

TERRA COTTA

· STANDARD · CONSTRUCTION

REVISED EDITION

COMPLIMENTS OF



GLADDING, McBEAN

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NATIONAL
TERRA COTTA SOCIETY

19 WEST 46th STREET U·S·A NEW YORK, N. Y.

1927

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Introduction

The present volume is a revision of Architectural Terra Cotta—Standard Construction, originally published in 1914.

Like the previous issue, this edition does not presume to suggest architectural design. It shows illustrative architectural forms of assumed proportions, and their proper constructional features. It shows the correct use of Terra Cotta. For a number of examples several good solutions of the structural problems are possible. Variations in size of similar sections sometimes necessitate radical changes in both jointing and construction.

The changes made in this revision are the result of a more extended experience in manufacturing and in modern building methods, and are based on a careful study of the behavior and weathering properties of exterior building materials.

The following are the most important of the structural principles upon which this revision has been developed:

Shelf Supports In concrete or steel frame buildings, the veneer or facing material should be fully and continuously supported, at each floor level on shelf supports, of adequate strength and stiffness, rigidly connected to the structural frame. Steel shelf angles or supports, in all cases, should be located in mortar joints. The strength of the Terra Cotta should not be unnecessarily reduced by cutting the webs to receive the steel.

Expansion Joints Proper provision should be made for expansion joints, at shelf supports, over column caps, etc., to prevent the development of disruptive stresses caused by deflection, wind pressure, temperature changes, settlement and like forces.

Terra Cotta on Concrete Frames The volume changes incident to the setting and hardening of concrete, and the variations in volume of concrete due to humidity and temperature conditions, require provisions to allow free movement of the supporting frame and make it undesirable to completely fill a facing applied to a concrete structure.

Protection against Corrosion Proper care should be exercised to prevent the corrosion of all steel supports, ties, etc. Where such protection cannot be permanently secured through encasement with mortar or concrete, or through the use of corrosion resistant metallic coatings, non-corrosive metals should be employed.

Free-standing Construction Exposed free-standing construction, subject to the absorption of water through mortar joints and liable to injury from subsequent freezing, or the expansion of improper filling material, should generally be left unfilled and should be ventilated by means of small, inconspicuously placed weep-holes (indicated by W. II. on the plates).

Flashing and Drips Properly constructed flashing should be provided to cover the top of large projecting horizontal courses, the backs and tops of parapet walls, wide-exposed sill courses, etc., and all projecting features should have drips.

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Index

A

- Anchorage*..... See plates in general
- Terra Cotta to Concrete Frame..... 27, 28, 36
- Types of Anchors, Hangers, etc., used..... 67

Arches

- Circular..... 2, 40
- Elliptical..... 4, 5, 33, 38
- Flat..... 2, 6, 19, 33, 34, 37, 38, 42, 46
- Gothic..... 39
- Pointed..... 14, 39, 64
- Rusticated Ashlar..... 6, 7, 8, 9, 41
- Segmental..... 1, 3, 7, 13, 19, 33, 34, 38, 41
- Semi-circular..... 2, 3, 8, 9, 10, 11, 12, 14
45, 48, 49, 50, 60, 62, 63
- Spandrels for..... 3, 4, 5, 14, 33, 45, 48, 49, 62, 63

Architraves

- 1, 2, 3, 21, 23, 29, 30, 31
32, 48, 49, 50, 60, 62, 63

Ashlar

- Paneled..... 7, 8
- Plain..... 2, 3, 5, 9, 11, 12, 13, 18, 25
29, 32, 39, 43, 45, 48, 50, 60, 64
- Rusticated..... 1, 6, 7, 8, 9, 11, 31, 41, 44

B

Balconies

- 12, 13, 14, 45

Balustrades

- Bases..... 12, 14, 15, 16, 25, 26
- Construction and Ventilation..... 12, 14, 15, 16
25, 26, 41
- Cover Plate Blocks..... 16, 25, 26
- Engaged..... 41
- Rails..... 12, 14, 15, 16, 25, 26, 41

Band Courses

- 24, 49, 50

Bases

- Courses..... 1, 2, 5, 6, 7, 8, 9, 10, 11
43, 44, 45, 47, 48, 50, 61, 62, 63
- Niche..... 48
- Strengthening Webs in Column
or Pilaster..... 7, 53, 54

Battlements

- 18, 34

Bay, Oriel

- 4, 5

Bosses

- 24

Brackets

- 2, 12, 13, 14, 15, 24, 28, 49, 50

Brick Field with

- Terra Cotta Trim*..... 4, 5, 10, 14, 19, 30, 31
32, 37, 38, 40, 43, 49

Buttress

C

Canopies, Engaged

- 5, 33

Capitals for Columns

- or Pilasters..... 1, 2, 3, 9, 10, 21, 26, 45, 47, 49
50, 51, 52, 53, 54, 55, 60, 62, 63, 64

Cartouches

- 9, 13, 34, 63

Channel Details, Metal, for Leaded Glass Windows

- 39, 42

Cheneaux

- 21, 24

Church Spire

- 64

Columns

- Annulated..... 52
- Bases..... 1, 14, 44, 47, 49, 51, 52
54, 55, 56, 57, 62, 64
- Capitals..... 1, 14, 21, 49, 51, 52, 53
54, 55, 60, 62, 63, 64
- Corinthian—Fluted and Plain..... 55
- Doric—Ornamented..... 53
- Engaged..... 1, 10, 14, 44, 47, 49, 52, 62, 63
- Entasis Diagram..... 51, 54, 55
- Entasised..... 1, 21, 49, 51, 52, 53, 54, 55, 62
- Flute Details..... 56, 57
- Ionic—Fluted and Plain..... 54, 62
- Jointing..... 1, 44, 47, 49, 51, 52, 53
54, 55, 56, 57, 62, 63
- Octagon—Ornamented and Plain..... 51
- Ornamented Shaft..... 52
- Volute Diagram..... 54

Concrete

- Frame Construction and
Anchorage Details..... 27, 28, 36
- For Protection of Steel and Anchorage in Non-
concrete Frame Buildings..... 4, 5, 12, 13, 21, 22
24, 26, 33, 62, 63

Consoles

- 3, 62

Copings

- Battlemented..... 18, 34
- Brick Dowel Construction..... 15, 16, 17, 21
23, 24, 31
- General..... 15, 16, 17, 18, 21, 23, 24
27, 29, 30, 31, 58, 59, 64

▲ ▲ ▲ ▲ TERRA COTTA STANDARD CONSTRUCTION ▲ ▲ ▲ ▲

Index—Continued

<i>Corbels</i>	13, 24, 32, 33	<i>Entablatures</i> —(Also see Cornices) Doric Style.....	21
<i>Cornices</i>			
Heavy Bracketed (Corbel Table).....	24	<i>Entasis Diagrams</i>	51, 54, 55
Modillion.....	15, 22, 23, 25	<i>Entrances</i> —(Also see Doorways)	
Paneled Soffit.....	26	Elliptical Arched.....	4, 5
Ventilation.....	1, 2, 3, 15, 21, 22, 23, 24, 25 26, 27, 28, 29, 30, 31, 32, 34	Flat Arched.....	2
With Concrete Supports.....	28	Segmental Pediment.....	1
With Niches.....	48, 49	Semi-circular Arch and Pediment.....	3
With Steel Supports.....	1, 15, 21, 22, 23, 24 25, 26, 27, 32, 44, 49	Store Front.....	32
Without Steel Supports.....	2, 3, 21, 29, 30, 31 34, 50, 58, 62, 63	<i>Expansion Joints</i>	
<i>Corrosion</i> —(See also Concrete used for Protection of Steel)*		At Shelf Supports.....	7, 29, 30, 31, 36
Protection of Steel from.....	1, 2, 4, 5, 22, 23, 24 26, 27, 28, 32, 33, 34, 35 36, 42, 44, 54, 64	At Spandrel Ends.....	32
<i>Crockels</i>	46, 47, 64	Over Column Capitals.....	1, 21, 49, 51, 52, 53, 54, 55
<i>D</i>			
<i>Diagrams</i>		Over Pilaster Capitals.....	2, 26
Entasis.....	51, 54, 55	<i>F</i>	
Volute.....	54	<i>Finials</i>	5, 33, 45, 46, 47, 49, 63, 64
<i>Domes</i>			
Coffer'd Apsidal.....	61	<i>Flashings</i>	
Interior of Plain Ashlar.....	60, 62, 63	Balconies.....	12, 13, 14, 45
Terra Cotta covered.....	58, 59	Balustrades.....	12, 15, 16, 25, 26
<i>Doorways</i> —(Also see Entrances)			
Flat Arched.....	6	Canopies.....	5, 33
Segmental Arched.....	7	Cornices.....	21, 22, 23, 24, 25, 26, 28, 63
Semi-circular Arched.....	8, 9, 10, 12, 14	Domes.....	58, 59, 62, 63
<i>Dormer Windows</i>	45, 46, 47	Dormers.....	45, 46, 47
<i>Drainage</i>			
Balconies.....	12, 13, 14, 45	Niche Sills.....	33, 48, 49
Cornices.....	1, 2, 3, 21, 22, 23 24, 25, 26, 28, 44, 58	Parapets.....	15, 21, 23, 24, 27, 29, 30, 31, 34, 58
Domes.....	58, 59, 62, 63	Pediments.....	1, 45, 46, 47, 64
<i>Drips</i>	See plates in general	Sills.....	43, 44, 47, 48, 62, 64
Details.....	20	Under Copings.....	15, 16, 17, 18, 23, 24, 27, 29, 31, 34
<i>Drop Light Center for Dome</i>	60	<i>Flue Details for Columns</i>	56, 57
<i>E</i>			
<i>Embrasures</i>	18, 34	<i>Free-standing</i> —(Also see Balustrades and Parapets)	
<i>G</i>			
		Cross.....	64
		Finials.....	5, 33, 45, 46, 47, 49, 63, 64
		Gargoyles.....	65
		Pinnacles.....	47
		<i>I</i>	
		<i>Impost</i>	60
		<i>Inscription Panels</i>	1, 32

* * * TERRA COTTA STANDARD CONSTRUCTION * * *

Index—Continued

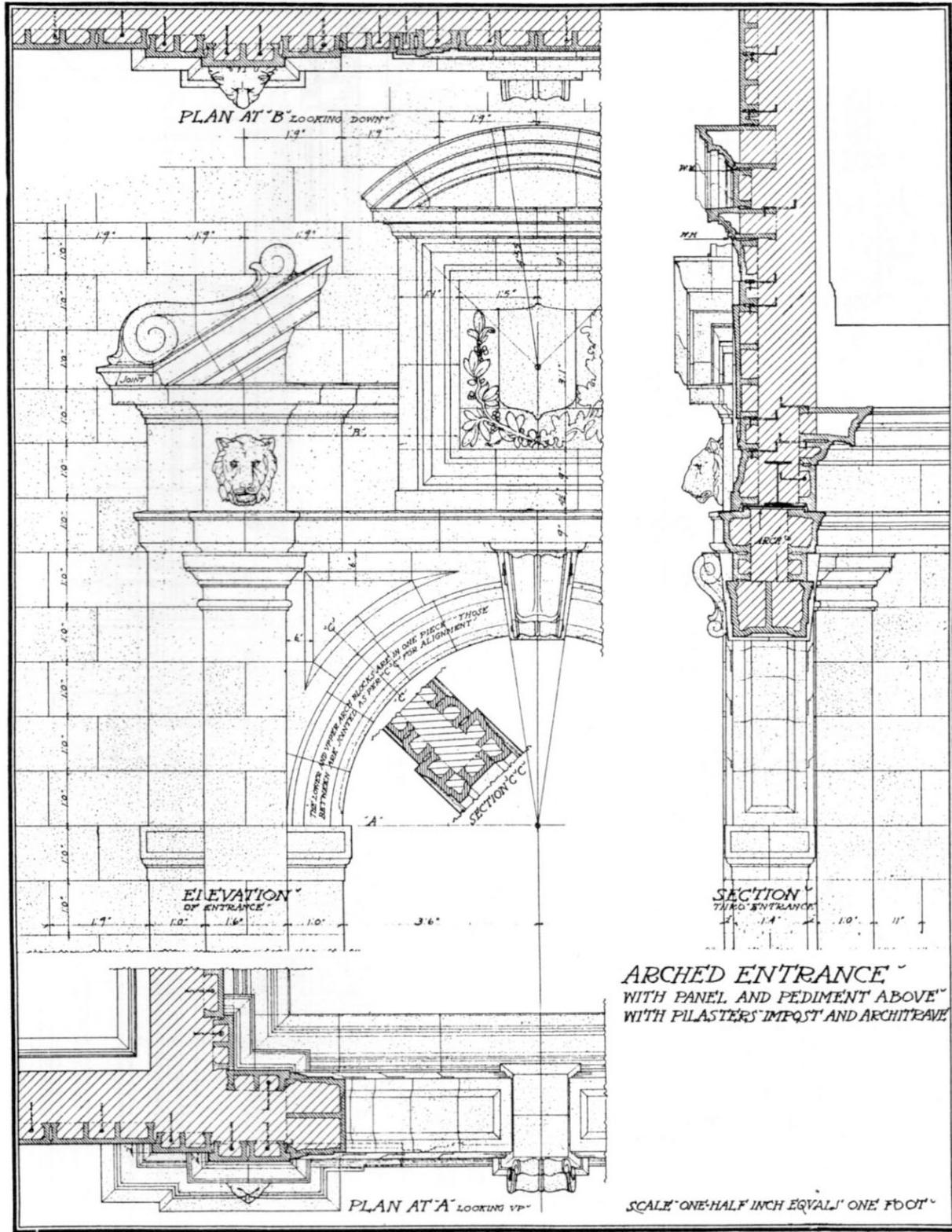
J	N
<i>Jambs</i>	<i>Niches</i>5, 33, 48, 49
Moulded.....4, 5, 7, 10, 11, 14, 33, 34, 37 38, 39, 42, 43, 46, 47, 49, 50	
Moulded and Quoined.....10, 30, 38, 42, 43	
Paneled.....1, 3, 6, 9, 14	
Plain.....2, 8, 9, 12, 13, 29, 31 32, 41, 42, 44, 45, 64	
<i>Jointings</i> —(Also see Arch Construction)	
Balustrades.....16, 41	
Brackets.....13, 24, 49, 50	
Columns.....1, 44, 47, 49, 51, 52, 53 54, 55, 56, 57, 62, 63	
Copings.....16, 17, 18	
Dome Coverings.....58, 59	
Jambs.....1, 4, 5, 6, 7, 9, 10, 11 37, 38, 39, 42, 43, 44, 64	
Mullions.....4, 29, 30, 31, 33, 34, 37, 38, 39, 42	
Pilasters.....2, 3, 26, 45, 50, 60	
Rosettes.....11, 22, 23, 24, 55, 64	
Soffits.....1, 12, 13, 21, 23, 26, 27 28, 32, 35, 36, 44, 49, 60	
<i>Joints for Wash Courses</i>	
Flush.....20	
Raised.....20	
Roll.....20	
K	P
<i>Keystones</i>3, 6, 7, 8, 9, 13 19, 41, 45, 62, 63	<i>Panels</i>
L	Parapet Construction
<i>Lettering, Detail Section</i> <i>for Raised and Incised</i>66	<i>and Ventilation</i>15, 21, 23, 24, 27 29, 30, 31, 34, 58
Lintels	<i>Pedestals</i>5, 33, 62, 63
Doorway.....1, 9, 32	<i>Pedestal Niches</i>33, 48
Window.....4, 19, 29, 30, 31, 35, 36, 37, 44, 46	<i>Pediments</i>1, 3, 45, 46, 47, 49, 64
<i>Louvered Windows</i> —(See Windows)	
M	<i>Piers</i>
<i>Merlons</i>18, 34	Plain Ashlar.....29, 32, 44, 50 1, 6, 7, 8, 9, 31, 41, 44 Shelf Supports for.....29, 30, 31, 32, 44 With Canopy, Niche and Pedestal.....33
<i>Metal Channel Frame Detail</i> <i>for Leaded Glass Windows</i>39, 42	<i>Pilasters</i>
<i>Melopes</i>21	Bases.....2, 45, 62 Capitals.....2, 3, 9, 26, 45, 60, 62 Paneled.....2, 45, 64 Plain.....3, 26, 50 Rusticated.....9
<i>Modillions</i>22, 23	
<i>Mullioned Windows</i> —(See Windows)	<i>Pinnacles</i>47, 64
<i>Mutules</i>21, 23, 25	<i>Plymths</i>1, 2, 6, 7, 8, 9, 10, 11, 43, 44, 45, 47 48, 49, 50, 51, 52, 54, 55, 56, 57, 62, 63, 64
	Q
	<i>Quoins</i>4, 10, 14, 19, 30, 31, 32 37, 38, 39, 42, 43, 46

* * * * TERRA COTTA STANDARD CONSTRUCTION * * *

Index—Continued

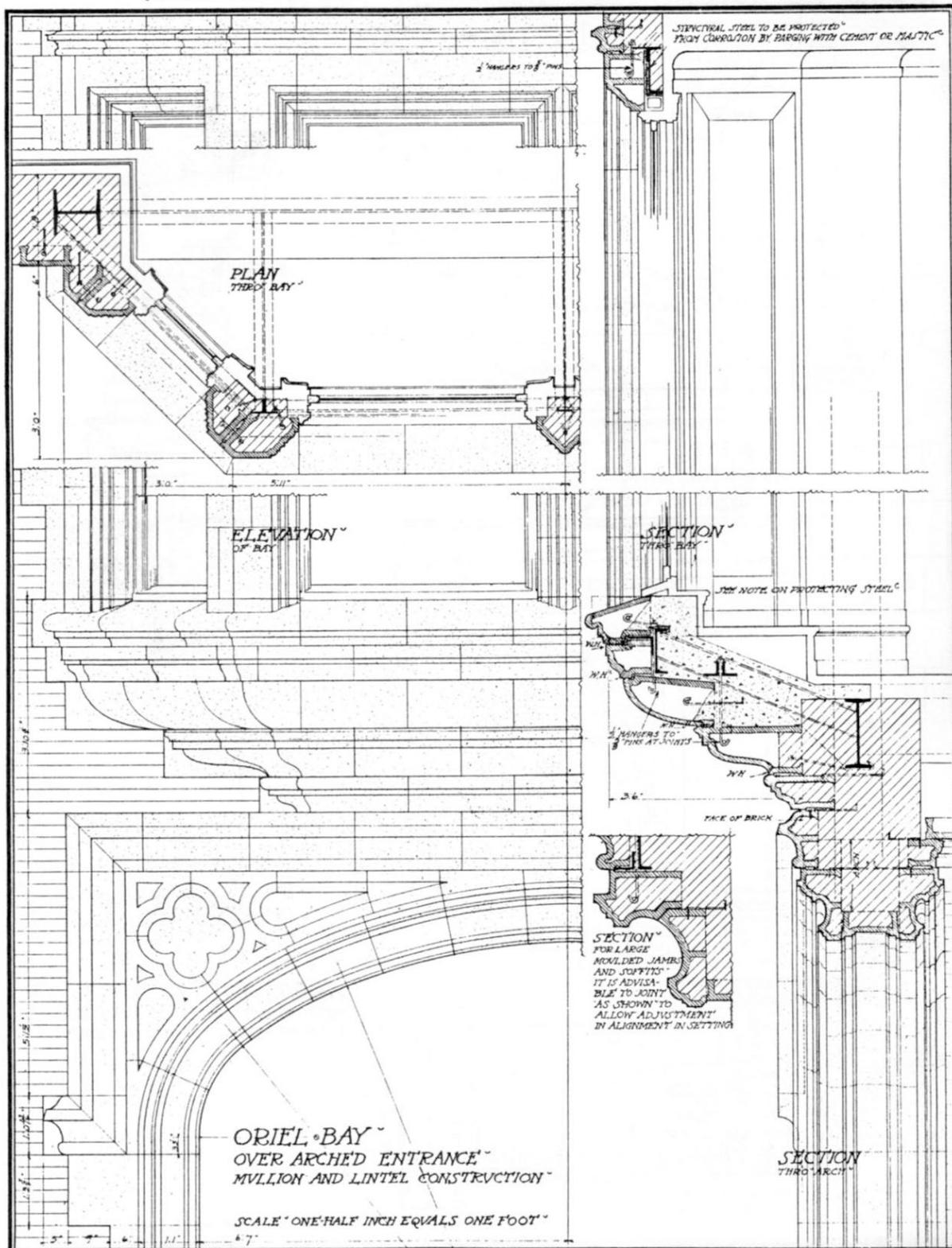
R	T
<i>Rails</i> —(See Balustrades)	
<i>Reglets</i>	21, 26, 45, 46, 47, 58, 64
<i>Rosettes</i>	11, 22, 23, 24, 55, 64
<i>Rubble Stone with Terra Cotta Trim</i>	42
<i>Rustication</i>	
Arches.....	6, 7, 8, 9, 41
Ashlar.....	1, 6, 7, 8, 9, 11, 31, 41, 44
Columns.....	1, 52
Mullions.....	30, 31
Paneled.....	7, 8
Piers.....	1, 6, 7, 8, 9, 31, 41, 44
Strengthening Webs for.....	6, 7
 S	
<i>Set-offs</i>	18
<i>Shelf Supports</i>	7, 23, 26, 27, 28, 29, 30, 31, 32 33, 34, 35, 36, 37, 42, 44, 60
<i>Sills</i>	
Details for Metal and Wooden Frames.....	20
For Leaded Glass windows.....	37, 38, 39, 42, 43
Niche.....	5, 33, 48, 49
Triple Wash.....	43, 64
Window.....	4, 13, 14, 27, 28, 29, 30, 31, 32, 33, 34 36, 37, 38, 39, 41, 42, 43, 44, 45, 46, 47
<i>Soffits</i> —(See also Arch Construction)	
Moulded.....	4, 5, 7, 10, 11, 14, 22, 26, 27, 37, 38
Paneled.....	1, 3, 6, 9, 12, 13, 14, 21, 22, 23 24, 25, 26, 27, 28, 32, 35, 44, 60
Plain.....	2, 8, 35, 36, 41, 44
<i>Spandrel Wall, Construction for</i>	
Concrete Frame.....	27, 28, 36
Steel Frame.....	23, 27, 28, 29, 30, 31, 32 33, 34, 35, 36, 37, 44
<i>Spandrels, Arch</i>	
Moulded.....	4, 5, 33, 45
Paneled.....	3, 14, 48, 49, 62, 63
Plain.....	34
<i>Steel</i>	
Protection from Corrosion.....	1, 2, 4, 5, 22, 23, 24 26, 27, 28, 32, 33, 34 35, 36, 42, 44, 54, 64
Supports, Cornice with.....	1, 15, 21, 22, 23, 24 25, 26, 27, 32, 44, 49
Types of Anchors, Hangers, Straps, etc.....	67
<i>Store Front</i>	32
<i>String Courses</i>	4, 5, 12, 24, 29, 30 41, 42, 43, 44, 50
 Terra Cotta	
In Brick Field.....	4, 5, 10, 14, 19, 30, 31 32, 37, 38, 40, 43, 49
Wainscot.....	42, 43
<i>Towers</i>	62, 63
<i>Tracery Windows</i>	39, 40
<i>Transom Lintel (Paneled)</i>	9
<i>Triglyphs</i>	21, 48
<i>Timpanums</i>	1, 3, 45, 46, 47, 49
 U	
<i>Urn, Engaged</i>	49
 V	
<i>Ventilation</i> —(See Cornices and Free-standing)	
<i>Volute Diagram for Columns</i>	54
 W	
<i>Wainscot</i>	42, 43
<i>Waiting Room Interior,</i> <i>with Ticket Windows</i>	50
<i>Waterproofing</i> —(See Flashings)	
<i>Water Table</i>	44
<i>Webs, Strengthening</i>	
Column and Pilaster Bases.....	7
Rusticated Ashlar.....	6
<i>Windows</i>	
Circular Arched.....	2, 40
Dormer.....	45, 46, 47
Drip Details.....	20
Elliptical Arched.....	38
Flat Arched.....	19, 33, 34, 37, 38, 42
Gothic.....	39
In Brick Field.....	14, 19, 30, 37, 38, 40, 43
In Plain Ashlar Field.....	29, 32, 39, 50
In Rusticated Ashlar Field.....	31
Lintel Construction.....	4, 19, 29, 30, 31, 36, 37, 44
Louvered.....	42, 47
Mullioned.....	4, 13, 29, 30, 31, 32 33, 34, 37, 38, 39, 42
Oriel Bay.....	4, 5
Pointed Arched.....	14
Rose.....	40
Segmental Arched.....	19, 33, 34, 38, 41
Sill Details for Concrete Construction.....	27, 28
Sill Details for Leaded Glass.....	37, 38, 39, 42, 43
Sill Details for Metal and Wooden Frames.....	20
Ticket (Waiting Room Interior).....	50
Tracery.....	38, 39, 40

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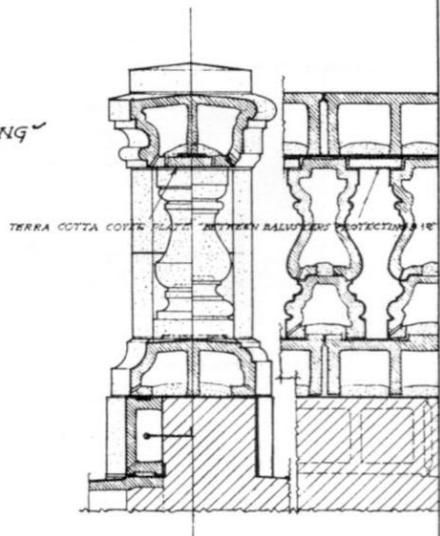
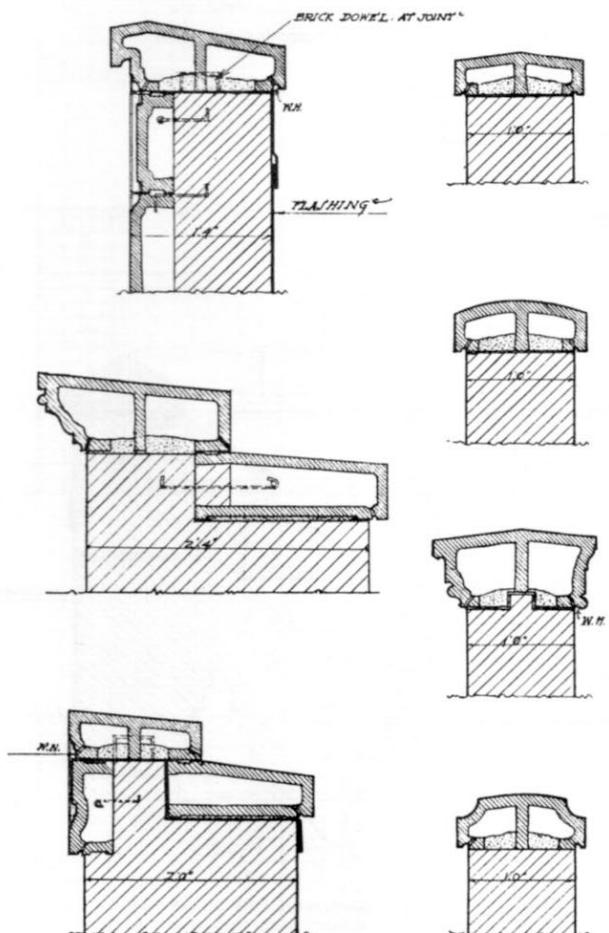
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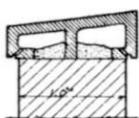
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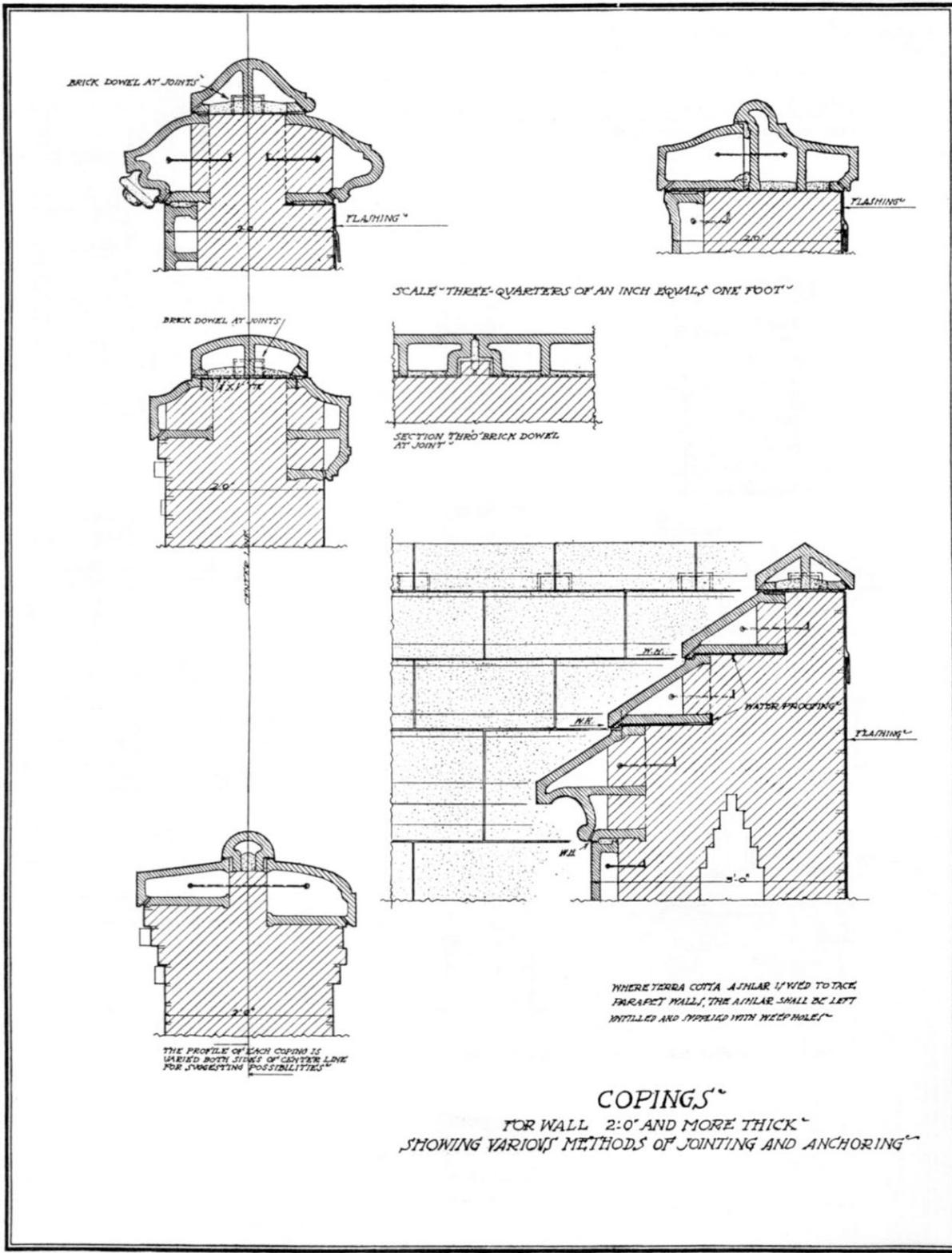
*WALL COPINGS AND BALUSTRADES
SHOWING VARIOUS METHODS OF JOINING AND ANCHORING*



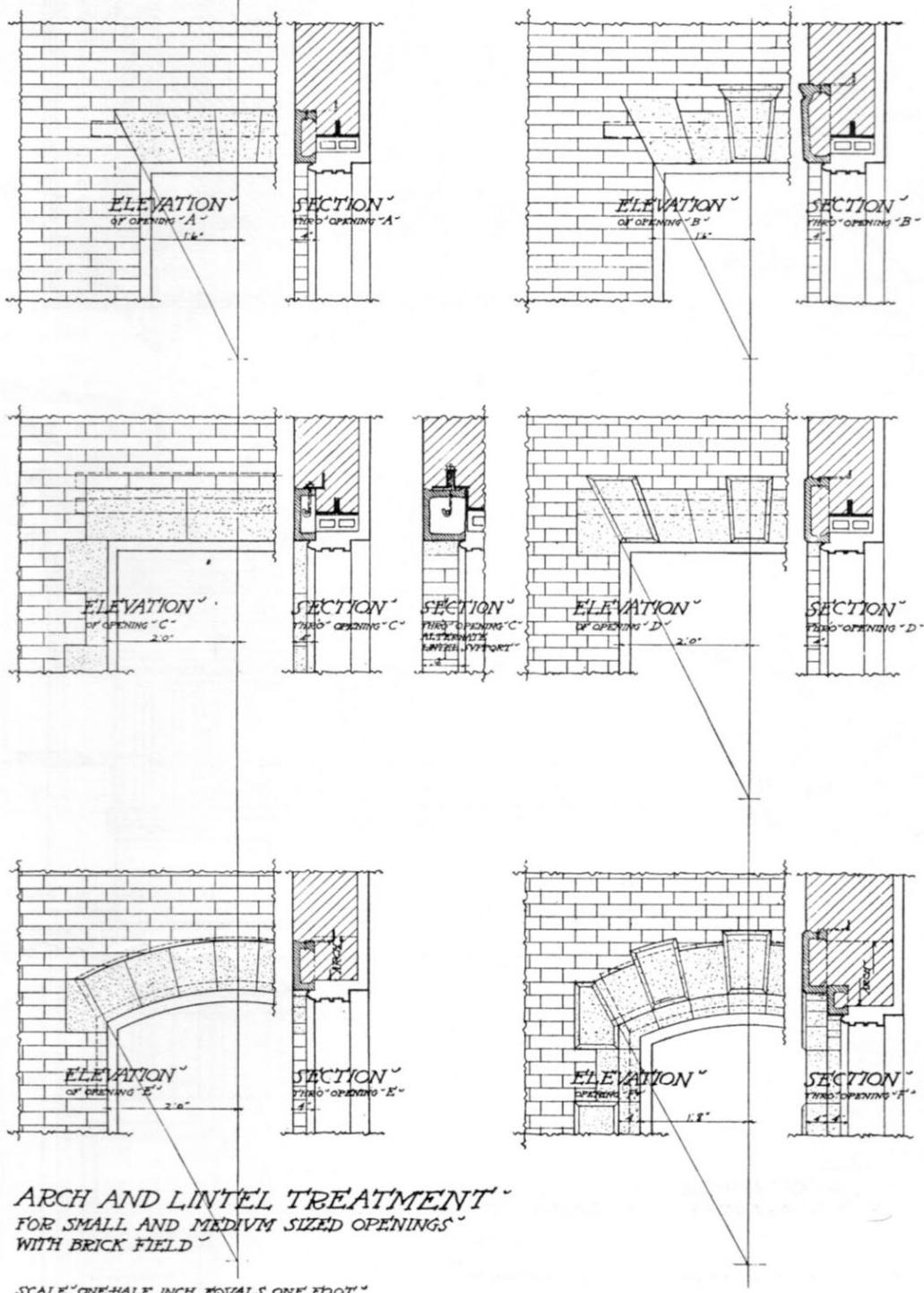
SCALE "THREE-QUARTERS OF AN INCH EQUALS ONE FOOT"



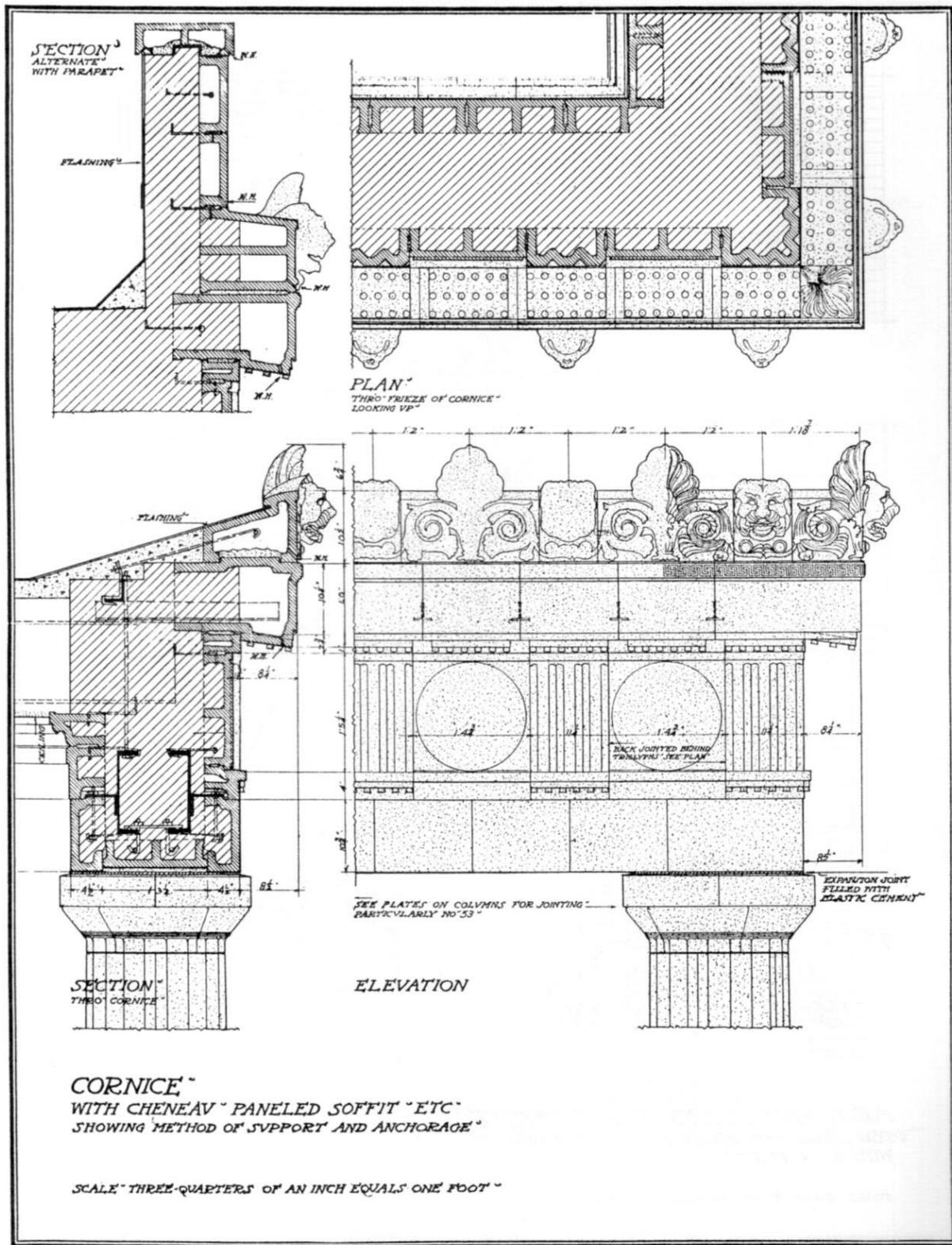
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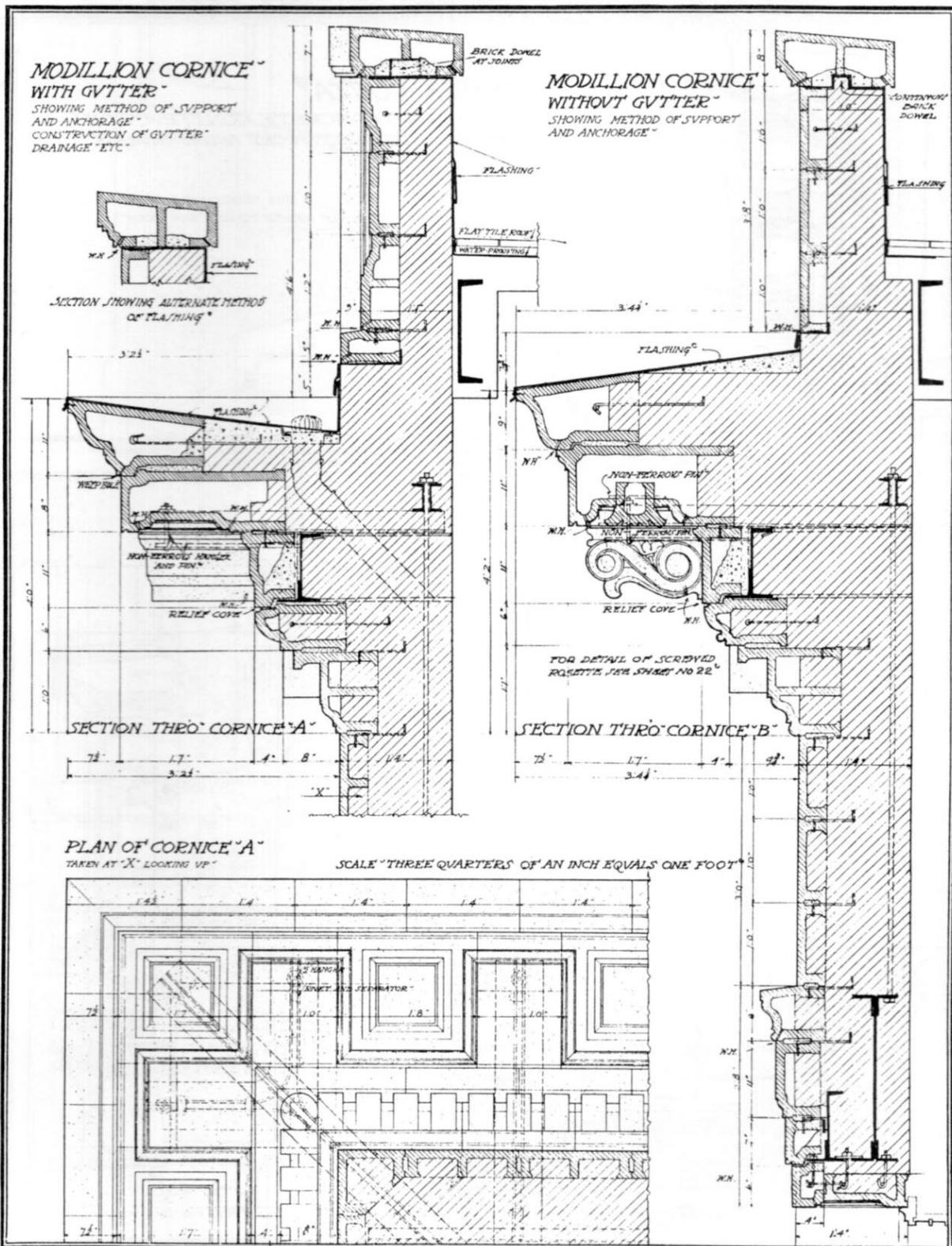


**CORNICE
WITH CHENEAV PANELED SOFFIT ETC
SHOWING METHOD OF SUPPORT AND ANCHORAGE**

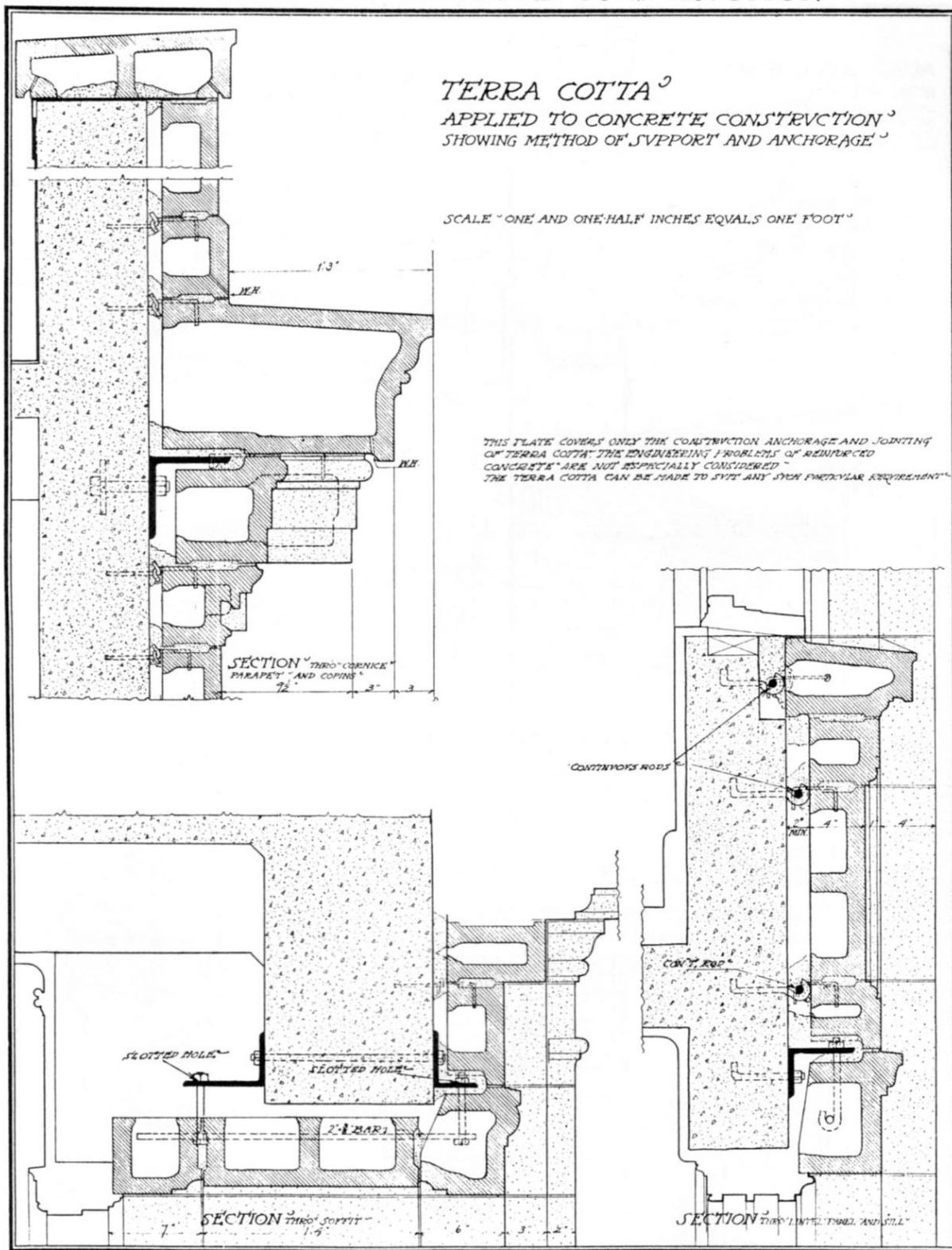
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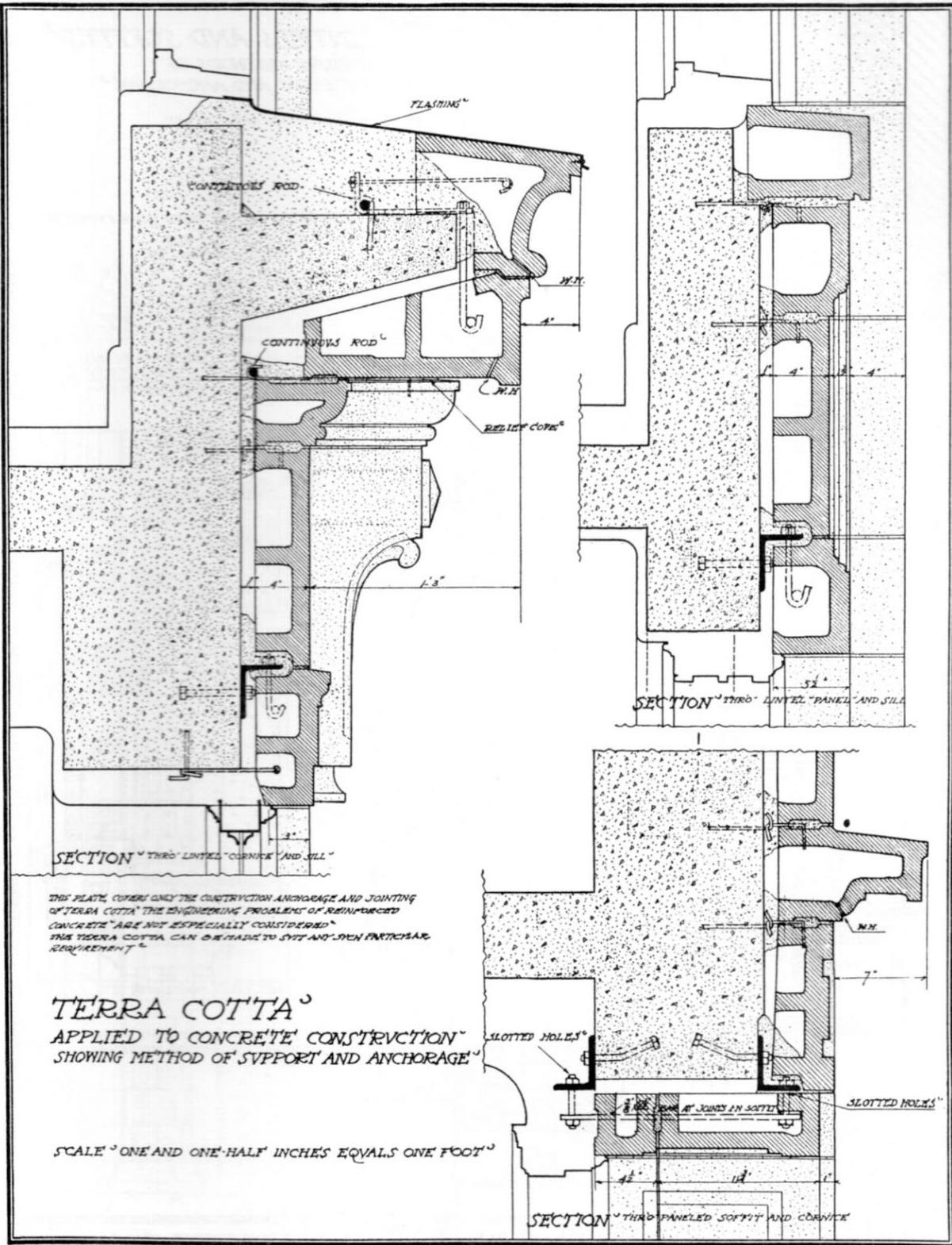
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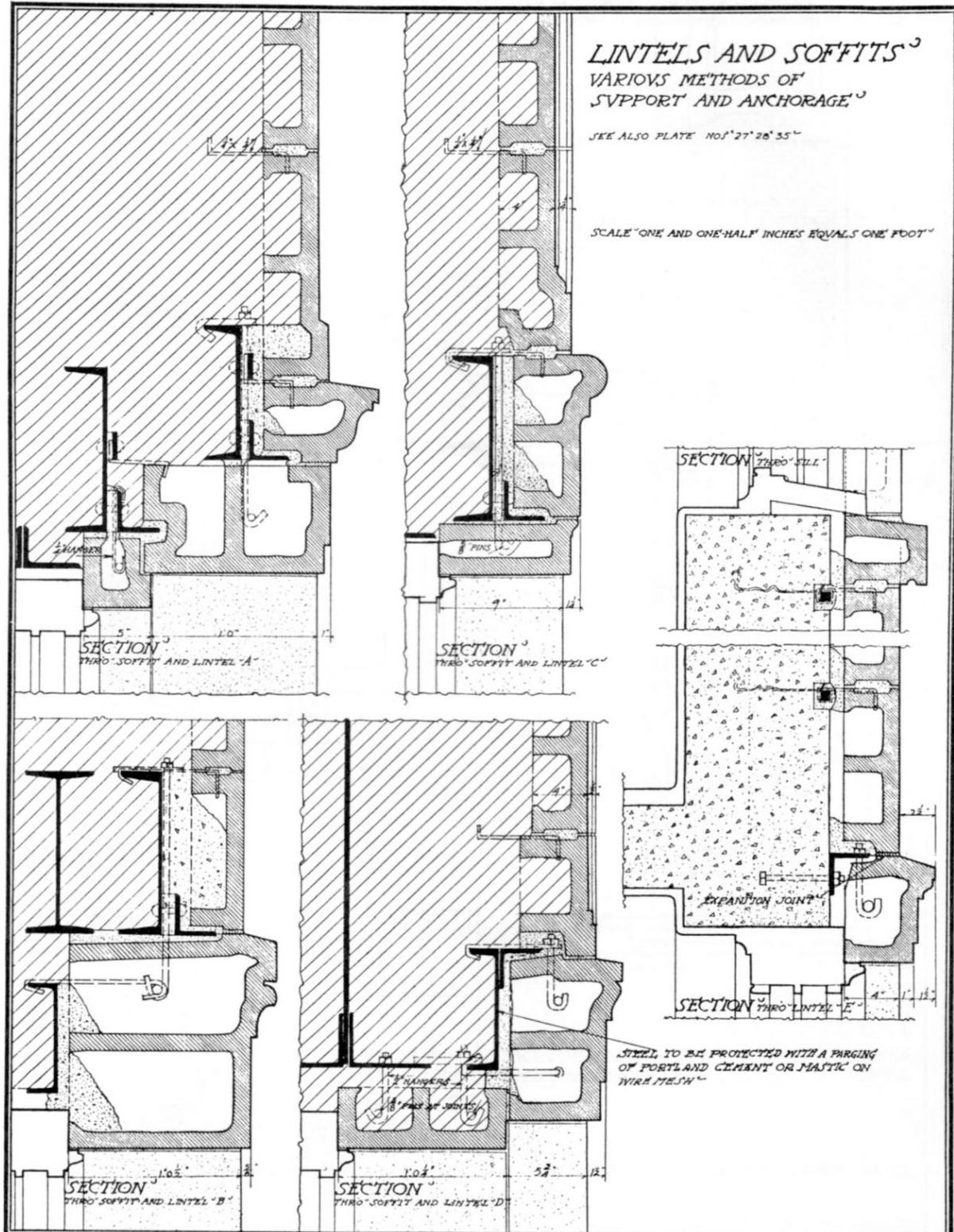


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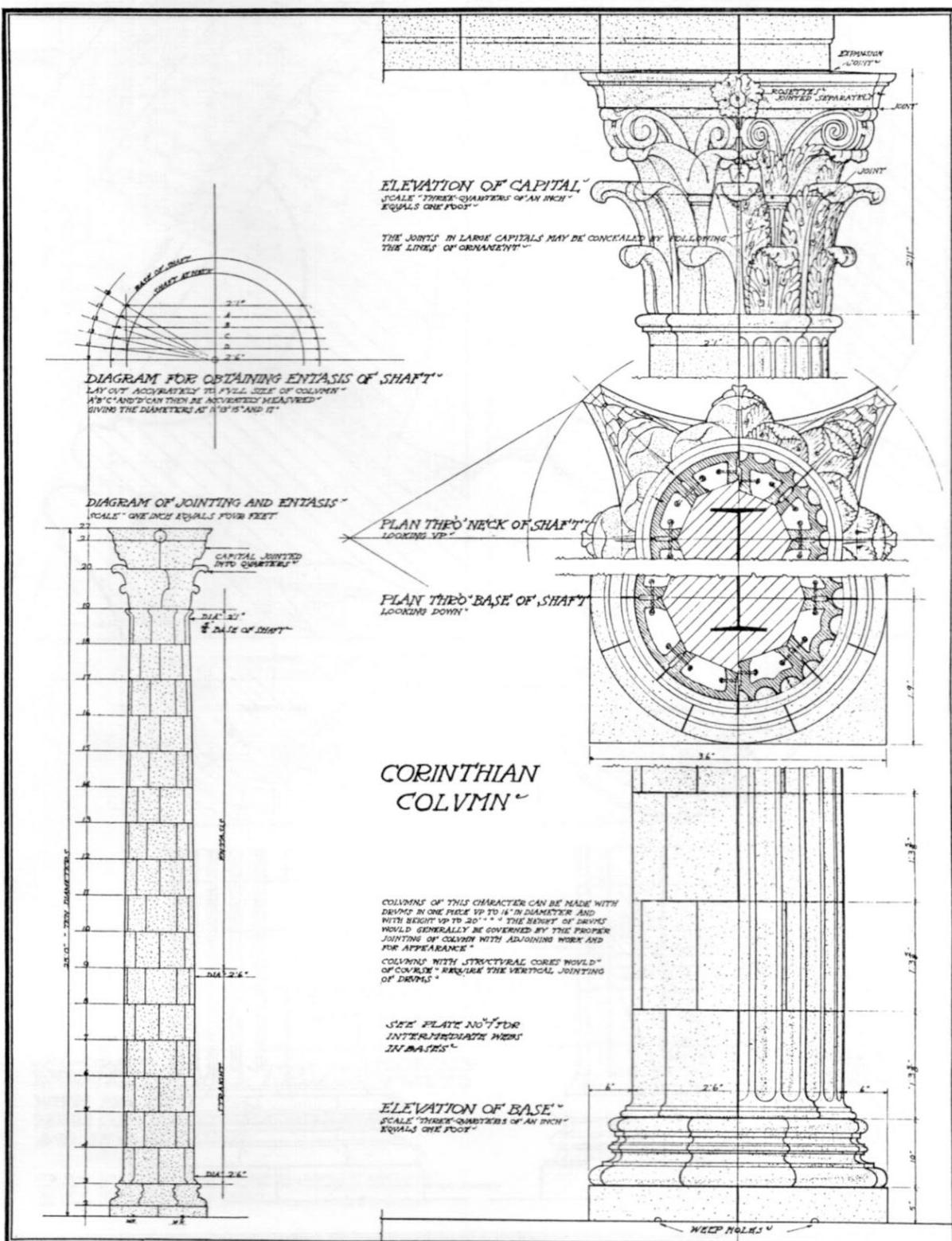


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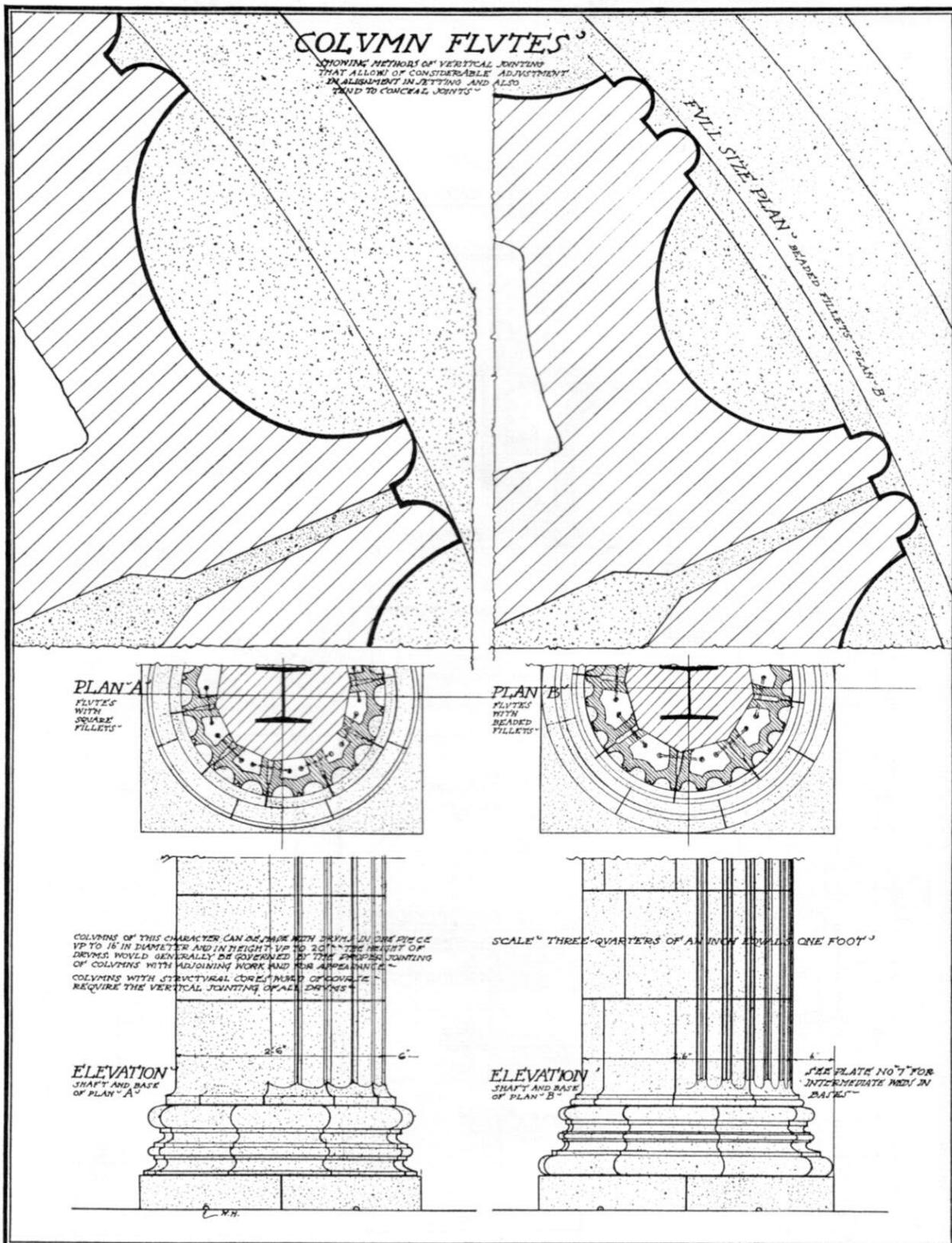
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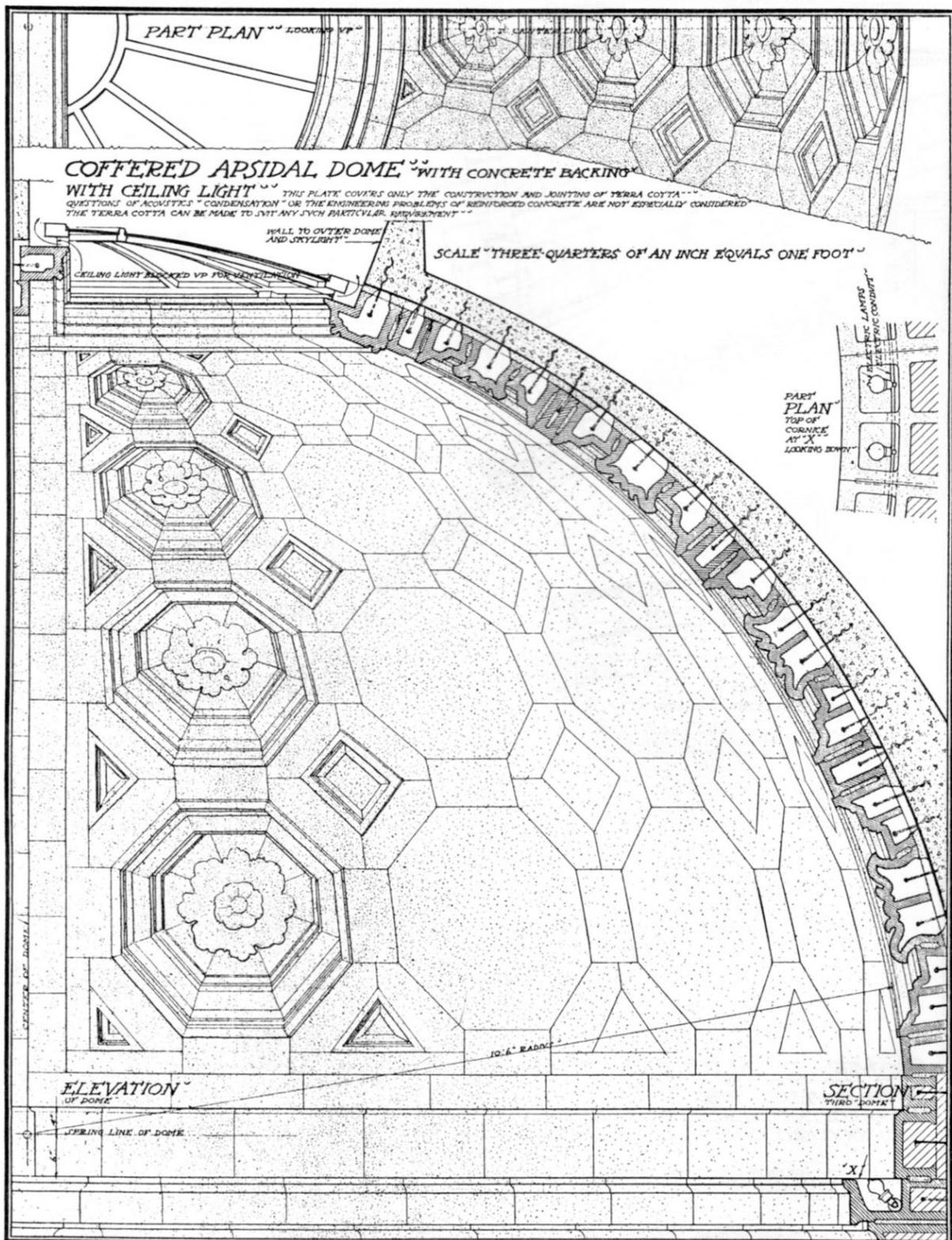
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DETAILS OF ANCHORS "HANGERS" "STRAPS" "CLAMPS" ETC
USED IN SETTING TERRA COTTA

STRUCTURAL STEEL WHEN ERECTED FREQUENTLY VARIES FROM EXACT FIGURED DIMENSIONS . . . FOR THIS REASON ALL SUPPORTS FOR TERRA COTTA INCLUDING ANCHORS ETC SHOULD BE DESIGNED SO AS TO PERMIT OF EASY ADJUSTMENT TO THE REASONABLE REQUIREMENTS OF CONSTRUCTION WHEN THE MATERIAL IS BEING SET.

