

Air Conditioning American Movie Theatres
1917-1932

Movie Theatre Chains and Studios

MOTIOGRAPH DeLuxe II

Cleveland's Latest Playhouse

Keith's Palace

Opens with
The New
MOTIOGRAPH DeLuxe II
and
HIGH INTENSITY ARCS
"Quality Counts"

ENTERPRISE OPTICAL MFG. CO.
564 W. Randolph St.
CHICAGO

CHICAGO OPERATIONS

The advertisement features a detailed illustration of the Keith's Palace building, a grand multi-story structure with classical architectural elements. The building's facade is covered in windows, and the name 'KEITH'S PALACE' is prominently displayed on the upper part of the building. To the right of the building, the text 'MOTIOGRAPH DeLuxe II' is written in a stylized font. Below this, the text 'Opens with The New MOTIOGRAPH DeLuxe II and HIGH INTENSITY ARCS' is written in a mix of bold, serif and sans-serif fonts. At the bottom of the advertisement, the name 'Enterprise Optical Mfg. Co.' and their address '564 W. Randolph St. CHICAGO' are listed. The entire advertisement is framed by a decorative border with repeating patterns.

The Big Five and Others

In the earliest years of the motion picture industry the functions of production, distribution and exhibition were controlled separately. But the film makers realised that profits could be improved if they took control of all these functions. So in the decade 1920 to 1930, between the end of the Great War and the start of the Depression, the *Studio System* evolved.

Film historians record that eight studios located in Hollywood, California, five of which were major organisations, came to dominate the industry, making not only the films but building or becoming owners of the theatres that showed their films. And of course they controlled the distribution by showing their most important films in their theatres. Between 1930 and 1948, the eight majors controlled 95% of films exhibited in the USA.

The big five studios were **Warner Bros Pictures, Paramount, RKO** (Radio-Keith-Orpheum) Pictures, **Loew's Incorporated** (which became **Metro-Goldwyn-Mayer**) and **Fox Film Corporation**. The three smaller, but important, minor studios were **Universal Pictures, United Artists** and **Columbia Pictures**.

Movie Theatres became decorative palaces, designed by leading architects who became experts in ways to impress the viewing audience. The big-five went on to control about 50% of the seating capacity in the USA in mostly *first-run* houses in major cities.

At their peak in the 1930s Paramount (Paramount-Publix) had over 1000 theatres; Warner and Fox each had some 700, Loew's (MGM) had somewhere between 150 and 200, while RKO also had about 200 (In 1936 RKO became the operator of the world's largest movie theatre- the 5940 seat Radio City Music Hall in New York which had opened in 1932, though one source claims the Roxy in New York had more seats).

Meanwhile in Chicago:

Ensuring the comfort of the public became an important consideration in attracting people in hot and humid weather. Air conditioning in movie theatres was pioneered by the Wittenmeier Machine Company, starting in 1917, using CO2 refrigeration machines in the Chicago theatres of the Balaban & Katz chain. During the 1920s, air conditioning became an essential requirement in the new prestige movie theatres of the "big five" chains and was adopted by many of the smaller independents.

The Balaban & Katz chain eventually owned about 125 theatres, but never made films. By comparison, at their peak, Paramount was releasing a new film every week. Shortly after 1935, Barney Balaban and his management team moved to Paramount in Los Angeles and after being made President of the company put them on the road to greater and greater profits.

Antitrust Proceedings

In 1948, after some ten years of argument and litigation, the United States Supreme Court in an antitrust case changed the way that the Big Five produced, distributed and exhibited their films. The result was that the Big Five gave up the ownership of their theatre chains and concentrated running their studios to make films.

American Movie Theatres in 1931

Total Seating Capacities of Theatres in the U. S.

State	Number of Theatres	Seating Capacities	Population	Number Of People Per Seat
Alabama	255	105,443	2,645,297	25.9
Arizona	98	48,734	435,833	8.9
Arkansas	253	109,595	1,854,482	17.0
California	951	699,651	5,672,009	8.1
Colorado	262	128,296	1,035,043	8.0
Connecticut	193	173,775	1,604,711	9.2
Delaware	66	37,701	238,380	6.3
District of Col.	48	41,254	486,869	11.7
Florida	260	129,945	1,466,625	11.3
Georgia	209	108,631	2,902,443	17.4
Idaho	211	76,784	445,837	5.8
Illinois	1,396	861,987	7,607,684	8.8
Indiana	635	304,178	3,225,600	10.6
Iowa	749	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	270	128,404	2,094,496	16.7
Maine	265	127,244	797,423	6.2
Maryland	202	121,444	1,629,321	13.4
Massachusetts	547	497,156	4,253,646	8.6
Michigan	649	486,390	4,842,280	9.9
Minnesota	568	231,386	2,566,445	11.0
Mississippi	246	109,178	2,007,979	18.3
Missouri	871	468,224	3,620,961	7.7
Montana	185	69,926	536,332	7.5
Nebraska	435	168,810	1,378,900	8.1
Nevada	51	23,324	90,891	3.8
New Hampshire	142	73,475	465,293	6.3
New Jersey	510	479,530	4,028,027	8.3
New Mexico	80	35,986	427,216	11.8
New York	1,833	1,576,980	12,619,503	7.9
North Carolina	341	143,504	3,170,287	22.0
North Dakota	291	81,910	682,448	8.3
Ohio	1,145	644,215	6,689,837	10.2
Oklahoma	363	172,140	2,391,777	13.9
Oregon	170	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	157	58,323	1,732,567	29.7
South Dakota	269	91,347	690,755	7.5
Tennessee	242	118,821	2,608,759	21.1
Texas	1,025	471,252	5,821,272	12.3
Utah	257	102,636	502,582	4.7
Vermont	123	54,645	359,611	6.5
Virginia	295	136,352	2,419,471	17.7
Washington	361	170,948	1,561,967	9.1
West Virginia	787	327,397	1,728,510	5.2
Wisconsin	590	318,087	2,980,282	9.3
Wyoming	77	34,009	224,597	6.6
TOTALS.....	21,284	12,143,761	122,696,577	10.1

Warner Bros Studios

In 1904, the four founding Warner brothers started the Duquesne Amusement & Supply Company in Pittsburgh to distribute films. Around 1914 they began producing films and in 1918 they opened the first Warner Brothers Studio in Hollywood.



COURTESY WARNER BROTHERS

WARNER BROTHERS FIRST NATIONAL STUDIOS IN HOLLYWOOD.

Warner Bros. was a pioneer of film with synchronised sound having bought the Vitagraph Company in 1924. In 1926 they made *Don Juan*, accompanied by a number of Vitaphone shorts. To celebrate this event, they acquired the large Piccadilly Theatre in Manhattan, New York City, and renamed it Warners' Theatre. The theatre was air conditioned by the Wittenmeier Machine Company who advertised their "Vitolysed Air" system. Photographs of opening night show mock icicles under the entrance canopy with the slogan *Refrigerated Washed Air*.



Warners' Theatre, New York

The success of their film *The Jazz Singer* in 1927 (the first major “Talkie”) enabled Warners to become a top studio and to acquire the Stanley Corporation, a major theatre chain. In 1929, they bought the St Louis-based theatre chain Skouras Brothers Enterprises followed, in 1930, by the acquisition of a number of movie theatres in Atlantic City.

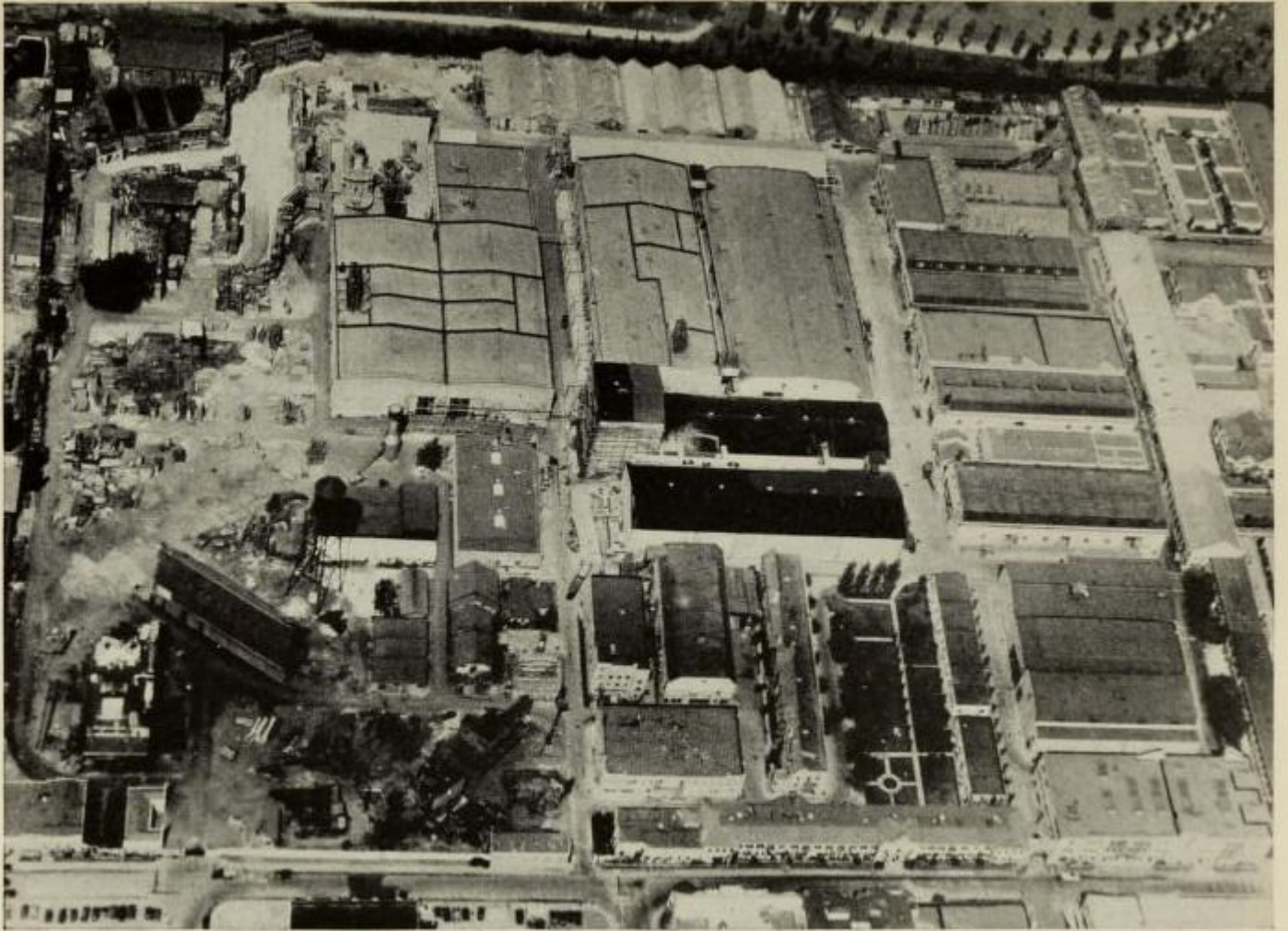
Examples of Warner theatres air conditioned by 1927 include the following:

By Carrier Engineering Corporation: the Boyd and Mastbaum, both in Philadelphia

By Brunswick-Kroeschell: Shore, Chicago

By York Ice Machinery: Stanley theatres in Baltimore, Philadelphia and Pittsburgh

Paramount Studios



COURTESY PARAMOUNT

THE PARAMOUNT STUDIOS IN HOLLYWOOD.

Paramount Pictures Corporation was established in Hollywood in 1912, was acquired by Adolph Zukor in 1917 and in 1926 acquired the successful (largely air conditioned) Balaban & Katz chain of Chicago that had developed the “Wonder Theatre” concept. The Paramount-Publix theatre chain in New York City then embarked on a project to expand wonder theatres and started building in New York in 1927. However, Publix then brokered a non-competition deal with their rival Loew’s (MGM) who took over the New York area projects leaving the Chicago area to Publix.

By 1930, Paramount-Publix had over 1000 movie theatres nationwide and continued to add to their chain.



Rivoli Theatre, New York (notice the sign *Cooled by Refrigeration*)

Examples of Paramount and Paramount-Publix theatres air conditioned by 1927 include:

By Carrier Engineering Corporation: Casablanca, Charlotte; Paramount, Brooklyn; the Paramount, and Rivoli in New York; Tampa in Tampa; Texas, San Antonio; Uptown, Philadelphia; Carolina, Greensboro.

By Brunswick-Kroeschell: Alabama, Birmingham; Olympia, New Haven



Sam Katz

*President
Publix Theatre Corp.*

At the conclusion of an address before the March 29th weekly luncheon of the Associated Motion Picture Advertisers said—"In many Publix Theatres in key cities where air cooling and conditioning systems have been installed, the business during the months of July and August was the biggest of the year. Air conditioning is rapidly changing the motion picture industry from an eight-month to a twelve-month profitable basis."

Twenty-three of the Publix Theatres in key cities throughout the country including the great new Paramount on Broadway are

Carrier Conditioned Theatres

The complete Carrier System is now adapted to the smaller theatres. Ask for a visit from our engineers. Write for the book, "Theatre Cooling and Conditioning".

Carrier Engineering Corporation

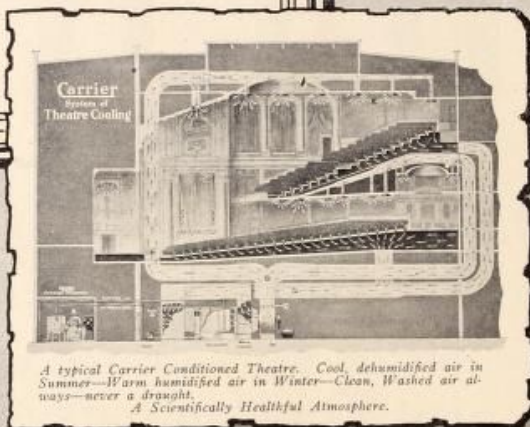
Offices and Laboratories

NEWARK, NEW JERSEY

New York Chicago
Boston Cleveland
Philadelphia Kansas City

Los Angeles

Washington



A typical Carrier Conditioned Theatre. Cool, dehumidified air in Summer—Warm, humidified air in Winter—Clean, Washed air always—never a draught.

A Scientifically Healthful Atmosphere.

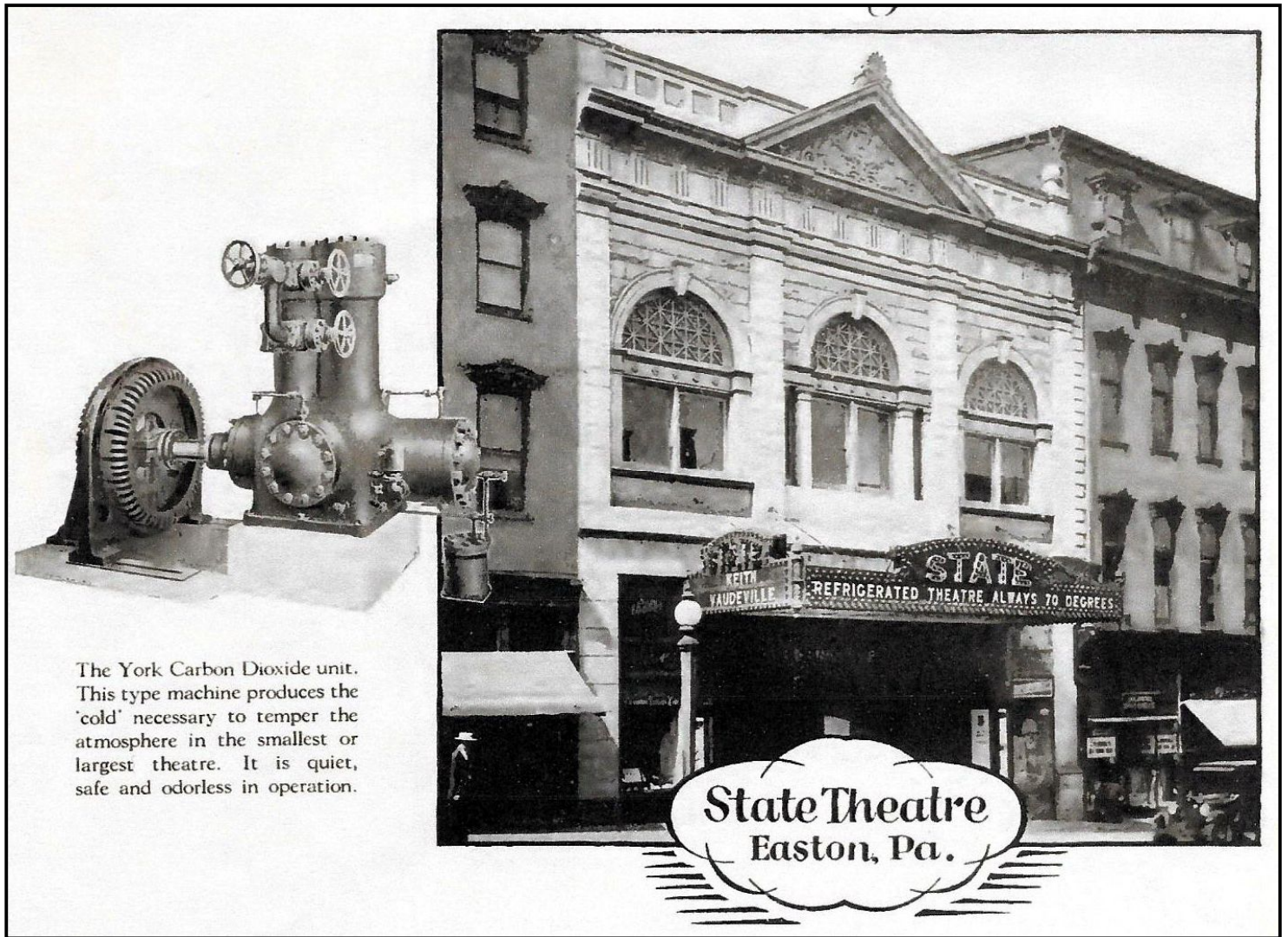
RKO Studios

The business was formed after the Keith-Albee-Orpheum theatre chain and Joseph P Kennedy's Film Booking Offices of America (FBO) were brought together under the control of the Radio Corporation of America (RCA) in 1928.



COURTESY R-K-O

THE R-K-O STUDIOS, LOS ANGELES.



The York Carbon Dioxide unit. This type machine produces the 'cold' necessary to temper the atmosphere in the smallest or largest theatre. It is quiet, safe and odorless in operation.

State Theatre, Easton (notice the sign *Refrigerated Theatre, Always 70 Degrees*)

Examples of RKO theatres air conditioned by 1927 include:

By York Ice Machinery: 86th Street, New York; Keith Palace, Cleveland; State, Easton

By Brunswick-Kroeschell: Brooklyn, New York; Orpheum in Los Angeles and Seattle; State Lake, Chicago; Tower, Chicago

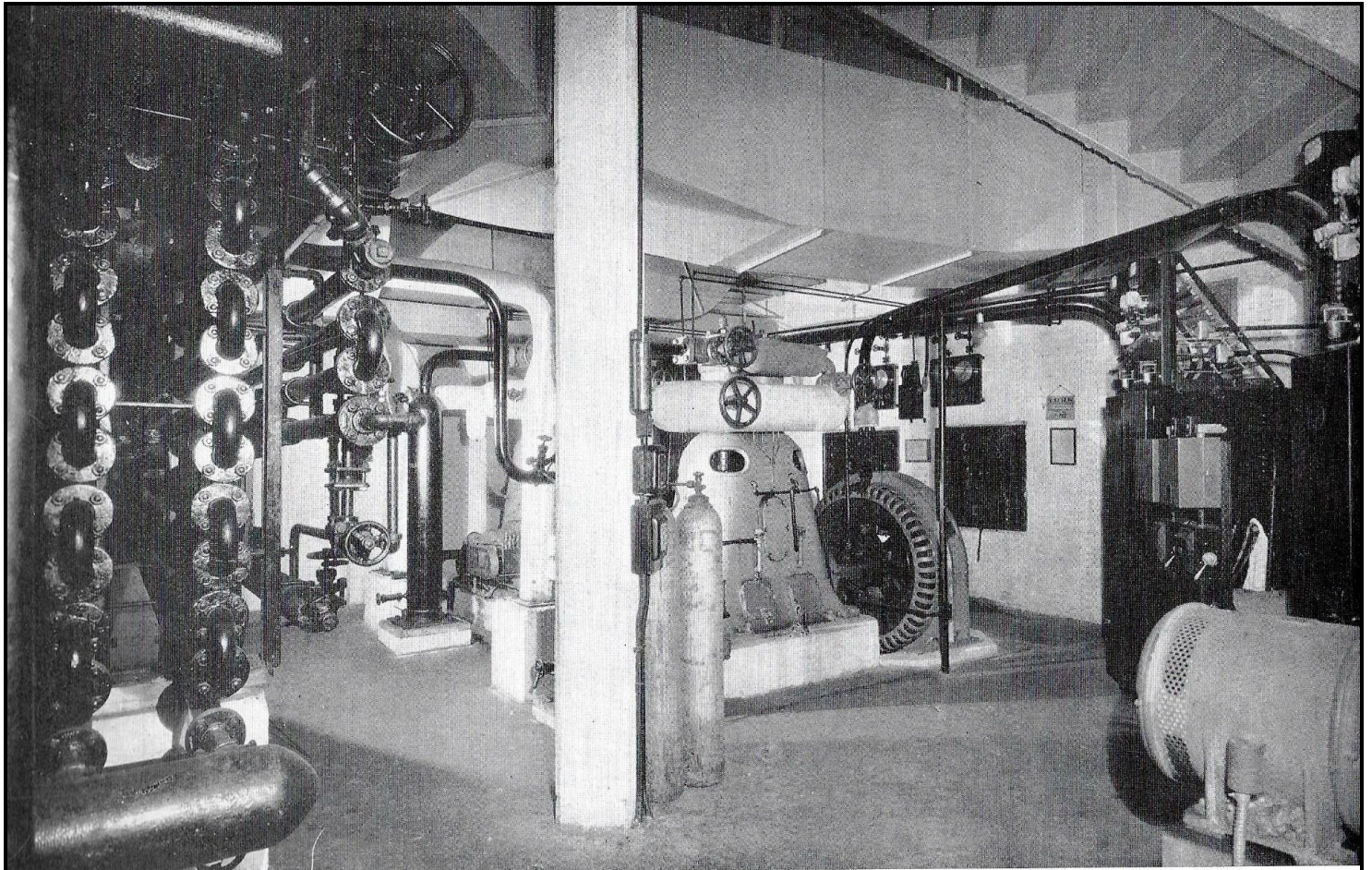
Metro-Goldwyn-Mayer Studios

The company was founded in 1904 by Marcus Loew and was the oldest theatre chain operating in the United States. From 1924 (until 1959) it was also the parent company of Metro-Goldwyn-Mayer Studios. The successful enterprise grew to include deluxe vaudeville houses and then lavish movie palaces. Loew's theatres were established in cities from coast-to-coast, but primarily in East Coast and Midwest States.



COURTESY M-G-M

THE METRO-GOLDWYN-MAYER STUDIOS, CULVER CITY, CALIFORNIA.



Refrigeration plant, Kings Theatre, Brooklyn, New York
C. W. & Geo. L. Rapp, architects

Examples of Loew's theatres air conditioned by 1927 include;

By Carrier Engineering Corporation: Broad, Columbus; Fairmont, New York; Granada, Cleveland

By York Ice Machinery: Kings, Brooklyn; Orpheum, Boston; Rochester in Rochester; State, Newark

By Brunswick-Kroeschell: Century, Baltimore; Loews, Boston; Loews State, St Louis; Valencia, Baltimore

Fox Studios

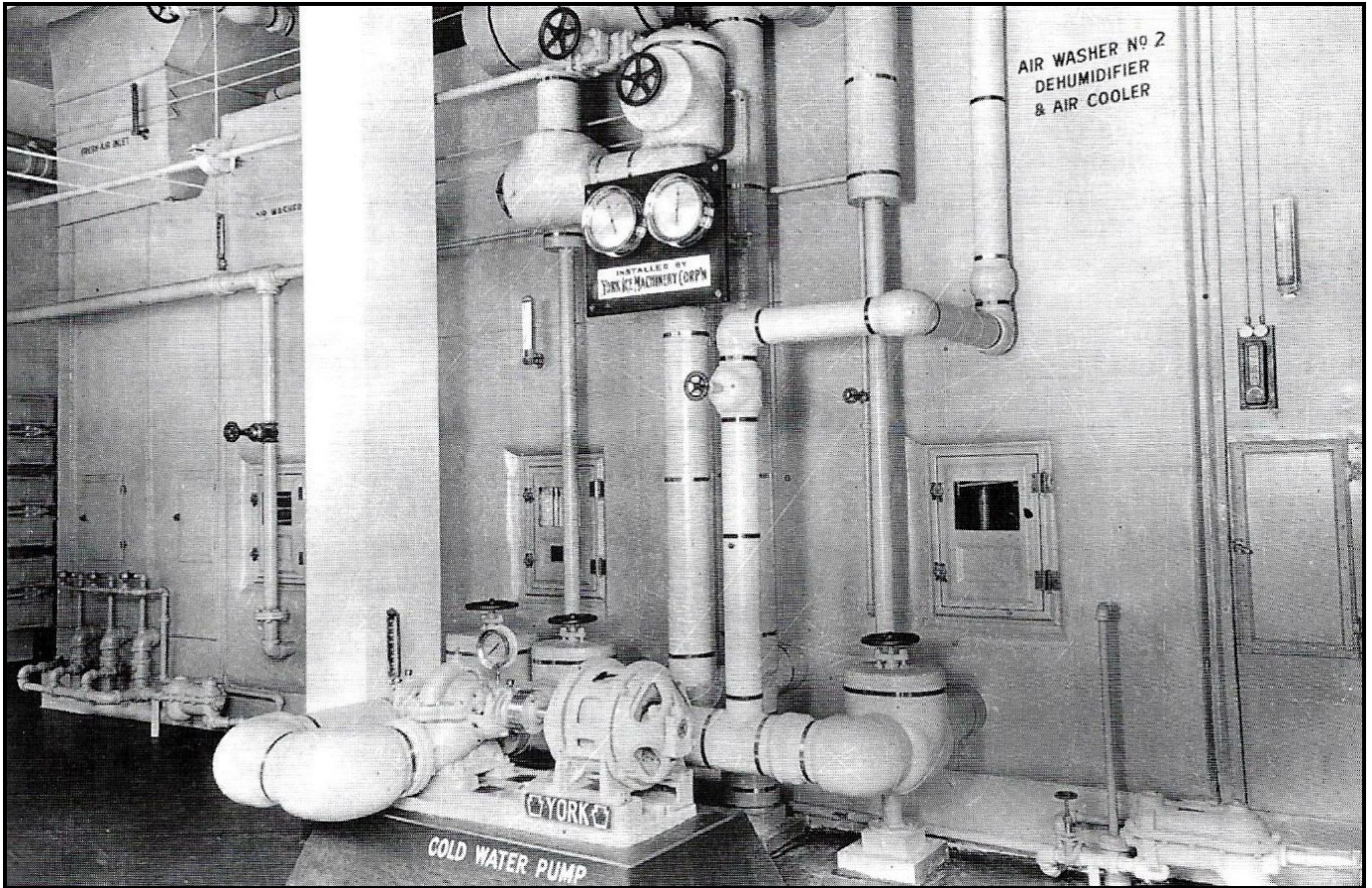
Fox Theatres was a large chain of movie theatres in the United States dating from the 1920s, either built by the Fox studio owner William Fox, or subsequently merged in 1929 by Fox with the West Coast Theatres chain. These grand “movie palaces” were built with a wide assortment of architectural styles drawn from Asian, Indian, Persian and Moorish influences.



COURTESY FOX FILM CORP.

THE FOX BEVERLY HILLS STUDIOS IN HOLLYWOOD.

Some 80 theatres are listed in the Fox Wikipedia entry which includes 8 in Brooklyn, New York and 11 Los Angeles.

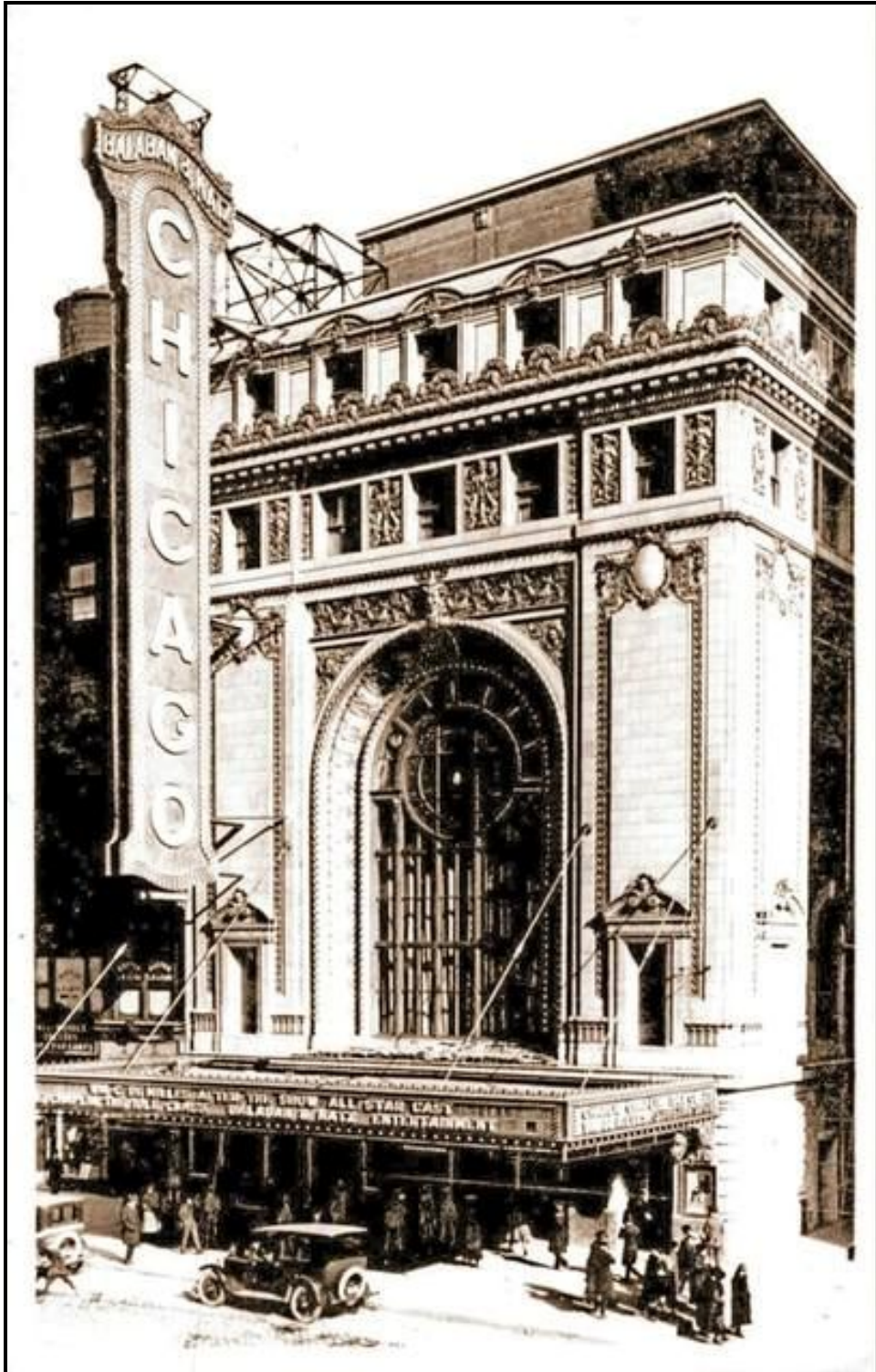


Fox, Spokane, Washington
Air conditioning air washer installation by York Ice Machinery 1932

Examples of Fox theatres air conditioned by 1932 include:
By York Ice Machinery: Fox, Spokane; Fox Washington DC
By Brunswick-Kroeschell: Denver in Denver; Fox, Philadelphia

Balaban and Katz

The B&K chain in Chicago was not one of the big five. However, by a combination of astute management, impressive theatre architecture and the introduction of air conditioning in 1917, they revolutionised the film and movie theatre industry. The big chains soon followed suit while B&K expanded from six to some one hundred and twenty-five theatres.

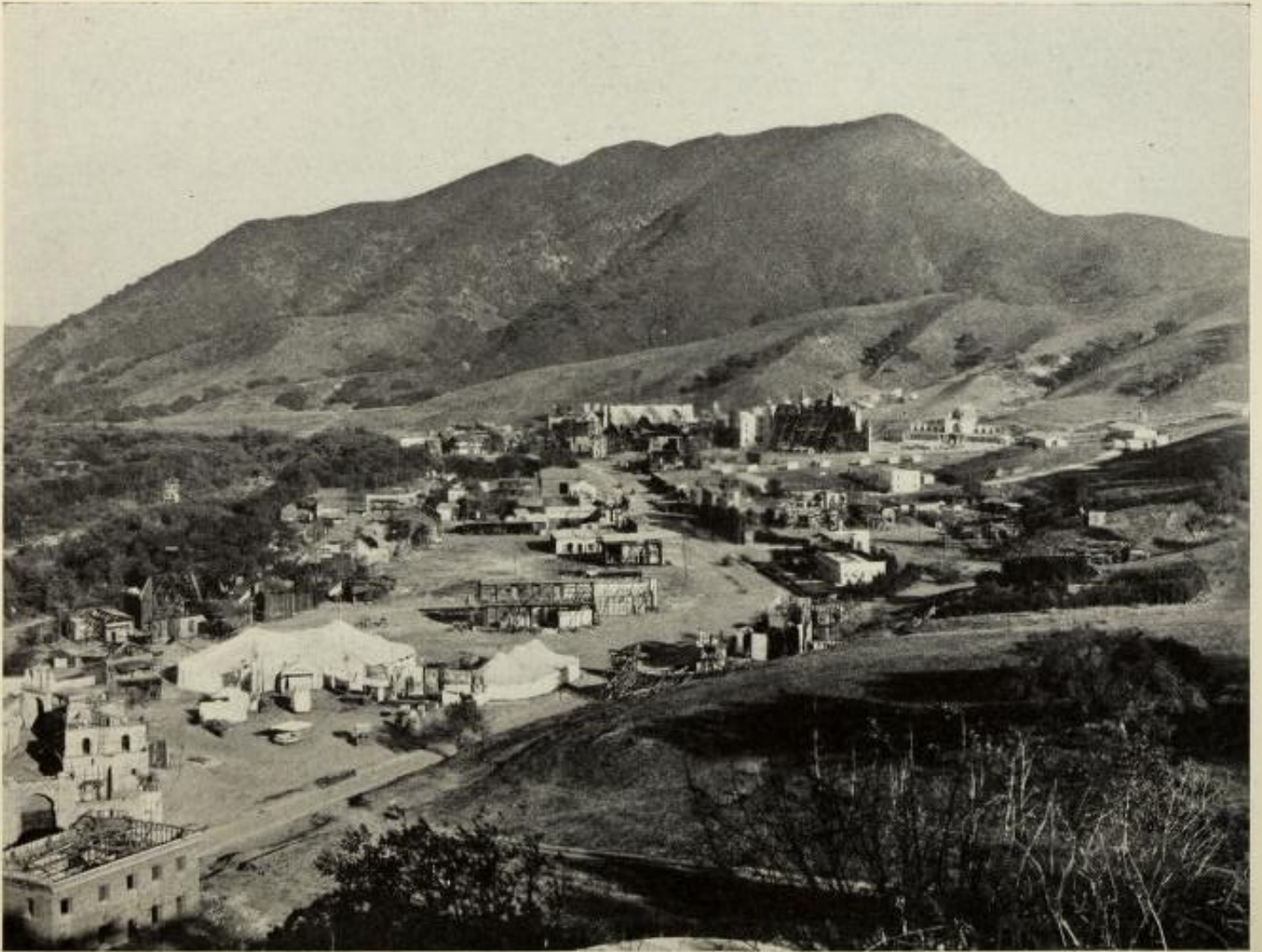


Chicago Theatre, Chicago



Uptown Theatre, Chicago

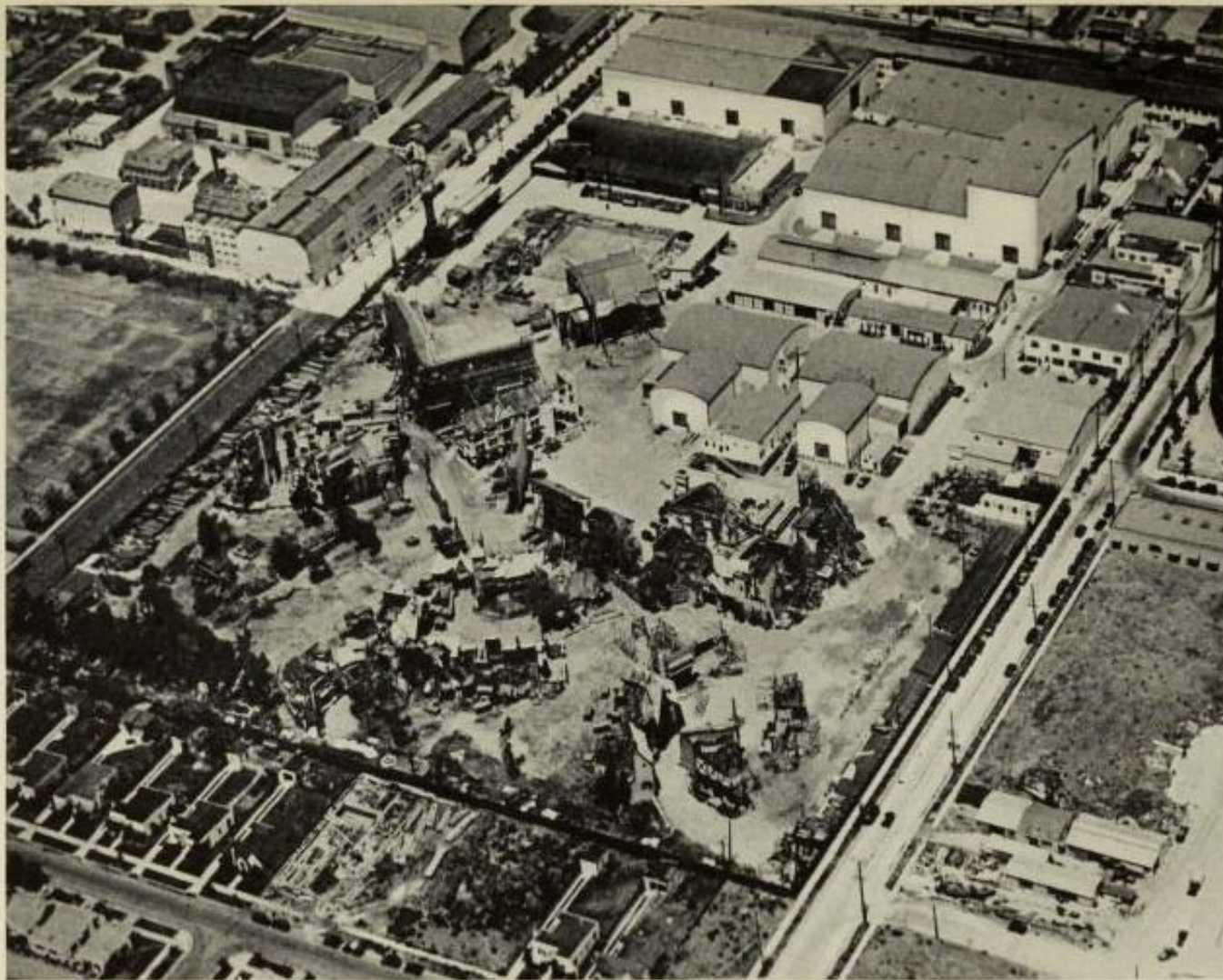
Universal City



COURTESY UNIVERSAL

UNIVERSAL CITY, CALIFORNIA.

United Artists Studios



COURTESY UNITED ARTISTS

THE UNITED ARTISTS STUDIOS, HOLLYWOOD.

Columbia Studios



Columbia Pictures
Gower Street, Hollywood 1937