



# ARCHITECTURAL HERITAGE OF INDIAN RAILWAYS

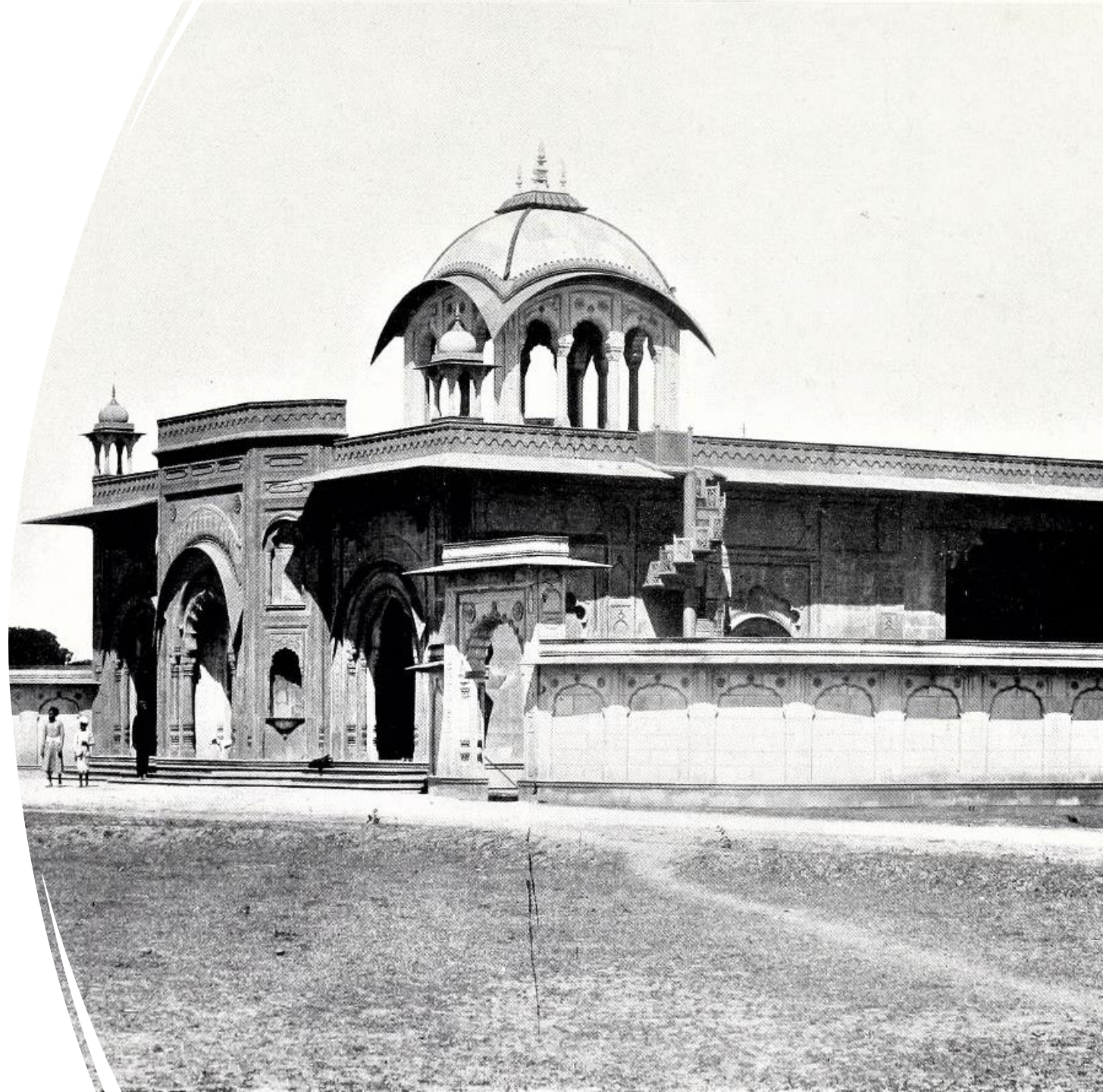
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APHTRO, New Delhi, 27/09/24

# EVOLUTION OF ARCHITECTURAL STYLES ON THE

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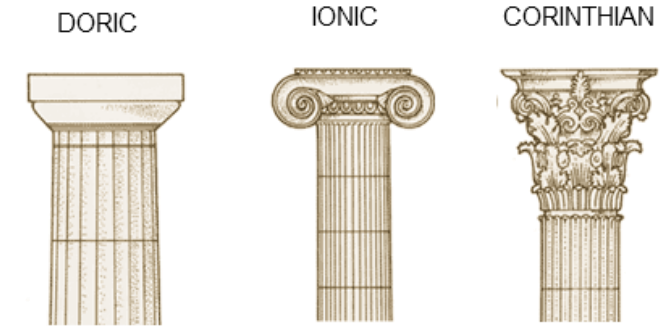
- **CLASSICAL REVIVAL**
- **ROMANESQUE REVIVAL**
- **GOTHIC REVIVAL**
- **INDO-SARACENIC**
- **PRINCELY STATES**
- **EARLY 20<sup>TH</sup> CENTURY**
- **COMPANY HEAD OFFICES**



# CLASSICAL ARCHITECTURE

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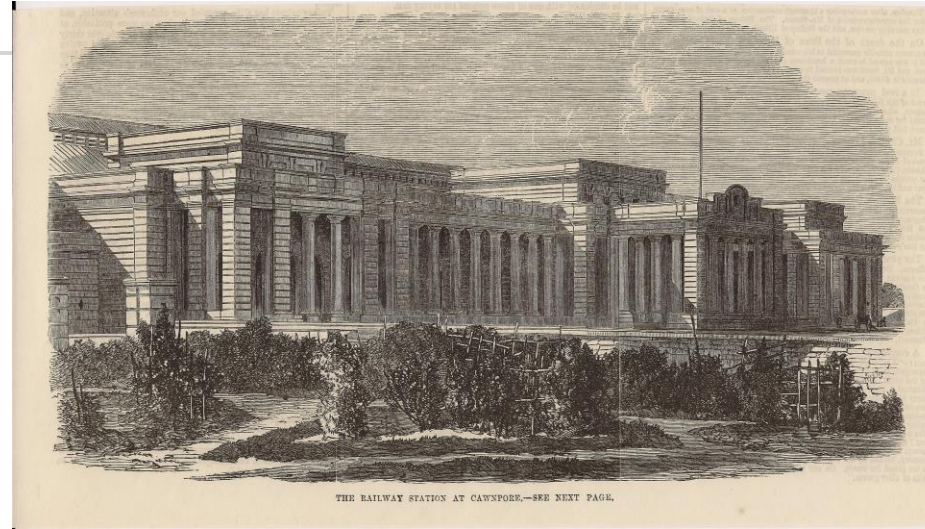
- **CLASSICAL ARCHITECTURE**
  - **GREEK 700 BC to 30 BC**
  - **ROMAN 509 BC to 476 AD**
- **FIVE ORDERS**
  - **DORIC**
  - **IONIC**
  - **CORINTHIAN**
  - **TUSCAN**
  - **COMPOSITE**
- **EARLY 19<sup>TH</sup> CENTURY WITNESSED  
REVIVAL OF CLASSICAL ARCHITECTURE**



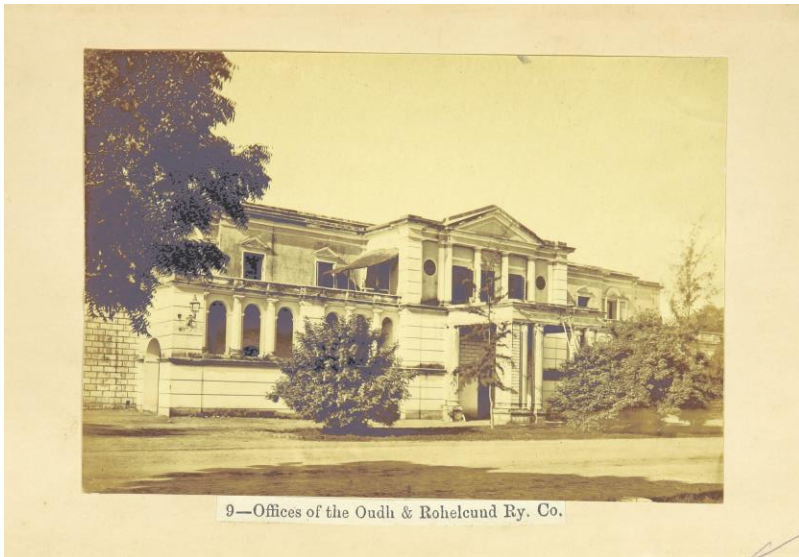
# CLASSICAL REVIVAL ARCHITECTURE 1850 - 1870



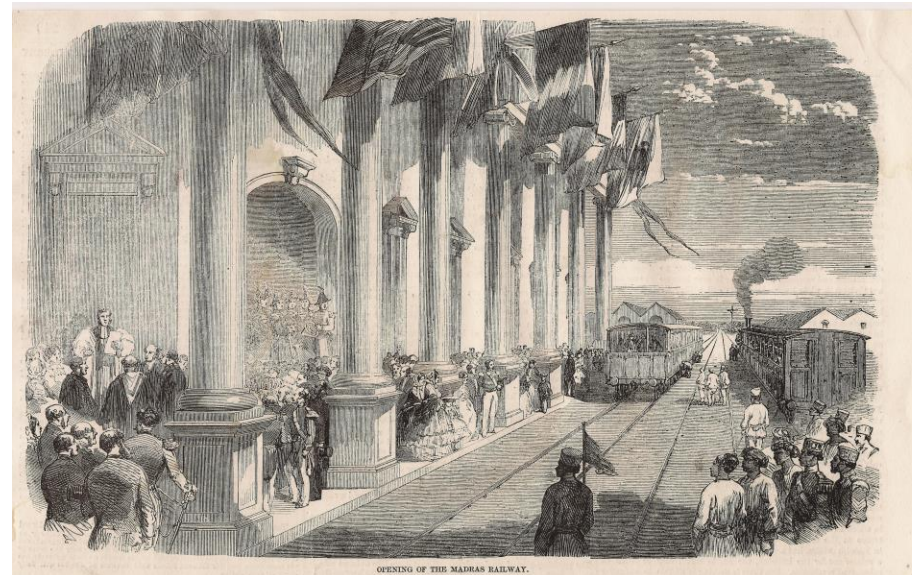
**BNR HOUSE  
KOLKATA 1845**



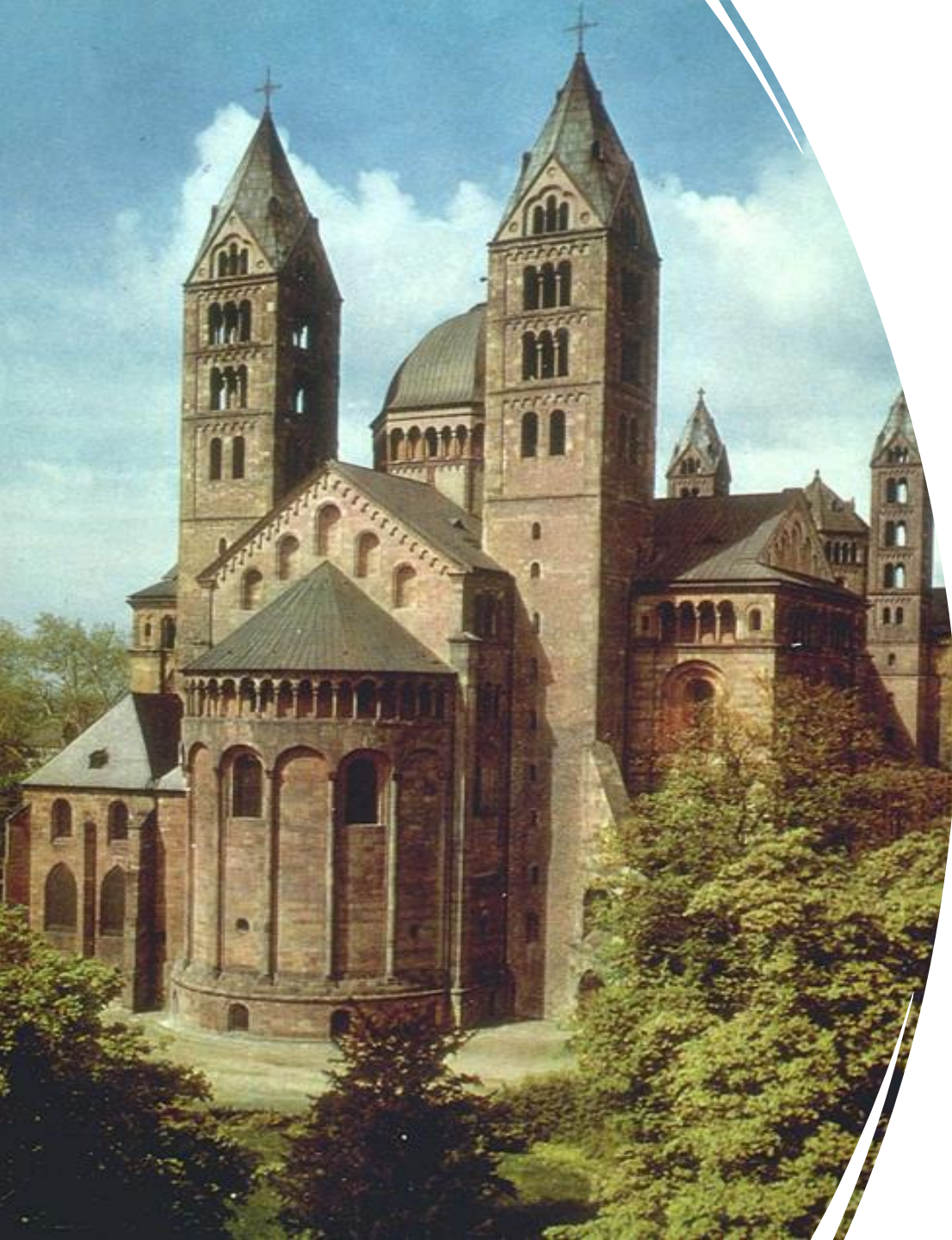
**EIR CAWNPORE  
STATION 1867**



**O&RR OFFICES  
LUCKNOW**



**ROYAPURAM  
STATION 1856**



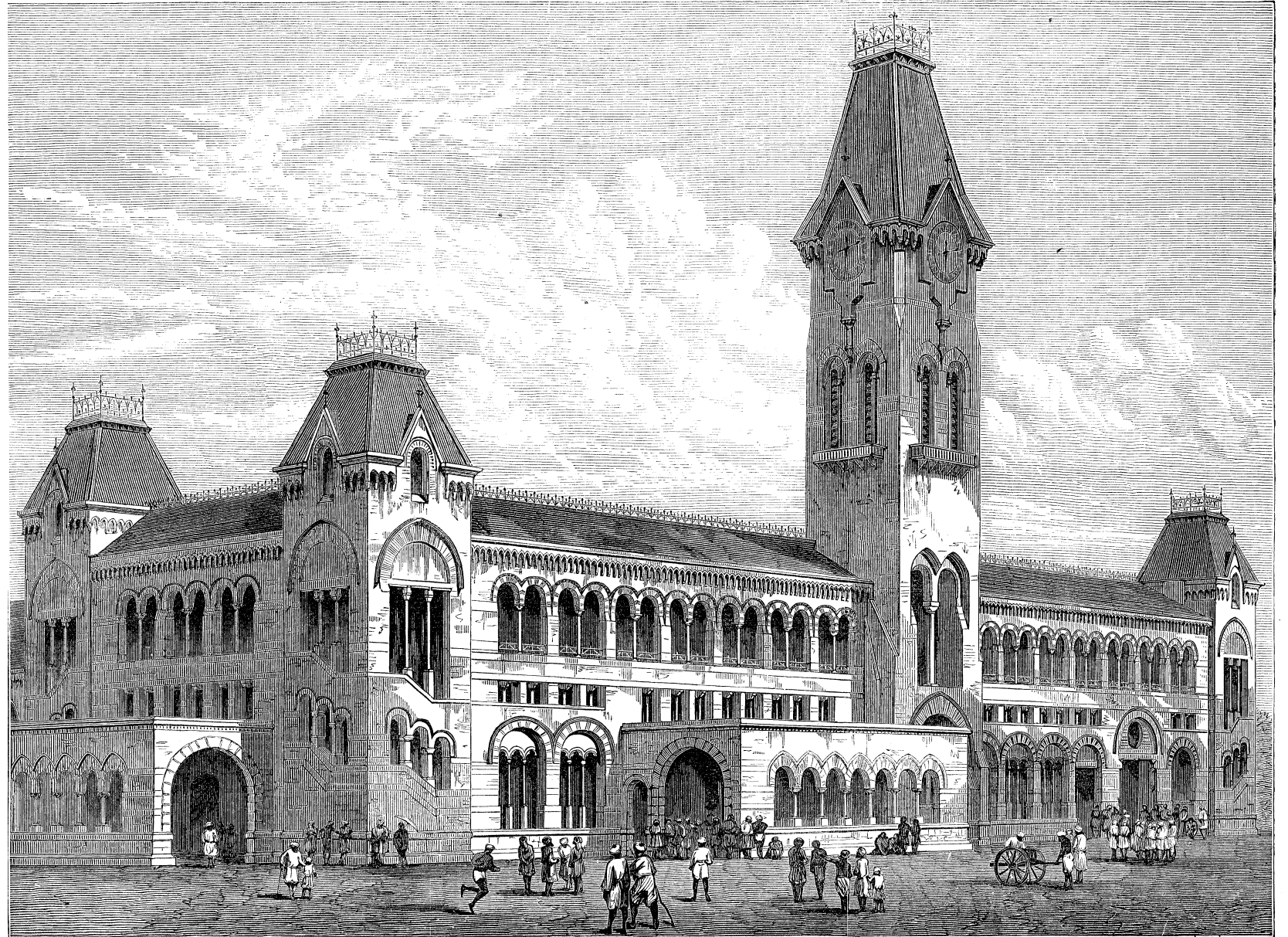
# ROMANESQUE ARCHITECTURE

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- **THICK WALLS OF BRICK OR STONE**
- **SMALL WINDOWS**
- **ROMAN ARCHES & ARCADES**
- **LARGE TOWERS**
- **CORBEL TABLE BELOW CORNICE**
- **BLIND ARCADES**
- **SYMMETRICAL LAYOUTS**

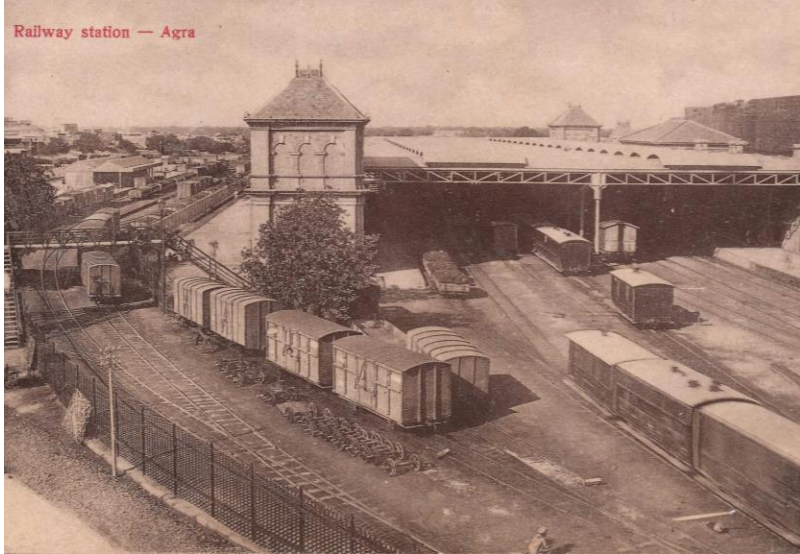
# ROMANESQUE REVIVAL ARCHITECTURE ON I.R. (1870 -1890)

- **MADRAS CENTRAL (CHENNAI)**
- ARCHITECTS
  - George Hardinge
  - Robert Chisholm
- DISPUTE OVER FEE TO BE PAID TO THE ARCHITECT

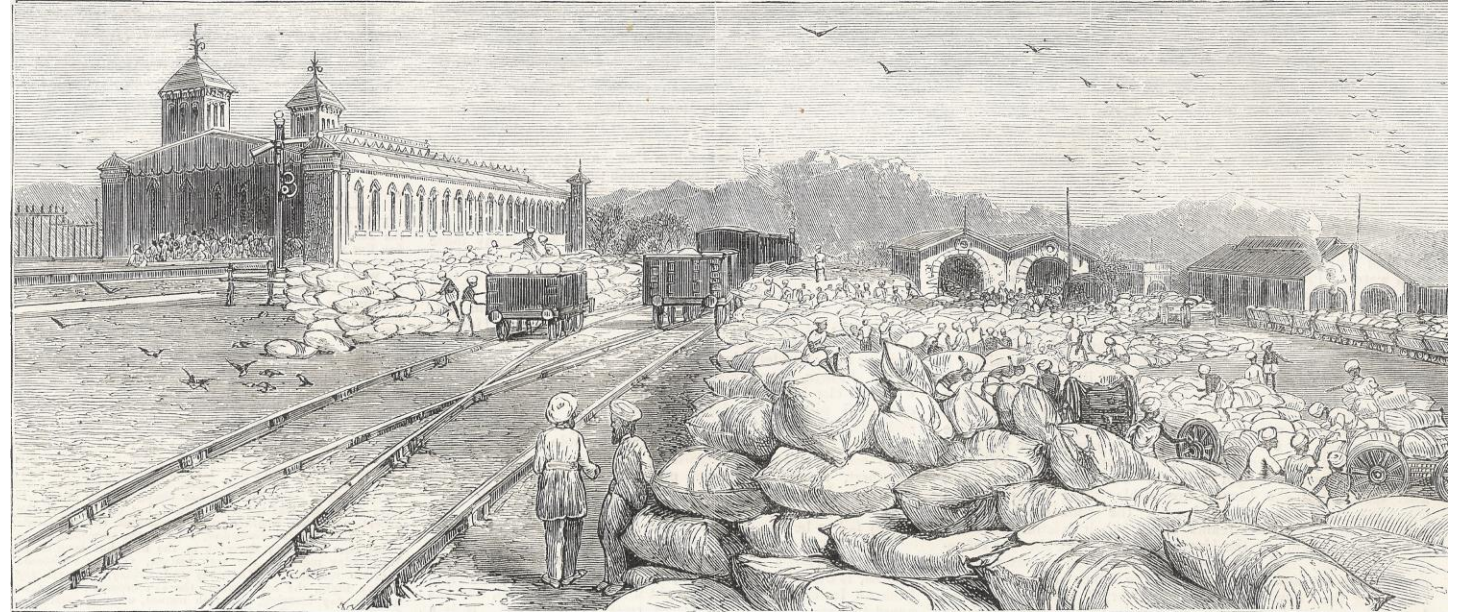


TERMINUS OF THE MADRAS RAILWAY.

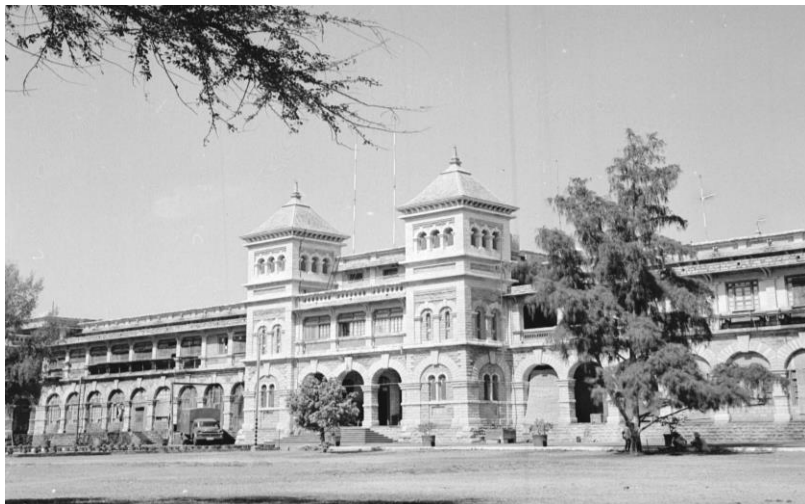
# ROMANESQUE REVIVAL ON I.R.



**AGRA FORT STATION 1881**



**BALLARI STATION**



**RMR HEAD OFFICES  
AJMER 1883-84**



# GOthic REVIVAL ARCHITECTURE CHARACTERISTICS

POINTED ARCH, THIN WALLS, STAINED GLASS, ORNAMENTATION, EMPHASIS ON THE VERTICAL



**SPIRE**



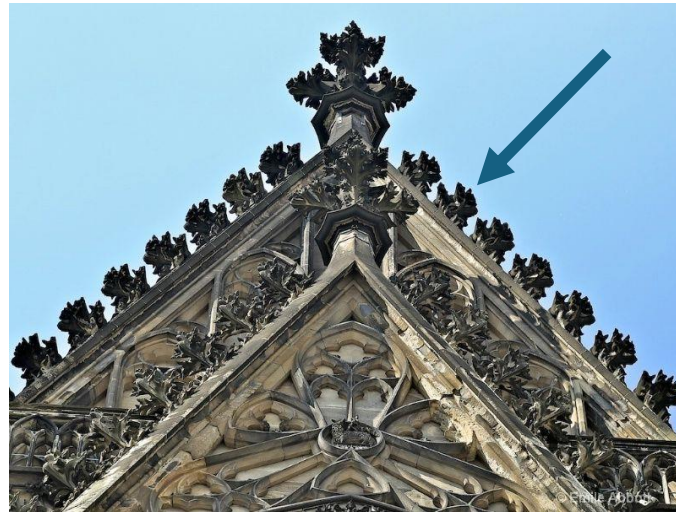
**PINNACLES**



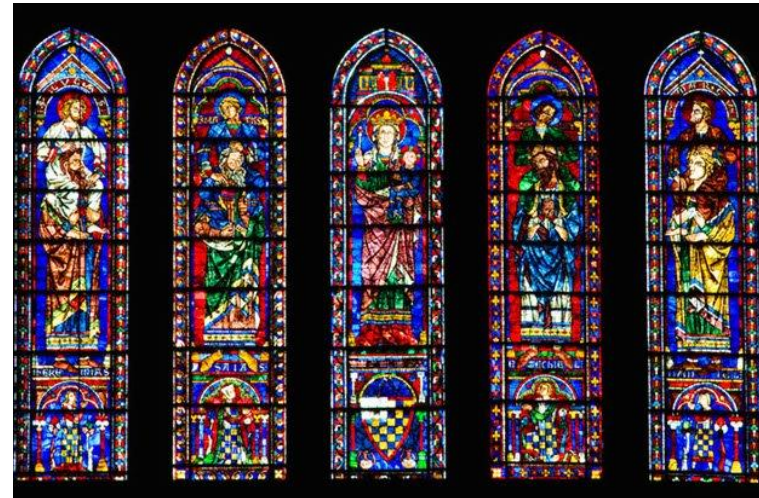
**FLYING BUTTRESS**



**GARGOYLE**



**CROCKETS**



**LANCET STAINED GLASS  
WINDOWS**



# GOTHIC REVIVAL BUILDINGS ON I.R. BOMBAY VICTORIA TERMINUS (C.S.T.M) 1878-87



Architect: **Francis W. Stevens**

# GOTHIC REVIVAL BUILDINGS ON I.R. BOMBAY V.T. (C.S.T.M) - ORNAMENTATION



**ARCADES**



**GARGOYLES**



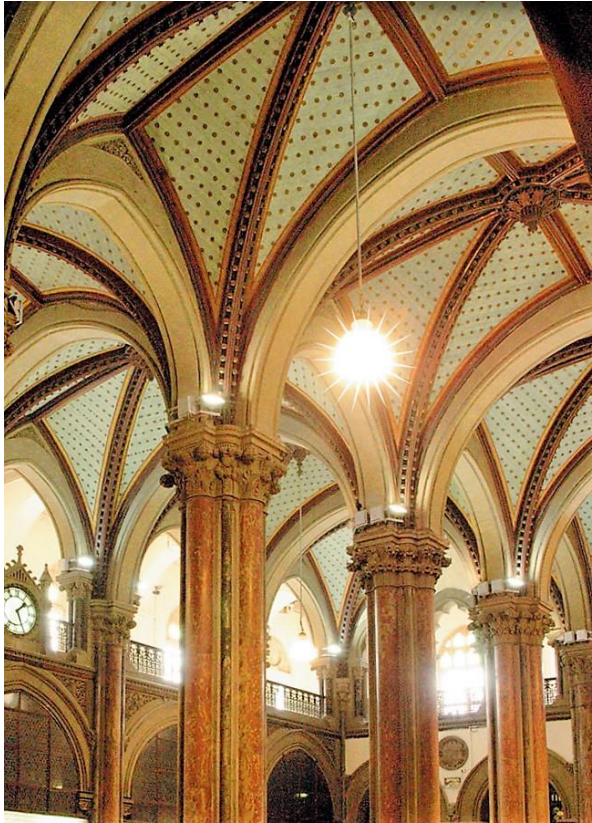
**COLUMN CAPITALS**



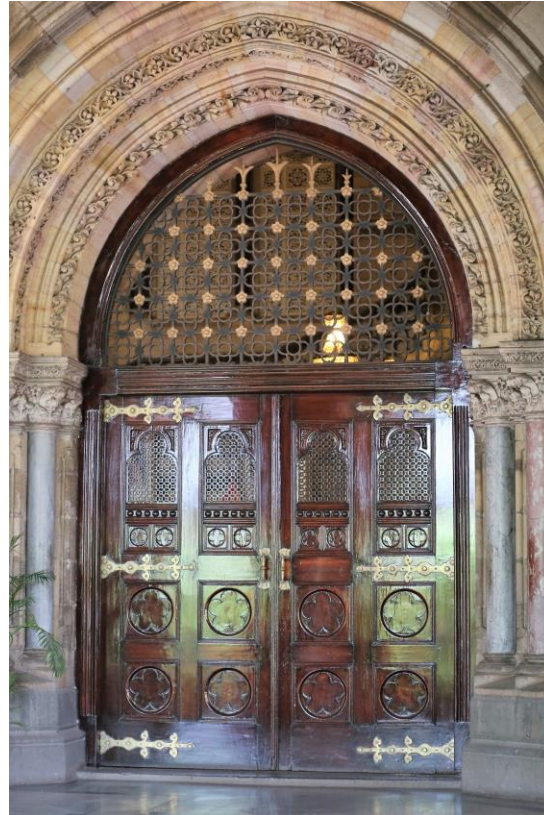
**TYMPANA DESIGNS**



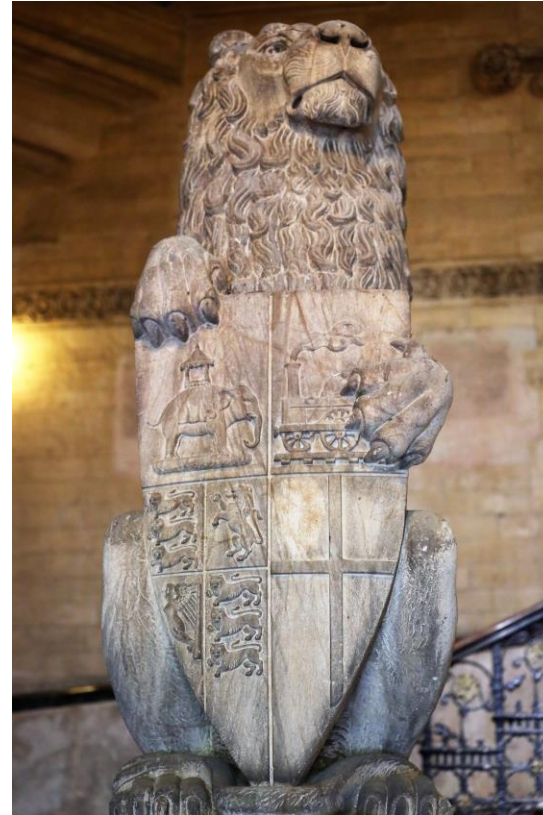
# GOTHIC REVIVAL BUILDINGS ON I.R. BOMBAY V.T. (C.S.T.M) - ORNAMENTATION



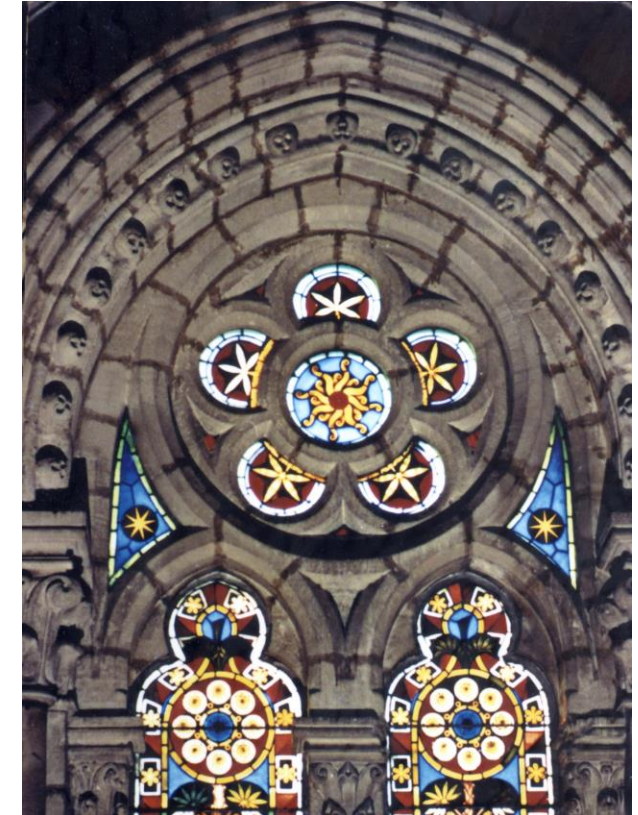
**VAULTED ROOF  
STAR CHAMBER**



**MAIN ENTRANCE  
WITH TEAK WOOD  
DOORS**

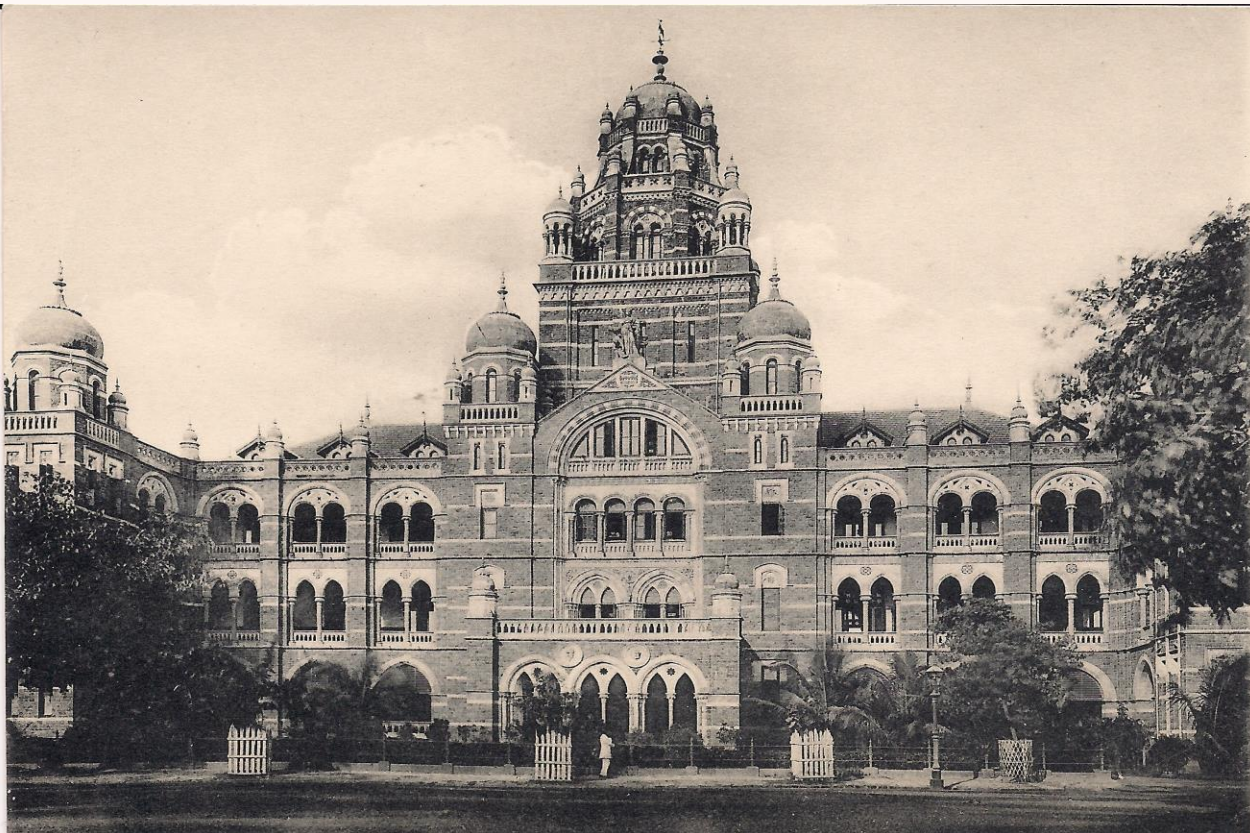


**LION HOLDING THE  
G.I.P.R. EMBLEM**



**STAINED GLASS WINDOW  
CENTRAL TOWER**

# OTHER GOTHIC REVIVAL BUILDINGS



**BB&CI OFFICES  
MUMBAI**

Architect: **Francis W. Stevens**



**OLD  
JABALPUR  
STATION**



**DELHI JN**

# INDO-SARACENIC ARCHITECTURE

## CHARACTERISTICS

**BULBOUS DOMES**

**POINTED & CUSPED ARCHES**

**DOMED *CHHATRI* KIOSKS**

***CHAJJAS* OR EXTENDED EAVES**

***JHAROKAS* / HAREM WINDOWS**

**MINARETS**

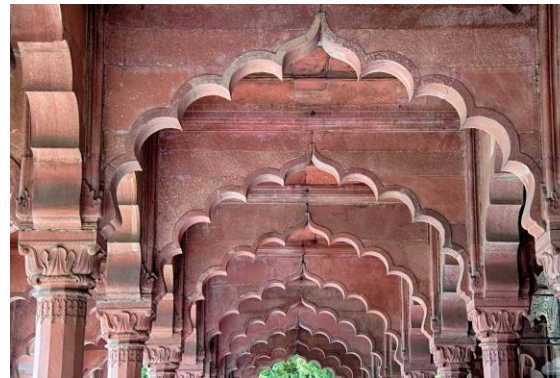
**STONE OPEN WORK SCREENS**



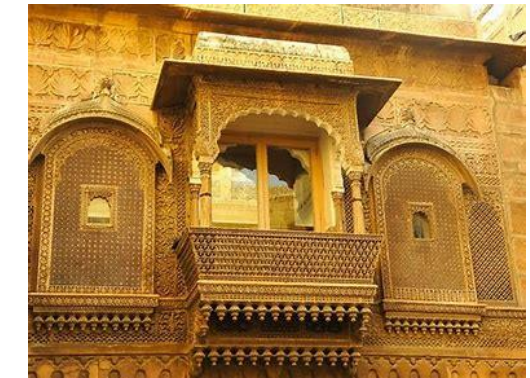
**CHHATRI**



**CHAJJAS**



**CUSPED  
ARCH**



**JHAROKHAS**

# INDO-SARACENIC STATIONS ON IR 1880 - 1930



**EGMORE 1908**

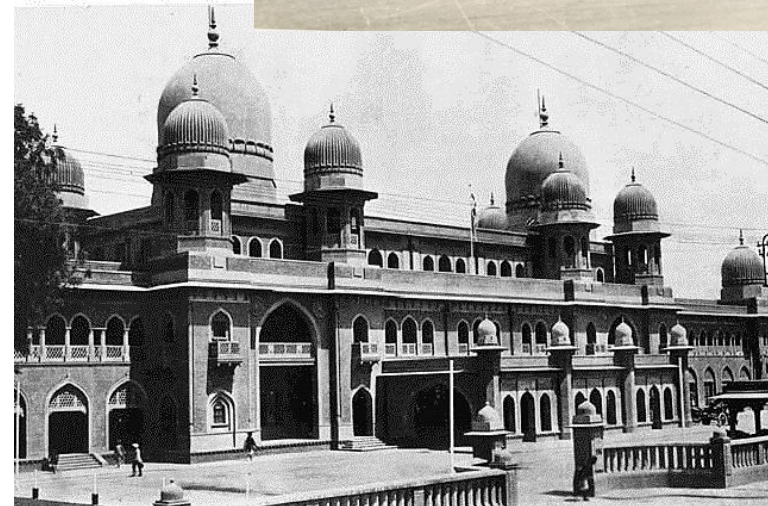


**LUCKNOW 1925**

Architect: **John Hanniman**

**KACHEGUDA 1915**

Architect: **Vincent Esch**



**KANPUR 1930**

# PRINCELY STATES



**HYDERABAD 1870's**



# EARLY TWENTIETH CENTURY

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- **NEW INNOVATION IN ARCHITECTURE**
- **‘MODERNISM’ - CHARACTERISTICS**
  - **NEW MATERIALS – REINFORCED CONCRETE, STEEL FRAMES, RIBBON WINDOWS**
  - **HORIZONTAL LINES, FLAT ROOFS**
  - **NO ORNAMENTATION**
  - **EXTERNALLY WHITE OR NEUTRAL SHADES**
  - **MAIN PROPONENTS – WALTER GROPIUS, LE CORBUSIER & FRANK LLOYD WRIGHT**
- **IMPACT ON RAILWAY BUILDINGS – ADOPTION OF ‘MINIMALIST’ DESIGN FEATURES**



# EARLY TWENTIETH CENTURY (1920-1940)

**NAGPUR 1925**



**MUMBAI CENTRAL 1930**  
Architect: **Claude Batley**



**PUNE 1925**



**TRICHY 1935**



# COMPANY HEAD OFFICES



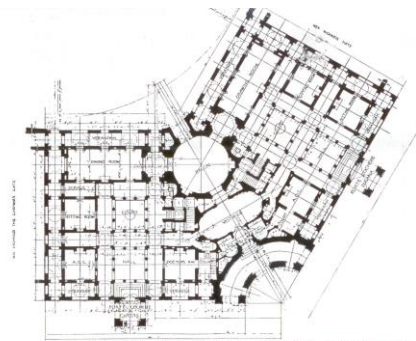
**E.R. HO KOLKATA 1884**  
Architect: Roskell Bayne



**S.E.R. HO KOLKATA 1907**  
Architect: Vincent Esch



**BARODA HOUSE  
NEW DELHI 1933**  
Architect: Edwin Lutyens



# A UNIQUE MUGHAL INHERITANCE

- CONSTRUCTION OFFICE  
DELHI

- **ALI MARDAN KHAN**
  - NOBLEMAN AT SHAHJAHAN'S COURT
  - 'TYKHANA' (BASEMENT)
  - TUNNELS & WATER CHANNELS
- **WILLIAM FRASER**
  - BRITISH RESIDENT AT MUGHAL COURT
  - FRASER KOTHI
- **MAJOR ROBERT SMITH**
  - RENOVATION 1819



**THANK YOU**



# RAILWAY BUNGALOWS



*Dr. B. C. Roy Institute at Sealdah, formerly known as Clem.*



# RAILWAY INSTITUTES