

**Air Conditioning European Movie Theatres  
1917-1932**

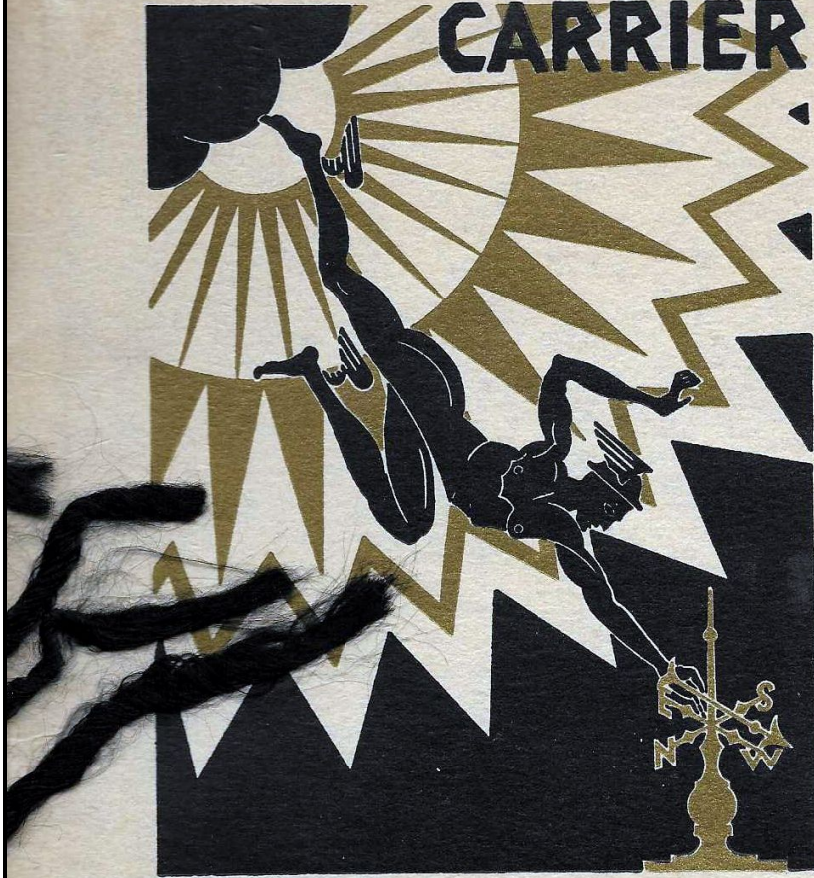
*Carrier Engineering*  
LONDON



**EMPIRE THEATRE, LEICESTER SQUARE, LONDON**

**Theatres are listed in alphabetical order by name**

**CARRIER**



TECHNICAL  
*Cats. C.E/13*  
Carrier Engineering Co. Ltd  
LIBRARY

**INDOOR AIR BY CARRIER**

Describing  
The Science of  
VENTILATING  
WARMING  
COOLING  
for  
PUBLIC BUILDINGS

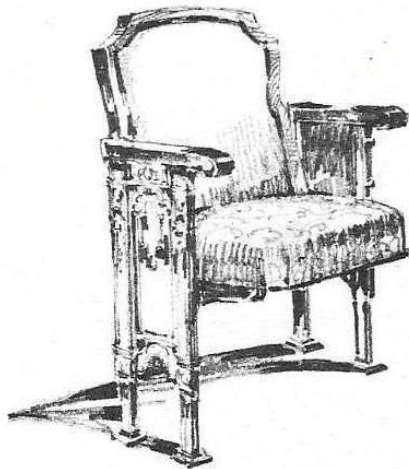


**Carrier Engineering Company Ltd**  
24 Buckingham Gate, London.

# Theatres

*Difficult  
Problem*

**T**HE modern cinema theatre presents a very difficult problem in ventilation owing to the many hours a day during which it is in continuous use. Once the audience is admitted, the maintenance of comfortable conditions is dependent upon an adequate supply of cool dry air evenly and slowly distributed throughout the auditorium. This is true for all theatres, once they have been in use sufficient time for the building materials to dry out thoroughly.



*Downward  
Diffusion*

The only way of attaining the ideal is to adopt the Carrier Patent Downward Diffusion system whereby the incoming air enters at ceiling level to descend and diffuse gently in virtue of its greater weight compared to the warmer air which it displaces at the lower level.

In this way, the air during its downward passage absorbs the bodily heat and moisture given off by the audience, reaching them at the temperature necessary for their comfort. The air at this point being uncontaminated by dirt and dust is finally removed at the floor level through exhaust openings.

To avoid any cold draughts annoying the audience, the cooling of the theatre is carried out in two stages.

*Graded  
Cooling*

In a separate mixing chamber the supply of cold or cooled fresh air is first used to cool a body of re-circulated air drawn from the auditorium; the mixture then, at a temperature of only 7 degrees below that of the theatre, is distributed from above so that in rising in temperature these 7 degrees during its downward passage it absorbs the heat given off by the audience and reaches them at the ideal temperature and humidity.

*Meeting  
Requirements*

The Carrier Downward system of ventilation is guaranteed to pass all requirements of the Ventilation and Fire Department of the London County Council, both for the Cinema or Legitimate Theatre.

Theatre owners have given it as their opinion that the chief reason for the poor attendance at Cinema Theatres during the hot summer months is due to the Englishman's proverbial love of fresh air.

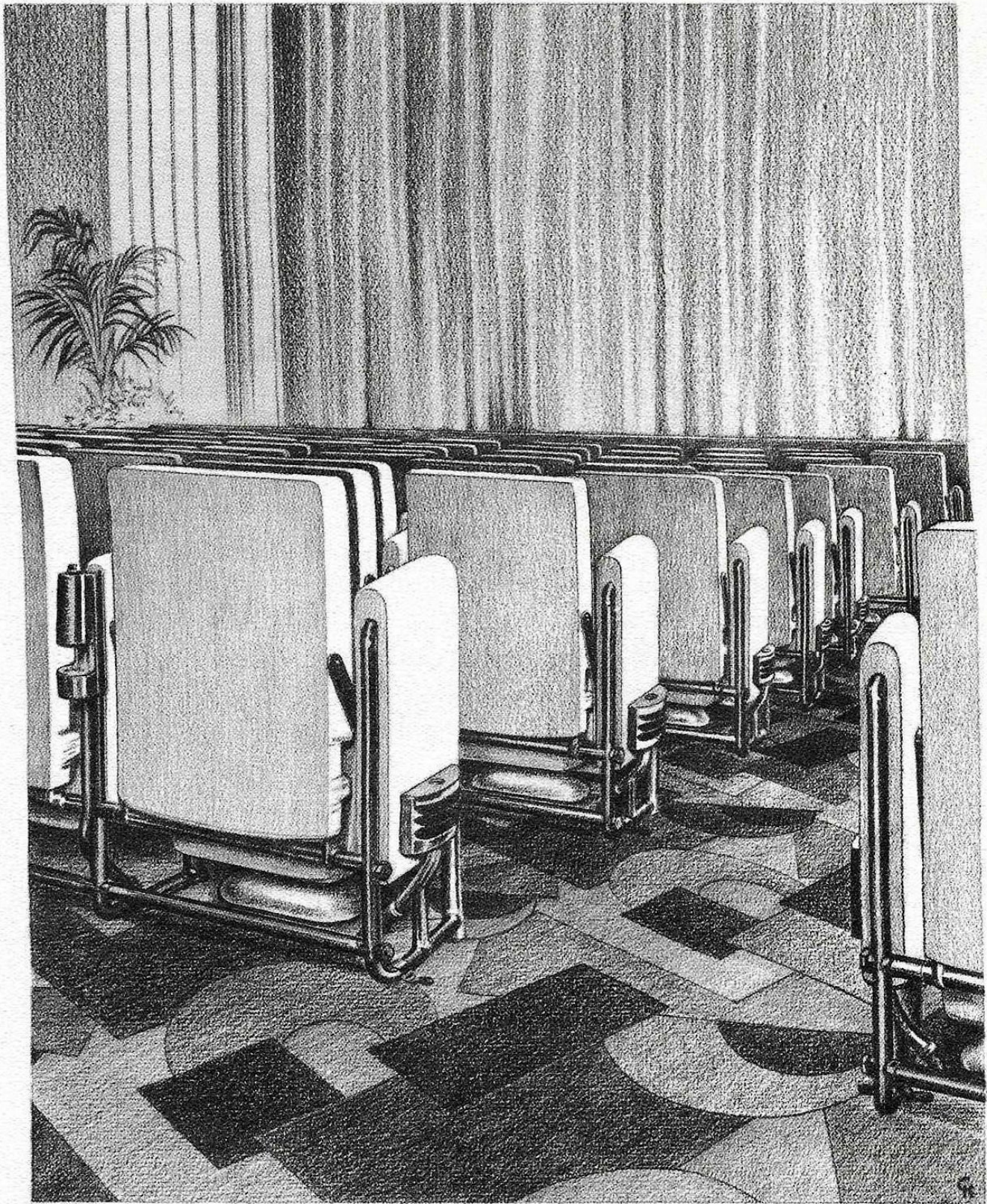
This is undoubtedly true, but it is all the more reason why a comfortable atmosphere should be provided in the theatre

during the hot summer days, maintaining inside the theatre an atmosphere superior to that prevailing outside both as regards temperature and humidity. This would be a certain method of attracting patrons and filling the theatres during what has hitherto been regarded as an unavoidably poor business season.

Carrier Air Conditioning Equipment is now providing the ideal atmosphere in over sixty-three theatres.



*Results*



*Theatre Seating showing  
Air Extraction Mushrooms  
Carrier Air Conditioning System*

**Air Conditioning European Movie Theatres  
1917-1932**

# *Astoria Theatre*

**BRIGHTON**



**Date Built: 1933**

**Seating Capacity: 1823**

**Architect: Edward A Stone**

**Cooling: Carrier Engineering Corporation**

**Believed mechanical ventilation with air washer**

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# *Astoria Theatre*

**BIXTON, LONDON**



**Date Built: 1929**

**Seating Capacity: nearly 3000**

**Architect: Edward A Stone**

**Cooling: Carrier Engineering Corporation**

**Believed mechanical ventilation with air washer**



**Air Conditioning European Movie Theatres  
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***Astoria Theatre***

**FINSBURY PARK, LONDON**



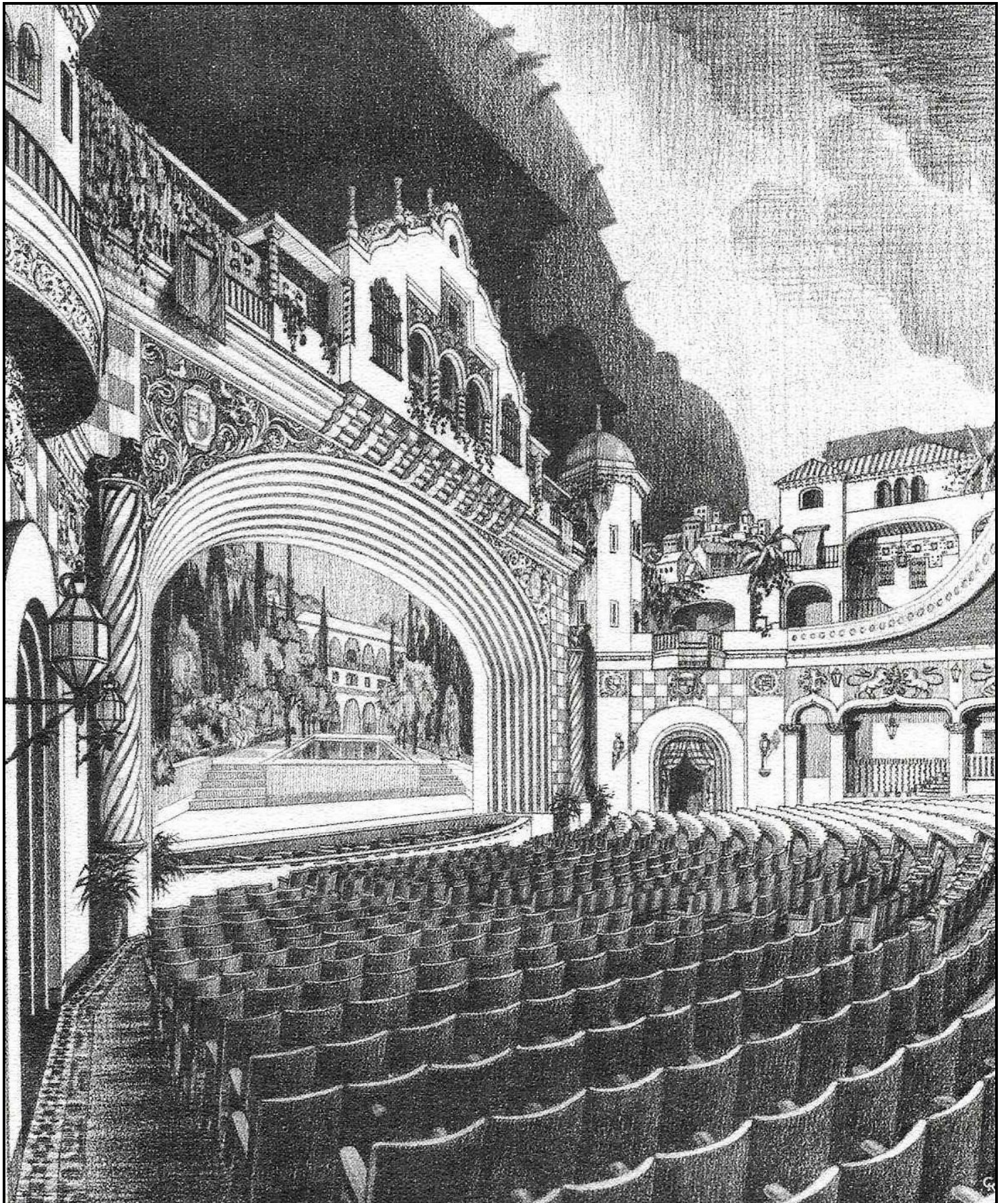
**Date Built: 1930**

**Seating Capacity: 3300**

**Architect: Edward A Stone**

**Cooling: Carrier Engineering Corporation**

**Believed mechanical ventilation with air washer**



**Air Conditioning European Movie Theatres  
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***Astoria Theatre***

**STREATHAM, LONDON**



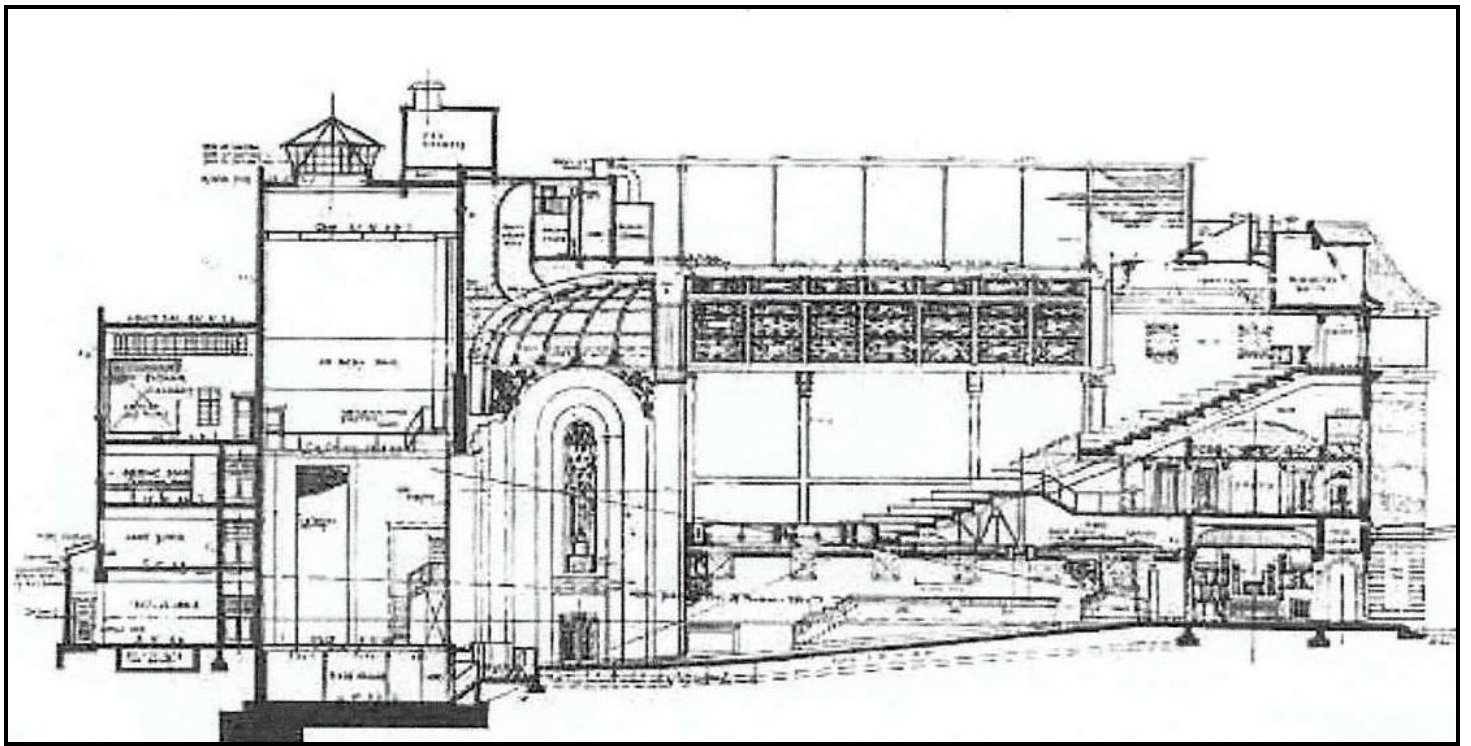
**Date Built: 19303**

**Seating Capacity: 3000**

**Architect: Edward A Stone**

**Cooling: Carrier Engineering Corporation**

**Believed mechanical ventilation with air washer**



**Air Conditioning European Movie Theatres  
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# *Carlton Theatre*

**HAYMARKET, LONDON**



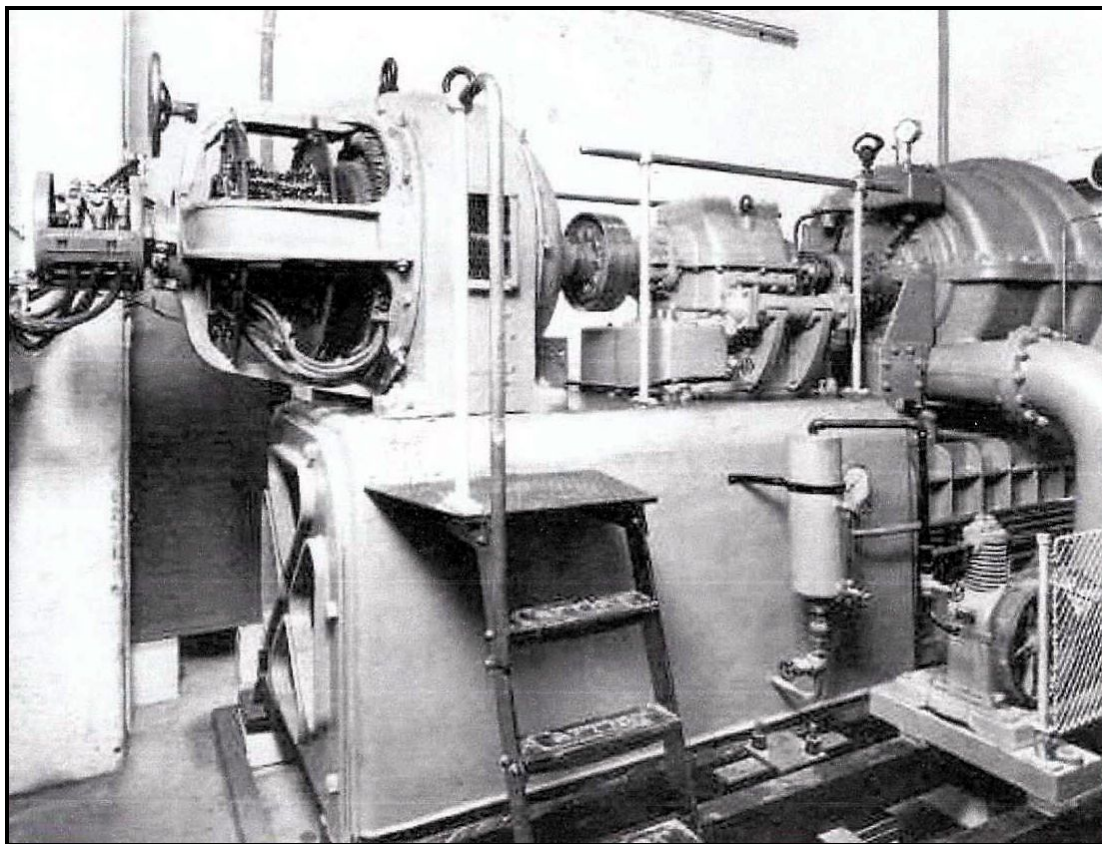
**Date Built: 1927**

**Seating Capacity: 1159**

**Architect: Frank T Verity**

**Air Conditioning: Carrier Engineering Corporation**

**Refrigeration: Carrier centrifugal chiller**



Carrier centrifugal refrigeration at the Carlton Theatre  
This was the first fully air conditioned cinema in Britain  
The Carrier centrifugal was the fourth to be installed in the UK

**Air Conditioning European Movie Theatres  
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***Empire Theatre***

**LEICESTER SQUARE, LONDON**



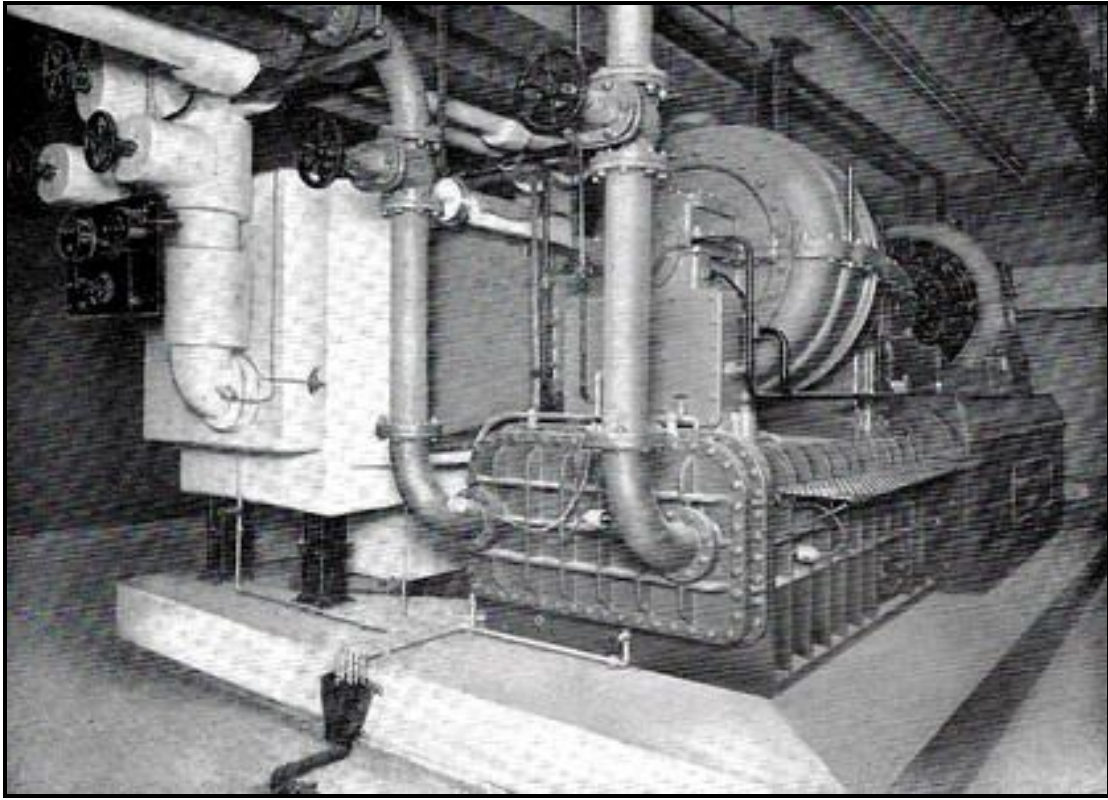
**Date Opened: 1928**

**Seating Capacity: 3226**

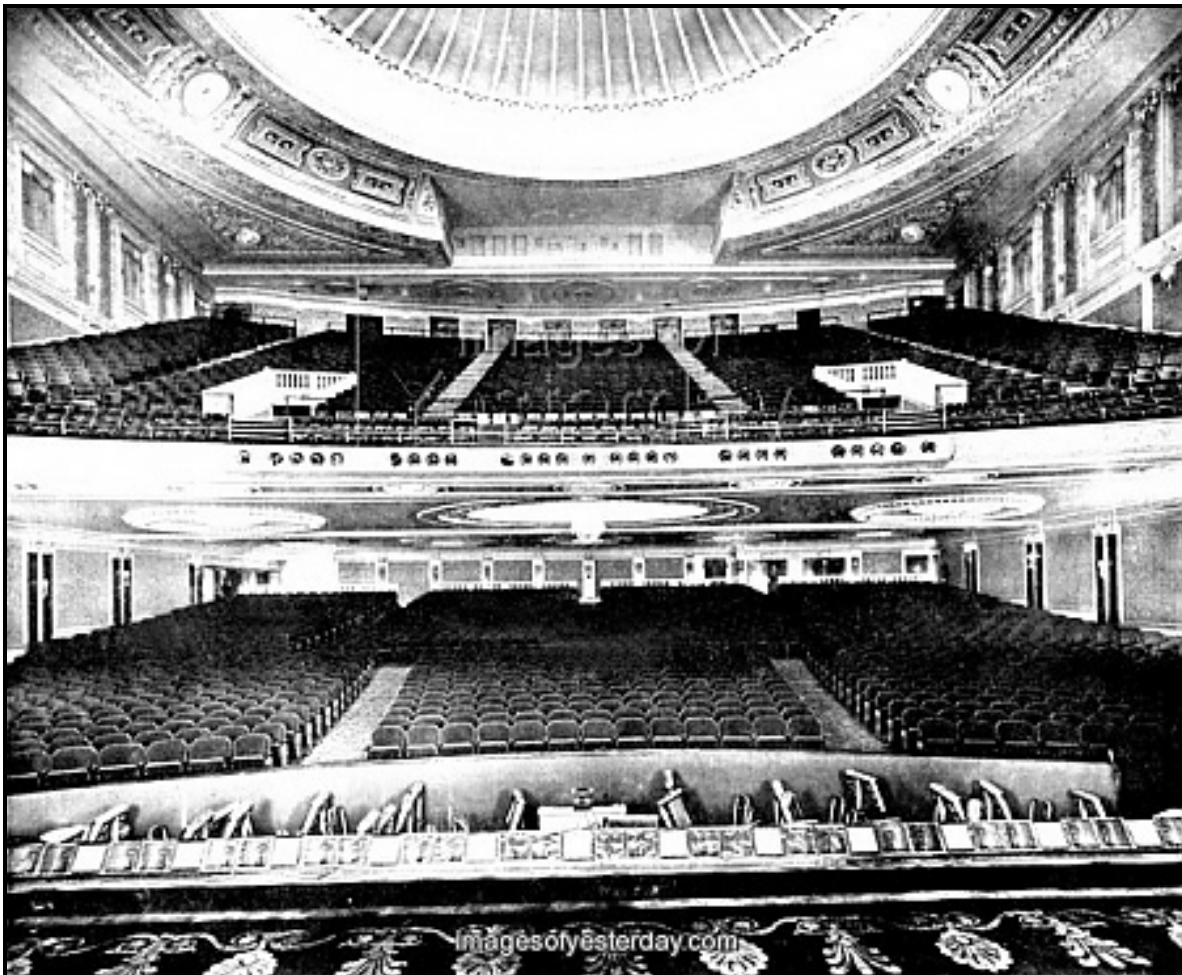
**Architect: Thomas W Lamb & Frank Matcham Practice**

**Air Conditioning: Carrier Engineering Corporation**

**Refrigeration: Carrier centrifugal chiller 250 TR**



Carrier 250 TR chiller





# EMPIRE THEATRE



DINNER AT EIGHT



**Air Conditioning European Movie Theatres  
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# *Paramount Theatre*

**LEEDS**



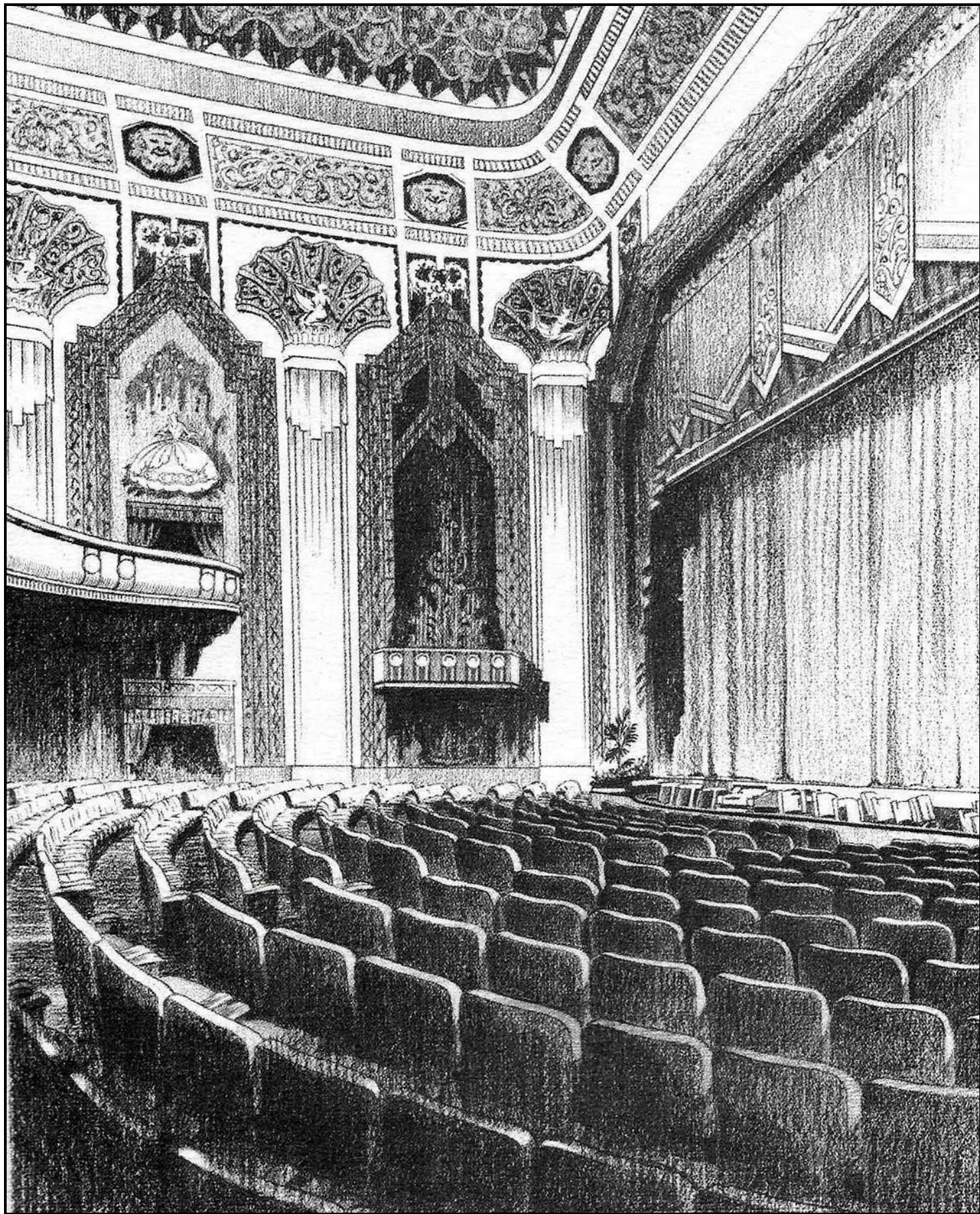
**Date Built: 1932**

**Seating Capacity: 2500**

**Architect: Frank T Verity**

**Air Conditioning: Carrier Engineering Corporation**

**Refrigeration: Carrier centrifugal chiller**



**Air Conditioning European Movie Theatres  
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# *Paramount Theatre*

**TOTTENHAM COURT ROAD, LONDON**



**Date Built: 1936**

**Seating Capacity: 2568**

**Architect: Frank T Verity & Sam Beverly**

**Air Conditioning: Carrier Engineering Corporation**

**Refrigeration: Carrier centrifugal chiller**



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# *Paramount Theatre*

**MANCHESTER**



**Date Built: 1930**

**Seating Capacity: 2920**

**Architect: Frank T Verity & Sam Beverly**

**Air Conditioning: Carrier Engineering Corporation**

**Refrigeration: Carrier centrifugal chiller**

**Model 8.E.R7.7, Number 02037**

**Air Conditioning European Movie Theatres  
1917-1932**

***Paramount Theatre***

**NEWCASTLE**



**Date Built: 1931**

**Seating Capacity: 2600**

**Architect: Frank T Verity & Sam Beverly**

**Cooling: Carrier Engineering Corporation**

**Mechanical ventilation with air washer, possibly  
Carrier refrigeration**





# Air Conditioning European Movie Theatres 1917-1932

## Warner Theatre

LEICESTER SQUARE, LONDON



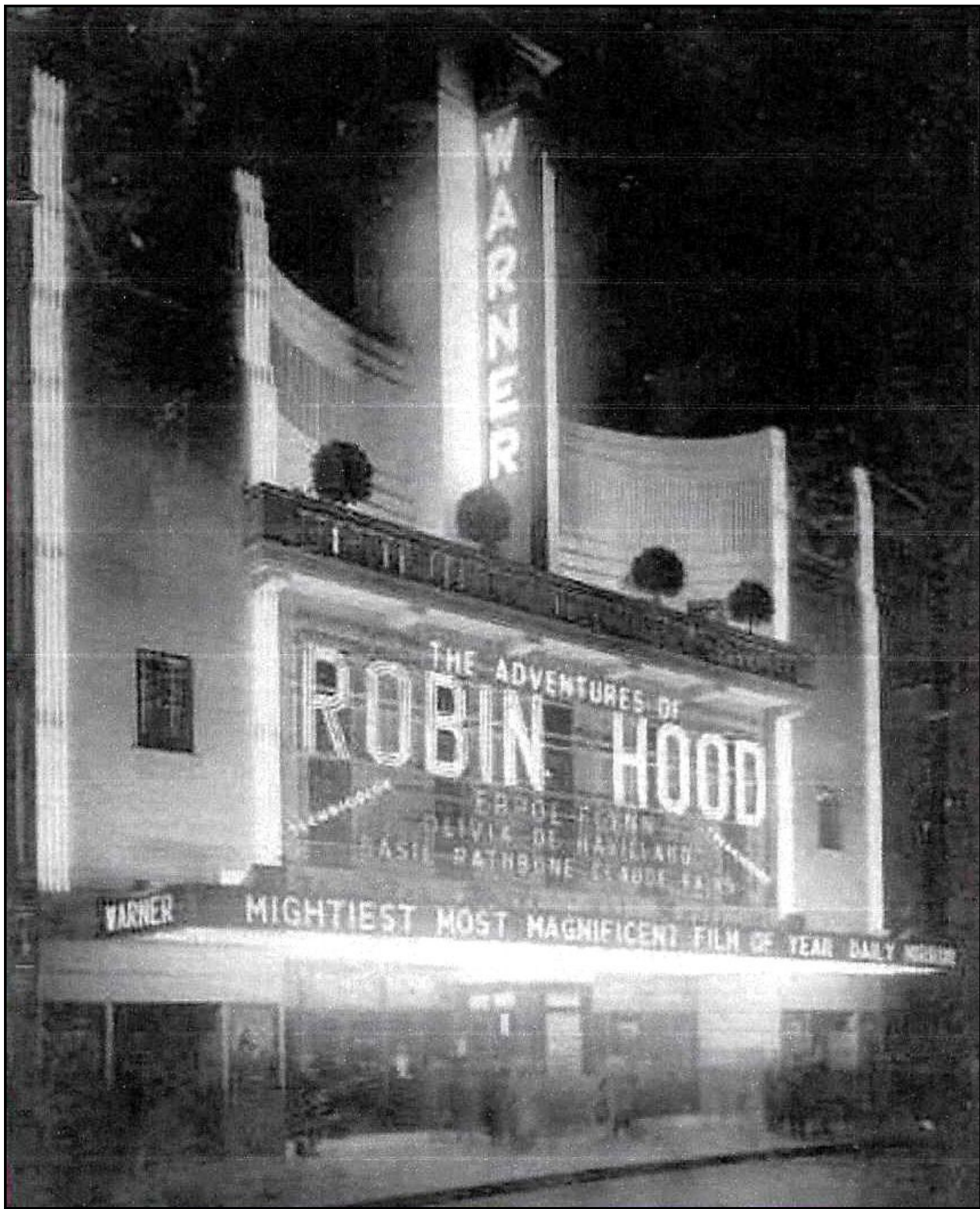
**Date Built: 1938**

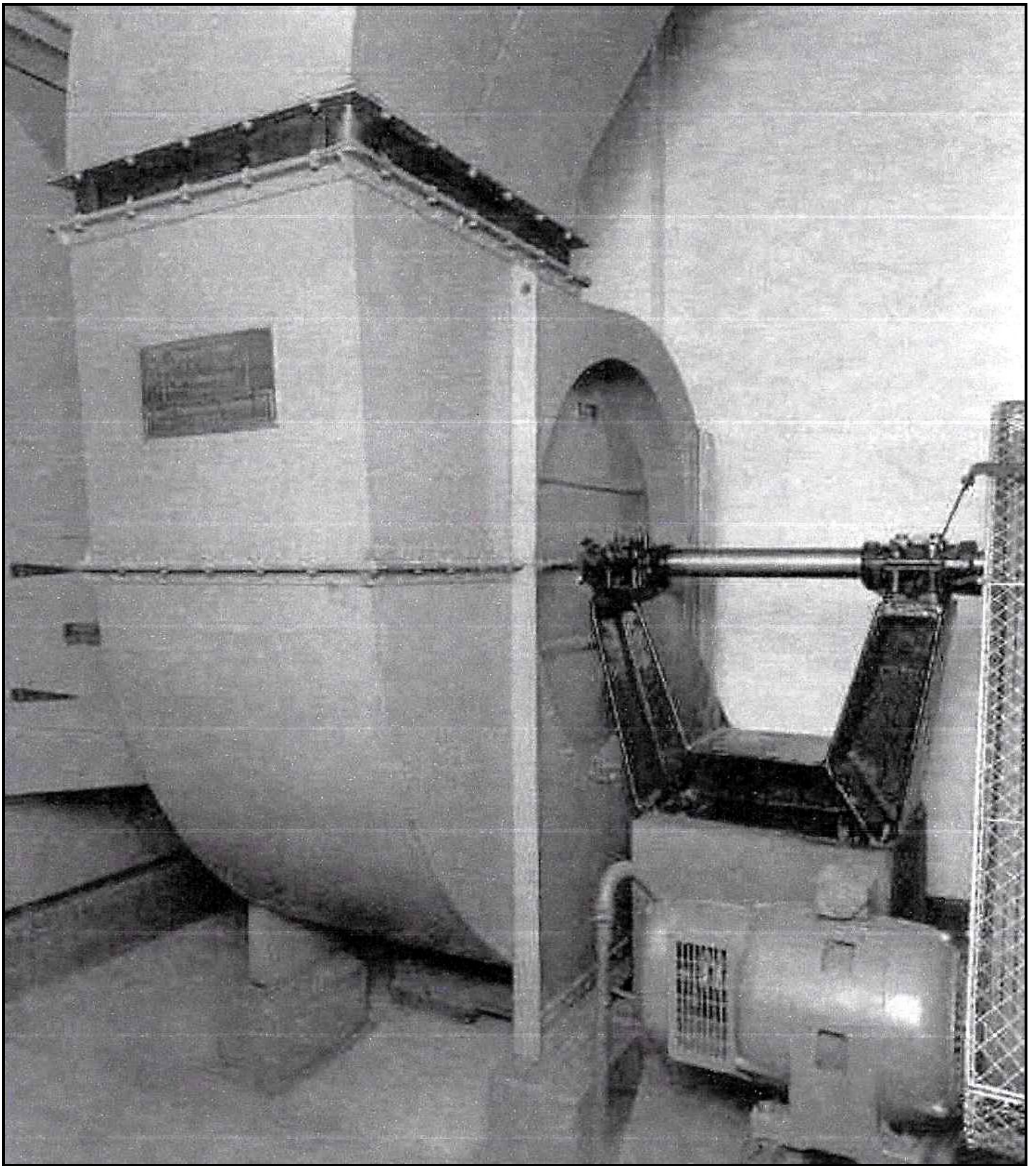
**Seating Capacity: 1789**

**Architect: Edward A Stone & T R Somerford**

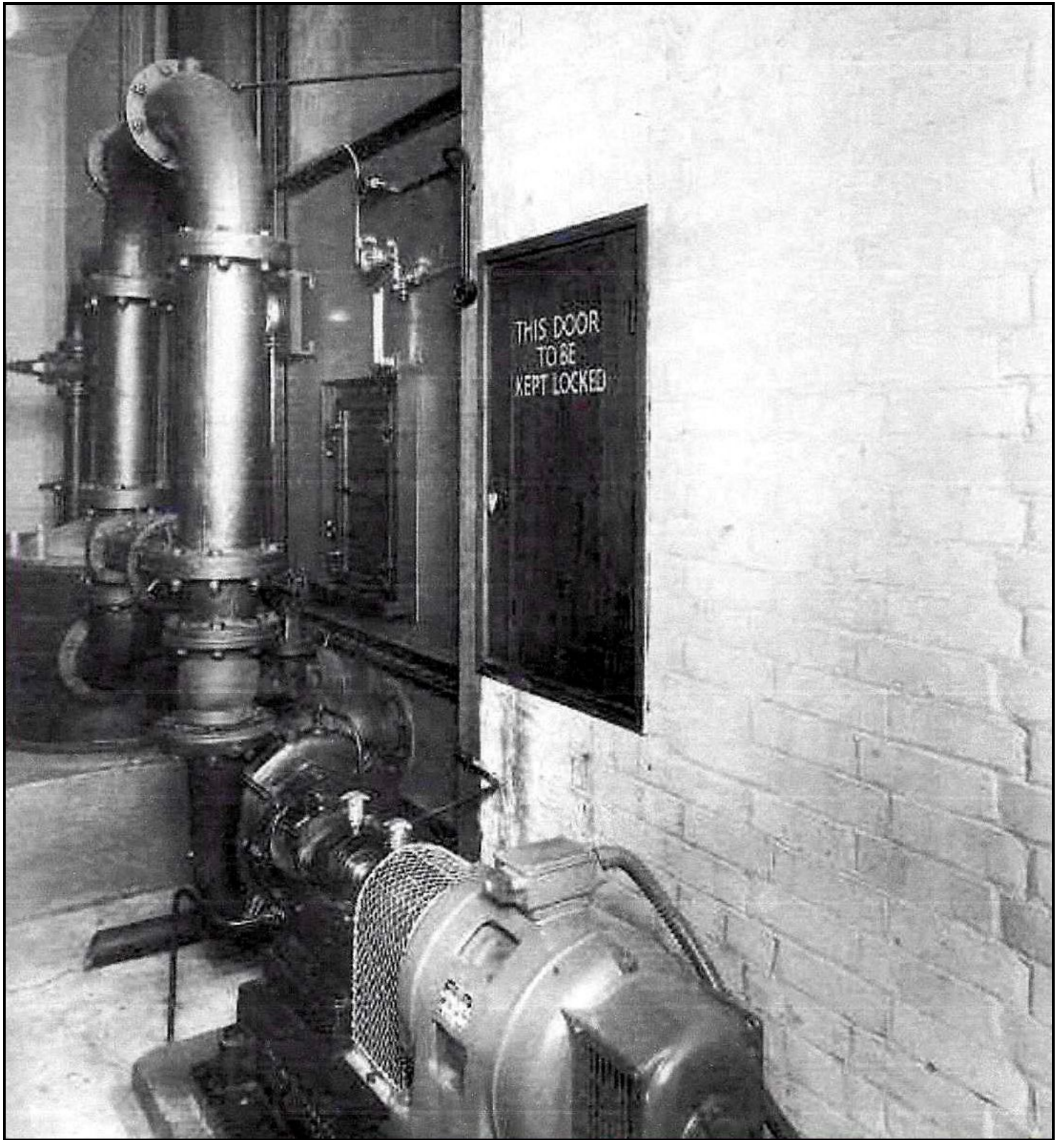
**Air Conditioning: Carrier Engineering Corporation**

**Refrigeration: Carrier centrifugal chiller**





Main fan



Chilled water air washer

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*Paramount Theatre*

**PARIS, FRANCE**



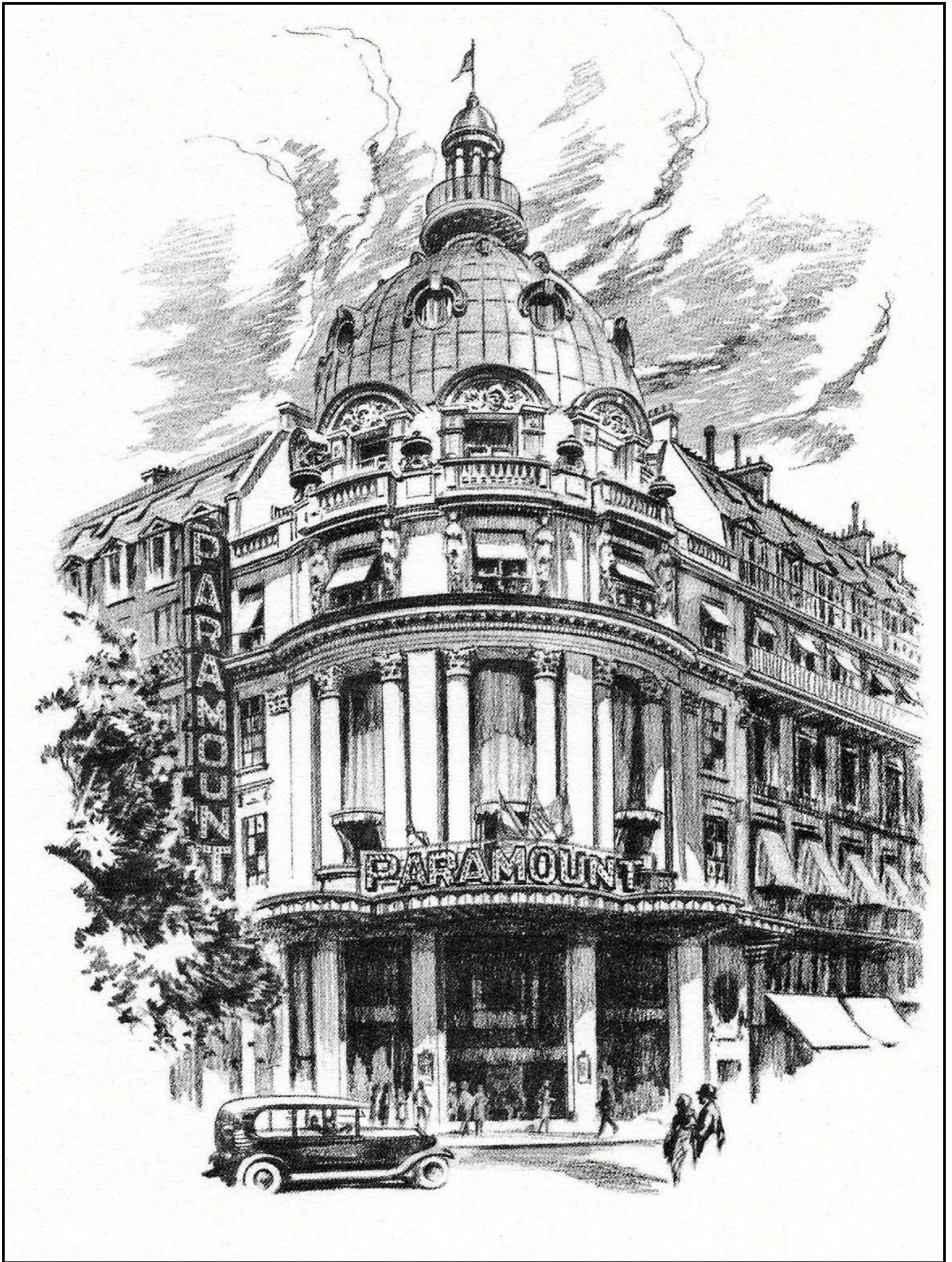
**Date Built: 1928**

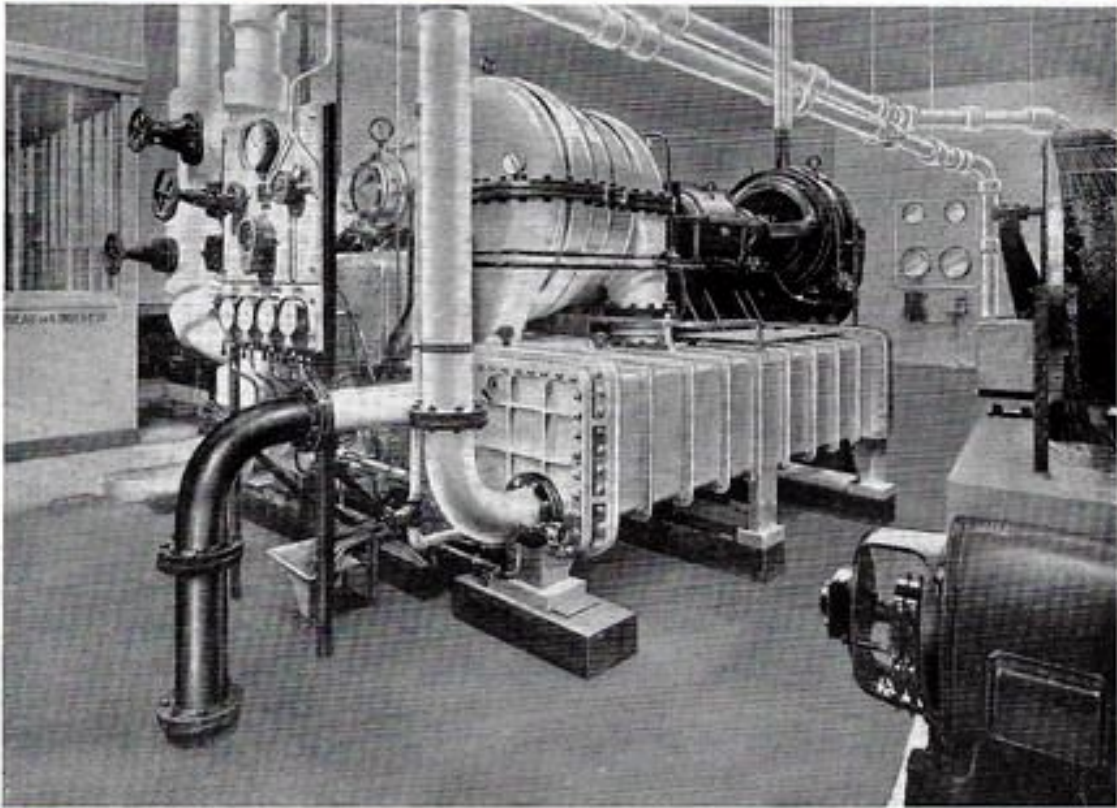
**Seating Capacity: 2187**

**Architect: Frank T Verity & Auguste Bluysen**

**Air Conditioning: Carrier Engineering Corporation**

**Refrigeration: Carrier centrifugal chiller 150 TR**





Showing the Carrier Centrifugal Refrigerating Machine, having a capacity of 150 ice melting tons, installed at the Paramount Theatre, Paris, in conjunction with the Carrier Air Conditioning System for the cooling of the Auditorium.

# Our Acceptance of Responsibility

## Guarantee

The Carrier System of Air  
Conditioning is guaranteed to  
**Automatically**  
maintain constant conditions  
of temperature and humidity  
in any given closed space,  
full or empty, night or day,  
winter and summer, without  
draughts.



Carrier  
Engineering  
Company Ltd  
London. S.W.



