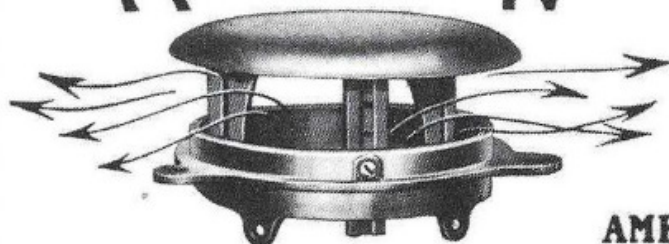
- 1—Delightful Comfort insured to the occupants of seats
- 2—Uniform distribution of Fresh Air either cool or warm
- 3—Compliance with the laws of nature and of man



**KNOWLES MUSHROOM
VENTILATOR CO.**

202 Franklin St. New York

KAUFFMAN



AIR DIFFUSERS

SINCE 1908

Kauffman Air Diffusers

HAVE BEEN IN USE IN

Some of America's Finest Theatres

Simple to Install—Low in Price

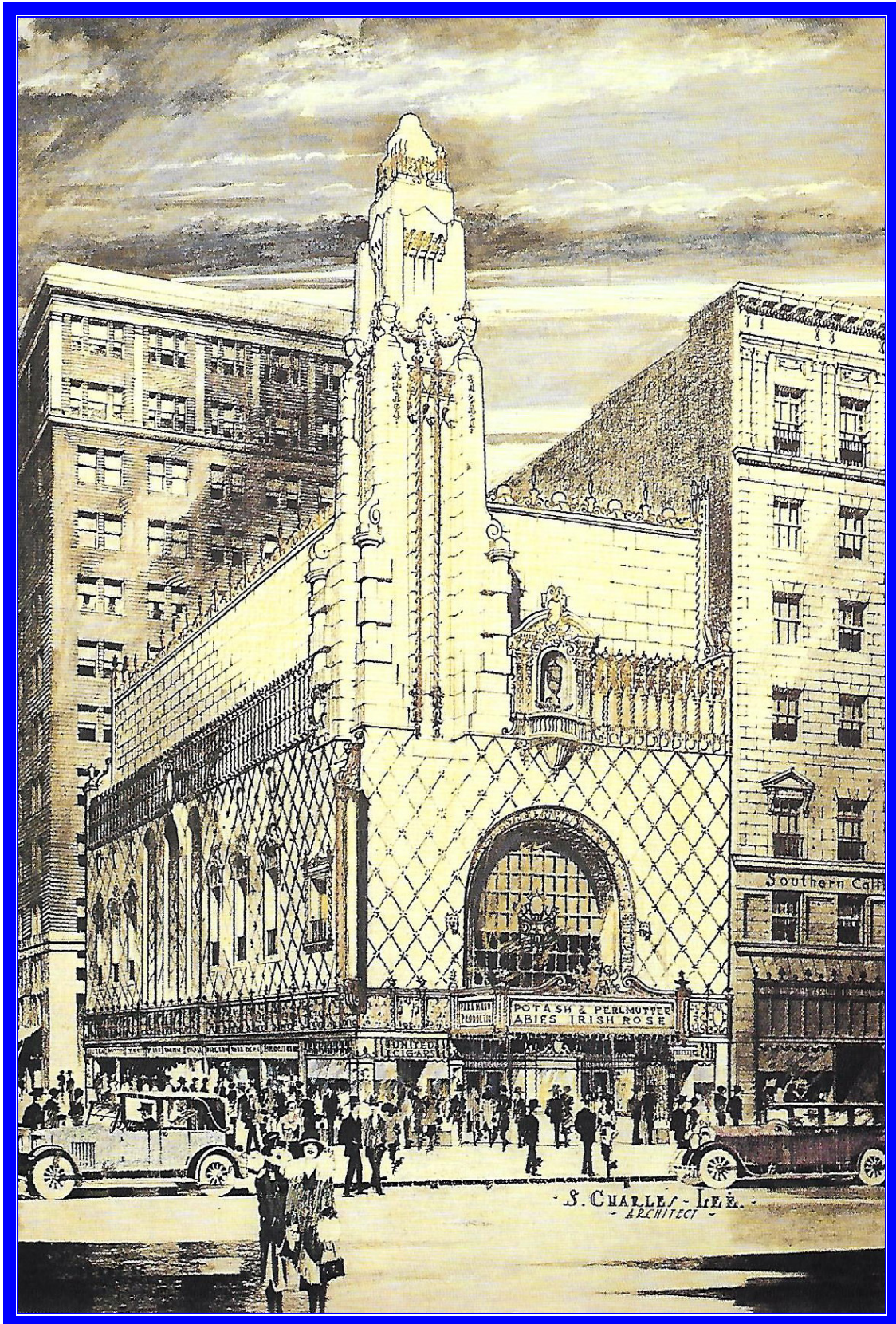
Graduated Air Control

AMERICAN METAL PRODUCTS CORP.

ST. LOUIS, U. S. A.

Figure 11-44 Small floor registers, commonly known as mushrooms, were used in halls and theaters after 1910 for upward air distribution. Such outlets proved unsatisfactory for cooling purposes (from The Heating and Ventilating Magazine, June 1929 and January 1925).

TOWER THEATRE



Tower Theatre 1926 by Architect S Charles Lee (The Show Starts on the Sidewalk)

TOWER THEATRE

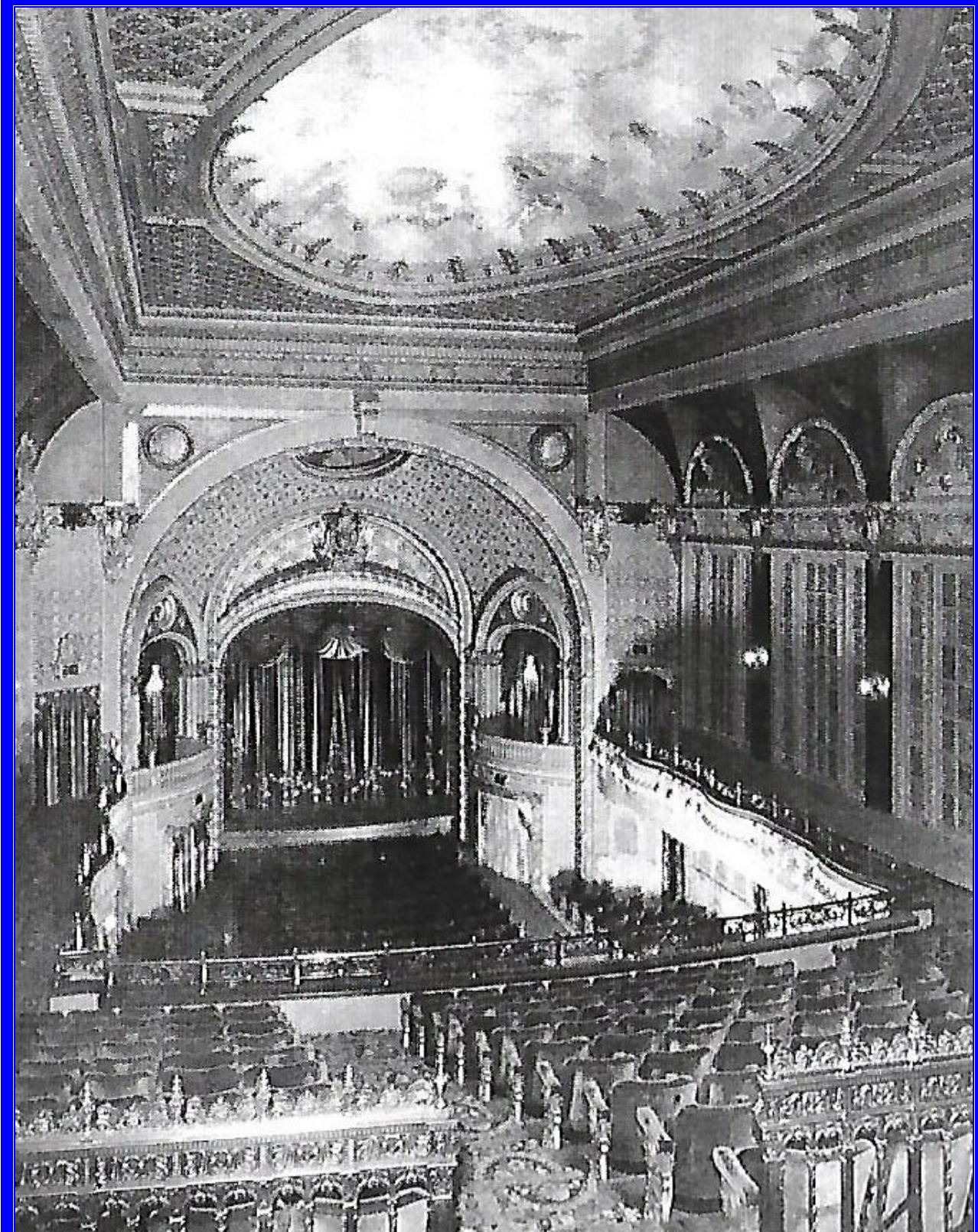


(The Show Starts on the Sidewalk)

Opened 1927 Seats 906
Architect: S Charles Lee

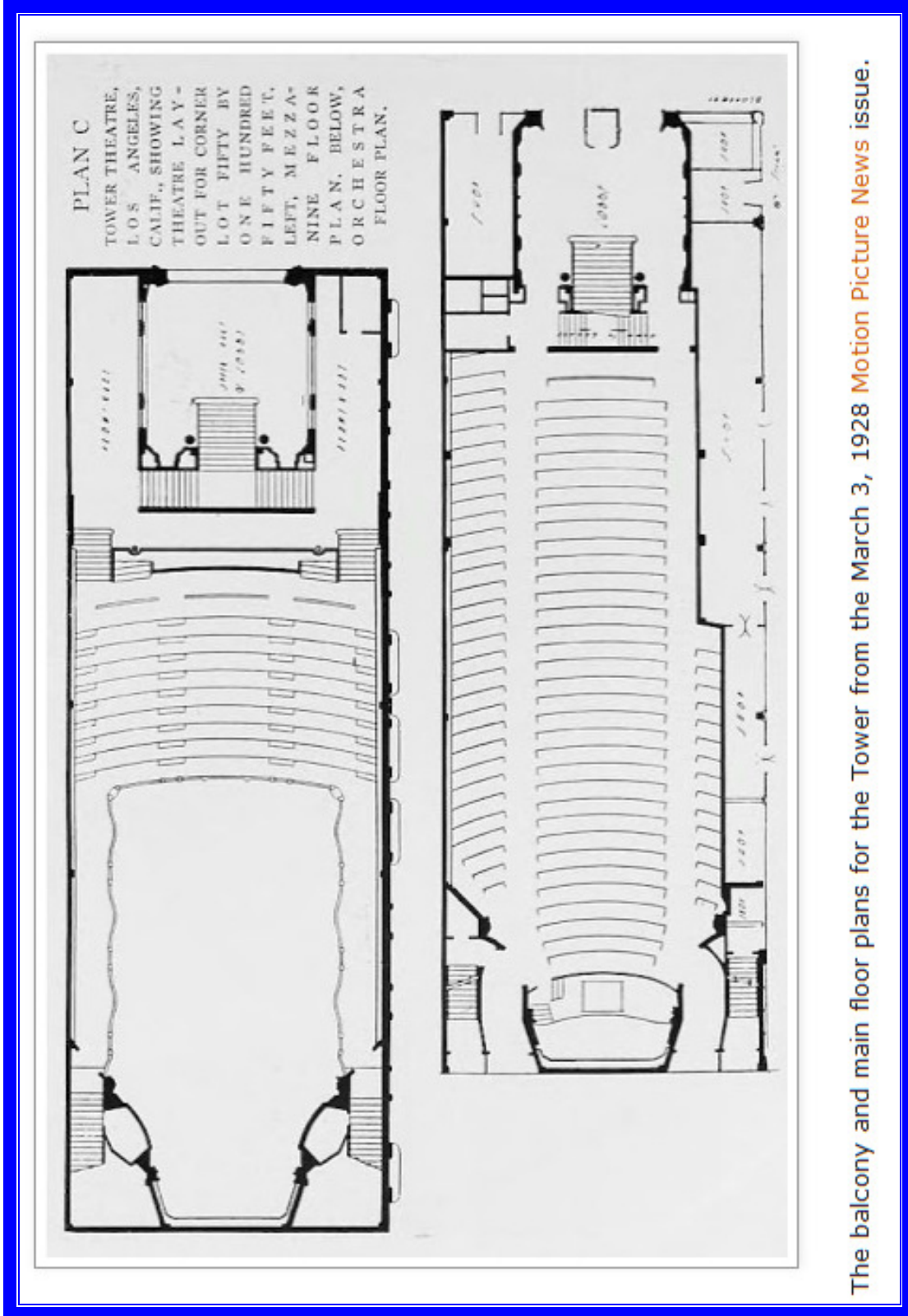
Air Conditioned by Carrier Engineering Corporation

TOWER THEATRE



(The Show Starts on the Sidewalk)

TOWER THEATRE



The balcony and main floor plans for the Tower from the March 3, 1928 [Motion Picture News](#) issue.

TOWER THEATRE

Gumbiner also requested that both his theatres be air-conditioned and kept at a uniform temperature of seventy degrees at all times. Air-conditioning, invented in 1908 by Willis Carrier, had previously been used only in hospitals and industry to control humidity. In 1921, the Central Park Theatre in Chicago introduced it as a creature comfort, as did Grauman's Metropolitan Theatre in Los Angeles in 1922. Movie theatres used air-conditioning routinely thereafter, the revenues from which allowed the Carrier company to survive the Depression.²⁷ Painted icicles dripping on a banner hanging from the marquee became as necessary as the marquee itself in theatre vocabulary and an important selling point (fig. 49).²⁸ Ads for the Tower Theatre in 1927 read:

Leave Your Fan at Home!

Manufactured Weather makes every day a good day at the Tower Theatre. When you enter, you will realize that H. L. Gumbiner has fulfilled one more great obligation to his public. He has included in this theater the marvel of manufactured Weather. This is a Carrier Conditioned Theater providing to the patrons a copious supply of air that is washed and purified, air that is warmed and humidified for ideal comfort in winter, air that is cooled and dehumidified for invigorating comfort in Summer, air that is greatly diffused throughout the theater without the slightest draught.²⁹

Eager to promote his investment, Gumbiner had a window installed on the landing between the first floor and the restrooms from which patrons could view the weather machinery.³⁰ One of the exterior poster cases at the Los Angeles contained a recording apparatus that continuously compared the temperature inside and outside.³¹ A plaque over the drinking fountain advertised ice-cold water.

(The Show Starts on the Sidewalk)

TOWER THEATRE

From Los Angeles To Broadway

Manufactured Weather
makes
"Every day a good day"



Carrier Conditioned Theatres

*Fulfill the Public's Demand
for Comfort*

PEOPLE have learned to feel for themselves and to recognize immediately the delightfully comfortable atmosphere in a Carrier Conditioned Theatre. Proper air conditioning in the theatre now rests on a par with the beauty of the theatre and the quality of the entertainment as an attraction to the public. This explains the remarkable rate at which the fine theatres of the country are adopting Carrier conditioning equipment.

The Carrier system, designed especially for each theatre, is guaranteed to maintain uniform conditions of Temperature, Humidity and Air Purity every day in the year.—It is the development of more than twenty years of specialized air conditioning experience.—A recent development provides the same complete system for the fine, small theatres.

Write for the book "Theatre Cooling and Conditioning".—Describe your theatres.

Ask for a visit from one of our Engineers.

Carrier Engineering Corporation

Offices and Laboratories

NEWARK, NEW JERSEY

NEW YORK PHILADELPHIA BOSTON CHICAGO CLEVELAND KANSAS CITY LOS ANGELES

WARNER BROS THEATRE



Warner Brothers Theatre, Hollywood, California
G. Albert Lansburgh, architect

(American Theatres of Today)

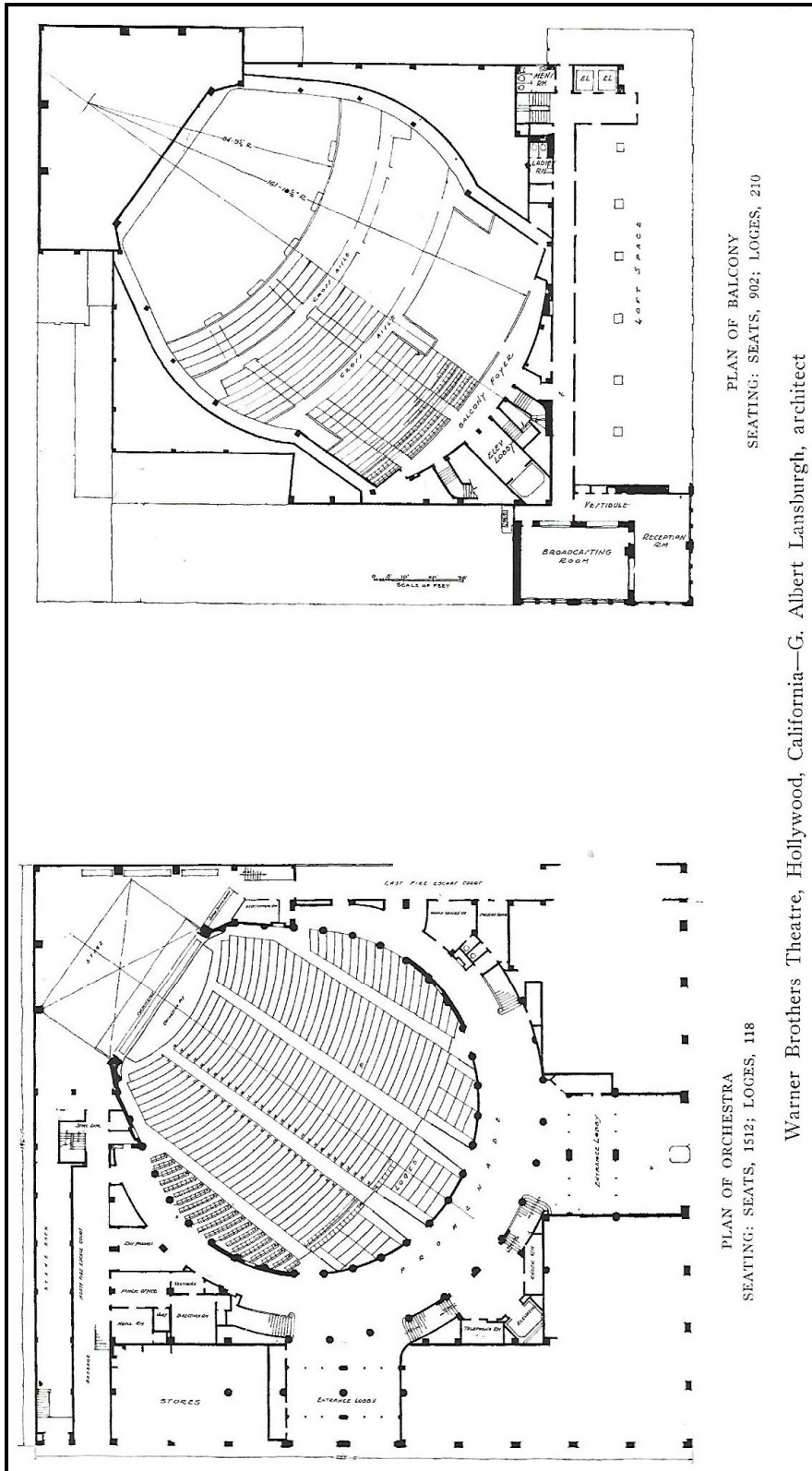
WARNER BROS THEATRE



**Opened 1928 Seats 2700
G Albert Landsburgh**

**Air conditioned with ammonia refrigeration.
Supply air from under floor plenum
through floor mushroom outlets**

WARNER BROS THEATRE



(American Theatres of Today)

WARNER BROS THEATRE



Refrigeration plant room with two ammonia machines
ALL ENGINEERING SERVICES PHOTOGRAPHS FROM losangelestheatres.blogspot.com

WARNER BROS THEATRE



Remains of ammonia refrigerating compressor



The boiler plant

WARNER BROS THEATRE



The fan room

WARNER BROS THEATRE



Basement supply air plenum chamber with the ceiling having multiple circular holes connecting to auditorium "mushroom" supply air outlets on the auditorium floor



Balcony supply air fan

WARNER BROS THEATRE



Stage sprinkler piping

WARNER BROS THEATRE



Electrical switchboards

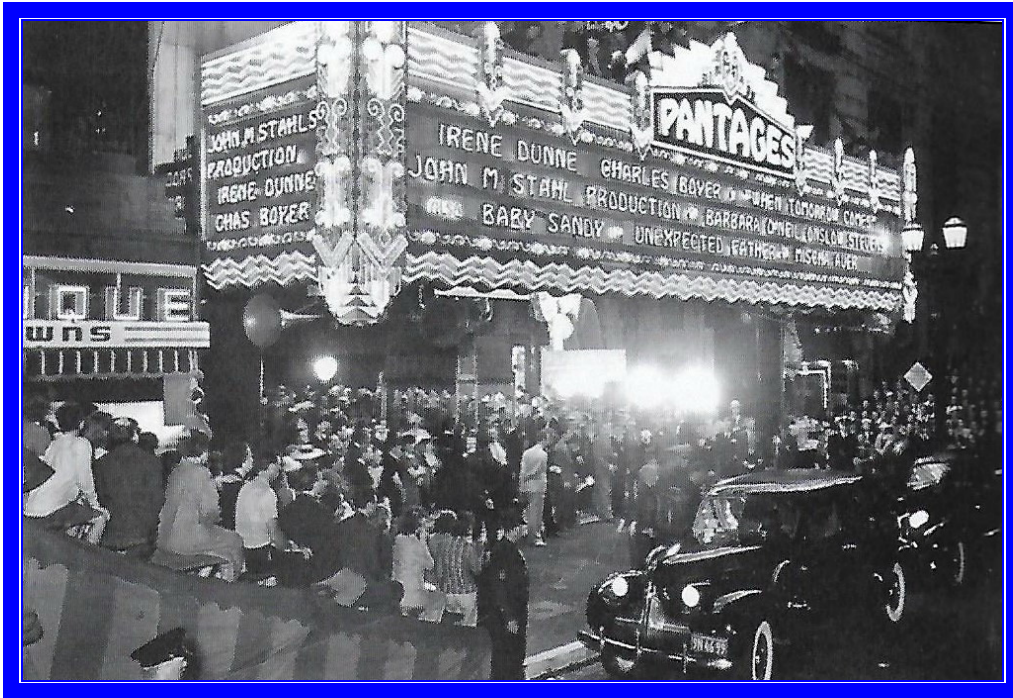
PANTAGES THEATRE



Pantages Theatre, Hollywood, California
B. Marcus Priteca, architect

(American Theatres of Today)

PANTAGES THEATRE



(Theatres in Los Angeles)

Opened 1930 Seats 2703
Architect: B Marcus Priteca

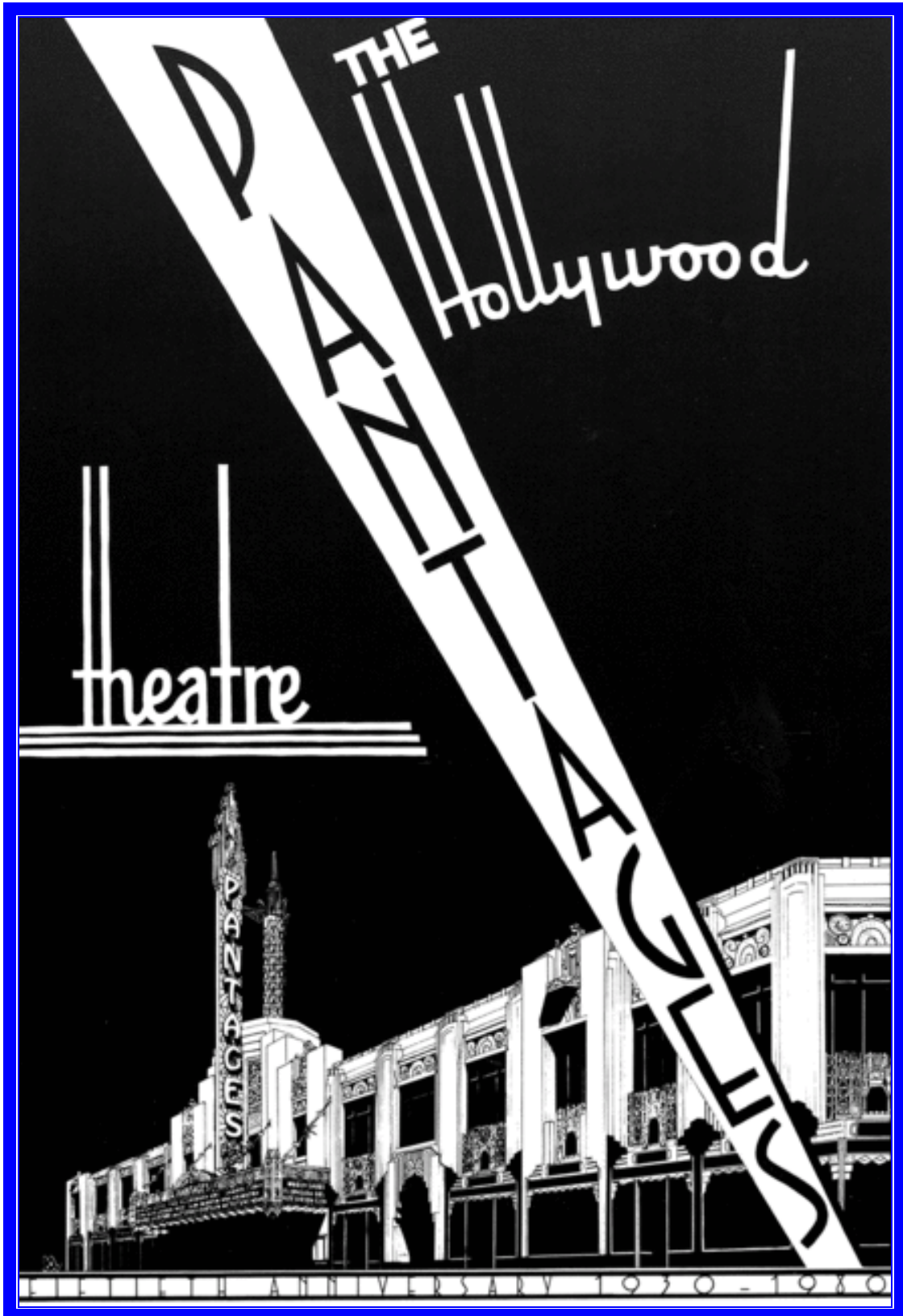
"The Hollywood Pantages cooling is based on a push/pull system. The vent boxes open to 2 massive pressurized air chambers known as the plenum located right below the seats"

PANTAGES THEATRE



(Cinema Treasures)

PANTAGES THEATRE



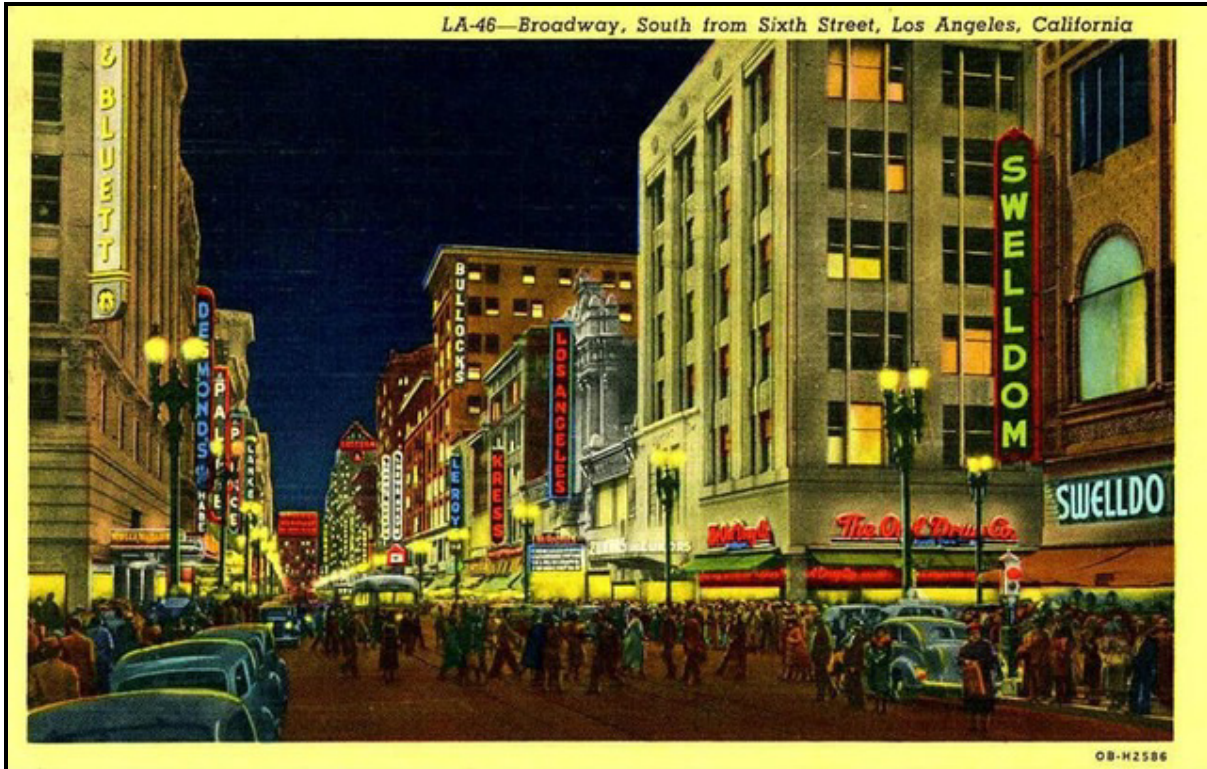
(Cinema Treasures)

LOS ANGELES THEATRE



(The Show Starts on the Sidewalk)

LOS ANGELES THEATRE



Opened 1931 Seats 2000
Architect: S Charles Lee

Air Conditioned by Carrier Engineering Corporation

LOS ANGELES THEATRE



(The Show Starts on the Sidewalk)

LOS ANGELES THEATRE



These Theatres have answered the Public's Demand for Comfort

- | | |
|---|--|
| Metropolitan, Los Angeles
Wm. Lee Strobel, Archt. | Colfax Grand, Chicago
J. H. Strobel, Archt. |
| Palace, Dallas, Texas
D. C. Hill, Archt. | Norridge, Mobile, Ala.
Guthrie West, Archt. |
| Texas, Houston, Texas
Joan & Taylor, Archt. | Capitol, Manhattan, Pa.
Wm. H. Lee, Archt. |
| Broad, Broadway, N. Y.
The W. Jones, Archt. | State's Hippodrome, Buffalo, N. Y.
Lyon H. Lampert & Ross, Archt. |
| Maryland, St. Louis
Kear & Kean, Archt. | Texas, San Antonio
Blair Ross, Archt. |
| Capitol, Chicago
John Brown, Archt. | Archbishop, St. Louis
Kear & Kean, Archt. |
| Lyle, Indianapolis
Vernon Egan & Miller, Archt. | Avonia, Chicago
John Brown, Archt. |
| Walter Warner, Joliet, Ill.
Kear & Kean, Archt. | Tampa, Tampa
John Brown, Archt. |
| Olympic, Miami, Fla.
John Brown, Archt. | Trial, Chattanooga
Kear & Kean, Archt. |
| New Vanderbilt, Atlanta
B. E. Hill & Lloyd Wheeler & Son, Archt. | Parsonage, Broadway, N. Y.
Kear & Kean, Archt. |
| Florida, St. Petersburg
B. E. Hill & Lloyd Wheeler & Son, Archt. | Paragon, Memphis, Tenn.
B. Moore Brown, Archt. |
| State, Broadway, N. Y.
B. E. Hill, Archt. | Im. Houston, Texas |
| Howard, Atlanta
The W. Lee & M. C. Jones | Keaton, Columbus, Ohio
C. Howard Clark, Archt. |
| | Cinema, Columbus, Ohio
B. E. Hill, Archt. |

Manufactured Weather makes "Every day a Good day"

A Constant Source of Comfort and Satisfaction
to the Public and to the Theatre Owner

Check the Box Office Receipts of the Carrier Cooled Theatres. Learn how the system which Cools and Dehumidifies the Air in Summer, also Heats and Humidifies the Air in Winter. Learn of the Simplicity, Safety and Dependability of Carrier Centrifugal Refrigeration. Learn why Real Engineering Experience is Important. Write for the Book, "Theatre Cooling," and ask for a visit from one of our Engineers.

Carrier Engineering Corporation

OFFICES and LABORATORIES
NEWARK, NEW JERSEY

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Cleveland

Los Angeles

Kansas City

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hevac-heritage.org/e-books large





