

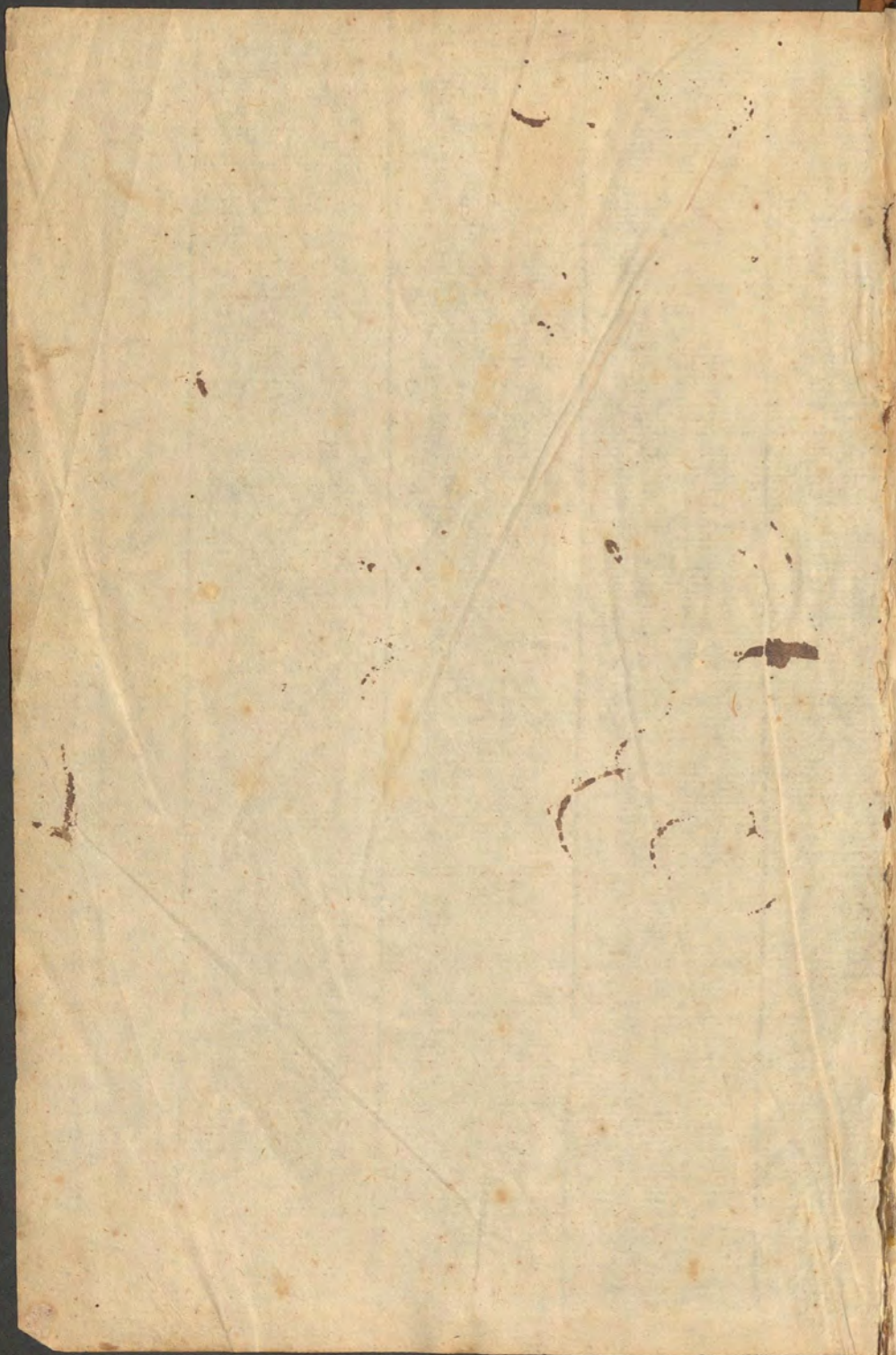
3732  
LE CLE  
re



XVIII-96

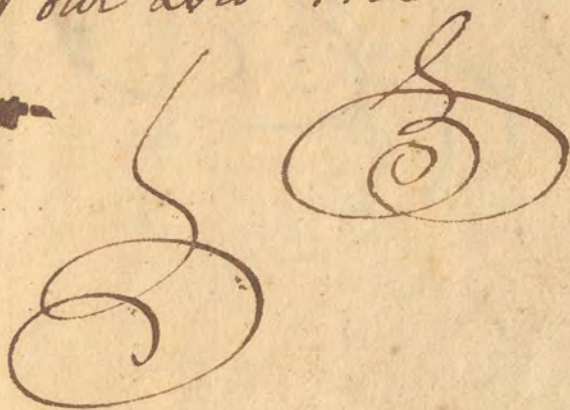
FA-187

1732 LE CLE Tre



N<sup>o</sup> 22.

This Book belongs to Timothy  
O'Scanlan de Lacy, Officer of Engi-  
neers of the Royal Navy; in y. Year  
of our Lord 1793



J. J. & Lucy  
D

1732 LE CLE TRE

R. 187





*J. Stuart, sc.*



SEBAST. LE CLERC.

(R. 122)

ATREATISE OF  
ARCHITECTURE,  
With REMARKS and  
OBSERVATIONS.

*John*  
By that Excellent Master thereof

*Delean*  
SEBASTIAN LE CLERC,  
KNIGHT of the EMPIRE

Designer and Engraver to the Cabinet

Of the late FRENCH KING & Member

Of the ACADEMY of ARTS & SCIENCES. Necessary

For Young People who would apply to that

NOBLE ART.

Engraven in CLXXXI. Copper Plates

By JOHN STURT.

TRANSLATED BY MR CHAMBERS.



Printed and Sold by RICH<sup>d</sup> WARE at the  
*Bible & Sun* in Warwick Lane  
AMEN CORNER.



Arms Blazon'd.  
 Azure a Chevron Or between  
 a Flower de lys  
 argent entre 2  
 Brick-axes in



Chief, a bundle  
 of Laths in Base  
 Or. Crest an arm  
 ed Arm hold-  
 ing a Brick-Ax  
 Or.

TO THE

*Master and Wardens of*  
**THE WORSHIPFUL COMPY OF**  
**Bricklayers London**

May it Pleale your Worships.

*This Company was Incorporated Anno 1568.  
 And are a Body of Workmen which have improv'd y<sup>r</sup>  
 Art to such a Height as to Excell all their Brethren in  
 Europe both in Number and Art to the Honour of  
 their Country.*

*This Treatise of Architecture by that Celebrated  
 Architect Sebastian le Clerc the most Copious and exact  
 in all its parts that has yet appear'd in y<sup>e</sup> World, may  
 enable you to advance it by Diligence and Imitation;  
 is most humbly Dedicated by Your Worships*

*Obedient Servant*

John Sturt

Arms Blazond  
Azure on a Chev-  
ron Argent, a  
Pair of Compa-



ses somewhat  
extended of the  
first. Crest a Cas-  
tle of y<sup>e</sup> second.

T O  
The MASTER and WARDENS

OF  
*The Worshipful Comp<sup>y</sup> of*  
**Masons London**

May it Please Your Worships,

*This Company was Incorporated in Anno 1410.*

*Having been call'd the Free Masons, a Fraternity of great  
Antiquity being Honoured by Several KINGS & very many  
of y<sup>e</sup> Nobility & Gentry being of their Society. And are a body of  
Workmen which have advanc'd their Art to such a height, that  
they out do all their Brethren in Europe both in Number,  
& Art to the Glory of their Nation.*

*This Treatise of Architecture by the most Correct Designer  
& Architect Sebaltian le Clerc, that has yet Appear'd in the  
World; whose Rules and Proportions well follow'd may  
advance it yet farther; is most humbly Dedicated by  
Your Worships,*

*Obedient Servant*

Arms Blazon'd.  
 Gules a Cheveron  
 Argent between 2  
 pair of Compasses  
 above & a Sphere  
 below in Base Or.  
 On a Chief of y<sup>e</sup> 3.<sup>d</sup>  
 2 Roses of y<sup>e</sup> first;  
 between them a  
 Pale Sable charg'd  
 w<sup>th</sup> an Escallop  
 Shell of the 2.<sup>d</sup>



Chrest a Demi-  
 Savage Proper,  
 holding a Spear  
 Or.

Supporters, 2  
 Cupids of y<sup>e</sup> last:  
 The Dexter hold-  
 ing a Woman  
 Crown'd with a  
 Castle: The Si-  
 nister a Square  
 both Proper.

T O

The MASTER and WARDENS

OF  
 The Worshipful Comp<sup>y</sup> of  
 Joiners and Carpenters  
 of London

May it Please Your Worships.

*This Company was Incorporated Anno 1570.  
 And are a Body of Workmen which have improv'd y<sup>r</sup>  
 Art to such a Height as to Excell all their Bretheren in  
 Europe, both in Number and Art, to the Honour of  
 their Country.*

*This Treatise of Architecture by that Celebrated  
 Architect Seballian le Clerc, the most Copious & Exact  
 in all its parts that has yet appear'd in y<sup>e</sup> World: may  
 enable you to advance it by Industry & Application  
 is most humbly Dedicated by Your Worships*

*Obedient Servant*

John Sturt

Arms Blazon'd  
Argent a Chevron  
in grayl'd between  
5 Pair of Compall



(pointing towards  
the Base and a lit-  
tle extended) Sa-  
ble.

TO THE

Master and Wardens of  
THE WORSHIPFUL COMP<sup>A</sup> OF  
Carpenters London

May it Please Your Worships.

*This Company was Incorporated Anno 1476.  
And are a Society of Handy-Crafts which have raised,  
their Art to such a Pitch of Excellency that they outdo all  
their Brethren in Europe both in Art and Number; to  
the Honour of their Country.*

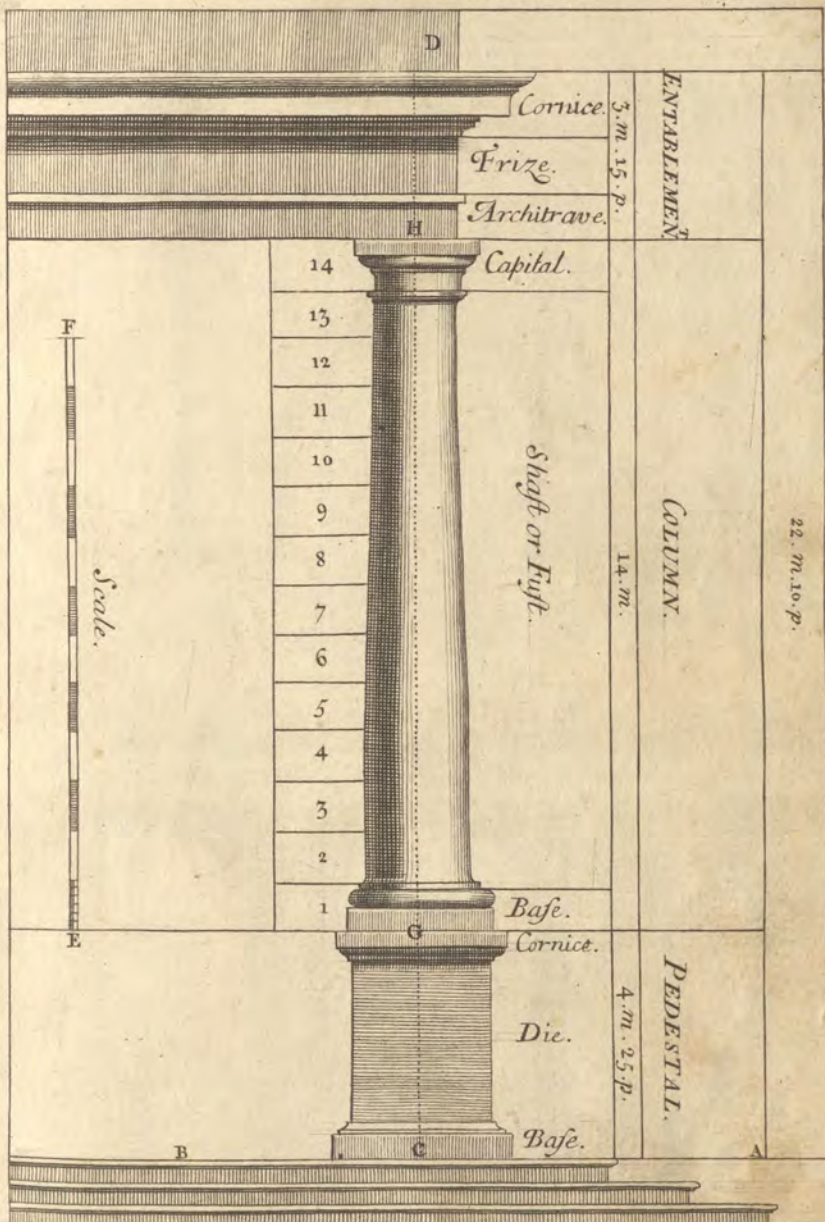
*This Treatise of Architecture by that most Celebrated,  
Designer & Architect Sebastian le Clerc, the most Copious  
& Exact in all its Parts that has yet appear'd in the World,  
may enable you to advance it by Diligence & Imitation, is  
most humbly Dedicated by Your Worships*

*Obedient Servant*

John Sturt

# TUSCAN ORDER.

1



22. m. 10. p.

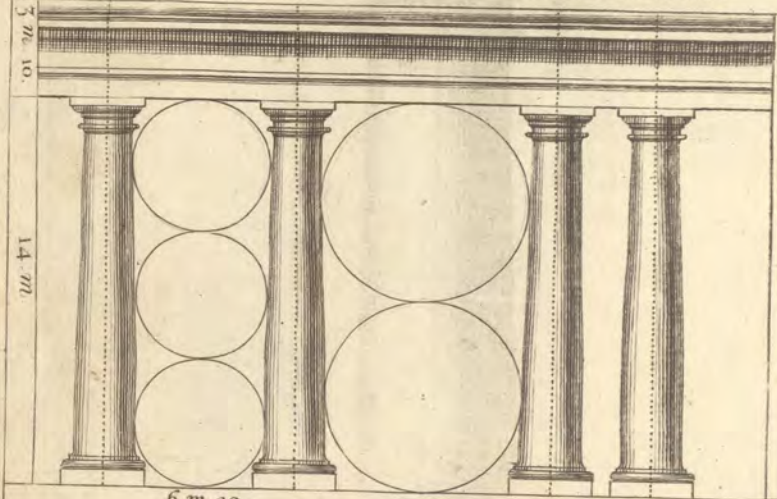
ENTABLATURE

COLUMN.

PEDESTAL.

# TUSCAN ORDER.

*Columns in Pairs*



3 m. 10.

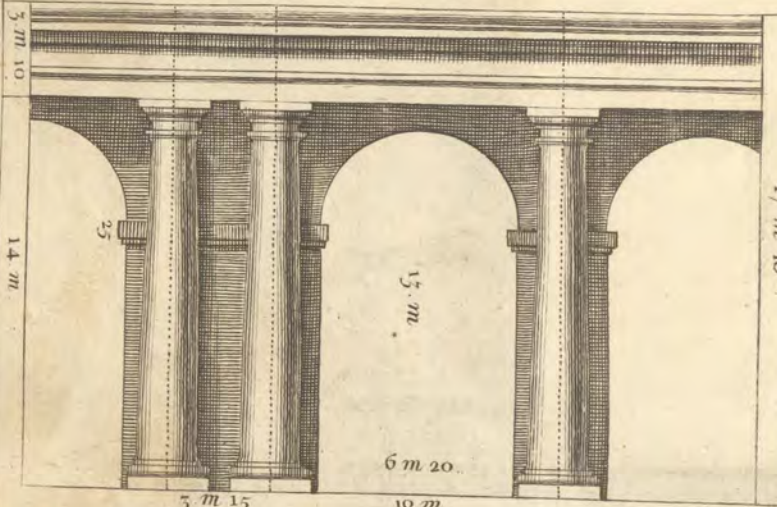
14 m.

17 m. 10

6 m. 20

9 m.

3 m. 15



3 m. 10

14 m.

17 m. 10

25

15 m.

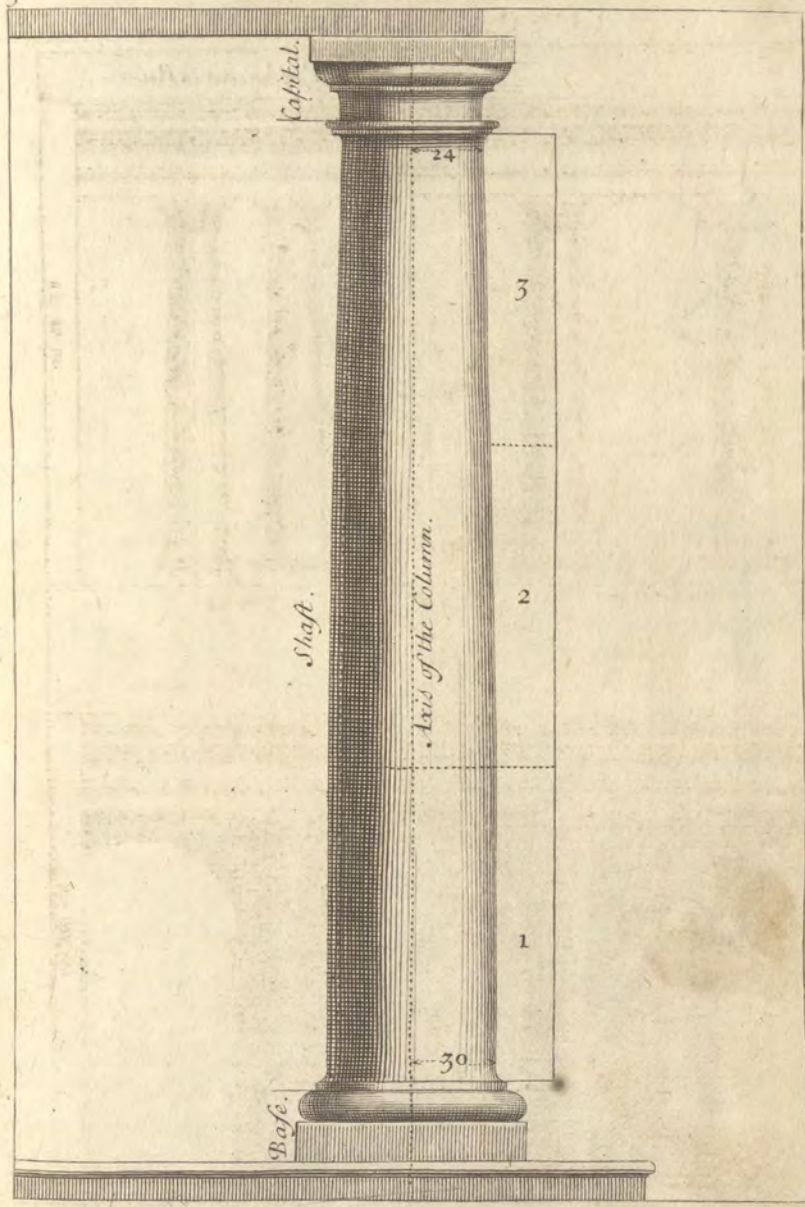
6 m. 20

3 m. 15

10 m.

# TUSCAN ORDER

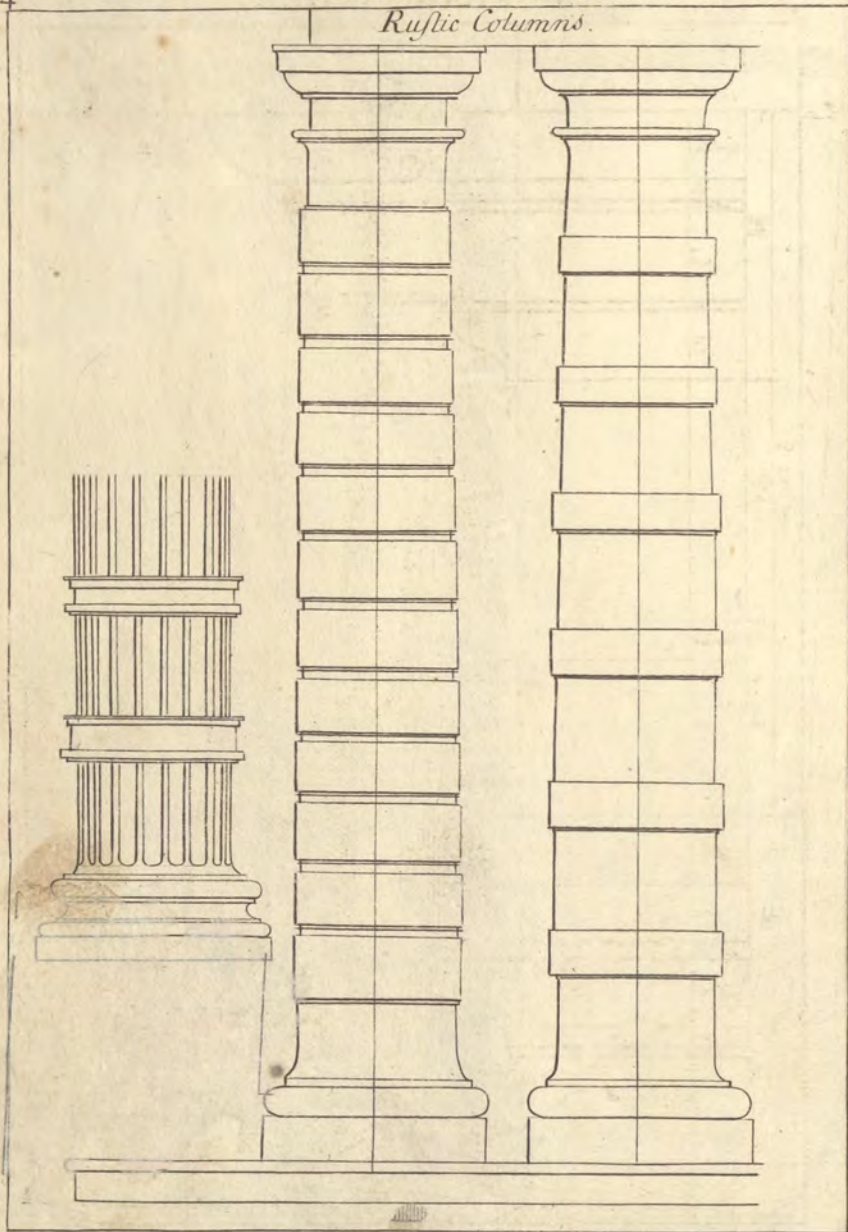
51



TUSCAN ORDER.

*Rustic Columns.*

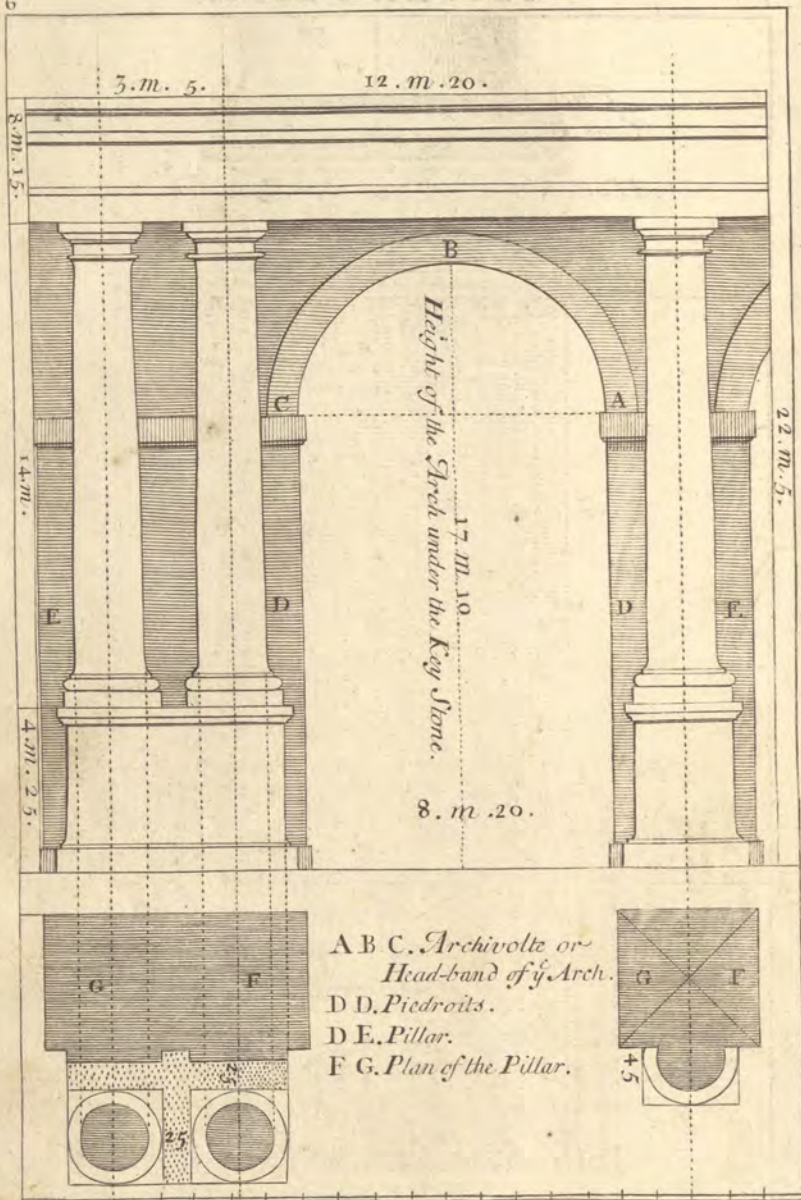
4

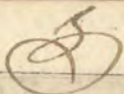




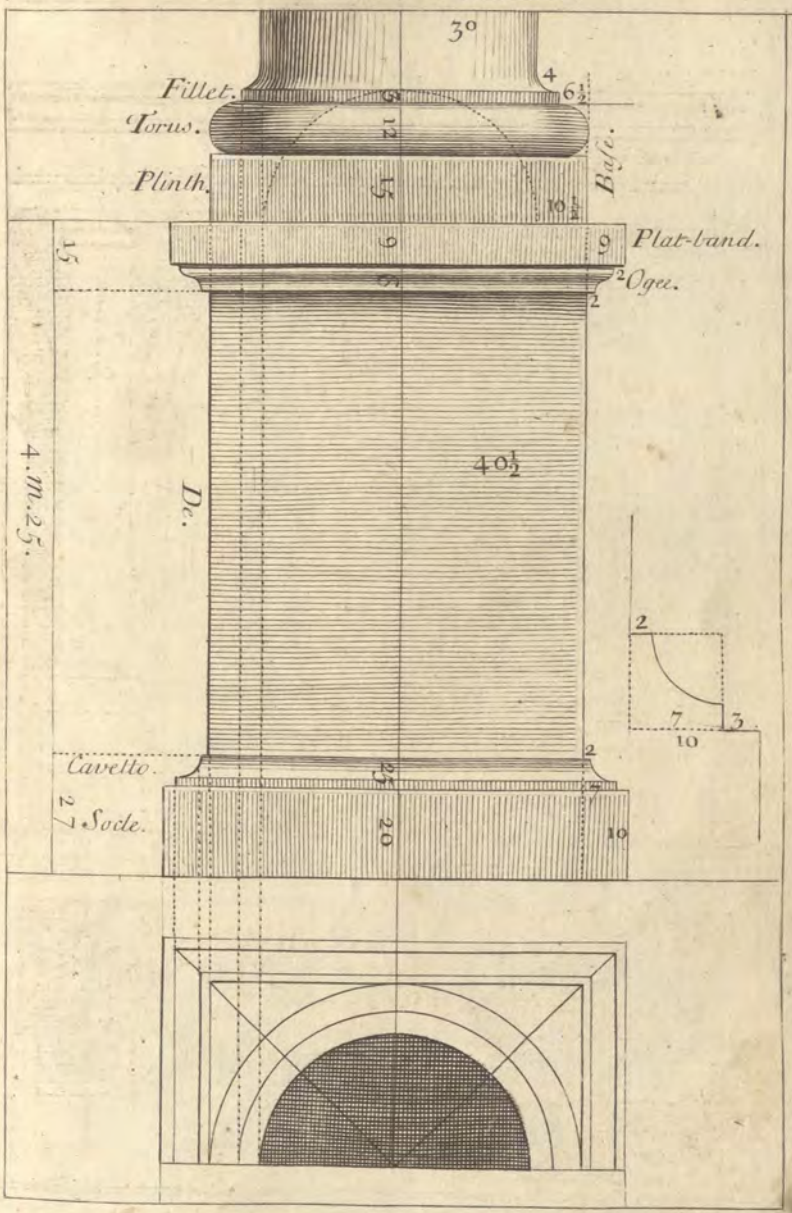
# TUSCAN ORDER.

6

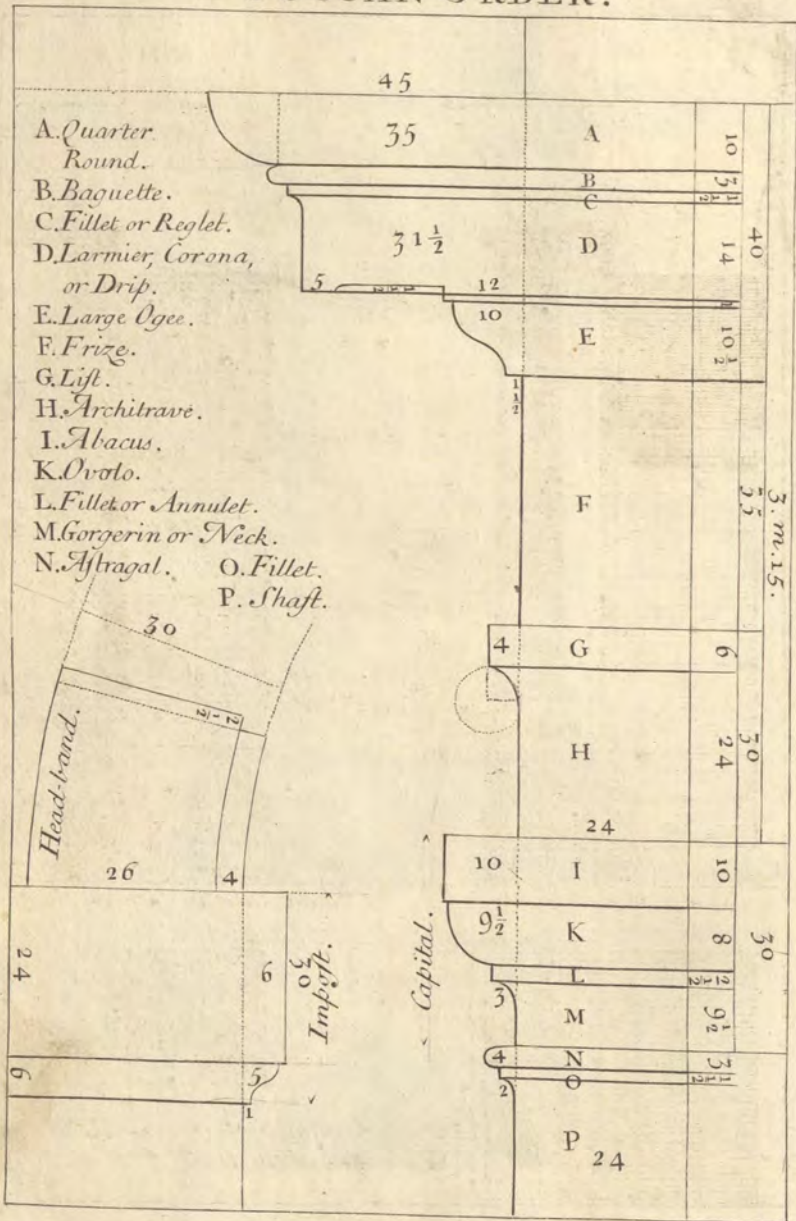




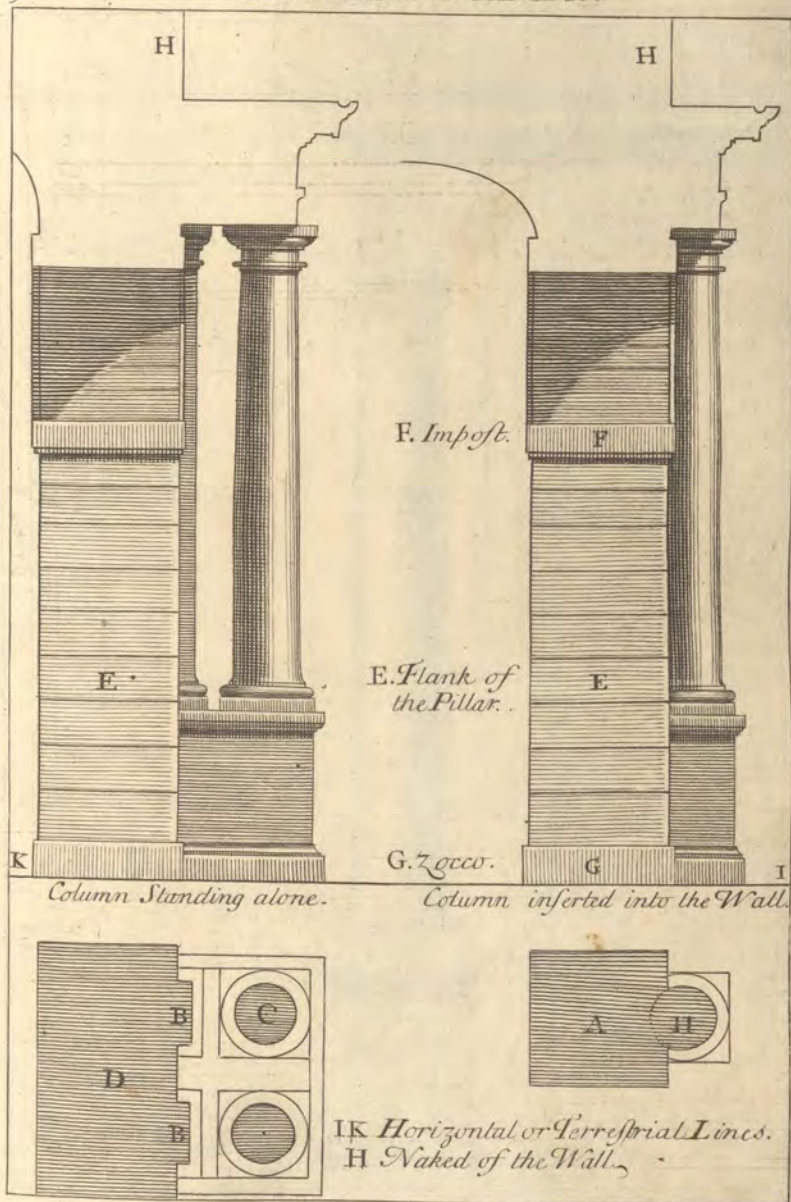
# TUSCAN ORDER.



# TUSCAN ORDER.



# TUSCAN ORDER.

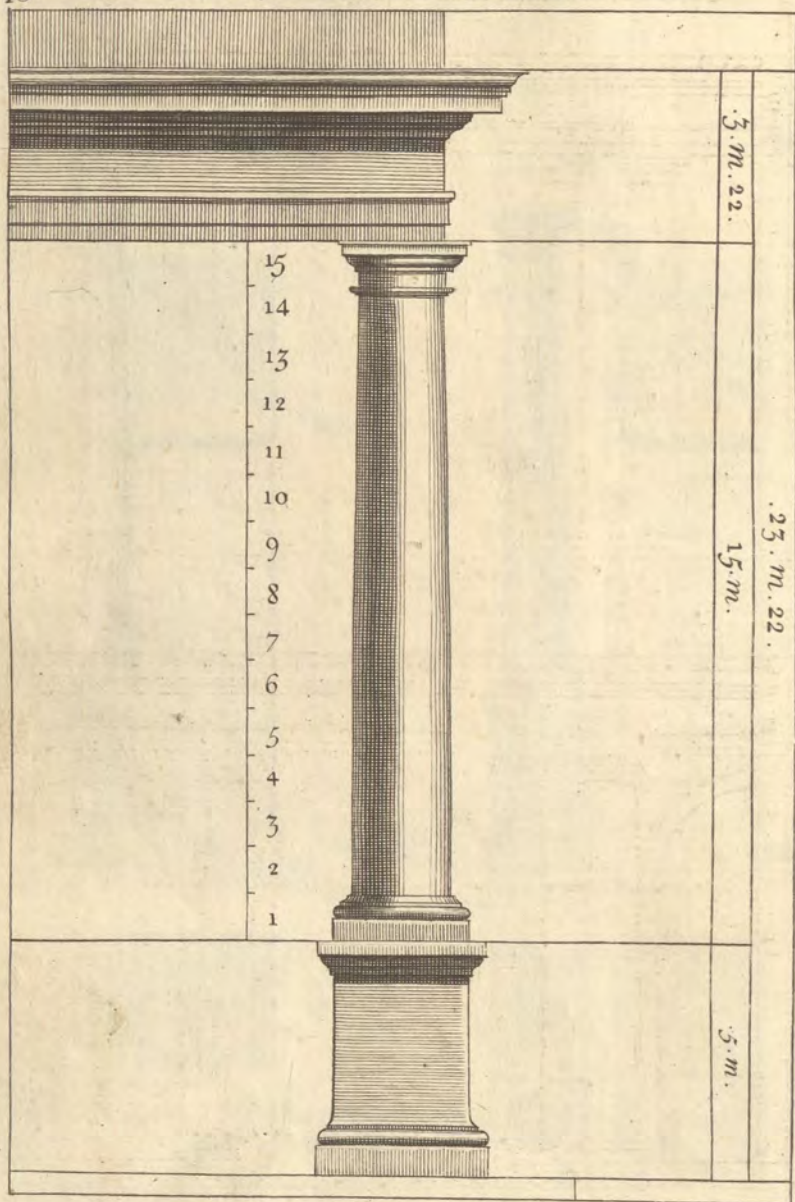


Column Standing alone.

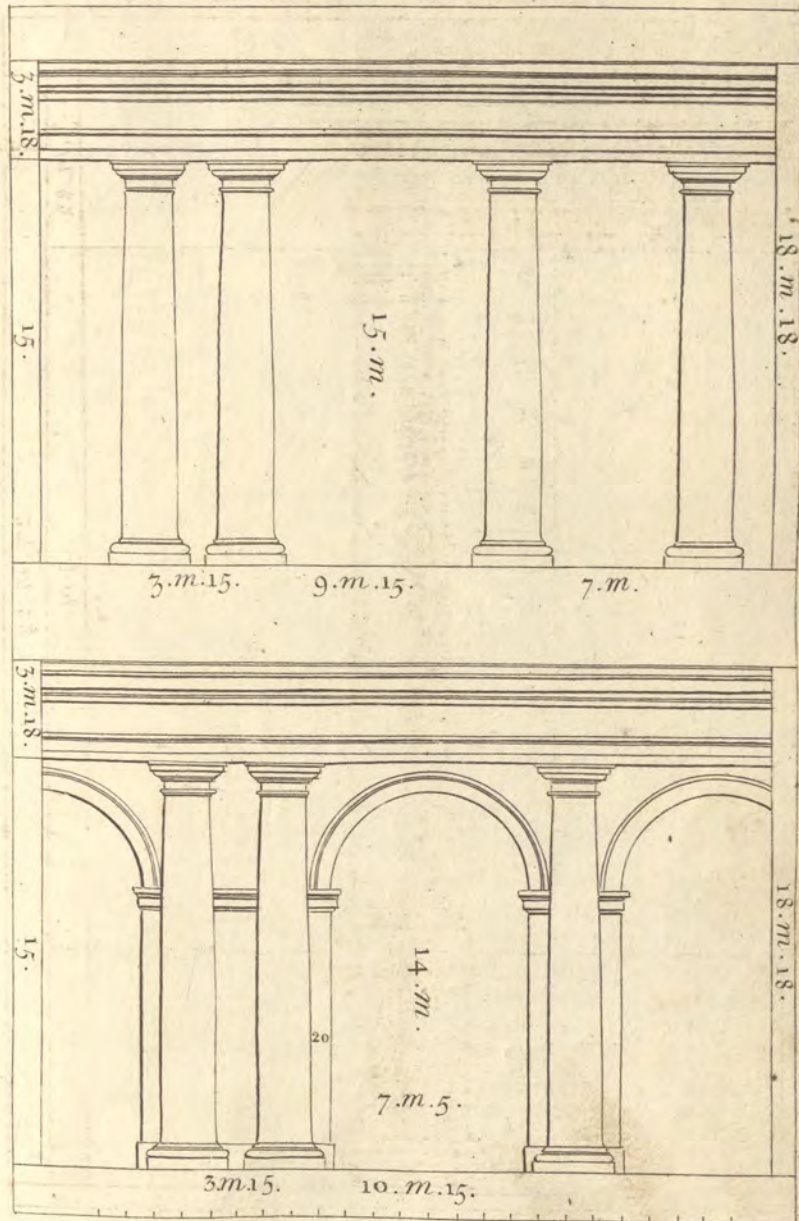
Column inserted into the Wall.

IK Horizontal or Terrestrial Lines.  
 H Naked of the Wall.

## II. TUSCAN ORDER.

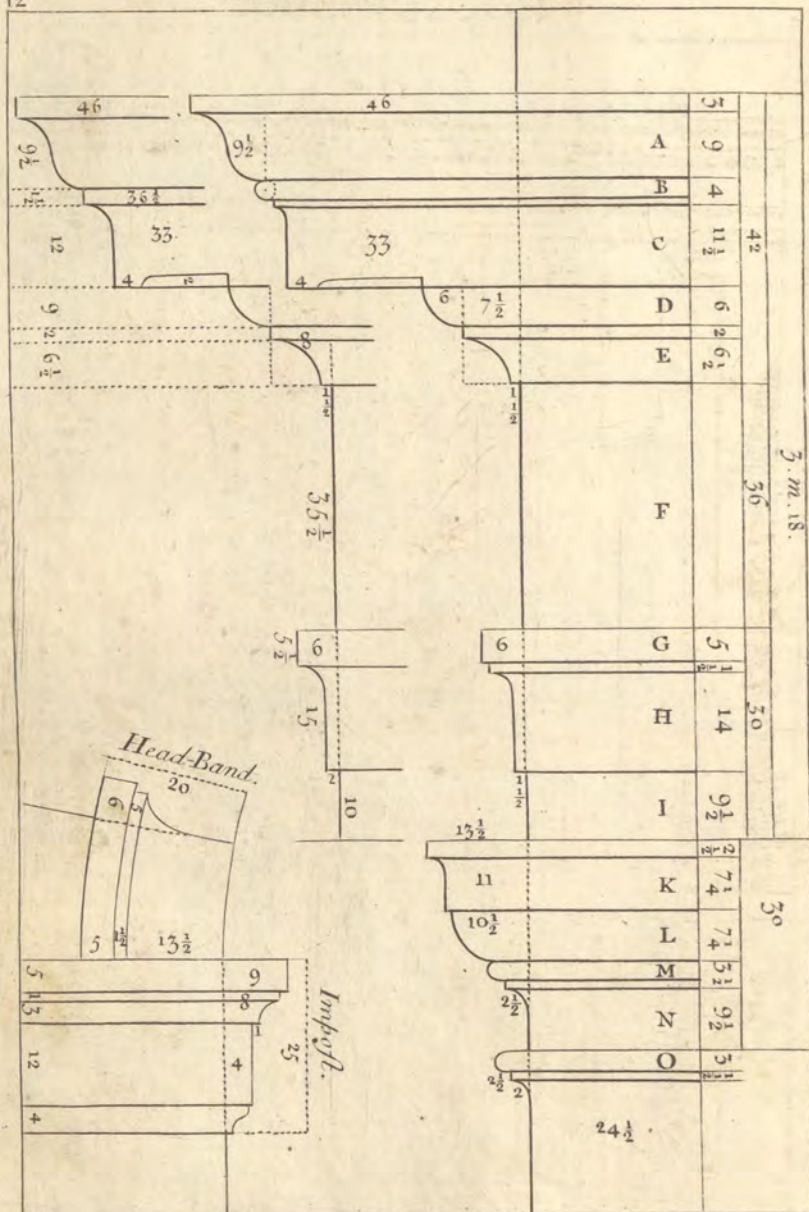


## II TUSCAN ORDER

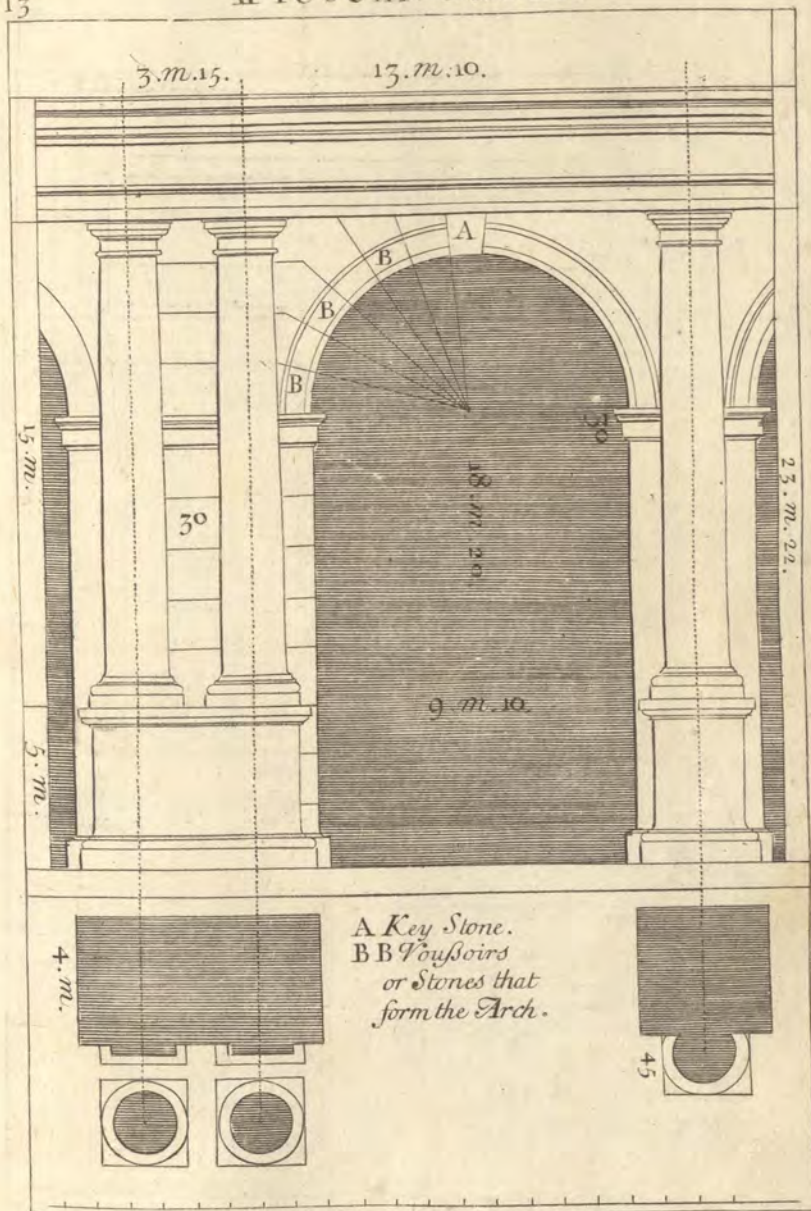


# II. TUSCAN ORDER.

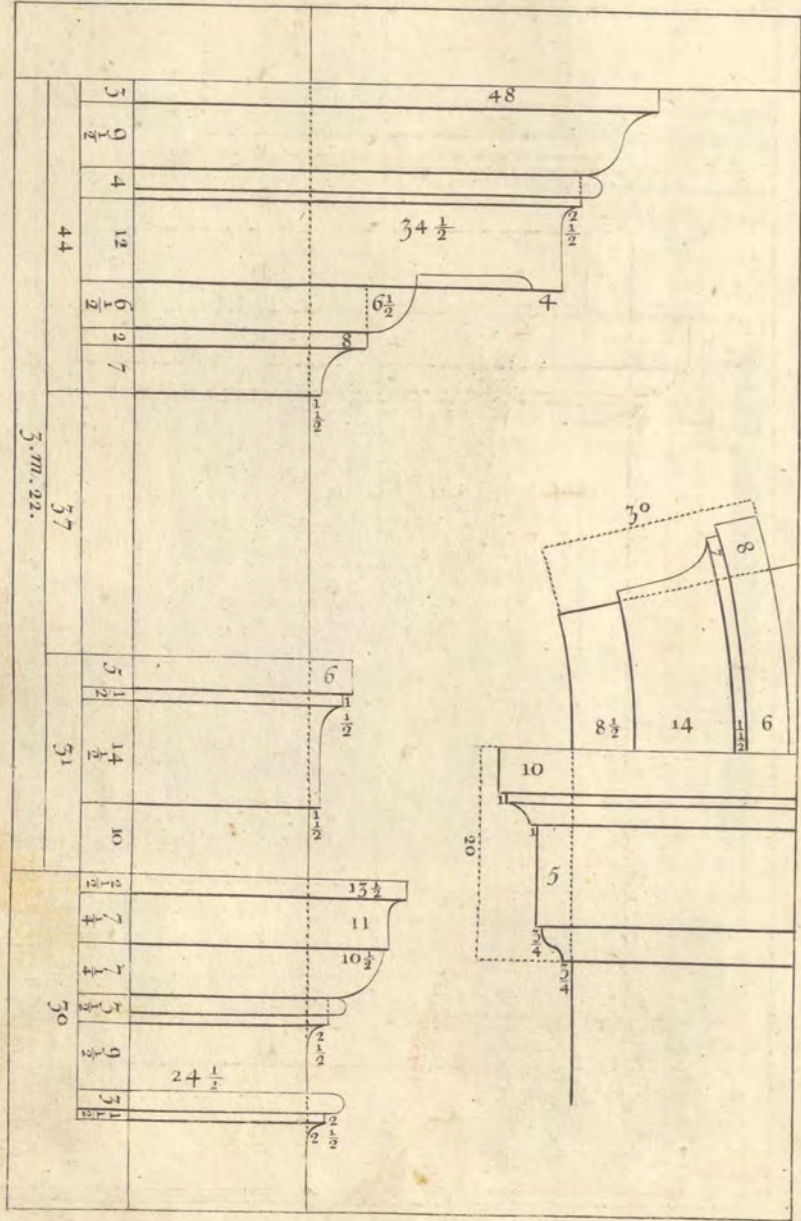
12



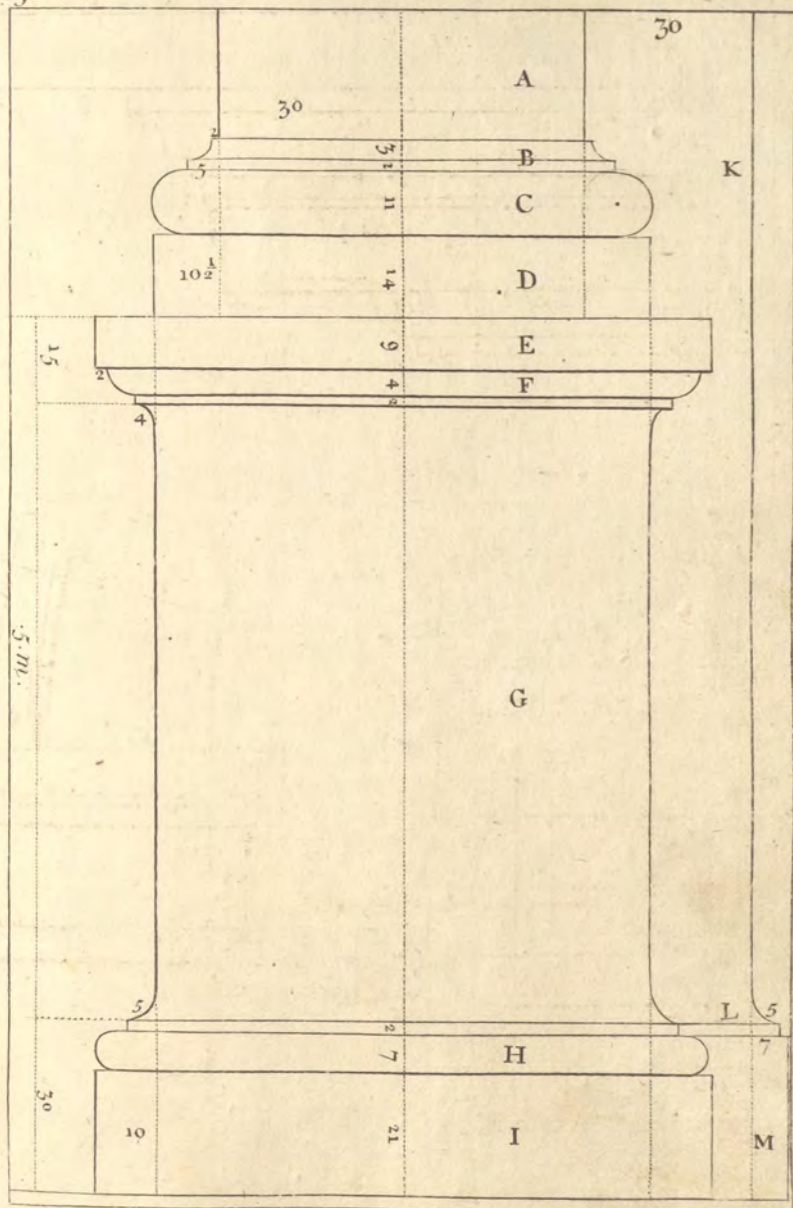
## II TUSCAN ORDER



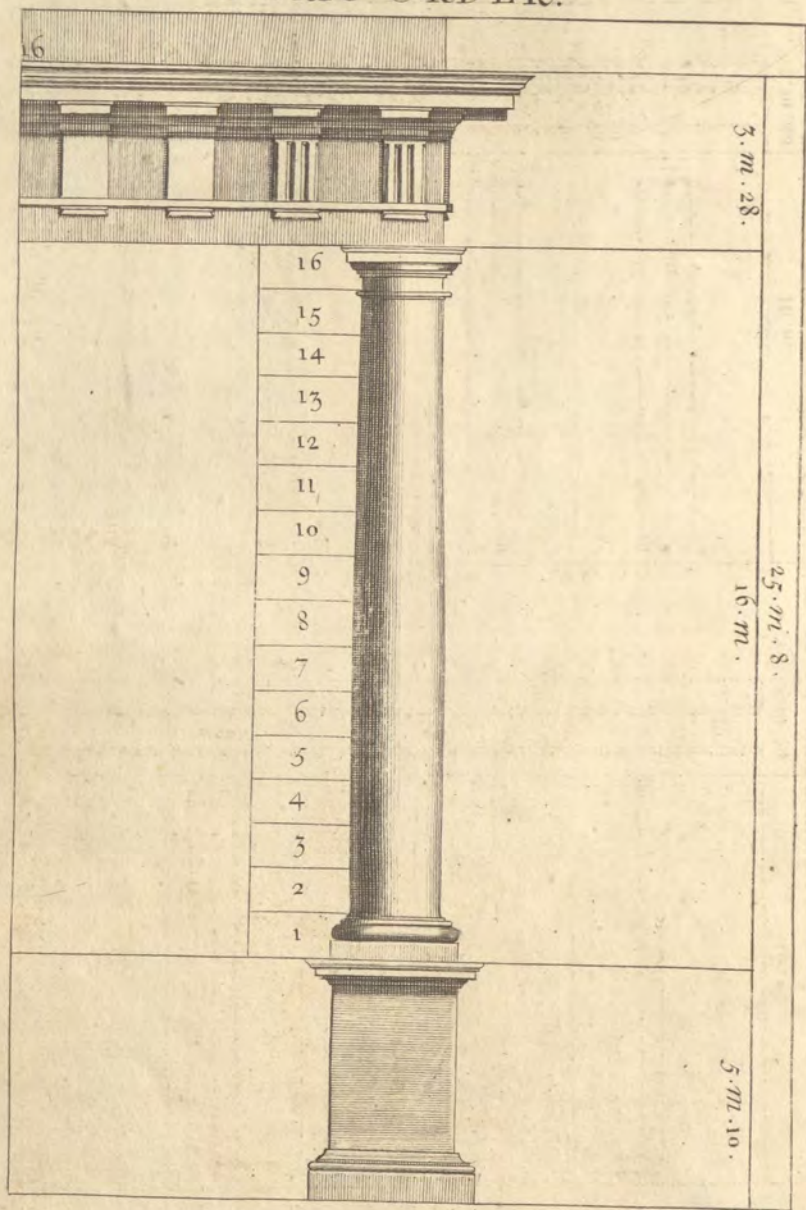
# II. TUSCAN ORDER.



## II. TUSCAN ORDER.

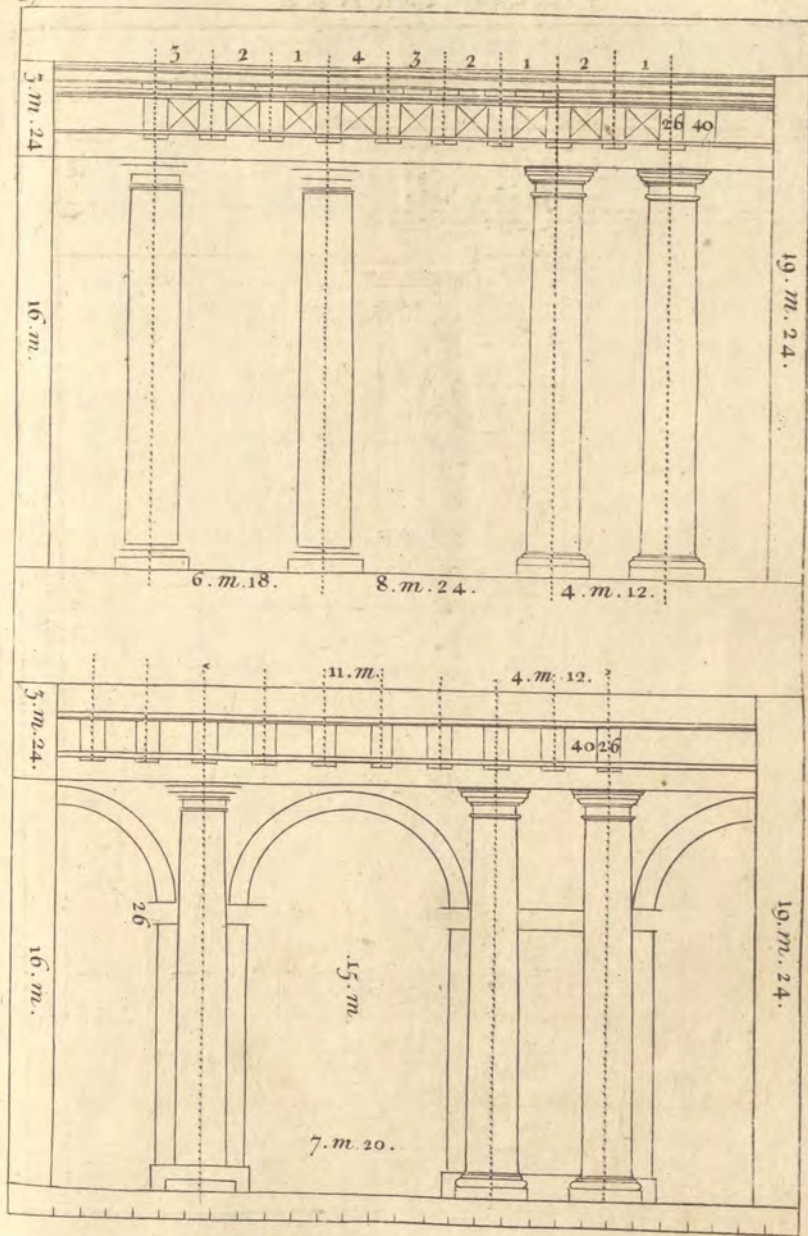


# DORIC ORDER.

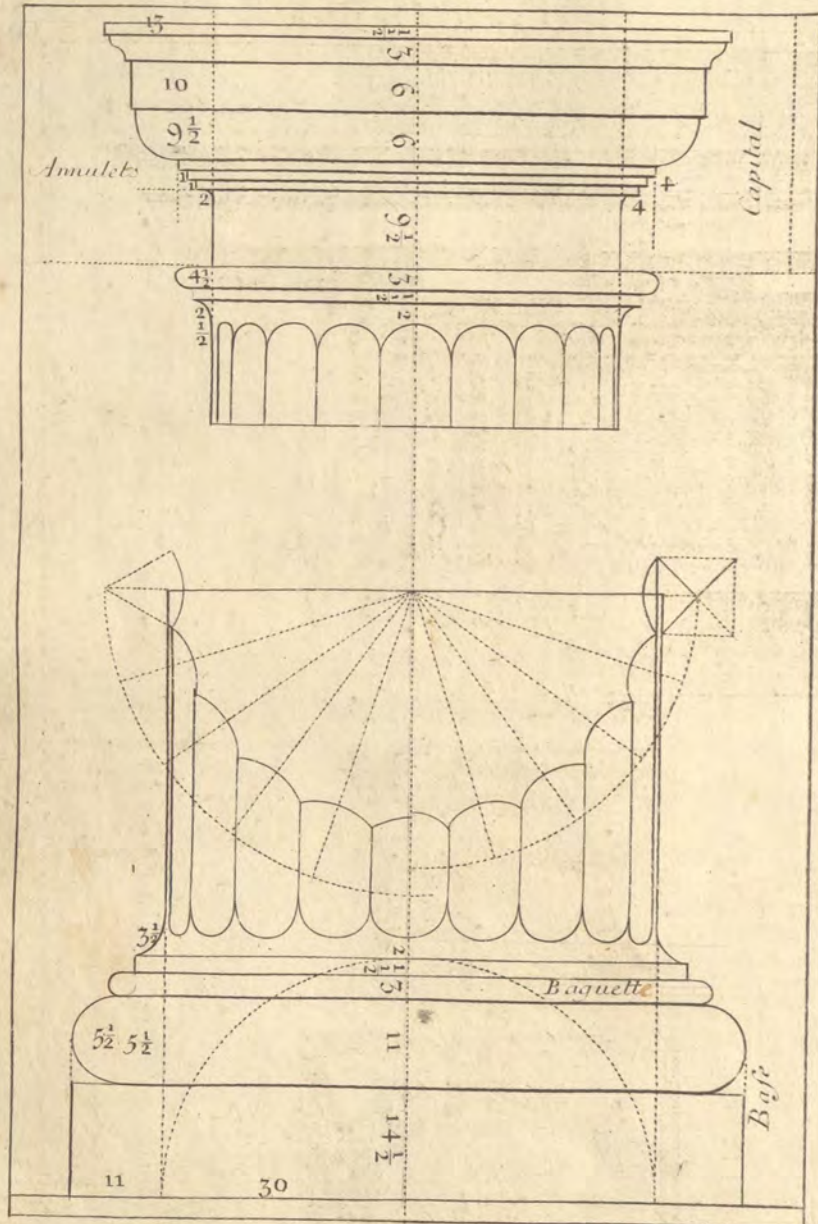


# DORIC ORDER.

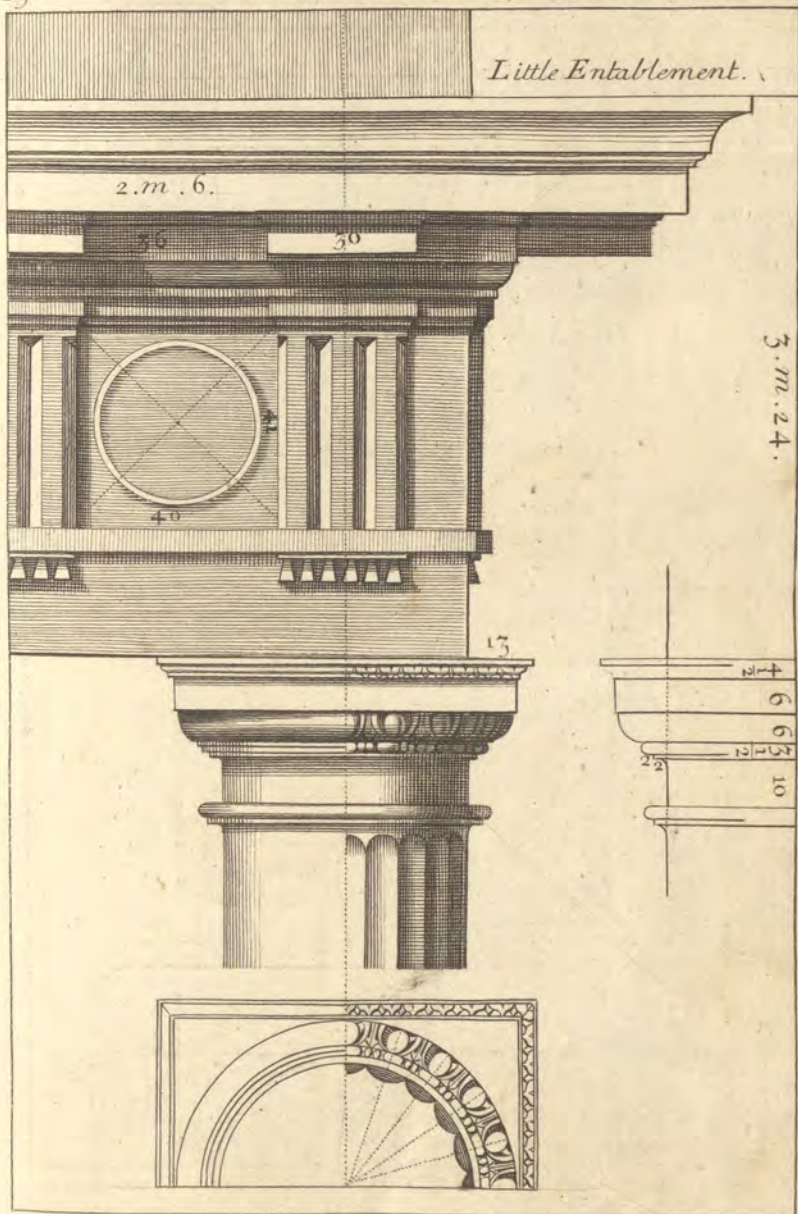
17



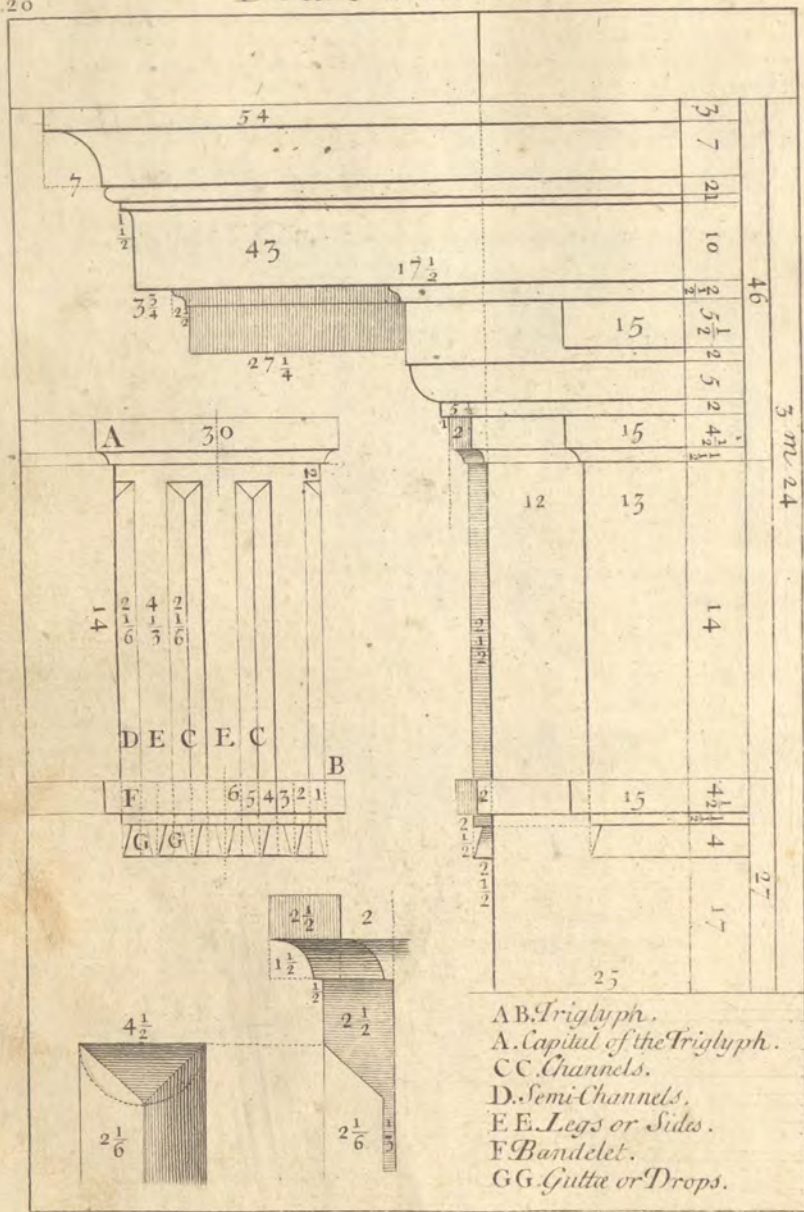
## DORIC ORDER.



## DORIC ORDER.

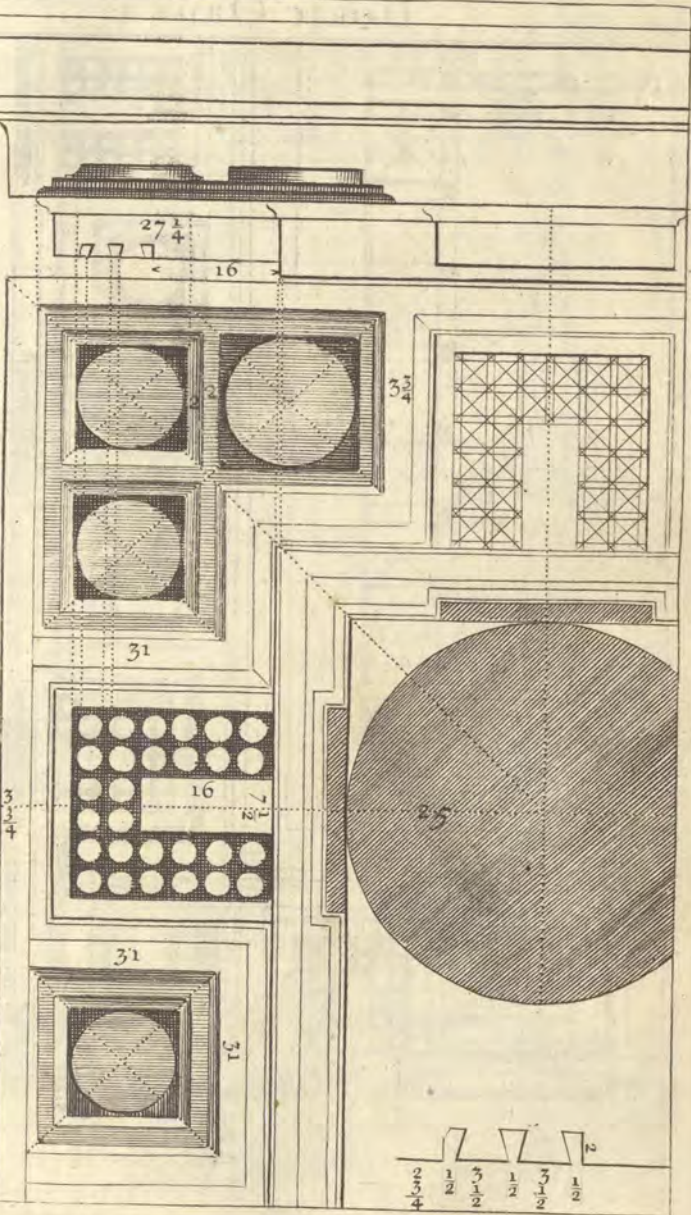


DORIC ORDER.



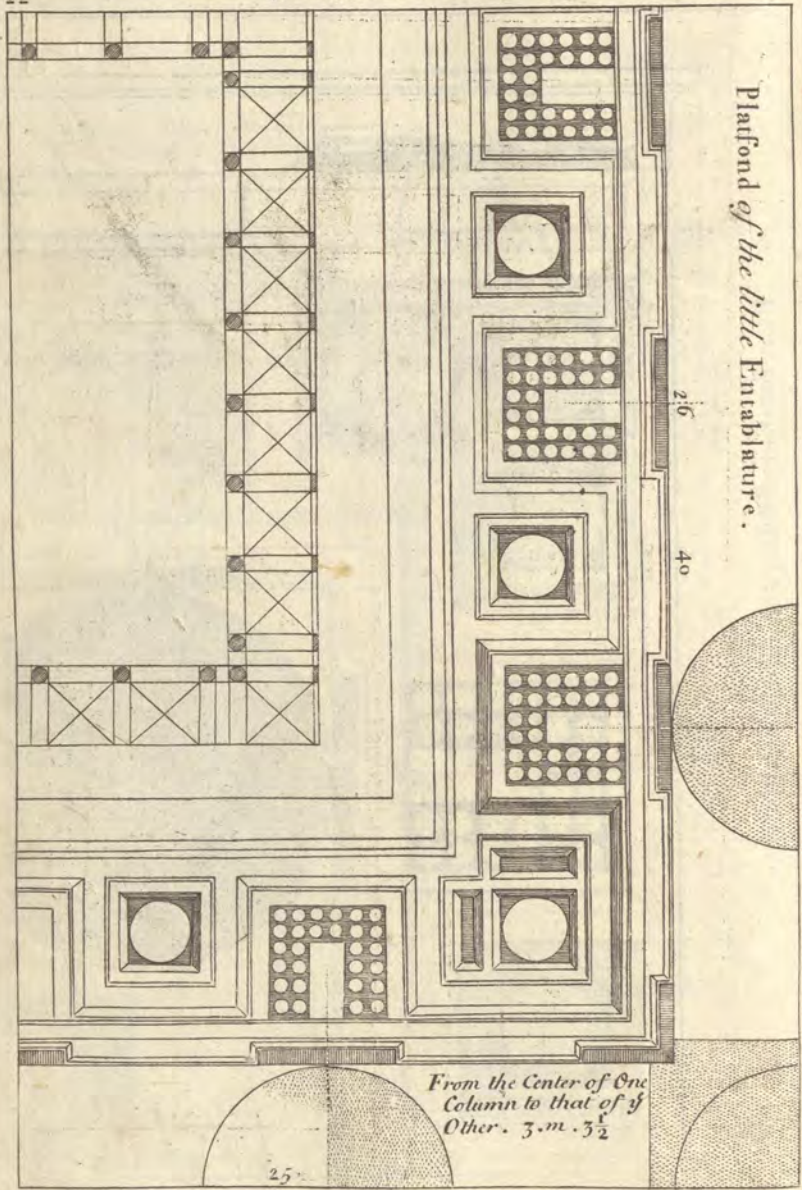
  
**DORIC ORDER.**

Plat-fond or Soffit of the Emablature.



No  
 $2 \frac{3}{4}$     $1 \frac{1}{2}$     $5 \frac{1}{2}$     $1 \frac{1}{2}$     $3 \frac{1}{2}$     $1 \frac{1}{2}$

# DORIC ORDER



*Platfond of the little Entablature.*

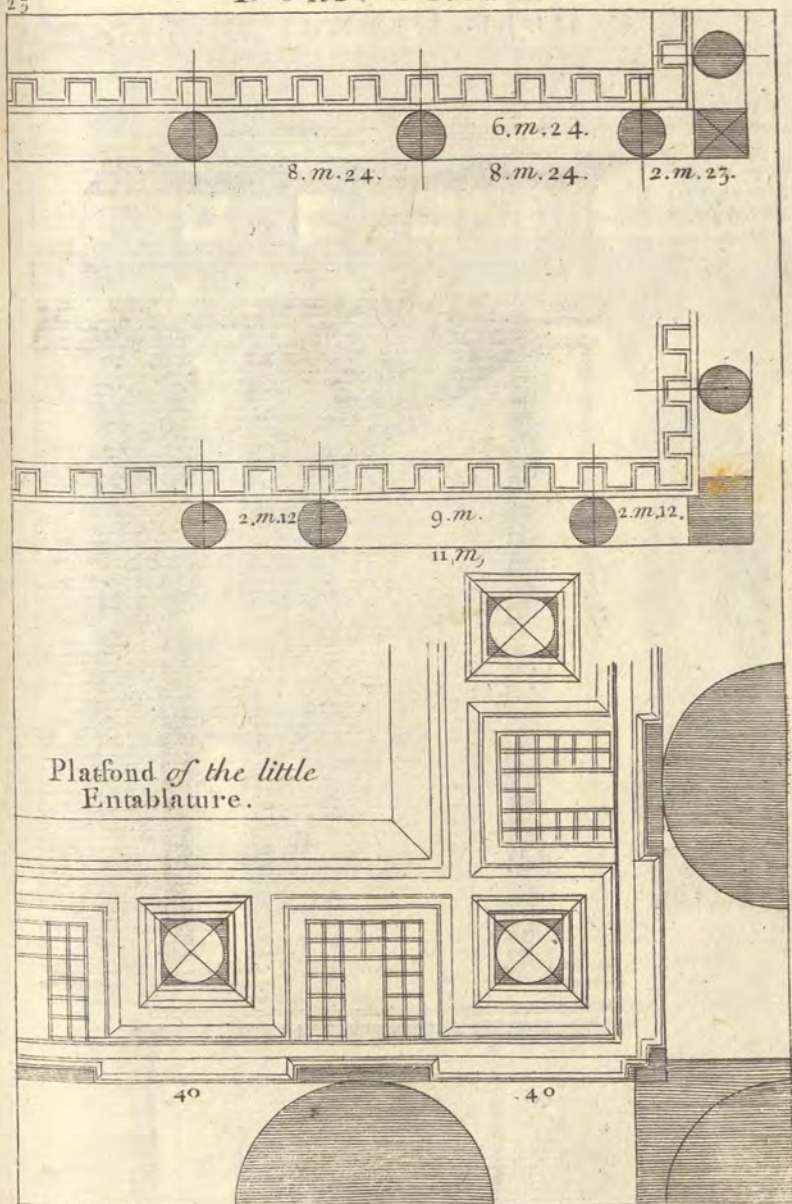
26

40

*From the Center of One Column to that of y Other. 3.m. 3 1/2*

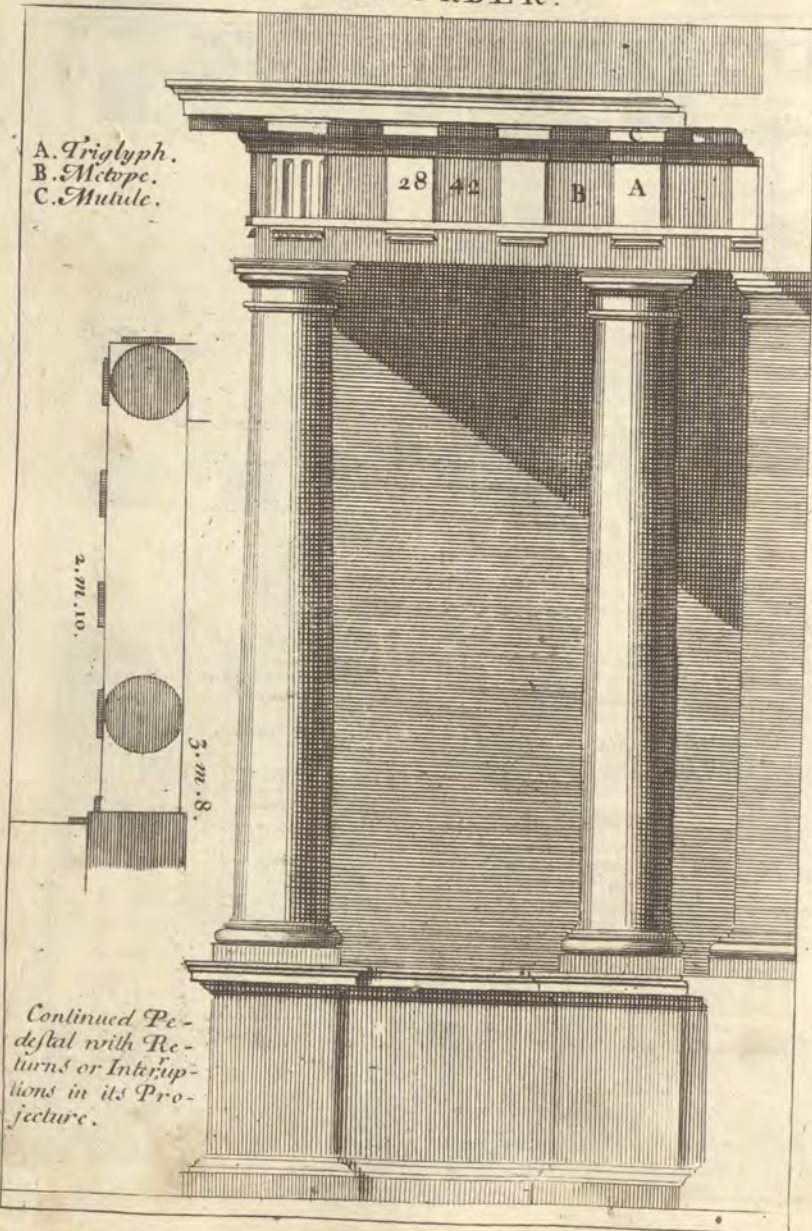
25

## DORIC ORDER.

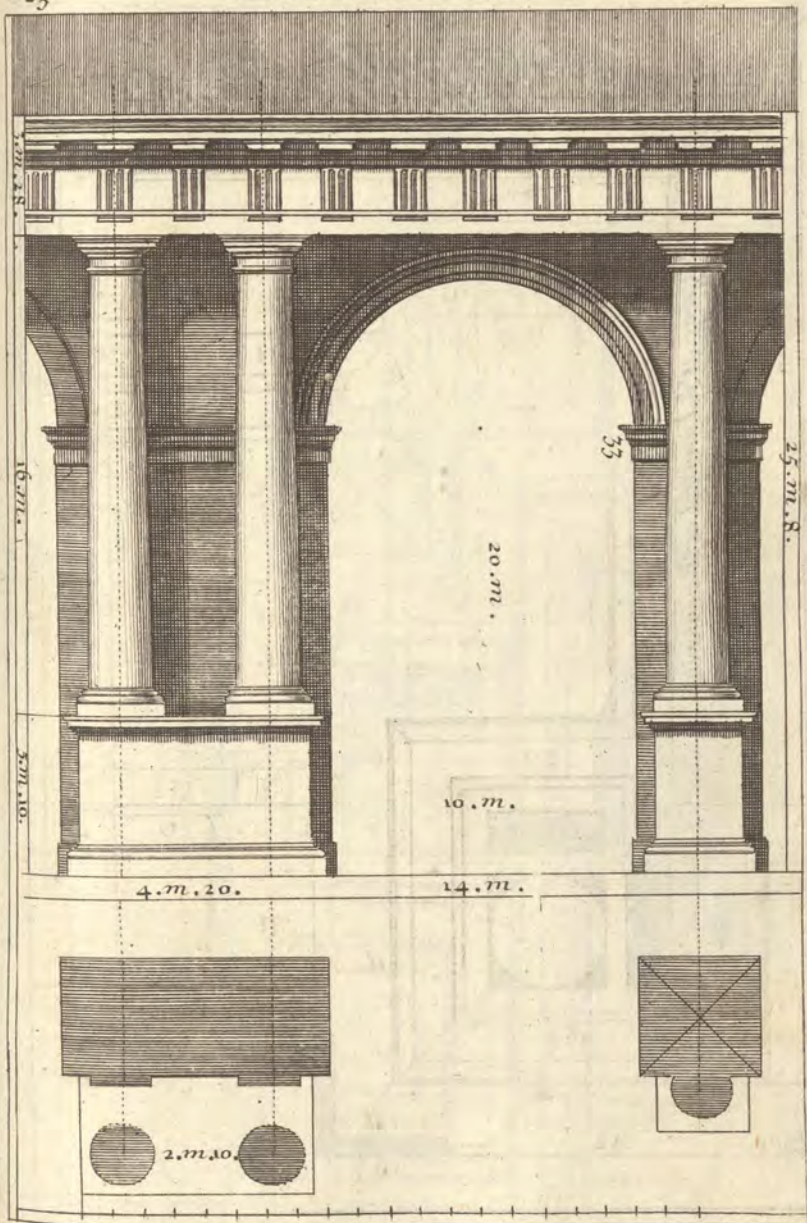


## DORIC ORDER.

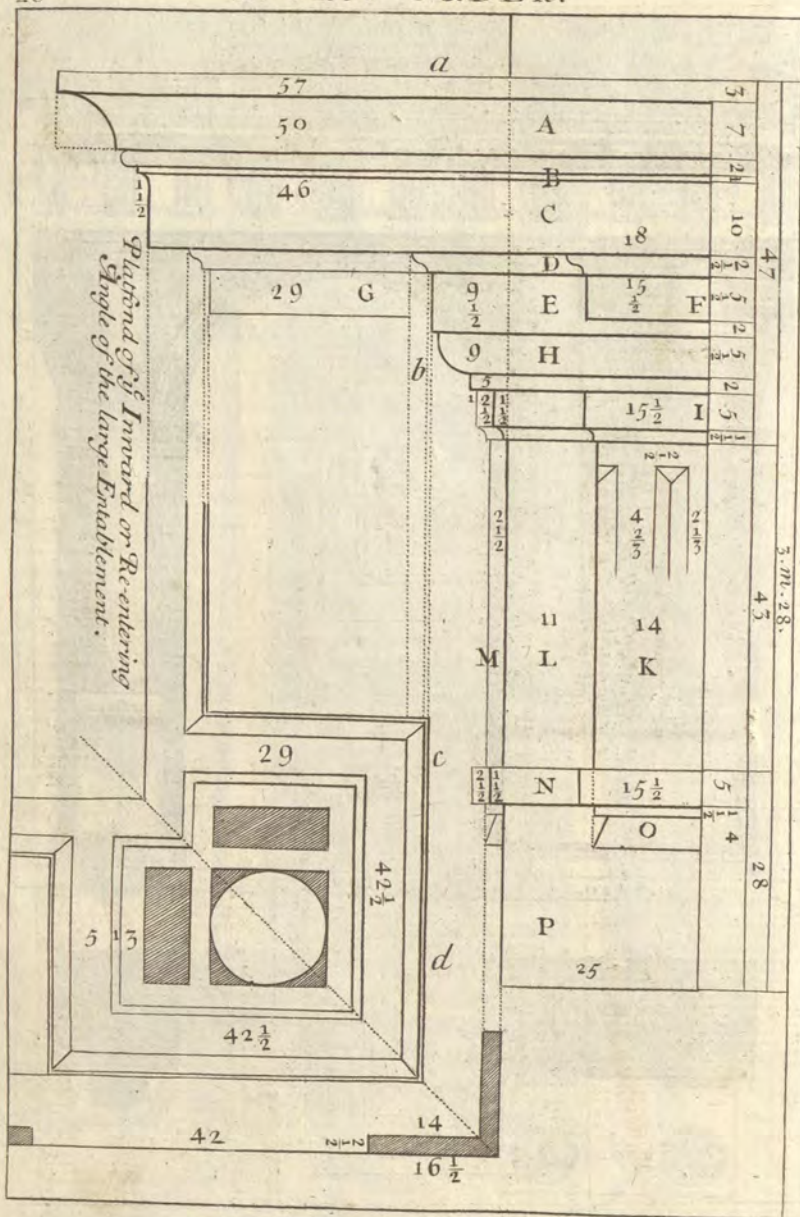
A. Triglyph.  
 B. Metope.  
 C. Mutule.



# DORIC ORDER.

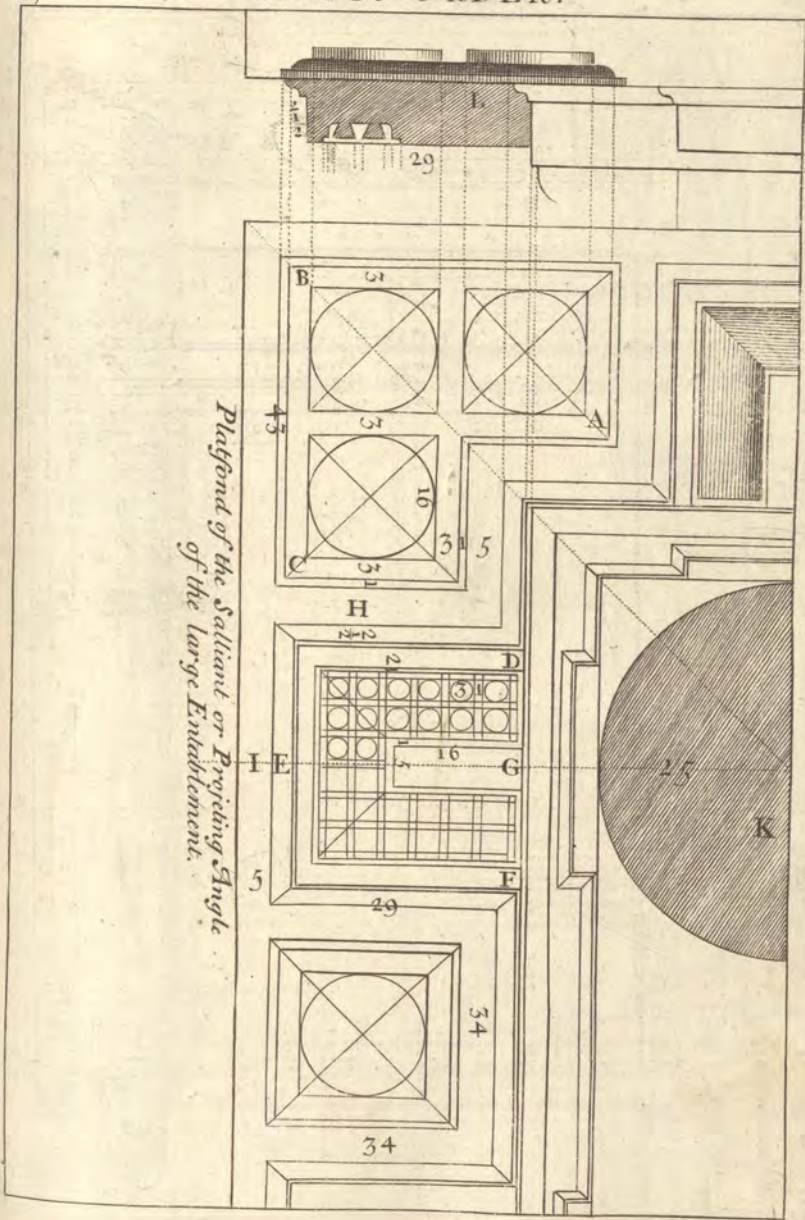


## DORIC ORDER.

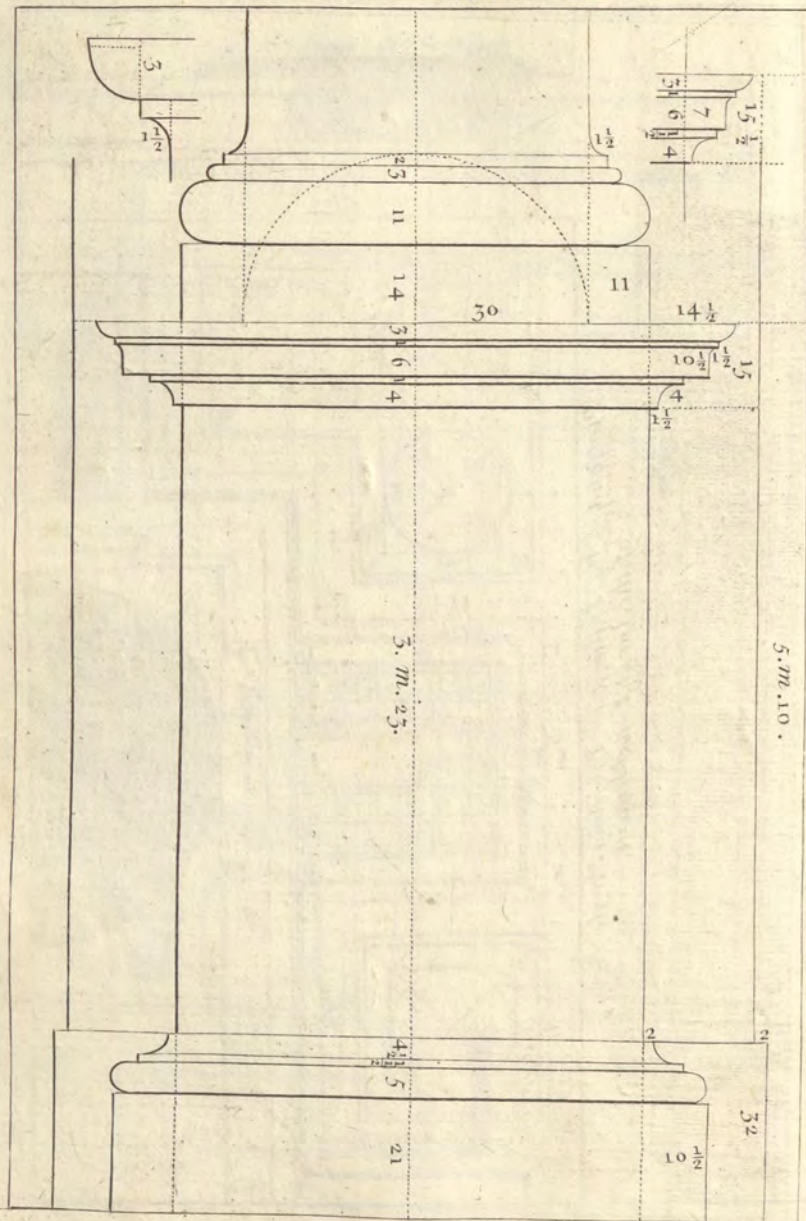


# DORIC ORDER.

*Playond of the Salliant or Pryching Angle  
of the large Entablement.*

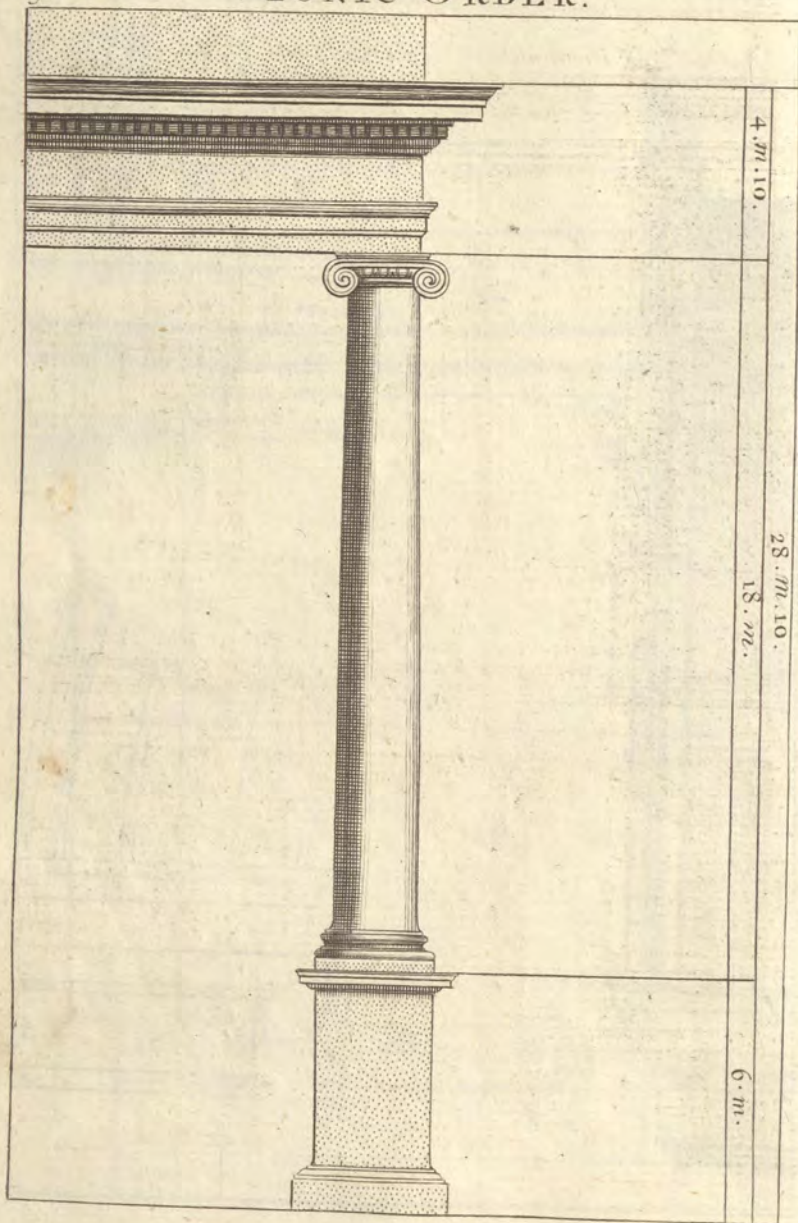


## DORIC ORDER.

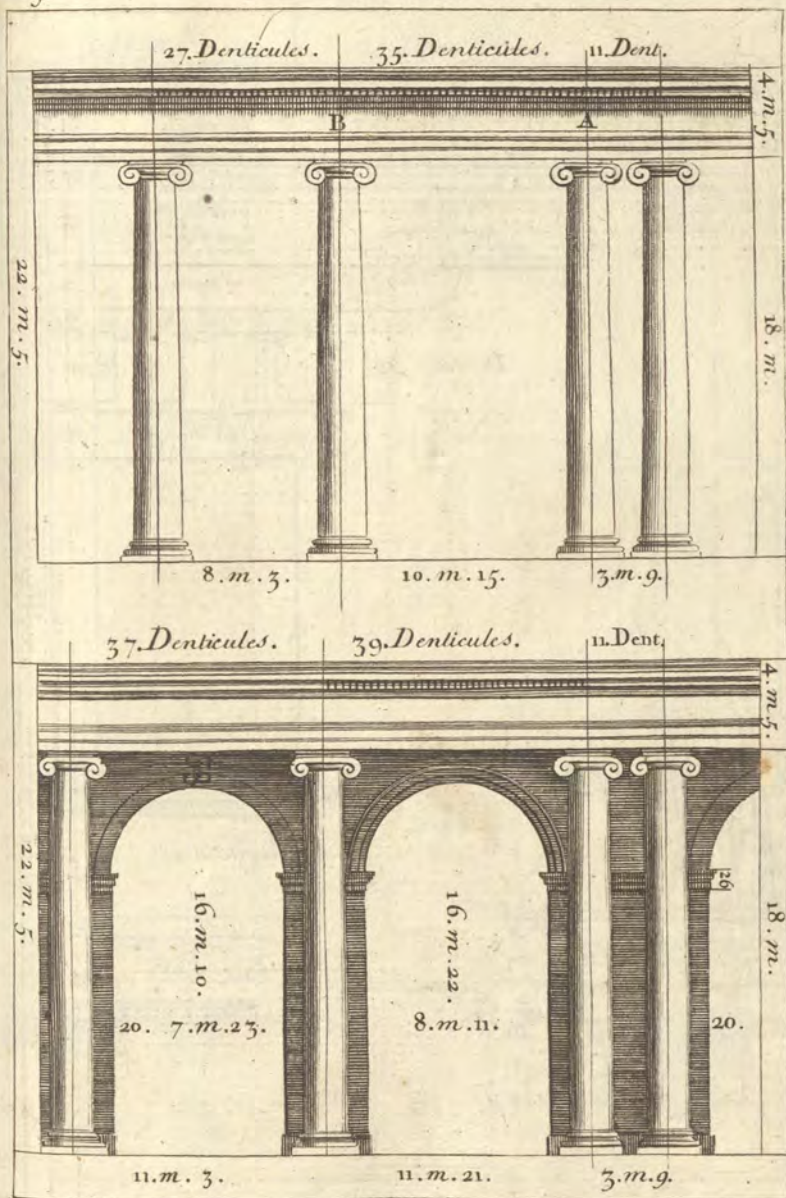




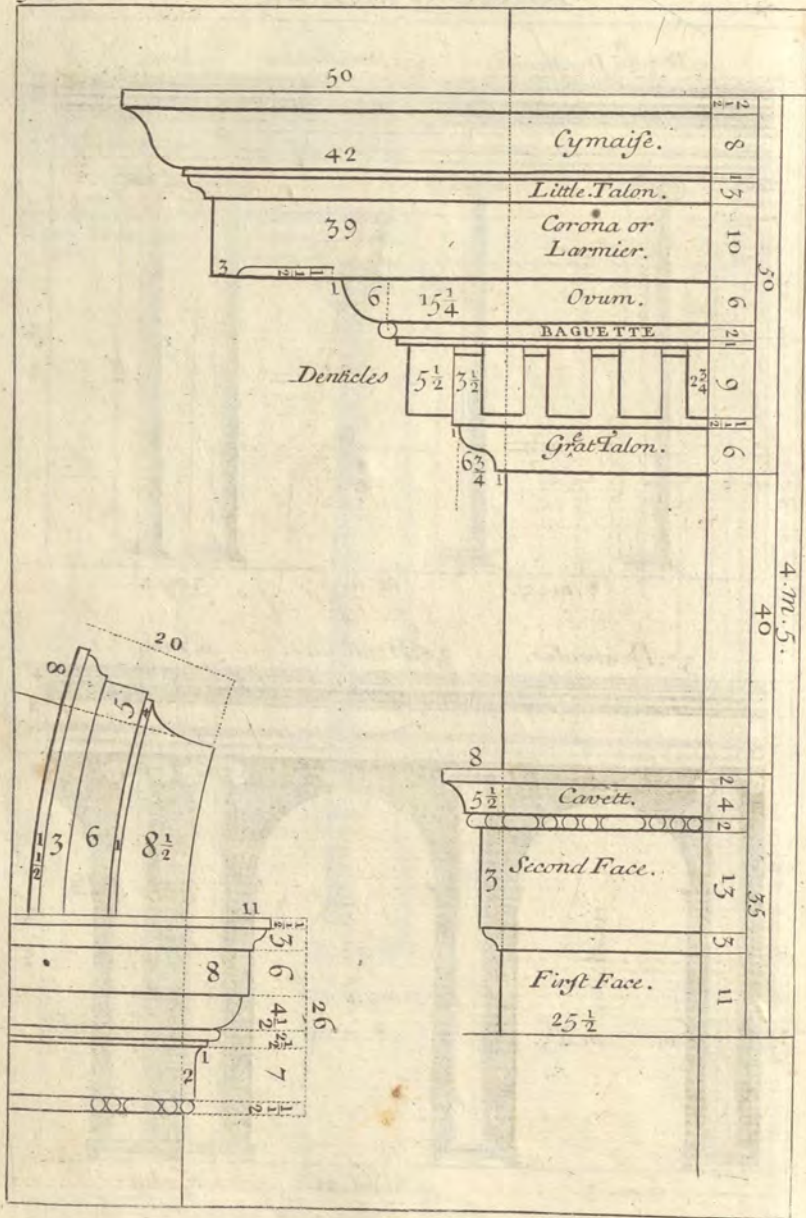
## IONIC ORDER.



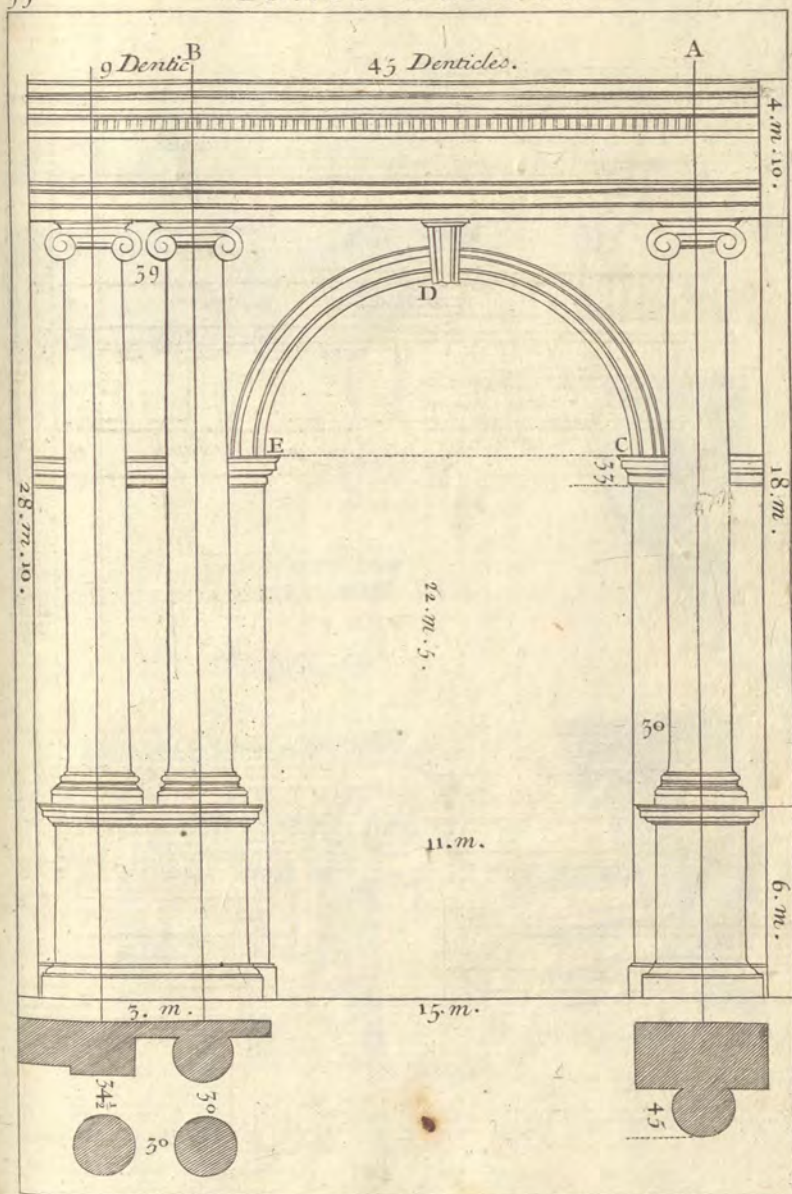
# IONIC ORDER.



# IONIC ORDER.



# IONIC ORDER.

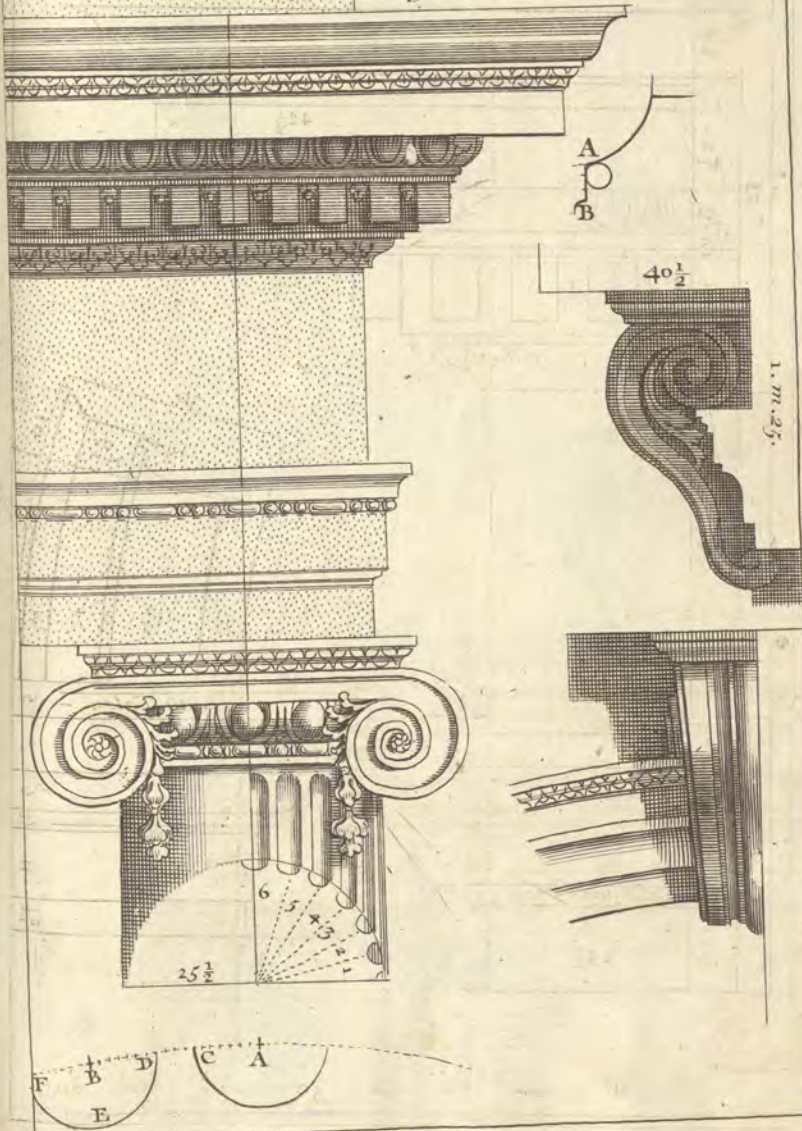




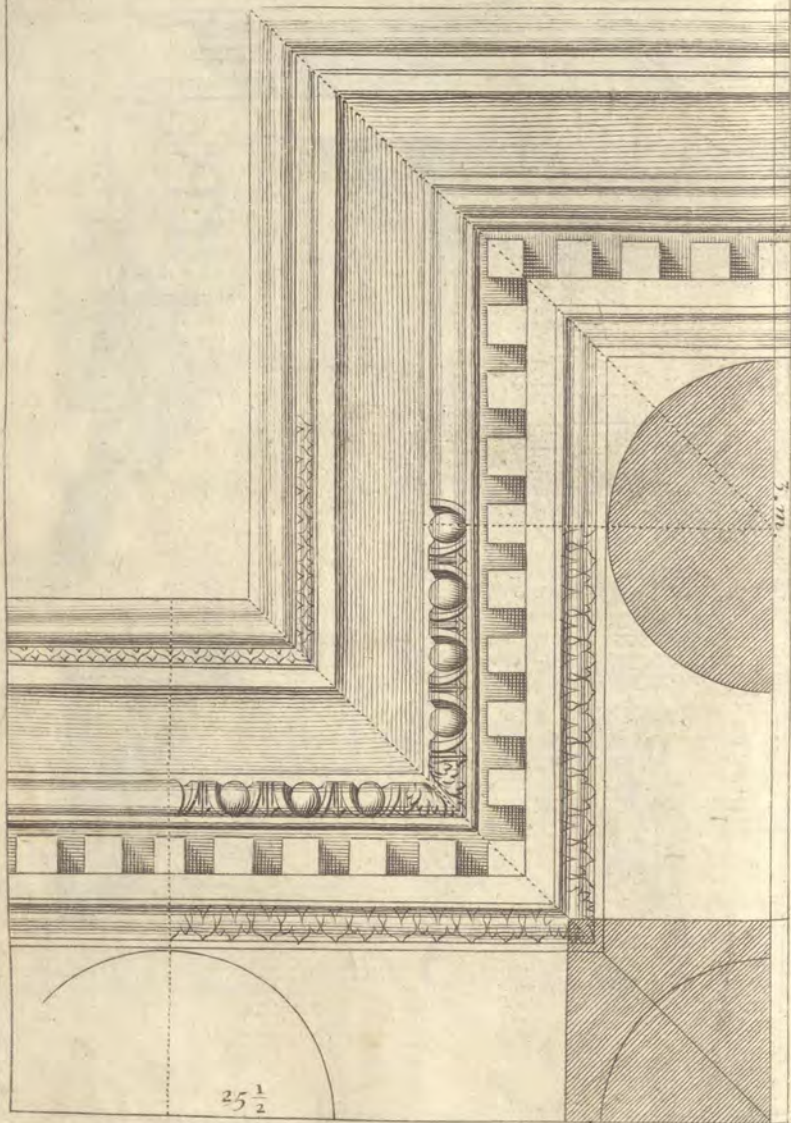
# IONIC ORDER.

55

*Large Entablature.*

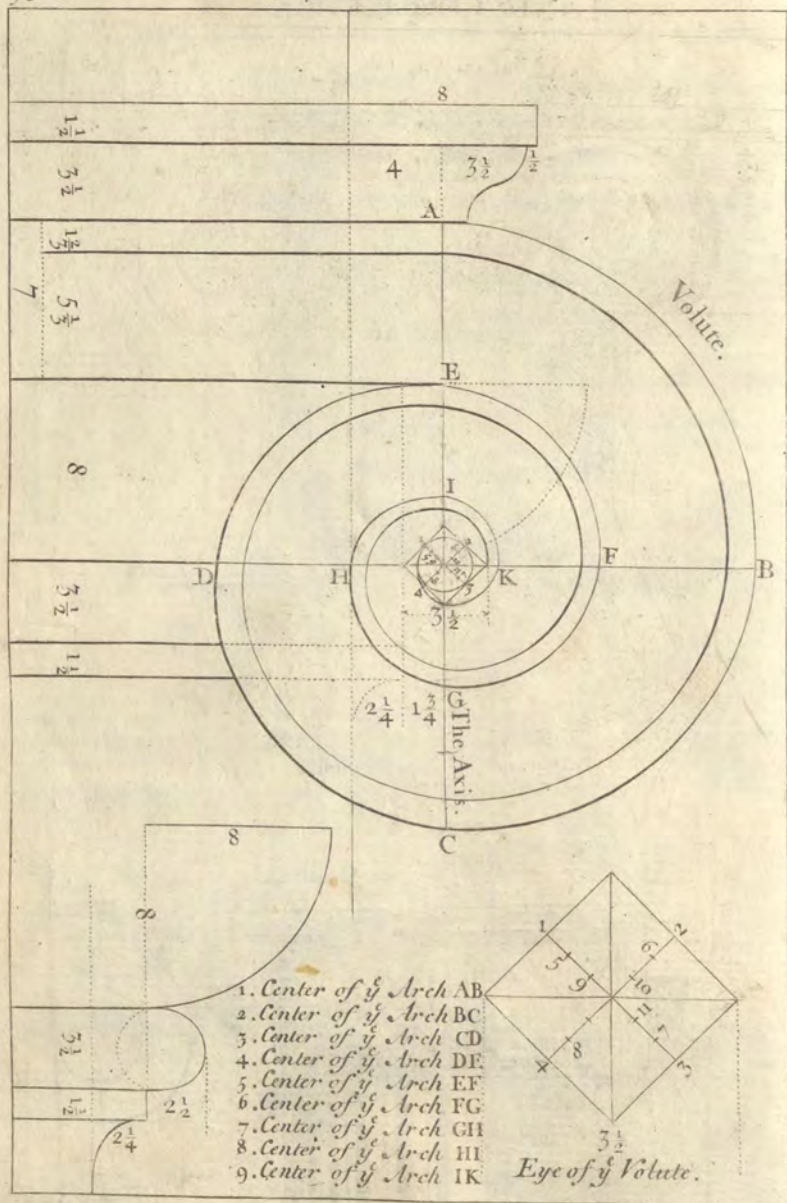


*Plat-fond or Soffit of y<sup>e</sup> great. Entablement.*





# IONIC ORDER.

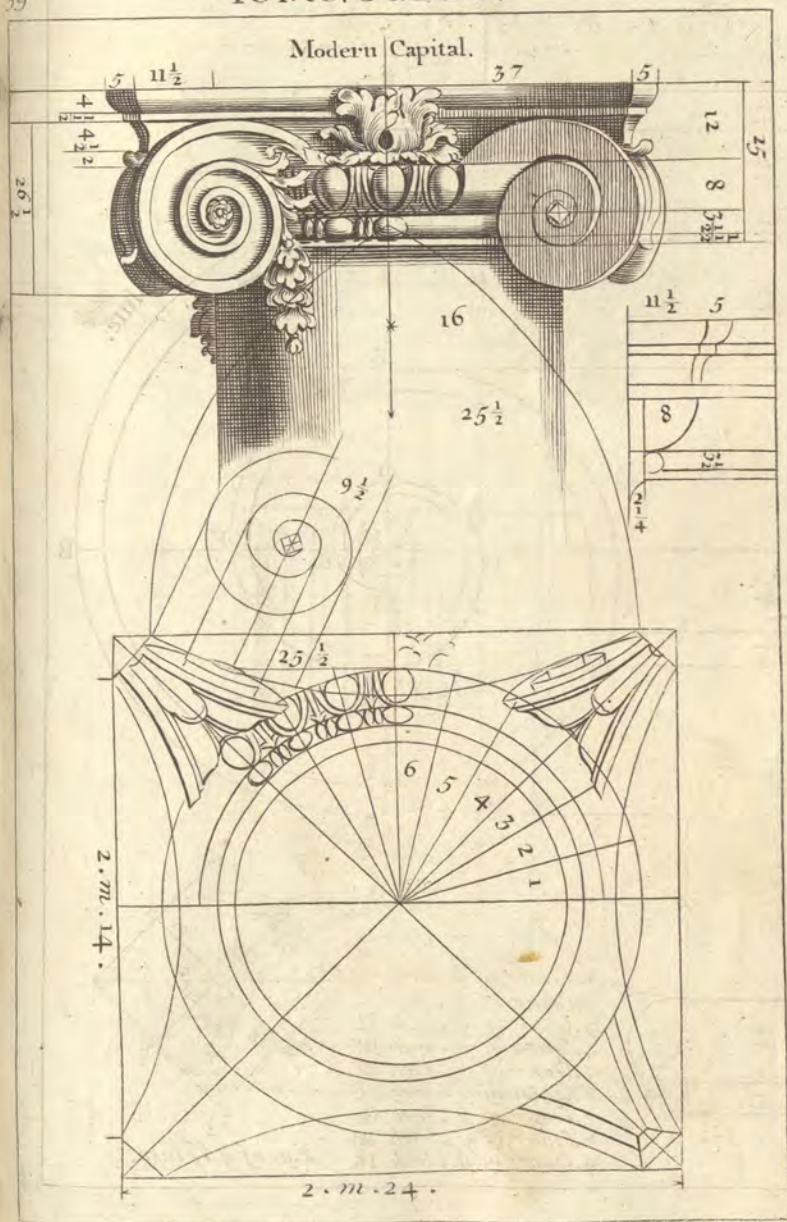


1. Center of y Arch AB
2. Center of y Arch BC
3. Center of y Arch CD
4. Center of y Arch DE
5. Center of y Arch EF
6. Center of y Arch FG
7. Center of y Arch GH
8. Center of y Arch HI
9. Center of y Arch IK

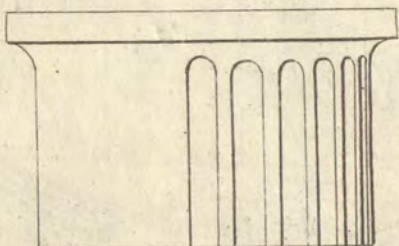
Eye of y Volute.

# IONIC ORDER.

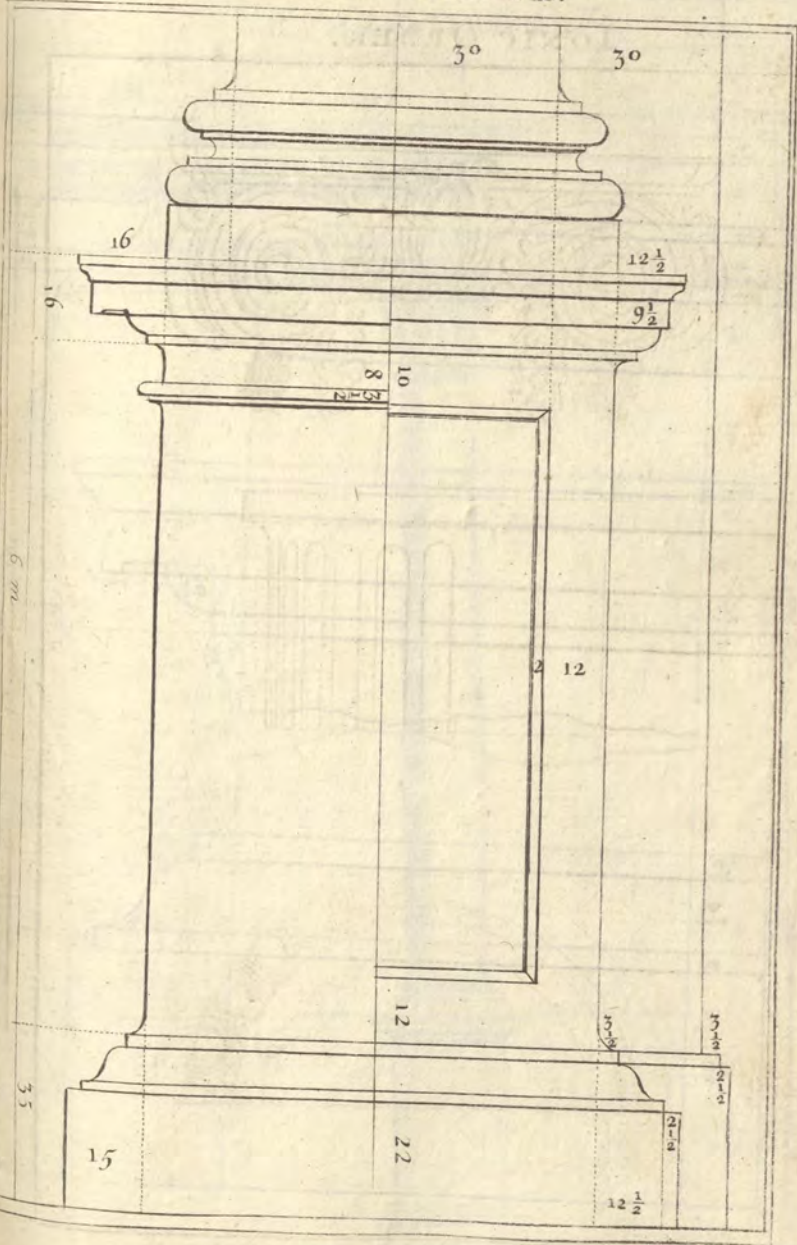
## Modern Capital.



## IONIC ORDER.

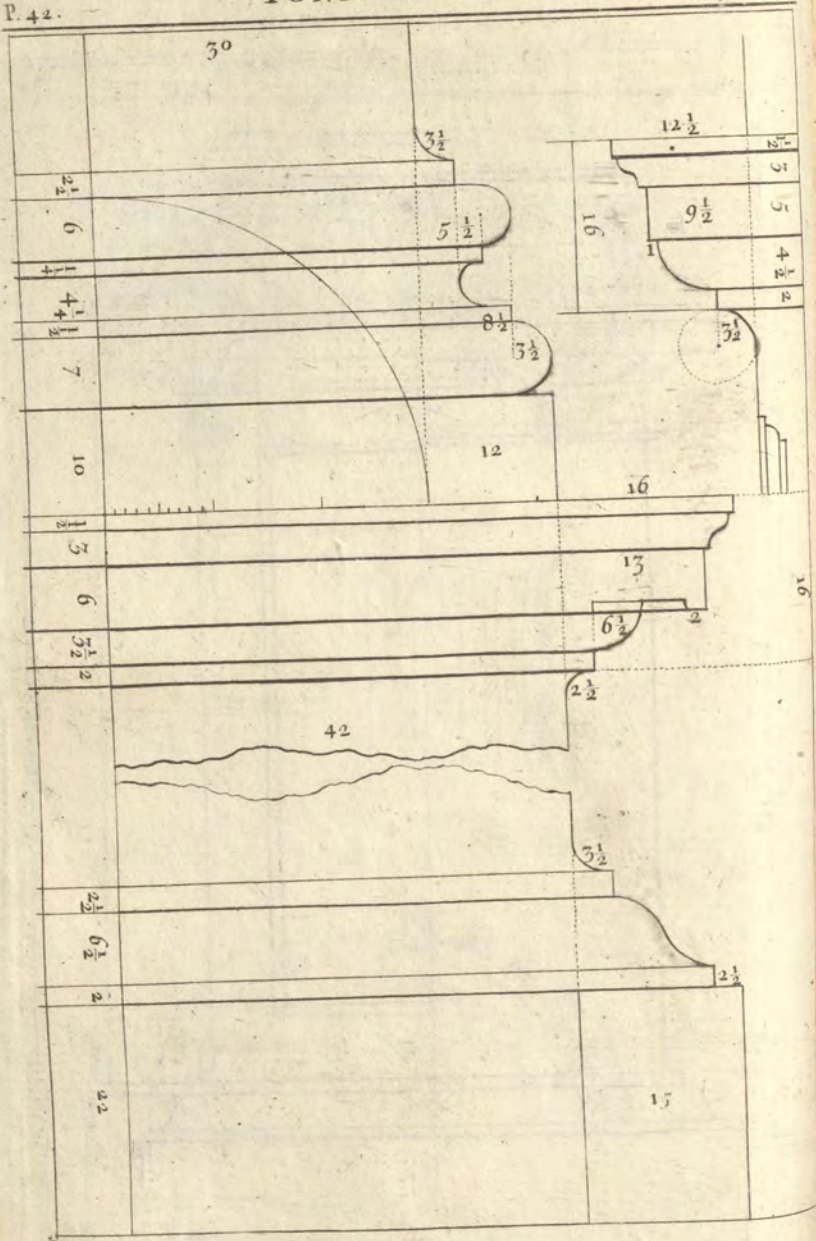


# IONIC ORDER.

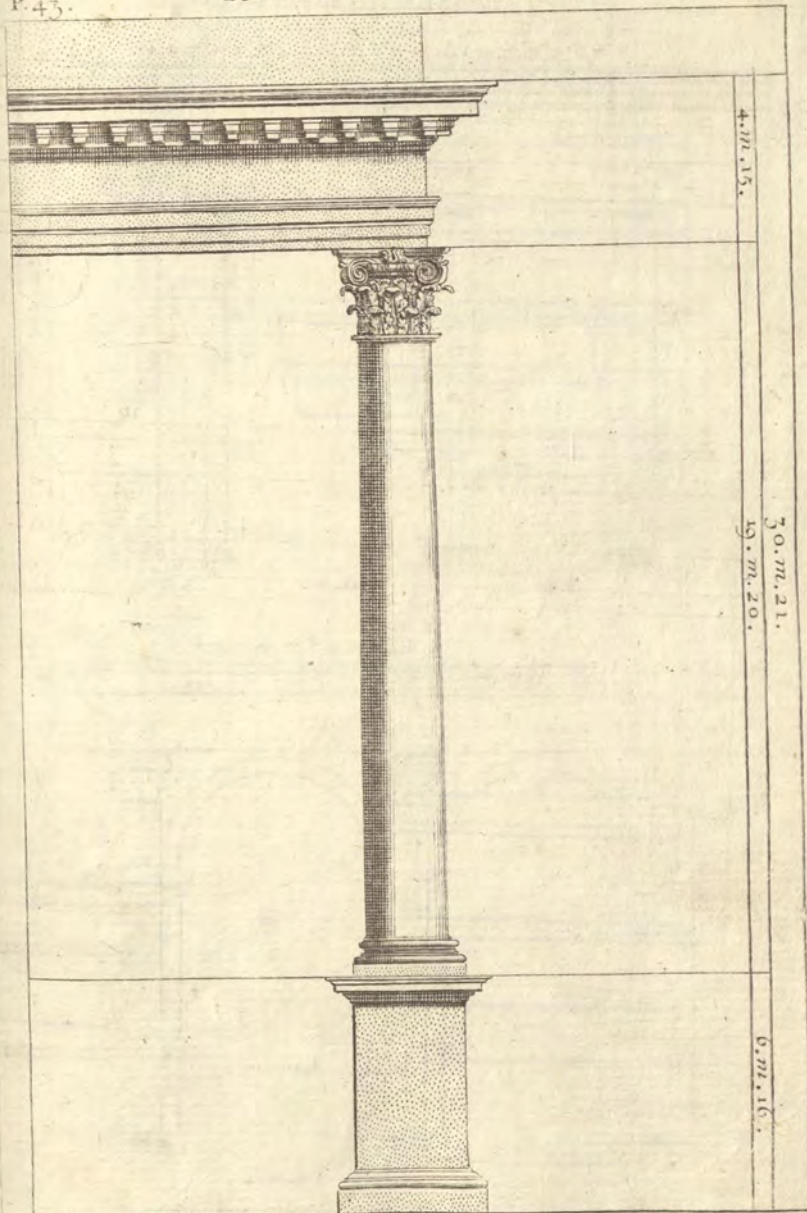


# IONIC ORDER.

P. 42.

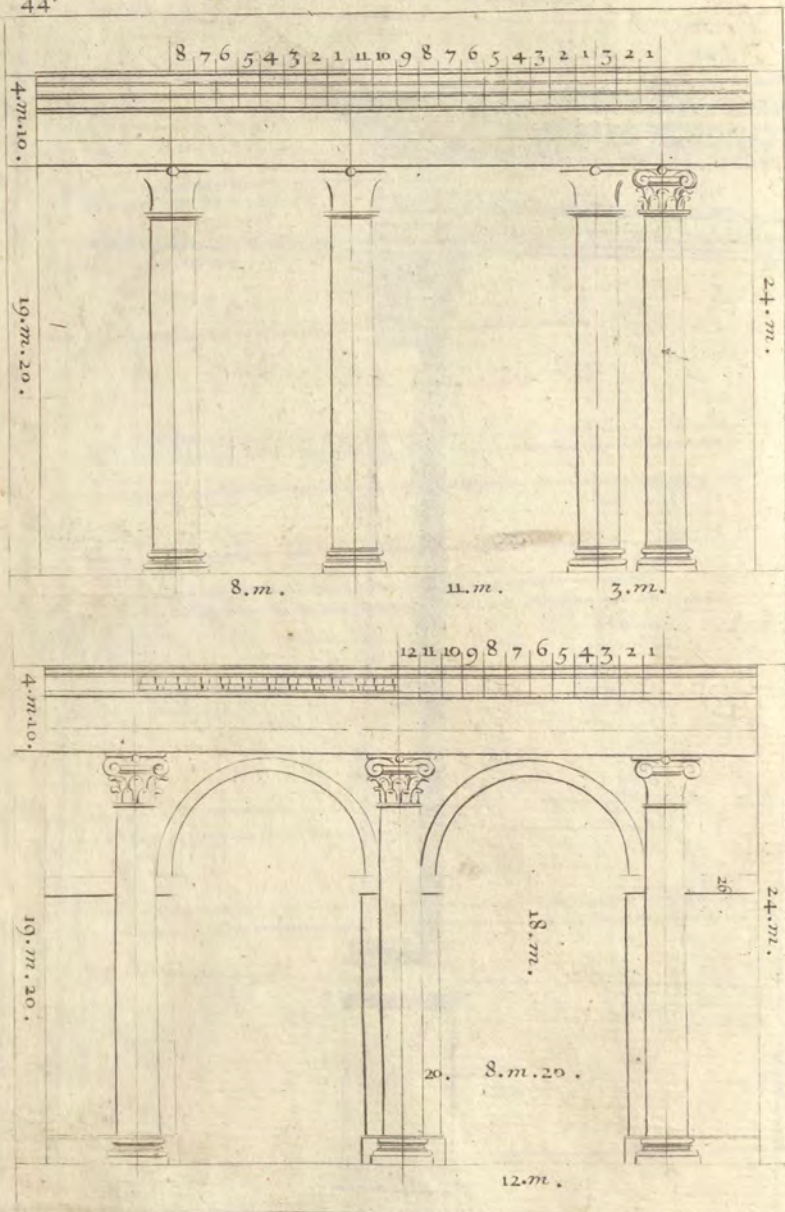


ROMAN ORDER.

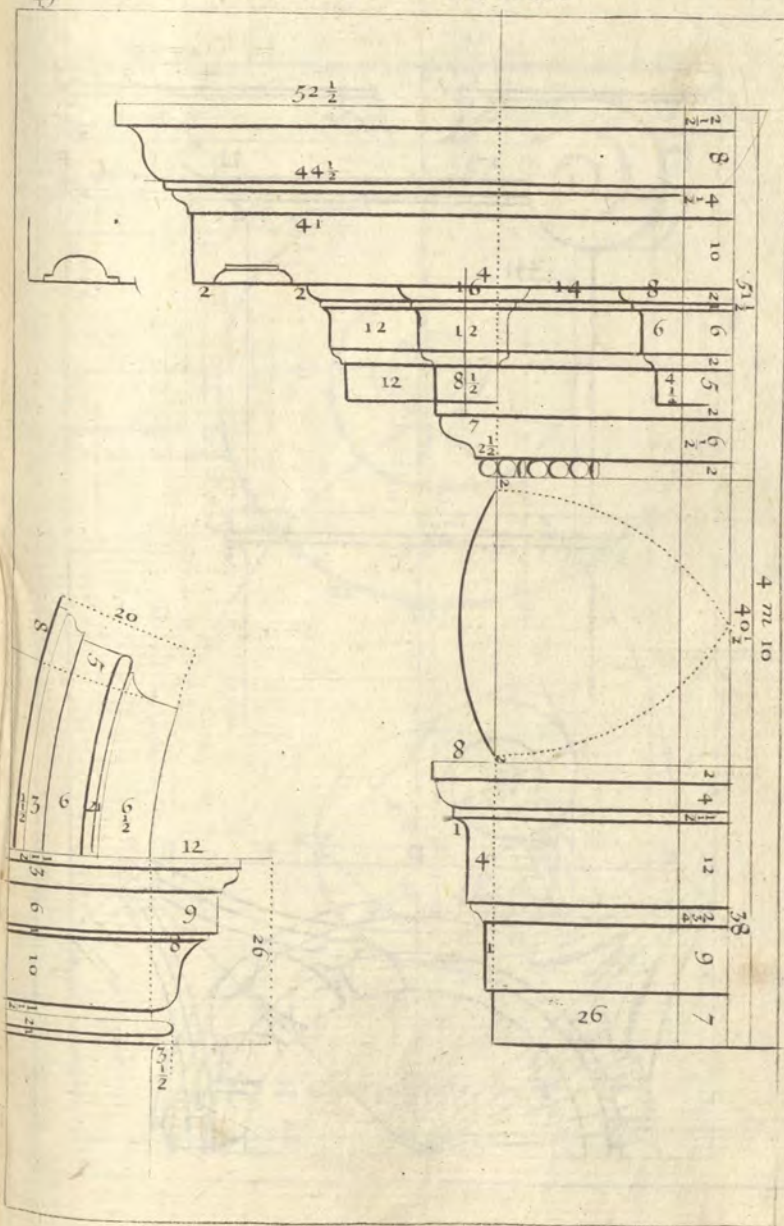


# ROMAN ORDER.

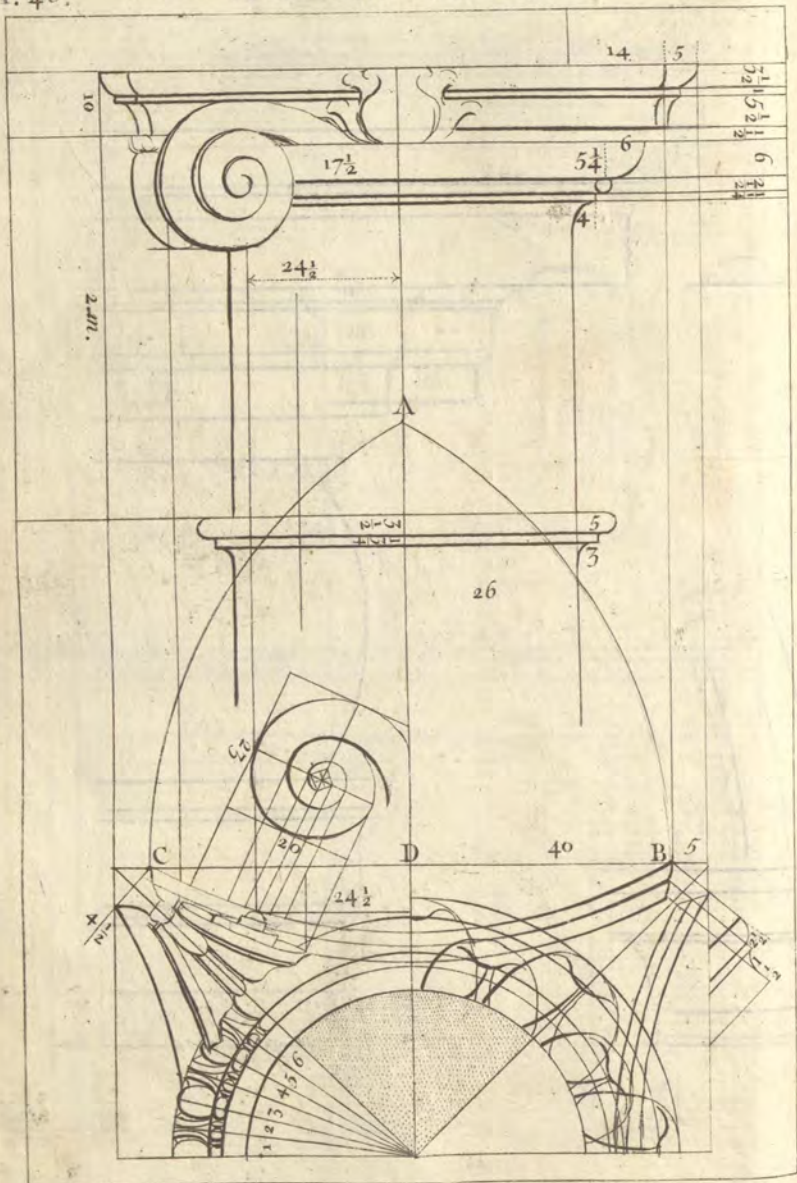
44.



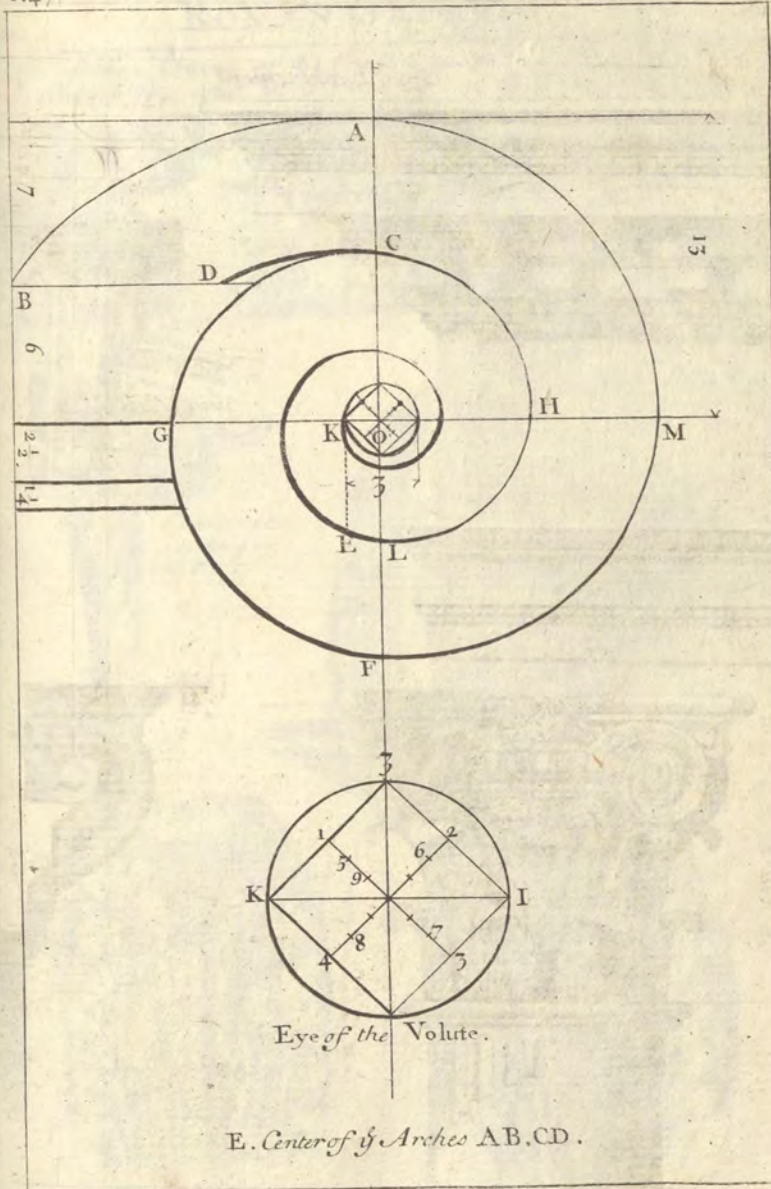
## ROMAN ORDER.

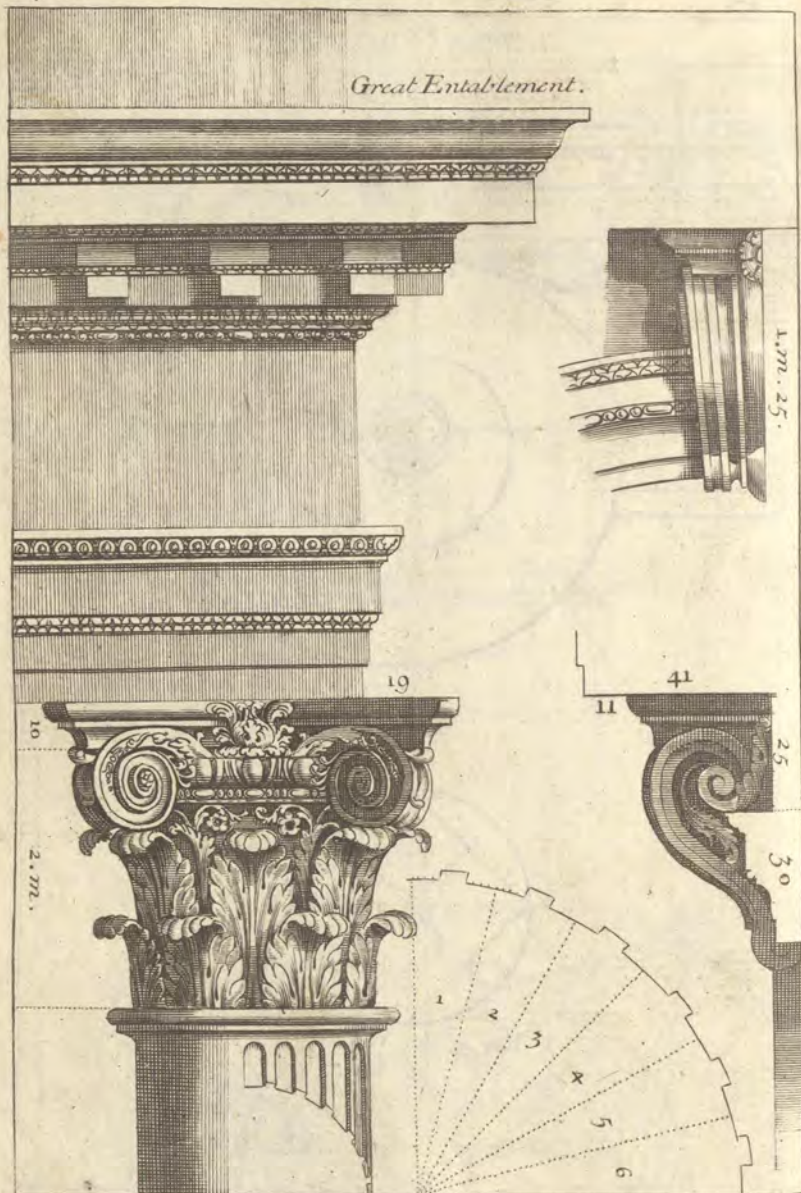


ROMAN ORDER.



ROMAN. ORDER.





# ROMAN ORDER.

*Rose of the Abacus of the Capital view'd  
Sidewise, and in Front,*



*Caulicole  
ending in  
a Rose.*



*A Little Fesloons  
D. Spring of y  
Volute.*



*Leaf of the Acanthus  
View'd Sidewise.*



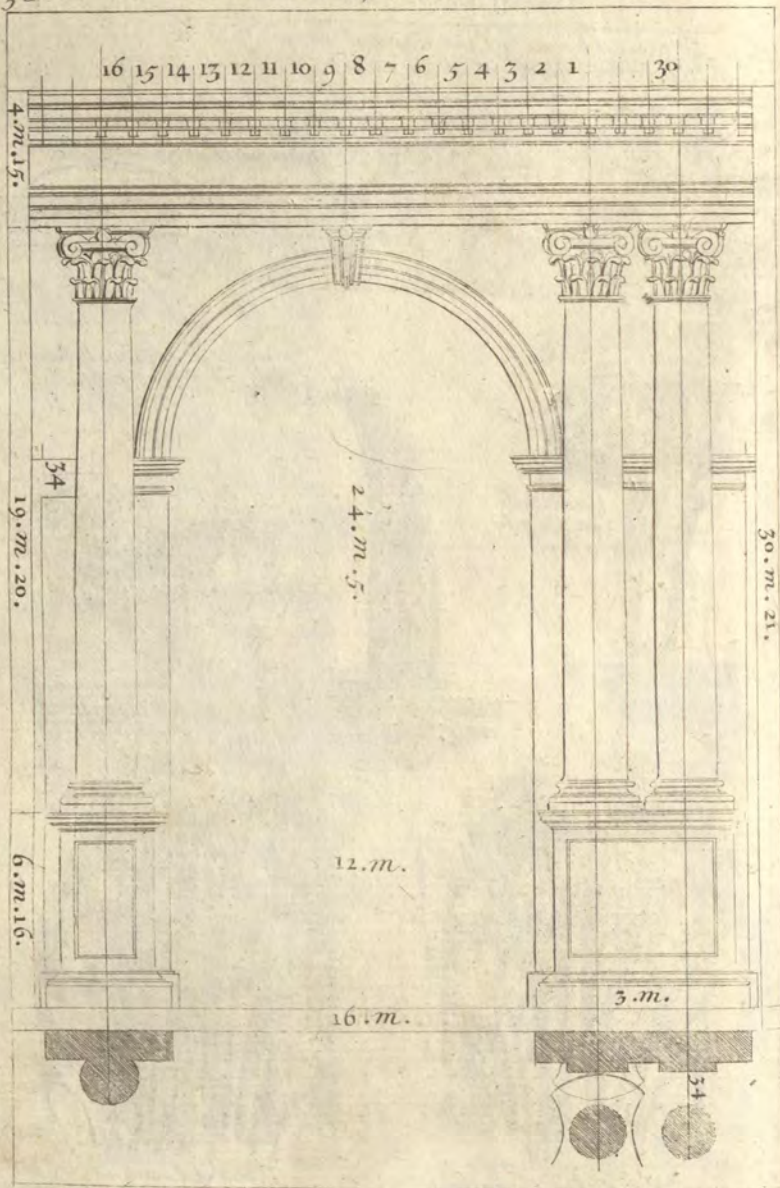
*Leaf of y Acanthus.*



*Laurel Leaf.*

# ROMAN, ORDER.

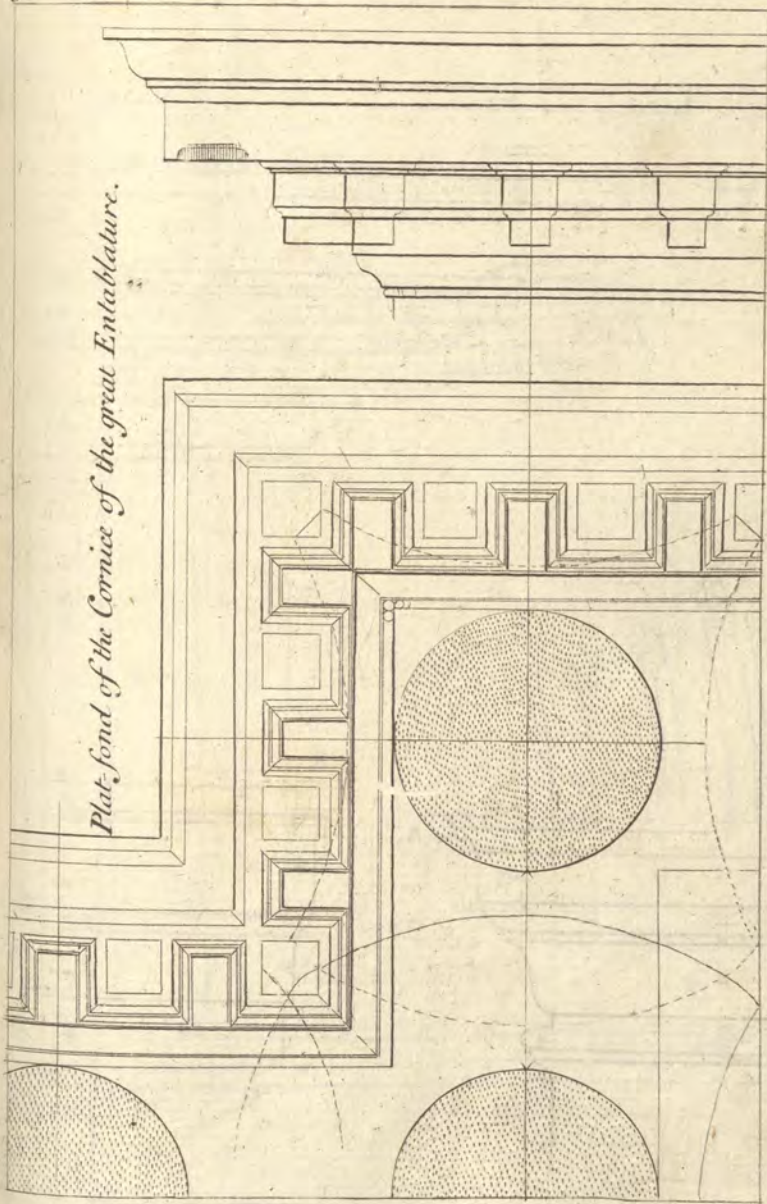
50



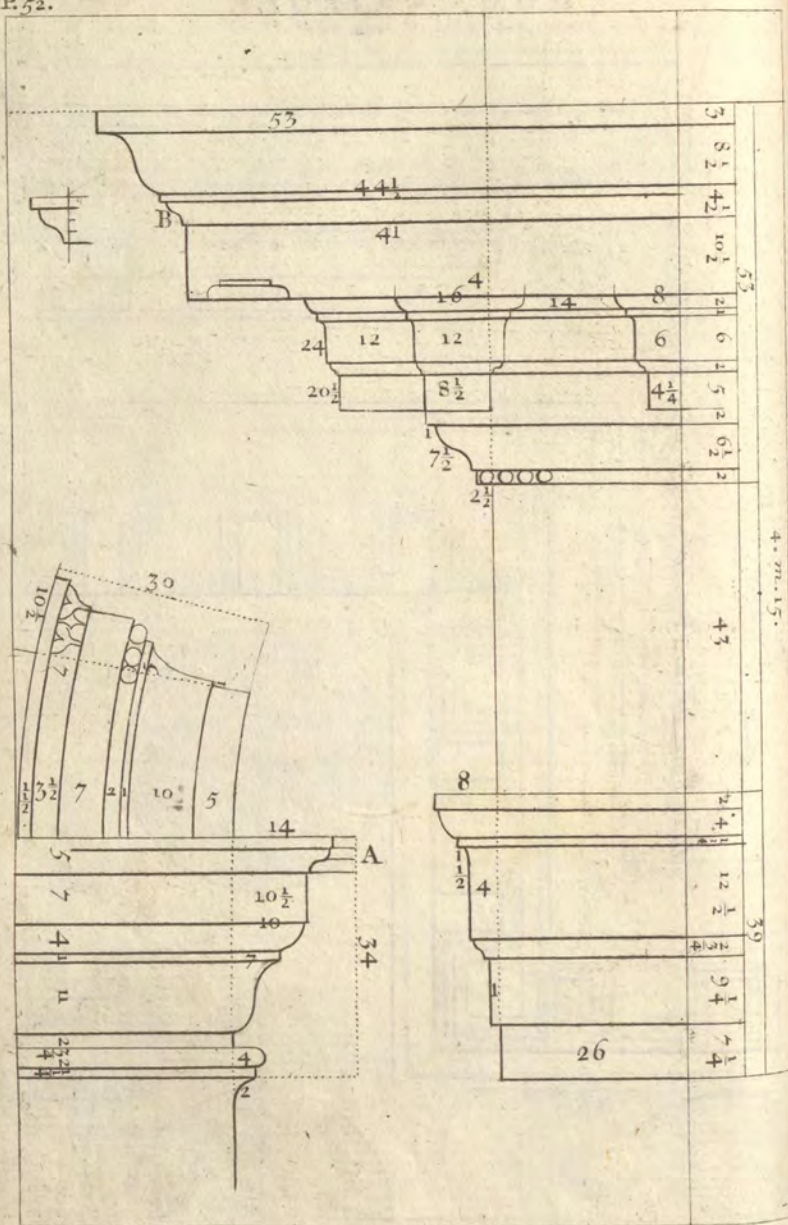
ROMAN ORDER.

51

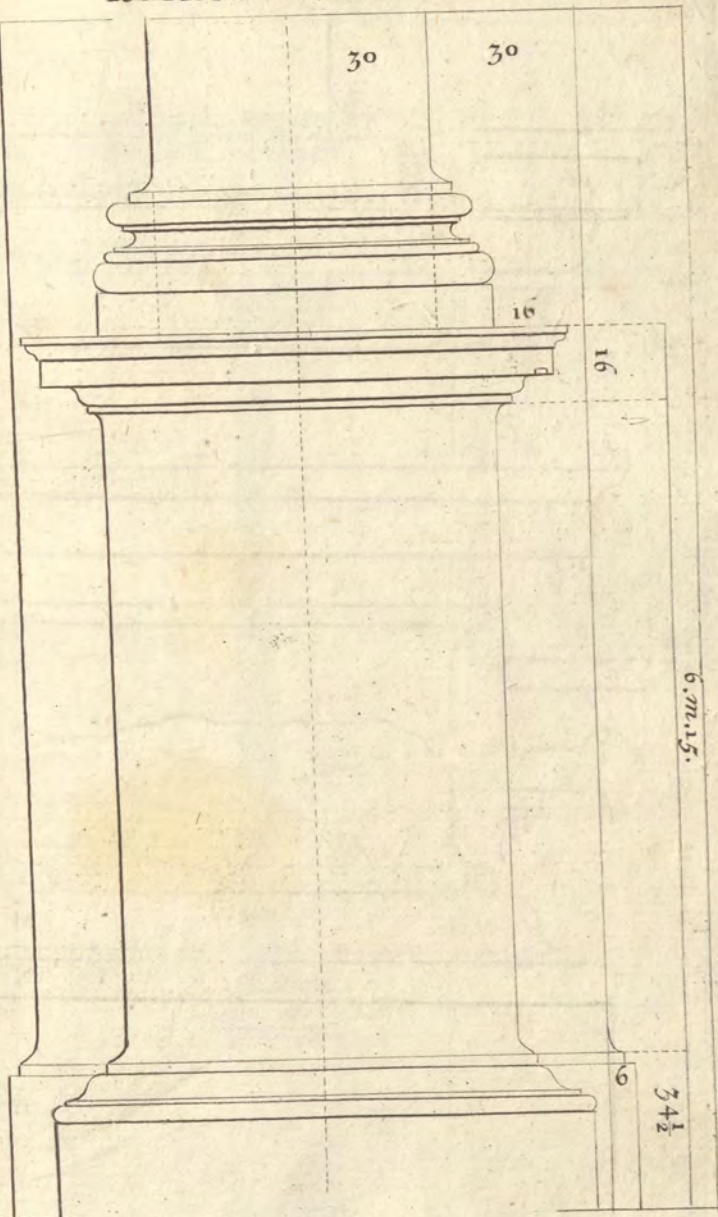
*Plat. fond. of the Cornice of the great Entablature.*



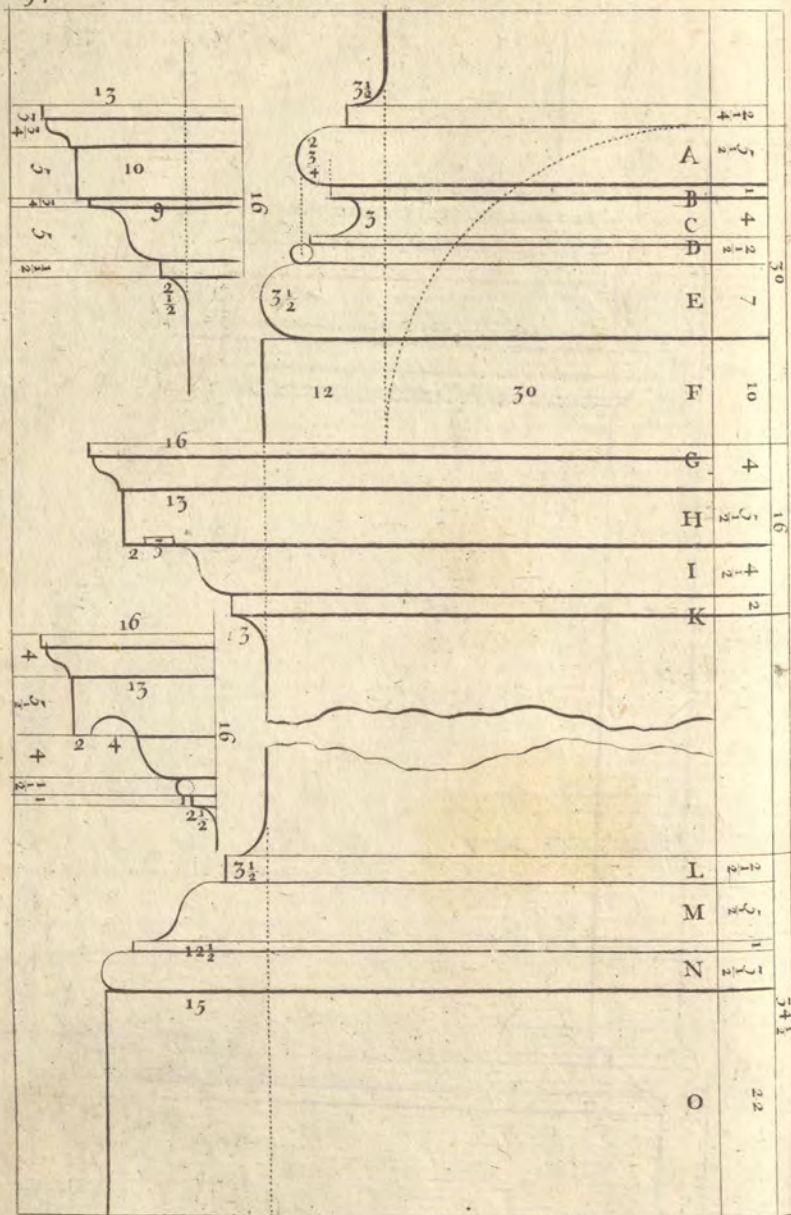
# ROMAN ORDER.



53  
ROMAN ORDER



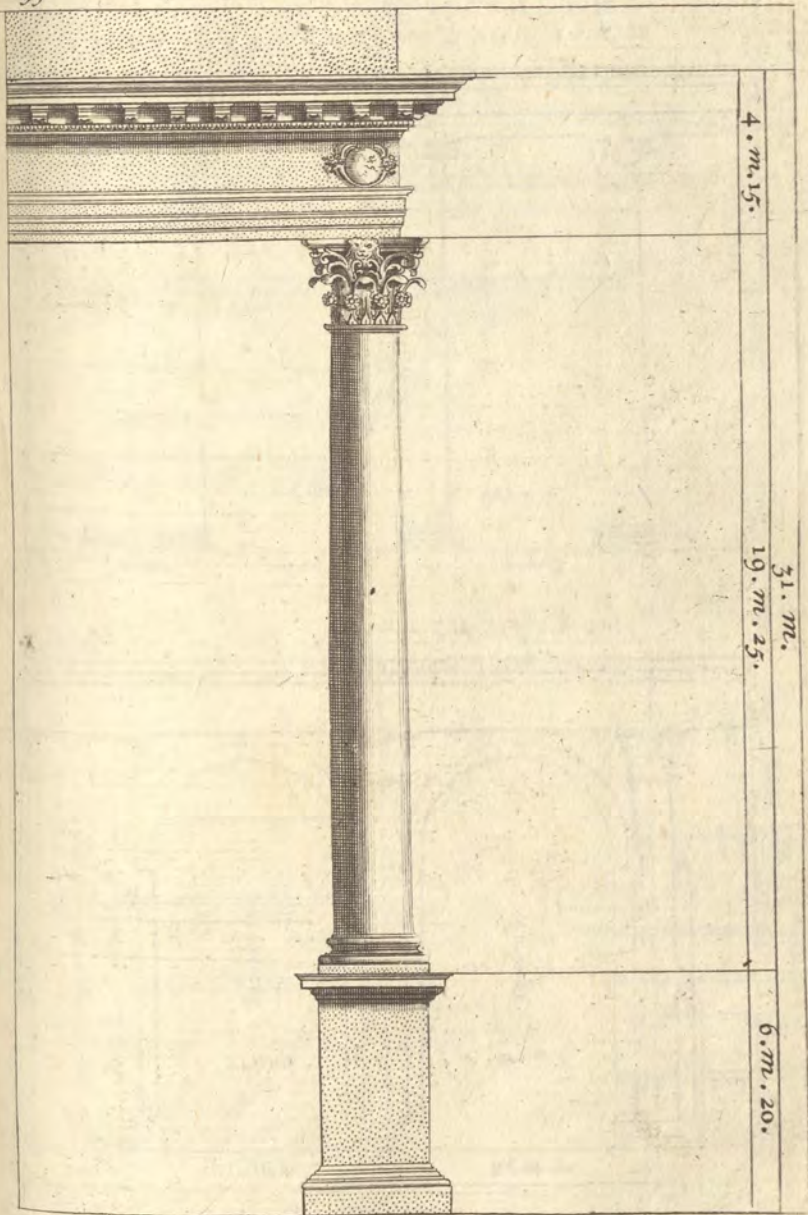
ROMAN ORDER.

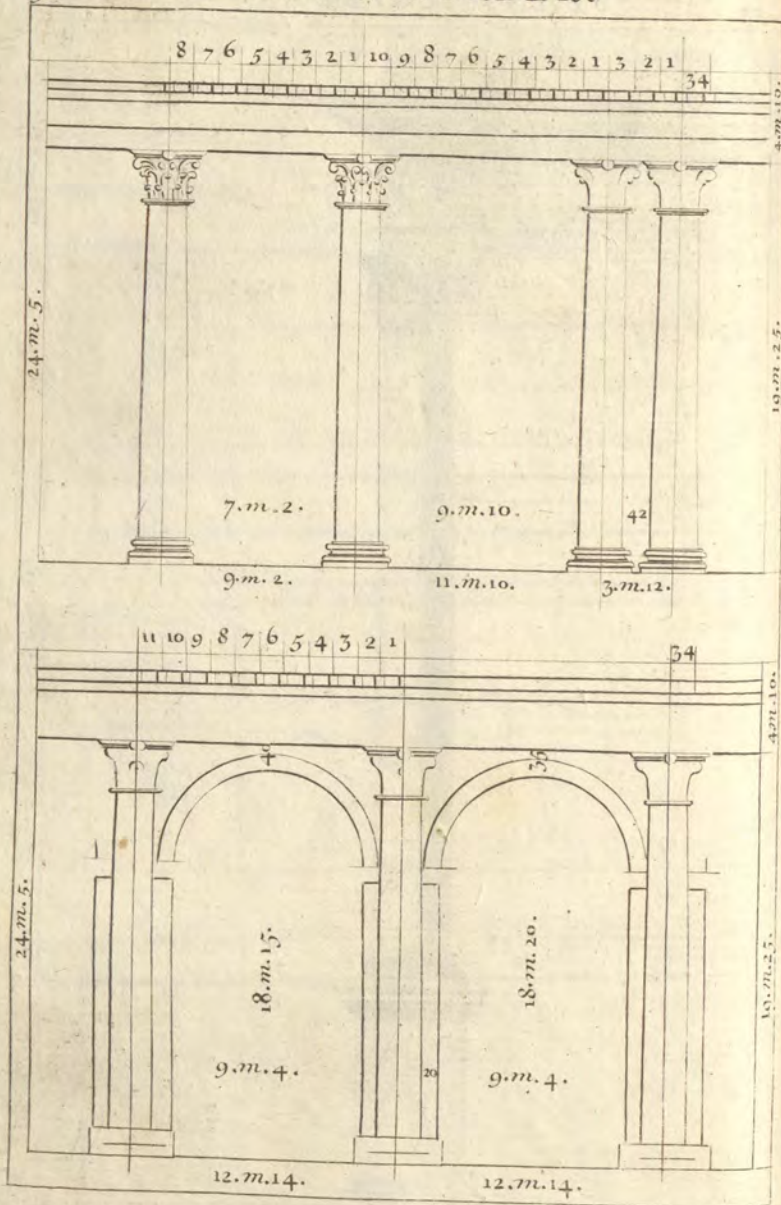




SPANISH ORDER.

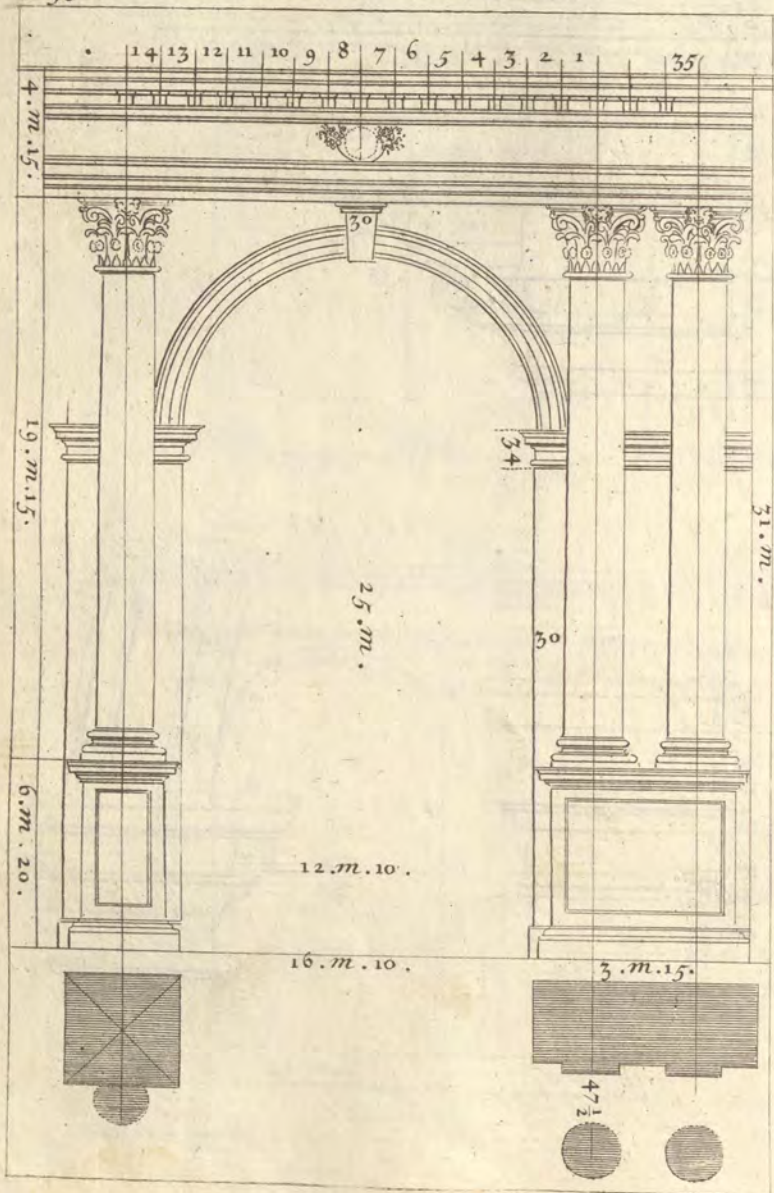
55



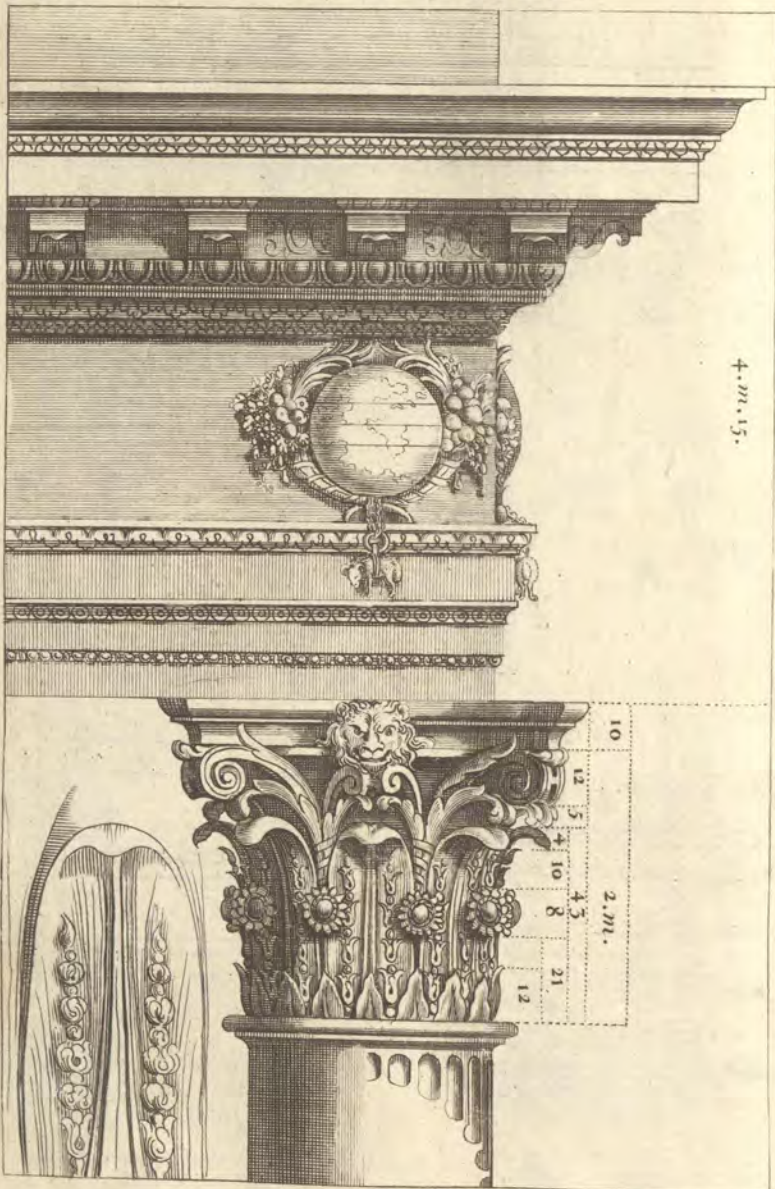




## SPANISH ORDER.







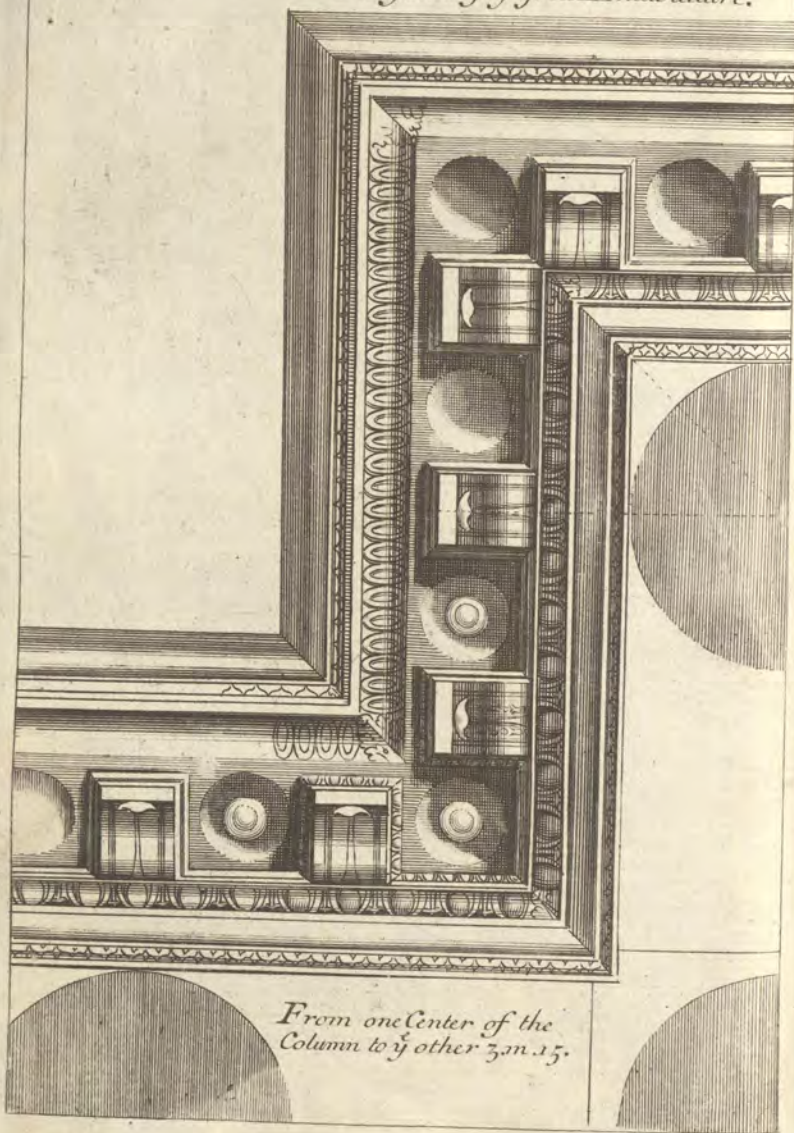
4. m. 15.

SPANISH ORDER.

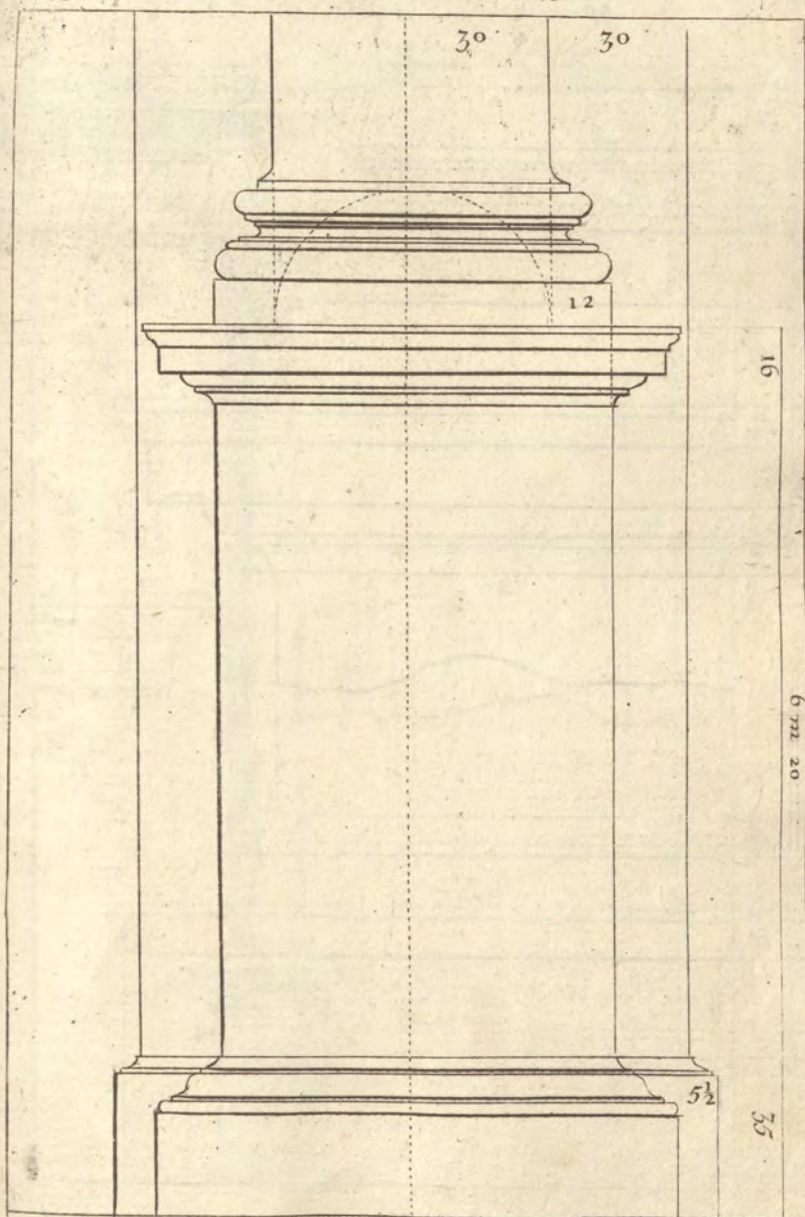


## SPANISH ORDER.

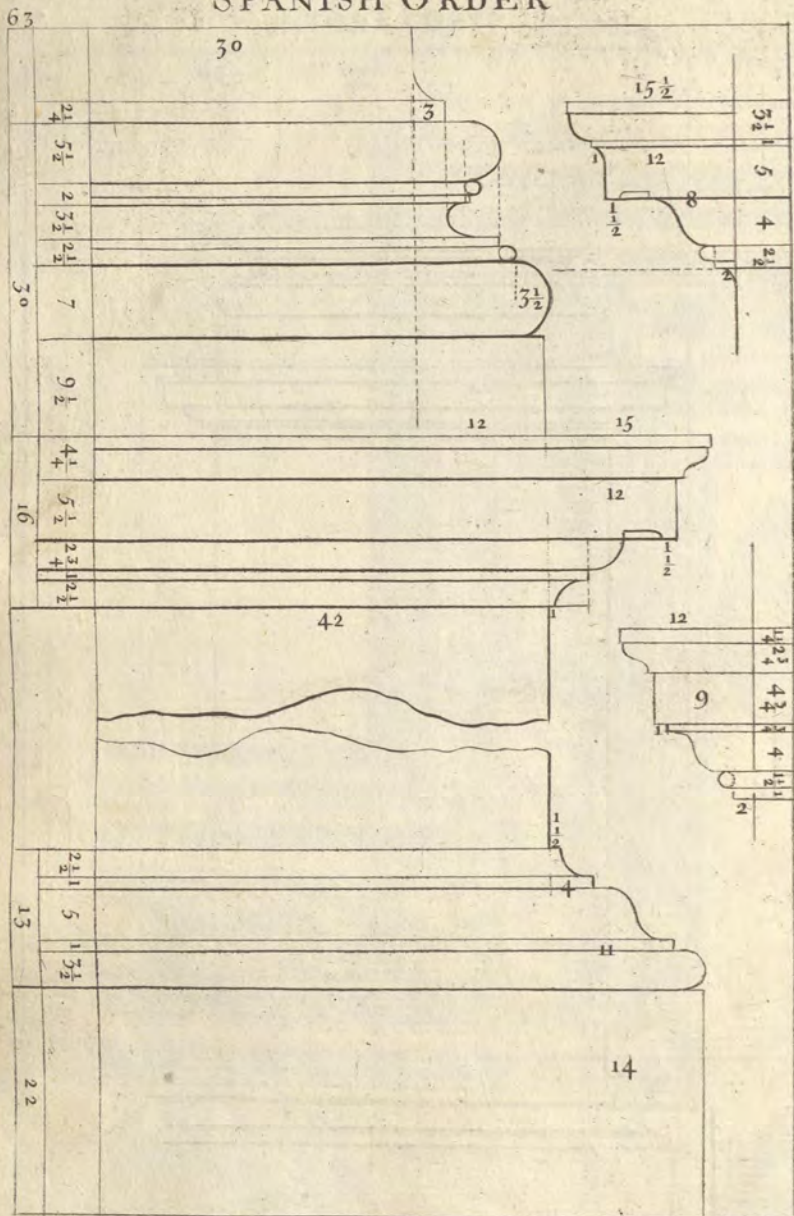
*Plat-fond of y<sup>e</sup> great Entablature.*



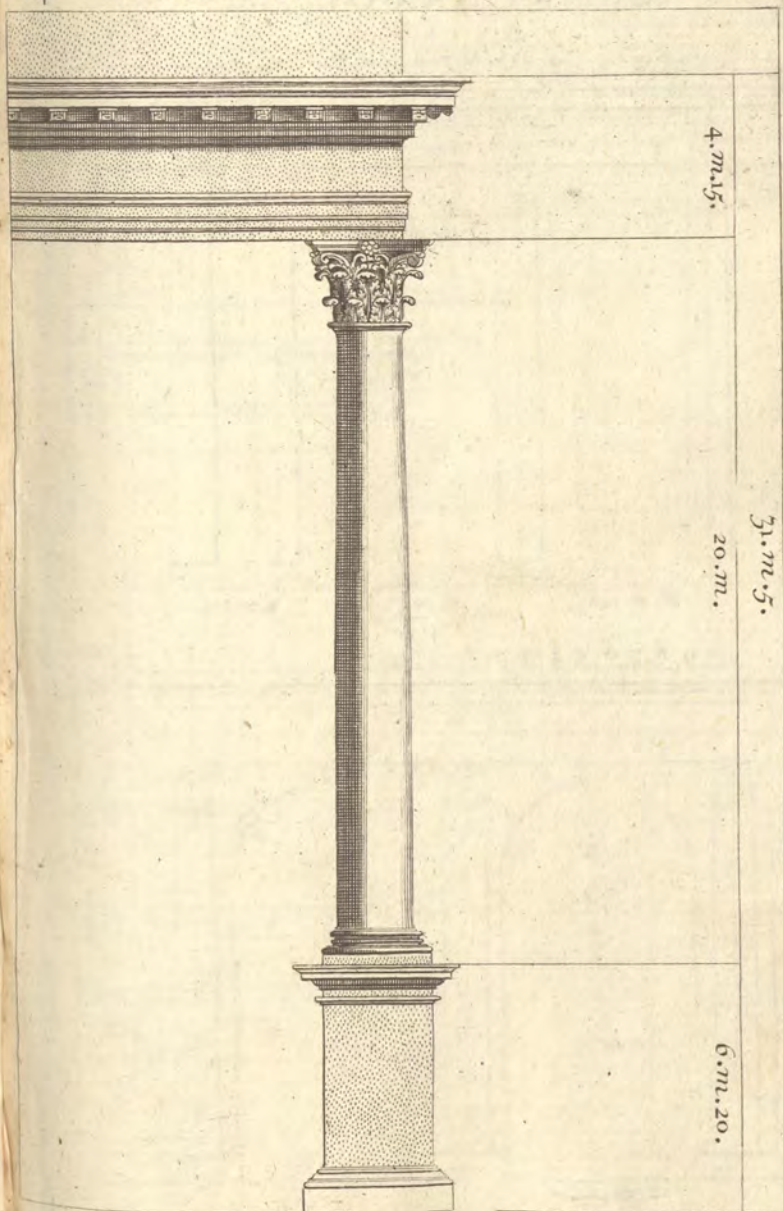
## SPANISH ORDER



# SPANISH ORDER

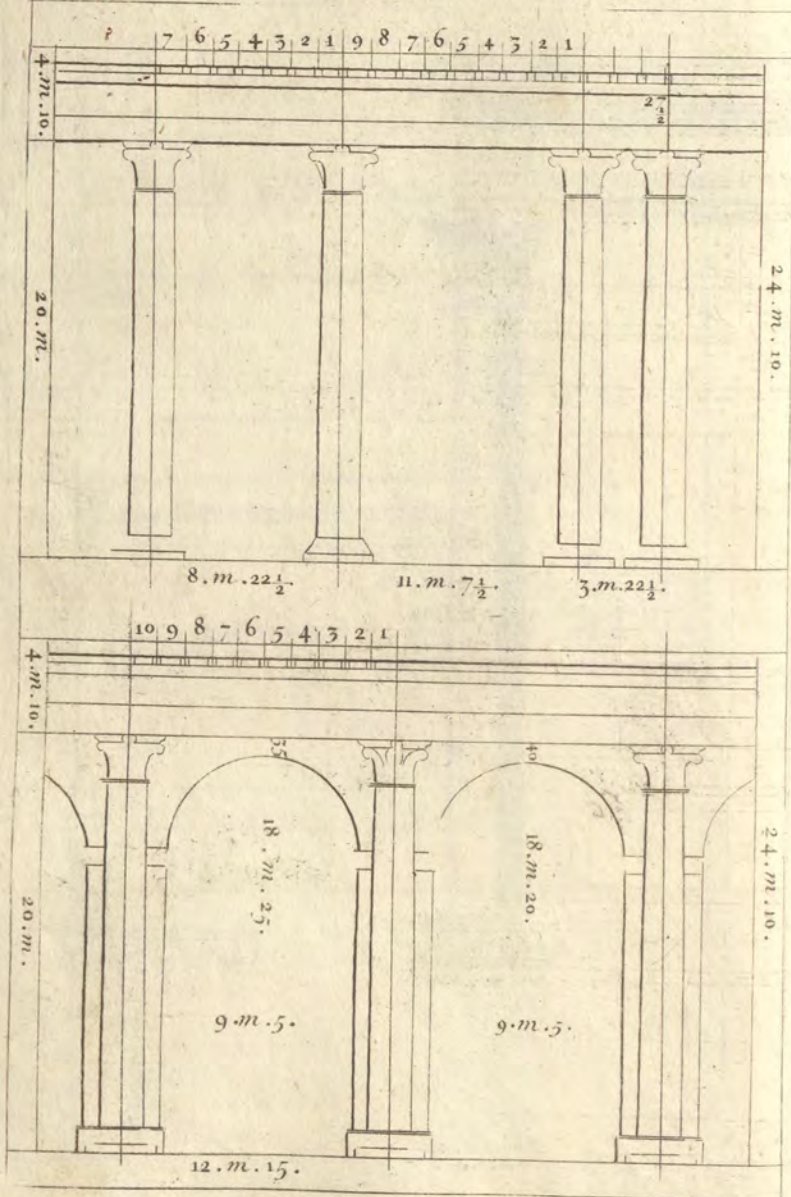


## CORINTHIAN ORDER.

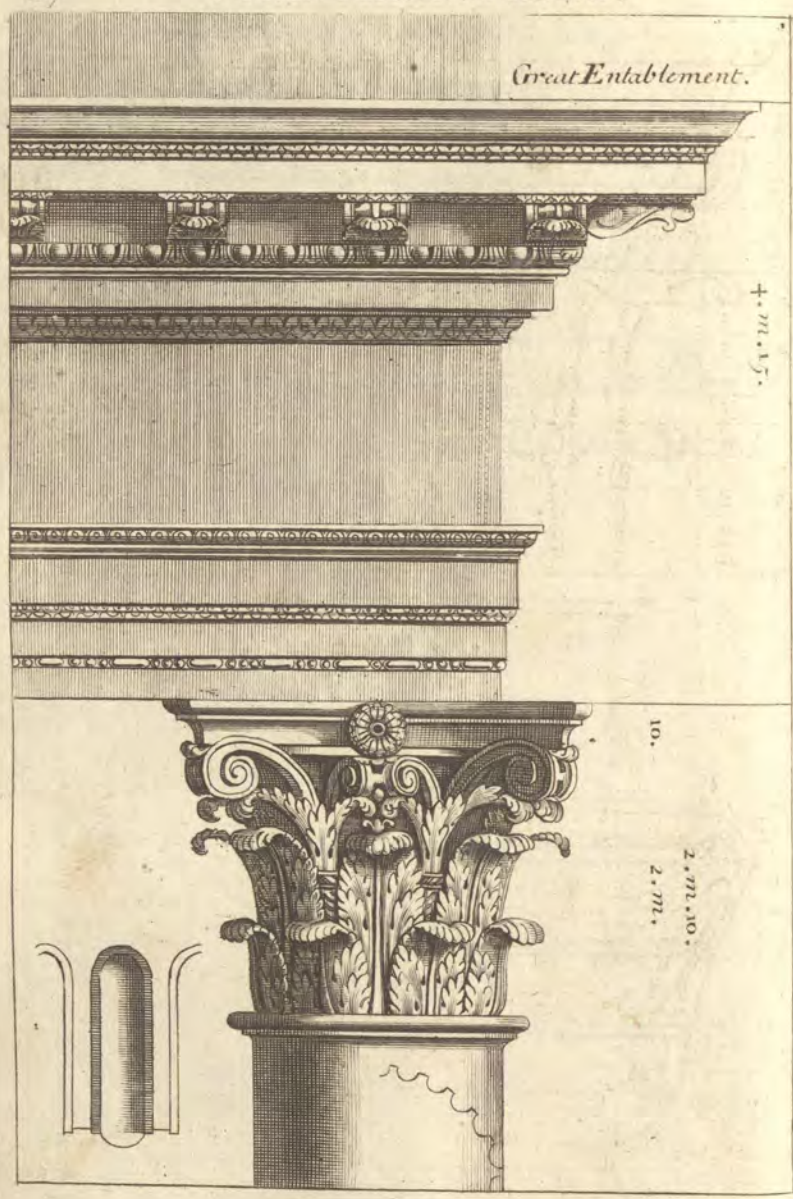


# CORINTHIAN ORDER.

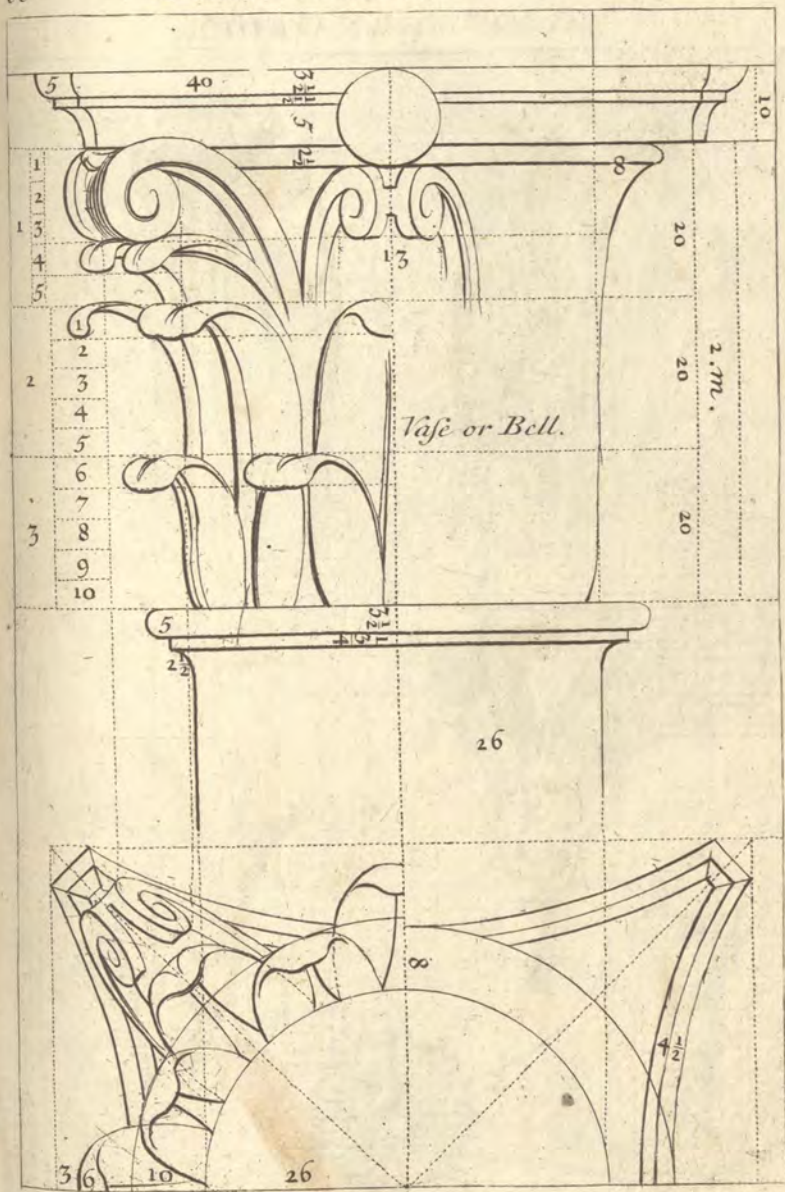
65







# CORINTHIAN ORDER.

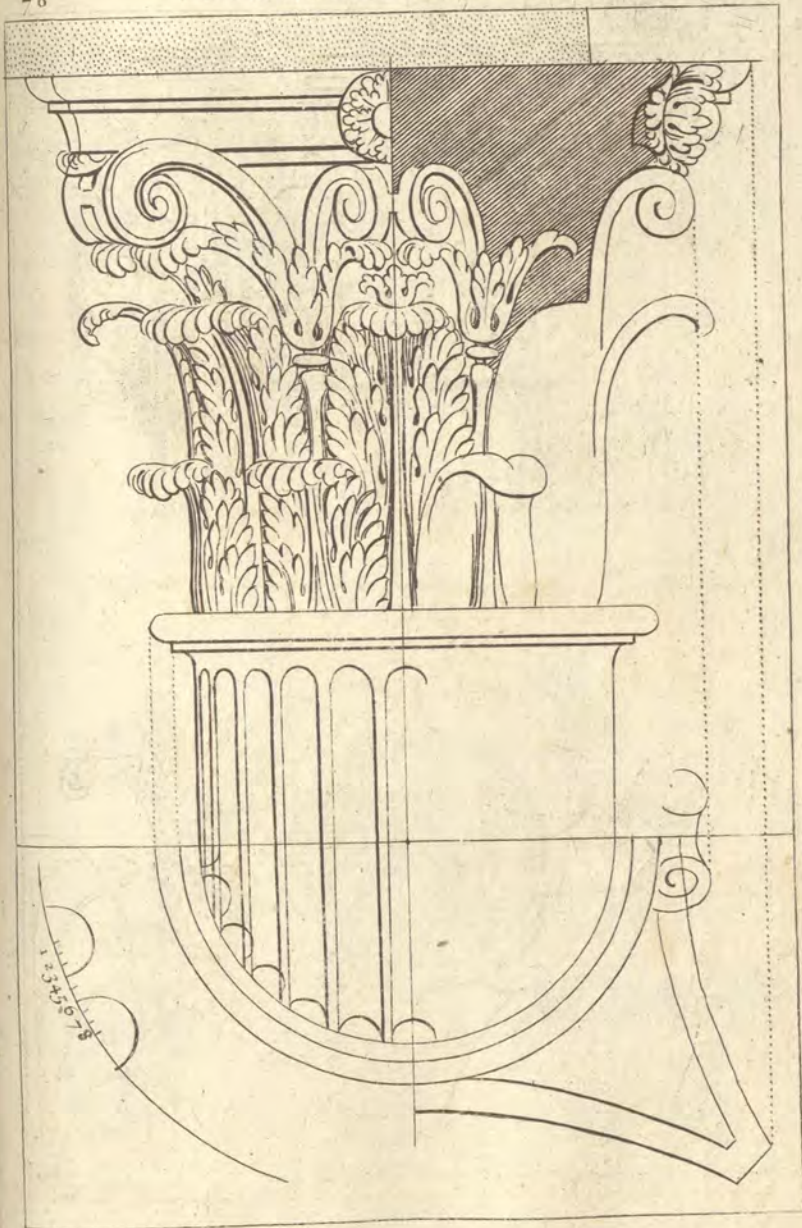


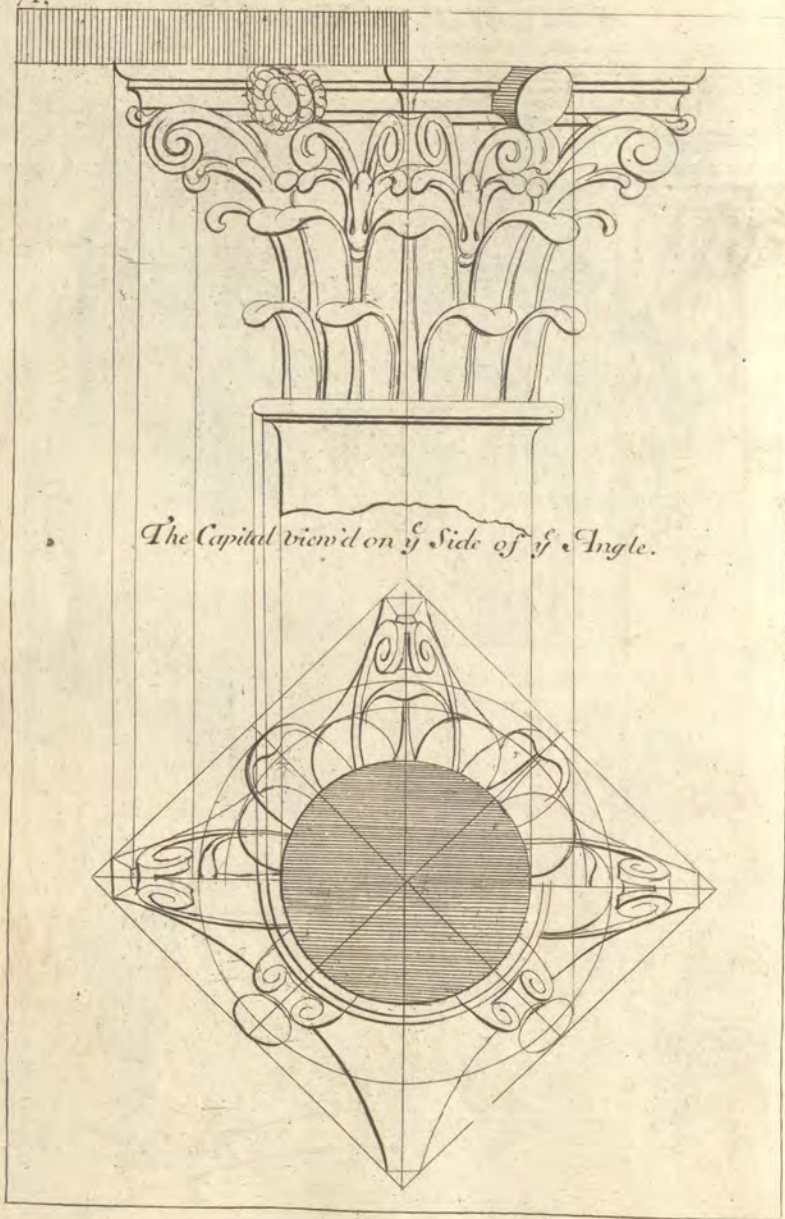
## CORINTHIAN ORDER.

*Leaves of Parsley.**Leaves of Olive.**A. Lips of the Vase.**B. Volutes.**Stems or  
Stalks.**Roſe of the Capital.*

CORINTHIAN ORDER.

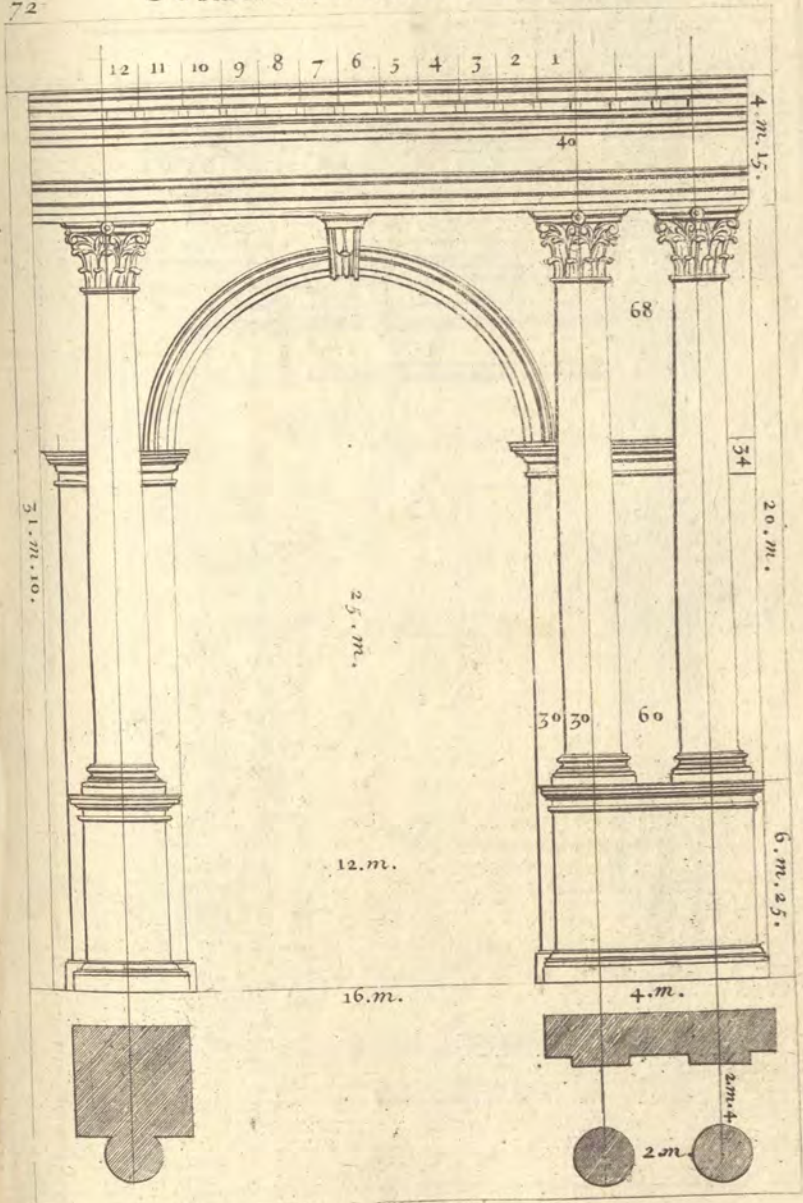
70





# CORINTHIAN ORDER.

72





# CORINTHIAN ORDER.

74

14  $\frac{1}{2}$

A

B

6. m. + 2.5. p.

33

30

30

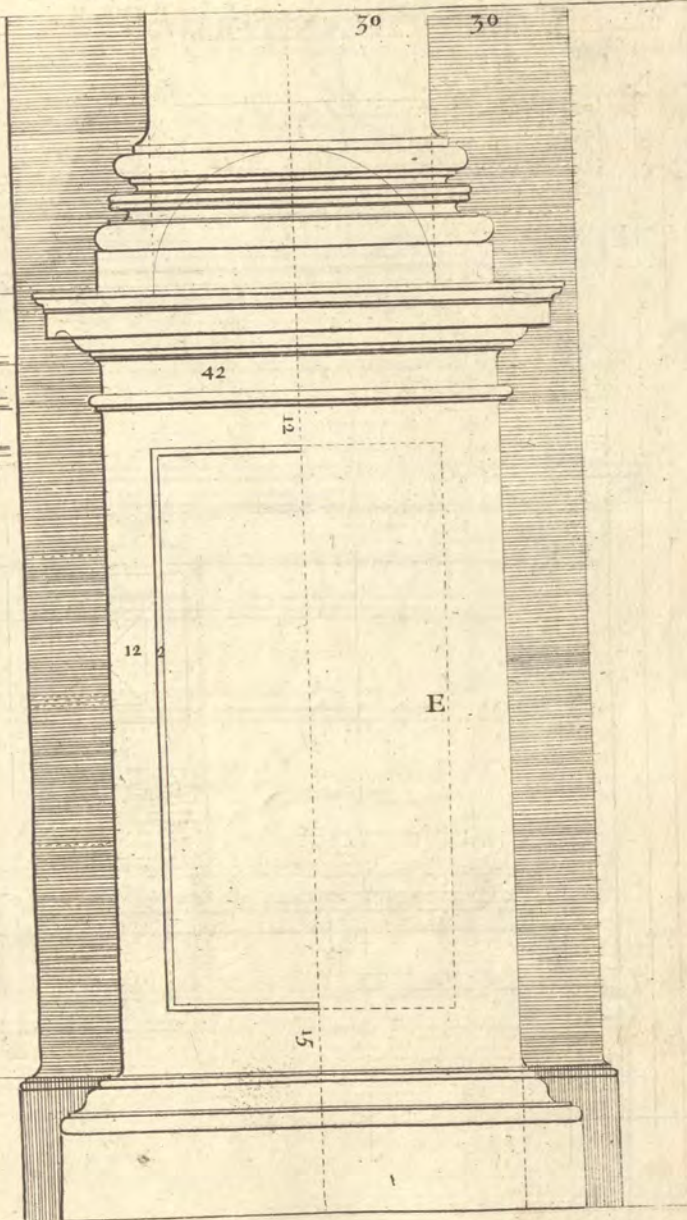
42

15

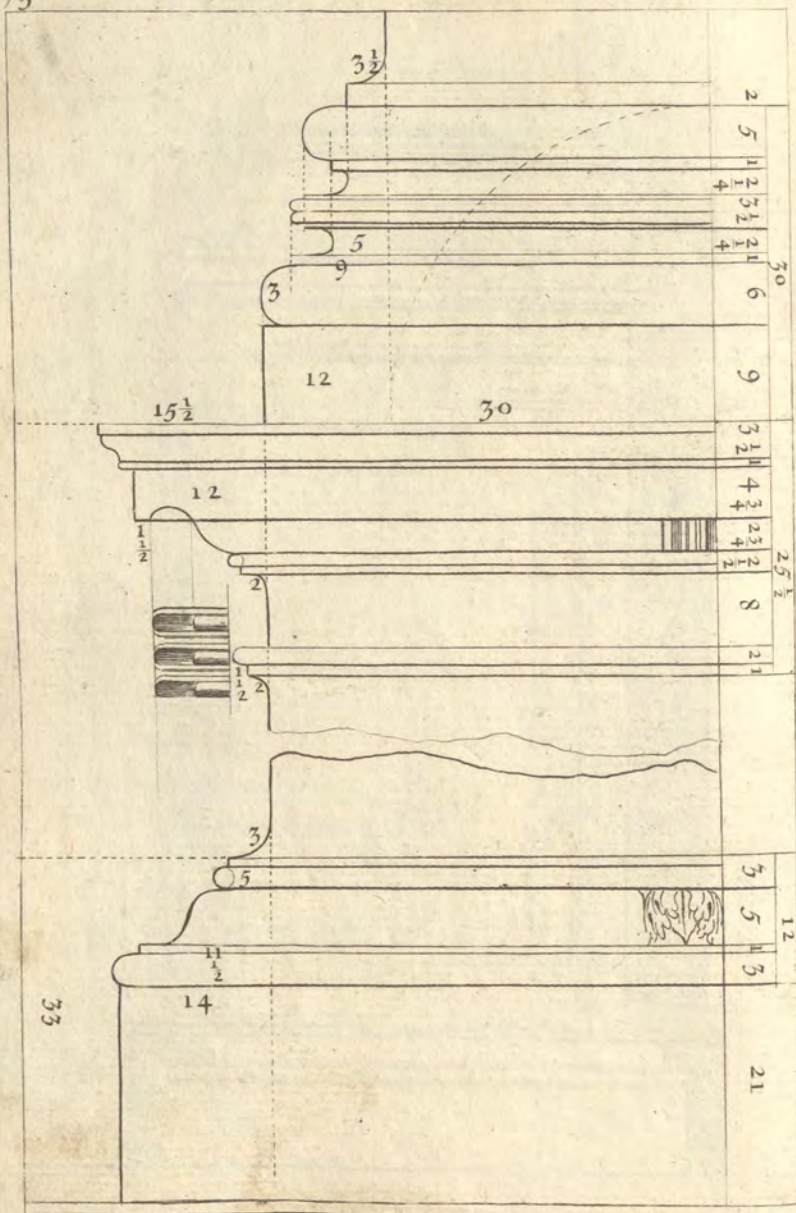
12

E

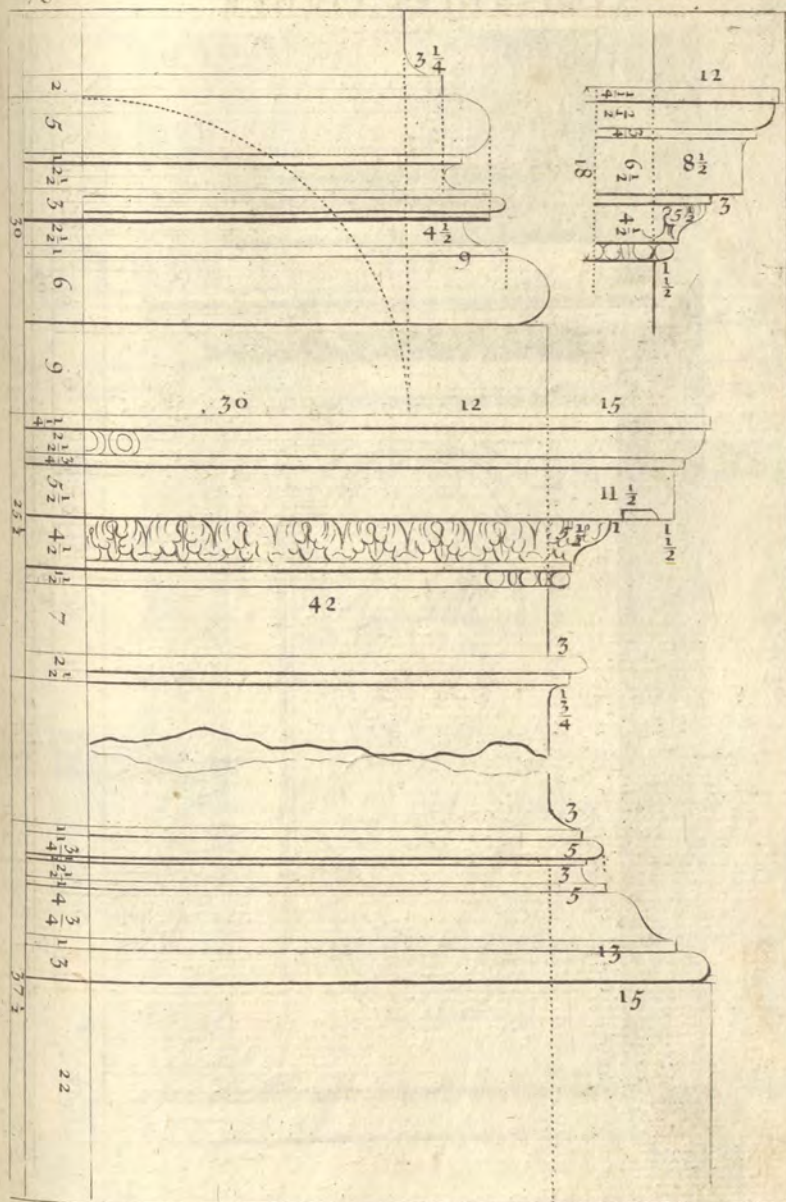
15

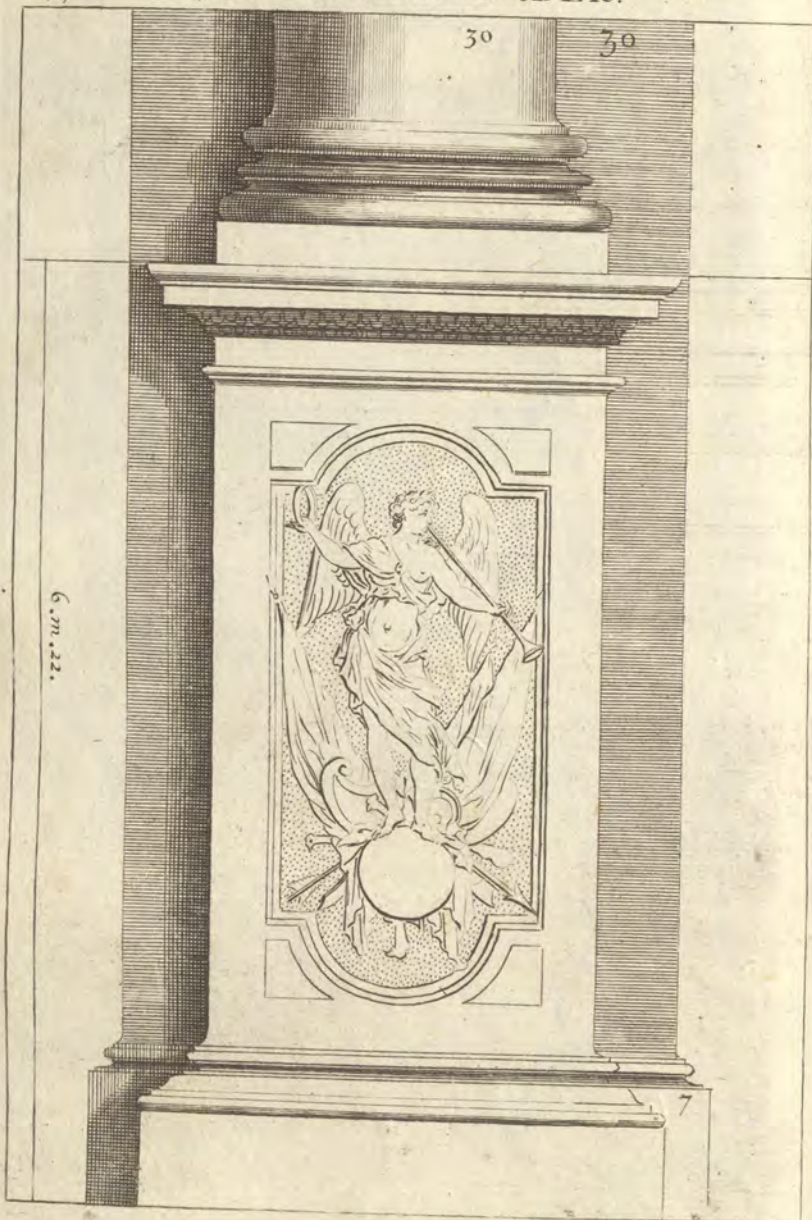


## CORINTHIAN ORDER.



## CORINTHIAN ORDER.





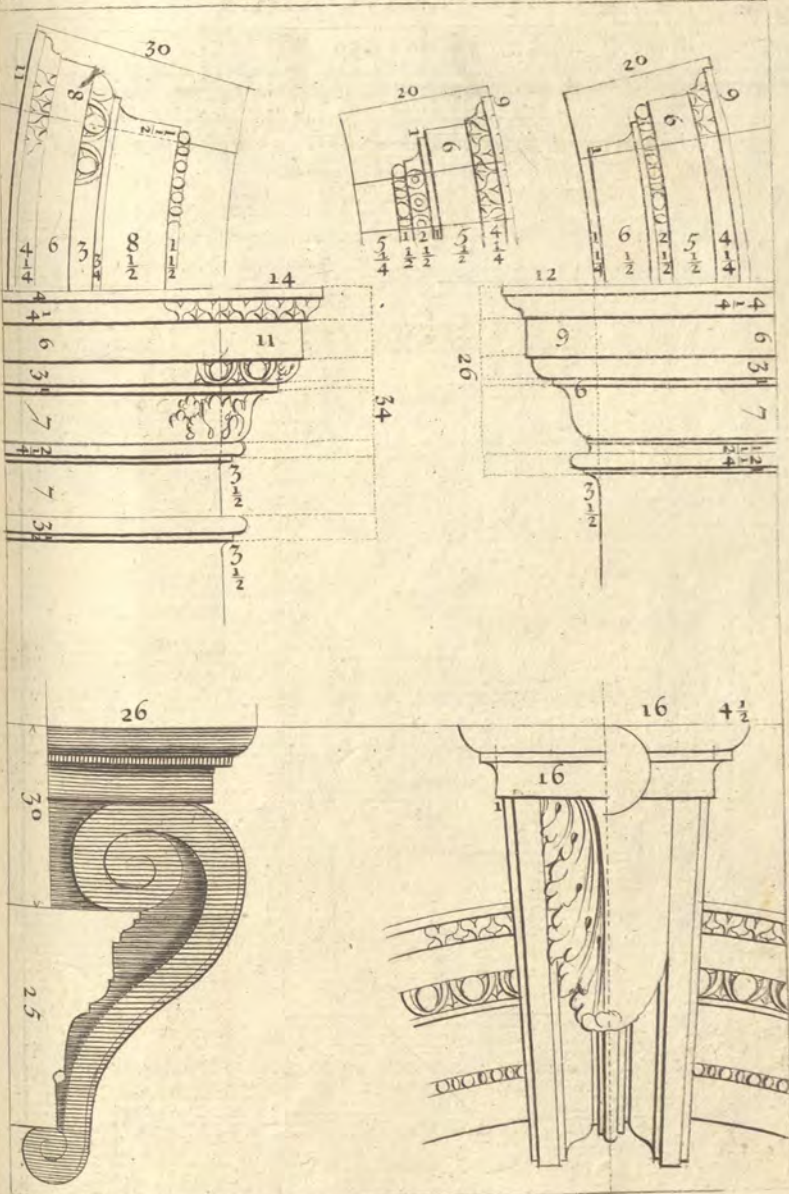
30

30

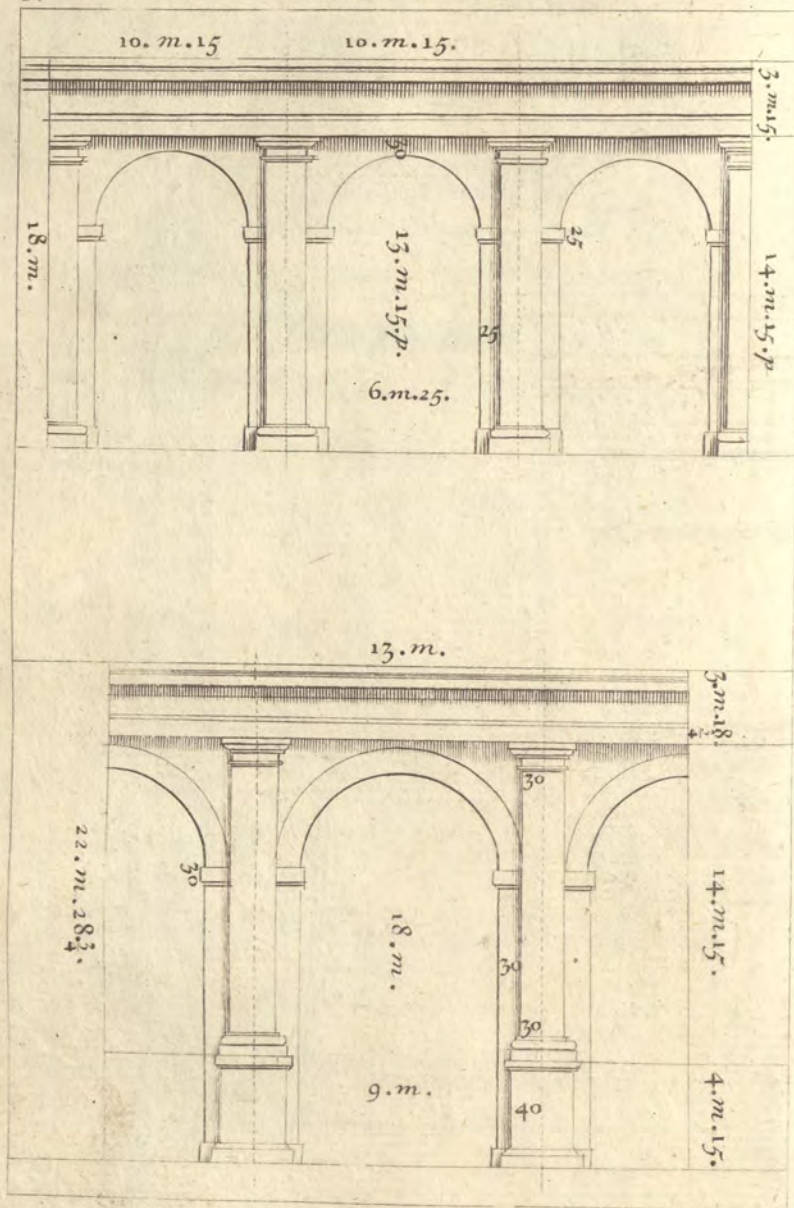
G. m. 22.

7

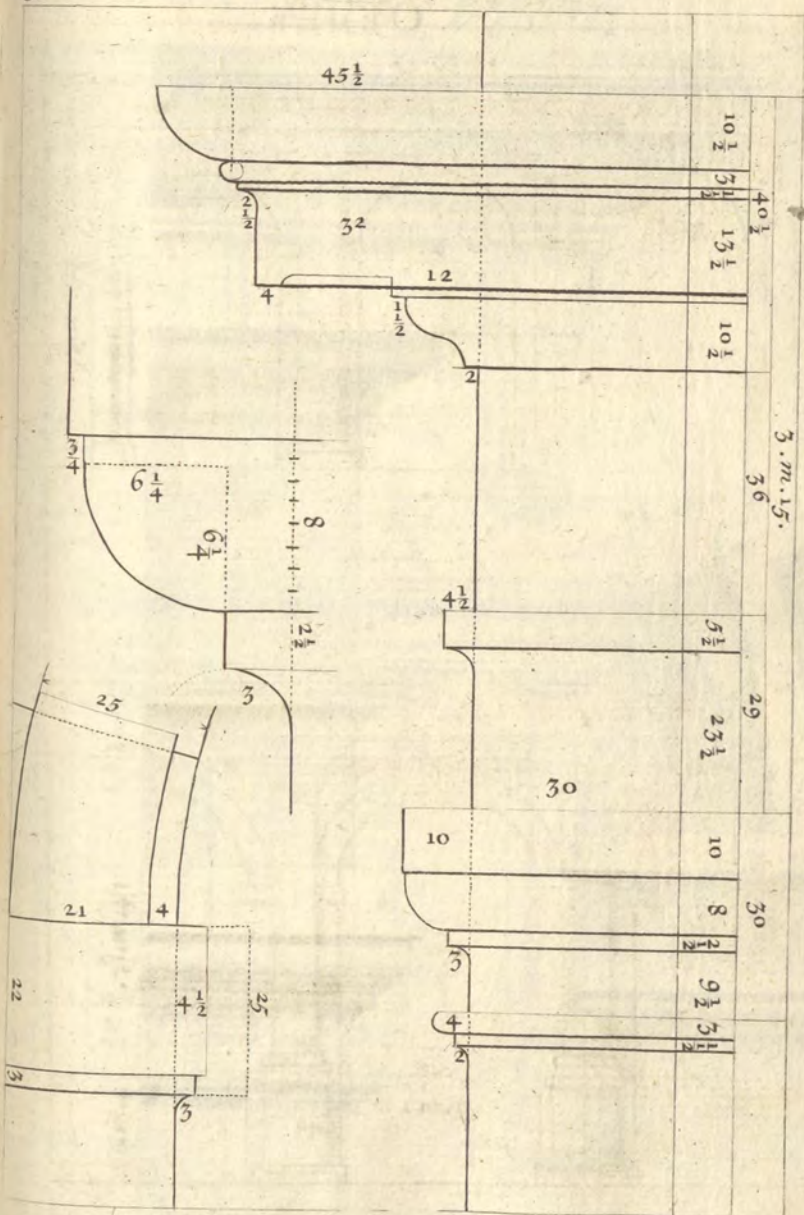
# CORINTHIAN, ORDER.



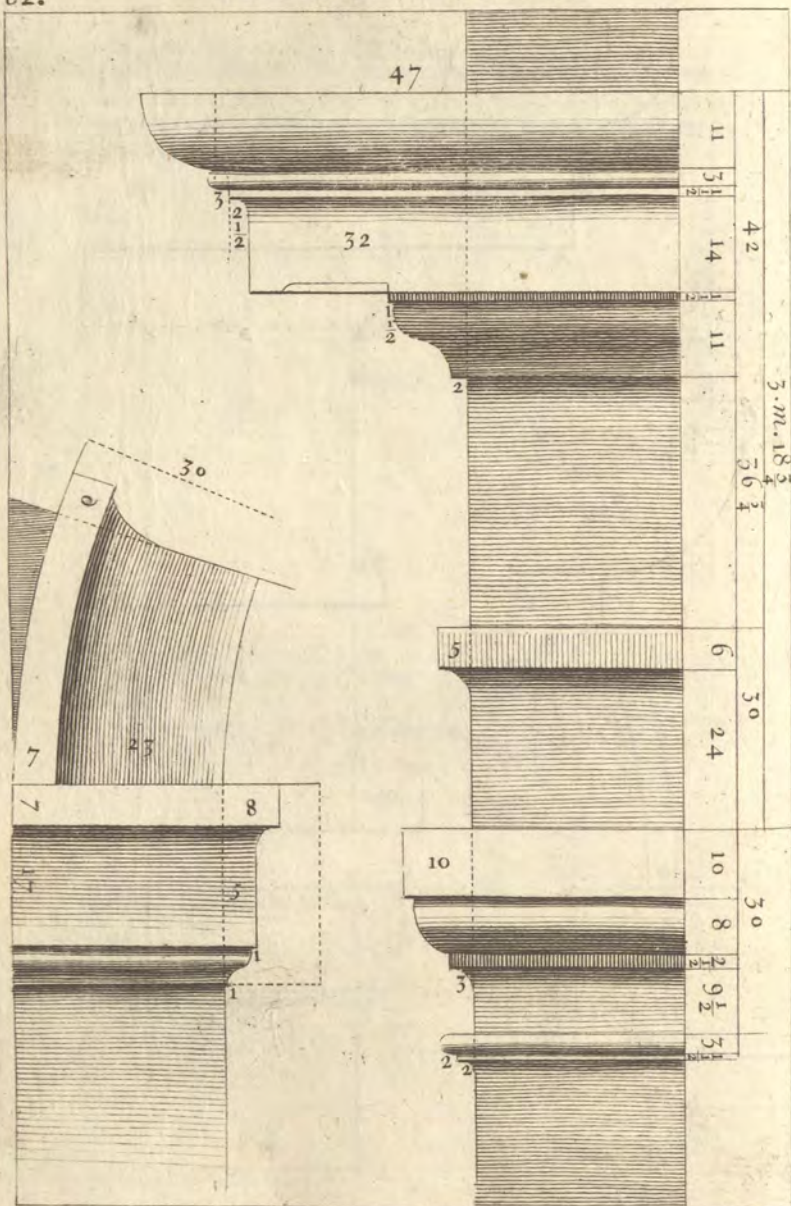
## TUSCAN ORDER.



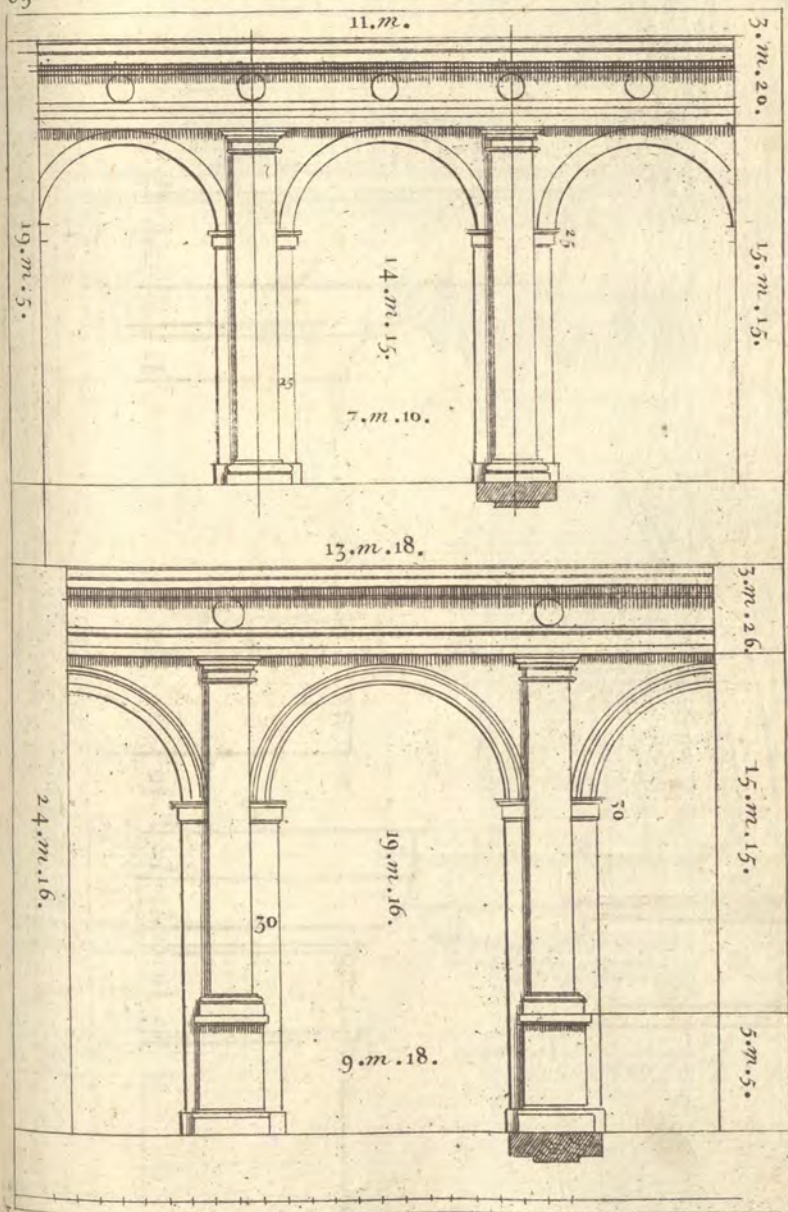
## TUSCAN, ORDER.



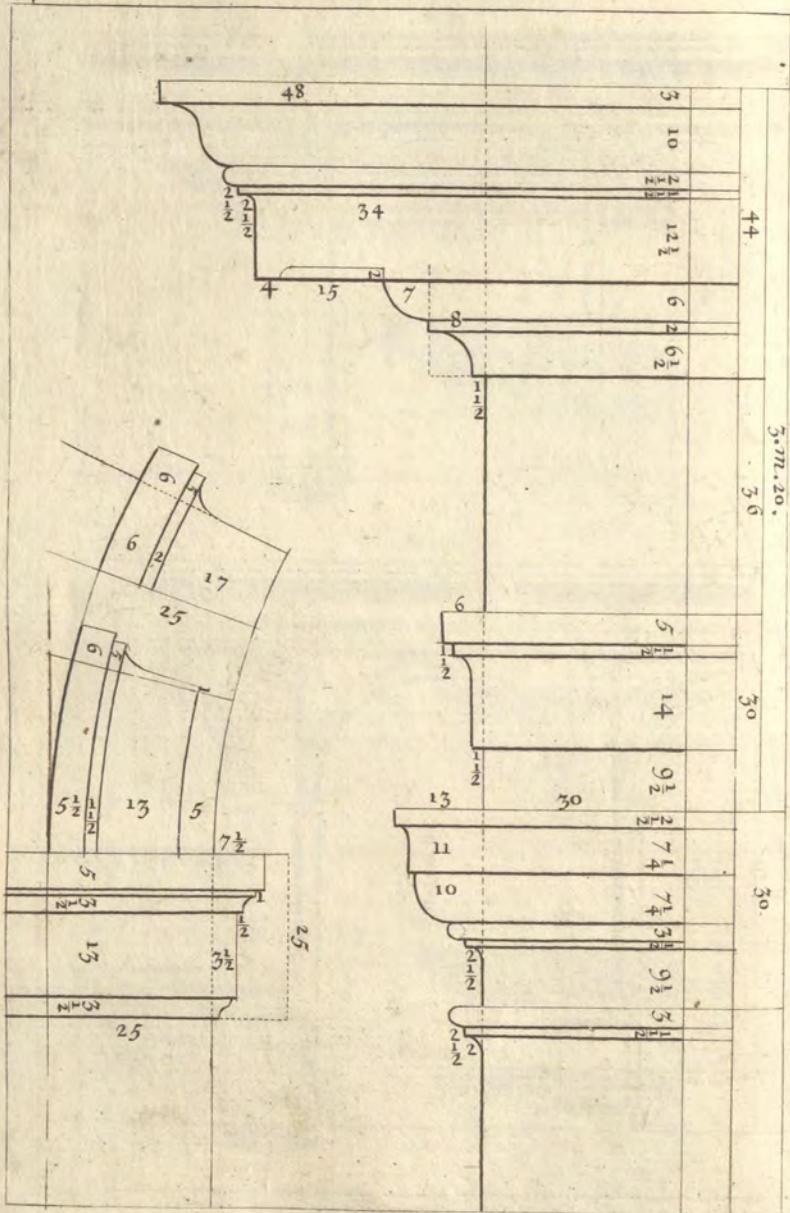
## TUSCAN ORDER.



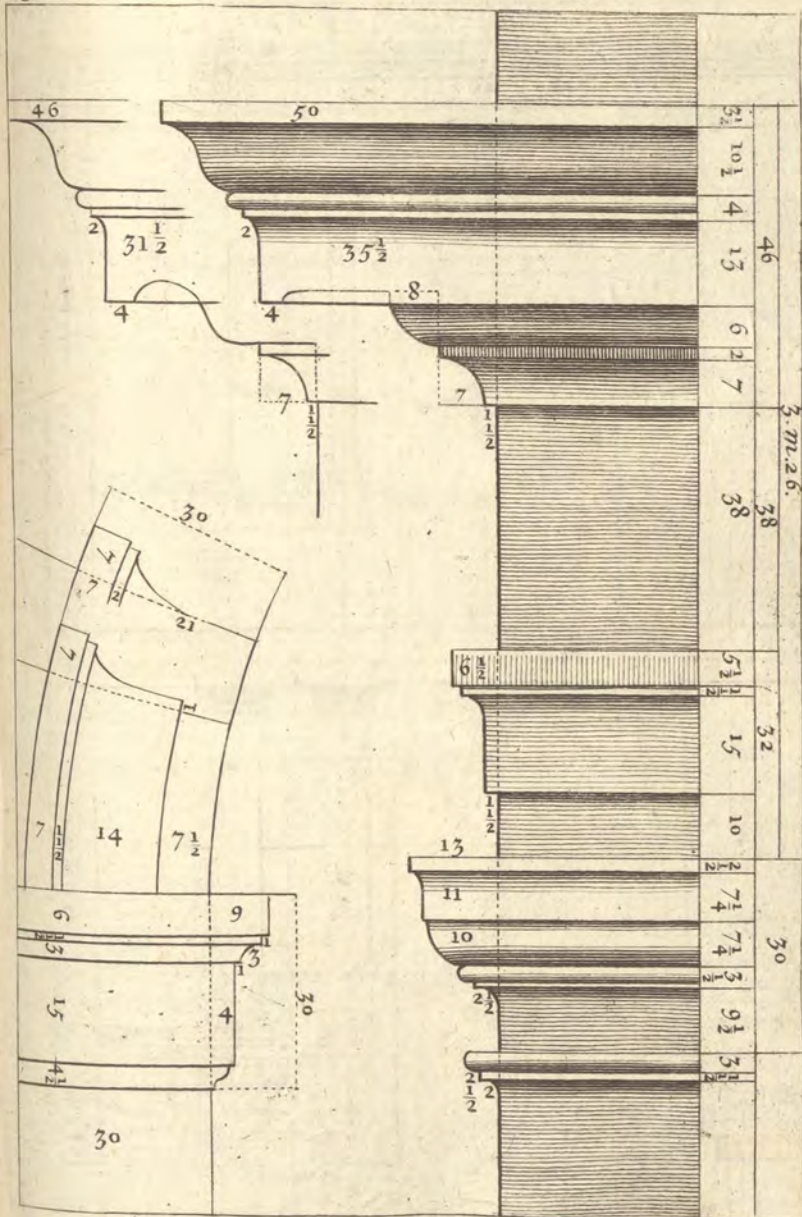
# II. TUSCAN ORDER.



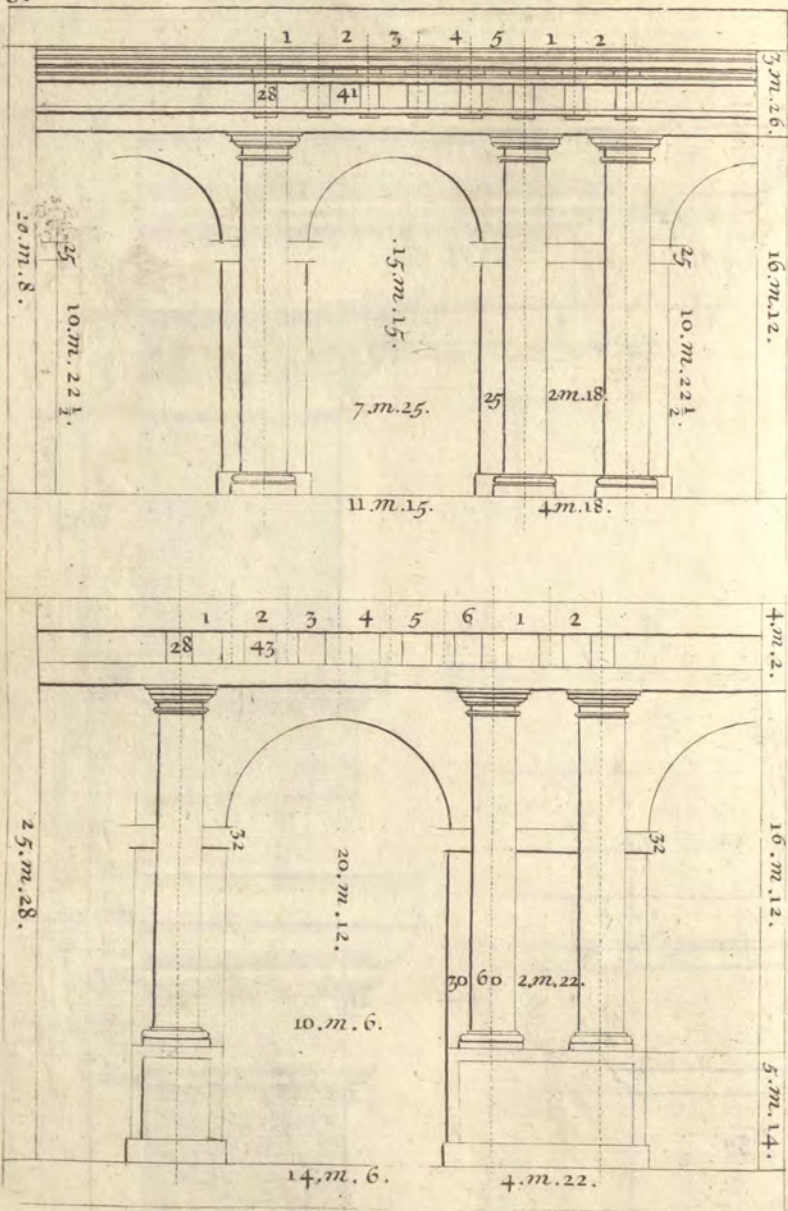
## II TUSCAN. ORDER.



## II. TUSCAN ORDER.

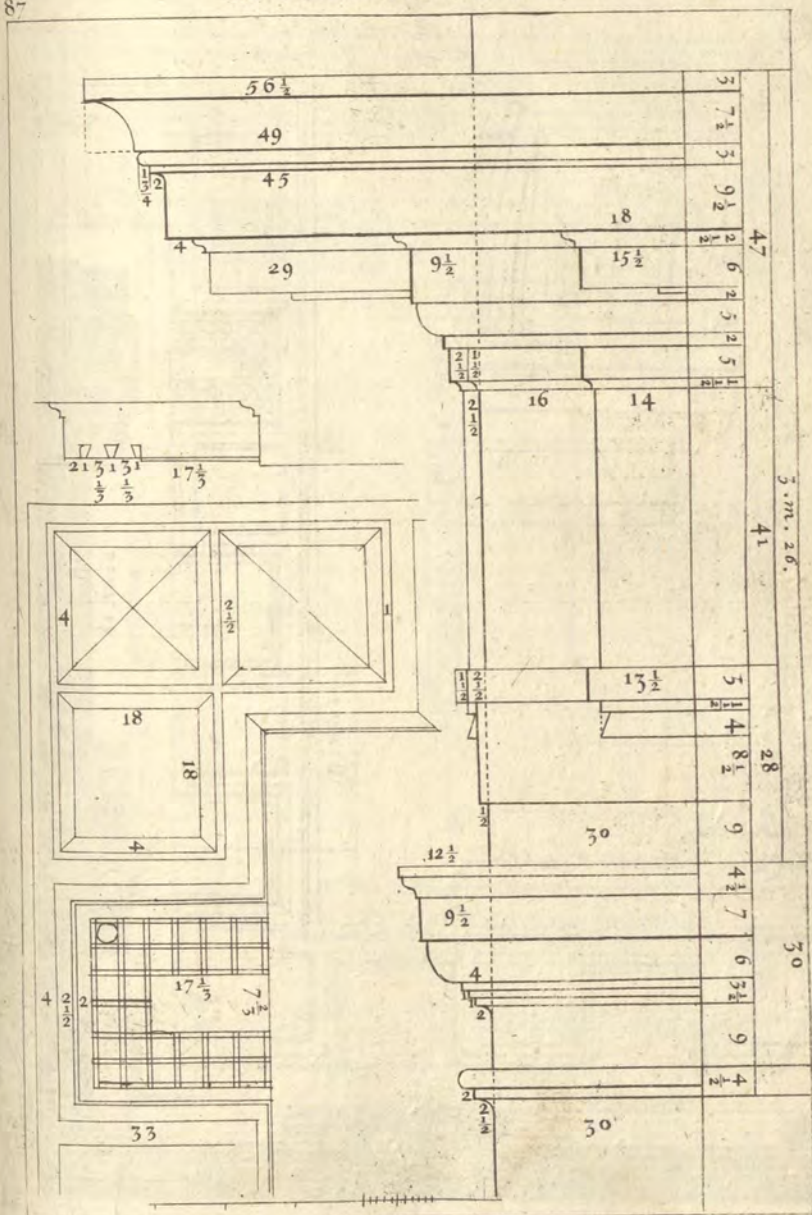


## DORIC ORDER.

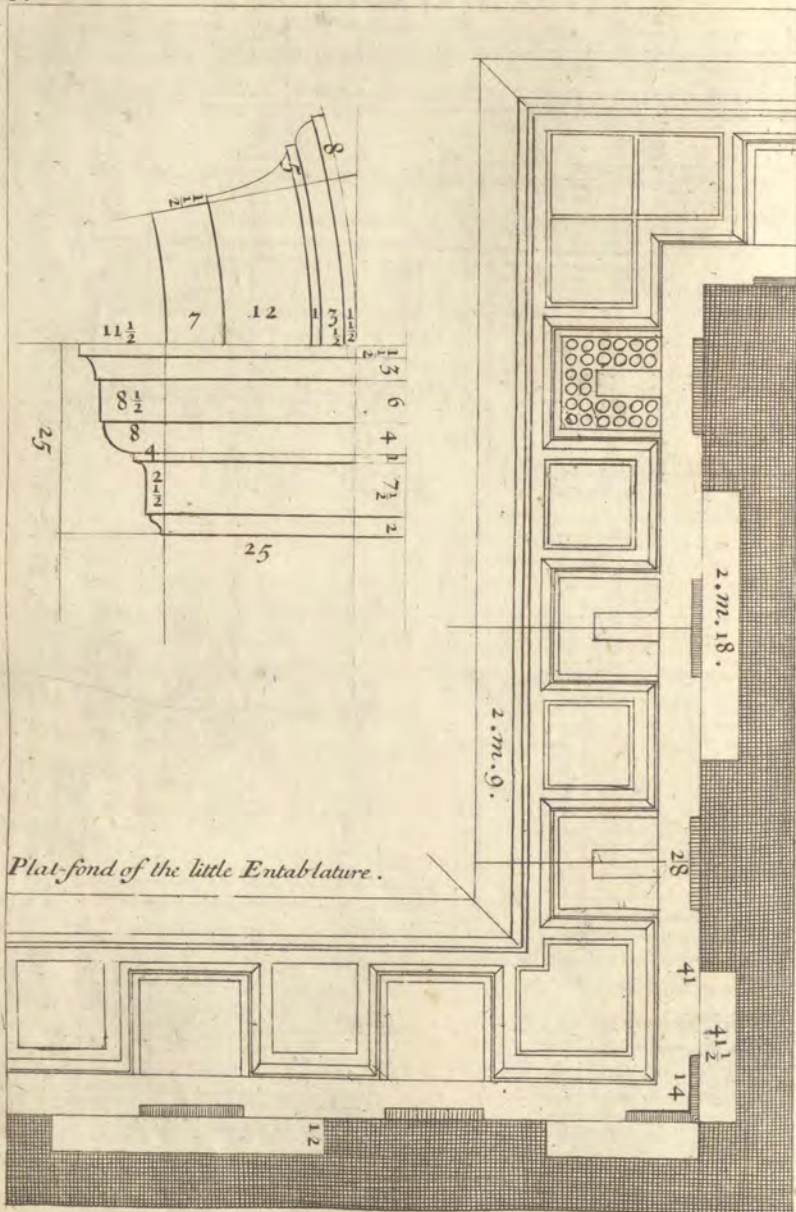


# DORIC ORDER.

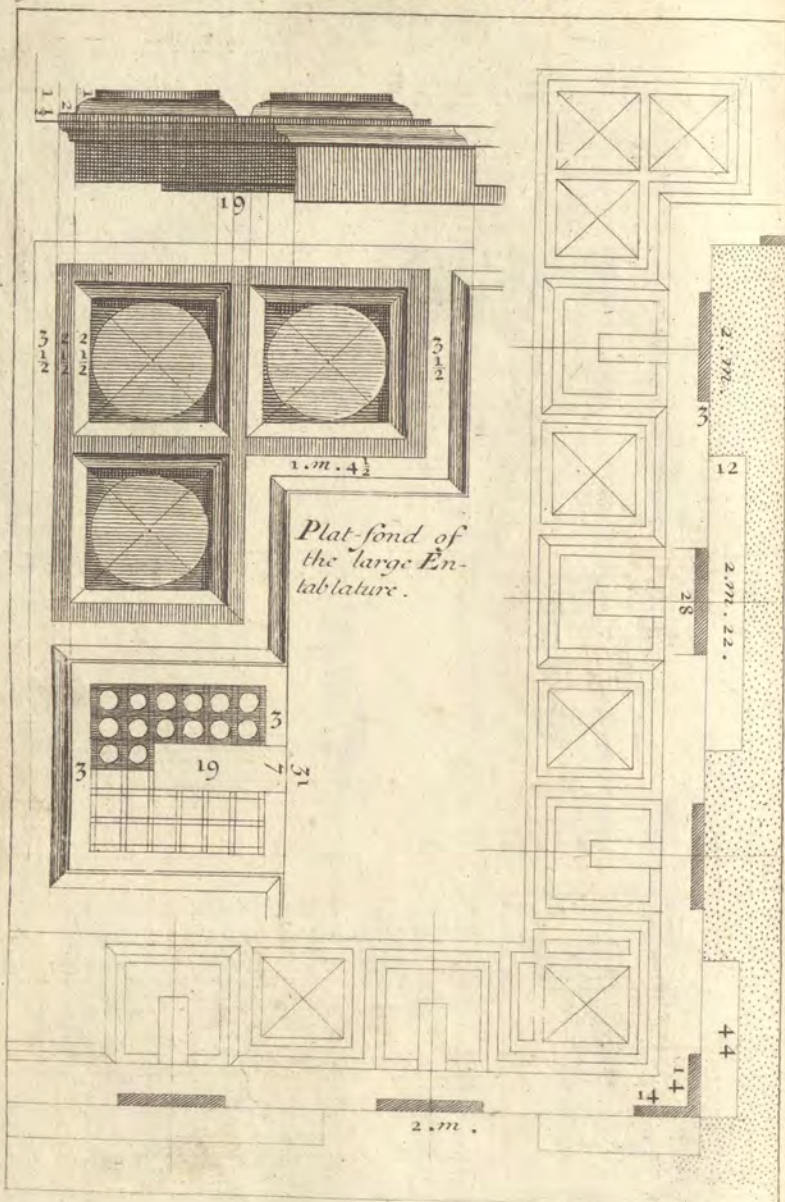
87



## DORIC ORDER.

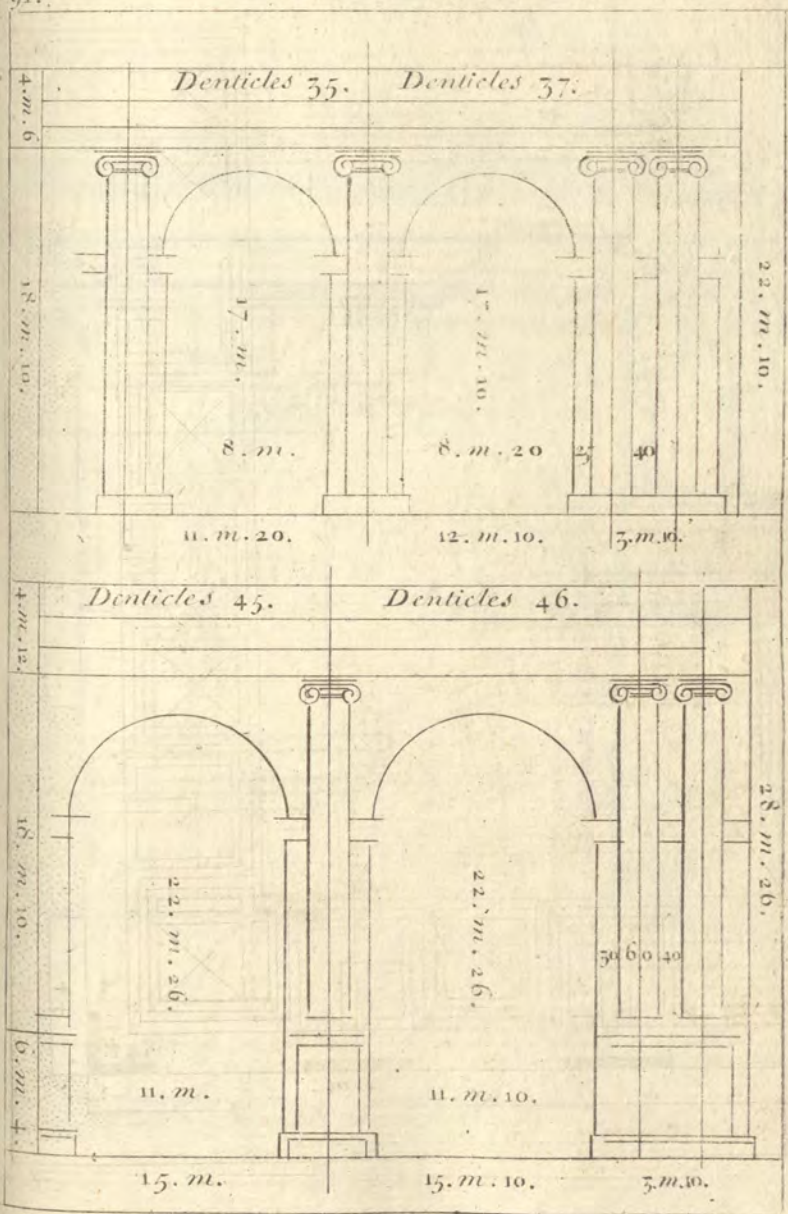






# IONIC ORDER.

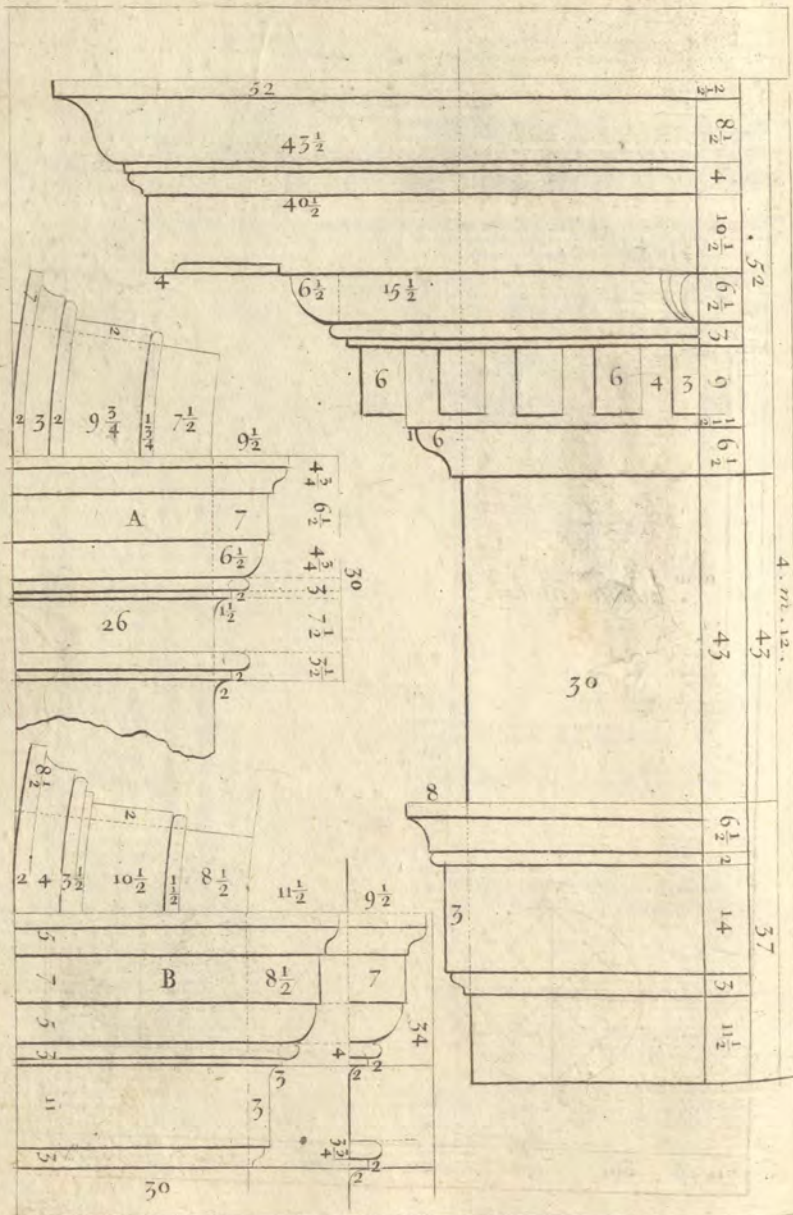
91.





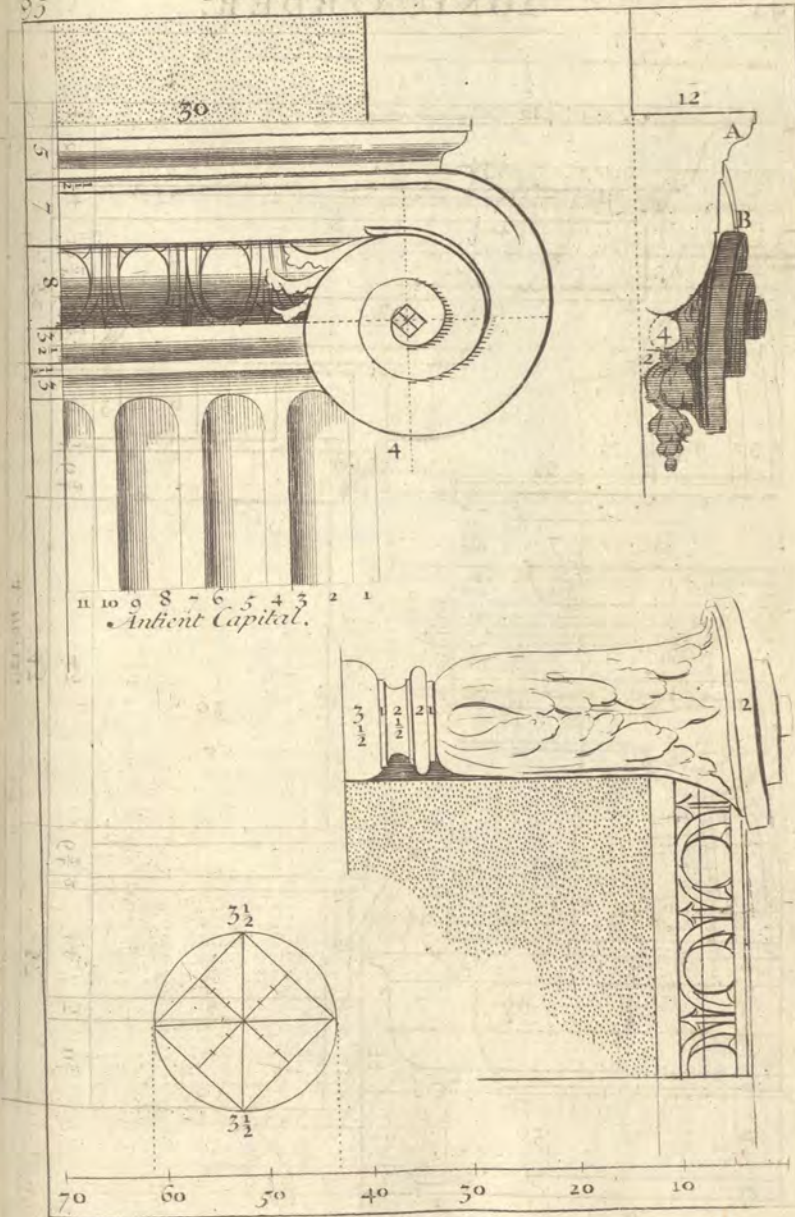


IONIC ORDER.

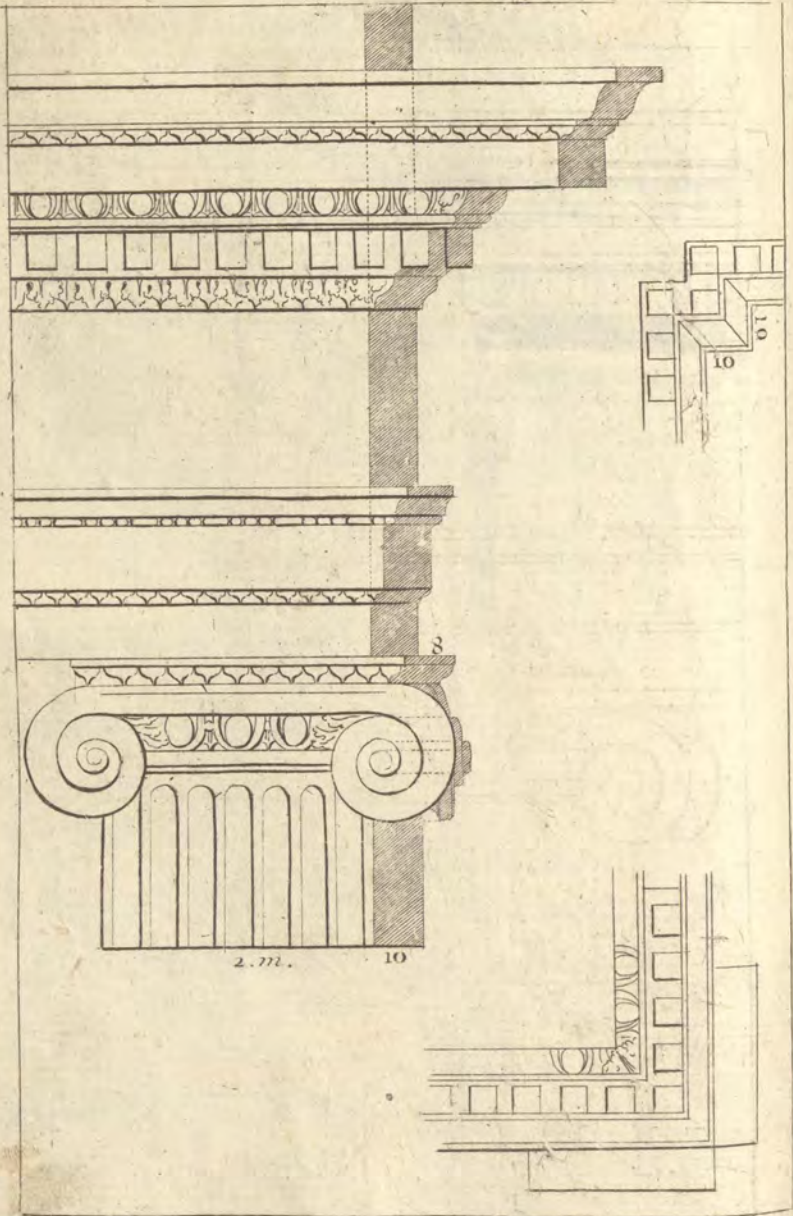


# IONIC ORDER

95

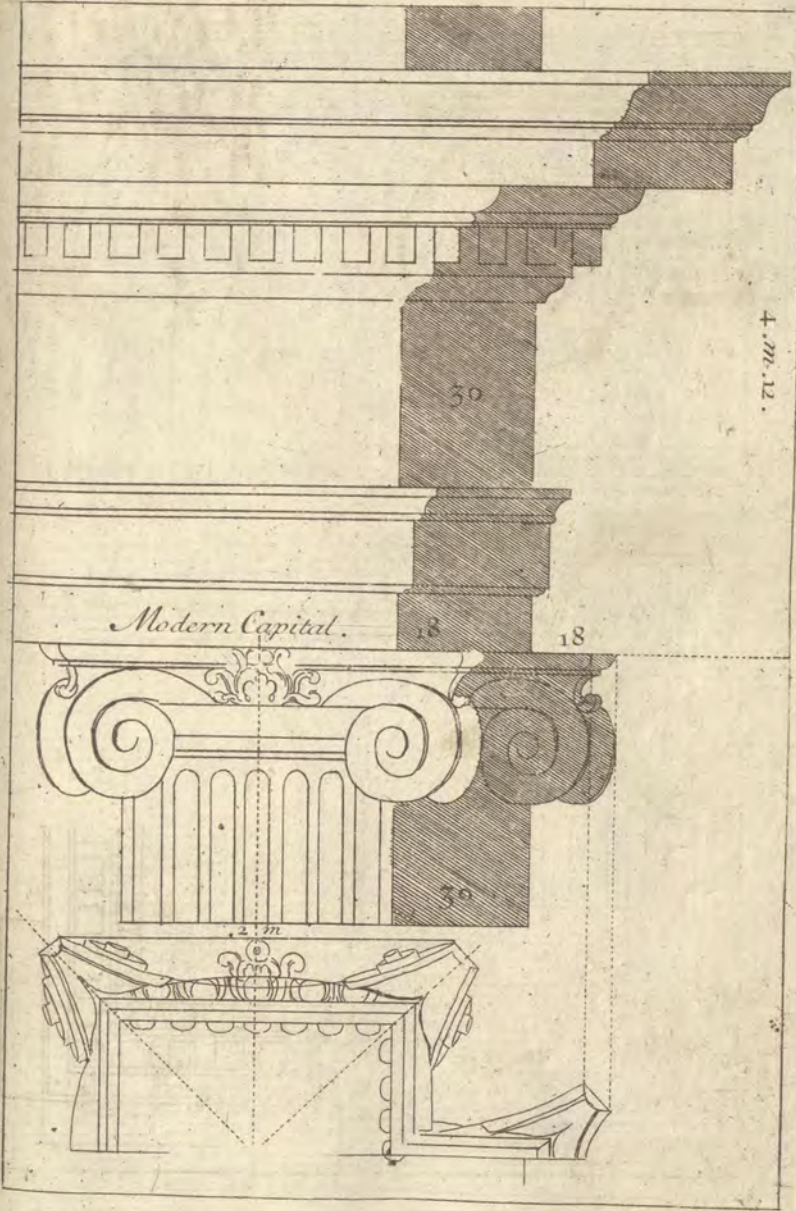


# IONIC ORDER.

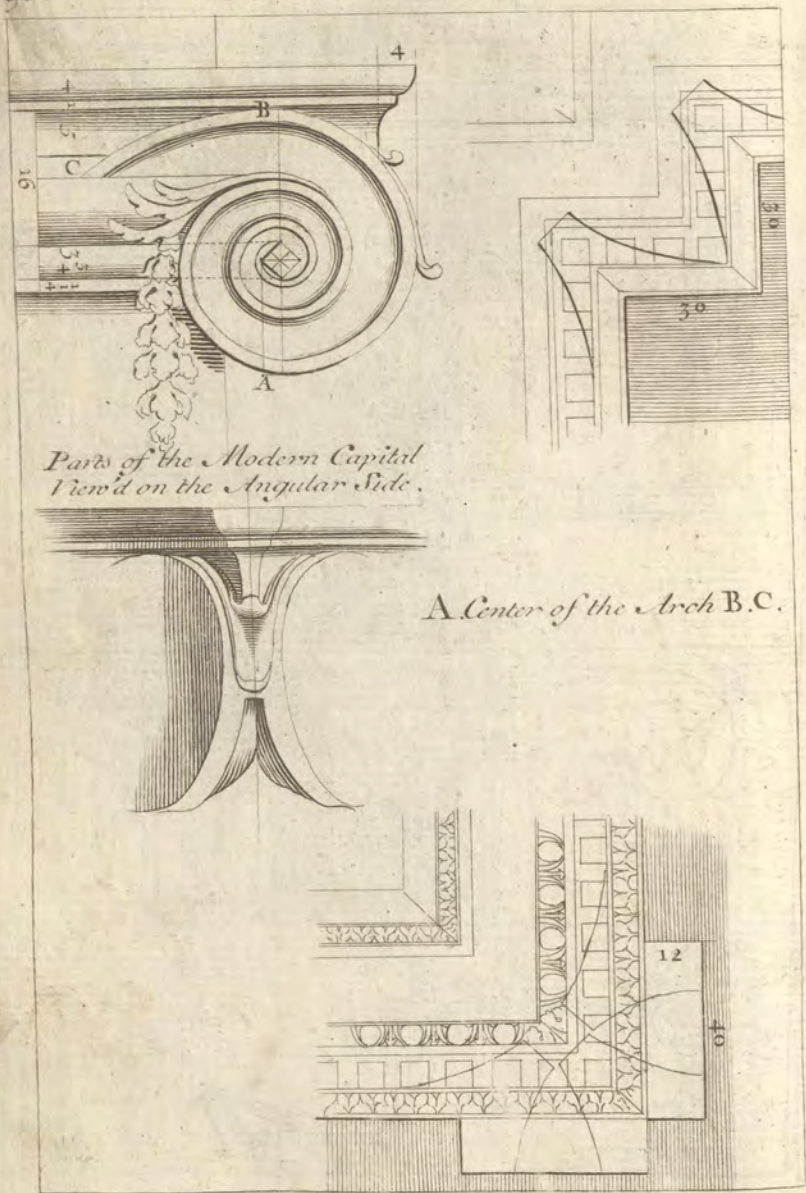


# IONIC ORDER.

+ m. 12.



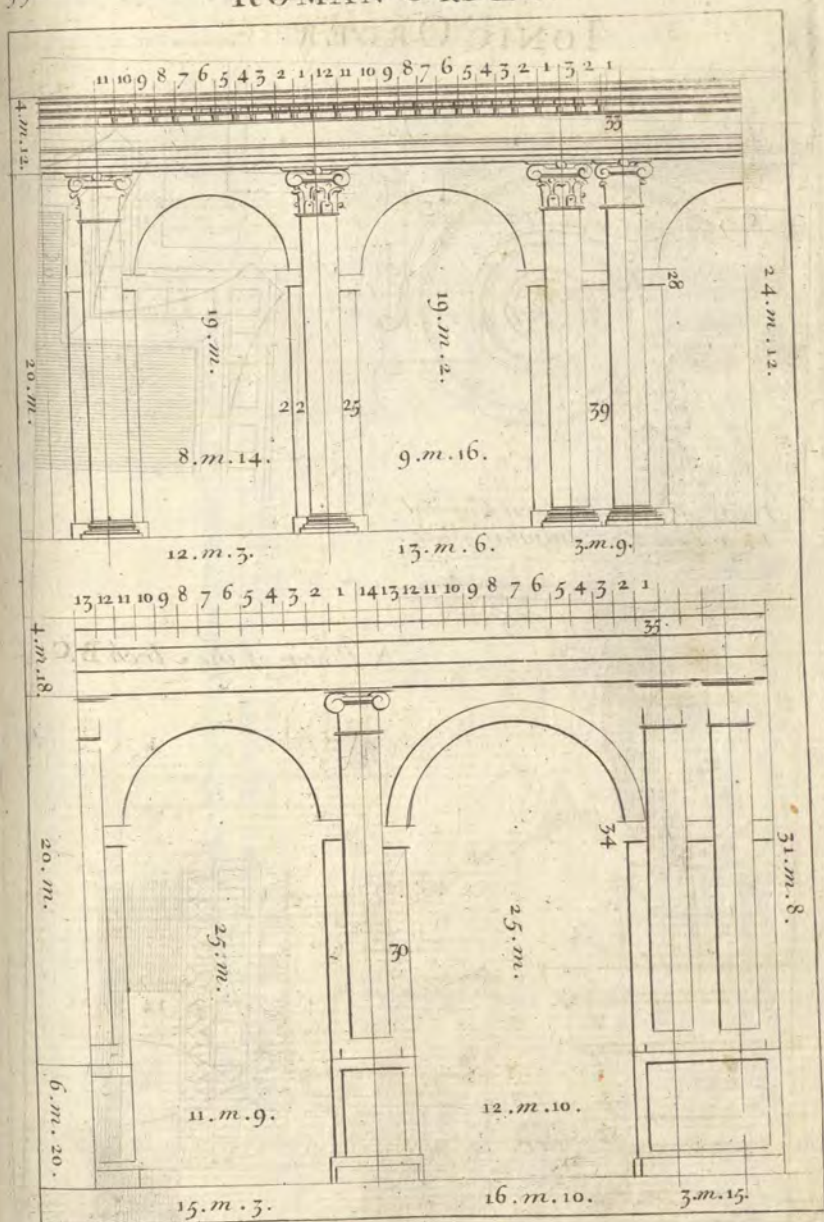
# IONIC ORDER



*Parts of the Modern Capital  
View'd on the Angular Side.*

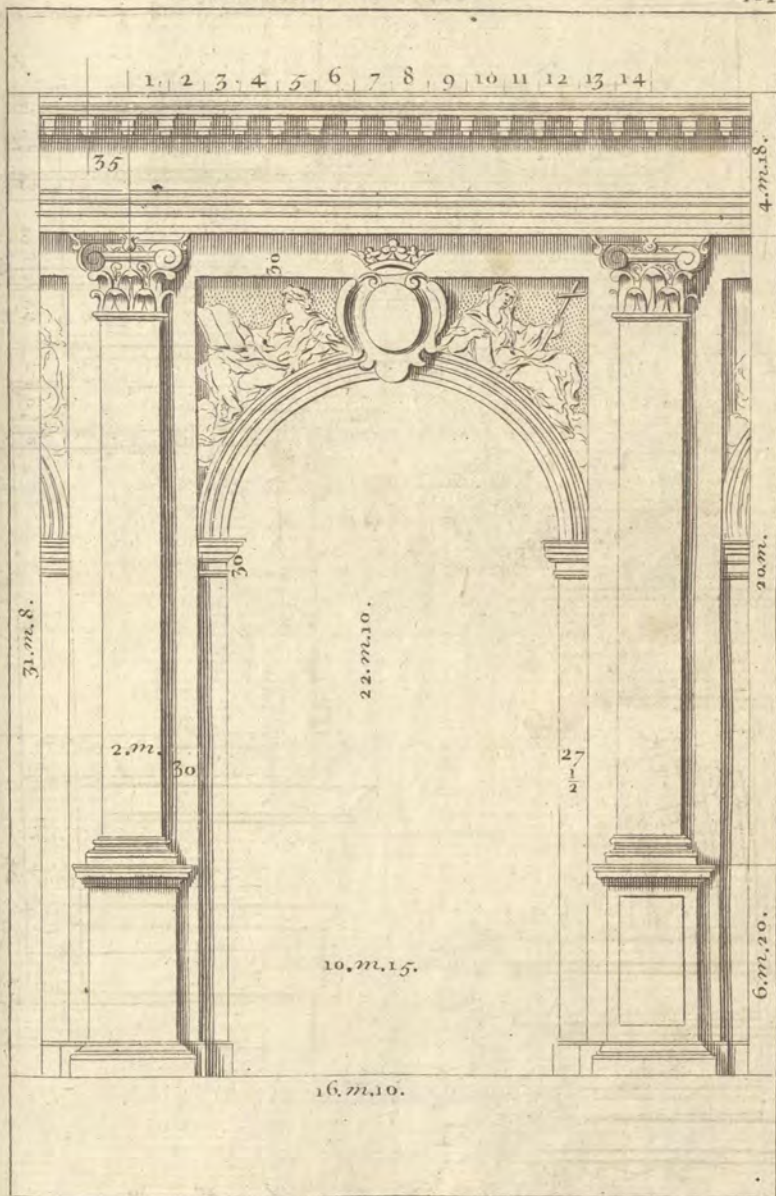
*A Center of the Arch B.C.*

## ROMAN ORDER.



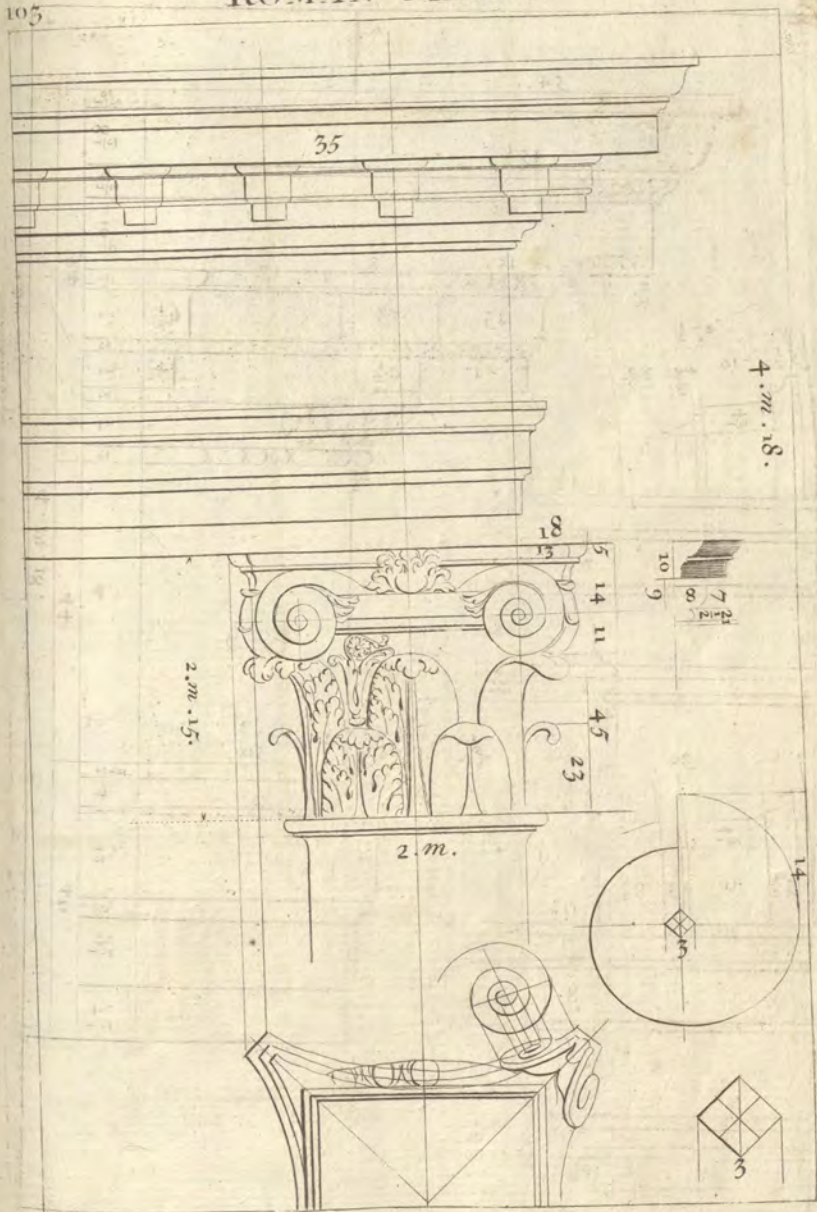


# ROMAN ORDER





# ROMAN ORDER.



4. m. 18.

2. m. 15.

2. m.

35

18

10  
7  
8  
9  
21

45

23

14

3

9

10

7

8

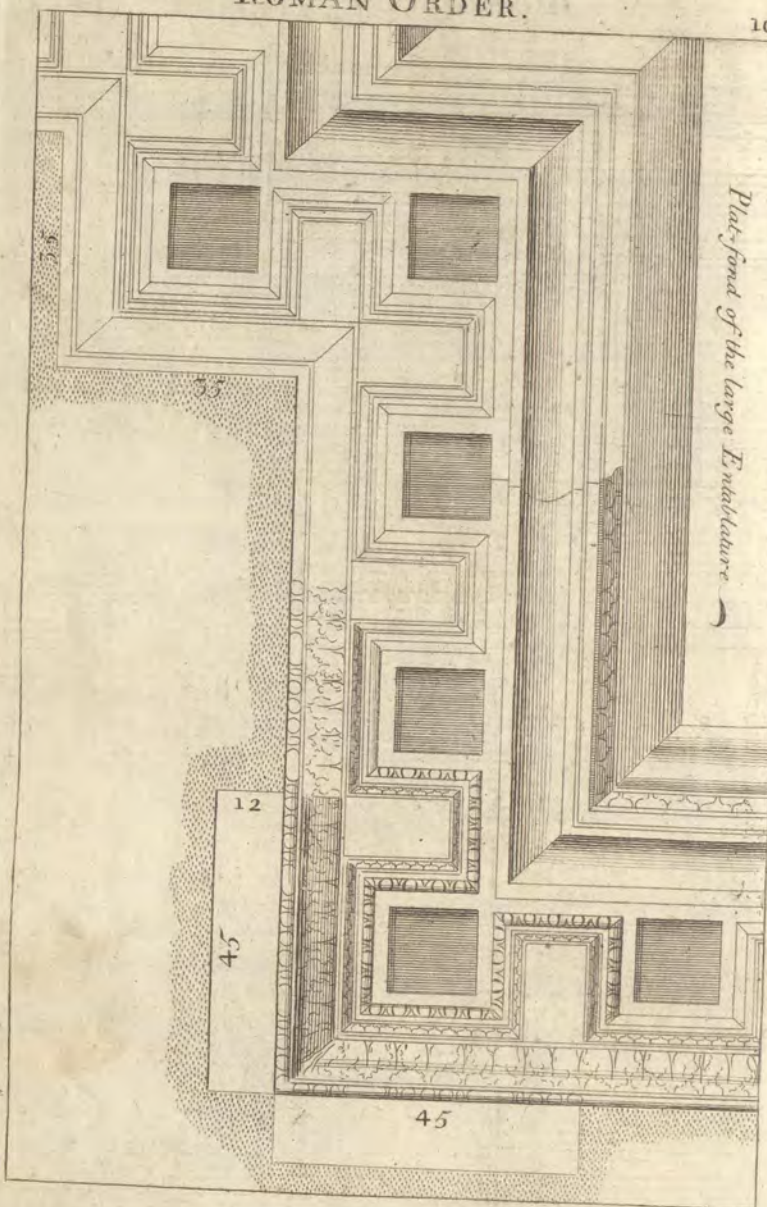
21

5

14

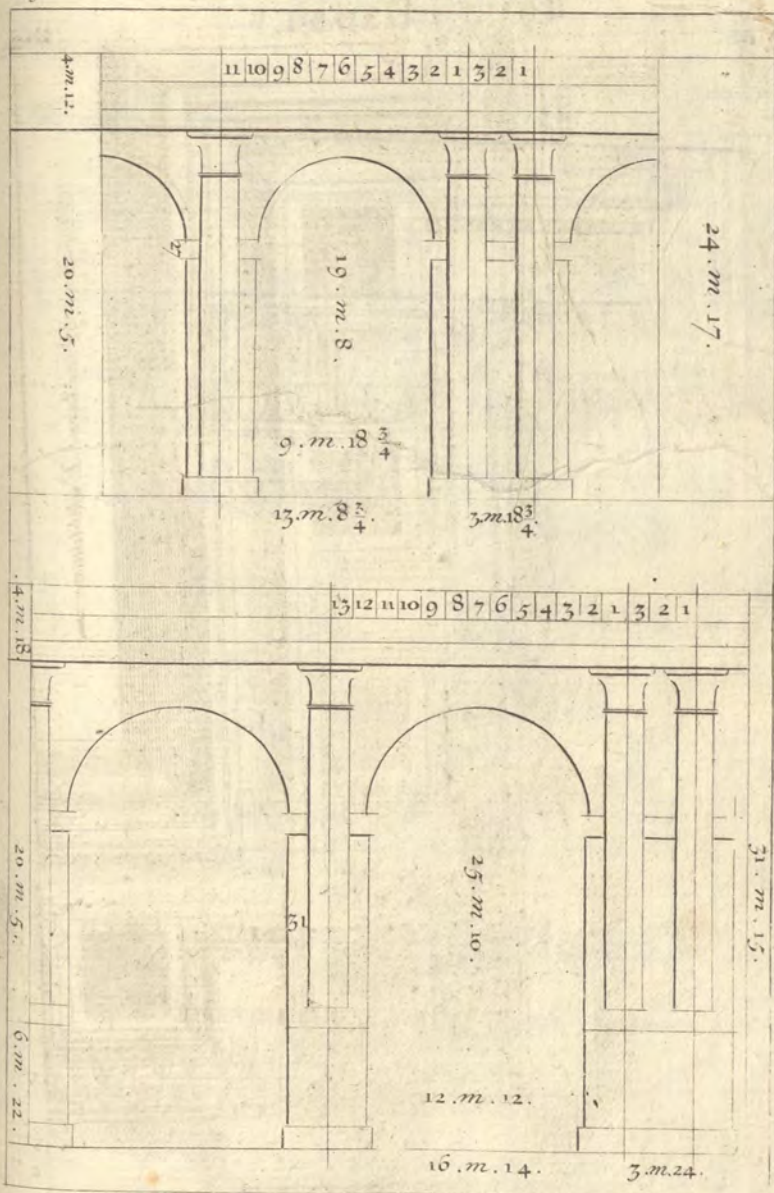
11

ROMAN ORDER.



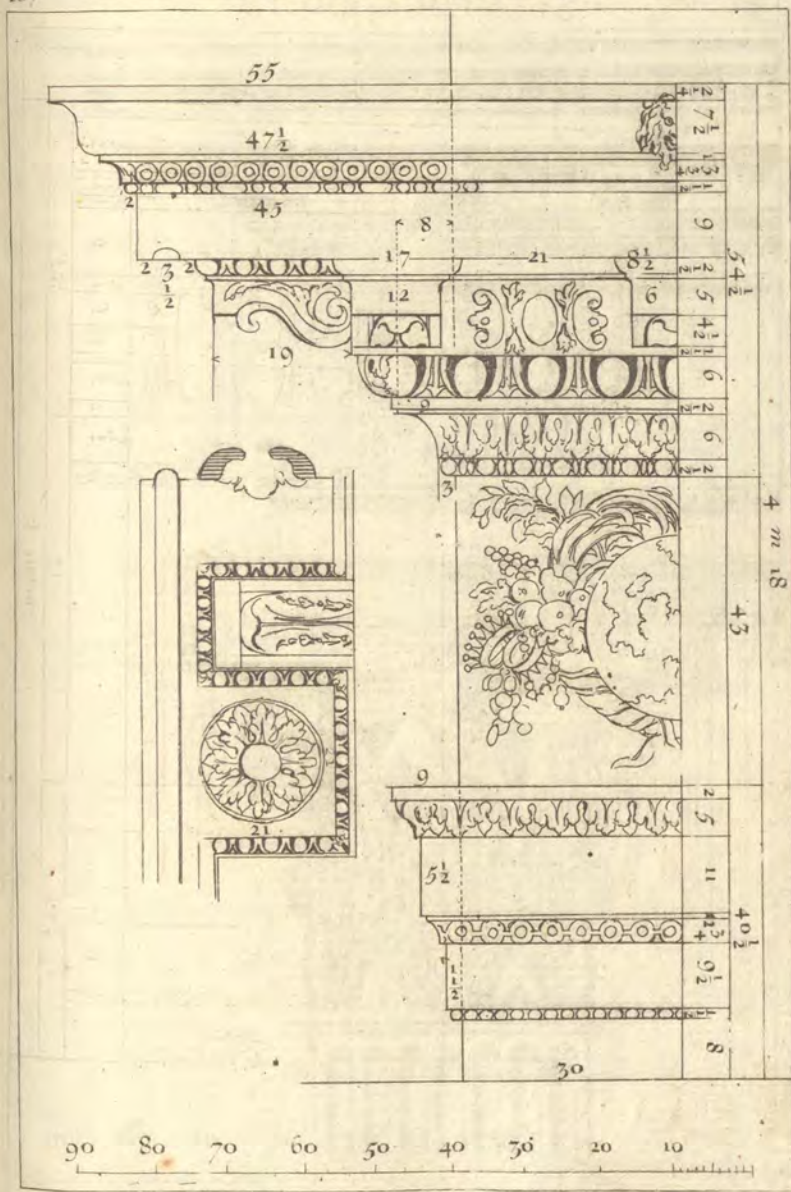
*Plat-fond of the large Entablature*

## SPANISH ORDER.

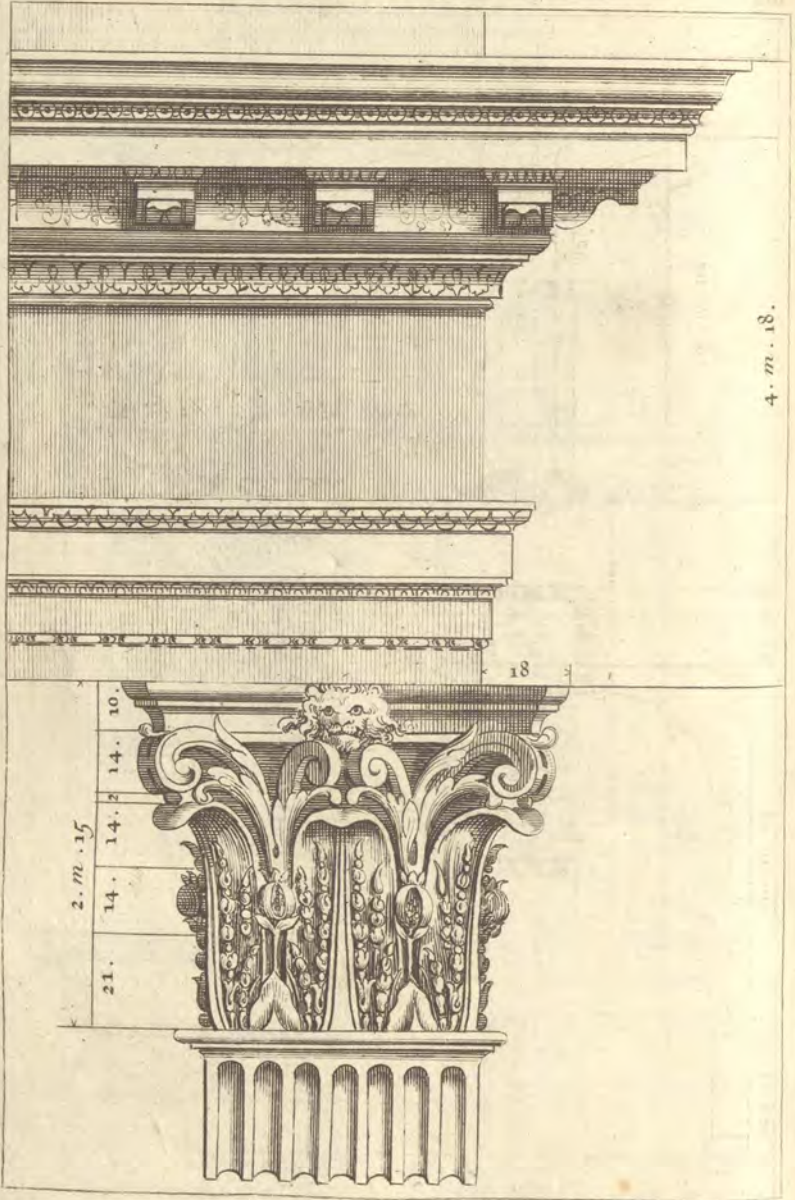




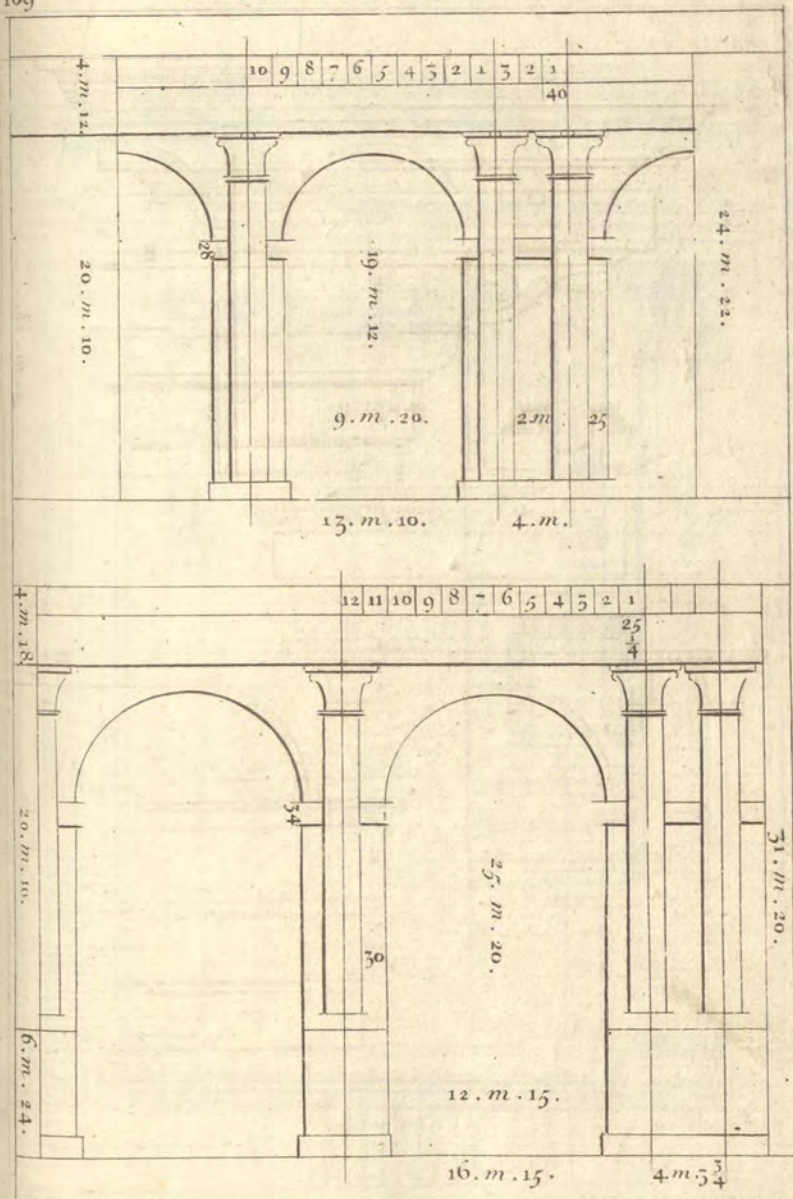
③  
SPANISH ORDER.



# SPANISH ORDER.



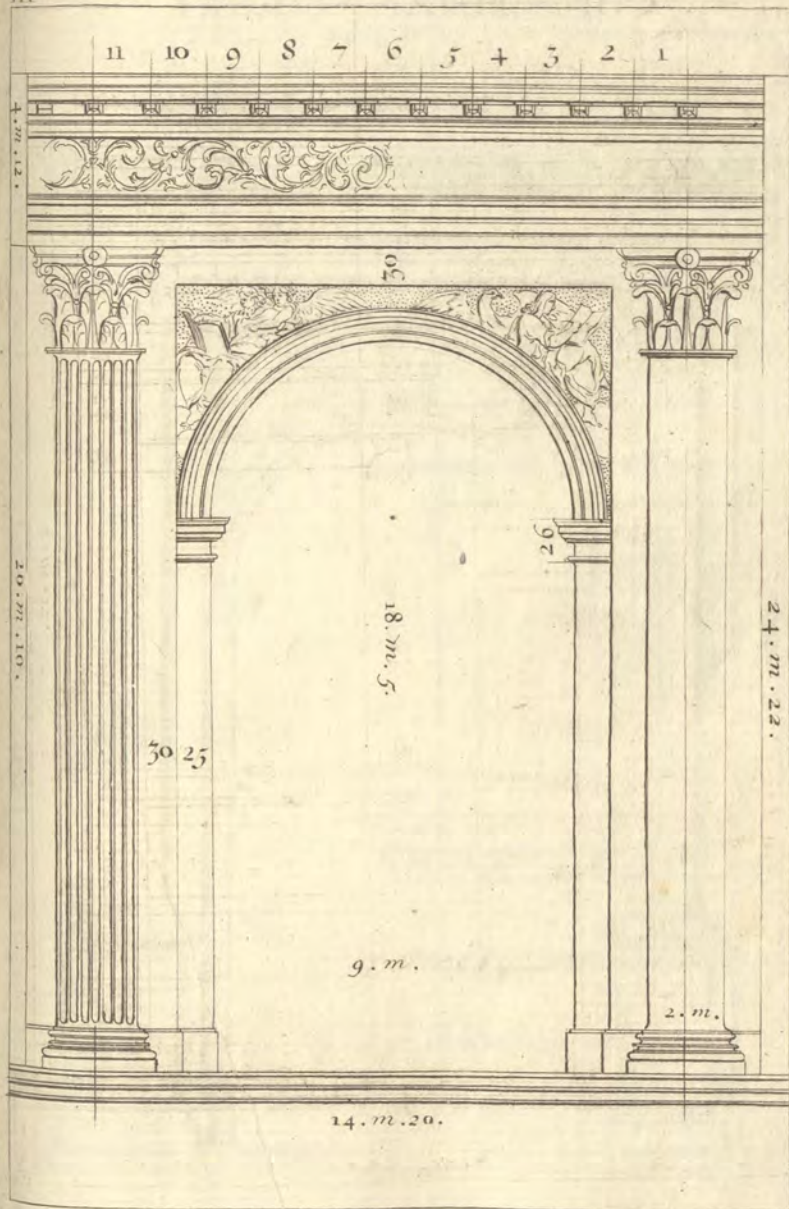
## CORINTHIAN ORDER.



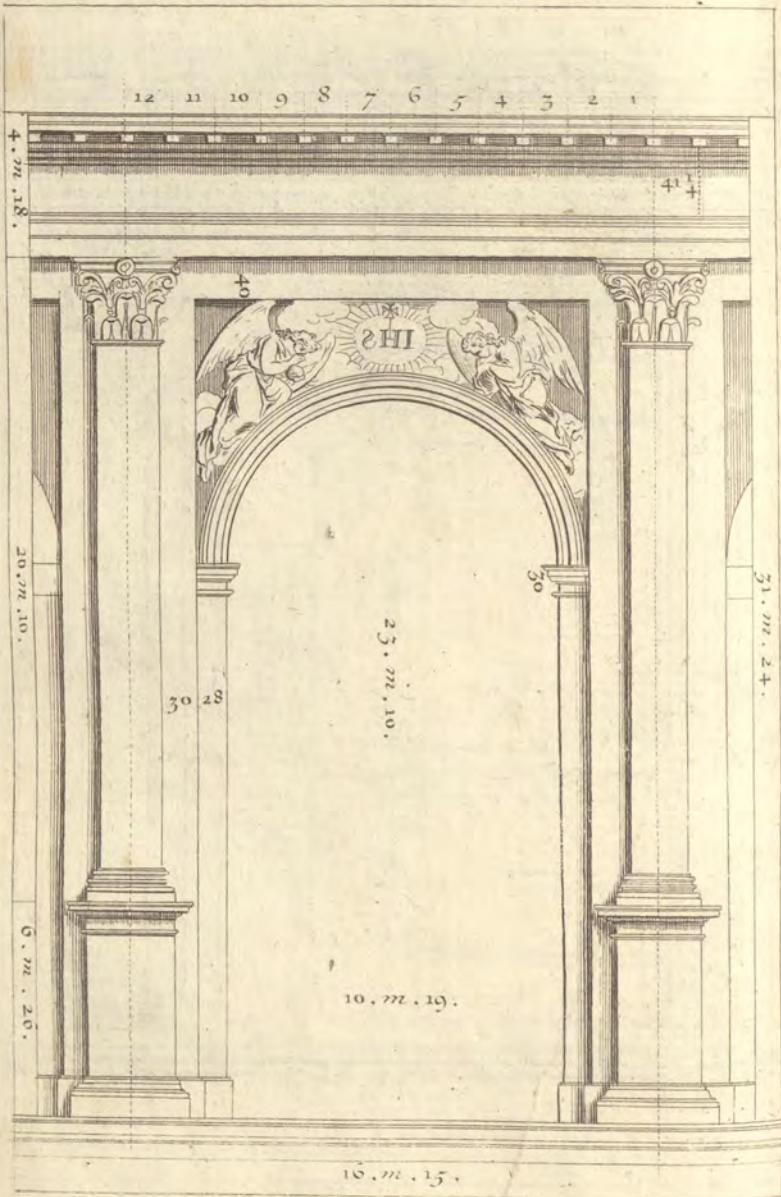


# CORINTHIAN ORDER.

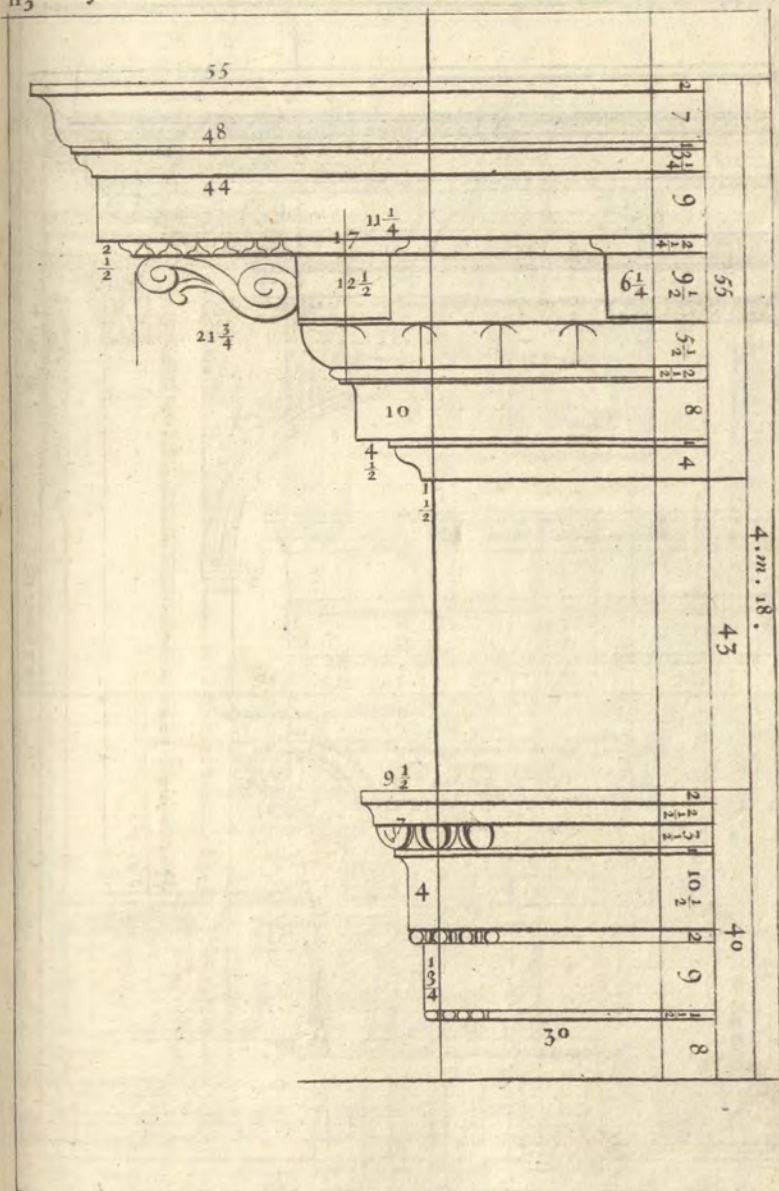
111



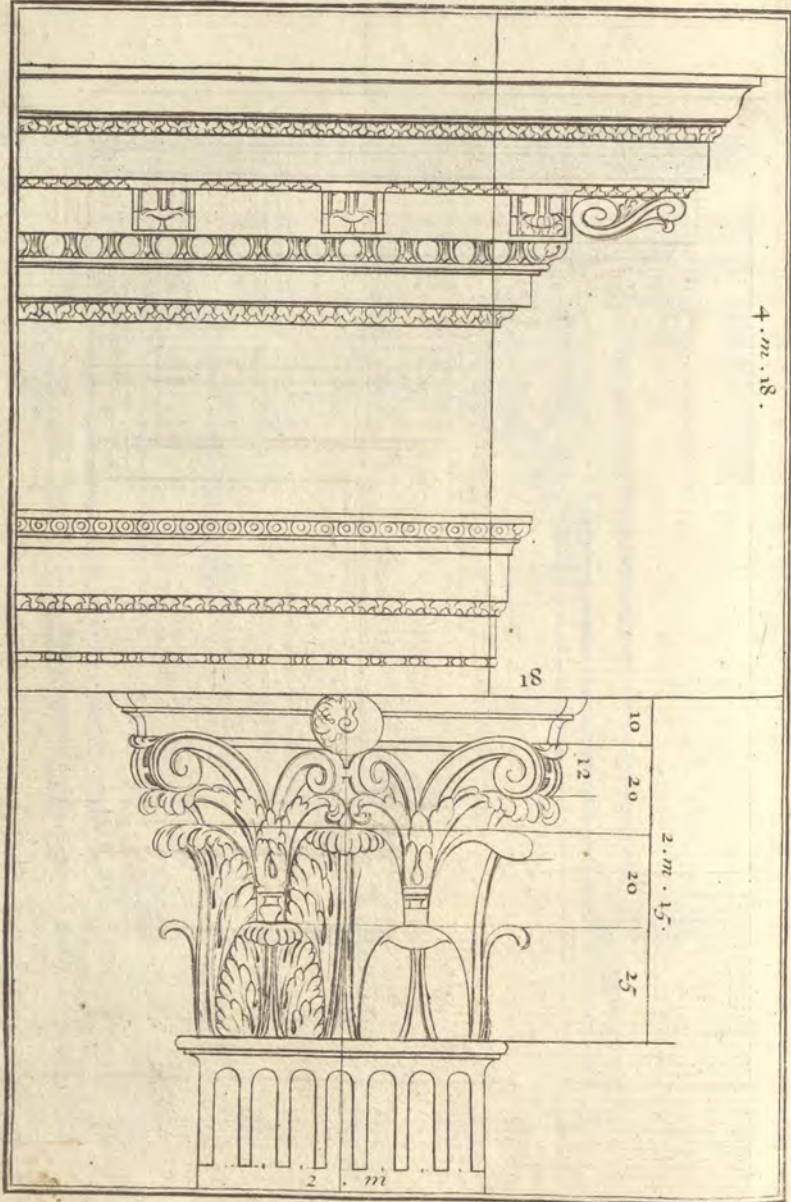
# CORINTHIAN ORDER.



## CORINTHIAN ORDER.



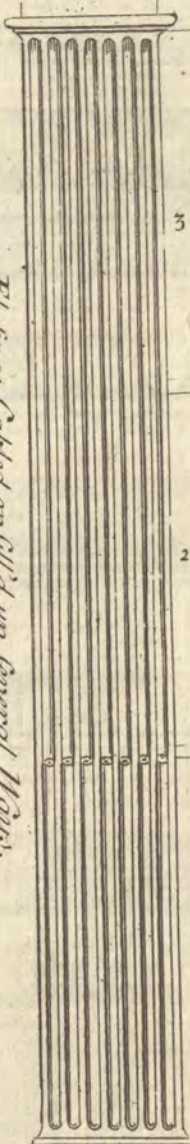
## CORINTHIAN ORDER.







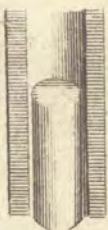
CORINTHIAN ORDER.



*Flutings Cablat or fill'd up several Ways.*



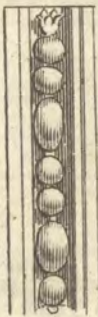
*Cablatio Plat.*



*Cabl. in manner of a Staff.*



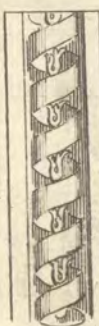
*Cabl. in manner of a Root.*



*Cabl. of Pearls & Olives.*



*Cabl. of Twisted Ribbons.*



*Cabl. of Acorns.*



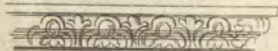
*Cabl. of Twisted Leaves.*



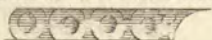
*Cabl. of Ronds or Shells.*

ORNAMENTS.

Talon cut with Trefoil.



Cavetto with round Knots.

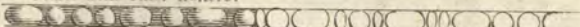


Grotesque.



Leaf of the Angle.

Pearls and Pater-nosters.



Chappelet of Pearls & Olives.

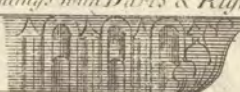
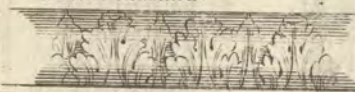


Eggs and Flower-work.

Eggs with Darts or Anchors.

Leaves indented.

Flutings with Darts & Rushes.



Knotts.

Mirrouirs.

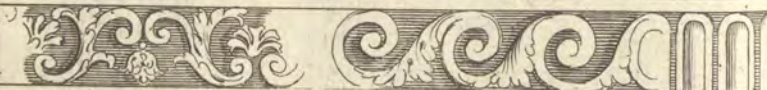
Plastrons.



Waving Posts and Counter-Posts with Leaves.

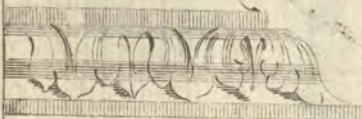
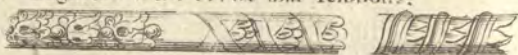
Waving Posts with Leaves.

Flutings.



Twisted Ribbons.

Baguettes with Cords and Ribbons.

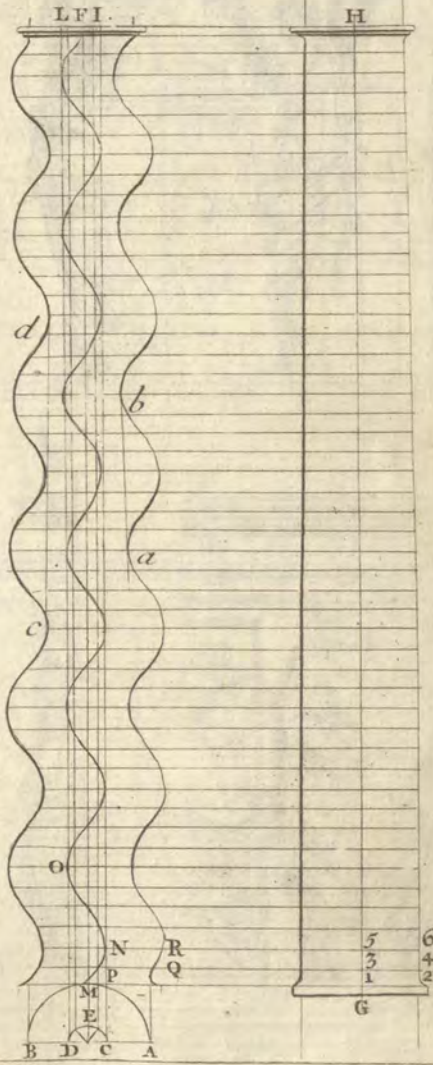


Rais de Cœur indented.



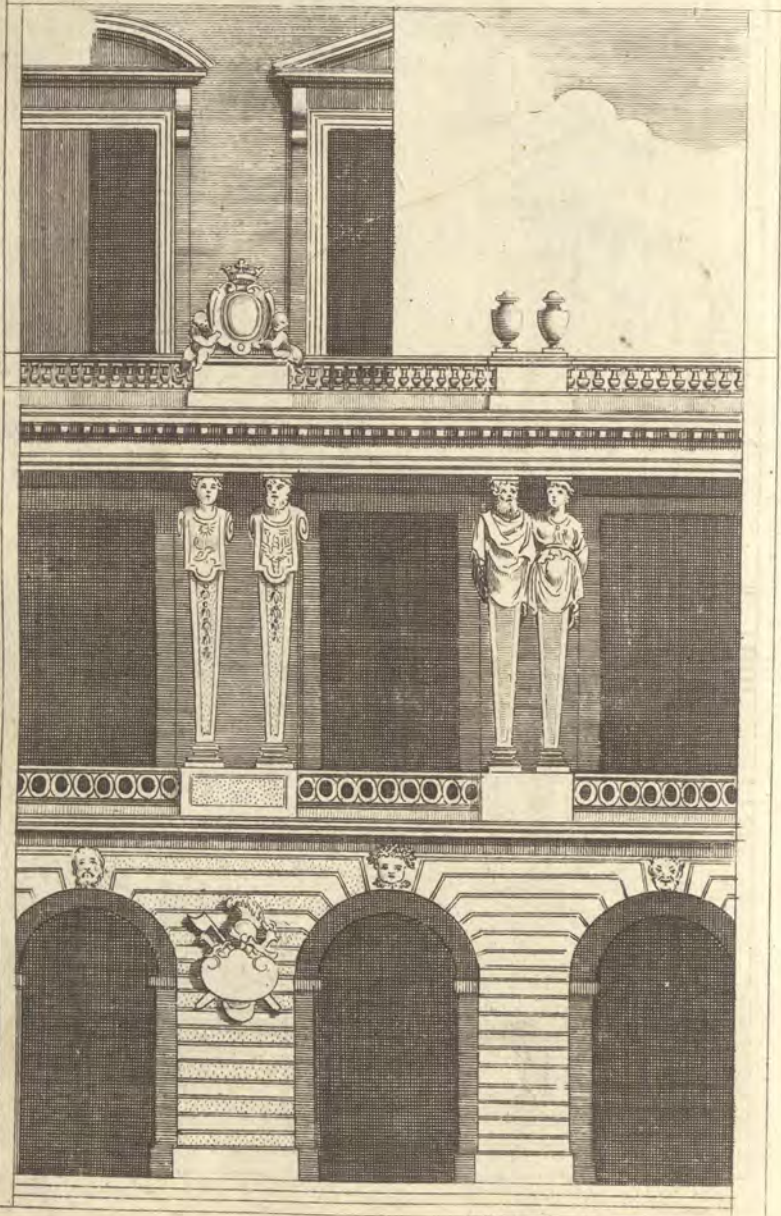
Leaves indented with others Waved.

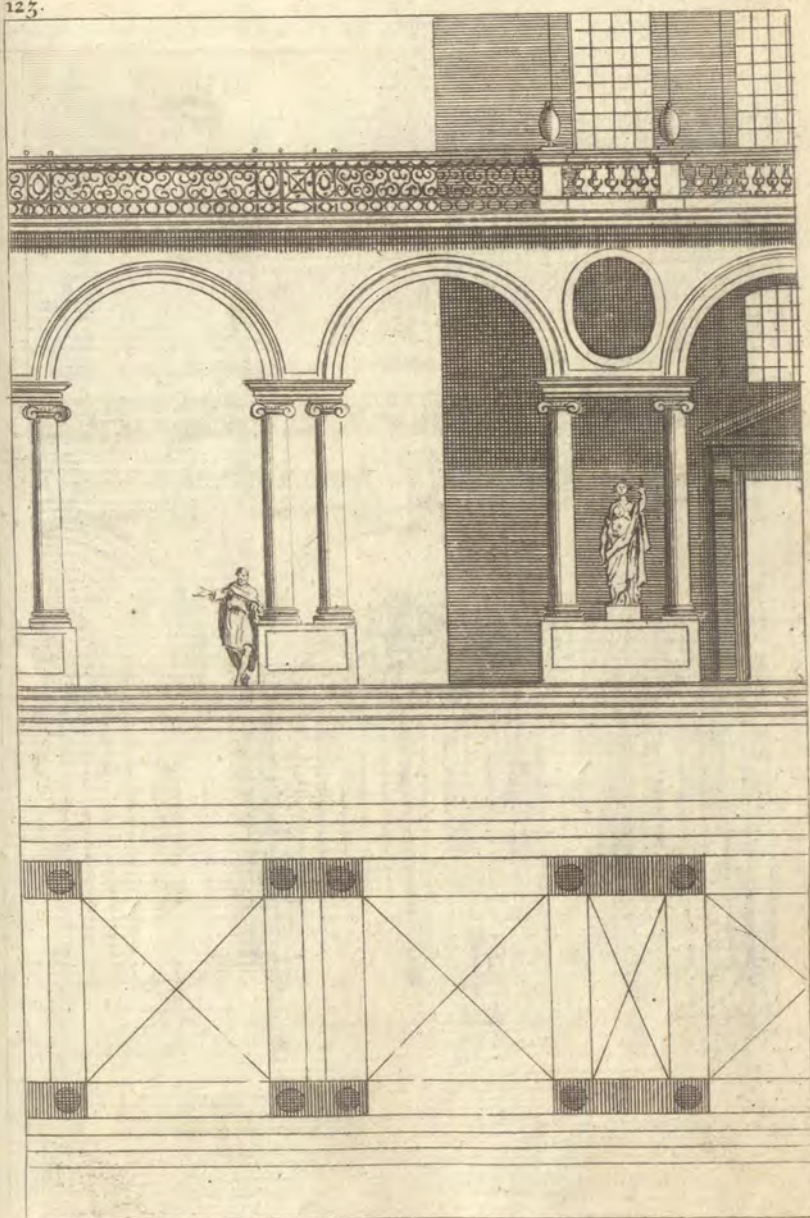
# WAIVED or TWISTED COLUMN.

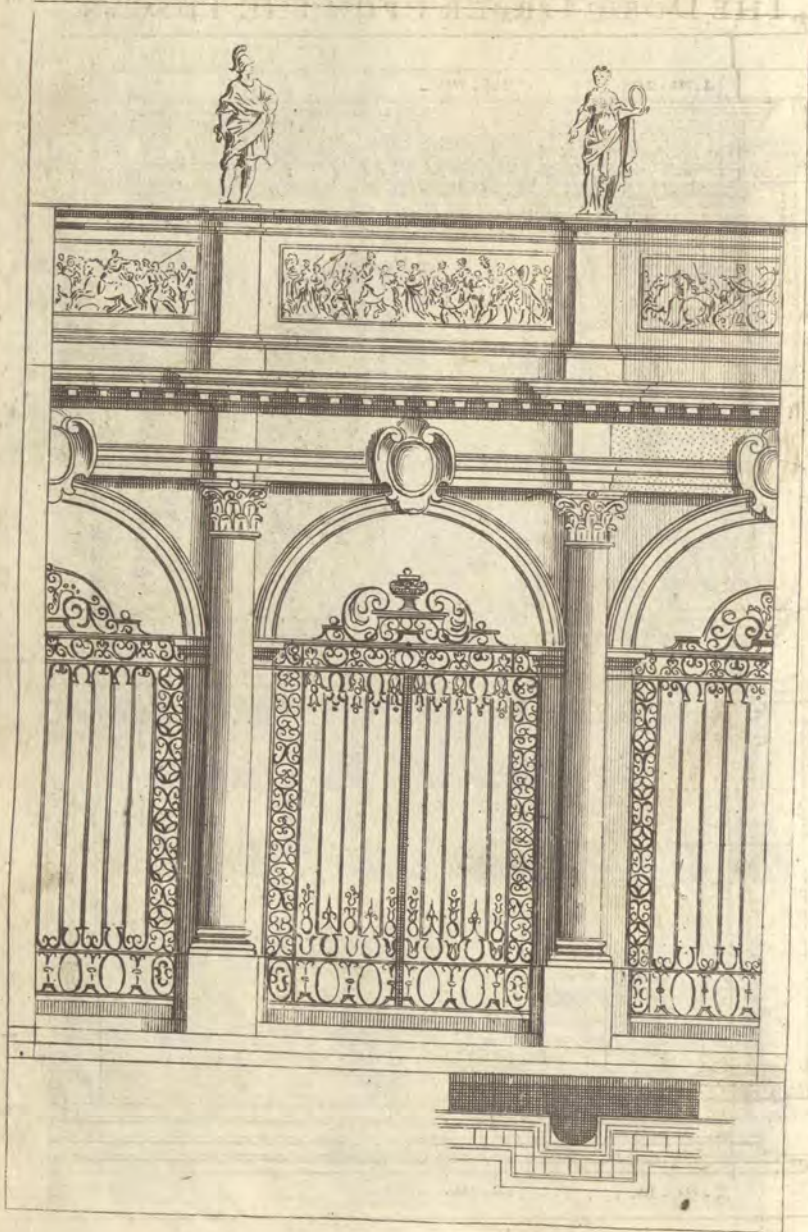




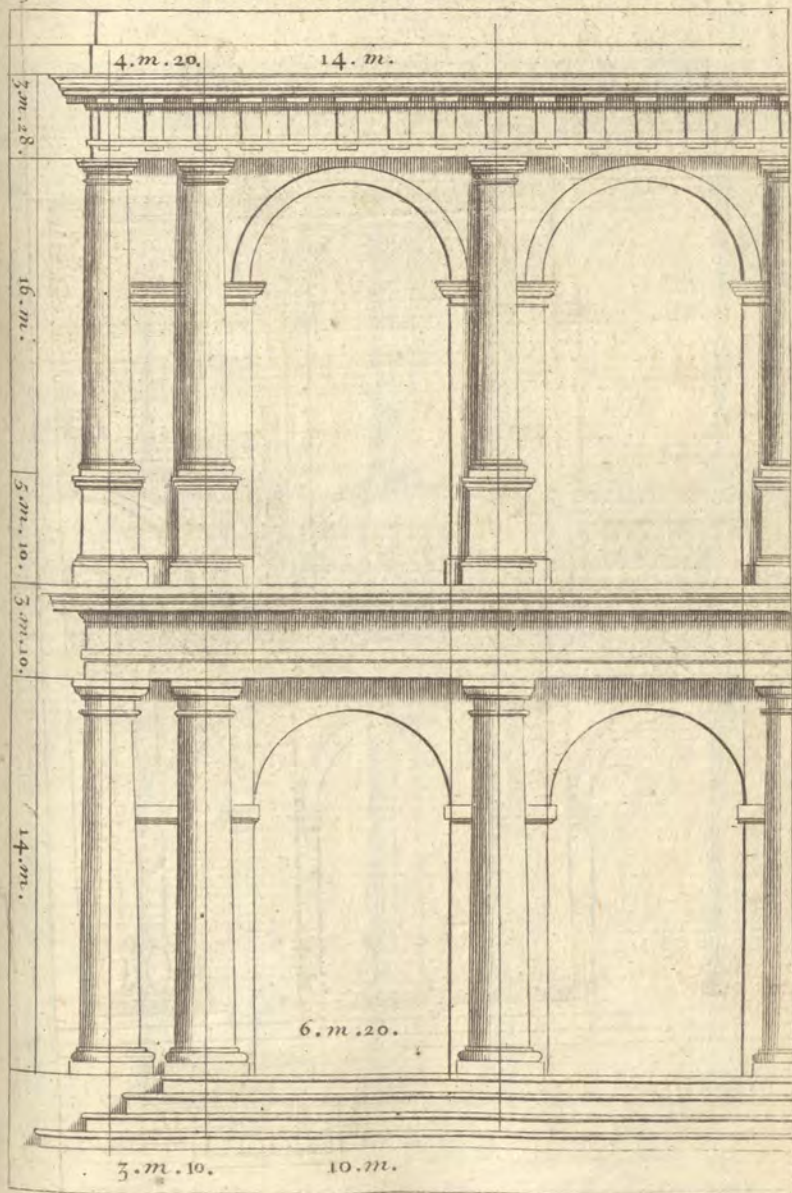




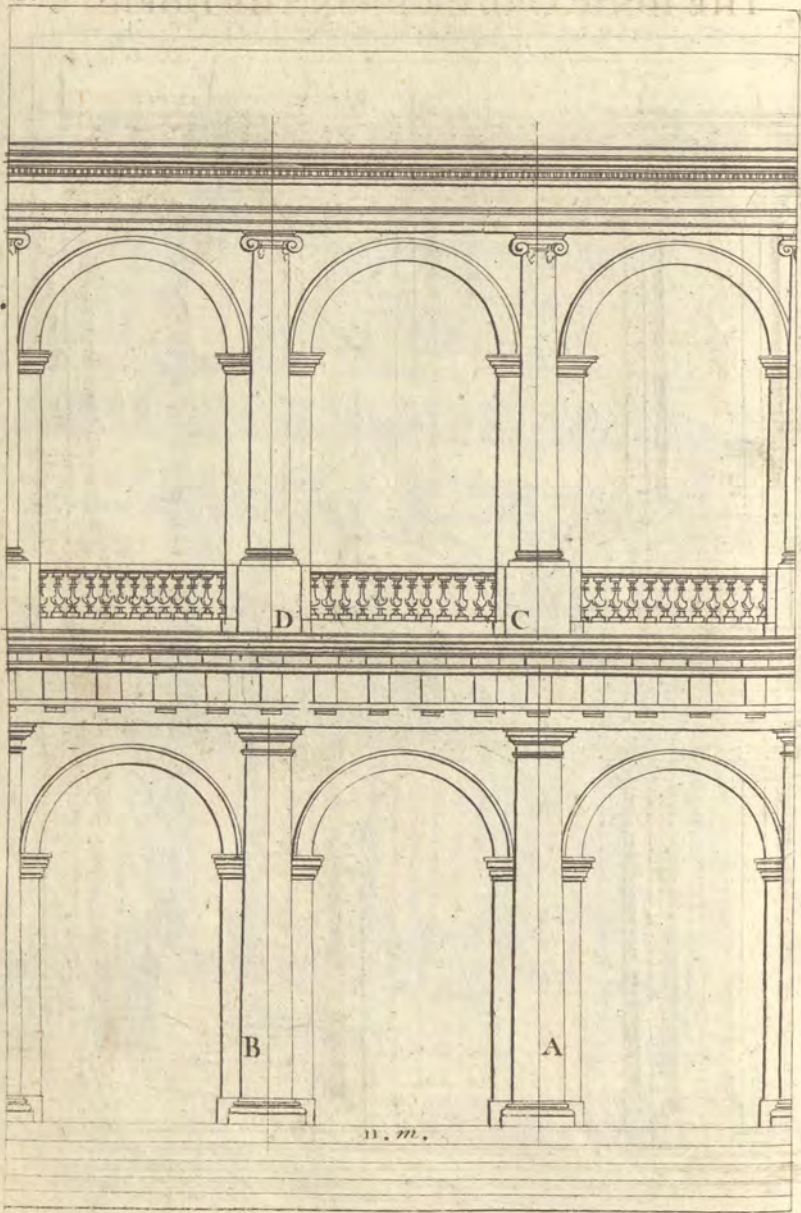




125. THE DORIC ORDER UPON THE TUSCAN.



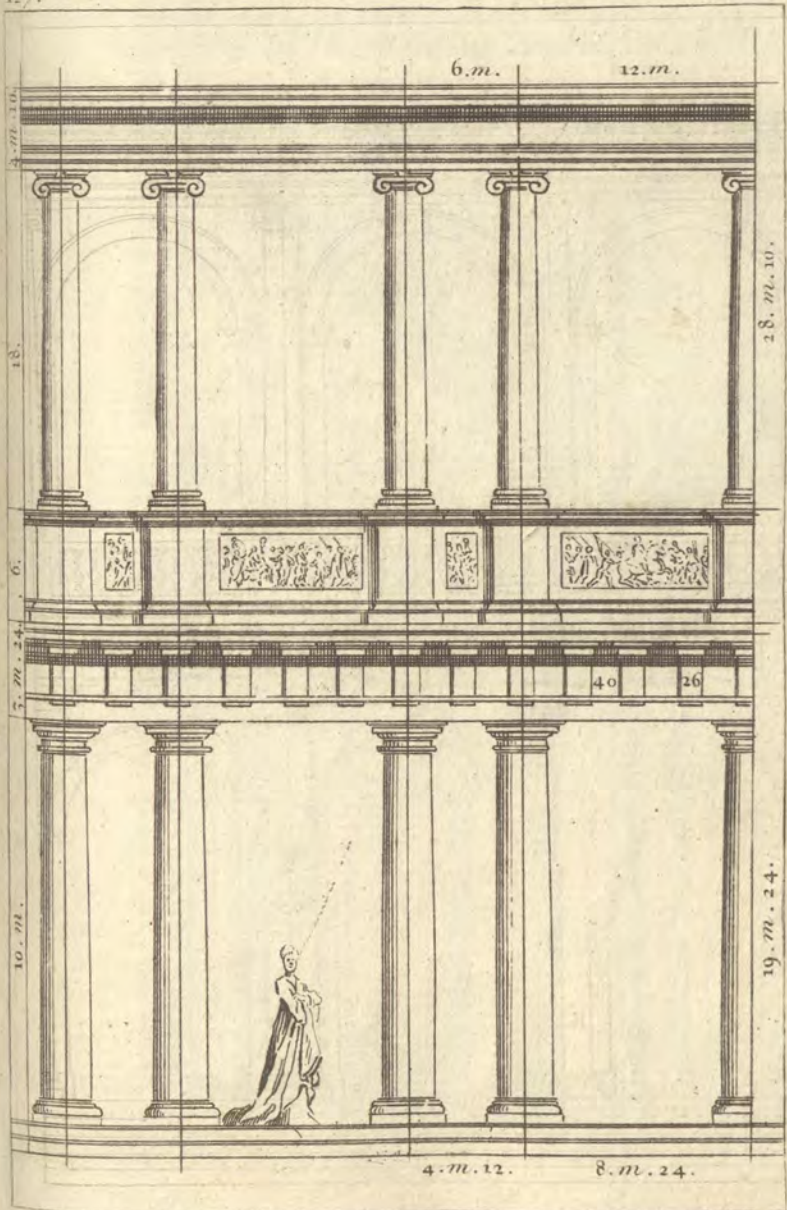
126 THE IONIC ORDER UPON THE DORIC.



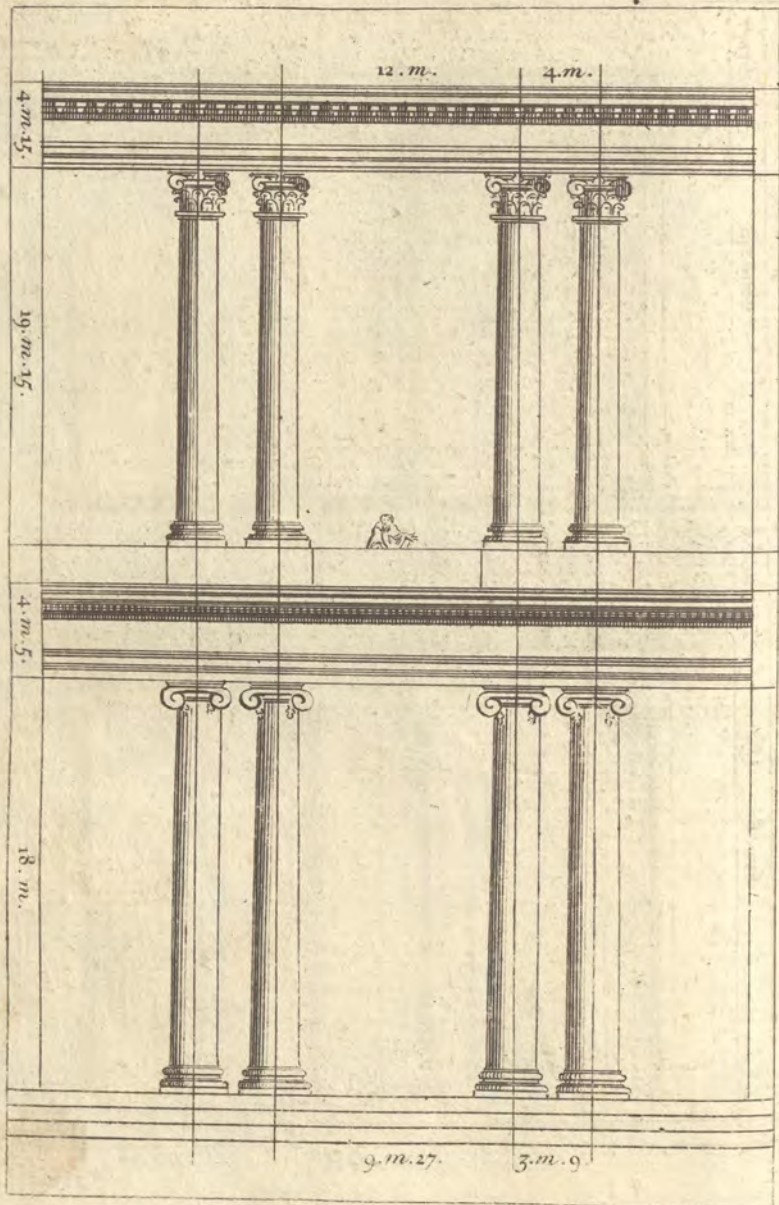
S

THE IONIC ORDER UPON THE DORIC.

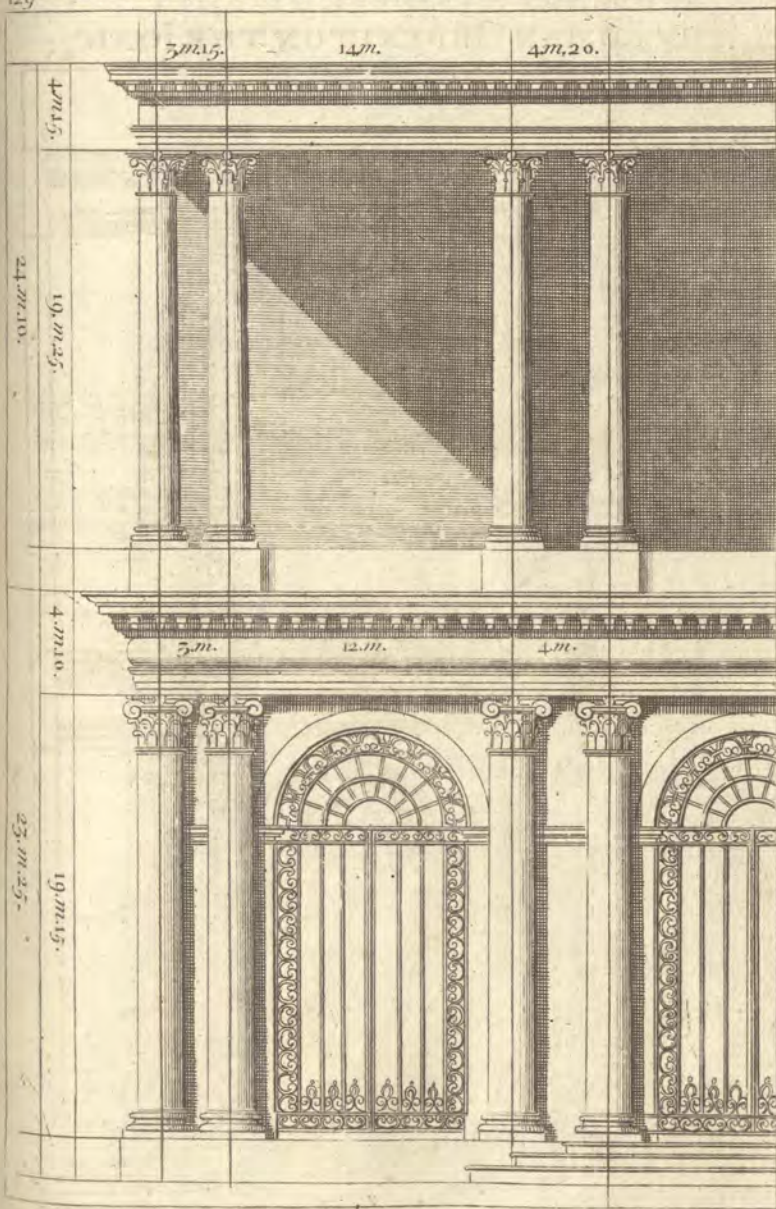
127.



128. THE ROMAN ORDER UPON THE IONIC.

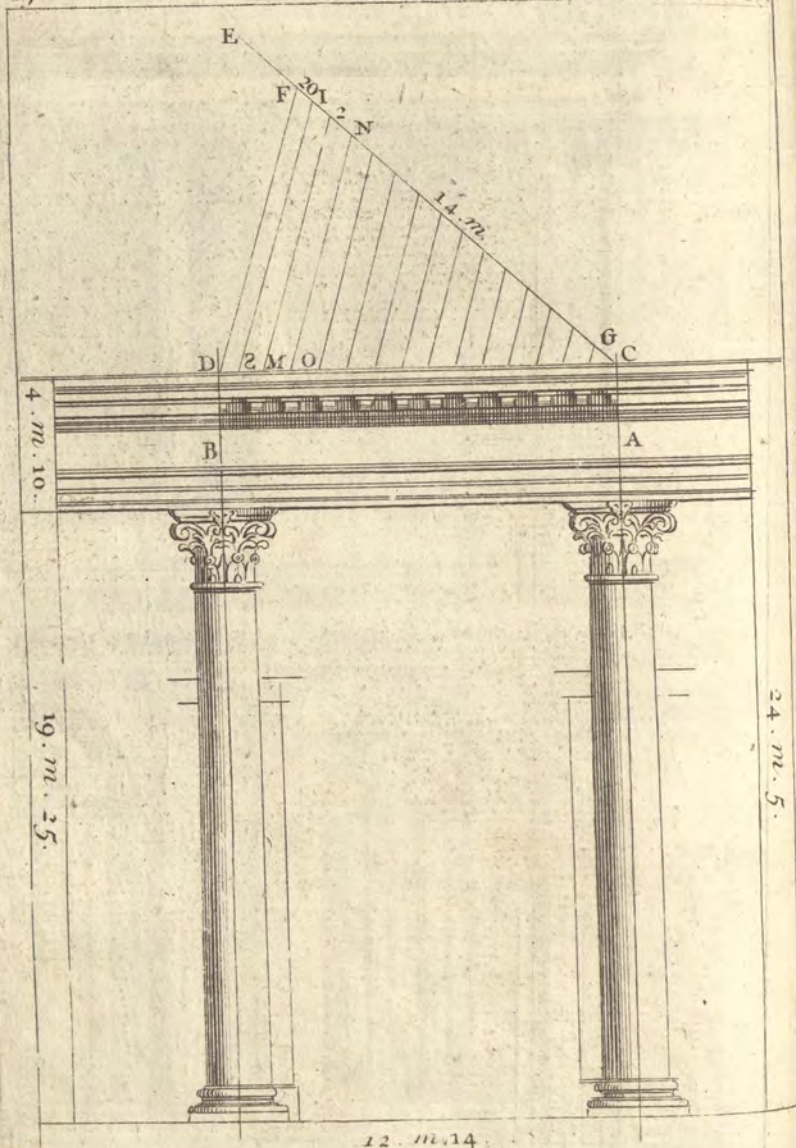


129 THE SPANISH ORDER UPON THE ROMAN.



SPANISH ORDER.

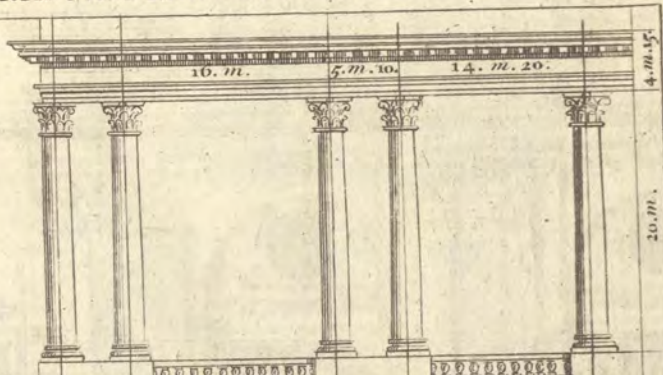
170



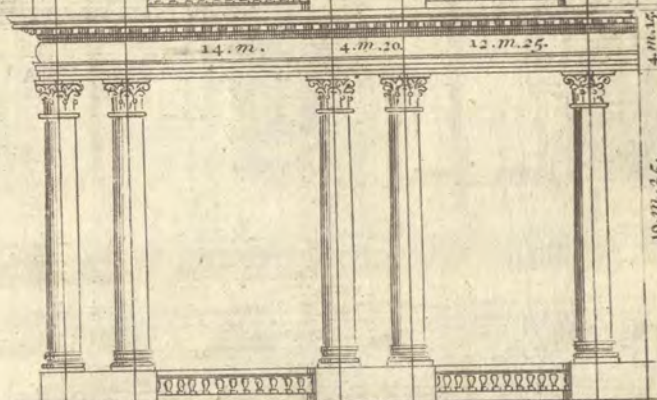
THE CORINTH. ORDER UPON THE SPAN. & ROMAN.

151.

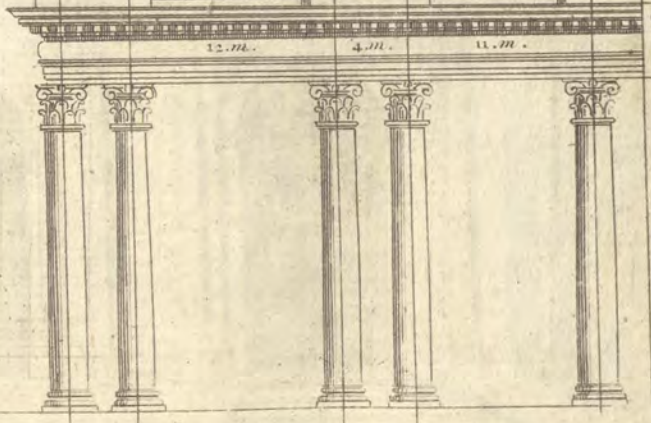
Corinthian.



Spanish.

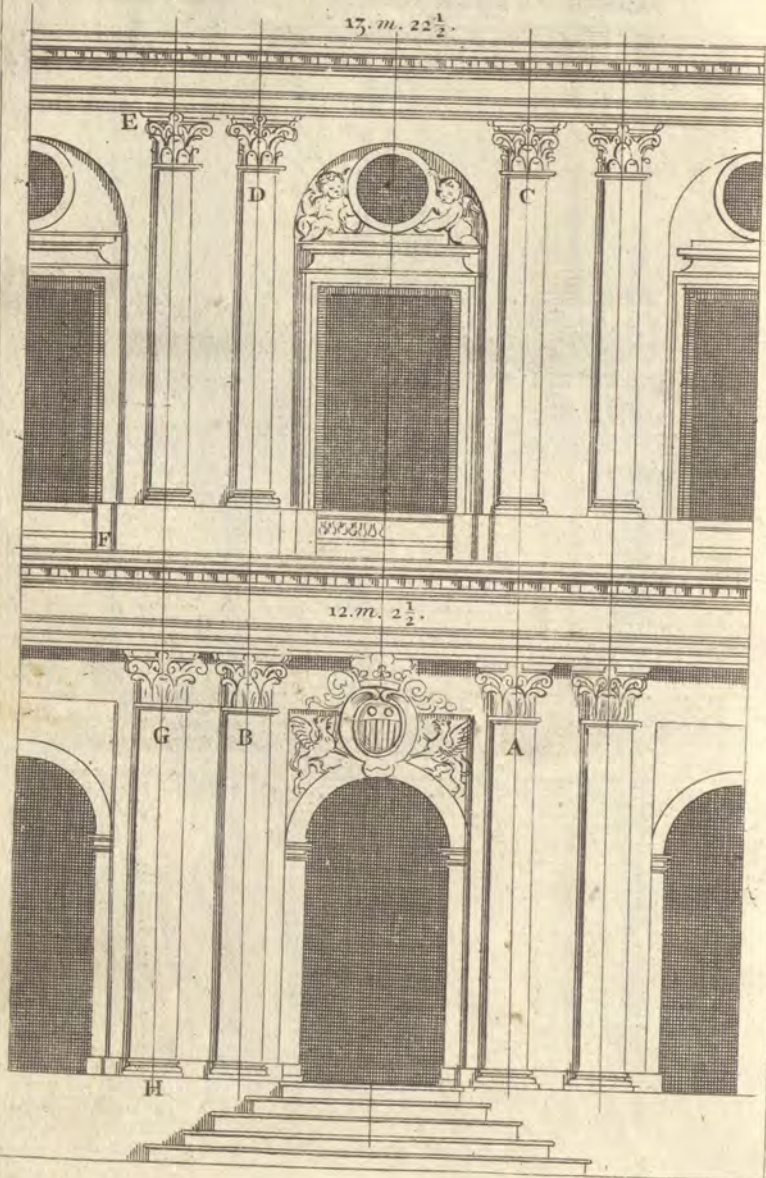


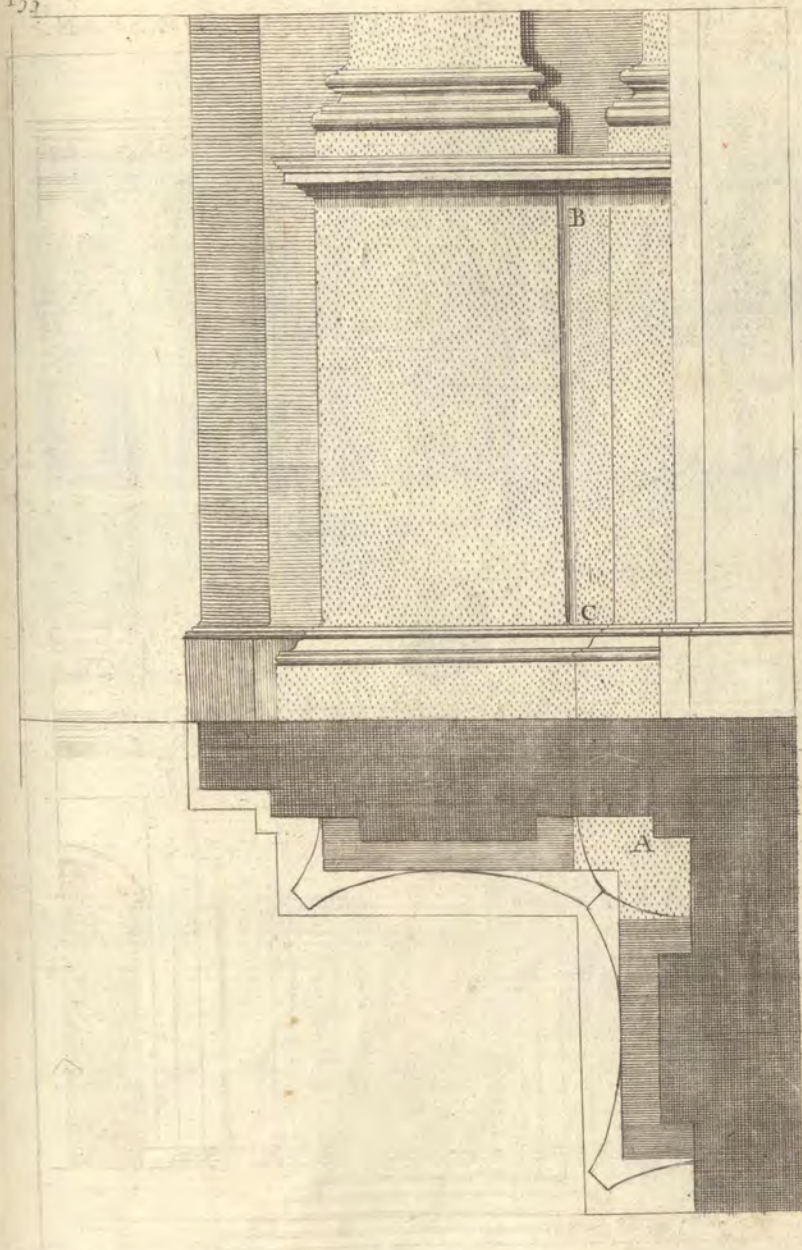
Roman.

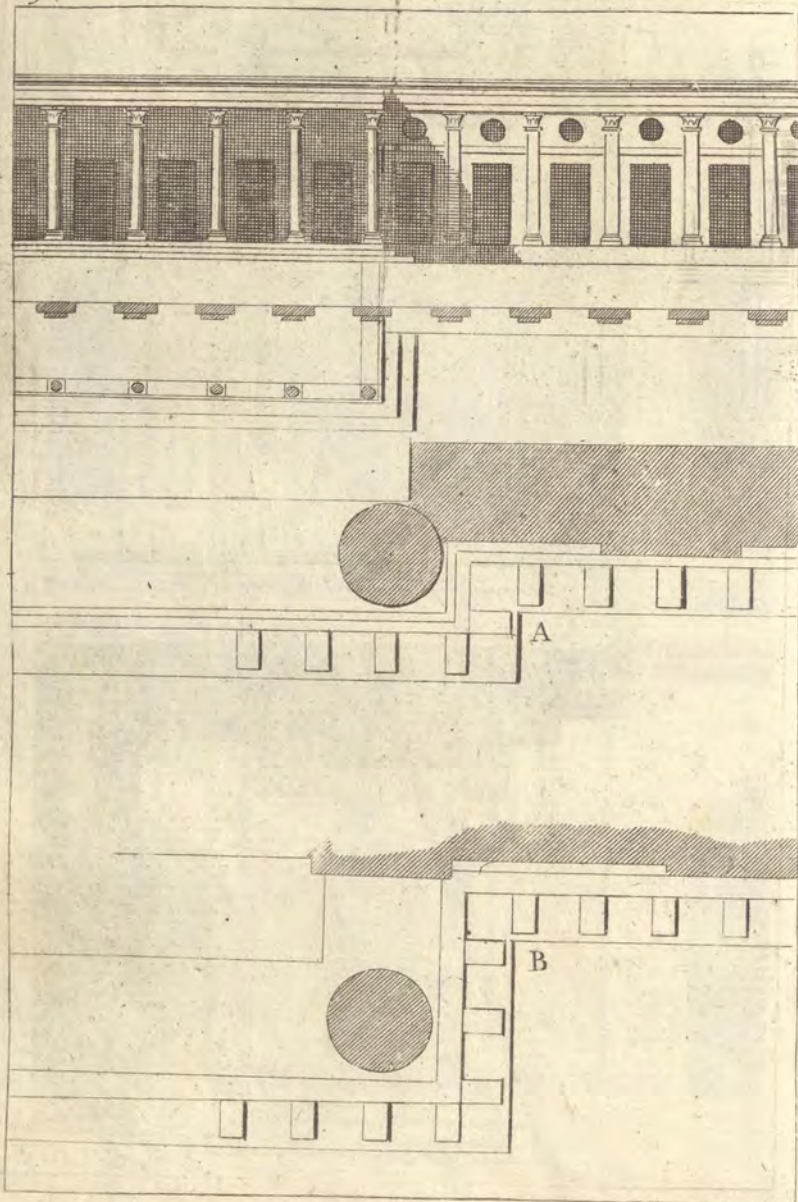


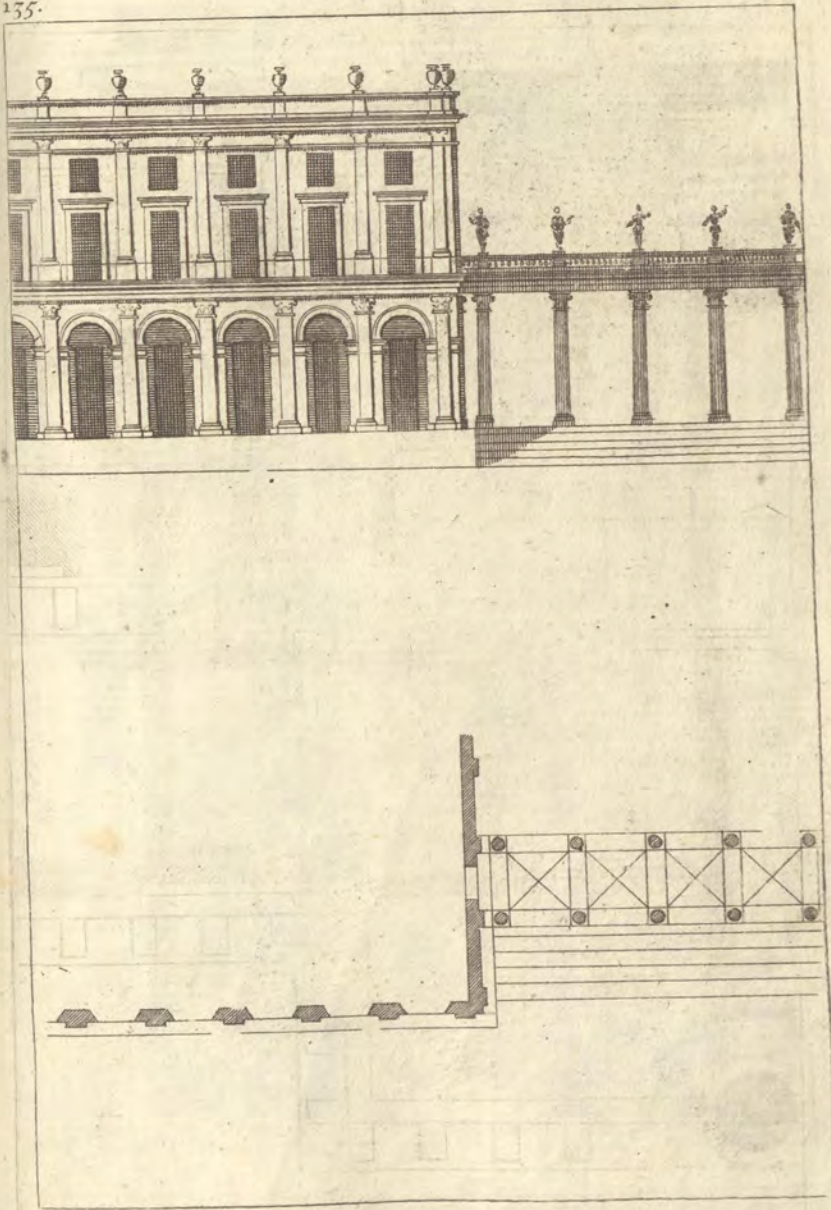
THE CORINTHIAN ORDER UPON THE SPAN. II<sup>1</sup>

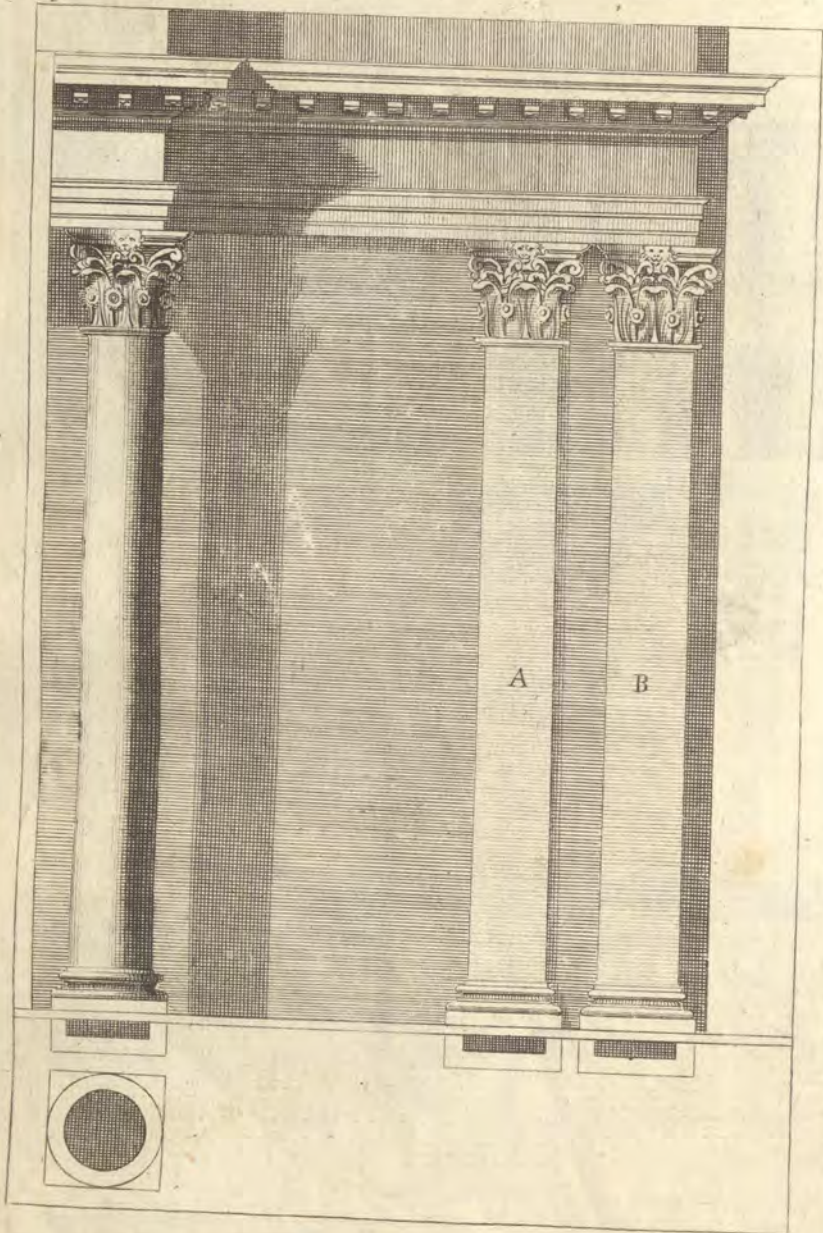
152.



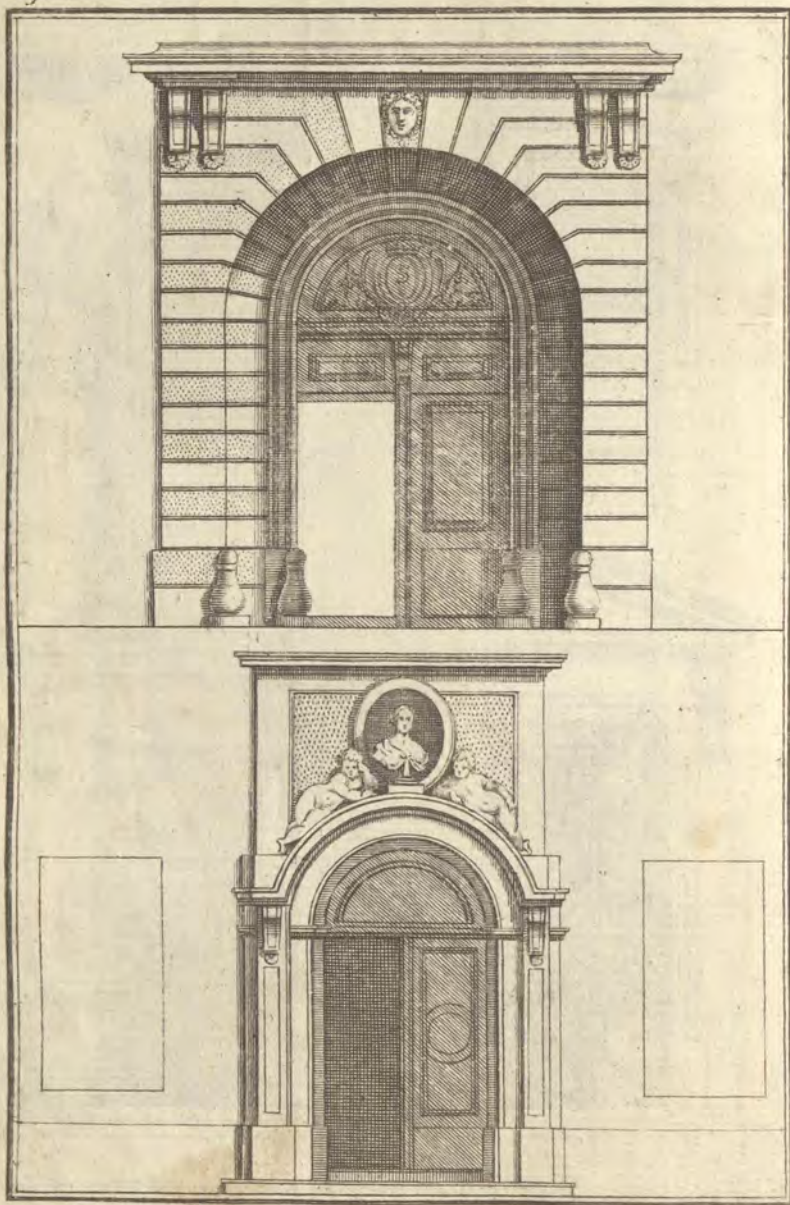




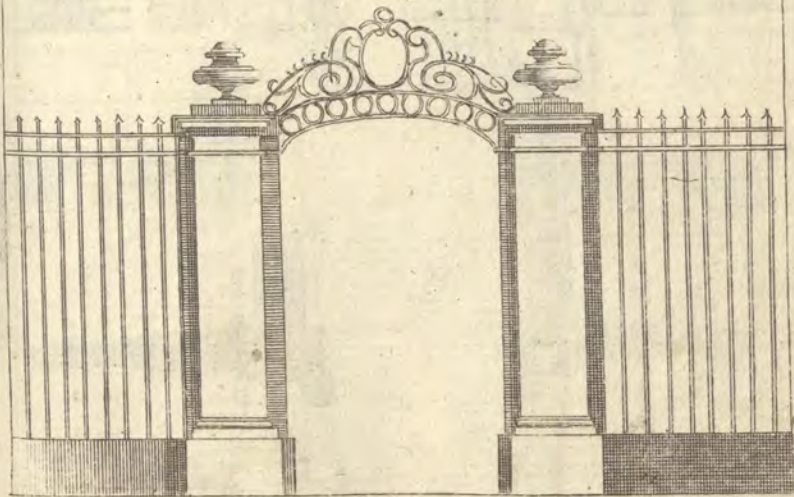


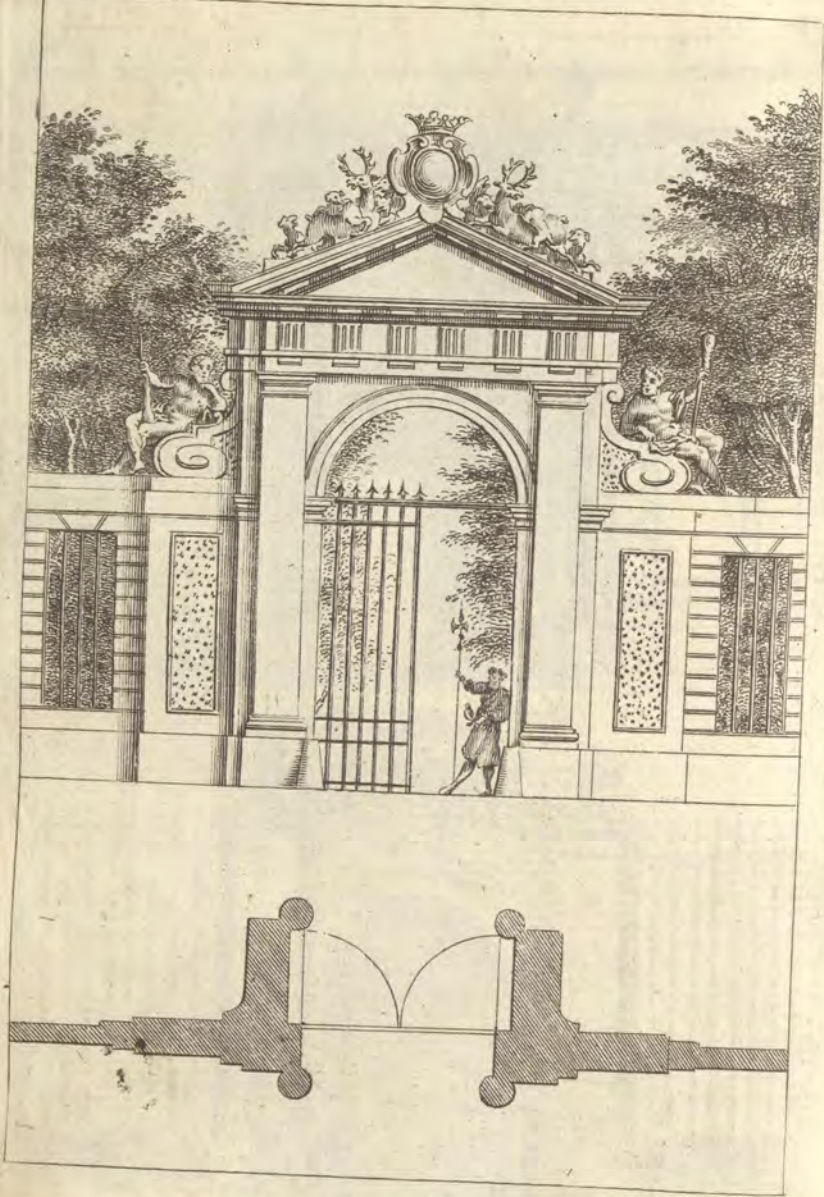


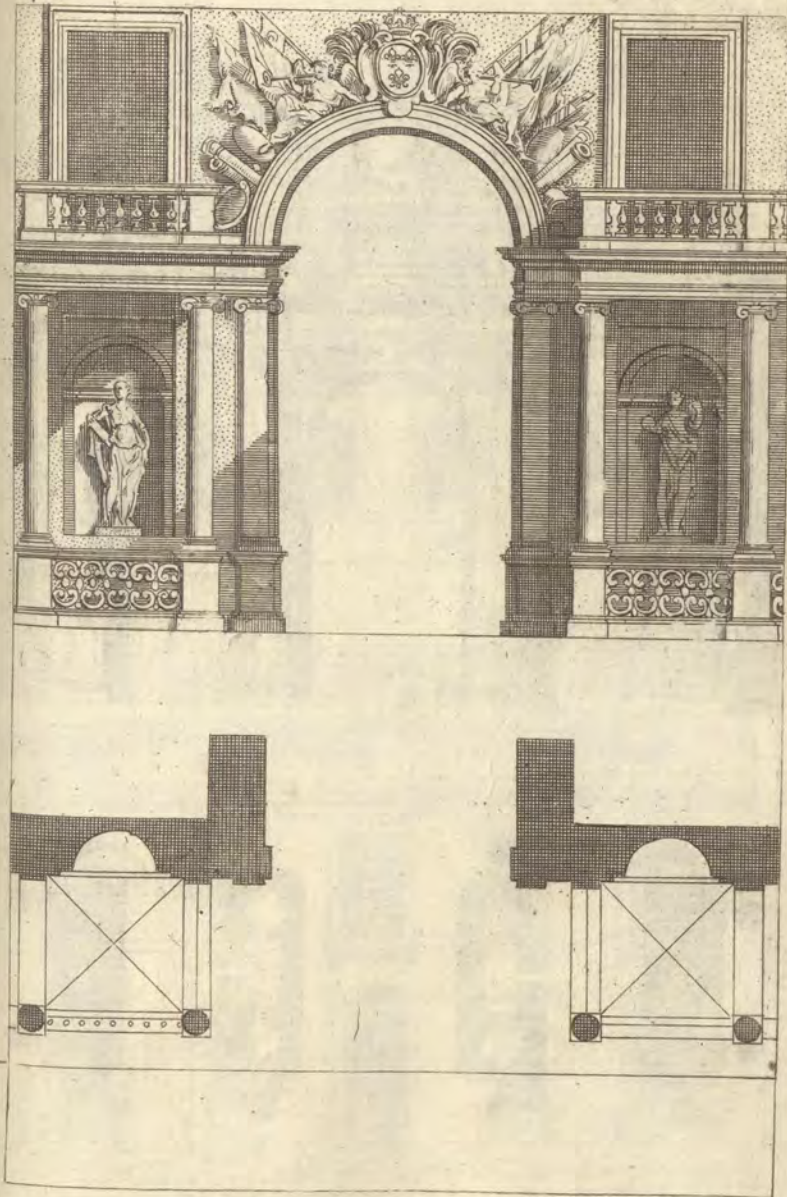


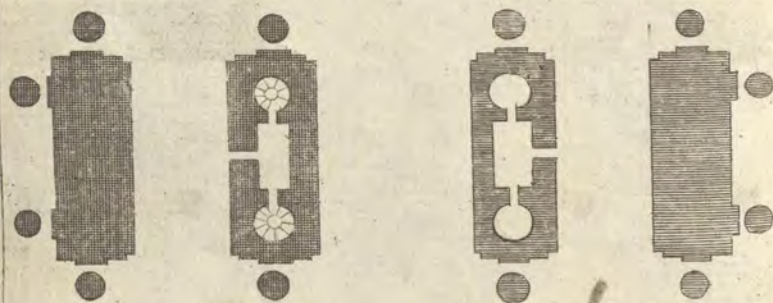


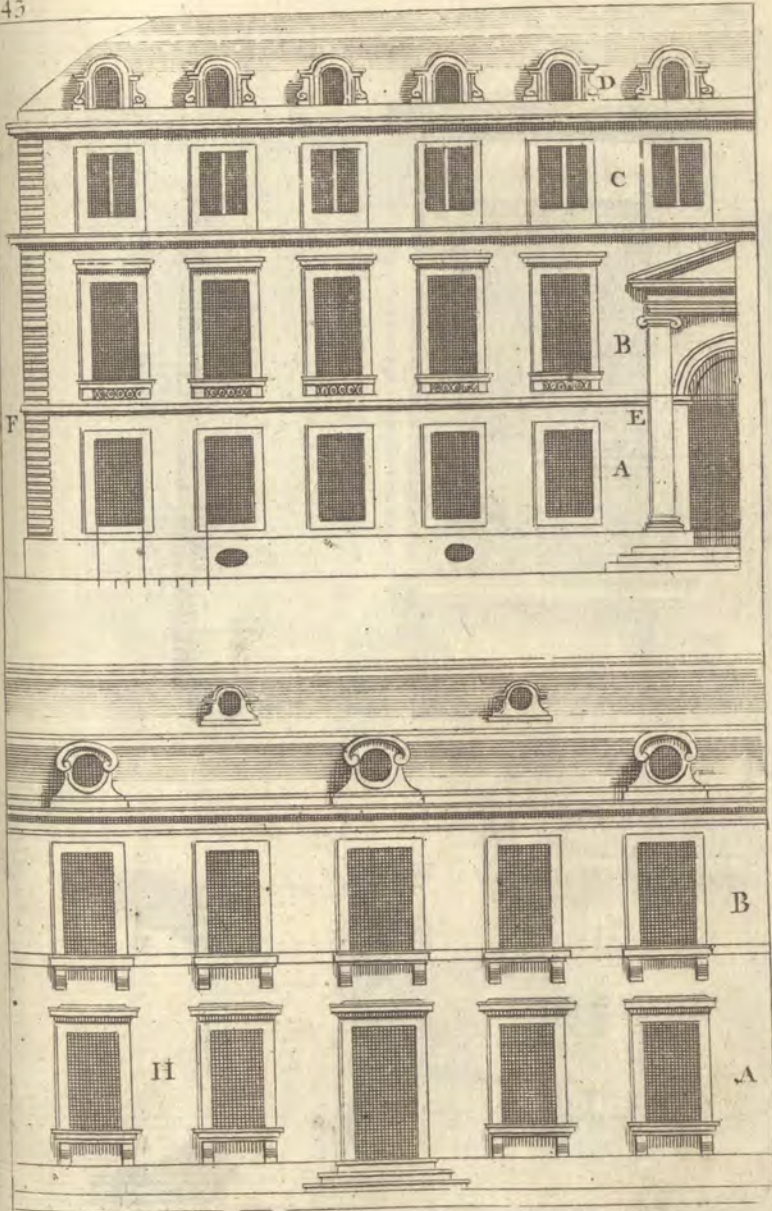
30

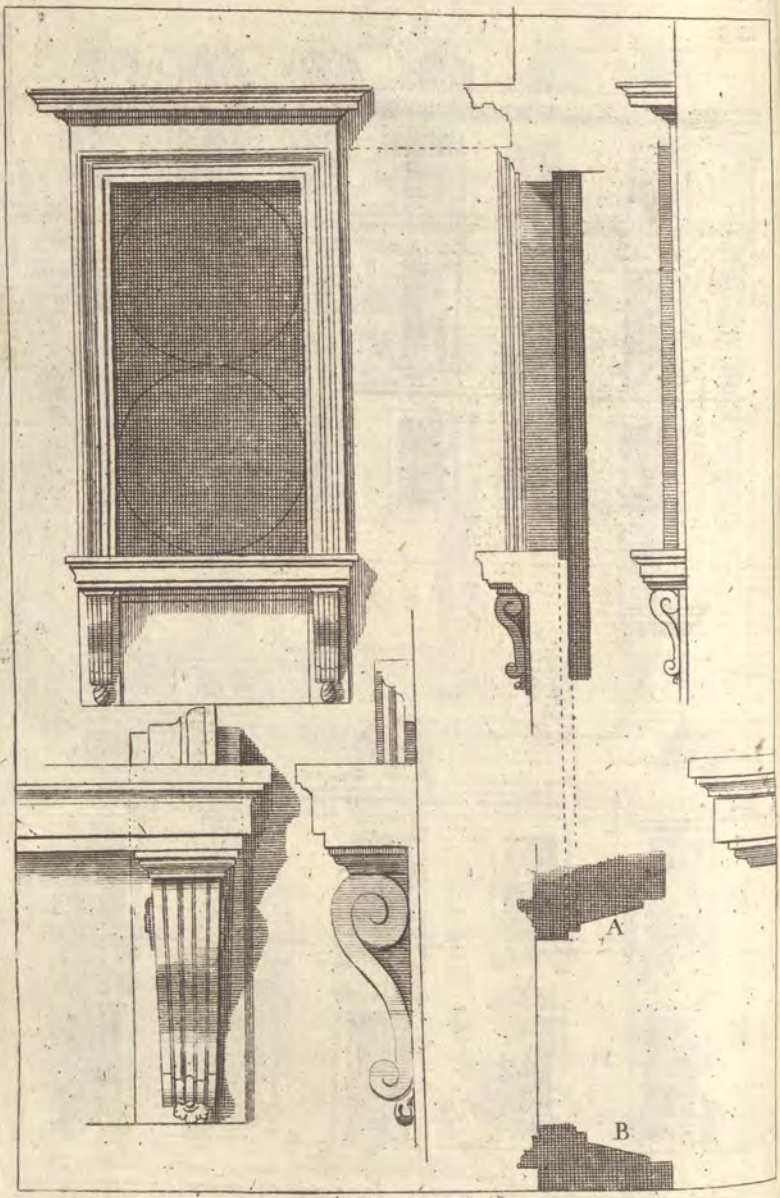


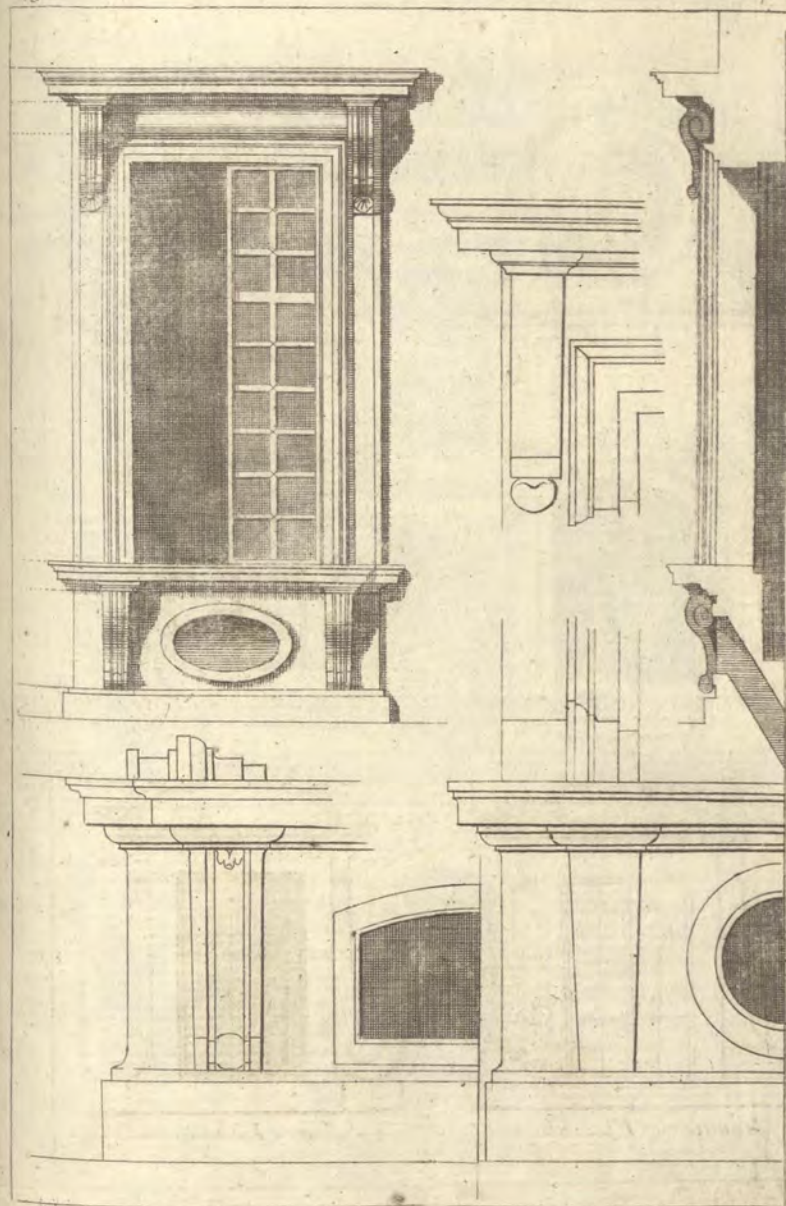


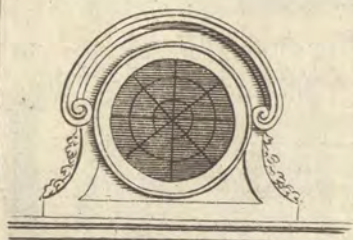


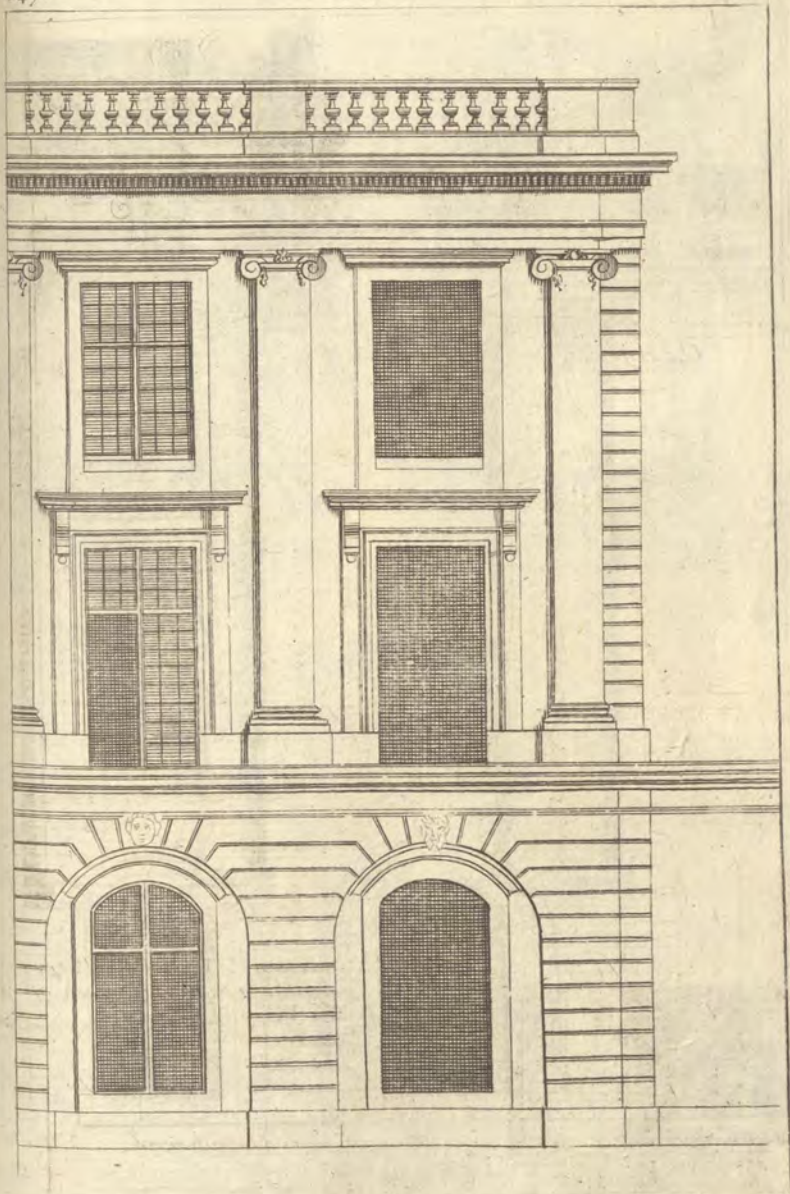




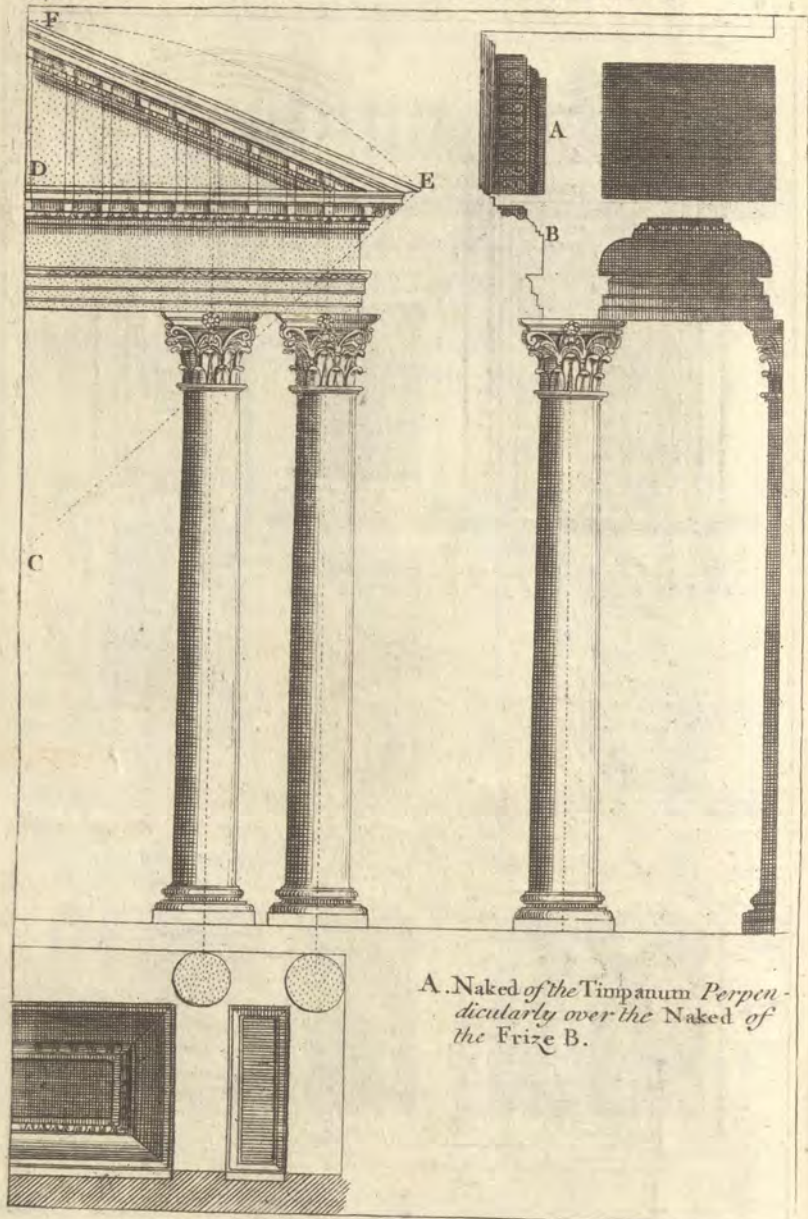




*Ox Eye Round.**Ox Eye Oval.**A Lantern with a  
Semi-circular Arch.**A Lantern with a Semi-  
circular Arch.**Lanterns Flemish.**or Square Lanterns.*



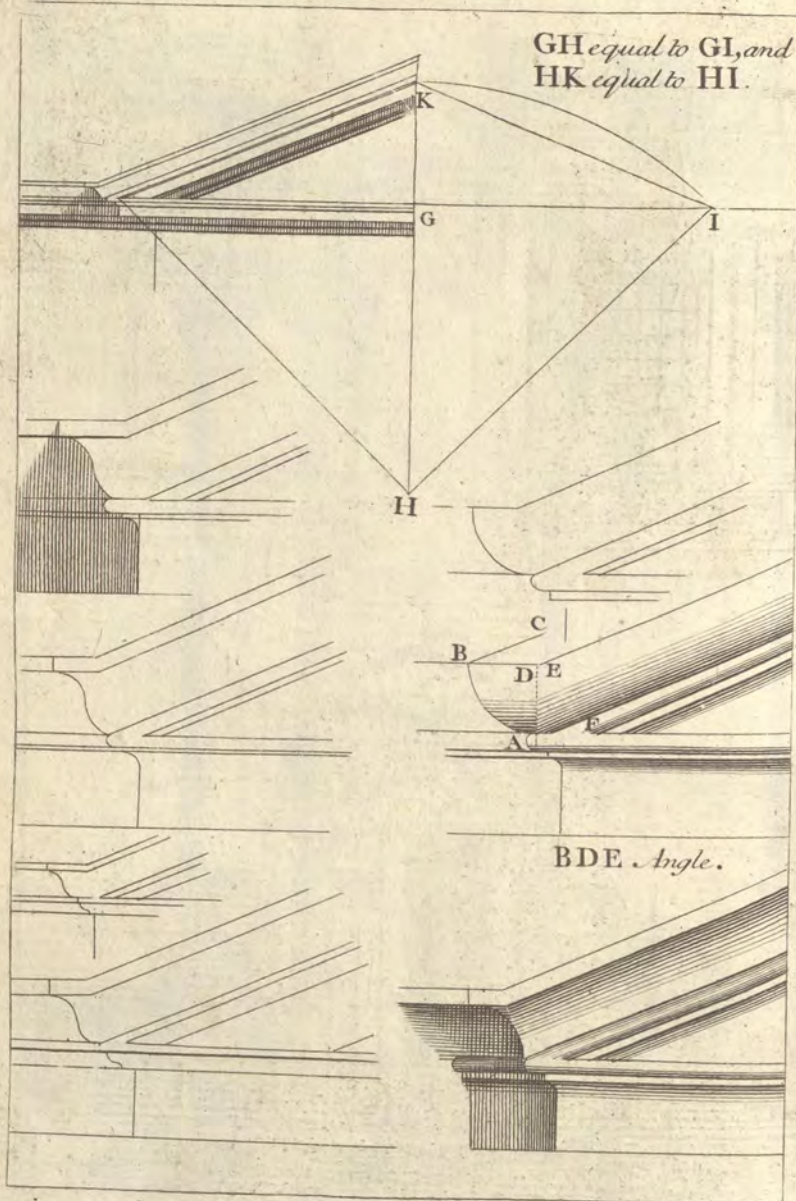
## A TRIANGULAR PEDIMENT.

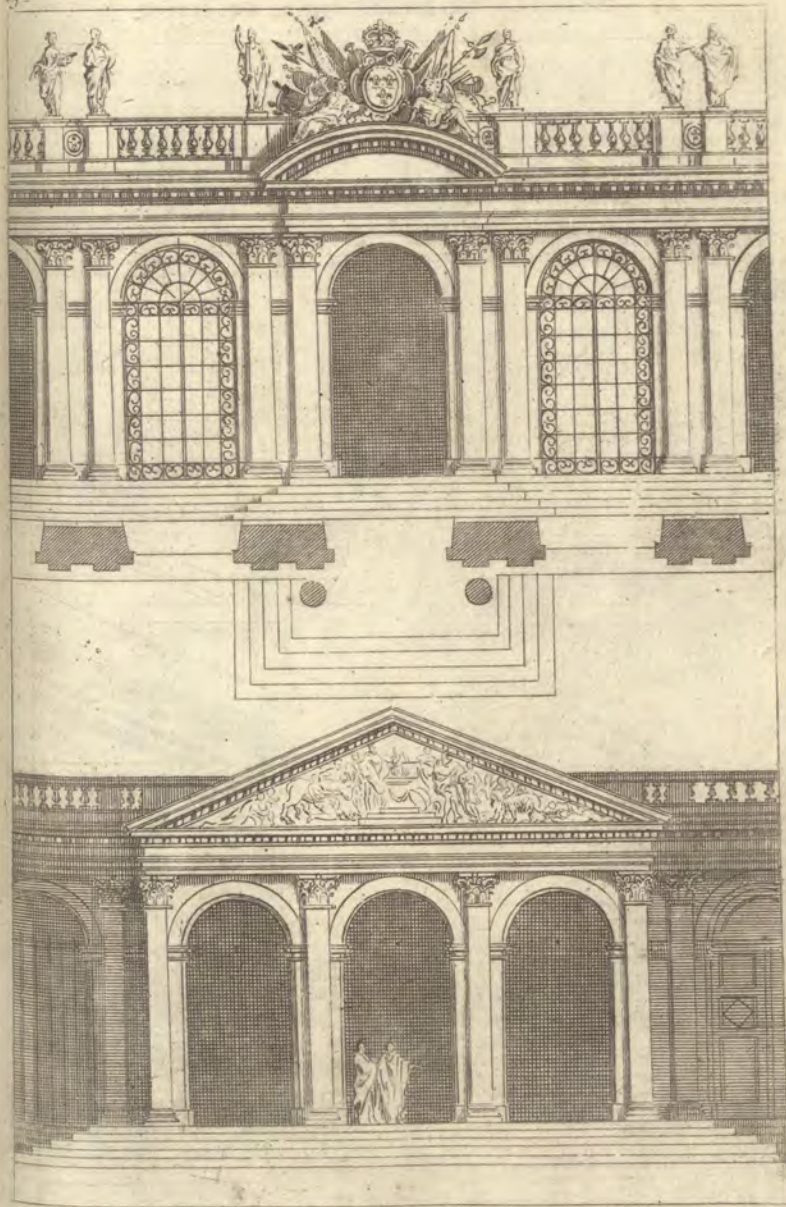


A. Naked of the Timpanum Perpendicularly over the Naked of the Frize B.



## Angles for the Pediments.







A



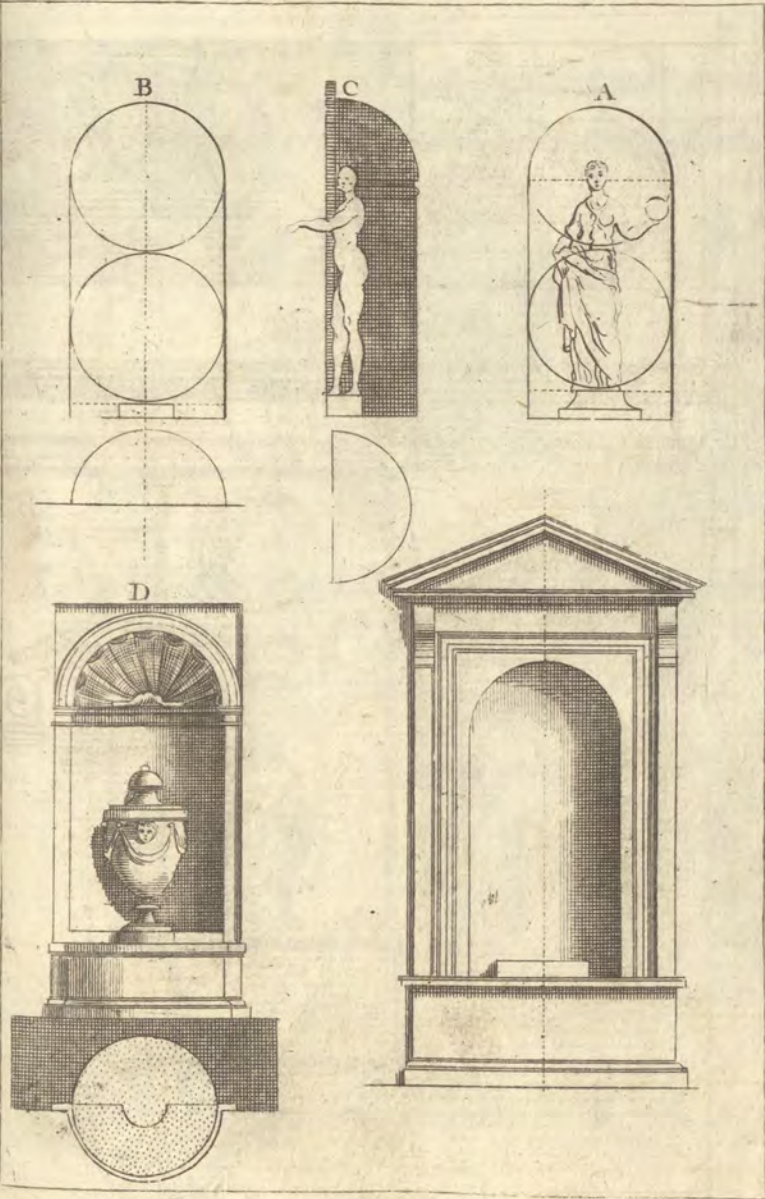
B

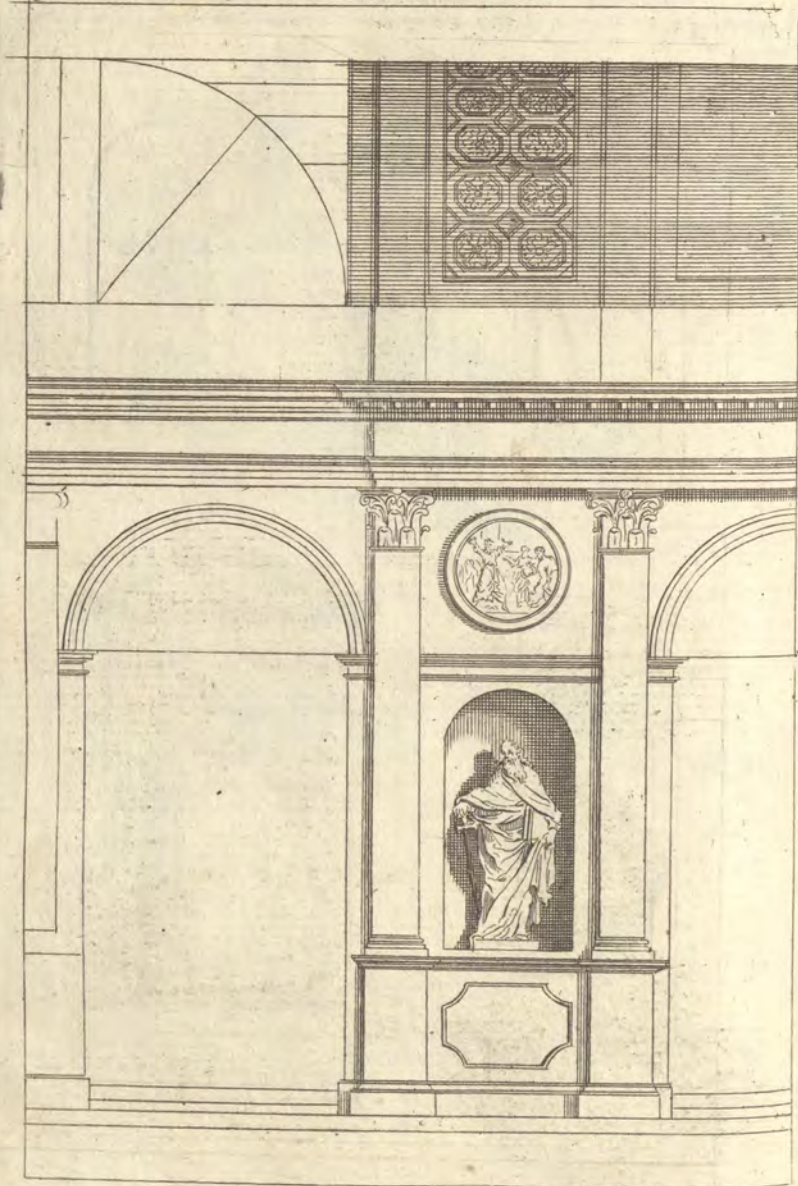


C



NICHES.



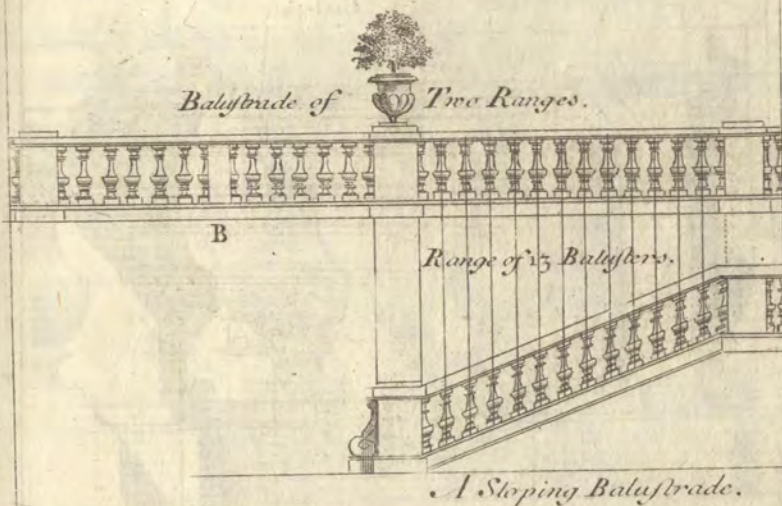




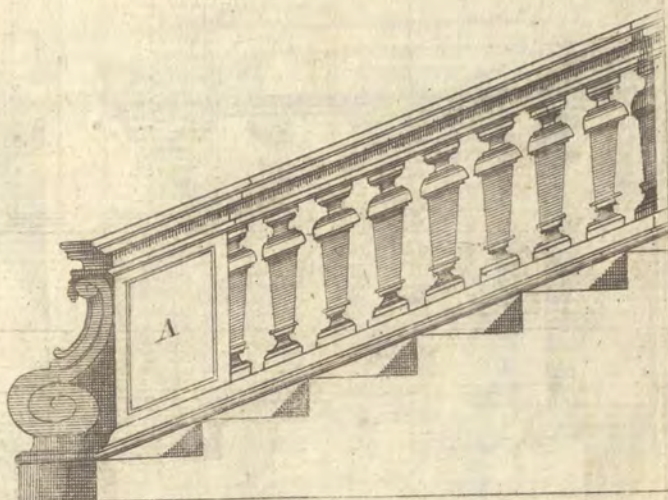


BALUSTRADES.

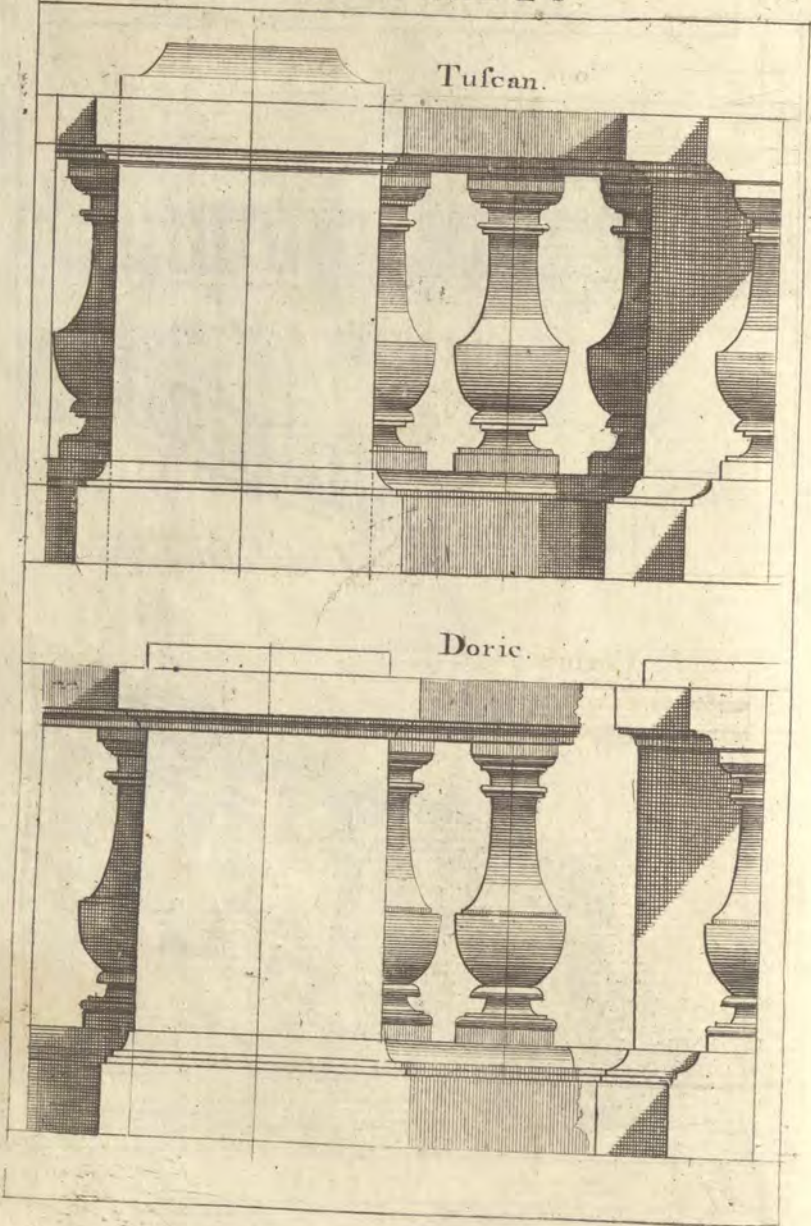
*Balustrade of Two Ranges.*

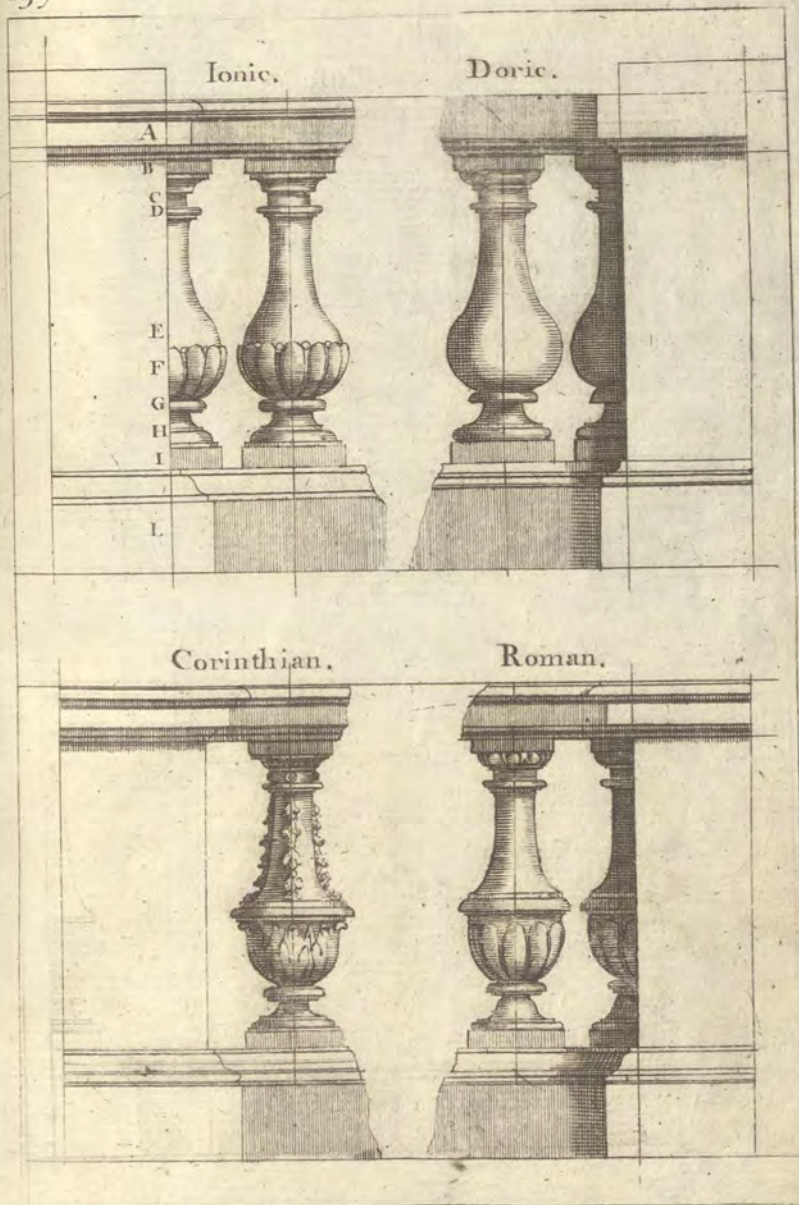


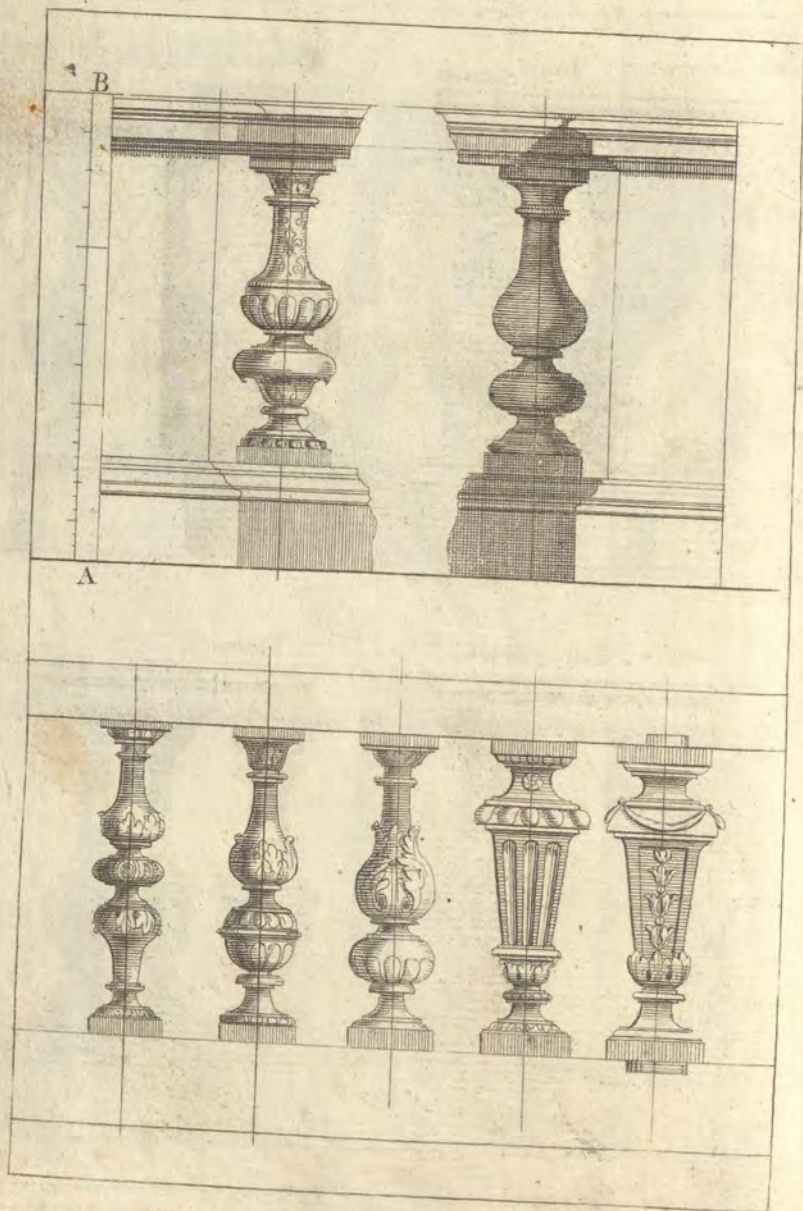
*A Stoping Balustrade.*

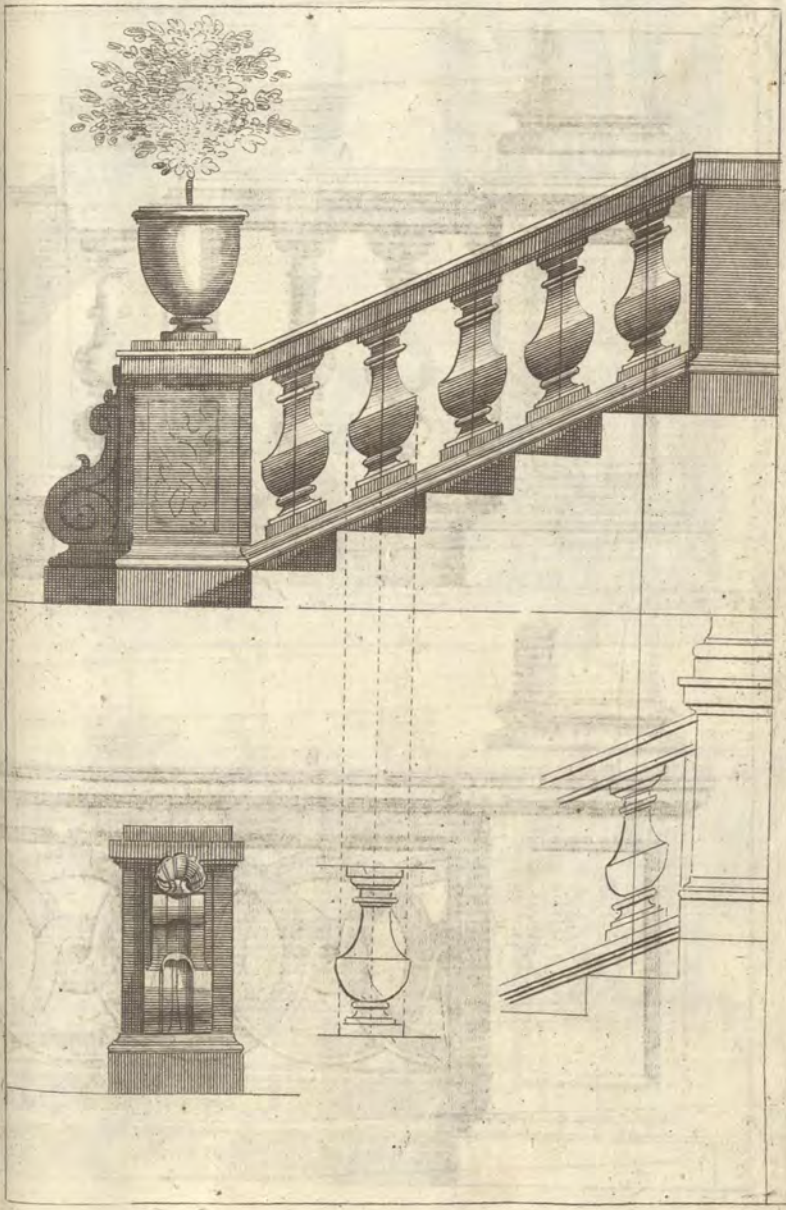


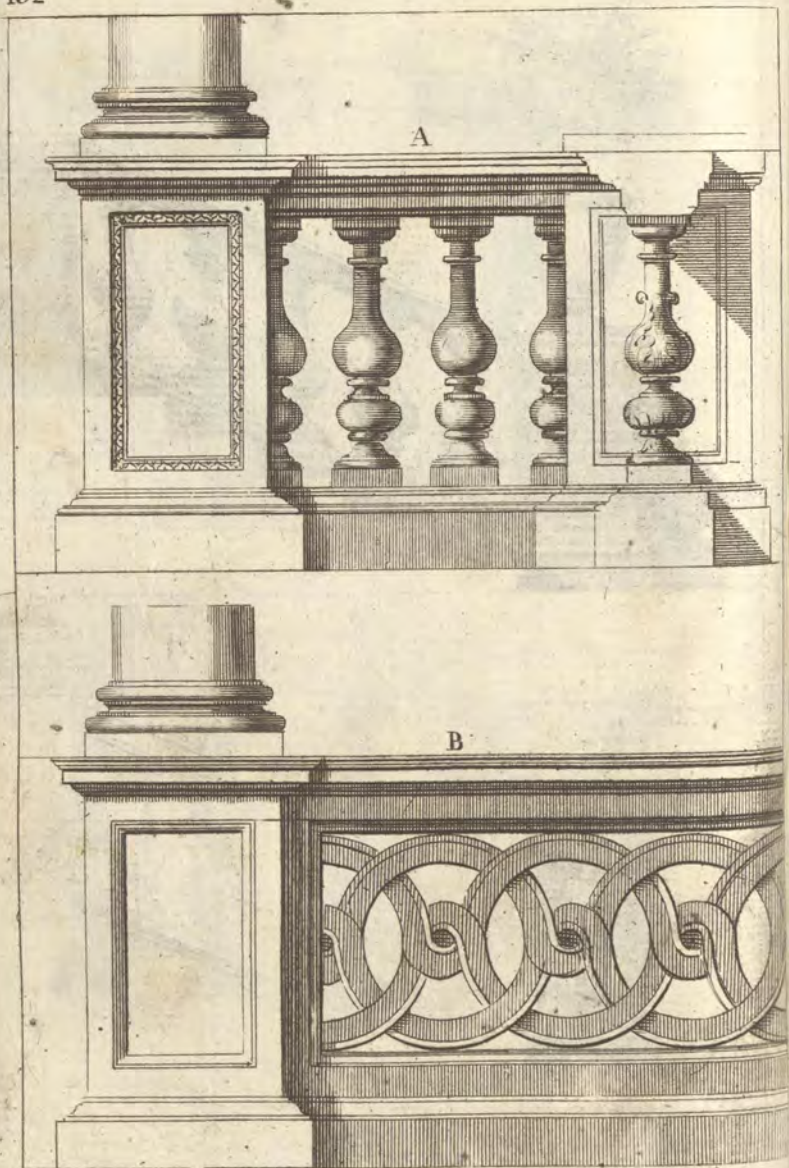
## BALUSTRADES



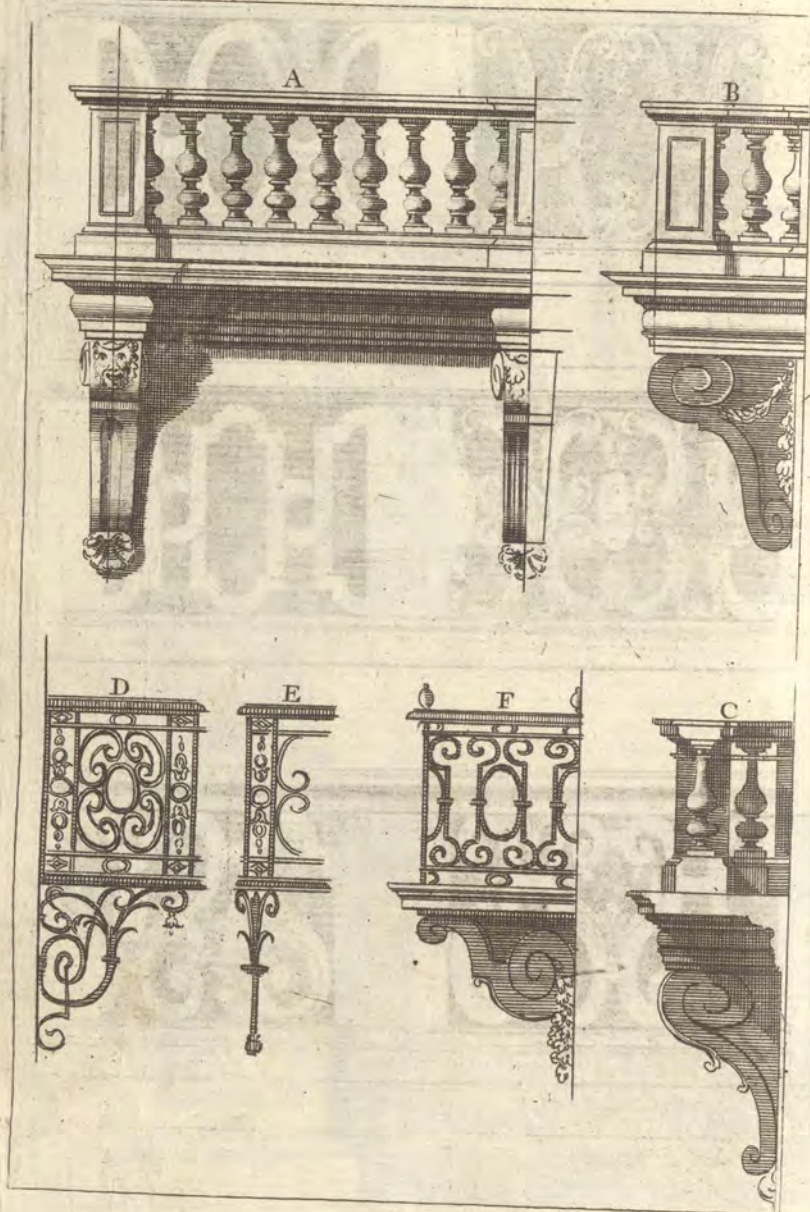








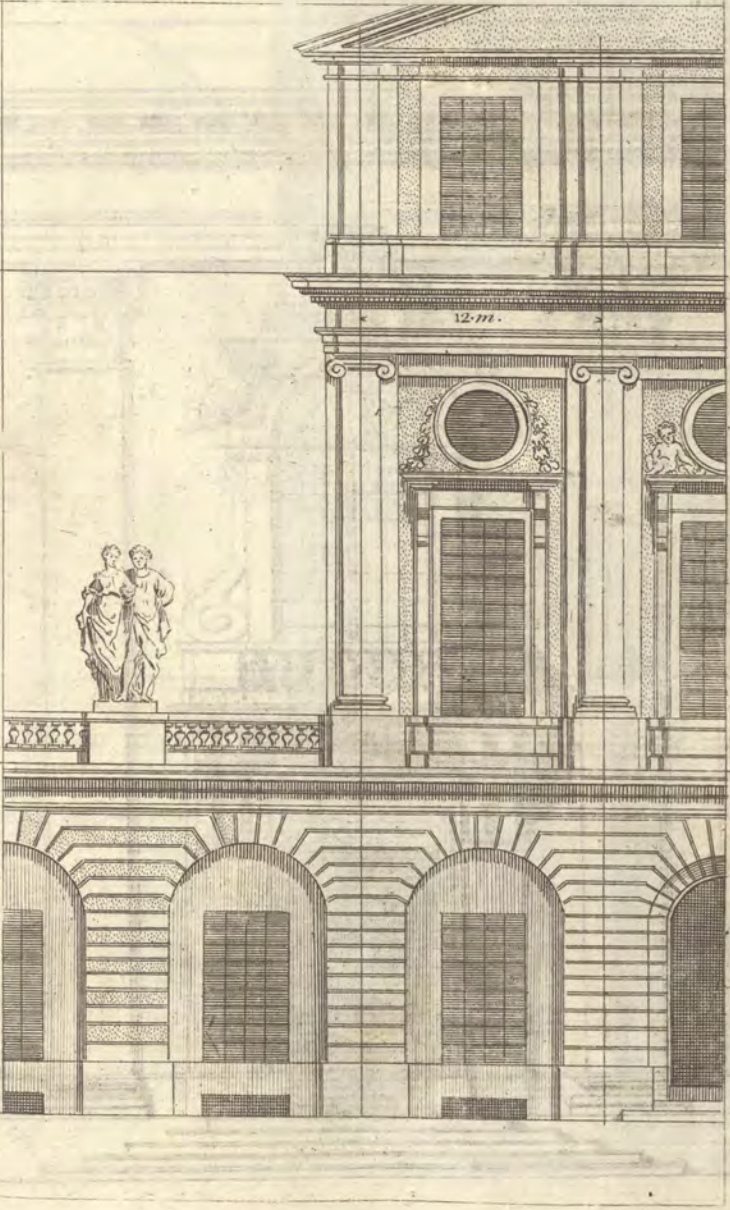


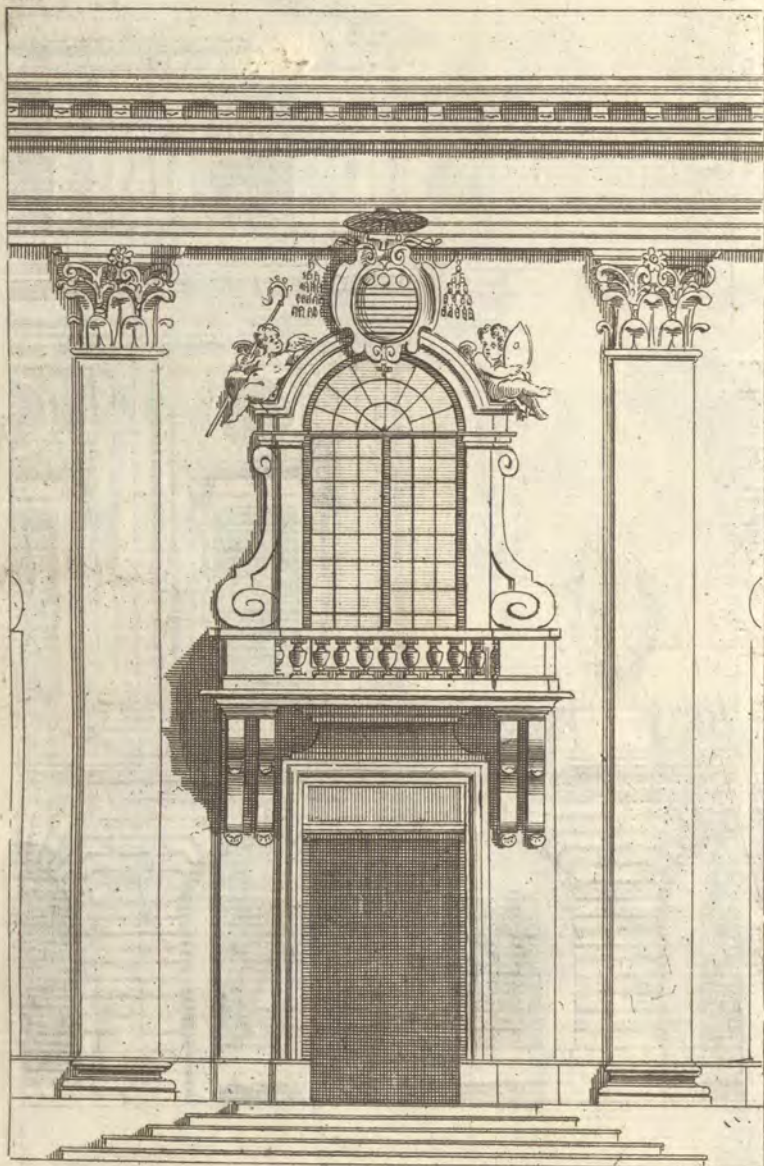


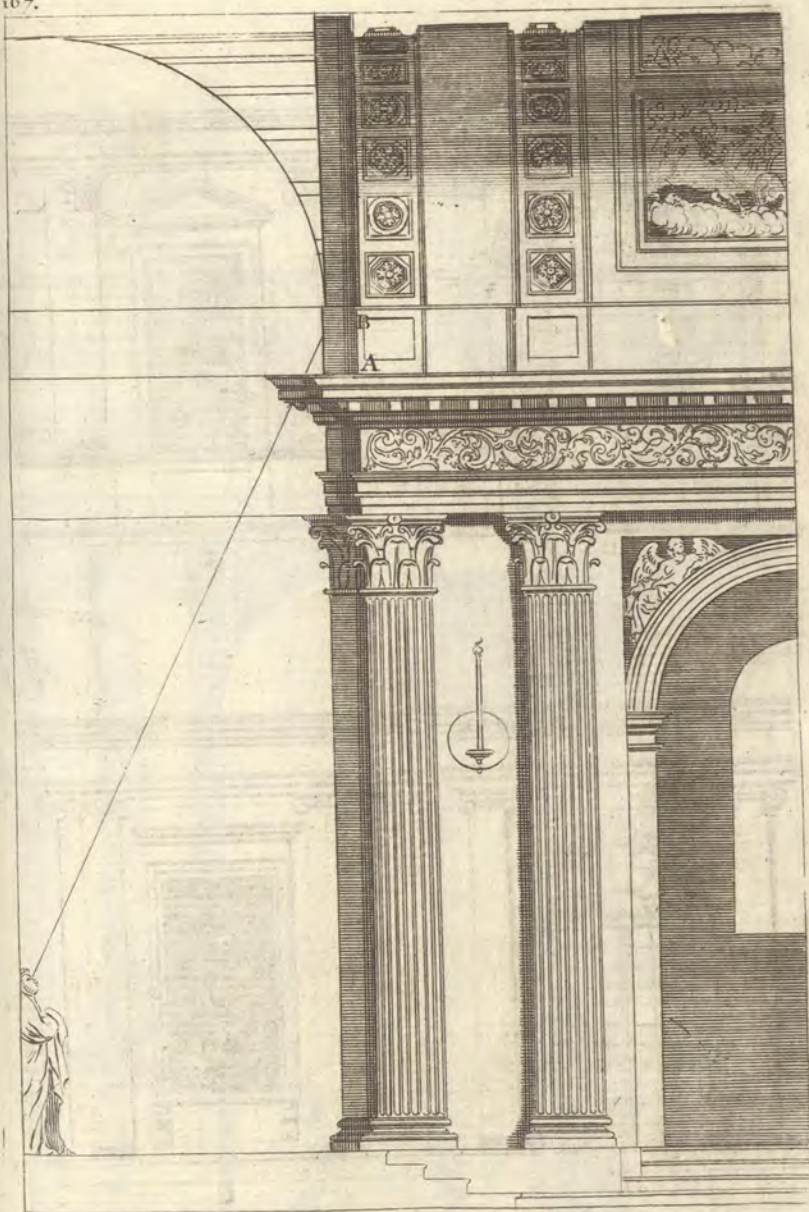
Ionic Order.

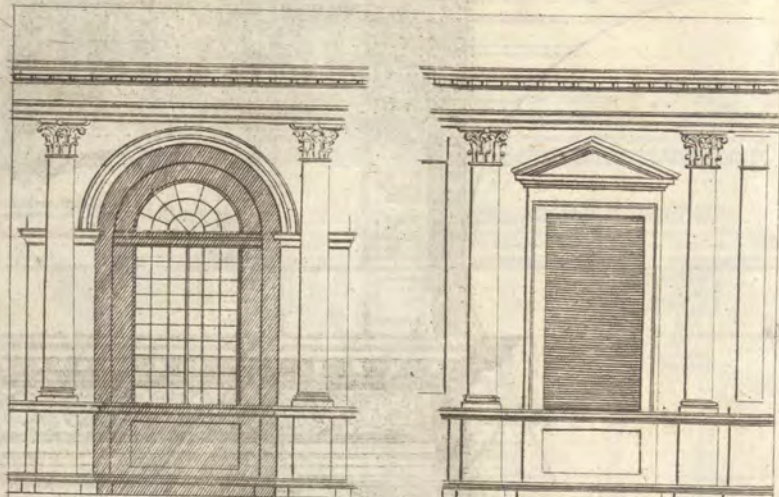
Regular Order.

Rustic Order.









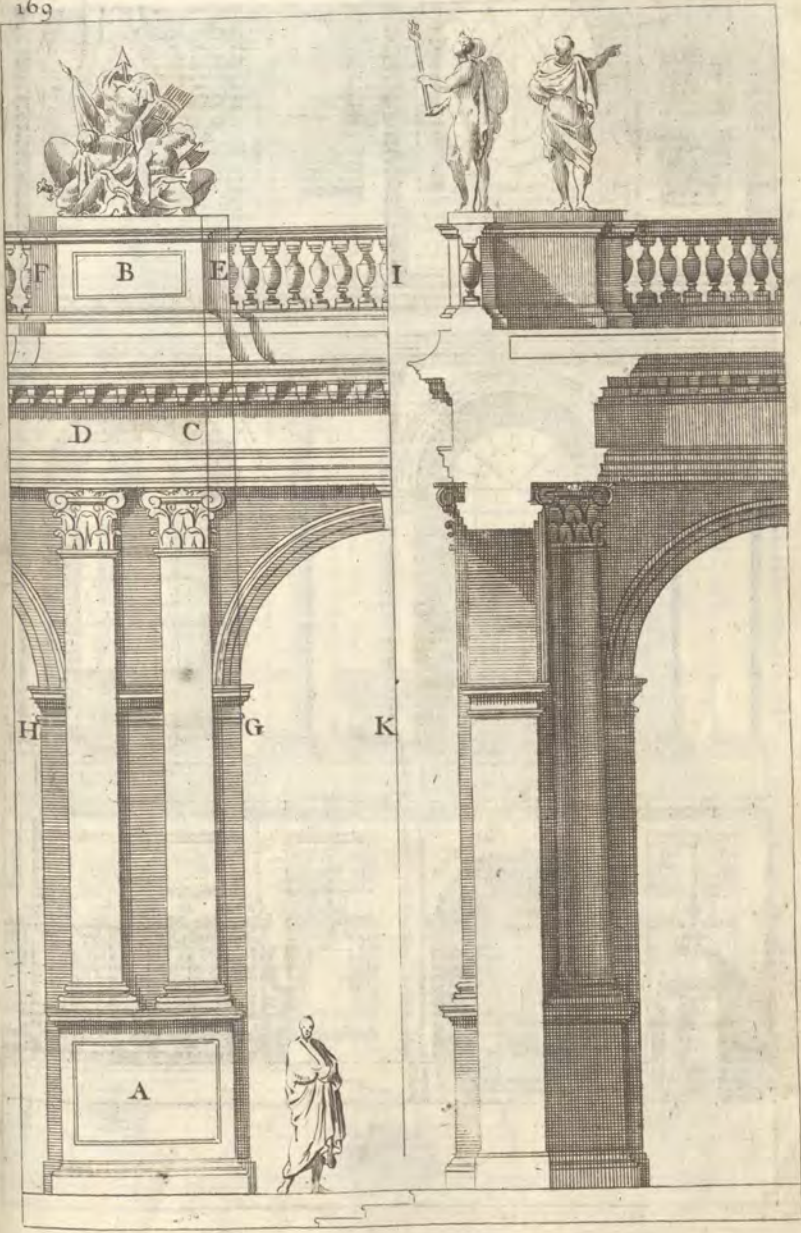
B

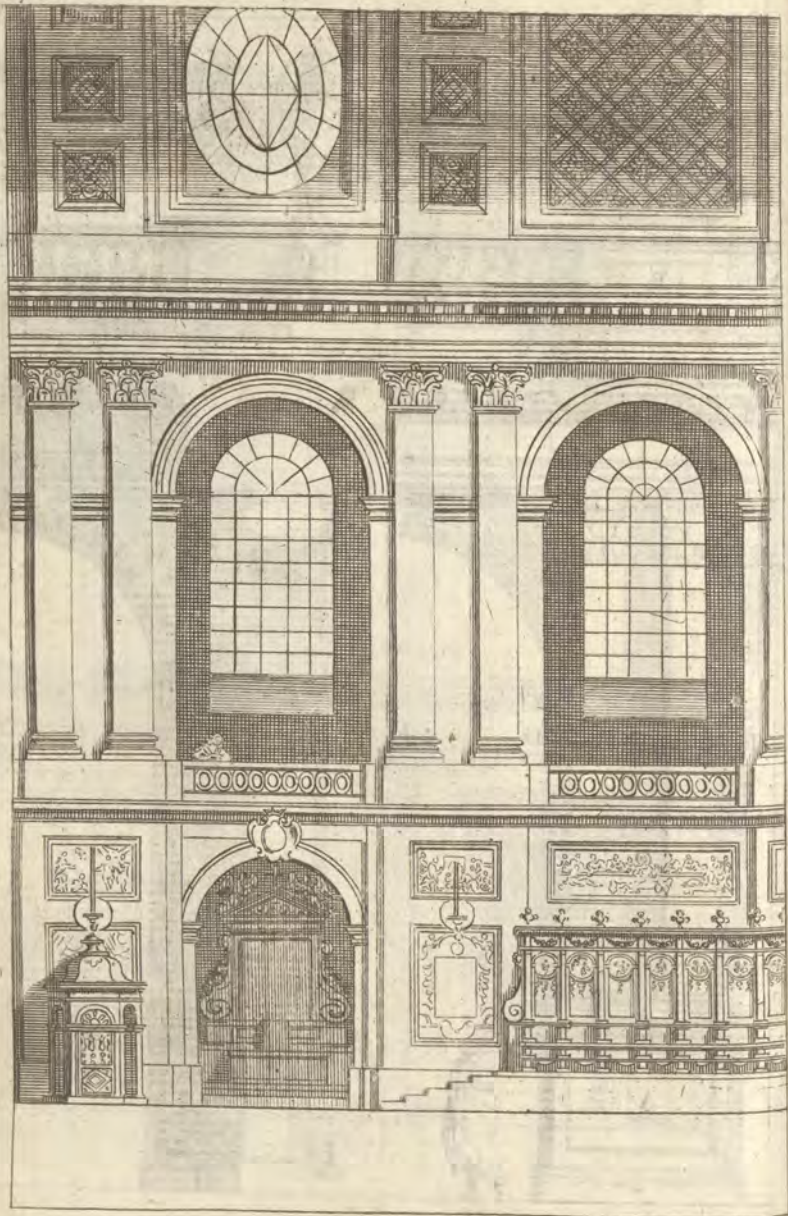
A

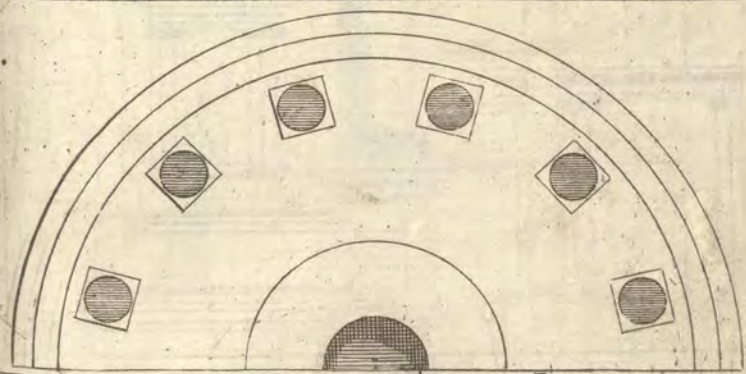
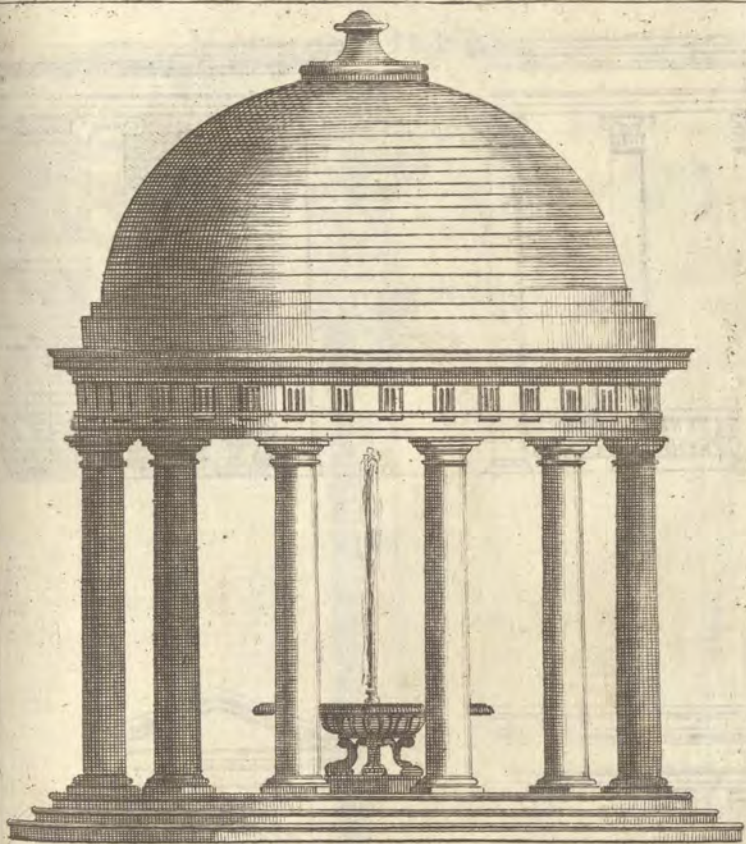


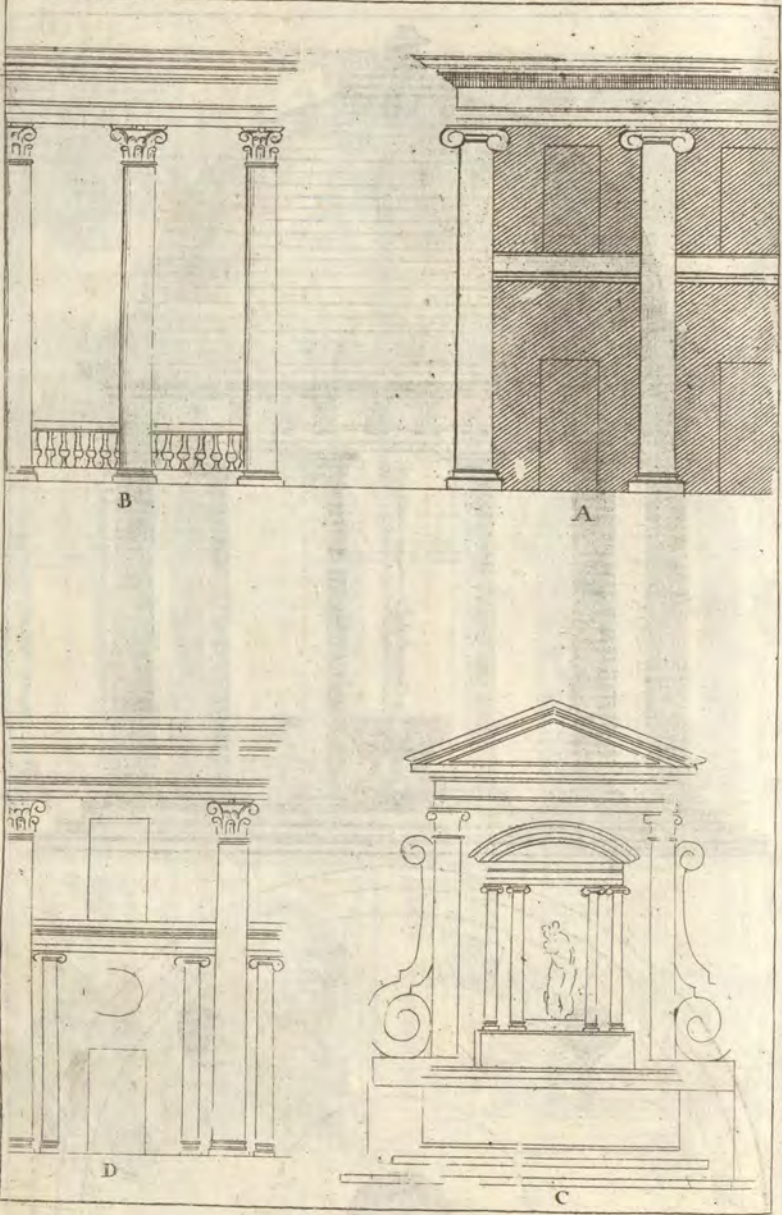
D

C

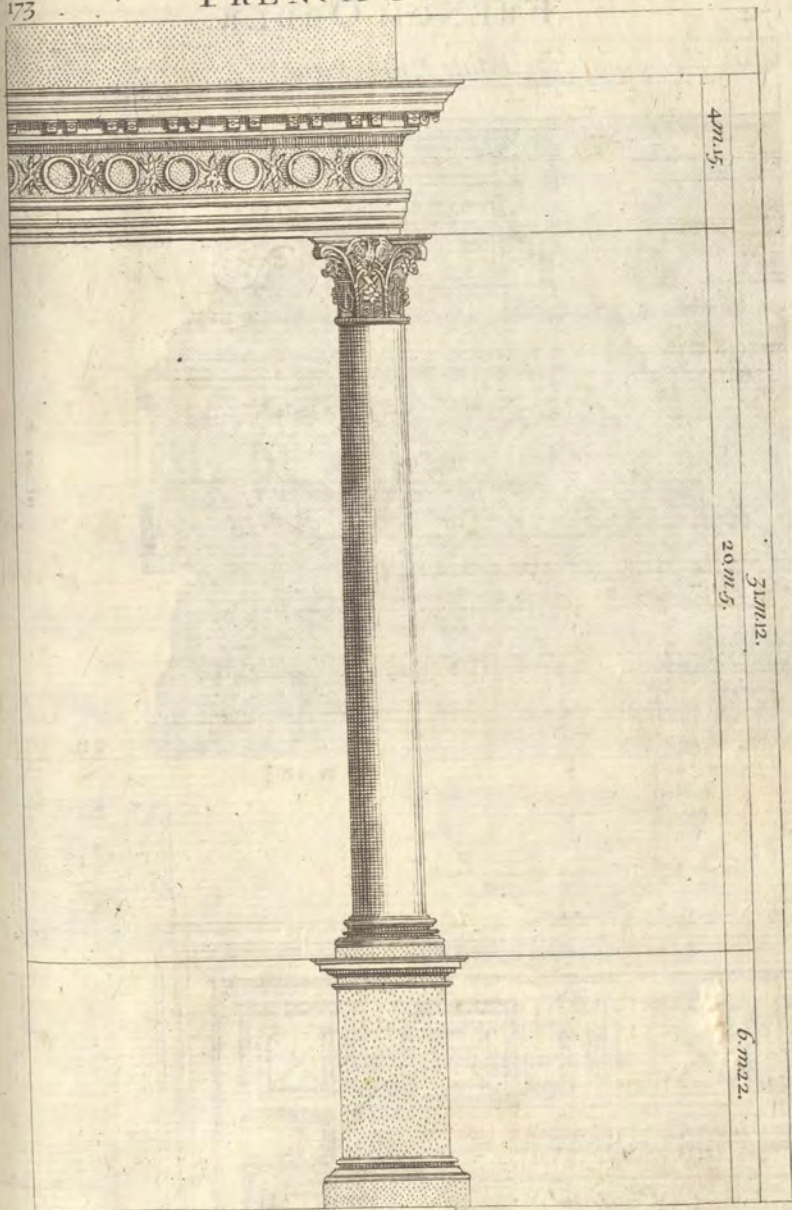






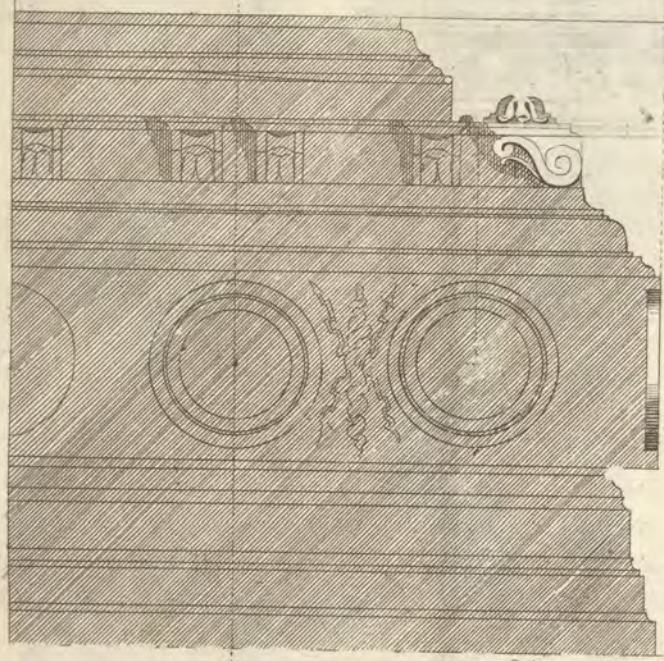


## FRENCH ORDER.



# FRENCH ORDER.

*Little Entablature.*



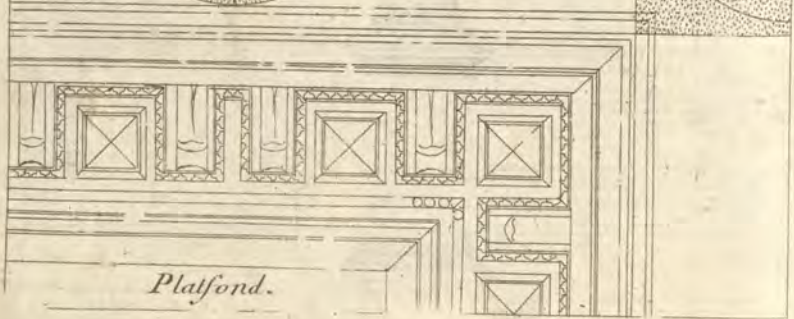
4 m. 10

26

3 m 18  $\frac{1}{2}$

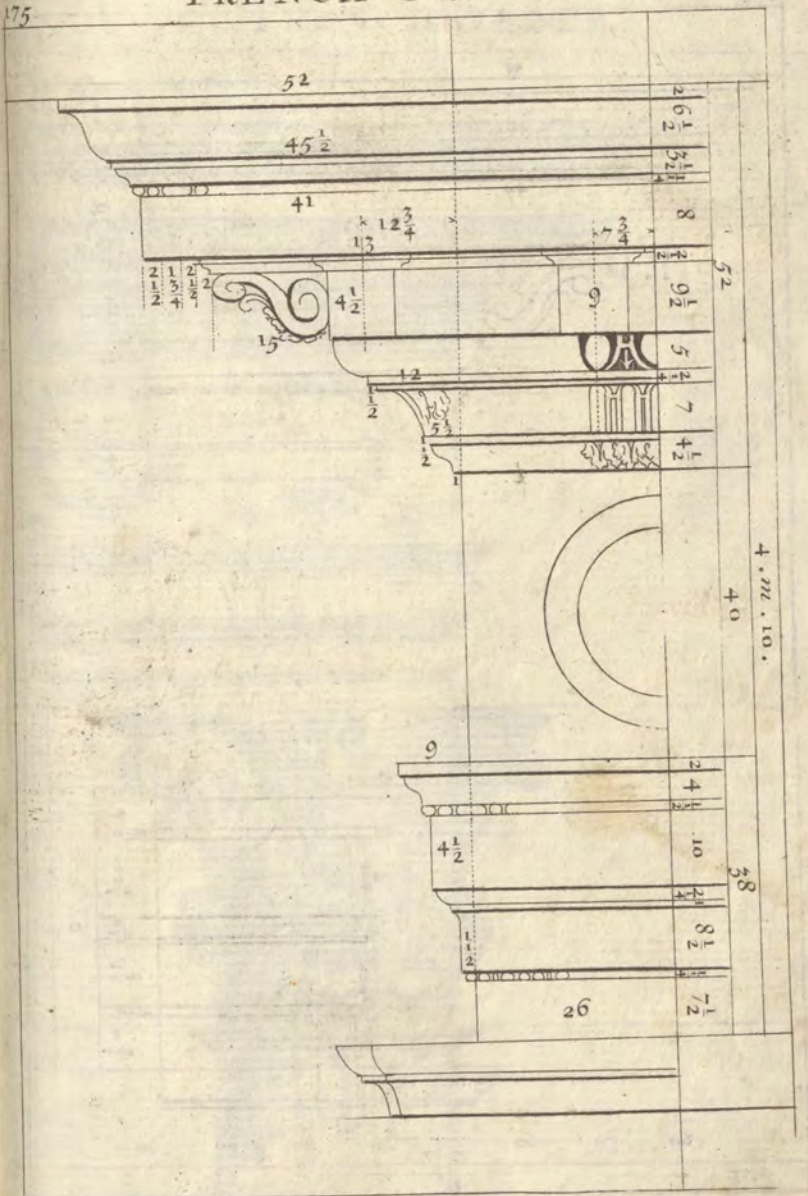


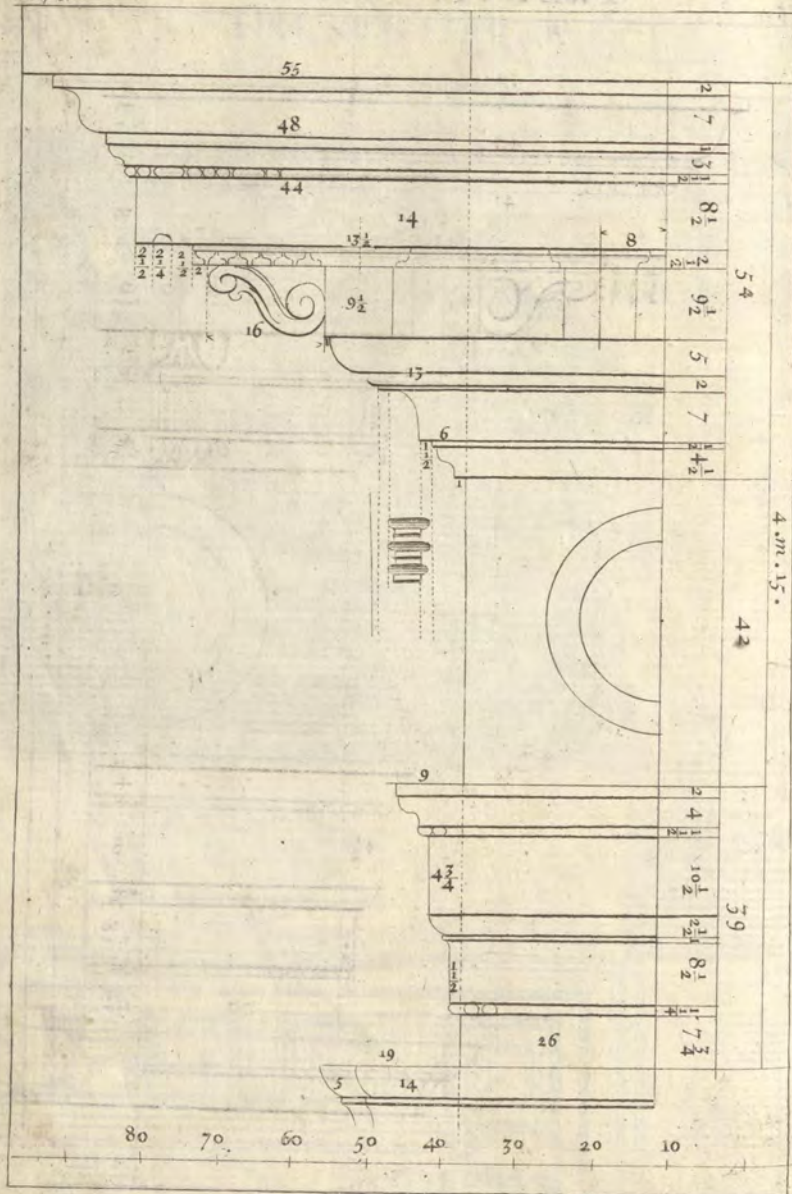
26



*Plafond.*

# FRENCH ORDER.





# FRENCH ORDER.

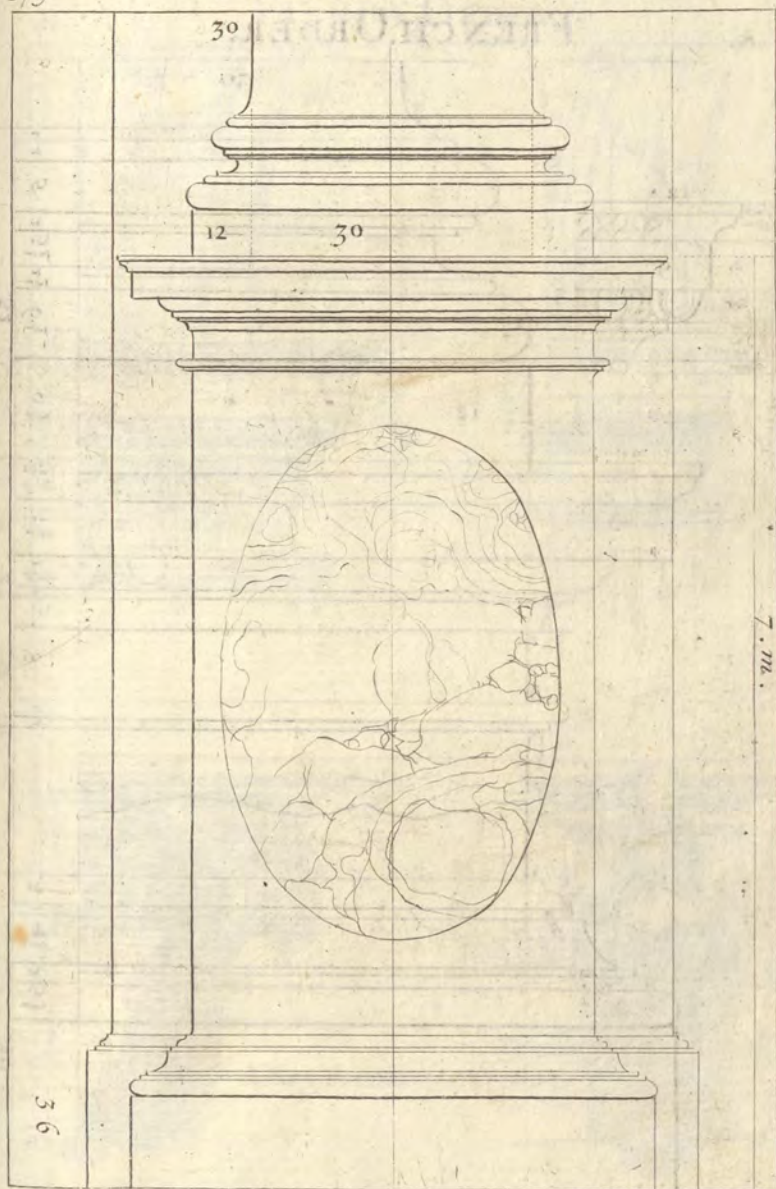


Fig. 15.

FRENCH ORDER.

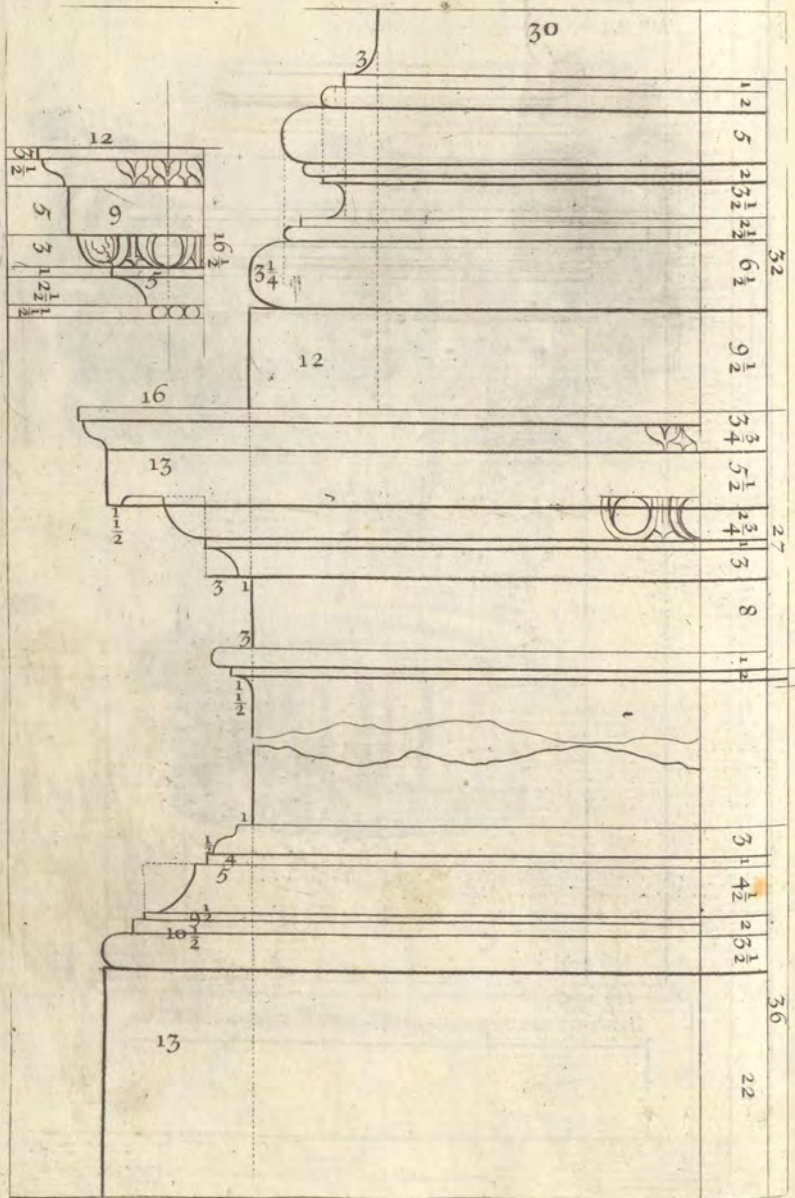


## FRENCH ORDER.

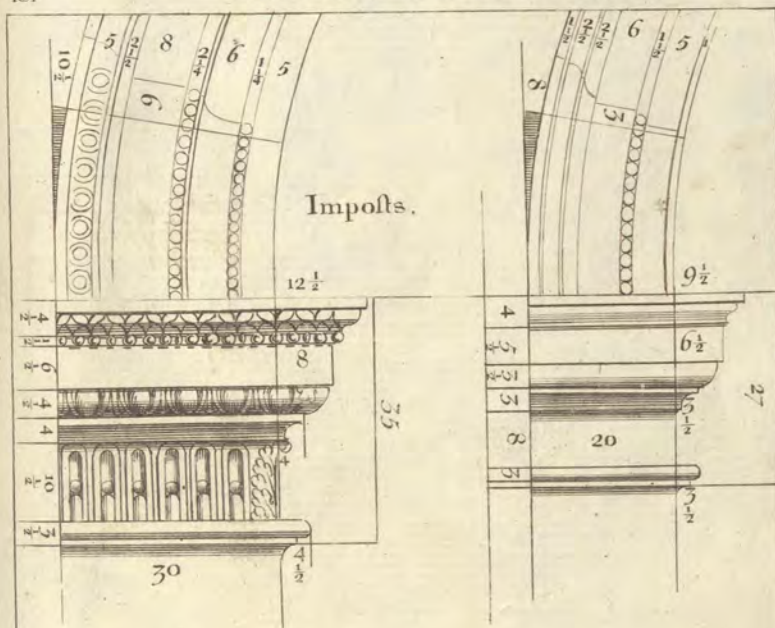


# FRENCH ORDER.

180



# FRENCH ORDER.



Section of the Archivolte.

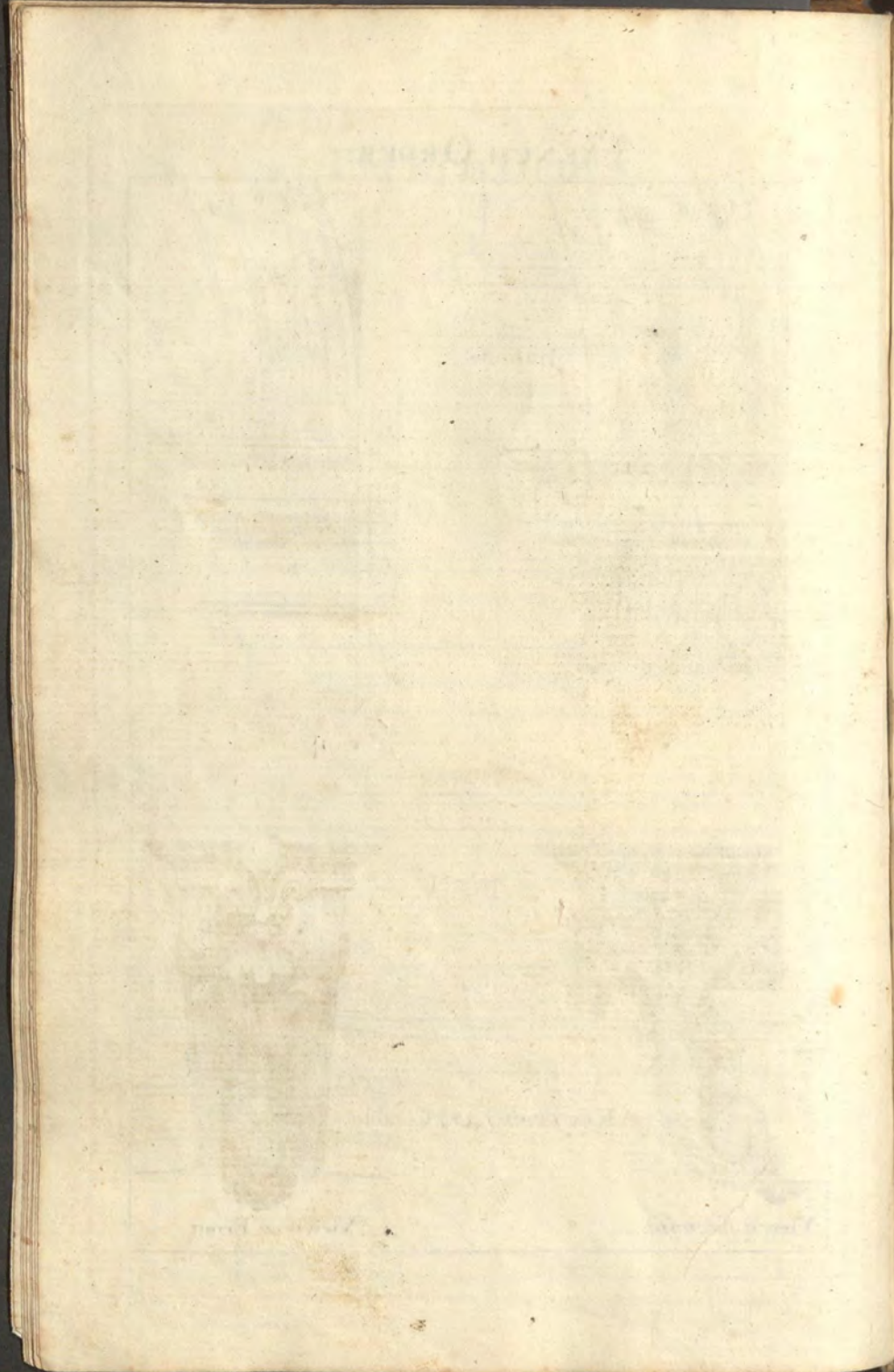


View'd *sidewife*.

A Key serving as a Console.



View'd *in Front*.



A  
TREATISE  
O F  
ARCHITECTURE,  
WITH  
*Remarks and Observations.*

Necessary for Young People, who  
would apply themselves to that  
Noble ART.

---

*By Seb. Le Clerc, Knight of the Empire, Designer and Engraver in Ordinary to the Cabinet of the French King.*

---



---

LONDON:  
Printed and sold by *Richard Ware*, at the *Bible and Sun* in *Amen-Corner*, near *Pater-Noster-Row*. 1732.

TREATISE

ARCHITECTURE

WITH

Remarks and Observations

on the Principles of the Art

and the Manner of Practising it

By JOHN SWEET

Author of the Treatise on the

Principles of the Art of Building

in Great Britain



LONDON:

Printed and sold by Richard Bland, at the

Sign of the Sun in Strand-Street, near

St. Martin's Church

---

---

T O T H E

# R E A D E R.

**I** Don't here propose to treat of all the Parts that belong to Architecture: The Mechanical Structure of a Building I pass over: and am utterly silent as to the manner of preparing the Foundations, raising the Walls, managing the Carpentry, learning the Nature and Quality of Stones, Woods and Sands; making of Lime, Mortar and the rest: these being Things quite foreign to my Profession, and which have been already abundantly handled in the Works of Vitruvius, Palladio, Vignola, Savot, and several other Architects sufficiently known.

My Design in this Work, is to confine my self to what regards the Beauty, the Elegancy, and good Taste of the principal Parts in the Composition of a noble and  
A 2 graceful

To the Reader.

*graceful Edifice. I lay down Orders of Columns and Pilasters, in new Measures and Proportions, and consider the other Parts which may accompany those Orders, the Rules and Observations to be regarded in assembling them together, and the Remarks that appear'd necessary to prevent young People from running into certain Errors, pretty frequent in Buildings, and which might not, perhaps apprehend of themselves, nor be inform'd of from other Treatises; in regard those who have hitherto written of Architecture have not taken the least notice of them, tho' otherwise precise enough in matters of little moment.*

---

---

A

# TABLE

Of the PRINCIPAL Matters in  
this Treatise.

## SECTION I.

- O**F *Architecture in general*  
*Of the beautiful and noble manner of*  
*Building*  
*The Knowledge necessary for an Architect to be-*  
*come eminent*  
*Of the Orders of Columns*  
*Of the different Orders of Columns*  
*Of the different Manners wherein the five Or-*  
*ders of Columns have been handled, with*  
*useful Remarks on those of Palladio and*  
*Vignola*

## SECTION II.

- Of the Tuscan Order*  
*Of a second Tuscan Order.*  
*Of the Doric Order*  
*Of the Ionic Order*

*Of*

# A T A B L E.

- Of the Roman Order*
- Of the Spanish Order*
- Of the Corinthian Order*

## SECTION III.

- Of Pilasters*

## SECTION IV.

- Of Wreathed Columns*
- Of Symbolical Columns*
- Of Cariatides or Columns made in the Figure of Women*
- Of Persian Columns*
- Of Termini or Terms*
- Of Arches or Portico's supported by Columns*
- Of Entablatures with Returns or unequal Projections*
- Of the Attic Order*

## SECTION V.

- Of the Assemblage of Orders*

## SECTION VI.

- Of Gates or Doors*
- Of Windows*
- Of Pediments*

A T A B L E.

*Of Niches*  
*Of Statues*  
*Of Pyramids*

S E C T I O N VII.

*Of Balusters and Balustrades*  
*Of Balconies*  
*Of Perrons or Ascents*  
*Some particular Observations*  
*A New French Order*

END of the Table.

---



The Abbot DE VALLEMONT, in his Panegyrick on Mr. Le CLERC; gives the following Account of this his Book of Architecture.

**I**N 1714. about six Months before the fatal Moment which depriv'd us of this great Man, he gave over all thoughts of every thing that bore any relation to Drawing or Engraving; but at the same time he did not give over labouring in another kind: For during that time, he published his Treatise of Architecture, the Proofs of which pass'd the Correction of his own Hand. This Work consists of two Volumes in Quarto; the second whereof is wholly Figures. The Exactness, that reigns throughout this great Work, very plainly demonstrates, that there are Persons who enjoy, as it were, a particular Privilege of Heaven; insomuch that when Death makes its approaches upon them, they are much less sensible than other People, of the Infirmities and Weaknesses which both the Soul and Body, (the Harmony whereof is at that time preparing for a Divorce,) feel as so many certain Tokens of a near Dissolution. Of this Monsieur Le Clerc appears a bright and eminent Example; if we consider that strength and vigour of

a Soul

*Soul which he must exercise in carrying on, so happily as he did. the Impression of a Book, filled with two hundred Figures lately compos'd, and which must be mighty puzzling and perplexing, by reason of the frequent References requir'd from the Figures to the Explanations in the first Volume. One must take a view of the perpetual Relation there is between these two Volumes, before we can comprehend how prodigi us an Application he must have made to render that great Work so correct as it is.*

*Monsieur Le Clerc, always modest, and ever a speaking of Truth, shews himself very particularly a Master of both these Virtues, in this his Treatise of Architecture; and that to such a degree too, as is against his own proper Interest. It is customary in the Titles of Books, to affect giving the World a great and pompous Idea of them, and to swell the Title with numerous Contents of mighty Profit, arising to all sorts of Persons from the perusal of the Book, in order to inbance its Price, and give it a better Run. Our Author on the contrary, in the very Frontispiece of his Work, declares, That it was expressly made for the use of young People, who had a mind to apply themselves to the study of that fine Art; and even in the Advice to the Reader, he does not explain himself to any better advantage, to make it appear more promising. Be it our part to make amends for the Injury which Monsieur Le Clerc has done himself in confining his Work to such narrow Views, and to shew that it truly contains all the Remarks and*  
*Obfer-*

Observations that can be devised for the Use and Profit even of those who have had many years Experience, and been long practiced in the important Profession of an Architect. Throughout all this Work, he keeps close to what regards the Beauty, the good Taste and Elegance of the principal parts which enter the Composition of an Edifice, truly great and noble; he has there describ'd the Orders of Columns, and Pilasters under new invented Measures, and Proportions. He next lays before our Eyes, the other Parts which may accompany these Orders; and are not these very nice Points, which must take with Masters themselves, as well as with Disciples of that Art?

Our Author explains himself so clearly upon every Point of Architecture that has ever been taught, that there is no young Man of a moderate Genius, but may from his own single Reading and Observation, comprehend all the Lessons contain'd in that Treatise. The Beauty of the Plates which compose the Second Tome, invite them to the Study, by the agreeable Accidents and Circumstances which Monsieur Le Clerc has there invented: He divides his Book into seven Sections.

The first Section treats of Architecture in general, and the five Orders of Columns: Namely, 1. The Tuscan. 2. The Doric. 3. The Ionic. 4. The Corinthian. 5. The Roman. which they likewise call the Composite Order, because the Capital of that Column is compos'd out of the principal parts of the Capitals belonging to the other Orders. The Corinthian  
Order

*Order is by much the more noble, rich and delicate; it is a Master-piece of Art which is seldom made use of, but in Buildings the most pompous and magnificent.*

*The Second Section treats of the Orders of Columns severally; and what the Author remarks, concerning the Intervals, or Spaces between the Modillions, deserves the Perusal of the greatest Masters.*

*The Third Section treats of Pilasters.*

*The Fourth Section treats of wreath'd or twisted Columns, of Columns representing human Figures, of Cariatides or Columns made in the shape of Women, of Persian Columns, Termini or Terms of Arches, Piazzas, and Portico's supported by Pillars, of Entablatures that have Returns, or unequal Projectures, and of the Attic Order.*

*The Fifth Section speaks of all the Assemblage of the several Orders together. Here the Author delivers in a very few Words a great many things that claim the uttermost Attention, and that are excellently adapted to form in us a good Taste, and lead us to the full Acquisition of that Knowledge, which is required in carrying on the greatest Works of Architecture.*

*The Sixth Section treats of Doors, Windows, Pediments, Niches, Statues, and Pyramids.*

*The Seventh and last Section treats of Rails and Balusters, of Balconies, and Perrons or Steps rais'd before the Doors of great Houses. Here again Mr. Le Clerc lays down some particular Observations. The whole concludes with a new  
French*

French Order; which he gives us to understand, provided it be well executed, will have the most beautiful and graceful effect, that can be conceiv'd. He has made a small Model of it in Relievo, which he observes is not to be beheld without Pleasure and Satisfaction.

In a word, Mr. Le Clerc has, in this last Book of his composing, not only given us Rules for the Ordonnance of the Parts of all kinds of Buildings; but he hath likewise let us into a thorough Knowledge of the proper Ornaments and Decorations, which ought to enter into the respective Compositions, and give Life and Beauty to the whole. He opens the Eyes of young People, and fills their Minds with those heights of Knowledge and Judgment, which those, who have a mind to be Masters of the Art, and eminent for their Skill in Architecture, should above all things make it their Endeavour to acquire.

---

Faint, illegible text, possibly bleed-through from the reverse side of the page. The text is arranged in several paragraphs and includes a horizontal line near the bottom.

A  
T R E A T I S E  
O F  
A R C H I T E C T U R E .  
S E C T I O N I .

---

By way of Introduction to the Study  
of Building.

---

ARTICLE I.

Of ARCHITECTURE *in general.*



ARCHITECTURE, in general, is the Art of Building well; and consists of two principal parts: the one Civil, the other Military.

The end of Civil Architecture is to shelter men from the injuries of the weather; and to furnish them with strong, suitable, healthy, convenient, and agreeable Habitations.

Military Architecture, usually called Fortification, has for its Object, the Security of Cities and States: but this part we reserve for the Subject of another Treatise.

Civil Architecture may be considered, either in the Design of a Building, or in the Construction and Workmanship thereof.

In

2 *A Treatise of Architecture.*

In the Design, the principal regard is had to the Distribution of Apartments, their Uses and Conveniencies, to the beautiful Appearance of the whole, the just Accord and Harmony of the parts, and to their Proportion and Elegancy.

In the Construction, regard is had to the Firmness of the Foundation, the Strength of the Masonry, the Quality of the Stone, Sand, Lime, and Mortar; or, to speak properly, the Construction, rather, consists of several distinct parts; as the Masonry, Carpentry, Joiney, Smithery, Alazery, Roofing, &c.

The Scheme or Projection of a Building, is usually laid down in three several Draughts or Designs.

The first is a Plan, which shews the Extent, Division, and Distribution of the Ground into Apartments, and other Conveniencies.

The second shews the Stories, their Heights, and the Outward Appearances of the whole Building; and this we call the Design or Elevation.

The third, call'd the Section, shews the Inside: and from these three Designs the Undertaker forms a computation of the expences of the Building, and of the time required to go through with it.

A Design or Projection may either be that of an ordinary Habitation, or that of a noble, stately and magnificent Building: the Architecture of which last, alone, will make the subject of the following Treatise.

Article

ARTICLE II.

*The Knowledge necessary for an Architect to become eminent.*

**A**Mong all the arts, that of Architecture is one of the most extensive and the most difficult. For which reason, a person who would apply himself to it, so as to become a Proficient, should not neglect any of those Studies, that have a tendency to open his mind, procure him a Genius, an Accuracy and a good Taste in every thing that in any wise relates to Building.

These Studies may be reduced to Designing, Geometry, Arithmetic, Mechanics, or the knowledge of Moving Powers, Perspective, Stone-cutting, Levelling and Hydraulics.

Designing is in a particular manner necessary for an Architect: for 'tis from hence he must fetch all his noblest Thoughts, and all that Grace and Beauty which he would bestow upon his Building, both in the whole and its parts.

Geometry, too, is indispensibly requisite; for it is this that must furnish the Architect with sure and certain Principles, whereon to proceed in the practice of his Art.

Arithmetic he can't be without; on account of the Calculations necessary to determine the Expence of Materials, of Money, and of Time, that the execution of his design will require.

#### 4 *A Treatise of Architecture.*

He must understand the Cutting of Stones, chiefly for the Building of Arches, Vaults, Gates, Stair-Cases, and all other parts of Buildings which hang in the Air, and are out of the Perpendicular.

Perspective is highly useful; for this, in a single Design, shews him the Effect which any Building will have, when it comes to be actually rais'd.

The Knowledge of Mechanics will be of infinite service to him, in contriving the Machines necessary in raising of his Buildings.

Levelling and Hydraulics will guide and direct him in the conveyance of Waters.

But above all he must strive to acquire a good Taste, by making himself a master in Designing. This will enable him to distinguish the Beautiful and Grand manners of Building, and to prefer them to all others; on which all his reputation in Architecture entirely depends.

### ARTICLE III.

*Of BEAUTIFUL Architecture; or the NOBLE MANNER of Building.*

**T**HE Beautiful manner of Building we owe wholly to the antient *Greeks* and *Romans*, who gave us the first Ideas thereof, in those magnificent Edifices which they erected to the glory of their false Gods, their Princes, and their People. Such were their  
Temples,

Temples, Palaces, Amphitheatres, Circus's, Triumphal Arches, Baths, Mausolea, and other Buildings and Monuments; some Remains whereof, even at this day, shew the Politeness and Power of those People.

This Architecture we distinguish from the Common, by its Orders of Columns and Pilasters; and by their Appendages, as Pediments, Niches, Balustrades, Vases Statues, and other Ornaments; by its noble Ordonnances of Frontispieces, Vestibles, Peristyles, Domes, Salons, and Portico's, whereof Architects have composed those stately and magnificent Structures, which still continue to do honour to those for whom they were erected.

#### ARTICLE IV.

##### *Of the ORDER of COLUMNS.*

**O**F all the parts which enter the composition of a Magnificent Building, the Orders of Columns are the most considerable.

An Order of Columns, is usually understood of a Column, bearing its Entablement; but the Order is scarcely compleat, excepting the Column be rais'd on a Pedestal.

The Pedestal, Column, and Entablement, are three compound Parts, each consisting of three others.

The Parts of the Pedestal, are the Base Dye, and the Cornice; those of the Column, the Base, Shaft, and the Capital; those of

6 *A Treatise of Architecture.*

the Entablement, the Architrave, Frize, and the Cornice: each of which parts have their particular characters and members, call'd by the general names of Mouldings or Ornaments.

ARTICLE V.

*Of the different ORDERS of COLUMNS.*

THE Antients have given us five several Orders of Columns; the *Tuscan*, *Doric*, *Ionic*, *Roman*, and *Corinthian*.

The *Tuscan* Order is the strongest, and the most simple of all others: its name shews its Original.

If we believe *Monf. de Chambray*, in his Parallel, this Order ought never to be used any where but in Rustic, or Country Houses and Places. And 'tis certain that in the manner *Vitruvius*, *Palladio*, and some others describe it, it scarce deserves to be used at all. *Me* thinks, however, in *Vignola's* manner of composition, it has certain beauties even in its simplicity, which add a value to it, and render it worthy to be used not only in private Houses, but also in publick Buildings; as in Portico's of Markets, or publick Halls, in Magazines or Granaries of Cities, and even in Palaces, and Seats of Princes and Noblemen, particularly in the lower Apartments, Offices, Equerries, &c. and in general, in all places where Strength and Simplicity are required, and where any of the richer and more delicate Orders would be unsuitable. The

The *Coric* Order is the most antient, and was given us by the *Greeks*. Its Composition is Grand and Noble; and the Triglyph, which make the Ornaments of its Frize, bearing some resemblance to a Lyre, seem to intimate it to have been originally intended for some Temple consecrated to *Apollo*. As we are now furnish'd with richer and more delicate Orders for Temples, the *Coric* is most properly used in the Gates of Cities, in Arsenals and Places of Arms, in Halls of Guards, and other Buildings that have relation to War; where Strength and a rough but noble Simplicity are particularly required.

In the most antient Monuments of this Order, the Columns are without Bases, the reason of which is not easy to assign. *Monf. de Chambray*, in his Parallel, is of opinion with *Vitruvius*, that the *Ionic* Column having been composed in imitation of a Naked man, nervous and robust as an *Hercules*, it ought to have no Base; imagining a Base to be that to a Column, which a Shoe is to a Man. But for my own part, I must confess, I can't consider a Column without a Base; but in comparing it to a Man, I rather form the Idea of a Man without Feet than without Shoes. For this reason, I am rather of opinion, either that the antient Architects had not yet thought of adding Bases to their Columns, or that they declined on purpose to give them any, with design to keep the pavement clear and unembarrassed with the Angles and Projectures of  
Bases,

Bases, which are apt to occasion people in passing by to stumble. This too appears the more probable, in regard the Architects of those times used to range their Columns exceedingly near one another; so that, had they been furnished with Bases, the Passages between would have been extremely narrow and incommodious. And this appears to be the reason why *Vitruvius* orders the Plinth of the *Tuscan* Column to be rounded off; that Order, in the manner he describes it, being particularly adapted to the servile Offices of Businets and Commerce, where Conveniency is always to be consulted before Beauty. Be this as it will, every man of good taste will allow, that a Base adds a Grace to a Column; and that it is a very necessary Appendage, in regard it makes it stand the more firmly on its Plan: so that if no Columns are now made without Bases, this ought not to be imputed to the Prejudice of our Architects, as some admirers of Antiquity will have it, but to their Prudence.

The first Idea of the *Ionic* Order was given by the *Ionians*, who, according to *Vitruvius*, compos'd this Column on the Model of a young Lady dress'd in her Hair, of an easy and delicate Shape; as the *Doric* had been formed on the Model of a strong robust Man. 'Tis said the Temple of *Diana* at *Ephesus*, the most celebrated Edifice of all Antiquity, was of this Order. It may now be used in Buildings of Piety, as in Churches, Courts of Justice,  
in

in Apartments of Ladies, and in other places of quietude and peace.

The *Roman* Order is usually call'd the Composite, in regard its Capital is composed of the principal parts of the Capitals of other Orders. It has a Quarter-round as the *Tuscan* and *Doric*, Volutes as the *Ionic* and a double row of Leaves underneath, as the *Corinthian*.

I call it *Roman*, as believing, with many others, that the *Romans* first invented it. Most of our Architects, in compliance with usage and custom, place this after the *Corinthians*; doubtless because it is the last that was invented. *Scamozzi* is the only Author who varies from the rule; but he does it with so much Judgment, that we make no scruple to imitate him.

This Order may be used in every place, and on every occasion, where 'tis required that Strength Richness and Beauty should be found together.

The *Corinthian* Order is the noblest, the richest, and the most delicate Order of Architecture. This is indeed a master-piece of Art, for which we are indebted to the City of *Corinth*: It ought always to be used in the most Stately and most Magnificent Buildings.

These several Orders have been very judiciously composed at various times, in order to suit the various kinds of Buildings, which either Necessity or Magnificence should occasion Men to erect; and these are ever made  
more

more or less simple, each in its kind, and more or less slender, according to the Buildings they are used in, and the riches of the Princes, People, or private Persons who build them.

## ARTICLE VI.

*Of the different MANNERS, wherein the five Orders or Columns have been treated; with some useful Remarks on those of Palladio, and Vignola*

**I**F these Orders of Columns had any positive Beauties, easy and obvious to the Eye, Architects wou'd have been oblig'd to agree among themselves as to their Rules and Properties; but as their Beauties are, in effect, meerly arbitrary, and not founded on any certain Demonstrations, it happens, that those who have treated of them have all prescrib'd different Rules, according as their Taste and Genius were different. It must be own'd, however, that tho' the same Order may have different Beauties, and different Proportions; yet among those Beauties and Proportions, 'tis certain there are some which please more, and are more universally approv'd than others.

Among the several Authors who have written of Architecture, *Palladio* and *Vignola* seem to be the most generally follow'd: But, 'tis a doubt

doubt even among Persons of Skill and Judgment, which of the two ought to be preferr'd to the other. The Orders of *Palladio* have Beauties different from the Orders of *Vignola*. I mean, their several Orders have each of them their respective Beauties: And yet the great difference between their Compositions does hardly allow us to view them without making a choice from some Circumstances. For instance, *Vignola's* Rule of making the Entablement in all the Orders just a fourth part of the height of the Column, pleases me less than that of *Palladio*, who diminishes this height in the three last Orders. I mean *Vignola's* Entablements appear heavy and lumpish; and especially in the *Ionic*, *Corinthian*, and *Composite* Orders; and above all, when the Columns are without Pedestals.

On the other hand, *Vignola's* Pedestals, whose height in all the Orders is one third of that of the Column, are in my Opinion preferable to the Pedestals of *Palladio*, which having less height appear flat and low.

Again, The Zocco of *Vignola's* Pedestal seems too little, and that of *Palladio* too big and strong for the Pedestal.

Further, I cannot commend *Vignola* for giving *Vitruvius's* Base to the *Ionic* Column, and for excluding out of all his Orders the ancient *Attic* Base, which without dispute is the most beautiful of all the Bases of Columns.

*Palladio*, too, in my Opinion had done better, if, in imitation of the Antients, he had given the *Attic* Base to the *Ionic* Column, instead of the *Doric*; in which last some more simple Base, as that for instance of *Vignola*, wou'd have been more suitable and consistent with the solidity of the Order.

Add to these, that a Man cannot view *Vignola's* *Tuscan* Order, without observing that of *Palladio* ill-conducted almost in every part; but especially in the Shaft of the Column; which, indeed, appears monstrous on account of its excessive Diminution towards the top. Even the smallest share of Discernment is sufficient to discover this.

Methinks, too, it had been more just in *Palladio*, if, instead of Modillions in the *Ionic* Entablement, he had made Dentils; which, as *Vignola* has very well observ'd, are an essential Ornament of this Order: Modillions appearing too strong, and massive for a Column that professes to imitate the delicacy of a young Woman.

Nor does it appear over-judicious in *Vignola*, to use Dentils in four of the Orders; it being a Point of Prudence in an Architect, to introduce a diversity in the Ornaments, as well as the principal Members of his Orders.

And again, I can't but think it an Oversight in *Vignola* to make his Dentils less in the *Doric* Order, than in the *Ionic*, *Corinthian* and *Roman*; when 'tis own'd the *Doric* is considerably

derably less delicate than any of those other Orders.

Who can approve of *Palladio's* making the *Corinthian* Column less delicate than the *Roman*, and the *Roman* Capital at the same time less delicate than the *Corinthian*? Or was it just in *Vignola*, to make the two Columns, *Corinthian* and *Composite*, in the same Proportions? Ought not some regard to be had to the difference of their Capitals, and, on that account, shou'd not some more Delicacy be shewn in the *Corinthian* Column, than the *Roman*?

Further, it may be justly said, That, if *Vignola* have made his Entablements too heavy in the three last Orders, *Palladio* has made his too light.

I observe also, that *Vignola* has made his Modillions in the *Corinthian* Order too large, insomuch that they encroach upon each other in the Inner Angles of the Entablement; on which account, the Roses inclosed between them appear too small with regard to those which come after them; which must be own'd a considerable Fault, that *Palladio* had the good Fortune to avoid, by making the Spaces between the Modillions perfect Squares.

Nor can it be denied, that in *Vignola* the Die of the *Corinthian* Pedestal is too high, and in *Palladio* too low for the Base.

Lastly, a Man cannot view *Vignola's* Portico's, without observing them to be better proportioned than those of *Palladio*, which are

14 *A Treatise of Architecture.*

too wide in the two first Orders, and too narrow in the two last.

Were I to examine the Profiles of these two Authors, many of them wou'd be found intolerable; being compos'd of Mouldings that are ill match'd to each other, and in no wise suitable to the Places where they are found.

These and many other Remarks of this kind, were what first determin'd me to compose the following Treatise. I wish those who do me the honour to read it, may have the Light necessary to judge of it themselves; or at least, that they wou'd have recourse to those Assistances of Mathematicks, and Designing, wherein I may be suppos'd to have made some Proficiency; and, which every one must allow are two Points to be principally labour'd, in order to meet with success in this Study.

## Advertisement.

I *Here propose the five common Orders, under new Measures and Proportions; with a second Tuscan Order, which I place between the first Tuscan and the Doric.*

*The Reader will also find a Spanish Order between the Roman and Corinthian, and a French Order at the end of the Work.*

*For the rest, I don't here propose to make any long, pompous, and unnecessary Discourses; the Figures which I add will explain themselves; nor shall I make any Remarks and Observations, but such as I judge absolutely necessary for the Instruction of the Youth, who apply themselves to this Art.*

*The Module, which I use for a Measure, is the Semidiameter of the Base of the Column, which I always suppose divided into 30 equal parts.*

*The Numbers added to the Figures signify Modules, where-ever they are follow'd by the letter M: without this letter they only express parts of Modules, which we otherwise call Minutes.*

TREATISE  
OF  
ARCHITECTURE.

---

SECTION II.

Of the Orders of Columns, in new Proportions: with useful Remarks and Observations.

---

*Figure 1.*

*Of the TUSCAN Order.*

THE Composition of this Order is much alike to that of *Vignola*, who has given it all the Simplicity that it can ever, reasonably, have.

The Columns is 14 Modules high, the Pedestal 4 and 25 Minutes, and the Entablement 3 and 15 Minutes; so that the Column is three times the height of the Pedestal, and four times that of the Entablement; the whole Order making 22 Modules, and 10 Minutes or Parts.

CON-

CONSTRUCTION of *this* ORDER.

To construct this Order, draw the Baseline *AB*, erect the perpendicular *CD*, which will be the Axis of the whole Order, and make a Scale *EF*, divided into Modules, that is, into equal Parts or Semi-diameters of the Column, and subdivide the first Division into 30 Minutes.

This done, take 4 Modules, 25 Minutes for the height of the Pedestal *CG*, 14 Modules for the height of the Column *GH*, and 3 Modules 15 Minutes for that of the Entablement *HD*; the rest according to the Measures express'd in the following Figures.

Thus much I thought proper to add by the way, to shew the Novice how he is to begin to make the Design of an Order: And I imagin I have said enough, to enable him without any further Instructions, not only to continue this Order, but also to conceive the Construction of the other Orders: Supposing that every one who applies himself to the study of Architecture, has already acquired Geometry enough to enable him to comprehend the whole at half a word.

*Of the* INTERCOLUMINATIONS.

*Figure 2.*

In this Figure, where the Columns are without Pedestals, and without Portico's too, there  
are

are three several Spaces or Distances at which they may be placed: *viz.* a large, a mean, and a little Distance.

The first and second shew the greatest, and least Space which can be reasonably interposed between the Columns of this Order, when they follow each other, one by one; and the third shews how near they may be placed, when they are to follow each other two by two.

When those Columns stand two by two, between each Pair the greatest distance must be made, which is 9 Modules, reckoning from the Axis of the one to that of the other.

When they follow each other, one by one, the Interval ought not to exceed 4 Modules 20 Minutes, from one Axis to the other.

In this Plate are likewise shewn the Measures for the distances of Columns, when they are found in Portico's or Arches. It is not however to be suppos'd, that these Proportions are so precise, as that they may not be varied a few Minutes, when occasion shall require; but this must be observed, that the less the Variation is, the better it will be.

*Of the COLUMN. Figure 3.*

The Column is composed of three Parts; the Base, the Shaft or Fust, and the Capital.

*Of the SHAFT.*

The Shaft always terminates a-top with an Astragal, and at bottom with a Fillet, which in this place is call'd Ozla.

The Shaft usually diminishes in thickness towards the top; and this Diminution commences from a third part of its height. That is to say, the height of the Shaft being divided into three equal parts, the first of them is equal, or Cylindrical, and the two others diminish imperceptibly to the Astragal, where the Diminution terminates.

Some give a little swelling to their Columns; that is, they make the Shaft somewhat bigger towards the top of the first third of its height, than towards the bottom; or rather they diminish the bottom of the Shaft, and by this means make the upper part of the first Division appear to swell. But this Diminution at the bottom of the Shaft, ought never to exceed one Minute, or one Minute and an half at the utmost. The truth is, there ought to be no swelling at all in a Column, excepting where there is some particular reason for it; as where the Orders are placed over one another: an instance of which will be given hereafter.

OBSERVATION.

A Column ought always to stand exactly perpendicular on its Base; and yet *Vitruvius*,

D

out

out of a view to the strength of the Building, tells us, there are some places and occasions, where'in it ought to incline towards the Wall, that is, the Diminution of the Column is to be taken wholly on the outside; so that it may make a kind of Counter-fort, or Buttress, to strengthen the Building. But as this Irregularity of Columns, cannot chuse but have an ill Effect; I am of opinion, *Vitruvius* in this case ought not to be regarded.

## REMARK.

In some antient Buildings we meet with Columns, whose Diminution commences from the very bottom of the Shaft; which to me indeed appears very just and reasonable: and yet this practice is now wholly laid aside, and abandoned by all our modern Architects.

OBSERVATION. *Fig. 4.*

Some very considerable Architects, on occasion, incompass'd the Shafts of their Columns with several Cinctures or Fillets imbos'd; as we see particularly in the place of *Luxembourg*, and other places of Note. But these kinds of Rustic Ornaments are never to be imitated, excepting in the Gates of Citadels or Prisons, in order to render their Entrance more frightful and disagreeable.

This too must be observ'd, That if these Rustic Ornaments may be admitted any where,

'tis

'tis only in *Tuscan* Columns, or at most in *Doric*; and never in the other more delicate Orders, especially where they are fluted.

*Of the CAPITAL. Fig. 3.*

The Capital of the *Tuscan* Column only consists of three parts; an *Abacus*, a Quarter-round or Boultin, and a Gorge or Neck, which terminates under the Quarter-round in a Fillet: the Astragal underneath belonging to the Shaft.

*Of the BASE of this COLUMN. Same Fig.*

This Base only consists of two Members or Parts, a *Plinth*, and a *Torus*: the *Plinth* is a flat square Body, the *Torus* a Body flat on one side, and round of the other.

The Fillet above the *Torus* belongs to the Shaft.

*Of the ENTABLEMENT. Fig. 5.*

The Entablement consists of three principal Parts; a Cornice, a Frize, and an Architrave.

To the first, that is, the Cornice, I give about two fifths of the whole height of the Entablement. The Frize I make somewhat higher than the Architrave, to the end that those two Members may appear to have nearly the same height; the Overplus given to the Frize, being intended to supply the place of that part hid-

22 *A Treatise of Architecture.*

den from the Eye by the *Tænia*, which finishes the Architrave: and this same Rule I observe in all my Entablements.

*Of the Projecture of the CORNICE. Same Fig.*

'Tis an establish'd Rule in Architecture, that the Cornice of the Entablement have its Projecture nearly equal to its height: and yet the Projecture may be safely made a little larger on occasion; particularly where a beautiful Profile is required, as I have here done in *Vignola's* manner.

*Of PORTICO'S, or ARCHES. Fig. 2. and 6.*

'Tis the ordinary proportion of Arches, that the height be made double the width. But this may be varied; and made a little more, or a little less, as occasion shall require.

OBSERVATION. *Fig. 6.*

When the Arches are to be at some distance from each other, for the conveniency of any Apartments, either above or underneath, the Columns which separate them, ought to be in couples; but when they are in couples, they should have but one Pedestal, if they have any Pedestal at all.

*of*

*Of the PEDESTAL. Fig 7.*

The height of this Pedestal, according to the general Rule already propos'd, should be one third of the Shaft of the Column; that is, it should not exceed 4 Modules 20 Minutes. And yet I make it 5 Minutes more; without which, in my opinion, it would lose all its Beauty: Whence it may be observ'd, that general Rules are not always to be rigidly follow'd.

OBSERVATION.

The Breadth of the Pedestal, I mean that of its Die, is always equal to the breadth of the Plinth of the Column; excepting the Pedestal be without Base and Cornice, as it frequently happens. In which case it is necessary that it should be a small matter broader, in order to distinguish it from the Base of the Column. See Fig. 126. and 128.

*Of the ENTABLEMENT of the COLUMN,  
rais'd on a PEDESTAL. Fig. 8.*

I always make two Designs of an Entablement; the one a small matter higher than the other: The first for Columns that have no Pedestals, and the second for those which have. This difference of Entablement is a thing highly reasonable; in regard Columns that have Pedestals, are in a more stately Ordonnance than

than those which have none, provided the Columns be but equal in other respects; whence 'tis apparent, the Entablement of the first should be stronger than that of the last. Accordingly, making one Entablement 3 Modules 15 Minutes, which is the common height, I could not think it adviseable to make the other, which is for Columns without Pedestals, above 3 Modules 10 Minutes; which comes five Minutes short of the former.

I am very sensible, that were we only to have regard to the Laws of Strength and Weakness, we should diminish the Entablements of Columns that have Pedestals, rather than those which have none. But we are here consulting Beauty, not Strength. And it may be observ'd, that I don't augment the Strength of this Entablement; but diminish that of the former, where the Portico's are less grand, and the Columns less distant. But the necessity of those two Designs of Entablements in the same Order, will appear more visibly hereafter.

*Of COLUMNS inserted, or let within the WALL. Fig. 9.*

There are some occasions, wherein an Architect cannot give his Building a sufficient Projecture; particularly where the Entablement would hinder the sight of the Windows above, or intercept the Light of the Apartments below. In these cases, the Columns are to have one third part of their Diameter inserted

ted or let into the Wall behind them. But recourse should never be had to this shift, excepting in cases of necessity; for the Columns here lose an infinite deal of that beauty and grace which they have when they stand alone.

It frequently happens too, that the Columns are let within the Wall for the greater Solidity, and the further strengthening of the Building. This, however, ought to be observed, that they never lose above one third of their Diameter; the reason of which will appear when we come to speak of Imposts.

OBSERVATION. *Same Fig. 9*

When the Columns stand alone, they have usually a Pilaster placed behind them, join'd to the Wall, or the Pillar of the Portico; as is shewn in the Plan *D*, of this Figure.

Sometimes in lieu of a Pilaster, we have a Column let within the Wall, in order to make the Symmetry more compleat: Instances of which are frequent.

OBSERVATION.

Though we allow of a Column let within the Pillar of a Portico; yet we can never approve of the letting a Column within a Pilaster; Instances of which, however, may be met withal.

*Fig.*

*Figure 10.**Of a Second TUSCAN Order.*

**T**HIS Order is less Simple and Massive than the former: It has somewhat of a Masculine beauty, and a good taste. Its Frize may be properly adorned with Turtles, which are the Arms of *Tuscany*.

*Names of the Parts and Mouldings of this ENTABLEMENT. Fig. 12.*

*A.* Cima-recta, or Ogee with its Fillet over it.

*B.* Baguette, kind of Astragal, with its Fillet underneath.

*C.* Corona, with its Larmier or Drip underneath.

*D.* Quarter-round, or Boultin.

*E.* Scotia or Cavetto, with a Fillet over it.

*F.* Frize.

*G.* Tænia, or Listel.

*H.* Second Fascia with its Fillet over it.

*I.* First Fascia or Naked of the Entablement.

**OBSERVATION.** *Fig. 13.*

When the Columns stand two by two, they may be placed pretty near each other; but it is

is to be observed, that their Bases ought never to touch; though we frequently find they do. The reason of this Rule is, that when the two Plinths come to be join'd into one, they form a new Body, which seems to have no relation to the Columns themselves. This Failing becomes very visible when the Columns have but a single Pedestal; for in that case, this continu'd Plinth appears rather as a part of the Pedestal, than of the Column.

Fig. 14. *Shews the Entablement of the Column raised on a Pedestal.*

Fig. 15. *Represents the Pedestal with the Base of the Column: The Names of whose parts are as follow.*

*A.* Shaft, or Fust of the Column.

*The Parts of the BASE.*

*B.* Scotia or Cavetto, with its Fillet underneath.

*C.* Torus.

*D.* Plinth.

*The Parts of the PEDESTAL.*

*E.* Plat-band.

*F.* Quarter-round.

*G.* Die, with its Fillets and their Apophyges.

*H.* Little Torus.

*I.* Zocco,

*The Parts of a PIEDROIT.*

KL. Piedroit, with its Fillet at bottom.

M. Its Zocco.

## OBSERVATION.

If the Shaft be made of Stone or other matter, different from that of the Base, the Cavetto *B*, with its Fillet underneath, may be added to it; the remaining Base only consisting of a Torus and a Plinth.

*Figure 16.**Of the DORIC Order.*

**I**N the Composition of this Order we may discern something extremely bold and noble. Its Entablement is pretty much like that which *Vignola* gives us; and which he owns to have taken from some antient Fragments. The Column is 16 Modules high, the Pedestal 5 Modules and 10 Minutes, and the Entablement 3 Modules 28 Minutes: so that the height of the Pedestal is one third of that of the Column, and the Entablement nearly one fourth. The whole Order being in height 25 Modules and 8 Minutes.

*Of the INTERCOLUMINATIONS. Fig. 17.*

The Distances of the Columns are not left to Discretion in this Order, as in the *Tuscan*. The Triglyphs, which make the ornament of this Column, with their Metopes, being confin'd to certain Measures, put it frequently out of the power of the Architect to place his Columns at the Distances he might otherwise chuse: However, by taking the liberty which I have done, of dispensing a little with the ordinary proportions of those Triglyphs and their Metopes, a Man has the Intercolumination in his own power; and yet without giving the least offence to the nicest Judges of Architecture, by such change of Proportions.

By Proportion I don't here mean, a Relation of Ratio's as the Geometricians do; but a Suitableness of parts, founded on the good Taste of the Architect.

In this Figure, the Measures of the Intercolumniations, and the Number of Triglyphs and of Metopes which separate them, are sufficiently shewn: the particular Proportions and Measures of those last parts will be shewn hereafter.

*Of the different Diminutions of COLUMNS.*

All Columns begin to diminish, in thickness, from one third of their height, as we have already observ'd. But in proportion as their Or-

ders are more delicate, their Diminution ought to be less sensible. For instance; in the first *Tuscan* Order, where the Column is but 14 Modules high, its Semi-diameter under the Astragal is diminish'd 6 Minutes. In the second *Tuscan* Order, where the Column is but 15 Modules high, its Diminution under the Astragal is but 5 Minutes and an half; and in the *Doric* Order where the Column is 16 Modules, the Diminution is but 5 Minutes. In the *Ionic*, where the Column is 18 Modules, this Diminution is but 4 Minutes and an half; and in the *Roman* and *Corinthian* only 4. That is, a Diminution of 4 Minutes on each side the Axis, is the utmost that the Column undergoes, tho' it always encrease in height in proportion to its thickness.

Indeed, according to some Authors, the Diminution of Columns, even of the same Order, ought to be greater or less, according as their heights are greater or less. For instance, a *Doric* Column, say they, 20 Foot high must have less Diminution than another of 15 Foot. And one of 30, less than another of 20: the reason they give for this, is, that the greatness of the height easily imposes on the Sight; and hence conclude that a very tall Column must of itself appear diminished towards the top. Nor can it be denied, but that this holds true where the Eye is placed near, and looks up from the bottom to the top of the Column; but then it is to be considered, that large Columns are never made with design to be

be view'd thus near, but always at a distance suitable to their height; and it would be ridiculous to spoil their Proportions, out of Complaisance to such as should please to view them at an improper distance.

In my opinion therefore. when any certain Diminution of a Column has been once establish'd; provided it do but please the Eye when view'd at a distance, it ought never to be changed on occasion of any Alterations in the height of the Column; excepting it should be found in some close narrow place, which yet can never happen, unless in the inside of a Building; for instance, of a Dome, or the like; to which a prudent Artificer will always have a particular regard.

It must be remembred, that I am here speaking of Columns of the same Order; for in different Orders the Diminution must be different, as I have already observ'd. But as to a *Doric* Column, for instance, be its height an hundred Feet, or be it but ten, its Diminution shou'd always be the same, at least this is my Opinion.

*Of the FLUTINGS of the DORIC Column.*

*Fig. 18.*

The Flutings of this Column ought not to exceed twenty, which is the Number observ'd by *Vignola*. *Palladio* indeed has twenty four, but they appear too slender for this Order. These shou'd always be so dispos'd, as that  
there

there may be one to stand full in the middle of the Column. *Vignola* determines their depth by an equilateral Triangle, having one of its Angles in the middle of the Fluting. *Vitruvius* will have the depth to be the middle of a Square, one of whose Sides is the width of the Fluting, which last must indeed be the deeper of the two.

Sometimes the Flutings are made flat, and are call'd *Facettes*; but these never have so good an Effect as the others; and for that reason, are not so much in use, tho' it can't be denied but they are more suitable to the Solidity of the Order.

OBSERVATION. *Fig. 19.*

The Flutings ought always both to begin and end in the Shaft; near the extremity of the Apophygis.

When there are Flutings in the Column, there ought also to be Eggs and Anchors in the Quarter round of the Capital; and even Pearls and Olives in a Baguette, to be made underneath, in lieu of Anulets.

These Eggs and Olives ought to be in the same number with the Flutings, and to be regularly distributed; as is shewn in the Plan of this Figure.

*Of the MUTULES. Fig. 19.*

I make Mutules in this Entablement, not only to distinguish it the more from other Entable-

Entablement, but also because they agree very well with the nobleness of this Order; and add somewhat of a masculine Beauty to it.

In this Figure may be seen, how the Mutules make a *Corona* to the Triglyphs underneath; each Triglyph having its several Mutule.

OBSERVATION. *Fig. 20.*

Those who use Mutules, usually make them of the same breadth with the Triglyphs. But it wou'd be much better in my Opinion, if they were made of the same breadth with the Capitals of the Triglyphs.

It may also be observ'd, That I don't run my Mutules so near the Extremity of the Larmier or Drip, as is usually done; but that I leave a Space of three or four Minutes between the two, that the Profile may appear the more distinctly; and I observe the same Rule in the Modillions of the other Orders.

*Of the TRIGLYPHS. Same Fig. 20.*

The ordinary Proportion of Triglyphs, is one Module in breadth, and one and an half in height. But in regard these Measures occasion a Disproportion in the Intercolumnations of Portico's, (a thing particularly observable in *Vignola*, who makes the Pillars there, five Modules broad, whereas the others are but four;) I have accommodated the Proportion of mine, I mean of my Triglyphs,

to that of the Intercoluminations; thinking it more reasonable to make the little parts correspond to the greater, than the greater to the less. And yet I believe it will be own'd, that my Triglyphs, tho' different from the ordinary ones, are not inferiour to them in beauty. See *Fig. 19. and 24.*

*Of the METOPES. Fig. 19.*

By Metopes are meant the Intervals between the Triglyphs. The beauty of these consists in their regularity; that is, in their being perfect Squares. And yet when they are really square, they appear to be less in height than in breadth; which is owing to the Projecture of the little Bandelet wherein they terminate underneath, that hides a small part of their height: for this reason I make the Metopes a Minute or two more in height, than in breadth; being of opinion, they ought rather to appear square, without being so, than really be square, without appearing so.

OBSERVATION. *Figure 22.*

When the Triglyphs and Metopes follow each other regularly, as in the Figure here refer'd to, the Columns must only stand one by one; exempting those of the inner Angles, which ought always to be accompany'd with two others, one on each side; from which the rest of the Columns may be placed at  
equal

equal distances from each other: and it is to be observ'd, that these two Columns, which accompany that of the Angle, are not less necessary on account of the solidity of the Building, than of the regularity of the Intercoluminations.

OBSERVATION. *Fig. 23.*

Instead of a Column in the Angle, one may place a Pilaster, which will contribute more to the strength of the Building.

OBSERVATION. *Fig. 22.*

Columns standing alone, and distributed one by one, ought to have no Pedestals, for these wou'd make them appear too slender and weak.

*Of the PEDESTAL. Fig. 23.*

When Columns are to be placed two by two, as it is sometimes found necessary, the regular placing of the Triglyphs in the inner Angle, must be a little interrupted, in order to keep up the regularity of the parts of the Ceiling; as is shewn in this Figure. And in lieu of a little part of a Triglyph in the Angle, may be plac'd the Arms of the Family, or some other suitable Ornament, to cover that Defect.

OBSERVATION. *Fig. 24.*

In a Peristyle consisting of Columns placed one by one, with Pedestals underneath, one single Pedestal should serve for all the Columns: that is, the same Pedestal must be continued throughout; as is represented in this Figure. But then the Pedestal ought to be distinguish'd into two parts, a fore and a hind part; so that each Column may seem to have its several Pedestal.

## OBSERVATION.

In placing a Pilaster in an Angle, in the manner already directed, there appears an Irregularity; and it consists in this, that the Naked of the top of the Pilaster, exceeds, a little, the Naked of the Entablement; which seems to oblige the Architect to make a Refaut or extraordinary Prominence in the Entablement. But as such a Prominence wou'd spoil all the Regularity of the Frize and the Ceiling, 'tis better to let it alone; and rather to suffer a little Defect, than correct it by adding a much greater.

OBSERVATIONS. *Fig. 25. and 26.*

When Columns, that have Pedestals, are used in Portico's, they may stand one by one;  
because

because in that Case, they are supported and fortify'd by the Pillars of the Portico.

The advantage of having two Designs of an Entablement, appears still more evidently in this Order, than in the *Tuscan*. In the preceding Designs, intended for Columns without Pedestals, the Triglyphs are but 26 Minutes broad; whereas in these which are for Columns that have Pedestals, they are 28. this number being necessary, in order to have just and well proportioned Intercoluminations.

It may also be observed, that when the Proportions of the Triglyphs are changed, those of the Metopes change likewise.

*Profile of the large DORIC ENTABLEMENT, with its Parts, and their Names*  
Fig. 26.

- A. Cavetto, with its Fillet over it.
- B. Baguette.
- C. Corona, with its Fillet over it.
- D. Little Ogee or Cima inver.a.
- E. Plat band.
- F. Mutule, view'd in Front.
- G. Mutule view'd sidewise.
- H. Quarter-round with its Fillet underneath.
- I. Capital of the Triglyph.
- K. Triglyph.
- L. Semi-Metope; or rather, part of a Metope.

*M.* Triglyph, view'd sidewise.

*N.* Tenia or Bandelet.

*O.* Guttæ or Drops.

*P.* Fascia of the Architrave.

*ab.* Cornice, *bc.* Frize, *cd.* Architrave.

## OBSERVATION.

I make but one Fascia in the Architrave; to the end that the Drops which fall from the Triglyphs, may not be found out of the naked of the Frize; and yet a second Fascia might be added, provided its Projecture be but small, as I my self have done in the Entablements of Pilasters, *Figures 87. and 89.*

*Names of the principal Parts of the SOFIT of a CORNICE. Fig. 27.*

*ABC.* An angular Frame or Pannel, containing three Roses.

*DEF.* Bottom of a Mutule.

*G.* A little Modillion contriv'd under the Mutule in the middle of the Drops, which make a double Row around it.

*D.* A little Border containing the Drops of the Mutule.

*HH.* A large Border which furrounds the Pannels and the Mutules.

*I.* Plan of the Triglyph.

*K.* Plan of the upper part of the Column.

*L.* Section of a Mutule, view'd sidewise.

*A General Rule for PEDESTALS.*

I usually allow one Module for the height of the Base of the Pedestal, and half a Module for that of its Cornice. The breadth of the Plinth of the Column, always determines that of the Die of the Pedestal; and a third of the height of the Column, is the Measure for the whole height of the Pedestal; so that the Difference in height, between the Pedestals of my Orders, lies wholly in their Dies.

*Of the IMPOSTS. Fig. 29.*

Imposts are little Cornices which terminate the Piedroits of Portico's, and are peculiarly appointed to receive the extremities of their Arches, with their Archivolts or Head-bands.

I usually propose two Designs of Imposts, different in Height and Projecture. The lowest for Portico's where the Columns have no Pedestals, and the other for Portico's where they have; that is, the little Imposts are for little Arches, and the large Imposts for large ones; it being highly reasonable that the bigness of the Impost should be proportionable to that of the Portico.

OBSERVATION.

Care must be taken, that the Projecture of the Impost never exceed the Semi-diameter of  
the

the Column, behind; nor intercept any thing of its roundness, before.

*Figure 30.*

*Of the IONIC ORDER.*

**T**HIS Order is of a delicate Composition with regard to the preceeding ones. Its Column is 18 Modules high; its Pedestal 6, that is one third of the Column; and its Entablature 4 and 10 Minutes, which is 5 Minutes short of a quarter of the Column: The whole Order being in height 28 Modules 10 Minutes.

*Of the INTER-COLUMNS. Fig. 31.*

The distances of the Columns in this Order are adjusted by a certain number of Denticles, which leave a convenient Space between them; with this Circumstance, that there is always found one in the middle of each Column. Thus, when I mention 35 Denticles between the Axes of the Columns *A* and *B*; it must be understood, that there are 34 whole ones, and two halves, one at each extrem; the first Denticle *A*, and the last *B*, being each cut into two equal parts by the Continuation of the Axes of the Columns. Whence it may be observed, that in case there be a necessity for augmenting or diminishing the Inter-Columns, it must be done

done by augmenting or diminishing the number of these Denticles, which however ought never to exceed one or two Denticles at the most.

*Of PORTICO'S and their IMPOSTS.*

*Fig. 33.*

The most perfect Arches are those which consists of a Semicircle; and the Imposts are usually placed on a level with their Centre. There are some Architects, however, who from an Optical consideration, place them a few Minutes lower; and 'tis with Judgment they do it; for as the Projecture of the Impost hides a little part of the Arch from the Eye, 'tis but reasonable it should be lower'd a little, to leave the entire Semicircle in view, which otherwise would appear defective.

*Of the CYMAISE or large upper MOULDING that terminates the ENTABLATURE.*

*Fig. 32. and 33.*

I usually make the Projecture of the Cymaïse equal to its height, exclusive of the Fillet a-top.

In the first *Tuscan* Order the Cymaïse is a Quarter-round; in the *Doric* it is a *Cavetto*, and in this, as well as the following Orders, a *Doucine* or upright Cymaïse.

*Of*

*Of the CORONA and its LARMIER or DRIP. Same Fig.*

The Corona is that large square Moulding immediately under the Cymaise. It projects very much, both for the greater beauty of the Entablature and for the better sheltering of the whole Order.

I usually make this part stronger than the Cymaise, as being the ruling Member of the Entablature, and even of the Order. Underneath this, we usually dig a Channel, for three Reasons; the first to give it more Grace and Ornament; the second to render it less heavy; and the third to prevent Rain or other Moisture from trickling down along the Order. For the Water falling from the top of the Cornice, not being able to ascend into the Channel, is forced to fall drop by drop on the Ground, by means of a little Ledge *A*; and 'tis on this account that the bottom of the Corona is called Larmier or Drip.

*Of the OVOLO. Same Fig.*

The Quarter-round underneath the Larmier is ordinarily called Ovolo; from the Figures of Eggs frequently carv'd upon it.

*Of the ASTRAGAL or BAGGUETTE,*  
*Fig. 35.*

The Astragal or Baguete has the Figure of a Staff; when it is joyn'd to a Fillet *AB*. I divide the height of the Fillet into three parts, two whereof I give to the Astragal; and this Rule I observe on all Occasions.

OBSERVATION.

This Astragal is frequently carv'd with Pearls and Olives, which the *French* call *fa-tenotes*.

*Of the DENTICLE. Same Fig.*

The Denticle is that square Moulding underneath the Ovolo; so call'd, because out of this Member, the Architects frequently cut a kind of Teeth, call'd Denticles or Dentils.

REMARK. *Fig. 36.*

The Division of the Denticle is so ordered in this Figure, as that there is a Dentil found in the re-entering as well as in the projecting Angle; which occasions a beautiful Regularity in the Soffit, not to be had in following *Vignola's* manner.

Those who will have the Denticles represent the ends of Rafters, will scarce approve  
G of

44 *A Treatise of Architecture.*

of my using them in Angles that have no relation thereto I shall beg, however, they'd consider that they are here used no otherwise than as pure Ornaments; such as in effect they ought to be; and not as ends of Rafter, which are never seen at all, excepting in Hutts and Country Cottages, which are foreign to my Subject.

*Of the CAPITAL of the COLUMN.*  
*Fig. 37.*

The most essential part of this Capital the Volute, which several Architects imagine to have been intended to represent the Rind or Bark of a Tree inclosed between the *Abacus* and Quarter-round, having its two Extrems twisted into Scrolls, and those two Scrolls bound with a large Rope in the middle; which comes pretty near the Figure that the Antients gave to the two sides of the Capital.

Other Architects considering that this Capital bears some resemblance to the Head-dress of a *Greek Lady*, believe it to have taken its Origin thence: But this being a matter of no great Use, we leave every one to judge of it as he pleases.

*Of the manner of describing the VOLUTE,*  
*Fig. 38.*

There are various Ways of describing this Volute; but I shall content myself with giving one,

one, which is the most usual as well as the most easy; being learn'd without any trouble, by a bare View of the Figure,

Some Architects blame it as not sufficiently accurate; but if managed with Address, it answers very well.

The first Spiral *ABC*, &c. being drawn, describe the Border or second Spiral, *MNO*, &c. taking new Centres near the first, but still approaching nearer to the Centre of the Eye of the Volute, by a Space not exceeding that of a Point made with your Compasses.

*Of the Modern CAPITAL. Fig. 39.*

The Capital of the Antients being found improper in angular Columns, by reason of the Diversity of its Faces; *Scamozzi* compos'd a new one with four similar Faces, pretty much like those in this Figure. Some Architects, however, won't allow the Volutes to spring out of the Vase of the Capital, but will have 'em consist of one and the same Rind continued under the *Abacus*, which by this means will appear the better supported, an Instance whereof we have in the five Orders of Monsieur *Perrault*; and they would have Reason on their sides, were there the same good Taste in this as in the other Design; but as that can't be, we must be contented with the other, which is easily design'd, and has a beautiful Appearance. 'Tis true, the new *Abacus*, which it has here, being better proportion'd to the largeness of the

Volutes, than that of *Scamozzi*, renders it the more graceful; besides that it is further enriched with little Festoons falling from the Volutes which some modern Sculptors have been pleased to add.

OBSERVATION. *Fig. 40.*

When there are Eggs cut in its Quarter-round, their Number should be 24; and the Shaft or Fuft should be channel'd with an equal Number of Flutings.

We sometimes also cut Pearls and Olives in the Astragal over the Ovolo, tho' it belong to the Shaft: But were the Capital made of a Matter different from that of the Shaft, then must the Astragal be considered as a Baguette, making part of the Capital, and not of the Shaft; to which last the Fillet underneath wou'd be left; were it otherwise, the Capital would be but poorly terminated by its Ovolo, or Quarter-round, besides, that it would be too flat and squab.

*Of the* PEDESTAL. *Fig. 41.*

I here propose two Kinds of Cornices for the Pedestal; the one Camus and Solid, to be used within-sides of Apartments where the Pedestal is to be view'd from above: The other has a Larmier, and is intended for those Pedestals whose Cornices are above the Eye, and are to be view'd from below.

OBSERVATION. *Fig. 41.*

Were an Astragal to be placed underneath the Cornice of this Pedestal, as we see done in that of the *Corinthian*, there should be no Table in the Die; at least, if for any particular Reason there were required one, there must be no Astragal. Nor wou'd I ever allow an Astragal under a Cornice that is Camus and without a Larmier, but a Table hollow'd in the manner of half this Pedestal, *A*. A Table under the Astragal wou'd make too many little Mouldings one over another; and the Projecture of an Astragal under a Cornice without a Larmier, wou'd make it appear too Camus; whereas the Retreat of a Table will give it a Grace, and seem to augment its Projecture, and render it less Camus, as is seen in the Profile *CD* of the following Figures.

*Of the BASE of the COLUMN. Fig. 42.*

This is that Base call'd the *Attic*; which is, without dispute, one of the most beautiful ever invented: Its height is one Module; its Parts are a Plinth, two *Toves* and a *Scotia* accompanied with two Fillers.

*Figure*

*Figure 43.**Of the ROMAN ORDER.*

**T**HIS Order resembles the *Ionic* in its *Volutes*, and in the *Base* of its *Column*; but is much richer and more ornamental. It has somewhat more *Elegancy* too, throughout the whole, as being somewhat higher, and yet it appears stronger, and more masculine, by reason of its *Modillions*, and the height of its *Capital*.

The *Column* is 19 *Modules* 20 *Minutes* high; the *Pedestal* 6 *Modules* and 16 *Minutes*, and the *Entablature* 4 *Modules* and 15 *Minutes*; so that the height of the *Pedestal* is nearly one third of that of the *Column*, and that of the *Entablement* one fourth, abating 12 *Minutes* and an half: The whole *Order* containing 30 *Modules* 21 *Minutes*.

## R E M A R K.

There is a particular *Necessity* for a rigorous adherence to these *Measures*, and *Proportions*, when the *Orders* are so disposed as that they may be compared together; as when one is placed upon another, where the *Elegancy* of each may be considered with regard to that of the other.

*of*

*Of the INTER-COLUMNS.* Fig. 44.

As in the *Ionic* Order the Distances of the Columns are to be adjusted by a certain Number of Denticles; so in this Order they must be adjusted by a certain Number of Modillions; with this Restriction, that there be always one exactly in the middle between each Column: The Inter-Modillions having been at first regulated by the Distances that ought to be between two Columns.

*Of the CONVEX FRIEZE.* Fig. 45:

We sometimes make the Frieze of the Entablature Convex; but then this shou'd never be done without some good Reason; meer Caprice being not sufficient to warrant such an Alteration.

When one Order is rais'd over another, and the upper Column has its due Bigness, its Pedestal necessarily goes beyond the Naked of the under Column; which to some Persons has a disagreeable Effect. This inclines me to think, that the first Architect, who made a Convex Frieze, did it with a Design to extenuate this Appearance of a Defect. This is evident, that as the Naked of a Frieze is hidden by this swelling, the Pedestal of the upper Order appears less to exceed the Naked of the under Order; which may be easily observed in Figure 129. where the two Orders are seen  
over

over each other. Were it not on this account, the Convex Frieze ought not, in my Opinion, to be imitated.

On the occasion just mention'd, the Frieze may be made Convex in all the Orders excepting the *Doric*, where this swelling can't be allow'd, by reason of the Triglyphs.

*Of the CAPITAL. Fig. 46.*

In these two Designs we see the essential Parts of the Capital, their Measures and Proportion.

The first shews the Figure of its Vase, with its height and breadth; here we may also observe, that the *Abacus* does not bear upon the Quarter-round, but only on the four Volute, which seems to be an Offence against Solidity; but which, however, is not very considerable, as being only in appearance, there being really no Space between the *Abacus* and Quarter-round; to which it may be added, that even this apparent Weakness is hid, by the Volute and the little Leaves that accompany them, as may be seen in Figure 48.

In the second Design of the same Plate 46. we see the Plan of the *Abacus* with its four Horns; and how the Equilateral Triangle *ABC*, gives the Point *A*, whence the Sweep or Curvity is to be described.

REMARK. *Fig. 47.*

The Volutes of the Capital are less in this Order than in the *Ionic*; the Line *A a* being here bare 13 Minutes, whereas in the *Ionic* it is 15.

CONSTRUCTION of this VOLUTE  
or SPIRAL-LINE. *Same Fig.*

The Eye of the Volute taking up three Minutes of the Diameter *IK*, make *AO* thirteen Minutes; then from the Point 1. describe the Arch *AM*, from the Point 2. the Arch *MF*, from the Point 3. the Arch *FG*, from the Point 4. the Arch *GC*, from the Point 5. the Arch *GH*, from the Point 6. the Arch *HL*, &c.

From the Point *K*, let fall the Perpendicular *KE*, and from the Point *E*, describe the Arches *AB*, *CD*.

Of the entire CAPITAL. *Fig. 48.*

This Capital is usually call'd Composite; as partaking of the *Doric* Order in its Quarter-round, of the *Ionic* in its Volutes, and of the *Corinthian* in its double row of Leaves underneath, which are in Number sixteen.

The Leaves I give it are of Laurel, which not being much edged, or indented, are less delicate, and for that Reason more suitable to

H

the

52 *A Treatise of Architecture.*

the Volutes of this Capital; which are tolerably massive, but agreeable to the Modillions of the Entablement.

*Of the FLUTINGS.* Fig. 48.

When we make Flutings in this Column, their Number is to be twenty four, as in the *Ionic*. But to distinguish them, I make those of the Composite flat at bottom, and only a Minute and a quarter deep, but twice as much in width.

*Of the KEYS.*

Keys that have a Projecture, and are made in manner of Consoles, and placed in the middle of Arches or Portico's, are particularly destined to sustain the Weight and Pressure of the Entablature, where it happens to be very great between the Columns; for this reason they ought to be made in such manner, as that they may prove a real Support, and not stand for mere Ornaments, as they frequently do: Without this Precaution, I think they had better be entirely omitted.

*Of the MODILLIONS.* Fig. 51.

The Measures that I observe in the Modillions, both of this and the following Orders, are not barely concerted with a View to the just Proportion of those Parts, but also to establish

blish a Regularity in the Parts of the Plafond or Soffit of the Cornice.

The Distance between one Modillion and another, depends on that between the Inter-Columns; and that Distance obliges us to make the Modillions of a certain height and breadth; in order to have the Spaces that separate them in the Soffit, perfectly square. Not only because those Squares are more regular than long Squares, but also because they may be continued uniform through the projecting and re-entering Angles which long Squares are incapable of; as may be observed in the Buildings made according to the Rules of *Vignola*.

Further, in making the Division of the Inter-Modillions, Care must be taken that they have such a Proportion, as that when the Orders are placed over one another, the Modillions of the lower Order be found in the same Number with those of the upper.

*Of the little TALONS., Fig. 52.*

When a little Talon or Gula serves as a Cymaise, particularly when it terminates an Impost, as the Talon *A* does in this Figure, or when it terminates the Cornice of the Pedestal, as in Figure 54; I give it a Fillet somewhat stronger than what I use when it is found inclosed between other Mouldings. See the Talon *B.* Fig. 52.

54 *A Treatise of Architecture.*

I make the Fillet of the first *A*, the stronger, because being more exposed, it is more liable to be broken: Besides, that these last Mouldings always appear more delicate than they really are, by reason of the Air, which seems to take something of their Bulk.

The height of the Fillet *A*, is half that of its Talon, and the Fillet *B*, only a third.

Of PILLARS or PIEDROITS.

In Portico's, where the Columns have Pedestals, the Pillars or Piedroits ought to be four Modules in breadth; but if they be more, they will be ill-proportioned to their Columns; an Instance whereof we have in the great Composite Portico of *Palladio*: To which it may be added, that the Inter-Columns in that case would likewise be too big; as may be observ'd in the *Doric* Order of *Vignola*, where the Pillars of his great Portico being of five Modules, the Columns are found too far distant from one another.

REMARK.

*Palladio* terminates these Pillars with the Mouldings of the Base of the Pedestal, which he continues quite round, so that the Base of the Pedestal becomes confounded with that of the Piedroit; a thing, in my Opinion, that ought to be avoided. For if those Mouldings be proportion'd to the height of the  
Pe-

Pedestal, they can't be so to that of the Pillar: Besides, that by advancing a good way within the Passage, they become incommodious, and are soon broken and defaced.

*Vignola* terminates these Pillars with a plain Zocle, which here suits very well; and this too, is my Practice.

When the Columns have no Pedestals, I terminate the Pillar with a Zocle equal to the Base of the Column. See the Portico's, Fig. 44.

*Names of the Parts that compose the Base of the Column.* Fig. 54.

- A. Upper Torus.
- B. Fillet.
- C. Scotia.
- D. Fillet with a Baguette.
- E. Under Torus.
- F. Plinth.

*Names of the Mouldings of the Cornice, and the Base of the Pedestal.*

- G. Cymaise, Talon, or Ogee with its Fillet.
- H. Corona, with its Larmier underneath.
- I. Doucine, or upright Ogee.
- K. Upper Fillet of the Die.
- L. Lower Fillet of the Die.
- M. Doucine with its Fillet underneath.
- N. Little Torus.
- O. Zocle.

*Of the SPANISH ORDER. Fig. 55.*

**T**HIS Order is more elegant than the *Roman*, both in the whole, and in its Parts; and yet it has an Air of Strength and Greatness that becomes it very well.

The height of its Column is 19 Modules 25 Minutes; that of its Pedestal 6 Modules and 18 Minutes; and that of its Entablature 4 Modules and 15 Minutes; so that the height of the Pedestal is nearly one third of that of the Column, and the Entablature 14 Minutes less than a quarter of the same. The entire Order containing 30 Modules 28 Minutes.

REMARK *on the INTERVALS between the MODILLIONS. Fig. 57.*

The Modillions are further apart in this Order, than in the *Roman*, but less than in the *Corinthian*; which is a thing necessary, in order to be able, on occasion, to place these Orders one over another. For as any Order ought to be less high than that whereon it is placed; the *Corinthian* when placed over the *Spanish*, shou'd be less than the *Spanish*, as that when placed over the *Roman*, should in like manner be less than the *Roman*. So that the under Columns being bigger than the upper, the bottom of the upper may not be bigger than the top of the under, and yet their Modillions be found exactly over one another; which

which were things impracticable, unless the Modillions were at the same distance, proportionably, in all the Orders. Whence it may be observed, that it is not enough to compose beautiful Orders, but they must also be match'd and adjusted to one another, if a Man would ever have 'em go together, as 'tis frequently necessary they should do. And this is what I have had a particular Regard to in composing these Orders; though 'tis a matter of no small Labour.

*Of the ARCHIVOLTE, or HEAD-BAND,*  
*Fig. 58.*

In every Order the Parts ought to have a relation to one another, as well as to their whole. Thus the simplicity or richness of the Architrave ought to determine the simplicity or richness of the Archivolte. And yet *Palladio* has neglected this Maxim of Architecture, particularly in his *Tuscan Order*. But that's what he cannot be commended for; or rather, 'tis what he ought not to be imitated in.

R E M A R K.

The Archivolte in large Portico's, is always one Module broad, in all my Orders; and only 20 or 25 Minutes in the little Portico's.

## OBSERVATION.

In all *Vignola's* Orders, over the Archivolte are placed triangular Tables, which Monsieur *D'Avilair* calls Timpan, or Tympana; but which ought not, however, to be imitated; because falling in with the Curvity of the Archivolte, they seem to be confounded with it, and appear to augment its breadth, which has an ill Effect.

*Of the CAPITAL. Fig. 60.*

I give it eight large Leaves, simple, but a little waved with Grenat-Stalks, or Flowers rising among 'em; which may be managed in various manners, according to the various Places where this Order is used.

The Horns of the *Abacus* are supported by little Volutes; the middle of the *Abacus* being adorned with a Lion's Snout, instead of a Rose. I need not mention that this noble Animal is the Symbol of *Spain*; and that it expresses the Strength and Gravity, as well as the Prudence of that Nation.

In the following Figure we have another Design of a Capital: The Architect is at liberty to chuse which of 'em he thinks best; for either the one or the other will do very well, if executed by a good Sculptor.

Further, in the Friezes over this Capital, may be added a terrestrial Globe, with Cornucopia's,

nucopia's, Palms, and Laurels, which are significant Ornaments that explain themselves.

*Of the FLUTINGS.*

The Flutings in the second Design of this Capital are in Number 32. sixteen whereof are hollowed Semicircularly; the other sixteen are nothing else but little Fillets intermix'd. *See the following Fig. 61.*

OBSERVATION.

Columns standing expos'd in the open Air, I mean those on the outside of a Building, ought not to have any Flutings; for besides, that such kind of Ornaments can't subsist any long time entire, plain uniform Colours carry always, in that case, a better appearance, and sustain the Magnificence of the Building much better to the Eye; and the Reason is obvious; for the Light diffus'd on fluted Columns being divided, and, as it were, cut by the streaks of Shadow from the Channels, the Eye, when at a little distance receives a faint confus'd Impression: To this it may be added, that the hollow Flutings found towards the Extremities, make the Columns appear more slender than they really are; insomuch, that, when view'd from any considerable distance, they shew mean and pitiful.

Fig. 65.

In the Plan we see the Composition of its Ornaments and the Effect that we are to expect from 'em.

The Ornaments between the Modillions may be Pomegranates, or any thing else that the Architect judges more to the purpose; and 'tis easy to perceive, that the Spherical Cavities where such Ornaments are used, with the large Canal that forms the Mouchette or Chin of the Larmier, and which is hollow'd into a Semicircle, will render the Cornice extremely free and beautiful.

*Of the CORINTHIAN ORDER. Fig. 64.*

**I**N this Order we have yet more Delicacy than in any of the preceding ones. Its Column is 20 Modules high, its Pedestal 6 and 20 Minutes, and its Entablature 4 and 15 Minutes: So that the Pedestal is one third of the Column, and the Entablature 15 Minutes less than a fourth: The height of the whole Order being 31 Medules 5 Minutes.

**OBSERVATION** *on the COLUMNS.*

In Colonnades, the Columns at the Angles, that is, the first and last, ought, according to *Vitruvius*, to be bigger than the rest, by one fiftieth

fiftieth part of their Diameter, without which they will appear too slender.

We have already observ'd, that Objects expos'd the open Air do ordinarily appear more delicate than they really are; the Air where-with they are encompass'd on all sides seeming to take off their Extremitities, and to diminish their Bulk: And 'tis for this Reason that the Sculptors, ordinarily, make such of their Figures as are to be placed without-side, and a-top of a Building, that is, in the open Air, much less delicate than the others: and it is very just in them to do so. But the Case is otherwise in Columns that compose a Colonnade in the same Line, and are placed pretty near one another. An Architect, on such an occasion, has so many Circumstances to observe, that unless he has a great deal of presence of Mind, as well as a great share of Experience, he'll fall into very considerable Errors; which he has no other way to avoid, but by setting this Observation of *Vitruvius* aside.

OBSERVATION *on the* DENTICULE.

*Fig. 67.*

I don't here divide the Denticles underneath the Ovolo, as in the *Ionic* Order: because the Modillions, the Ova or Eggs, and the Denticles, would be too many considerable Ornaments to go together.

*Of the FLUTINGS. Same Fig. 67.*

Were we only to have regard to this Order, the Flutings of the *Ionic* Order wou'd suit it very well : but when the two Orders may be compar'd together, as will be the case if they be plac'd over one another, then these Flutings may easily have the additional Ornaments of a little Fillet running quite around ; as in the Figure.

*Of the LEAVES of the CAPITAL. Fig. 69.*

The Leaves of this Capital are in Number sixteen, eight in each Row, the same as in the *Roman*.

Each Leaf is divided into seven or nine Plumes ; two whereof, or to speak more properly, one whole and an half on each side go to form the Return or Descent. See also the preceding Figures, 67, and 69.

Sometimes the Return consists of three Plumes almost entire ; each Plume being divided according to the nature of the Leaf : As is particularly shewn in Fig. 69.

## R E M A R K.

The Leaves of the Capital are ordinarily either those of Olive, those of Acanthus, or those of Smalage. But the first ought, in my Opinion, to have the Preference to the two last ;

last; and particularly when the *Corinthian* is rais'd over any other Order. For its Leaves being flat and plain, reflect more Light than the others, which are more wrought and uneven; for which reason the first have a better Effect when seen at a distance, than the last; which are only fit to be view'd near at hand.

OBSERVATION.

In making the Leaves of this or the *Roman* Capital, great Care must be taken they be well design'd; particularly that in dividing them into Plumes, those Plumes don't run too far off from one another, but that all together appear to form one single Leaf; which must not be too narrow towards the top: That each Plume direct to its Origin, &c. without which Precautions the Leaves will lose all their Grace and Beauty.

OBSERVATION. *Figure.*

If a *Corinthian* Order were to be placed very high, as in the Lanthorn of a Dome, I shou'd rather chuse not to divide the Leaves of its Capital at all, but to preserve the Mass entire, as in this Figure.

In some Capitals we find Leaves that are finely wrought, which, nevertheless, are of an extremely ill Taste; as those of Olive for Instance in the Pilasters of *V. de G.* This I mention by the way, for the sake of those  
who,

64 *A Treatise of Architecture.*

who, having no great Share of Judgment themselves, think they can't fail of doing well, if they do but imitate what they find in Buildings of Reputation.

OBSEVATION *on the* MODILLIONS *of*  
*this* ORDER. Fig. 73.

Underneath these Modillions, 'tis usual to have a Leaf, that takes up their whole breadth, and almost their whole length too. But in my Opinion, the Modillions wou'd be more graceful, if this Leaf were less both in length and breath. For this Reason I inclose it between two little Lists, wherein it seems, as it were, to be set, and out of which it never comes, but to form its Return against the little Wave of the Modillion, which it joins without hiding: From this Relation of the Leaf with the Modillions, the latter is render'd exceedingly graceful.

The Leaf of the Modillion ought to be of the same Kind with those which make the Ornament of the Capital: which is a Rule not to be overlook'd.

*Of the* TABLES *or* PANNELS *of the* PEDESTAL. Fig. 74.

The Tables in the Die of the Pedestal, ought to be equal to the width of the Column; that is two Modules: Now the width of the Die being two Modules twenty four Minutes,

Minutes, there remains twelve Minutes for the width of the List that goes round it; tho' towards the bottom it must be somewhat wider, and may be pretty well fix'd at fifteen Minutes.

#### OBSERVATION.

When these Tables are of Marble, I would chuse to have them fix'd even with the Die. However, if they are to be sunk lower, the Inequality ought not ordinarily to exceed a Minute and an half; in which Case they shou'd have a Baguette, or a little Talon or Cavetto for a Border.

#### *Figure 78.*

In these Tables are sometimes added Basso Relievo's, which may be of Marble, of Brass, or even of Brass gilt: But special Care must be taken that the Relievo never project beyond the Naked of the Die. The Sculptor therefore, in this Case, must take a sufficient depth for the Ground of this Work, and the Work itself must be rais'd as little as possible. I here suppose myself talking to young People, who are yet without Experience.

#### OBSERVATIONS.

Some Architects bound these Tables with a little Border, projecting beyond the Naked of the  
the

the Die; but in my Opinion they ought not to be imitated herein: Such a projecting Moulding or Frame agreeing very ill with the Astragal above it, and which itself projects nearly as much as the Baguette that terminates the bottom of the Corniche. To which it may be added, that so many little Mouldings, being found almost at an equal distance from one another, have an ill Effect; for it must be remember'd that the beautiful Distribution of Mouldings consists in observing a Diversity in their Bignesses, Figures, and Distances.

*Of the BASE of the COLUMN. Fig. 75.*

This is a *Corinthian* Base, in most respects like that usually given to this Order. Its height is one Module, and its Projecture beyond the Naked of the Shaft twelve Minutes; as in the preceeding Orders, which have two Tores.

Some Architects make the Projecture less, and others more; but neither the one nor the other, in my Opinion, have succeeded.

R E M A R K.

The two Scotias of this Base placed one over another in like manner as the two Baguettes that separate them, don't seem to be well concerted. But this is so popular a Fault, that a Person who wou'd offer to correct it, wou'd

wou'd be sure to be censur'd. However, in lieu of the two Baguettes, a Man need only use one; as we see done in the Baths of *Dioclesian*. See *Fig. 76*.

OBSERVATION.

To raise an Order of Column; a Module must be taken of such a Bigness, as that when the Pedestal is describ'd in its proper Measures, the Cornice may not be found on a level with the Eyes of those who pass, or who are to be Spectators of it; it being a Pain to the Sight to bear projecting Bodies, just at its own height; inasmuch as they seem to menace the Eye with a Rencounter.

However, if any Difficulty should occur in adjusting the height of the Pedestals to that of Portico's and Apartments that are to accompany them, one may retrench the Cornice and the Base, and then the Pedestal may be reduced to the proper height without any Restriction at all. See Figures 128, and 129.

K

A

---

A  
T R E A T I S E  
O F  
A R C H I T E C T U R E .

---

SECTION III.  
Of *PILASTERS*.

With useful Observations.

---

Of *PILASTERS*.



**P**ILASTERS are square Columns, as big at top as at bottom. These Pilasters are often used for mere Show; as when they appear inserted or let within the Wall, not discovering above a fifth or sixth Part of their Bigness. These kind of Pilasters, which may be called flat Pilasters, are always found to have a better Effect than the others, which  
being

being entire, ordinarily appear heavy and lumpish.

When these Pilasters accompany Columns, they should have the same heights with the Columns in every part; but if they be alone, I mean if they be not accompanied with any Columns, their Measures and Proportions shou'd be varied

First, in the *Roman, Spanish and Corinthian* Orders, the Capitals of Pilasters, to be well proportion'd, shou'd be higher than those of Columns, as being broader: whence it follows that their Shafts ought also to be augmented in proportion.

Secondly, it may be observed in general, that a Pilaster made according to the Measures or Proportions of a Column, that is, containing an equal Number of Modules in height, appears much shorter, with regard to its breadth, than the Column: and the reason is, that the sides of the Pilasters, being flat, appear in their full breadth; which is otherwise in the Column; the shadow of whose roundness makes it appear slenderer than it really is: so that, to make a Pilaster appear with the beauty of a Column, the height of its Shaft must be augmented, as well as that of its Capital; and of consequence the height of its Entablature, and that of its Pedestal must be augmented likewise.

Further, the Capital of a Pilaster being broader than that of a Column; and the Profile of the Entablature beyond the naked of

the Pilaster continuing nearly the same, the Modillions are found farther apart from each other than in the Orders of Columns: Whence it likewise follows that the Distances given for the Intervals of Columns adjusted by a certain number of Modillions won't serve for the Intervals of Pilasters, no more than they will for determining the proportion of Portico's.

And lastly, the Modillions being farther apart from each, the Cornice ought to have a greater Projecture, in order to have perfect Squares between the Modillions; whereon the Regularity of the Soffit depends.

'Tis necessary therefore to have particular Compositions for the Orders of Pilasters, distinct from those of Columns; for this reason I suppose the following ones, which answer to those of my Order of Columns. I have not given any particular Designs for their Bases, nor for the Cornices and Bases of their Pedestals; the proportions of which parts may be taken from the Orders of Columns: and the reason is, that as the breadths of those parts are not altered, neither should there be any Alteration in their heights. So that the difference in height between the Pedestals and Columns, and those of Pilasters will lie wholly in their Dies.

*Figure 93.*

Besides the common Portico's, I likewise propose others with Breaks or Retreats, such as  
we

we have in the *Val de Grace*, and which have this advantage, that one may make *Basso Relievo's* over the Archivolts, which, when well managed, prove a very great Ornament to the Architecture.

Some Architects are averse to this kind of Portico's: and may perhaps have particular Reasons for it. Be that as it will, I am of another Sentiment.

*Of the Projecture of flat PILASTERS.*

The ordinary Projecture of these Pilasters beyond the Wall is ten or twelve Minutes; but when they terminate the Saillant Angle of a Building, their thickness shou'd, if practicable, be regulated by the parts of the Soffit or Plafond of the Cornice, as is seen in *Figures 96, 97, 98, 104.*

*Of the FLUTINGS. Fig. 97.*

When Flutings are used in Pilasters, their number shou'd be seven on each side: The first and last whereof may be a little further from the Angle than the rest are from each other; that the Extremities of the Pilasters mayn't be too much weakned.

In some old Monuments we find Pilasters which have only five Flutings on a side; but then those are too large, and make the Pilasters appear little and pitiful: and if there were nine, they wou'd be too fine and slender even for the most delicate Orders.

O B.

OBSERVATIONS. *Fig. 89.*

We never make Flutings in the *Tuscan* Pilaster; and if by chance we make any in the *Doric*, (which however is very rare) we leave pretty large Spaces next the two Extremities, in order to fortify the Angles.

One may either add a single Fluting in the Projecture or thickness of the Pilaster, or leave it quite plain; provided it don't exceed ten Minutes in breadth.

*Observation on the antient IONIC CAPITAL.*  
*Fig. 95.*

The Antients having made the Baluster of this Capital very short, one finds some Difficulty in adjusting the Volutes to the Quarter-round in the Capitals of Pilasters. This has occasion'd several Architects to flatten or diminish the Convexity of the Quarter-round; which is a very considerable Irregularity, that they might have avoided by lengthning out the Baluster so as to go beyond the Quarter-round; at the same time making the Circumvolution of the Volute advance a little farther, as is shewn in the Profile, *AB*.

*Fig. 97.*

However, if a Person has a mind to follow the Custom, I mean, if he chuses to diminish the  
Con-

Convexity of the Quarter-round, as is here done, he commits a Fault, that has good Authority on its side: which, however, he wou'd do well to avoid; especially as it may be done without much trouble.

We meet with a Difficulty of the same kind in the Quarter-round of the modern Capital, which our Architects have likewise diminish'd, in order to receive the Volutes more favourably; which shou'd further have a Curvity like that of the *Abacus*, but from which a Man is under a Necessity of receding, and of opening the Volutes, so as to be above the Quarter-round, after it has run perpendicularly across the face of the Pilaster: and the same may be understood of the *Roman Capital*. See *Fig. 103*.

*Of the RUDENTURES, or Fillings up of  
FLUTINGS.*

By a Rudenture we mean the Figure of a Rope or Staff cut, on some Occasions, in the Flutings, to strengthen their sides, and render them less liable to be broken. For Instance, when we make Fluted Columns or Pilasters without Pedestals, and place them on a Level with the Ground: or at least so little rais'd as to be within the reach of the Hand; their Flutings must be rudented, or cabled (as they call it) as far as one third of their height: that is, they must be fill'd up in part to that height, with these Rudentures, in order to strengthen the sides which might otherwise be soon defac'd.

These

These Rudentures, which were at first invented for use, have been since converted into Ornaments, to enrich the Flutings; so that, instead of plain substantial Rudentures, we now frequently see them exceedingly weak and slender, being wrought in form of twisted Ribbons Foliages, Chaplets, and other rich and delicate Ornaments. But this kind of Rudenture, ought never to be used, excepting in Columns or Pilasters of Marble, and such as are beyond the reach of the Hands of the People.

One may likewise for the greater richness, as well as the greater ease sake, make these Ornaments of Brass, and even of Brass gilt; to be fitted within the Flutings.

These delicate Ornaments are also found to succeed very well in Columns and Pilasters of Wood; where they are cut with a great deal of Ease and Justness.

*Of ORNAMENTS on the MOULDINGS.*  
*Fig. 118.*

Ornaments are not always used on Mouldings barely to enrich them, but sometimes also to distinguish them the better from one another.

As the generality of Mouldings, and in particular those of Corniches, are only illumined by Reflexion, they would be frequently confounded and lost, if they were all simple and uniform: but a few Ornaments cut on some one distinguish them advantageously from each other.

other. Thus the Eggs have a noble Effect underneath the Larmier in the *Ionic* Order, or underneath the square Member whence the Modillions proceed, in the *Corinthian* Fig. 67. because those Ornaments, being cut strong and bold, make an agreeable difference between the Mouldings that accompany them.

Among these Ornaments some stand prominent from the Mouldings, and others are cut within 'em, as may be observ'd in the several Figures of this Plate 118.

*Of MOULDINGS that are to have no Ornaments.*

Ornaments are not to be bestow'd every where indifferently. Some Members or Mouldings must be reserv'd plain to set off the rest; and without the Simplicity and Plainness of these, the richness of Ornaments would only make a Confusion in Architecture; a sensible Instance whereof we have in the *Corinthian* Profile taken from the Baths of *Dioclesian*, and mention'd in the Parallel of *M. de Chambray*.

The Corona, for Instance, is the first Master-Moulding in the Corniche, which won't admit of Ornaments, and the reason is, that it is follow'd with a Larmier, which is usually full of very rich Compartments, besides the Modillions which make one of the most considerable Ornaments. It may be observ'd, that I now only speak of the more delicate Orders; wherein Ornaments are the most proper.

L

The

The Faces of the Architrave ought also to be left plain, and particularly when the Frieze is enrich'd.

All the Fillets, Lists or Listels, ought still to be without Ornaments; those being peculiarly destin'd to fix and inclose the parts in the Mouldings wherewith they are encompass'd.

The Astragal of the Column ought always to be plain, excepting in the *Ionic* Order, where the Astragal of the Shaft is converted into a Chaplet of Pearls and Olives for the Capital. See *Fig. 40.*

All the parts of the Base of a Column ought to be plain, in order to serve as a Rest to the Flutings of the Shaft. There are some occasions, however, wherein the Tores may be enrich'd; of which we have a remarkable Instance in the new Chappel at *Ve sailles*: where 'tis done with a great deal of Prudence. For as nothing should be expos'd to the Eyes of a great Prince, but what is some way distinguish'd by its Richness; and as the King, here, has in sight, the Bases of the Columns of his Seat, 'tis but just they should be enrich'd, like the rest of the Chappel, which is extremely pompous: The nobleness of the Architecture, and the beauty of the Painting and Sculpture, shewing at the same time, the Magnificence and the Piety of the Founder. But setting aside such Occasions, it wou'd be a Fault to adorn the Bases of Columns; tho' *Scamozzi* is of another Opinion.

We shall shew hereafter what is to be observ'd with regard to the grand Distribution of parts, plain and enrich'd.

---

A

T R E A T I S E

O F

A R C H I T E C T U R E .

---

S E C T I O N I V .

Of particular Kinds of COLUMNS.

---

Of WREATHED COLUMNS.



THESE kind of Columns, which are pretty well known by their Names, and are usually made very rich, ought never to be used but in places of Distinction, as in Altars, Tombs, Salons, and other Places where Magnificence is required; an Instance whereof we have in the *Val de Grace*.

They shou'd never be used to support either Walls or Vaults, or any other considerable Burthen; by reason of their Weakness: nor should any thing be laid upon them beyond a plain  
 L 2 slight

flight and delicate Entablature. For tho' they appear by their Circumvolutions to have less delicacy than the common Columns, yet in effect they have less Solidity. This is evident from the Perpendiculars *ab, cd*, drawn by the Cavities of their Waves; the solid Space included between the two, being considerably less in Diameter than the Column *GH*, which however is as delicate as possible.

*The manner of describing the CIRCUMVOLU-  
TIONS of this COLUMN. Fig. 119.*

Divide the Diameter of the Plan of the Column into three equal Parts, *AC, CD, DB*.

On the Division *CD*, as on a Diameter, describe a Semicircle *CED*, and divide it into three equal Parts.

From the Divisions of this little Semicircle draw Lines parallel to the Axis of the Column *EF*:

Draw a common Column as *GH*, of the same height, and in the same Order as the wreath'd Column to be design'd; but take care the Order be delicate.

Divide its Axis *GH*, into 48 equal Parts, which is easily done by dividing it at first into three, then each of these into two, and each of these into two more: thus proceeding from two to two till you get the whole Number 48.

Through these Divisions draw Lines parallel and horizontal.

From

From the Points where these Parallels cut the Perpendiculars *CI*, *DL*, &c. describe the Spiral *M*, *N*, *O*, &c.

Through the Points of that Spiral draw transverse Lines, *PQ*, *NR*, &c. equal to the transverse Lines 1, 2, 3, 4, 5, 6, &c. and you'll have Points sufficient for describing your Wreath'd Column.

R E M A R K.

The Wreath'd Columns in the high Altar of *St. Peter's* at *Rome* have two Astragals, which divide the height of the Shaft into three parts; but these are not to be imitated; excepting where there are particular Reasons for it.

Those in the Altar of the *Val de Grace* have an Astragal over the first third of their height; which is a judicious Contrivance to hide the Junction, or setting on of the two Pieces, whereof each Column consists.

But what I think inexcusable both in the wreath'd Columns of *St. Peter*, and in those of the *Val de Grace*, are the Flutings in the first third of their height; for these render the lower part of the Column more delicate than the upper part; which is the more visible, by reason of the Foliages and other Ornaments that run along the upper parts, and by their Relievo seem to increase its Bigness: For this reason it had been better, in my Opinion,

nion, to have fluted the upper part, and either to have charged the lower part with Foliages, or to have left it quite plain and uniform.

Another thing to be censured in the Altar of the *Val de Grace*, is the Entablature, which is distributed Piece-meal over each Column: a continued Entablature wou'd doubtless have done much better.

### Of SYMBOLICAL COLUMNS and HUMAN FIGURES.

THE ancient *Greeks*, to preserve the Memory of their Victories, had a Custom, in the Columns of their publick Buildings, to add Figures and Representations of the Enemies they had subdued. The Wives of the rebellious *Carians*, when reduced to Obedience, and the *Persians* vanquish'd by the *Lacedæmonians* at *Platæa*, were the first Subjects of these Columns; which have preserved, to late Posterity, both the Glory of the Victors, and the Dishonour of the Vanquish'd.

Hence, originally, came the Names *Cariatides* and *Persian* Columns; which have been since applied to all Columns made in Human Figures, tho' with Characters very different from one another.

Of CARIATIDES or CARIATES, Columns  
made in the Figures of WOMEN. Fig. 120.

We don't now represent the Cariatés, as formerly, with the Marks of Servitude and Slavery: Such Characters were injurious to the fair Sex, and for that reason we give them others entirely opposite; never using them in Buildings, but as singular Beauties, and such as make the greatest Ornaments thereof. They never make their appearance, now, but under the noble Symbols of Prudence, Wisdom, Justice, Temperance, &c.

When the Cariatés are insulate, they should not have any Weights to support, greater than those of Balconies, little Galleries, or slight Crownings; and their Entablature may be *Ionic*.

The Cariatés shou'd always have their Legs pretty close, the one a little a-thwart the other, with their Arms either join'd to the Body or to the Head, or at least very little asunder; that, as they do the Office of Columns, they may, as much as possible, bear the Figures of them.

There is this particular defect in the Cariatés, that being the Figures of Women, they don't seem altogether proper to do the Office of Columns: but this is easily amended when they join to a Wall, there being nothing to do in that Case but to place a Console over 'em, which shall appear to bear all the Weight of the Entablature. This will have a good Effect;

fect; and the Cariates will serve for Columns; without appearing over-burden'd.

If the Cariates have a Projecture beyond the Wall in the manner of Pilasters, they may be used in the Architecture of a Gallery or Sallon; provided they ben't made to sustain any thing but the Entablature; the weight of the Vault being born by the Wall behind, which serves them as a Ground or Bottom.

OBSERVATION. *Fig. 121.*

The Cariates should never be made of an immoderate Stature; lest being too big, they become frightful to the Ladies. For this reason one would sometimes chuse to confine them under the Impost of a Portico; such Imposts serving them for an Entablature. Further, on occasion, one may raise them on Pedestals, which however, must not have less than one third of their height. And if besides this, one place Cosoles over their Head, the Figures may be made of a reasonable Size.

OBSERVATIONS.

The Cariates and the common Columns should never be used together, under the same Entablature; for besides that there can never be a just Symmetry between them; the Figures of Women as high as common Columns would be monstrous, and make all the rest of the Architecture appear mean and pitiful.

There

There are some Cariatés that have their Arms cut off; as those, for Instance, in the Hall of the *Swiss Guards* in the Old *Louvre*. But these kind of Mutilations, which are only used to make the Figures more light and delicate, or rather to make 'em more conformable to the other Columns, are only proper for *Termini* or Terms, which are a kind of half human Figures seeming to proceed out of a Vagina or Sheath, as in the following Figure 122.

OBSERVATION.

The Cariatés must always appear in Characters proper to the Places they are used in. Those for Instance, which support the Crowning of a Throne ought to be Symbols, or Representations of Heroic Virtues. Those that serve as Columns in a Place of Devotion, shou'd bear the Characters of Religion: and those, again, in Halls and Banqueting-Rooms, carry the Marks of Gladness and Rejoicing.

OBSERVATION.

'Tis not proper to use Cariatés in the Figures of Angels, excepting at Baldequins and Altars; and such as do appear under that holy Form, ought, in my Opinion, to support the Entablature with their Hands, as bearing it easily, and without trouble. See Fig. 120.

The Entablature supported by Angels may be *Corinthian*, and the Virtues *Ionic*; and both the one and the other somewhat less massive than ordinary.

*Of Persian COLUMNS. Fig. 120, 121.*

These Columns are usually made in form of robust Men, with long Beards; and such Figures are much fitter to represent an unhappy Slavery, than those of Women.

The Character of Slavery is express'd in these Figures, either by tying their Hands before, or behind their Backs.

Columns of this kind may be very properly used in a Cabinet or Gallery of Arms, in Princes Palaces; in which case they may be made Gigantic, as in Figure 121. and their Entablature *Doric*.

We would not however insinuate that the Figures of Men are always Marks of Slavery: They are frequently used as Symbols of Virtues and Vices; of Joy, Strength, Valour, and even of fabulous Deities: as when they are made in the Figure of *Hercules* to signify Strength, of *Mars* to shew Valour, of *Mercury* to represent Dexterity, and of *Fauns* or *Satyrs* to inspire Mirth and Jollity.

*Of TERMINI or TERMS. Fig. 122.*

Termini are another kind of Symbolical Columns in human Figures, that appear with a half

half Body, as if they proceeded out of a Sheath or Case.

To give 'em a Figure proper to represent a delicate Column, their Arms are lopp'd off, and their Body does not appear below the Girle; an Instance whereof is seen in Figure 122.

These Termini are very proper in Decorations of a Theatre, as also in pieces of Architecture *de Treillage*, or of the crail'd Work kind.

#### OBSERVATION.

The Termini have this in common with the Cariates, that they shou'd never be brought to match with the common Columns: This Advantage, however, they have in particular, that a Man may give them what degree of Delicacy he pleases, by lengthning out their Sheath, and raising the Figures to any height desired. By this means they'll be made to suit gay airy Architecture; such as Cabinets, Sal-lons, and Arbours of crail'd Work, especially, require.

#### OBSERVATION.

'Tis not reasonable, in my Opinion, to reduce the Figures of Angels into Termini; tho' we see it has been formerly done in Places of Distinction.

*Of ARCHES or PORTICO's supported by COLUMNS. Fig. 123.*

We have but few Instances of such pieces of Building; tho' nothing hinders but they may be used, where the Architecture is not requir'd to be very strong, as in a plain open Gallery, serving for a Passage or Communication between two Parts of an House; or where 'tis desired to have a slight Terrasse in the Front of a Building, and a Gallery or Portico underneath; as in this Figure.

In a Portico of this kind, I would have nothing but the Archivolte upon the Column: the Corniche shou'd be placed over the Archivolte, as in this Example.

If a Man wou'd have a Gallery in Treillage or crail'd Work between two grand Cabinets, he may support it by *Termini* instead of Columns.

*Of ENTABLATURES that have BREAKS, or that project unequal y. Fig. 124.*

The Entablature is sometimes made to give back or retreat a little between the Columns: but such Breaks shou'd never be used but on extraordinary Occasions, and for special Reasons, as where there are not large Stones sufficient to carry out the whole Entablature to its due Pitch; or where a great Projecture between the Columns might intercept the Light necessary underneath, or prevent the View of  
any

any thing above; as in this Example, and in the Triumphal Arch, *Fig. 142.* where the *Basso Relievo's* in the *Attic* could not be seen, but from a great distance, if the Entablature had all the Projecture which that of the Columns might give it. It must not, however, be forgot, that the principal end of the Entablature is to shelter what is underneath; which in this case it only does by halves; as having nothing besides the bare Projecture of the Cornice for that purpose.

*Of the ATTIC ORDER. Fig. 124.*

This Order is a kind of rich Pedestal. Some Architects, on occasion, give it the several Capitals of all the Orders of Columns; but the *Ionic*, *Roman* and *Corinthian* don't at all become it. The best Way, in my Opinion, is only to distinguish the Capitals by a difference in their Mouldings; which may be made more or less simple, and more or less delicate, according to the relation they are to bear to the Architecture underneath.

OBSE<sup>R</sup>VATION.

We also give the Name *Attic* to the whole Story, wherein this Order enters; this little Order being always found over another that is greater.

This Pedestal, or false-Pilaster, ought always to have the same breadth with the Column or Pilaster underneath, and its height may be equal to a third, or even a half of the same Column or Pilaster, by which it is supported. A

---

A

T R E A T I S E

O F

A R C H I T E C T U R E .

---

S E C T I O N V .

Of the Affemblage of ORDERS.

---

Of the ASSEMBLAGE of ORDERS.

O B S E R V A T I O N I .



WHEN two Columns are placed over one another, they must be of different Orders; the stronger always to support the weaker. For Instance, the *Doric* may be placed over the *Tuscan*, the *Ionic* over the *Doric*, the *Roman* over the *Ionic*, the *Spanish* over the *Roman*, and the *Corinthian* over the *Spanish*.

O B-

OBSERVATION 2.

The upper Order must always be less Massive than the under, agreeable to the Maxim, that the strong ought to support the weak.

OBSERVATION 3.

The Columns ought to stand exactly over each other, so that their two Axes may be both found in the same Perpendicular.

OBSERVATION 4.

The Distances between the lower Columns must be determin'd by the Intercoluminations of the Order, that is without Pedestals; and the Distances of the upper Columns by the Intercoluminations of the Order with Pedestals: taking care by the way that the first Order be mouned on a pretty high Zocle, or on an ascent of several Steps, to serve instead of a continued Pedestal or Foot. *See Figures 125, 126, 127, 128, and 129.*

To the upper Order I give a Pedestal, because, being confin'd to the breadth of the Intercolumination of the lower Order, its Columns, by this means, are render'd smaller; insomuch that the diameter of their Base does not exceed that of the top of the under Columns, which is a Rule that ought not to be dispensed withal.

## R E M A R K.

*Vitruvius* won't allow the upper Order above three quarters of the height of the under. But if this Reduction were followed, the Columns wou'd be too small, and of consequence too far asunder, with regard to their height, when placed over others.

*How to find the Module of an Order that is to be placed over another: 'Tis here propos'd for Instance to place the IONIC Order over the DORIC, Fig. 126.*

Consider first, that in the *Doric* Order without a Pedestal, *Fig. 17.* which is to give you the Measures of that first Order, the Columns are placed at the distance of 11 Modules from each other, in Portico's.

That in the *Ionic* Order with a Pedestal, the Columns are 15 Modules apart; and that to place this Order upon the *Doric*, you must divide the Intercolum *AB*, or its equal *CD*, into 15 equal parts; one of which 15 will be the Module for raising the *Ionic* Order with its Pedestal, according to *Fig. 33.*

## O B S E R V A T I O N.

When two Portico's are plac'd over each other, the higher ought to be regulated by the lower: I mean the width of the upper Arch should

shou'd be made equal to that of the under; it being but just that the two Arches shou'd have the same width. On such an occasion, one may make the lower Arch 10 or 12 Minutes narrower than usual; that the width of the upper Arch may be the better proportioned.

*Fig. 127.*

When Columns are to be without Portico's, as in this Figure, one need only make 4 Triglyphs between the *Doric* Columns, that is, an Interval of 8 Modules 24 Minutes; which are equivalent to 12 Modules in the *Ionic*; as appears by the Rule of Proportion: and the same thing may be observed of coupled Columns.

R E M A R K. *Same Fig.*

The *Roman* Order does not match perfectly well with the *Ionic*. Because its Capital is higher with regard to its Column, than the *Ionic* Capital, with regard to the *Ionic* Column; and because the Denticles of the *Ionic* appear somewhat weak underneath the Modillions of the *Roman*. However, the *Roman* Order being, in this place, less than the *Ionic*, the Disproportion between their Capitals becomes less sensible, as well as that between the Denticles of the one, and the Modillions of the other.

N

*How*

*How to find the MODULE for raising a CORINTHIAN over a SPANISH Order.*  
Fig. 130.

Tis evident that the Modillions of the upper Order must be the same in Number with those of the under, in order to have 'em exactly over one another. Thus the Modillions between the *Spanish Columns A and B*, being in Number 11, there must likewise be 11 between the *Corinthian Columns* over 'em.

Now the Inter-modillions of the *Corinthian Order* containing just 40 Minutes where the Column has no Pedestal, these 40 Minutes must be multiplied by the number of Modillions, that is, by eleven, the Product whereof will be 440, and this divided by 30, the Module, the Quotient will be 14 Modules 20 Minutes, which is the Division of the Scale *CD*, for raising the *Corinthian Order*.

*How to divide the INTER-COLUMN, CD, into 14 Modules 20 Minutes.* Same Fig.

Draw at random the Line *CE*, making an Angle with *CD*.

Take any Distance at pleasure, for Instance, *CG*, and set it off 14 times on *CE*. This done, divide the last, as we divide the Module; that is, into 30 Parts, 20 whereof add to the 14 Modules *CI*:

Lastly,

Lastly, draw the Line *DE*, and its Parallels *IS*, *LM*, &c. and you'll find *CD* divided into 14 Modules 20 Minutes, according to *Prop. 48. Lib. 3.* of my Geometry.

OBSERVATION. *Fig. 131.*

One finds a Difficulty in placing three Orders over each other; and it consists in this, that the second Order having a Pedestal, the Columns of the third become a little too big at bottom: tho' 'tis so very little that the Eye can hardly perceive it. This Inconvenience, however, may be remedied by taking the Excess imperceptably away, wholly from the Base of the Column: 'tis true, this will occasion a little Swelling, but that won't do any harm.

OBSERVATION.

It wou'd not be proper, in my Opinion, to undertake the placing of more than three Orders of Columns over one another. For, besides that in the fourth Order the Columns wou'd be too far asunder with regard to their height, it must likewise be consider'd, that four Columns rais'd over one another, can't well be very strong: indeed the first may have a Rustic Order whereon it is raised, and which may serve it as a Foot.

*Of PILASTERS raised over one another.*

Fig. 132.

Pilasters are to be rais'd over one another according to the preceeding Rule. 'Tis desired for Instance, to place the *Corinthian* Order over the *Spanish*, and 'tis supposed that in this Figure the Pilasters *A* and *B* are ten Modillions apart; there must therefore be ten Modillions between the Axes *C* and *D* of the *Corinthian* Order: and, as the *Corinthian* Inter-modillions consist of 41 Minutes and a quarter, the whole distance *CD*, will be found equivalent to 13 Modules 22 Minutes and an half, which being divided in the manner already shewn, p. 125. you'll have a Scale for raising the *Corinthian* Order.

*The upper PILASTERS to be less than the lower.* Fig. 132.

As Pilasters are of the same bigness from top to bottom, one would imagine at first sight, that to preserve a Regularity, the Pilasters placed one over another should likewise be of the same bigness; but there are two Reasons which oblige us to recede from this Rule.

The first is, that as the Orders increase in Delicacy, they likewise increase in height with regard to their bigness: so that were the Module to continue the same in the upper and the under Pilasters, the Consequence wou'd be,  
that

that the Orders and Stories would increase in height in proportion as they rise over one another, which wou'd be preposterous.

The second Reason is, that if there shou'd be Columns along with the Pilasters of the lower Order, as in *Fig. 155.* the Diameter of the upper Pilasters wou'd be bigger than that of the top of the Columns underneath, which wou'd be another Fault.

One should never, therefore, place two Pilasters of the same bigness over one another, unless the upper be *Attic*, as in *Fig 124.*

R E M A R K.

In the Assèmbly of Pilasters, all that is required is to examine how big the Base of the upper Pilaster may be, with regard to the top of the under: for the Pilasters being always equally big at top and bottom, it follows inevitably according to my Rules, that by observing the same number of Modillions in the two Orders, the upper Pilaster always becomes less than the under, as in effect it should be.

OBSERVATION *on the* INNER *or* RE-  
ENTERING ANGLES. *Fig. 133.*

In the Orders of Pilasters, I wou'd always have the Inner Angles accompanied and strengthened with two flat Pilasters, one on each side, at an equal Distance from a third,  
but

but within the Angle, as appears by the Plan of this Pilaster *A*.

On some Occasions one need only place a single Anta in the Angle between two Pilasters; as when the Capitals of the two entire Pilasters approach very near each other.

By Anta I mean a kind of Shaft of a Pilaster without Base or Capital, and even without any Moulding.

OBSERVATION. *Same Fig. 133.*

Tho' these Columns be Conjugate or coupled, and for that reason can have but one common Pedestal, yet 'twould not be amiss, if on this occasion they appear'd to have each its several one; which may be had by means of a little Indenture or Retreat, *BC*, not exceeding a Minute in depth.

R E M A R K.

Pilasters split or cloven from top to bottom in an inner Angle never have a good Effect; for besides that their halves have no Symmetry with the entire Pilasters that answer to them, their Capitals do likewise become very defective, as is particularly seen in the Church of *Val de Grace*.

OBSERVATION. *Fig. 134.*

When Columns and Pilasters are placed under the same Entablature, the Entablature must be that of the Columns. When

When Columns and Pilasters are placed under the same Entablature, they ſhould never, if poſſible, ſtand in the front Line, by reaſon of the manifeſt Irregularities that would follow thereupon; they muſt therefore be ſeparated by a Reſſaut or Difference in the Range.

A Reſſaut can never conſiſt of leſs than an entire Modillion, without ruining the Regularity of the Parts of the Soffit of the Corniche.

Further, if the Reſſaut don't exceed a Modillion, the Column will remain engag'd in the Body of the Building, as appears by the Plan *A*.

When this Column is allow'd to be thus engag'd in the Body of the Building, it muſt have a Pilaster by its ſide, to make a Symmetry with that on the other ſide the Window, which the Column cou'd not well do: beſides, that without this Pilaster the Angle or Corner of the Building would be too weak.

But if one would have the Column entirely diſengag'd, as it appears in Figure *B* of the ſame Plate, the Reſſaut or difference of Range in that caſe muſt conſiſt of ſeveral Modillions; and behind the Column muſt be a Pilaster, beſides that which makes the neceſſary Symmetry with the Window.

#### OBSERVATION.

When Pilasters accompany Inſulate Columns, give them as a Ground or *arriere Corps*,  
and ſe as

as in this Figure, they ought to be at a competent Distance from each other, to prevent their Capitals from interfering; which is a considerable Fault that we find frequently committed, but which, however, ought to be carefully avoided.

In this Figure is represented a *Ressaut*, where the Line of Columns advances forwards, with regard to the Pilasters which are sunk behind. In the following Figure is a *Ressaut* where the Columns retreat backwards, with regard to the Face of the Building, and the Line of Pilasters, which stands forwards.

OBSERVATION. *Fig. 136.*

Where Pilasters are placed under an Entablature of Columns, by way of Ground or *arrière Corps*, as was just now supposed, there arises a considerable Difficulty; and 'tis this.

I have already shewn that in the Orders of Pilasters, the Modillions must of necessity be further apart than in the Orders of Columns.

Now suppose this Excess to be of 4 Minutes in the *Spanish* Order; here then are 4 Minutes to be regain'd on the breadth of the Pilasters, and on that of the Modillions and Inter-Modillions, in order to adjust the Pilasters of this Order to the Columns: But the Pilasters behind the Columns must be excepted out of the Diminution; because being very near the Columns, neither their Bases nor Shafts can lose  
any

any thing of their breadth, without its being perceived. So that the whole Reduction will lie on the Pilasters *A* and *B*, which are by the side of each other.

First then the Pilasters *A* and *B*, may be each two Minutes less in breadth without its being discovered, in regard the Eye can't compare these at one Glance, with those behind the Columns: but this Diminution being no more than a Minute on each side, there will still remain three to be gain'd out of the Modillions and Inter-Modillions. The Modillions therefore must be made a little broader than those in the Entablature of Columns, and the Inter-Modillions the same; and if with this, the strength of the Modillions be likewise a little increased, we shall have perfect Squares in the Larmier to separate them from each other; and by this means the Order of Pilasters will be brought to agree very well with that of the Columns.

#### OBSERVATION.

When a Pilaster is placed behind a Column, the breadth of the upper part of its Capital shou'd be reduc'd to that of the upper part of the Capital of the Column; to the end that, their Bases being of the same breadth, their Abacus and Volutes may be so too.

---

A  
T R E A T I S E  
O F  
A R C H I T E C T U R E .

---

S E C T I O N VI.

*Of* GATES *or* DOORS, WINDOWS,  
PEDIMENTS *and* NICHES.

---

O F G A T E S *or* D O O R S .



GATES or Doors are either large, moderate, or little. The Large ought to be arch'd to an entire Semicircle; the Moderate may either have a Semicircle or an Arch somewhat less; and the Little ones must be square; excepting they serve for subterraneous Passages; which being usually vaulted, their Doors must be arch'd likewise.

All

All regular Gates have three principal parts; those with Arches have Piedroits or Jaumbs, Imposts, and Archivolts; the square ones have a Chambrante or Door-Case, a Frieze and a Corniche.

Each kind of Door is sometimes accompanied with an Order of Columns or Pilasters.

When they are so accompanied, they are usually crown'd with a Pediment, and sometimes also with a Balcony.

Square Gates, without any Order of Columns or Pilasters, have their Corniches frequently supported by Consoles; particularly where those Corniches have a little Projecture for a Shelter to Persons underneath 'em.

*Of the Proportion of GATES.*

The ordinary proportion of Gates is to have their Height double to their Width: This Rule, however, is not so inviolable, but that they may have a little more, or a little less, height on occasion,

R E M A R K.

Gates are call'd *Tuscan, Doric, Ionic, &c.* according to the Relation which their Imposts, Corniches, and Chambranlies bear to the Parts and Mouldings of those Orders.

## R E M A R K.

Besides Gates in the regular Architecture, there are others of the *Rustic* Order, which in their kind have very singular Beauties, and such as, in some Places, are more suitable than any others that could be used; particularly in the Entries of great Houses, where the Front has no regular Order of Architecture.

R E M A R K. *Fig. 138, 139.*

Coach-Gates, and others of a middle kind, are usually made with two Leaves or Folding-Doors; and, when they are a little bigger than ordinary, have a Dormant, (i. e. *the upper part of the Gate that does not open*) which Dormant, where the Gate is arch'd, commences from the Spring of the Arch.

## R E M A R K.

In one of the Folding Doors is usually Wicket, or little Gate, through which People on foot ordinarily pass.

O B S E R V A T I O N. *Fig. 140.*

Gates of Gardens, Parks, &c. have usually a kind of Pillars behind, call'd Buttresses or Counter-Forts, as in the Plan of this Gate.  
These

These Pillars shou'd reach far enough inwards to receive and stay the Leaves or Folding-Doors, as also to support the Stones or Barrie.s placed there for their Security.

R E M A R K.

It may be easily concluded that these Buttresses are only used in such Gates as have no Lodgement to sustain 'em.

*Fig. 140.*

These kind of Gates may also have Buttresses on their Sides, with Consoles both to support the Architecture of the Gate, and also to add a Grace and Ornament to it; especially where the Wall is low, and the Gate high and magnificent.

O B S E R V A T I O N.

A Console, in my Opinion, shou'd always have something exceedingly massive to sustain and serve it as a Rest, when rais'd, as in this Example.

*Fig. 141.*

This Sweep, with the Archivolt, of any great publick Gate, as that of a Place Royal, may be supported by Pilasters, which will  
make

make a Symmetry with the Ground Story, and may consist of Columns supporting a Terrace, or Balcony, to be continued quite round the Place.

OBSERVATION. *Fig. 142.*

Large Gates, as the preceding one, which are never shut, and are principally intended to shew the Magnificence of Princes and People, ought to have a noble and rich Composition, with great Streets answering to 'em. Triumphal Arches, in a peculiar manner have their Appearance enobled by large Avenues, which shew them at a great Distance.

## OBSERVATION.

These grand Triumphal Gates should always be accompanied with two little ones for the Passage of People on foot.

## OBSERVATION.

The Vaults or Ceilings of these Gates should be enrich'd with Compartiments of beautiful Sculpture, to make the Passage thro' them the more pleasing.

## OBSERVATION.

The Avenue on the side of the Champaine should always consist of large Trees planted in parallel

parallel Lines, with an Interval equal to the breadth of the whole Triumphal Arch, that the Beauty and Magnificence of the Edifice may strike the Eye at once, and from a great distance.

OBSERVATION. *Fig.* 143.

When a little Door is made in the Front of an ordinary but regular Building, it shou'd be rais'd to the just height of the Windows that accompany it, but its breadth mnst a little exceed that of the Windows; lest, while it is adjusted to the rest of the Building, it appear ill proportion'd in itself.

If 'tis desired to have the Door adorn'd with an Order of Columns or Pilasters, it must be rais'd higher; see the first *Facade* or *Front* in this Plate, where the Plat-Band *E F* being continued, serves as an Impost to the Door, terminating the first Story, and shewing where the second commences.

*A.* First Story.

*B.* Second Story.

*C.* Third Story.

According to the common Usage, *B* is the first, *C* the second, *D* the third, &c.

Of WINDOWS. *Fig.* 143.

Windows, as well as Gates, differ both in their Bigness, and in their Architecture. The biggest are seen in Churches, and are usually arch'd to a Semicircle. The

The moderate ones frequently terminate in an Arch less than a Semicircle. As to the small ones, they are usually long Squares; their height being sometimes double their width, or very nearly so.

Both the one and the other are made more or less simple, or more or less rich, according to the Place, and to the Architecture of the Buildings where they are used.

#### OBSERVATION. *Same Fig.*

In the *Facade* or Front of a Building, the Windows shou'd be exactly perpendicular under one another; and to that end care must be taken that they be all of the same width: but in different Stories, their height must be different.

Those of the lowest and the uppermost Stories may be less high, as well as less adorn'd, than those of the middle, which are usually for the Master's Story.

#### OBSERVATION.

The width of the Windows, with regard to that of their Jaumbs, that is, with regard to the breadth of the Wall between two Windows, may be as 3 to 4 in temperate Climates, like that of ours; or as 3 to 5 in Climates that are colder or more hot: or as 3 to 6 in Countries still more exposed to violent Heat, or violent Cold; but the various Situations of a Build-

Building with regard to *East* and *West*, will always occasion a Variation in the proportion of the Windows themselves. See *Vitruvius* on the Subject.

REMARK. *Fig.* 144, 145.

The Designs of Windows given us by *Vignola*, do very well as reform'd by *M. d'Aviler* in the Translation he has made of that Author: The Composition whereof is shewn pretty accurately in these two Designs or Figures: However, 'tis usual to have Windows much less adorn'd; and we often make them without any Ornament at all, besides a Plat-Band around them, and that too, in fine Buildings. See *Fig.* 143.

#### OBSERVATION.

Large Windows shou'd have a Corniche that projects pretty much, to be a shelter to those who present themselves at it; and in that case the Projecture shou'd be supported by two Consoles, as well as the Rest or Leaning Place that terminates the Window at bottom.

#### OBSERVATION.

The Consoles of the Corniche shou'd be as big at bottom as at top, that they may fall in regularly with the Jaumb and Chambranle.

## O B S E R V A T I O N.

The breadth of the Chambranle or Window Frame may be a sixth part of that of the Window.

## R E M A R K.

Without the Chambranle is a Plat-Band, serving it as an *Arriere-Corps*, called a Montant or Window-post, which may have an equal breadth with the Chambranle, or on occasion a little less. It serves particularly to place the Consoles of the Corniche upon.

## O B S E R V A T I O N.

If the Corniche be not supported by Consoles, this Plat-Band shou'd be then narrower by one half; and without any Mouldings besides those that compose its Corniche.

## O B S E R V A T I O N.

The Consoles that support the Rest or Bottom of the Window, should be placed underneath the Chambranle, and be equal to it in breadth, and their Wreathings may be made to run out on the sides.

## O B S E R V A T I O N.

The height of these Consoles must not exceed half that of the opening of the Window  
at

at the most, nor fall short of a third of that opening, when the least.

OBSERVATION.

They are usually made narrower at bottom than at top, but in my Opinion, 'twould be better to have 'em equally big.

REMARK.

The top of the Perron or Ascent frequently terminates the bottom of these Consoles.

*Of LUTHERNS or DORMERS. Fig. 146.*

We call Lutherns, those Windows rais'd over the Corniche of a Building, and in the Roof of the House.

Lutherns should be built on the Wall, and stand very upright. Being now much in use in Houses of indifferent Architecture, 'tis become a Custom to cut off that part of the Corniche directly underneath 'em, that it mayn't intercept the View of what passes below. But this shou'd never be practis'd in Palaces or Buildings of Magnificence; such Notches in the Corniche having a very ill Effect, outwards; which must be carefully avoided, tho' to the Prejudice of those People who may chance to possess these upper Stories.

*Of the several STORIES in the height of a BUILDING of the same Order of COLUMNS or PILASTERS. Fig. 147.*

In a publick Place, intended for the Magnificence as well as the Convenience of a City, the Buildings cannot be too stately: Now, as nothing carries more State with it, than one grand Order; this is what must be thought on in the first place: However, as Convenience on this Occasion is to be inseparable from Magnificence, I think two Stories may be allow'd in the height of this one Order: and if the whole be rais'd on a *Rustic* Order, 'twill be a great addition to the Beauty of the Ordinance. This is what we see practis'd with so much Success in the Building of the *Place de Vend me*, and that of *des Victoires*.

Over this grand Order, one may raise a Balustrade, to make it terminate the more agreeably, and to conceal, in some measure, the Roof, which is never found any great Ornament to a beautiful Building.

Instead of Pilasters, one might place an Order of Insulate Columns with a Corridor or Gallery behind; which would be still infinitely better.

*Fig. 148.*

Of PEDIMENTS.

BY Pediment we mean the Crowning frequently seen over Gates, Doors, Windows, and Niches; and sometimes over entire Orders of Architecture. The Ridges of ordinary Houses, were, what gave Architects the first Idea of this noble Part.

*The Parts of the PEDIMENT are the TYMPANUM, and its CORNICHE.*

By Tympanum we mean the Area or Space included between the Corniche which crowns it, and the Entablature which supports and serves it as a Foundation.

*Fig. 149.*

The Tympanum is either Triangular or Circular. The Triangular the Workmen call pointed, the Circular they call arch'd.

OBSERVATION. *Fig. 148.*

The Naked of the Pediment, *i. e.* the Tympanum, ought always to stand perpendicularly over the Frieze of the Entablature underneath, as the Tympanum *A*, which is in the same Perpendicular with Frieze *B*.

O B-

OBSERVATION. *Same Fig.*

The Modillions of the Corniche of the Pediment ought to be found in the same Perpendicular with those of the Entablature underneath.

OBSERVATION. *Fig. 150.*

That part of the Corniche whereon the Pediment stands, shou'd not have any Cymatium; in regard the Cymatium of the rest of the Entablature, when it meets the Pediment, passies over it: but this change of Determination occasions a very considerable Difficulty; and 'tis this.

If the Cymatium were carried over the Pediment, beginning just at the Angle of the Corniche, as one would imagine it thou'd do; it would be considerably widen'd, in regard that Angle is acute. But this wou'd be a considerable Eye-sore, both on account of the inequality of its width, and because it would be render'd too strong and heavy for the Corona.

Some Architects, to reduce this Cymatium to a proper width, make the Horizontal Cymatium that supports the two sides of the Pediment very flat, as we see done over the great Door of the *Minimes* in the *Place Royal*; but this is to prevent one Deformity, by putting another in its stead.

Other

Other Architects make a little Retreat or Elbow, as the Workmen call it. at the extremity of the Cymatium of the Pediment; much after the manner of this Figure; and this Expedient, in my Opinion, is preferable to any of the rest.

It here appears very evidently, that if the Cymatium *AB*, were to pass over the Pediment, commencing from the Point *B*, it wou'd have the whole Breadth, *CF*. whereas by commencing from the Crosette or Elbow *D*, it has only the breadth *EF*, which is the just breadth the Cymatium shou'd have according to my Rules.

Sometimes the Pediment does not commence from the Extremity of the Corniche; but in that case, too, there are Difficulties, which we shall take occasion to examine hereafter.

*Vitruvius* observes, that the Ancients did not approve of Modillions in the Corniche of a Pediment, and the reason they gave for it was, that Modillions being only intended to represent the ends of Rafters, it would be absurd to use them in the Declivity of a Pediment where no Rafters are supposed to be. But the truth is, these Modillions are rather Ornaments to sustain the great Projecture of the Corona or Larmier, than to represent the ends of any Rafters, or other pieces of Wood; and therefore it wou'd be a Weakness to be influenc'd by such imaginary Reasons; the rather because these Ornaments have a very good Effect, and especially when used in large Pediments.

OBSERVATION. *Fig. 151.*

A Triangular Pediment may serve to crown three Arches, but a circular Pediment can't properly crown more than one: and the Centre of the Sweep of the Gate or Arch, should be used for describing the Sweep of the Pediment.

OBSERVATION. *Fig. 155.*

I would not have more than two Pediments placed over each other in the same Front of a Building: and even where there are two, it wou'd not be amiss to have the one with a Sweep, and the other pointed or triangular; this last finishing the Front in manner of a Ridge.

OBSERVATION. *Fig. 152.*

We now use none of those broken and interrupted Pediments which *Michael Angelo* introduced in his Time: Nor is there any body that seems to value 'em, but People of no Taste or Experience.

Those made of later Days, and which are supported by an Entablature truncated in the middle, as those in the Court of the *Val de Grace*, were so maim'd to shew the Cypher of the House. But these, too, are Corruptions in Architecture, which ought by all means to be avoided.

OBSERVATION.

Tho' the Pediment is bounded by its Tympanum and its Corniche, yet were it not for its Entablature underneath, it would not only be ill supported, but imperfect too; just as a Ridge would be, if the Rafters that compose it wanted Beams to prevent their flying asunder.

The placing of two Pediments over one another, as is done in the old *Louvre*, is perfectly absurd and ridiculous, tho' perform'd by an Architect of Reputation.

In some places we likewise see the Architrave interrupted and cut off between the two Columns, with Festoons in its place, which is a Deformity, tho' somewhat less considerable than the former.

REMARK.

*Vitruvius* thinks it just that all the Parts rais'd above Columns and Pilasters, that is, all that are above the Eye, as the Faces of the Architrave, the Frieze, the Tympanum of the Pediment, and the Acroteria with their Figures or Statues shou'd be inclin'd forwards, about a twelfth part of their height. And his reason for it is, that those parts will by that means be the better expos'd to the view of such Persons as are plac'd below: but I think his Advice ought here to be set aside, as being built on a particular reason to the prejudice of a general Rule, which enjoins all the parts of a beautiful

Q

Build-

Building to be exactly perpendicular. Without this, they must needs have a woful Effect, when view'd sidewise; on which occasion they wou'd appear reeling, and ready to tumble down. However, the Statuaries observe the Maxim of *V. truvius* very judiciously with regard to their Figures, when they are placed sufficiently high, and can only be view'd in Front, and from below.

Of N I C H E S. *Fig. 153.*

Niches are Hollows sunk into the Wall, for the commodious and agreeable placing of Statues.

Their ordinary proportion is to have two Circles in height, and one in width; but I make their height something more: The excess being to compensate for the height of the Plinth or Pedestal of the Statue; as is shewn in the Figures *A* and *B*.

R E M A R K S.

The Hollow is Semicircular at bottom, that is in its Plan; at top it terminates in a kind of Canopy or *Cul de jour*, as is seen in Figure *C*.

Niches have frequently an Impost, and an Archivolt or Head-band, and their Canopy wrought and enrich'd in manner of a Shell. See Fig. *D* of the same Plate.

The breadth of the Archivolt may be made equal to a sixth or seventh part of the Aperture  
of

of the Niche; and the height of the Impost to a fifth or sixth part of the same.

The Impost and Archivolt ought to consist of such Mouldings as have some relation to the Architecture of the Place.

OBSERVATION. *Fig. 154.*

When a Niche is placed underneath an Impost, between two Columns or Pilasters, as in this Figure; it shou'd have no Impost of its own: for two Imposts over each other wou'd have a woful Effect; besides that the Pedestals, in this case, having their Bases and Corniches, there wou'd be too many Mouldings over one another.

OBSERVATION. *Same Fig.*

There must no Niche be made between two Pilasters, if they ben't a-part nearly one third of their height; otherwise we shou'd have Niches too scanty and narrow.

Care must also be taken, that they be not too big; lest by that means the Architecture be made to appear little and pitiful: Thus from the largeness, for Instance, of the Niche one is led to judge that the Architecture is only intended for a Chappel or other Building of an ordinary size.

OBSERVATION.

Niches should be plac'd at the height of the Pedestals of the Columns or Pilasters that accompany them.

Q 2

OB-

## OBSERVATION.

When Niches are placed underneath Imposts, as in this Figure; the opening of the Arches shou'd be somewhat narrower than ordinary, that the Impost being on that account a little higher, the Niches may become of a moderate bigness: For this reason, instead of twelve Modillions between the Pilasters, I only here make eleven, that is, I retrench one Modillion from the Corniche, that the Pilasters may approach each other equally.

## OBSERVATION. 155.

When the Columns have no Pedestals, a Niche may be rais'd higher than their Base; and in that case a Table or Pannel may be placed underneath.

OBSERVATION. *Same Fig.*

If it happen that a Niche with an Impost be placed between two Pilasters, without any Portico, as in this Figure; it shou'd be made with a Retreat or Fall, backwards, to prevent the necessity of continuing its Impost between the Pilasters. For that Impost being proportioned to the Niche, cannot be in proportion to the Pilasters. Besides, without this Expedient I don't readily see how it cou'd be well terminated on the side of the Gate.

We

We sometimes see Niches that are made square, but these want all the Beauty of the others.

OBSERVATION. *Fig. 156.*

If the Order of Column or Pilaster should be very big and high, as that by following the Design of the preceding Plate, the Niche wou'd become too large and unsizeable, the Pilasters must be brought a Modillion or two nearer each other; and instead of a Niche with a Retreat, one may make a Niche with a Chambranle and a Corniche, crown'd with a Pediment, over which may be an Oval Light of the same width with the Niche.

Of STATUES. *Fig. 124.*

A Figure or Statue, rais'd over an Order or Building, may have its height equal to one third of that of the Column, or to four ninths thereof, if the Statue have no Niches. *Fig. 155.* If it be bigger, it will make the Building appear little; and if it be less, for Instance only a fourth or a little more, the Building will appear by much the larger; as may be observed from Figure 156,

OBSERVATION *on the Size of STATUES.*

'Tis observable, that in proportion as a Statue is rais'd above the Eye, it appears to diminish in Bulk, 'till such time as being elevated to a very great pitch, it becomes almost imperceptible.

rible. For this reason some Architects contend that the Sculptor must always accommodate his Figures to their height, and increase their bigness just as their Elevation increases, to the end that they may always appear of a reasonable Size. But as the Orders of Columns are to be diminish'd in proportion as they rise over one another, it would happen that the Statues in this case would become too big for the Order.

There need not therefore be any Difficulty made with regard to what the Architect is to do on this occasion. He must always proportion his Figures to the Orders, and the Stories where they are to be placed; unless it happen to be in a close narrow place, as in a Stair-Case or Dôme, for in that case the Orders and the Statues may be enlarged in proportion. However, Care must be taken not to run into excess, it being better they shou'd appear too little than too big.

#### OBSERVATION.

Instead of placing Statues to finish the uppermost Stories, one may have Vases, Torches, Pots of Incense, Trophies, and the like Ornaments; which will suit better with such Places than human Figures; unless those represent the Tutelary Angels appointed for the Guard and Protection of the Building.

OBSERVATION. *Fig. 155.*

Figures plac'd in Niches shou'd have their Eyes at the height of the Sweep, as in the Diameter of the Arch.

OBSERVATION.

'Tis usual to add little Plinths or Zocles for Bases, to these Figures: but when the Niches are of the biggest, so as the Figures wou'd appear too Gigantic, if having their Eyes in the Centre of the Sweep, they shou'd reach to the bottom, abating the height of a little Plinth under their Feet; in that case, they may be rais'd on a moderate Pedestal, as in this Figure 155. But on the other hand, care must be taken that these Pedestals be not too high, and the Figures too little, with regard to the Niche, it being a great Eye-sore to see a little Figure in a big Niche. On such an Occasion, I imagine the Pedestal may have a fifth part of the height of the Figure; if it have more, the Figure will be too little.

OBSERVATION. *Fig. 156.*

When Figures are plac'd in Niches by way of Ornaments to the Portail or Frontispiece, there seems no necessity to have any above the Entablature; but in their stead one may have Vases or other Ornaments, which will have nearly the same Effect, For, those Figures in Niches being frequently requir'd to be bigger than those plac'd

plac'd over the Entablature, such an Inequality of Figures in the same Frontispiece, might be displeasing to some People.

### Of P Y R A M I D S:

Pyramids are a kind of Monuments proper for transmitting the Memory of great Princes to Posterity. They may be adorn'd with Trophies of War, with Statues and Basso Relievo's, to represent their memorable Actions, their Victories, Virtues, Power, and the Enemies they subdued.

A Pyramid can't be better situate than in the middle of a large *Place*, or Square, where it may be seen on all sides, and at different heights, without Interruption.

It shou'd be rais'd to such a height as may set it above all the Buildings that encompass it; so as it may be view'd out of the Country, and be a noble Ornament to the City where it is rais'd.

The Pyramid is always esteem'd a Symbol of the Glory of Princes; for this reason it must be made so much the more magnificent, as the Prince for whom 'tis design'd has been more eminent for Virtue and Power.

Further, a Pyramid should always be single, or alone; otherwise it loses its proper Signification, which is to represent the Glory of the Prince who Reigns, or has Reign'd.

---

A

# T R E A T I S E

O F

## A R C H I T E C T U R E .

---

### S E C T I O N VII.

*Of BALUSTERS and BALUSTRADES, and  
of BALCONIES, and PERRONS or AS-  
CENTS.*

---

*Of Balusters and Balustrades.*

*Fig. 157.*



Balusters or Balisters, are a kind of little Pillars join'd by a Rail, at a convenient height for the Elbows to rest upon. Of these I propose various Forms accommodated to the various Orders of Architecture where Balustrades may be used.

By Balustrade we mean a Series or Row of Balusters with their Rail, serving as a Tablette

R

blette or Rest to the Elbows, and at the same time as a Fence or Inclosure to Altars, Balconies, Terrasses, Water-works, Stair-cases, and large Windows.

Balustrades consist of one or more Ranges or Rows of Balusters, terminated by Pedestals of the same height.

If in a Stone or Marble Balustrade, the Distance from one Pedestal to another be too great for a Tablette or Rail of a single Stone, it must be made of two; in which Case 'twill be proper to have the Joncture or Assemblage supported by a Die, mark'd *DB*, if a Baluster be judged too weak to sustain them.

The Ranges, in my Opinion, ought to terminate in half Balusters join'd to the Pedestals; tho' there are other Architects of another Sentiment. However, every Man may follow his own Inclination. I here give Instances of each kind.

We have Balusters of various Figures, but the round and the square should always have the Preference. See *Fig. 158*, and *159*.

Every Balustrade shou'd have a Zocle. *Palladio* indeed, gives us an Instance of the contrary, in his *Egyptian Hall*, p. 110. but this is not to be imitated.

Round Balusters are not so heavy as the square ones: they are frequently made of very hard Stone, as that of *Lions*, which works better than any other kind of Stone, except Marble.

*Fig. 159.*

- A.* Tablette, Rail, or Rest.
- B.* Abacus.
- C.* Cincture or Orlo.
- D.* Astragal.
- E.* Ball of the Baluster.
- F.* Gaudrons of the Ball.
- G.* Astragal.
- H.* Base.
- I.* Plinth.
- L.* Zocle or Foot.

*Fig. 160.*

When 'tis desir'd to have a Balustrade richer and more delicate than ordinary, such as we sometimes see before Altars, it may be cast of Brass or Silver; unless, to save Expences, it be thought better to have it of Wood gilded; for such kind of Balustrades may be made as rich in Ornaments as one pleases: several Designs of this kind will be found in this Plate; and those, who have a Taste for such Things, will find no Difficulty in composing infinite others.

All Balustrades being intended to be Breast-high, shou'd none ever exceed three Foot and a quarter at the most, nor come short of two Foot and a quarter at the least; the Measures for this to be taken from the Royal *Paris* Foot, \* which

---

\* *N. B.* The *Paris* Foot here referr'd to, is to the *English* Foot as 1068. to 1000.

is the same throughout the Kingdom, and does not vary like the Module, which is of various Dimensions.

*AB* a Scale of three Feet, whereon the parts of these Balusters may be measured.

OBSERVATION. *Fig.* 161.

In Balustrades of Stair-Cases, the Zocle shou'd always be the height of the Steps: and the Balustrade terminates much better with a Pedestal on the Ground, as in this Figure, than with a Pedestal on the Descent, as in *Fig.* 157.

OBSERVATION.

Whether the Pedestal be on the Descent or not, it must always have a Buttress in manner of a Console to sustain and bear up against the Pressure of the Balustrade.

OBSERVATION.

In Balustrades that are between Pedestals, without either Bases or Corniches, of which I give Instances in Figures 126, and 131; the Tablette shou'd only consist of a Plat-Band, sustain'd by a Fillet or little Talon underneath, and the Zocle may have a little Cavetto over it.

OBSERVATION. *Fig.* 162.

When a Balustrade is independant, one may proportion its Pedestals to its Balusters, of which I have given several Instances: but when it is used in Orders of Columns, whereon it has some Dependence, the Pedestals in that case can't be manag'd at Pleasure.

*Fig.* 162.

If the Pedestals that terminate a Balustrade be compleat, and well-proportion'd to the Pillars which they support, their Corniches will be found too weak to be continued alone, and so to serve for a Tablette to the Balustrade. 'Twill be necessary, therefore, to add a Plat-Band underneath; which will make a Symmetry with that round the Table or Pannel of the Pedestal, as in the Figure mark'd *A*.

*Fig.* 163.

Instead of Balusters, we sometimes make Entrelas of Crail'd Work, which are not inferior to the others in Beauty. Of these I propose various Designs in this Plate; and everybody is at liberty to imagine as many more as he pleases.

One might enrich these yet further, by making the Wreaths, Roses, and Foliages, of Brass; which wou'd do still infinitely better if they were gilt.

O B.

## O B S E R V A T I O N.

These Entrelas shou'd be made more or less delicate according to the Places where they are to be used. For Instance, those that are to be placed a-top of a Building, and which can only be view'd from a-far, should be less delicate than those that are to be view'd near at hand.

*Of BALCONIES. Fig. 164.*

A Balcony is a little slight Terrass, standing out from the Body or Naked of a Building; where one may take the Air, and easily observe what passes underneath.

Its Parts are the Terrass, the Balustrade that incloses it, and the Consoles that support it: or, to explain myself more accurately, a Balcony is a piece of Architecture rais'd in the Air, inclosed with a Balustrade, and supported by a little Entablature, whereof the Corniche or uppermost part makes a Terrass: The Frieze and Architrave being only continued at the Bottom and Sides; and the whole Balcony further supported by Consoles, as is shewn in this Figure.

## R E M A R K.

The Frieze is made with a little Sweep, that the Zocle of the Pedestal above may not appear ill

ill supported, and that the Console, coming to contract or straiten itself at bottom, may do it the more gracefully; without which it wou'd appear too heavy.

The height of the Consoles may be equal to their Projecture, but 'twill be an Addition both to the Beauty and Strength of the Work if they be made higher.

### OBSERVATION.

A Balcony may be continued quite through the *Facade* of a Building, by adding Consoles from Space to Space; to be disposed between the Windows, which will be underneath.

*A.* A Balcony of Stone, view'd in Front.

*B.* A Balcony of Stone view'd Sidewise.

*C.* The Section of the same Balcony.

### OBSERVATION. *Same Fig.*

Balconies of Iron will do much better than those of Stone, as being lighter, and less subject to Decay: If they be gilt, they will be exceedingly magnificent, and a very proper Ornament for a Palace.

*D E F,* Balconies of Iron.

*Fig. 155.*

### Of PERRONS or ASCENTS.

By Perron we mean an Ascent or Elevation given to the Entrance of a Building. The  
Portail

Portail or Frontispiece of a Church, Palace, or any other great Building, should always have a Rise of some Steps, that is, in a word, it ought to have a Perron.

## O B S E R V A T I O N.

The Rest or Landing-place of a Perron shou'd always be extended in Width as far as the Frontispiece, if possible; and the Steps, according to *Vitruvius*, must ever be an odd Number.

## O B S E R V A T I O N.

These Steps shou'd always be 5 or 6 Inches in height, and 10 or 12 in breadth; that is, their breadth must be double their height; which is found the best Proportion to have an easy and commodious Ascent.

O B S E R V A T I O N. *Fig. 155.*

Where the Perron is 13 or 15 Steps high, 'tis necessary, at least 'tis convenient, to interrupt its Range with one or two Landing-places, that there mayn't be too many Steps to mount successively, and that the Eye may not be displeas'd in descending so great a height without Rests. See, in this Figure, the Perron interrupted with two Landing-places, according to the Disposition of the Parts of the Frontispiece.

O B.

OBSERVATION.

A Perron shou'd always be confin'd to the height of the Zocle or Foot of the whole Building.

OBSERVATION.

Tho' this Zocle or Foot serve as a continued Pedestal ; - yet it must neither have a Base nor Corniche when its height is taken up by a Perron ; and I can't at all agree with *Palladio* in the Examples he has given us to the contrary.

Sometimes the Place does not allow a Perron to be extended so far as one would otherwise wish, in which case it must be reduced as conveniently as may be, to the little Space allotted for it. See *Fig. 165.*

*Some particular Observations. Fig. 165.*

REMARK.

When 'tis required to have an Order of Columns or Pilasters placed in a Second Story ; the First Story may be Rustic, and its Arches in Bossage, which will not only add to its Solidity and Strength, but to its graceful Appearance.

S

RE-

R E M A R K. *Same Fig.*

If the First Story be a Rustick Order, the Order of Columns or Pilasters rais'd over it may be made higher; that is, its height may exceed that of the Rustic Order; which in this Case only serves it as a Stand or Foot.

O B S E R V A T I O N. *Same Fig.*

When the Body of a Building is to be rais'd higher than the Alaë or Wings that accompany it; 'tis not necessary for that purpose, that the first or lowest Order of the Body should be taller than that of the Wings, but that of the Wings may be continued throughout, and the Elevation of the main Body above these may be left to a second Order, and even, if it be necessary, to a third.

O B S E R V A T I O N.

For the third Story one may use an *Attic Order*; as in the same Figure.

O B S E R V A T I O N. *Fig. 165.*

We have already observ'd that on some Occasions, one may make two Stories in the height of the same Order. Figure 147. And in this Figure 165. I propose another Instance with Round or Oval Lights, which will make a very beautiful Diversity with the larger Windows.

These

These round Lights over the Windows, serving to illumine the Mezzanines or Half Stories, may also serve to raise the Light of a large Sallon in the middle of a Building.

*Fig. 166.*

One might also make two Stories in the height of the same Order of Pilasters, by placing the Master-Story a-top, and that of the Offices and Domesticks underneath; but this last, with simple unadorn'd Windows: and yet the whole be conducted in a noble and graceful Manner.

#### OBSERVATION.

In such kind of Ordonnances, I would never chuse to continue any Mouldings quite to the Pilasters; excepting the Zocle of the whole Building.

The Body of the Building may be of Brick where this is in Use: and the Architecture, or Orders of a beautiful white Stone, which will make the most agreeable Facade of Building imaginable.

*Of the Distribution of ORNAMENTS on the grand PARTS. Fig. 167.*

The Ornaments shou'd be distributed in such manner, as that they may always be sustain'd by simple uniform Parts, to serve as Foils to set 'em off. I mean the Parts that are simple and

plain shou'd always be so disposed as to be a Rest or Repose to the Parts that are adorn'd. For Instance, if the Vault of a Church be full of Ornaments, the principal or projecting Arches shou'd be plain; if the Vault be plain, the Arches must be enrich'd; with this Restriction, that the Composition of the place be such as that Ornaments may be suitable.

If 'tis desir'd to have a great deal of Richness and Ornament; I mean, if the Place happens to require Ornaments both in the projecting Arches, and in the Compartiments inclosed between 'em; 'twill be necessary, however, that the Arches and Compartiments of the Vault be border'd with pretty broad but plain Lists, in order to make a Separation, and to prevent those Parts from being blended and confounded together.

OBSERVATION. *Same Fig.*

When the Projecting Arches of a Vault have no Ornaments, the Columns or Pilasters that support them shou'd have no Flutings: And if the Columns or Pilasters be Fluted, the Arches shou'd be Enrich'd, as also the Frieze of the Entablature: at least this is my Opinion; tho' we find it otherwise practis'd in the *Val de Grace*.

OBSERVATION.

It may be observ'd that the Zocle *AB*, which is here over the Entablature, cannot be seen from

from below, yet is it of some Use, to have the whole Sweep of the Vaulted Roof in Sight; part whereof, without such a Rise, wou'd be hid behind the Projecture of the Corniche, which wou'd be a considerable Defect: the great Beauty of the Vault of a Church, and that whereon its Effect principally depends, consisting in its appearing rais'd, as much as possible, with a full Sweep.

OBSERVATION. *Same Fig.*

Each Pilaster in the Vault of a Church shou'd have a projecting Arch answering to it, which Arch shou'd be of the same Breadth, and the same Projecture or Thickness with the Pilaster that sustains it.

OBSERVATION. *Fig. 168.*

In a Lodgment or piece of Building that receives the Light under a Portico, and whose Windows have a Rest or Support for the Breast; the Columns or Pilasters shou'd have Pedestals of the same height with those Rests, or to speak more properly, those Pedestals should be continued so as to form Rests or Leaning-places for the Windows, as in the Figures *A* and *B*: otherwise the Columns and Pilasters shou'd not have any Connexion with the Pedestals, as is shewn in *Fig. C*.

## OBSERVATION.

If the Windows have no Rests, but reach down to the Pavement; the Columns and Pilasters will do much better without Pedestals than with them. *See Fig. D.* of the same Plate.

It may here be observ'd, that an Order of Columns or Pilasters, which only takes up one Story in height, makes but a mean piece of Architecture, when the Windows are of a bigness suitable to the Apartments.

## OBSERVATION.

An Order of Pilasters used in an Apartment shou'd have a continued Pedestal, equal in height to the Rests of the Windows; the Corniche of which Pedestal shou'd be flat, and without any Larmier.

## OBSERVATION.

In such Places where the Pedestals are required to be higher, as in Churches, large Salons, Halls, &c. they must be at least six or seven Foot high, that their Corniche may not stand directly out against the Eyes of those who may have occasion to come near.

## OBSERVATION.

A Pedestal rais'd above the Eye must never have a flat Corniche; I mean a Corniche that

is to be view'd from below, shou'd always be adorn'd with its Larmier, which on such an Occasion makes its chief Beauty; whereas it only serves to weaken and spoil the Effect of the Corniche, where that Corniche can only be view'd from above.

O B S E R V A T I O N.

Coupled Columns, should, ordinarily, have but one and the same Pedestal, and the principal reason is, that these Columns requiring to be as near one another as possible, it frequently happens they can't be so well distinguish'd from each other, but that their Bases and Corniches will be confounded together, which must needs have a miserable Effect, that by all means ought to be avoided: To which it may likewise be added, that the two Pedestals being brought into one, the Columns will be the more firmly fix'd.

If it shou'd happen, however, that two Coupled Columns be found far enough a-part to prevent any Confusion of the Corniches or Bases of their Pedestals, each Column may have its separate Pedestal; and this, on some occasions, is necessary; as for Instance, when two Columns are rais'd upon two others: for in that Case 'tis Prudence to make the Pedestals as light as possible: and yet they will still compose a kind of continued Pedestal, by means of a Rail or Balustrade which connects them together. See *Fig. 127.*

It may be observ'd, that I here only speak of Pedestals that are compleat; for when two Columns have only a Zocle for a Pedestal, 'twill always be best to have it undivided, as in Figures 128, 129, 131.

R E M A R K. *Fig. 169:*

To conclude the general Rules which we have propos'd for Pedestals, cannot be observ'd on all Occasions; it being frequently necessary to vary their Heights and Breadths, to accommodate them to the Parts that encompass them. For Instance, the Pedestal *A*, shou'd be as broad as both the Bases of the Pilasters it supports; whereas the Die of the Pedestal *B*, shou'd only be the breadth of the Pilasters that support it.

It may also be observ'd, that the width of the hind Pedestal *EF*, is equal to that of the hind Pillar *GU*. That the Balustrade *EI*, does exceed the width of the opening *GK* underneath: so that Massive is found over Massive, and Void under Void; or, at least, nothing very heavy is supported by any thing very weak.

*That the Parts which enter the COMPOSITION of a BUILDING shou'd be made for one another.*

In raising any Edifice, as for Instance, a Church, regard must be had to the Joynery that  
that

that is to be used in it : and care taken, that all the parts of the Architecture, whether they belong to the Joynery or Masonry, may appear as if they were the Work of the same Undertaker. Without this Precaution, a Man will scarce do any thing that is tolerably consistent ; as we find frequently the Case when the Architect, and Joyner follow each their particular Humours and Inclinations. Can any thing, for Instance, be more ridiculous, than to see the Bases of grand Orders of Columns or Pilasters covered with Seats and Confessionals ? or to see the Tops of several large Pilasters appearing over some little Balustrade or Gallery ? 'Tis in vain to urge that these are magnificent Seats and Confessionals, and that the Gallery is a Master-piece of Art. No-body disallows all this ; but the Misfortune lies here, that these Works, beautiful as they are, are ill placed, and are found to hide others more beautiful than themselves.

Seats, and even Chapels or Oratories, may be contrived at the Foot of a large Order, as appears in this Figure, where there is likewise room for a Gallery, and a Choir of Musick to be placed with Advantage.

In the Churches of Religious, the Choir may be separated from the Nave, in such manner as that the Architecture of the one shall have no Dependance on that of the other ; an Instance whereof we have in the Church of the Priests, of the Oratory in the *Rue-Saint-Honore*. And in this Case the Seats

T

of

of the Religious may make the Architecture of the Choir, and the Orders of Columns and Pilasters the Architecture of the Nave.

As to Confessionals, they may be placed between the Chapels, or even in the Chapels themselves.

#### OBSERVATION. *Fig. 172.*

Galleries made entirely open, and placed over one another in the height of some one grand Order of Columns, whereof we have several Instances in *Paladio*, ought not to be imitated. *See Fig. A* in this Plate.

#### OBSERVATION.

Care must be taken to avoid the making a Balustrade between Columns or Pilasters, without Pedestals; in regard the Apparatus and Disposition necessary for a Balustrade is there wanting. *See Fig. B* of the same Plate.

#### OBSERVATION.

Two Ordonnances of Architecture shou'd never be placed within one another, a little one within a great one, with design only to compose a single one; as we see done in many Places: *See Fig. C.*

OBSERVATION.

Columns of different Bignesses and different Orders, shou'd never be placed by the side of one another, for they can't chuse but make a very unpleasing Discord. *See Fig. D.*

OBSERVATION. *Fig. 156.*

When one wou'd add any piece of Architecture, as a Pavillion or Turret for Instance, to a Building already made; it must be remember'd, that it be made of some other Order. Care must likewise be taken that the Additional Piece may appear to have been directed by the same Architect who had the Management of the rest of the Building. In a word, all Endeavours must be used to make the part conformable to the whole.

OBSERVATION.

I wou'd never have any Order of Columns painted on a flat Ceiling, much less on a Vaulted Roof; in regard, for one little Spot or Point of View, whence such a piece of Architecture wou'd have its Effect; there are a thousand others whence it wou'd appear deform'd, and monstrously out of the perpendicular, unless the Vault be very high, and very narrow too, as the CALOTTE or Top of a Dôme.

## OBSERVATION.

An Intelligent Architect will never allow such elevated Places to be painted with pieces of History, or other Matters relating to our Earth; where such Subjects must be extremely unsuitable. If it be the Dôme of a Church, he may paint the Heavens open, a Glory, an Ascension, some Saint carried up by Angels: In a word, some Subject that relates to Heaven. He may, indeed, introduce People at the Bottom, leaning over a Balustrade, and viewing attentively what passes above.

When an Architect is not provided of an able Painter fit to manage a Work of this kind, he had better content himself with fine Compartiments, which may be made extremely rich, and will be infinitely more ornamental than a History Piece ill conducted.

---

*A New* COMPOSITION of a FRENCH ORDER. *Plg.* 173.

**I** Give this Order as great a Share of Delicacy, Richness and Elegancy, as I cou'd conceive practicable, without running into Excess.

The height of the Column is 20 Modules 5 Minutes, that of the Pedestal 6 Modules 22 Minutes, and that of the Entablature 4 Modules and 15 Minutes: So that the Pedestal is about one third of the height of the Column, and the Entablature 16 Minutes less than a fourth;

fourth; the entire Order making 31 Modules  
12 Minutes.

The Ornaments of the Capital are three *Flower-de-Luces* on each side, with *Palms*, and the Badge of *France*, viz. a *Cock*; Arms underneath, and a *Lyre* in the Shade of the *Palms* under each Horn of the *Abacus*, which are so many Symbolical Ornaments, that Persons of understanding will conceive without any Difficulty.

*Crowns* make the Ornament of its *Frieze* with a *Sun* shining in the middle; whence it will be easily apprehended that this Order is consecrated to the *Glory* of the *Grand Monarch*.

This Order, in the Execution, will have the noblest, the most beautiful and agreeable Effect imaginable: I have made a little Model of it in *Relievo*, which I never see without Pleasure.

*For what remains; it was my Design to have closed this Work with the Plans, Elevations and Sections of several Buildings; but a Weakness of Sight having seized suddenly on me, prevents my proceeding any further.*

F I N I S.

A CATALOGUE of BOOKS Printed for and Sold by R. Ware, at the Bible and Sun in Amen-Corner, near Pater-Noster-Row.

1. **T**HE Crucify'd Jesus: or a full Account of the Nature, End, Design, and benefit of the Sacrament of the Lord's Supper; By *Anthony Horneck, D. D.* pr. 5 s.
2. The happy Ascetick; or the best Exercise, together with Prayers suitable to each Exercise. By *Anth. Horneck, D. D.* pr. 4 s. 6.
3. The great Law of Consideration; By *Anth. Horneck, D. D.* pr. 4 s. 6 d.
4. The Fire of the Altar; or certain Directions how to raise the Soul into holy Flames, before, at, and after receiving the Sacrament of the Lord's Supper. By *A. Horneck, D. D.* pr. 1 s. 6 d.
5. Delight and Judgment. By *Anth. Horneck, D. D.* pr. 1 s. 6 d.
6. The whole Duty of a Christian; By the Author of the Devout Communicant. pr. 1 s. 6 d.
7. A Guide to the English Tongue, in two Parts; The first proper for Beginners, shewing a natural and easy Method to pronounce and express both common Words and proper Names; in which particular Care is taken to shew the Accent for preventing vicious Pronunciation: The second for such as are advanced to some ripeness of Judgment, containing Observations on the Sounds of Letters and Diphthongs: Rules for the true Division of Syllables, and the use of Capitals, Stops, and Marks, with large Tables of Abbreviations, and Distinctions of Words, and several Alphabets of Copies for young Writers. By *Tho. Dyebe.* pr. 1 s.
8. *Vocabularium Latiale*; or, a Latin Vocabulary, in two parts: The first being a Collection of the most useful and easy Latin Words, whether primitive or derivative, with their Signification in English, after the Order of the eight Parts of Speech. By *Tho. Dyebe, the 5th Edition.* pr. 1 s.
9. *Supplication of Saints*; a Book of Prayers and Praises, in 4 parts. 1st, *Daniel's Devotion.* 2d, *Paul's Assembly,* 3d, *David's Suit:* 4th, *Moses's Song;* wherein are three most excellent Prayers made by the late famous Queen Elizabeth, the 42d Edition, corrected and enlarged, by *Tho. Shorocold.* pr. 1 s.
10. The compleat Constable; directing Constables, Headboroughs, Tything-Men, Church-wardens, Overseers of the Poor, Surveyors of the Highway, and Scavengers, in the Duty of their Offices allowed them by Law. pr. 1 s.
11. The Art of Gardening, with the Gardener's Almanack; containing the Art of Gardening in all its particulars; 1st, The Site of a proper Plat of Ground for planting Fruit-Trees, &c. the Art of making Cyder, Perry, and Wines of several sorts of Fruits.

BOOKS printed for R. Ware.

Fruits. 2d, Of the Kitchen Garden, &c. 3d, Of the Flower Garden, &c. 4th, Of Greens, how to order and preserve them? By Leonard Meager. *pr.* 1 s.

12. A curious Set of Bible Cuts, containing near 300 Histories, adapted to Folio and Quarto Bibles. Engrav'd by Mr. John Sturt, from the Designs of the greatest Masters.

13. The Common Prayer; curiously engraven on Copper Plates, and illustrated with Cuts; By Mr. John Sturt. *pr.* 1 l. 5 s.

14. Curiously engraven by Mr. John Sturt, The Orthodox Communicant, by way of Meditation on the Order for the Administration of the Lord's Supper or Holy Communion, according to the Liturgy of the Church of England. *pr.* 7 s. 6 d.

15. Sacred Geography, in six Maps, shewing the Situation of Paradise. 2. The Peopling of the World by the Sons of Noah. 3. The Plan of the City of Jerusalem, with a View of Solomon's Temple. 4. The Holy Land divided into the 12 Tribes of Israel, in which are exactly traced our Saviour's Travels, of St. Paul, and the rest of the Apostles. *Price* 3 s. 6 d.

16. The Fables of Ædrus; under the following Heads, *viz.*: The weakest goes to the Wall; chuse the least of Evils; be content in your Stations; all covet all lose; keep not too great Company; like Father like Son, &c. render'd into familiar English, by Thomas Dyce. *price* 1 s.

17. A Companion to the Lord's Table; declaring plainly the Nature of the Holy Sacrament, &c. *pr.* 6 d.

18. Just published in Folio, 4to, and all other Sizes fitted to bind up with the Bible, a brief Concordance, for the more easy finding out of the usual Places therein contain'd; by J. Dove-name, B. D.

19. IV. The Tradesman's Guide. Containing a List of all the Stage-Coaches, and Carriers; with an Account of all the Market-Towns and Fairs in England. *pr.* 1 s.

20. The Gentleman's Compleat Jockey, with the perfect Horseman, and Experienc'd Farrier; Containing, first, The Nature of Horses; their Breeding, Feeding, and Management in all Places, *pr.* 1 s.

21. Dr. Lowther's Receipts; Containing the best and safest Method for curing most Diseases in human Bodies, &c. *pr.* 1 s.

22. Emblems for the Entertainment and Improvement of Youth, containing Hierophycal and Enigmatical Devices, relating to all Parts and Stations of Life: Engrav'd on 62 Copper Plates. *pr.* 2 s. 6 d.

23. The History and Antiquities of the Cathedral Church of Canterbury; by J. Dart. *pr.* 1 l. 1 s.

24. The Doctrine of the most Holy and Ever Blessed Trinity briefly stated and proved, with the Objections against it answer'd To which are added, Discourses upon the Parable of Dives and Lazarus; setting forth the deplorable Corruption, Immorality, and Infidelity of the present Age, &c. By Joseph Trapp, D. D. *pr.* 4 s. 6 d.

BOOKS printed for R. Ware.

25 The Impartial Churchman; or a fair and candid Representation of the Excellency and Beauty of the Church of England, Together with an earnest and affectionate Address to Protestant Dissenters. By Robert Warren, D. D. Rector of Stratford-Bow in Middlesex. *pr.* 3 s. 6 d.

26 Dupin's Evangelical History: Or, the Records of the Son of God, and their Veracity demonstrated, in the Life and Acts of our Blessed Lord and Saviour Jesus Christ, and the Holy Apostle. Wherein, 1. The Life of the blessed Jesus is related in all its Circumstances, *pr.* 8 s.

27. A Description of Three Hundred Animals, *viz.* Beasts, Birds, Fishes, Serpents, and Insects. With a particular Account of the Whale-Fishery. Extracted out of the best Authors, and adapted to the Use of all Capacities; especially to allure Children to Read. Illustrated with Copper-Plates, whereon is curiously engraven, every Beast, Bird, Fish, Serpent and Insect, describ'd in the whole Book. 2 s. 6 d.

28. *The Spelling Dictionary*; or, a Collection of all common Words made use of in the *English* Tongue, carefully compar'd with the original Languages from whence they are deriv'd, and mark'd as they are to be pronounc'd. By Thomas Dyche, Master of the Free-School at Stratford-le-Bow, in Middlesex. The second Edition revised by the Author. 1 s. 6 d.

29. An Historical Narration of the whole Bible. In Two Parts. The first, treating of the Old Testament, with the various Histories of the Lives and Travels of our Blessed Saviour and his Apostles; With a Summary of the Matter, Doctrine, Scope and Divine Authority of all the Canonical Epistles; and an Explanation of several Heads in that mysterious Book of St. John's Revelation. By J. Hammond, D. D. and curiously adorn'd with Cuts, engrav'd by J. Sturt, *pr.* 4 s. 6 d.

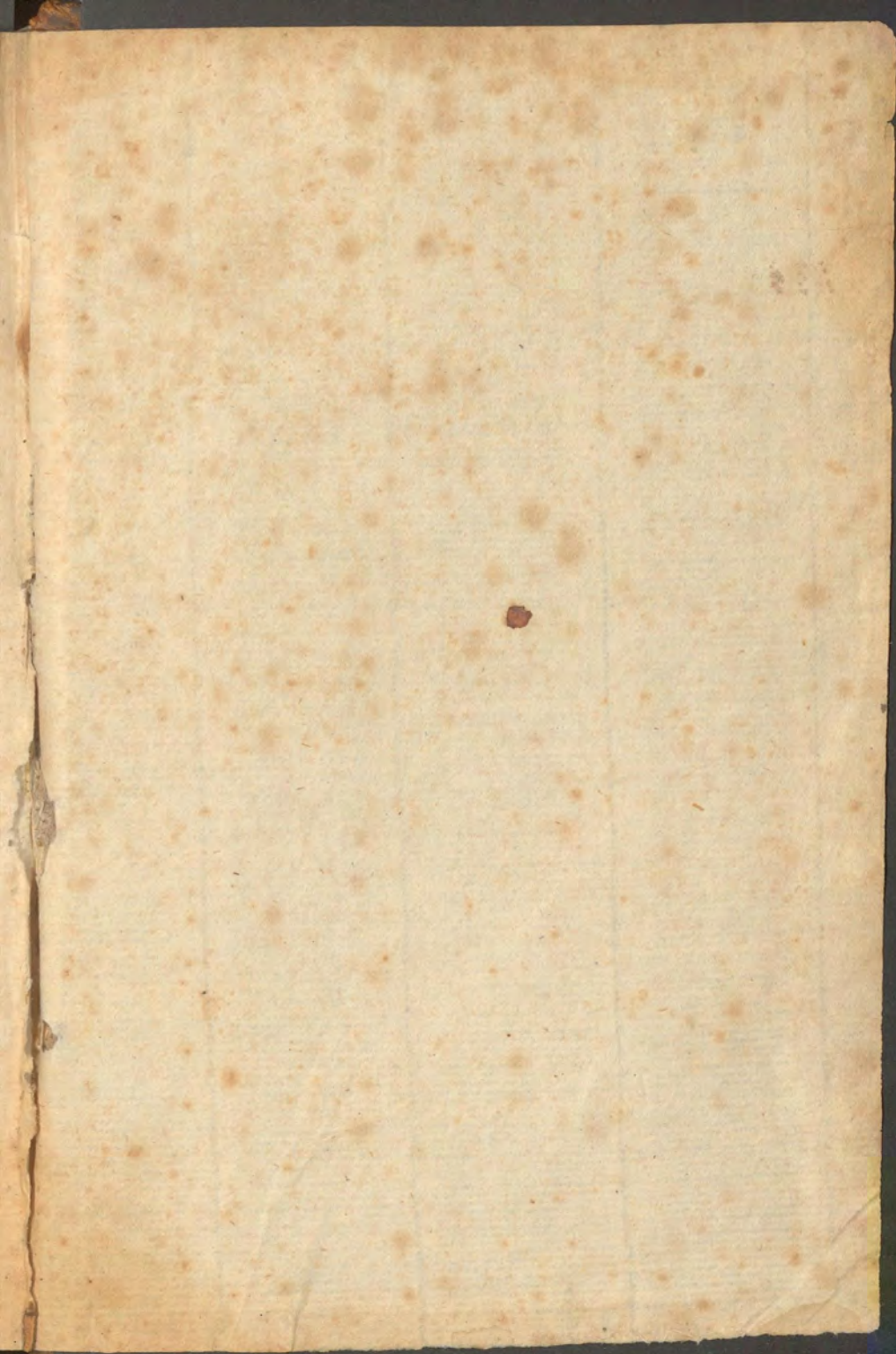
30. The whole Duty of Man. Part. II. Teaching a Christian, 1. How to grow in Grace, 2. How to prepare himself for an happy Death. Together with Advice, how *Visitants* and *Attendants* should carry it towards the sick Person; and some general Considerations, that may induce Relations and Friends to take his Death patiently. By the Reverend and Learned Dr. John Williams, late Lord Bp. of *Chichester*. *pr.* 3 s. 6 d.

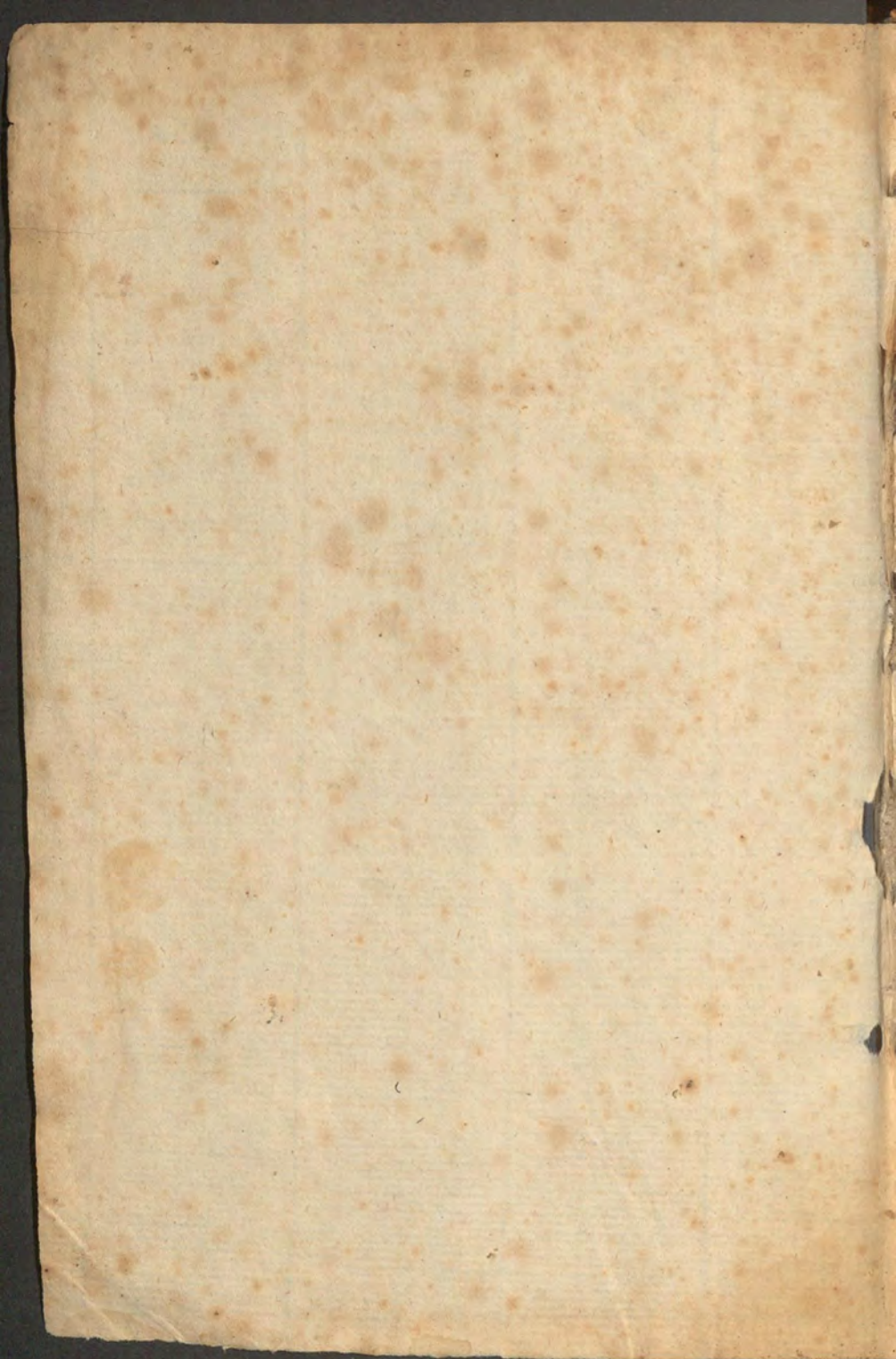
31. English and Latin Exercises, for School-Boys. Comprising all the Rules of Syntaxis, with Explanations, and other necessary Observations, on each Rule, and shewing the Genetive Case, and Gender of Nouns and Pronouns; as also the Preterperfect Tense, supine, and Conjugation of Verbs. By N. Bailly School-Master, the 8th Edition corrected. *pr.* 1 s.

*Note.* Any Chapman or Charity-School may be furnished with all sorts of Bibles, Common Prayers, Testaments, Psalters, Grammars, The whole Duty of Man, or Books of Devotion, by Wholesale or Retail. Also may be had all sorts of *Field's Bibles*.

Faint, illegible handwriting at the top of the page, possibly bleed-through from the reverse side.

Ce livre appartient à son  
Maître qui n'est ni Cappuccin  
Ni prêtre & baro le 8. mai  
1845







**BIBLIOTECA**

