

# PARAMOUNT

### **PART ONE**

# HOLLYWOOD STUDIOS & THEATRE CHAIN

Eur Ing BRIAN ROBERTS CEng Hon.FCIBSE Life Member ASHRAE

**CIBSE HERITAGE GROUP** 

# PARAMOUNT

#### **PART ONE**

# HOLLYWOOD STUDIOS & THEATRE CHAIN

**Introduction** 

The Founders

**Paramount Studios** 

**Publix Paramount Theatres** 

**Balaban & Katz: Air Conditioning** 

**Architects Rapp & Rapp** 

**General Sources of Information** 

#### Introduction

Histories of the American Film Industry concentrate on the films and films stars. This ebook looks at how the introduction of air conditioning, added to the existing elaborate schemes of interior decoration and lighting, helped create an enormous viewing public and the widespread building of "movie palaces." The major studios made the films, controlled their distribution and created their own chains of theatres. At their peak in the 1930s, Paramount (Paramount-Publix) had over 1000 theatres; Warner and Fox each had some 700; Loew's (MGM) had between 150 and 200, while RKO also had about 200.

The early history of Paramount Pictures may be summarised as follows:

Famous Players Film Company, 1912-1916 Famous Players-Lasky Corporation, 1916-1924 Paramount Famous Lasky Corporation, 1924-1936

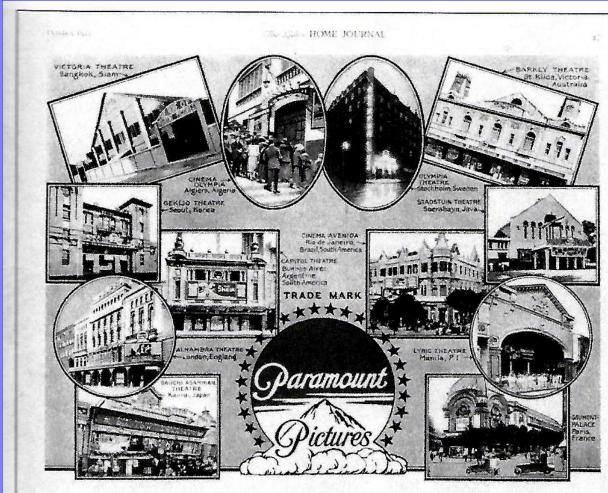
The founders were William Wadsworth Holden, Adolph Zukor and Jesse L. Lasky, while their most important producer was Cecil B. DeMille.

Before air conditioning many theatres in hot and humid locations closed during the summer months. Ensuring the comfort of the public became an important consideration in attracting people throughout the year. Air conditioning in movie theatres was pioneered from 1917 in the Chicago chain of Balaban & Katz, who eventually owned about 125 theatres but never made films (By comparison at their peak Paramount was releasing a new film every week).

During the 1920s, air conditioning became an essential requirement in the new prestige, or *Wonder Theatres* of the "big five" chains and was adopted by many of the smaller independents. In 1925, the Paramount Famous Lasky Corporation bought a controlling interest in Balaban & Katz. But back in 1923......

Paramount Theaters, 1923. To curb Zukor's growing power in Hollywood, which was looked on by some as monopolistic, previously independent chains of exhibitors banded together in an attempt to take back some control. The exhibitors especially resented Paramount's policy of block booking, which forced them to purchase a block of lesser films to get the movie they really wanted. The new company, First National Pictures, also moved into production, stealing Mary Pickford away from Zukor. Famous Players—Lasky, which was being increasingly marketed as Paramount Pictures by this time, retaliated by purchasing its own national chain of theaters. Soon, Paramount was building picture palaces all around the world, as seen in this October 1923 advertisement in the Ladies Home Journal. Block booking would later be deemed an unfair business practice by the US government, which later forced Paramount and other studios to unload their theater chains.

#### Introduction

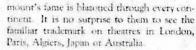


# THE MAGIC NAME IN ENTERTAINMENT THE WORLD OVER

YOU whose lives are spent in one locality may have a dim idea of the thousands of other communities keemly enjoying Paramount Pictures at the same moment.

You who travel all over the United States have seen for yourselves that Paramount is always mysteriously there ahead of you!

But world-travelers can add still another chapter to the story! They know that Para-



In some Far Eastern communities the name Paramount (perhaps the only English term they know) is a magic word, because it means

to them just what it means to you-"tonight's the night for a great show!"



# Paramount Pictures

If it's a Paramount Picture it's the best show in town!

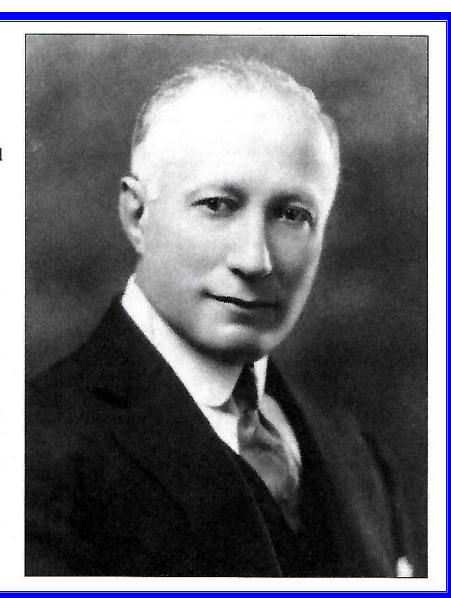
#### **Introduction**

In 1931, the number of American Movie Theatres was said to be 21,284 with a combined seating capacity of 12,143,761 serving a population of 122 million. The States having more than 1000 theatres were: Illinois, New York, Ohio, Pennsylvania and Texas.

Total Seating	Capacities	of Theatres	in the U	. S.
				Number
A**	Number of	Seating		Of People
State	Theatres	Capacities	Population	Per Seat
Alabama	255	105,443	2,645,297	25.9
Arizona	98	48,734	435,833	8.9
Arkansas		109,595	1,854,482	17.0
California	212	699,651	5,672,009	8.1
Colorado		128,296 173,775	1,035,043 1,604,711	8.0
Delaware	6.6	37,701	238,380	9.2 6.3
District of Col	4.6	41,254	486,869	11.7
Florida	260	129,945	1,466,625	11.3
Georgia		108,631	2,902,443	17.4
Idaho		76,784 861,987	445,837	5.8
Illinois		304,178	7,607,684 3,225,600	8.8 10.6
Iowa	710	331,720	2,467,900	7.4
Kansas	544	225,624	1,879,946	8.0
Kentucky	525	244,269	2,623,668	10.8
Louisiana	m / m	128,404	2,094,496	16.7
Maine		127,244	797,423	6.2
Maryland	- 1-	121,444 497,156	1,629,321 4,253,646	13.4
Massachusetts	4.40	486,390	4,842,280	8.6 9.9
Minnesota		231,386	2,566,445	11.0
Mississippi	246	109,178	2,007,979	18.3
Missouri		468,224	3,620,961	7.7
Montana		69,926	536,332	7.5
Nebraska	71	168,810	1,378,900	8.1
New Hampshire		23,324 73.475	90,891 465,293	3.8 6.3
New Jersey		479,530	4,028,027	8.3
New Mexico		35,986	427,216	11.8
New York	~!-	1,576,980	12,619,503	7.9
North Carolina		143,504	3,170,287	22.0
North Dakota		81,910	682,448	8.3
OhioOklahoma	~/^	644,215 172,140	6,689,837 2,391,777	10.2 13.9
Oregon	• **	96,906	952,691	9.8
Pennsylvania	1,191	823,581	9,640,802	11.7
Rhode Island	91	72,644	681,232	9.4
South Carolina		58.323	1,732,567	29.7
South Dakota	0.40	91,347 118,821	690,755 2,608,759	7.5 21.1
Texas	4 455	471,252	5,821,272	12.3
Utah	257	102,636	502,582	4.7
Vermont	123	54,645	359,611	6.5
Virginia		136,352	2,419,471	17.7
Washington		170,948	1,561,967	9.1
West Virginia		327,397 318,087	1,728,510 2,980,282	5,2 9,3
Wyoming		34,009	2,980,282	6.6
	- Contractive Communication		Constitution of the constitution	
TOTALS	21,284	12,143,761	122,696,577	10.1

#### The Founders: Adolph Zukor

ADOLPH ZUKOR, 1922. Adolph Zukor was born in 1873 in Ricse, Hungary, in what was then the Austro-Hungarian Empire. Orphaned at eight, Adolph and his older brother Arthur went to live with their uncle, and by age 12, Adolph was a clerk's apprentice earning \$2 a month. Enchanted by tales of America filtering back to Hungary from recent emigrants, Adolph asked the trustees of his parents' estate for the necessary funds to travel there once his apprenticeship ended. The money was granted, and with only \$40 sewn into his coat and a few coins in his pocket, young Adolph boarded a ship to America. In just over 25 years from the day he arrived in New York harbor, Zukor would be the head of the most powerful film studio in Hollywood.



(Photo 1922, Early Paramount Studios)

### The Founders: Jesse L. Lasky



Jesse L. Lasky, 1910. At times, gentlemanly Jesse Lasky seemed out of place around some of his more ferocious peers in Hollywood. Lasky had a keen eye for talent, discovering and grooming several of the studio's most bankable stars. A steadying presence through the company's frenetic early years, Lasky helped steer it through the turbulent waters of studio scandals in the early 1920s. Forced out of the studio during the financial crisis of the 1930s, Lasky later produced independently, most notably with 1941's Sergeant York, which won Gary Cooper his first Best Actor Oscar. Despite later financial problems, historian Norman Zierold claims that, "With all his tribulations, Lasky, in memory of his widow, never spoke unkindly of another human being." He harkened back to his days on the vaudeville circuit for the title of his autobiography, I Blow My Own Horn, which was published a year before his death in 1958. Lasky was interred in Hollywood Forever Cemetery, just north of the Paramount Pictures lot. Cecil B. DeMille, Lasky's friend and partner, was buried in the same cemetery the following year.

#### The Founders: W. W. Hodkinson



W.W. Hodkinson, 1914. While far less glamorous than the production or exhibition sides of the motion picture business, film distribution is a crucial link in the chain, getting the films from the studios to the theaters. This hugely important—but generally overlooked—side of the biz changed enormously in the mid-1910s through the creation of Paramount Distributing Corporation, a nationwide distribution company set up by W.W. Hodkinson. Before Paramount, films were generally distributed on a regional, or "states rights," basis. Hodkinson brought smaller distributors together to create a national distribution chain and instituted the policy of distributor-financed film production, meaning that Paramount agreed to finance several producers' films, thereby insuring a steady number of films to distribute, while taking a cut of the profits. Two of the producers who signed up for the deal were Zukor and Lasky. Initially pleased with the arrangement, the two men later teamed up and took over control of Paramount from Hodkinson. After being ousted from his own company, Hodkinson continued for a time as a distributor and later became an airplane manufacturer.



#### Paramount Famous Lasky Studio, Hollywood

Originally a distributor for the Jesse L. Lasky Co. and Famous Players, Paramount was absorbed by these producers and, under them, became one of the top five studios in Hollywood. Adolph Zukor from Famous Players was responsible for the financial success of the studio, a great deal of which came from building up the theater chain. Jesse Lasky was the creative force behind the studio, signing on directors such as Cecil B. DeMille and James Cruze and such stars as Rudolph Valentino, Wallace Reid, Pola Negri, and Gloria Swanson. Paramount's studios were on Sunset Boulevard and Vine Street until 1926, when the company moved to its present location on Melrose Avenue. The famous Paramount Gate, visible here and immortalized in *Sunset Boulevard* (1950), among other movies, is still part of the studio.

(Hollywood in Vintage Postcards)

In May 1914, film distributor W.W. Hodkinson created a company to sell films on a nationwide basis. He called it the Paramount Distributing Corporation, taking the name from an apartment building he passed in New York. One day, while doodling at his desk, Hodkinson came up with a sketch of the snowcapped mountain that, with several modifications over the years, is still used to this day as the corporate logo. Hodkinson's plan included enticing several independent producers

to distribute their films through Paramount on a 65–35 basis, meaning that the producers kept 65 percent of the take, with 35 percent going to Paramount. Hodkinson included Famous Players and the Lasky Feature Play Company in the Paramount distribution network, making both Zukor and Lasky members of the board of directors.

That same year, Famous Players moved west to Hollywood, leasing space at the corner of Santa Monica Boulevard and Gower Street at the former home of the Oz Film Manufacturing Company. During the same year, Lasky expanded the barn and acquired the Providencia Ranch near Burbank for location filming.

Zukor approached Lasky with a plan to merge their two companies to secure a stronger position in the industry. On June 28, 1916, they joined forces to form the Famous Players—Lasky Corporation, with Zukor named president, Lasky vice president, Goldfish chairman of the board, and DeMille in charge of production.

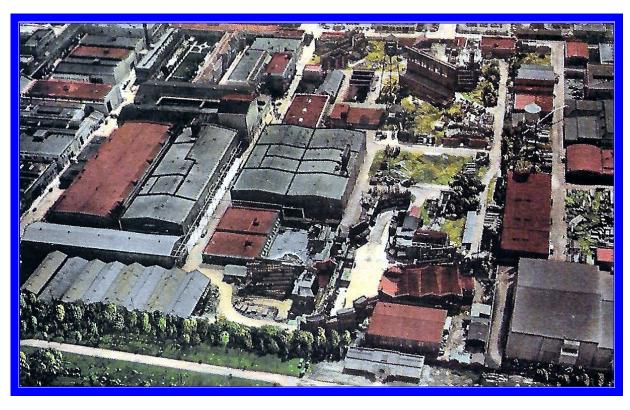
A second part of Zukor's plan was the takeover of Paramount, their distribution company. While the deal they made with Paramount initially sounded attractive, Zukor and Lasky quickly realized that profits that could be lining their own pockets were going to the Paramount coffers—a situation that could only change if they were in charge of their own distribution. The solution came by staging a corporate coup d'etat, with Zukor engineering a buyout of a majority of the stock of Paramount, while simultaneously ousting Hodkinson from his own company.

The new entity was immediately the biggest in Hollywood. Zukor began using the Paramount name in advertising and publicity for the new company, with the slogan "If it's a Paramount Picture, it's the best show in town."

In 1926, the company found a new Hollywood home on Melrose Avenue after it purchased United Studios, which shared a city block with what would later become RKO Pictures. Zukor immediately shifted primary operations from the Selma and Vine lot to the new site. He also ordered that the barn where *The Squaw Man* was filmed in 1914 be moved to their new headquarters for sentimental reasons, converting it to a gymnasium. The company went through several name changes during the 1920s before eventually settling on Paramount Pictures. Before the decade was out, the company saw great success with several films, including *Wings*, the first movie to win the Academy Award for Best Picture.



(Hooray for Hollywood)



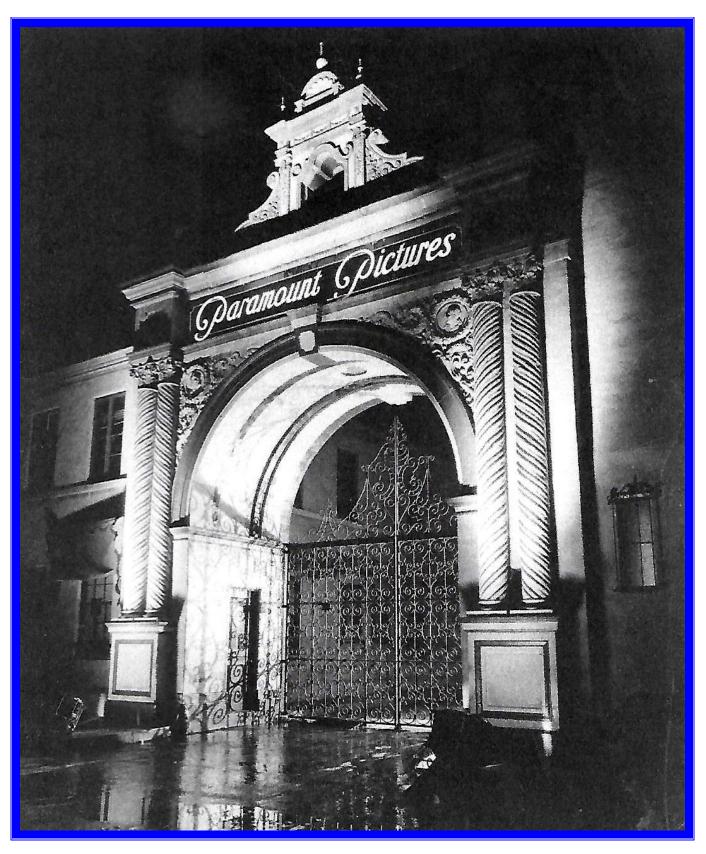
(Undated postcard)



Paramount stages and backlots in 1930 (Early Paramount Studios)



Hopeful extras at the gates of the Bronson Studio in 1930 (Early Paramount Studios)



The famous Bronson Gate at Paramount Pictures, late 1930s (Early Paramount Studios)

#### **Publix Paramount Theatres**

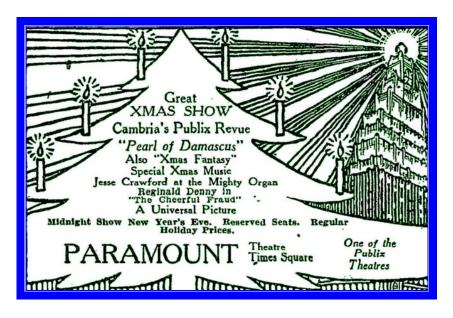


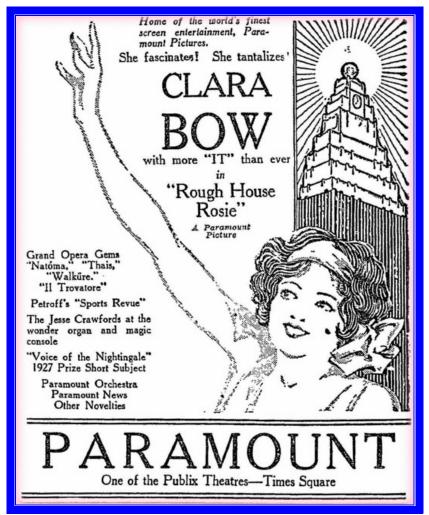
#### Publix, Balaban and Katz, Loew's competition and wonder theaters

By acquiring the successful Balaban & Katz chain in 1926, Zukor gained the services of Barney Balaban (who would eventually become Paramount's president in 1936), his brother A. J. Balaban (who would eventually supervise all stage production nationwide and produce talkie shorts), and their partner Sam Katz (who would run the Paramount-Publix theatre chain in New York City from the thirty-five-story Paramount Theatre Building on Times Square)

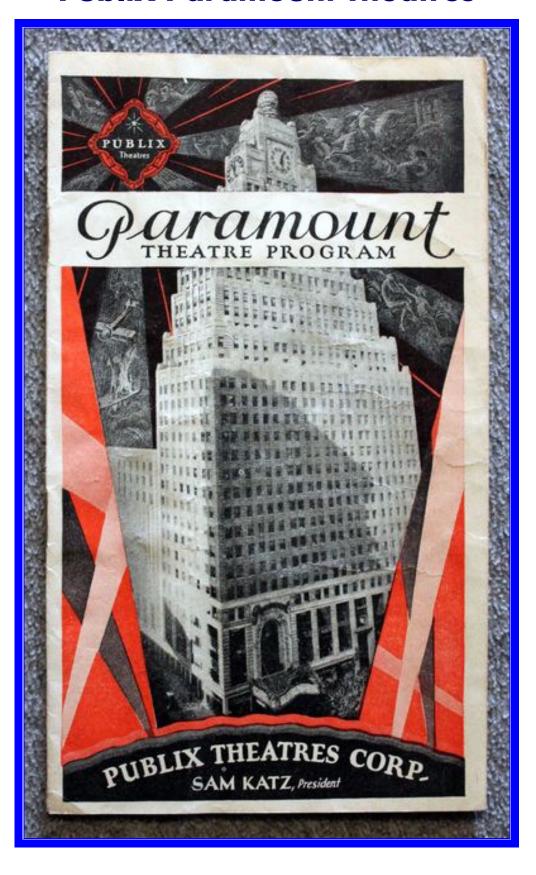
Balaban and Katz had developed the Wonder Theater concept, first publicized around 1918 in Chicago. The Chicago Theater was created as a very ornate theater and advertised as a "wonder theater." When Publix acquired Balaban, they embarked on a project to expand the wonder theaters, and starting building in New York in 1927. While Balaban and Public were dominant in Chicago, Loew's was the big player in New York, and did not want the Publix theaters to overshadow theirs. The two companies brokered a non-competition deal for New York and Chicago, and Loew's took over the New York area projects, developing five wonder theaters. Publix continued Balaban's wonder theater development in its home area.<sup>[10]</sup>

#### **Publix Paramount Theatres**





### **Publix Paramount Theatres**



The history of Balaban & Katz is significant in the story of Paramount because in 1926 Paramount bought a majority shareholding in their chain of over one hundred and twenty theatres. Barney Balaban and Sam Katz became important members of the Paramount management team bringing with them their experience of commissioning architects Rapp & Rapp to design large "Wonder Theatres" complete with air conditioning. In 1930, Sam Katz became Vice-President of the Publix-Paramount Group.



Three of the founding members of Balaban & Katz. (l-r) Morris Katz, Sam Katz and Barney Balaban

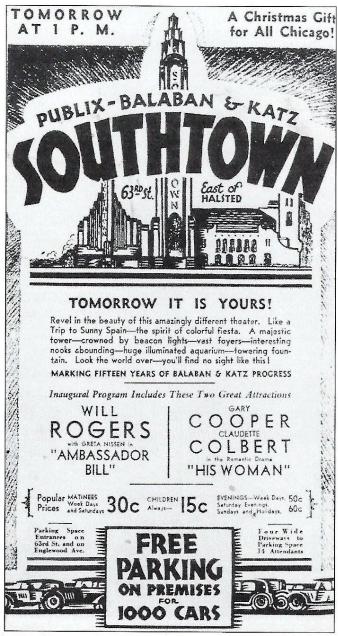
Balaban & Katz ventured into the movie theatre business in 1915 showing films in a Chicago restaurant but they quickly went on to establish a chain of theatres. The Balaban & Katz\* chain is notable as being the first to provide air conditioning in a major theatre, using refrigeration, rather than evaporative cooling air washer systems. Starting in 1917 with the Central Park in Chicago, a 2400 seater, they went on to commission Rapp & Rapp to design a number of large *Wonder Theatres* having seating capacities of over 3000, including in 1921 the Chicago Theatre (3861 seats) and the Tivoli Theatre (3520), followed in 1925 by the Uptown Theatre (4381) and the 1931 Southdown Theatre (3206 in partnership with Publix), all in Chicago.

Before this time, comfort air conditioning for people was not feasible as the refrigerant in general use was the toxic NH<sub>3</sub> (ammonia). However, the Kroeschell Ice Machine Company of Chicago and their Chief Engineer, Frederick Wittenmeier secured the European patents for CO<sub>2</sub> (carbon dioxide) machines, and developed these for air conditioning in Balaban & Katz theatres. Wittenmeier went on to form his own air conditioning company (the Wittenmeier Machine Company\*\*).

Balaban and Katz experimented with many new innovations with the Central Park Theatre. Most notable was the installation of central air-conditioning. In 1917, virtually no public buildings boasted temperature-controlled environments. According to Ida Scully Balaban (John's daughter), John's future wife Bertha Bruder and Barney both worked at the Western Cold Storage Company. Barney decided to find a way to use the same technology used to cool the food at Western Cold Storage to air-condition all B and K theaters. It was six years before any of their competitors installed air-conditioning. B and K enjoyed an exclusive reputation for providing state-of-the-art comfort to its customers.

<sup>\*</sup> The B&K history is contained in the book "The Chicago Movie Palaces of Balaban & Katz" Arcadia Publishing, 2003.

<sup>\*\*</sup>The story of Wittenmeier is detailed in a Large E-Book on the CIBSE Heritage Group website under Part 2, Section 7 of "Air Conditioning American Movie Theatres 1917-1932." See also the Technical Reports in Part 1.



Many consider the Southtown to be the last deluxe movie palace built in Chicago. Designed by Rapp and Rapp in the Spanish-Moorish style, it had 3,206 seats. It had interesting displays in the mezzanine that told Chicago's history. The Southtown, located at 610 West Sixty-third Street, opened on Christmas Day in 1931, and the first movies shown were part of a double feature: Ambassador Bill starring Will Rogers and His Woman starring Claudette Colbert. Its timing was rather poor, as it was completed just as the Depression set in. The stage was never used for live shows. The Southtown was closed down in 1958 and became a department store. It was torn down in 1991. Notice in the advertisement above the 30¢ bargain matinees and the 14 parking attendants to park 1,000 cars. Accepting tips was strictly forbidden. (Advertisement courtesy of Theatre Historical Society of America.)

#### The Chicago Movie Palaces of Balaban and Katz

Theater	Location	Seats	Opening Date
Chicago	175 North State Street	3,861	October 26, 1921
Oriental	20 West Randolph Street	3,217	May 9, 1926
United Artists	35 West Randolph Street	1,696	*April 1, 1929
Roosevelt	110 North State Street	1,535	*July 1, 1922
McVickers	25 West Madison Street	2,264	*February 1, 1926
Regal	4719 South Parkway	2,866	February 4, 1928
Tivoli	6329 Cottage Grove Avenue	3,520	February 16, 1921
Maryland	855 East Sixty-third Street	1,540	September 2, 1928
Tower	1510 East Sixty-third Street	3,015	*September 22, 1928
Southtown	610 West Sixty-third Street	3,206	December 25, 1931
Uptown	4814 Broadway Street	4,320	August 17, 1925
Paradise	231 North Crawford (Pulaski) Avenue	3,612	September 14, 1928
Senate	3128 West Madison Street	3,097	June 1925
Harding	2714 North Milwaukee Avenue	2,962	October 12, 1925
Norshore	1748 North Howard Street	3,017	June 17, 1926
Varsity	1710 Sherman Street, Evanston	1,812	*April 1, 1928
Pantheon	4642 Sheridan Road	2,035	*September 28, 1930
Granada	6427 North Sheridan Road	3,447	*November 1, 1929
Marbro	4124 West Madison Street	3,931	*November 1, 1929
Riviera	4746 North Racine Avenue	1,943	*September 29, 1918
Covent	2653 North Clark Street	1,972	*November 1, 1929
Congress	2135 North Milwaukee Avenue	2,890	*November 1, 1929
Belmont	1632 Belmont Avenue	3,257	*May 9, 1930
Century	2820 North Clark Street	3,056	*February 7, 1930
Alamo	3639 West Chicago Avenue	1,557	*October 1, 1930
Belpark	3231 North Cicero Avenue	2,004	*March 12, 1930
Berwyn	6404 West Twenty-second Street, Berwyn	1,673	*November 1, 1929
Biltmore	2046 West Division Street	1,677	*July 31, 1930
Central Park	3535 West Roosevelt Road	1,780	October 27, 1917
Crystal	2705 West North Avenue	1,860	*September 15, 1929
Gateway	5218 West Lawrence Avenue	2,092	June 27, 1930
LaGrange	80 South LaGrange Road	1,436	*September 20, 1929
Manor	5609 West North Avenue	1,827	*September 1, 1930
Nortown	6320 North Western Avenue	2,105	April 4, 1931
State	5814 West Madison Street	1,895	*November 1, 1929
Alba	4826 North Kedzie Avenue	968	*December 25, 1934

\*Date taken over by Balaban and Katz

(Reprinted from the official Balaban and Katz theater manager's manual written in 1934.)

This is a list of the Balaban & Katz Chicago Theatres in 1934

Pictures and text extract from Rapp & Rapp: Architects, Charles Ward Rapp, Viburnham Press



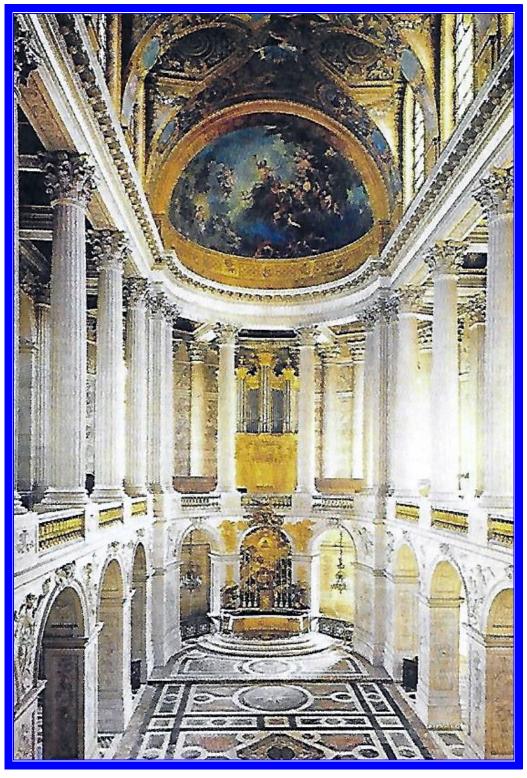
George Leslie Rapp



Cornelius Ward Rapp

By virtue of their size, the Tivoli and Chicago created greater crowd circulation problems than had the Central Park. Rapp & Rapp solved the logistical problems of continuous day and evening performances by creating large lobbies, cross-aisles, exit passageways called vomitories and side stairways, all designed to keep arriving and departing patrons out of one another's way. Always at the front of every official mind was the memory of Chicago's 1903 Iroquois Theatre fire that claimed lives for lack of good exits. Modern theatres met the new fire codes by using ten ton stage-front concrete or steel fire curtains requiring heavy compressors to raise and lower, and a plethora of marked doors whose decorative "Exit" signs gave rise to a minor design art form.

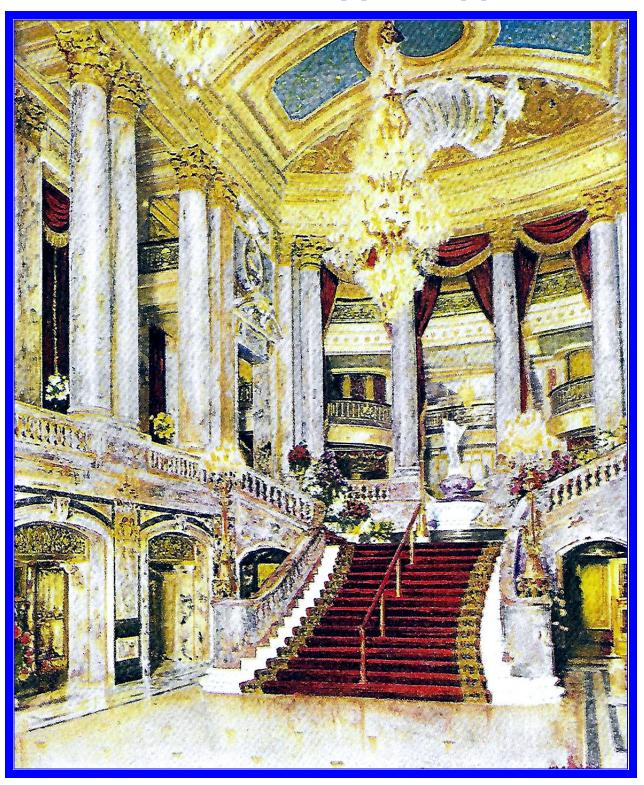
Air-conditioning too was a movie house breakthrough and a prime marketing tool for management who advertised the theatres as oases during long hot summers in a time when home and workplace cooling was only a wish. The Chicago Theatre's clever system pulled 50 degree air from the city's honeycomb of subterranean freight tunnels, passed the air through scrubbers and forced it into the house through under-seat registers called mushrooms.



The Palace of Versailles Chapel was often used by Rapp & Rapp as a model for movie theatre lobbies



Entertainments Room at the Palace of Versailles which influenced Rapp & Rapp in the "Signature Elegance" of their 20th Century movie palaces



Rapp & Rapp design for the lobby of the Paramount Theatre, New York



An example of a Rapp & Rapp design is Chicago's Oriental Theatre & Masonic Building, 1926



Construction to the designs of Rapp & Rapp underway on the Paramount Building & Theatre, Times Square, New York 1926

# General Sources of Information American Movie Theatres & Air Conditioning

#### **AMERICAN MOVIE THEATRES**

#### Where noted IOA=Images of America, Arcadia Charleston.

- 1975 The Best Remaining Seats (Roxy NYC), Ben M Hall, Da Capo Press, NY.
- 1979 The Radio City Music Hall, Charles Francisco, Clarke Irwin, Canada.
- 1982 Movie Palaces: Renaissance and Reuse, Valerio & Friedman, Academy for Educational Development, New York.
- 1983 Hooray for Hollywood (Postcards), Jim Heimann, Chronicle Books, San Francisco.
- 1987 Great American Movie Facilities, David Naylor, A National Trust Guide, USA.
- 1987 Lobby Cards- The Classic Films, Michael Hawks Collection, Bloomsbury, London.
- 1980 Movie Palaces- Survivors of an Elegant Era, Ave Pildas, Charles N Potter, NY.
- 1991 Ticket Paradise, John Margolies & Emily Gwathmey, Bulfinch Press, Boston.
- 1994 The Show Starts on the Sidewalk, Maggie Valentine, Yale UP.
- 1997 The Last Remaining Seats, Berger & Silverman, Balcony Press, CA.
- 1998 Air Conditioning America, Gail Cooper, John Hopkins UP.
- 1998 Movie Palace Masterpiece (Loews Syracuse), Alfred Balk (Ed, Landmark Heritage, NY.
- 1981 American Picture Palaces- The Architecture of Fantasy, David Naylor, Prentice Hall, NY.
- 1982 Movie Palaces: Renaissance and Reuse, Valerio & Friedman, Education Facilities, NYC.
- 1998 Movie Palace Masterpiece, Alfred Balk (Ed), Landmark Theatre Foundation, NY.
- 2002 Cool Comfort: America's Romance with Air Conditioning, Marsha E Ackermann, Smithsonian Books, Washington.
- 2003 Hollywood in Vintage Postcards, Rod Kennedy Jr., Gibbs Smith, Salt Lake City.
- 2004 Cinema Treasures, Melnick & Fuchs, MBI Publishing, St. Paul.
- 2005 Theatres of San Francisco, Jack Tillmany, IOA.
- 2006 The Chicago Movie Palaces of Balaban and Katz, David Balaban, IOA.
- 2006 South Jersey Movie Houses, Allen F Hauss, IOA.
- 2006 Detroit's Downtown Movie Palaces, Hauser & Weldon, IOA.
- 2006 Theatres of Oakland, Jack Tillmany & Jennifer Dowling. IOA.
- 2008 Theatres in Los Angeles; Cooper, Hall & Wanamaker, IOA.
- 2008 Our Movie Houses, Norman O Keim, Syracuse UP.
- 2009 American Theatres of Today (reprint 1927-30), Sexton & Betts, Liber Apertus, CA.
- 2010 Milwaukee Movie Theatres, Larry Widen, IOA.
- 2011 Boston's Downtown Movie Palaces, Arthur Singer & Ron Goodman, IOA.
- 2011 Theatres of Hawaii, Lowell Angell, IOA.
- 2012 Fox Theatre (Atlanta), Janice McDonald, IOA.
- 2012 Downtown Chicago's Historic Movie Theatres, Konrad Schiecke, McFarland, NC.
- 2013 Movie Houses of Greater Newark, Philip M Read, IOA.
- 2013 Early Paramount Studios, Stephens, Christaldi & Wanamaker, IOA.
- 2013 Memphis Movie Houses, Vincent Astor, IOA.

# General Sources of Information American Movie Theatres & Air Conditioning

- 2013 American Movie Palaces, Rolf Achilles, Shire, Oxford.
- 2014 Toronto Theatres, Doug Taylor, History Press, Charleston.
- 2014 Rapp & Rapp- Architects, Charles Ward Rapp, Viburnum Press, USA.
- 2014 Cool: How Air Conditioning Changed the World, Basil Salvatori, Fordham UP, NYC.
- 2015 A Theatre History of Marion, Ohio, Scott L Hoffman, History Press, Charleston.
- 2016 Historic Movie Houses of Austin; Rittereiser &, Miller, IOA.
- 2016 After the Final Curtain, Matt Lambros, Jonglez, USA.
- 2016 Kings Theatre (Brooklyn), Matt Lambros, Theatre Historical Society of America, PA.
- 2017 Flickering Treasures (Baltimore), Amy Davis, John Hopkins UP.
- 2018 Historic Movie Palaces of West Virginia, Kelly Shapiro, IOA.
- 2018 Movie Theatres of Washington DC, Headley & Padua, IOA.
- 2019 Historic Move Theatres of Delaware, Michael J Nazarewycz, History Press, Charleston.

#### **Books on Air Conditioning & Refrigeration**

- 1952 Father of Air Conditioning, (W H Carrier), Margaret Ingels, Country Life Press, USA.
- 1975 Air Conditioning and Ventilation of Buildings, D J Croome-Gale & B M Roberts, Pergamon Press, Oxford.
- 1982 Building Services Engineering: A Review of Its Development, N S Billington & B M Roberts, Pergamon Press, Oxford.
- 1994 Heat & Cold: Mastering the Great Indoors, Donaldson & Nagengast, ASHRAE, Atlanta.
- 1996 The Legend of York International, Jeffrey L Rodengen, Write Stuff Enterprises, Fort Lauderdale, Florida.
- 1998 Air Conditioning America, Gail Cooper, John Hopkins UP.
- 2000 The Comfort Makers (270 Mini-Biographies), Brian Roberts, ASHRAE, Atlanta.
- 2010 Cold Comfort: America's Romance with Air Conditioning, Marsha E Ackerman, Smithsonian Books, Washington, DC.
- 2012 Weathermakers to the World, Carrier (United Technologies), USA.
- 2020 Adventures in Heat & Cold: Men and Women Who Made Your Lives Better, Bernard A Nagengast & Randy C Schrecengost, ASHRAE, Atlanta.
- 2020 20th Century Air Conditioning, David Arnold, ASHRAE, Atlanta.

#### See Also:

- 1925 Theatre Cooling, Carrier Engineering Corporation (Brochure)
- 2019 Historic Theatres and their impact on air conditioning today, Roger Crane, ASHRAE Journal, December.

#### Websites

cinematreasures.org hevac-heritage.org historictheatres.org