THE
ORDERS
FOR
PLANES
IN
Perspective.

Of Planes viewed directly or in front.

ONE may have seen at the third and fourth Advice, and the Elevations following will cause to know, that it is not my purpose that one should use Planes Geometrical, for to make Perspectives : for this would be to double the labour ; and no Painter would take this pains, seeing that I teach him to make the same thing by means of the base. But as there is no Rule so general, which hath not its exception; so there are certain Figures, which one cannot set into Perspective, but by the help of these Planes : further also one should be troubled, if one should give one of these Planes to be set into Perspective, and that one had not learned how he ought to proceed. These Reasons have obliged me to set these which follow, the which will suffice to learn to set into Perspective all those, which may be presented and also be imagined.

1. To contract or abridge a square A B C D. One must draw A B at the point of sight E, and from the same Angles A B, two Diagonals, F B, A G, and where they shall divide the Rays A E and B E, at the points H and I. This shall be the square A B C D, abridged into A H I B; for to make it without the Geometrical Plane, we must draw from B to F, or from A to G, or else transport A B upon the base, as B K, and from the point K to draw to the point F, it will give the same section I upon the Ray B F.

2. To abridge a square viewed by the Angle D, having made the Plane A B C D, We must draw a line which toucheth the Angle B, and it must be in right Angle upon the line B D. This base being produced, we must set the Rule upon the sides of the square, as A D, and D C, and where this Rule shall divide the base, there to make the points H I, then to draw H and B, to the points of distances P and B I, to the other point of distance G. And at the section of these lines to make the points which shall give you the square K L M B ; for to make it without the Plane, you must set the Diameter on the one part, and the other of the middle B, as H and I. But as well in the one manner as the other, you must not draw at the point of sight O.

3. To abridge a Circle. It must be enclosed in a square A B C D : And from the Angles A D and G B, to draw Diagonals, which shall divide the Circle into eight parts ; and where they shall divide it at the point O, to draw upon the base the Perpendiculars E F, then to draw two lines Diametral Q R S P, which divide themselves in right Angles at the Center G. The Plane being ordered in this manner, you must draw all the Perpendiculars at the point of sight H, and where they are divided, the Diagonals A K, and B I, to make points; of the which the two latter M N, are the draughts of the square, which are to be divided into four by the section of the Diagonals, at the point P. Then from the ends of this Cross they draw bended lines by these points, which give the shape of a Circle in Perspective. This manner may pass for little ones : but we shall give one more exact for the greater.

4. This Figure is composed of the two first, wherefore I will say nothing of it; for he that shall have made one or two of them, shall be able to make it easily.

5. The fifth depends also upon the two first : but there is also more a Border round about, which they have not ; for to set this Border into Perspective, we must draw these four Rays A B C D, at the point of sight G, and where the inward Rays B and C are divided by the Diagonals A F and D E, we must draw Parallels to the base, and you shall have that which you demand.

6. It is the same with the second, except that it is compassed about with two Borders: wherefore I will speak no more of it.
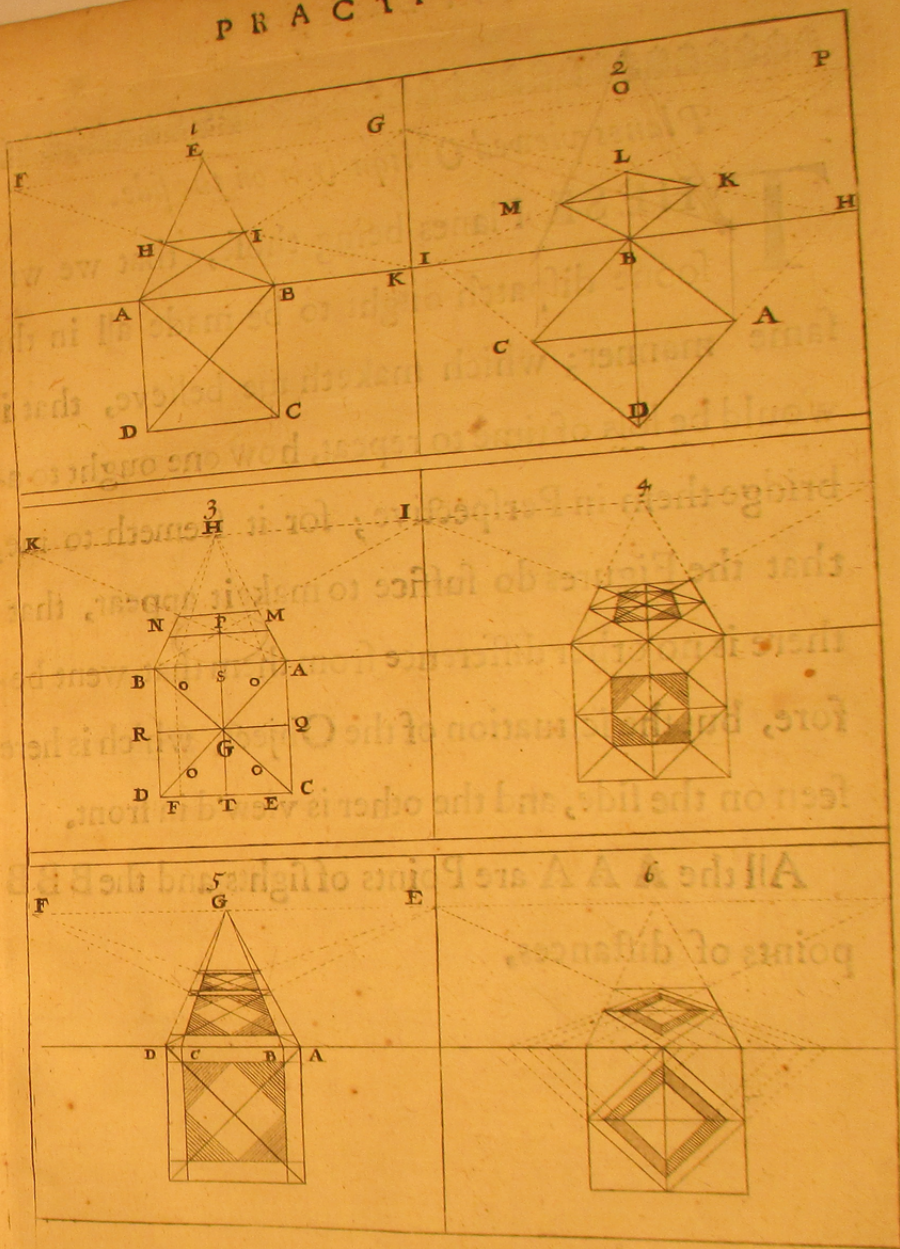
Planes viewed O*bliquely or on the ſide.*

THESE Planes being thoſe, that we will
ſoone diſpatch ought to be made all in the
ſame manner; which maketh me belieᵛe, that it
would be loſs of time to repeat, how one ought to a-
bridge them in Perſpective; for it ſeemeth to me,
that the Figures do ſuffice to make it appear, that
there is no other difference from them that went be-
fore, but the ſcituation of the Object, which is here
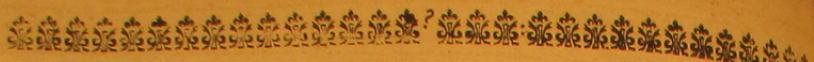ſeen on the ſide, and the other is view'd in front.

All the **A A A** are Points of ſights, and the B B B
points of diſtances.
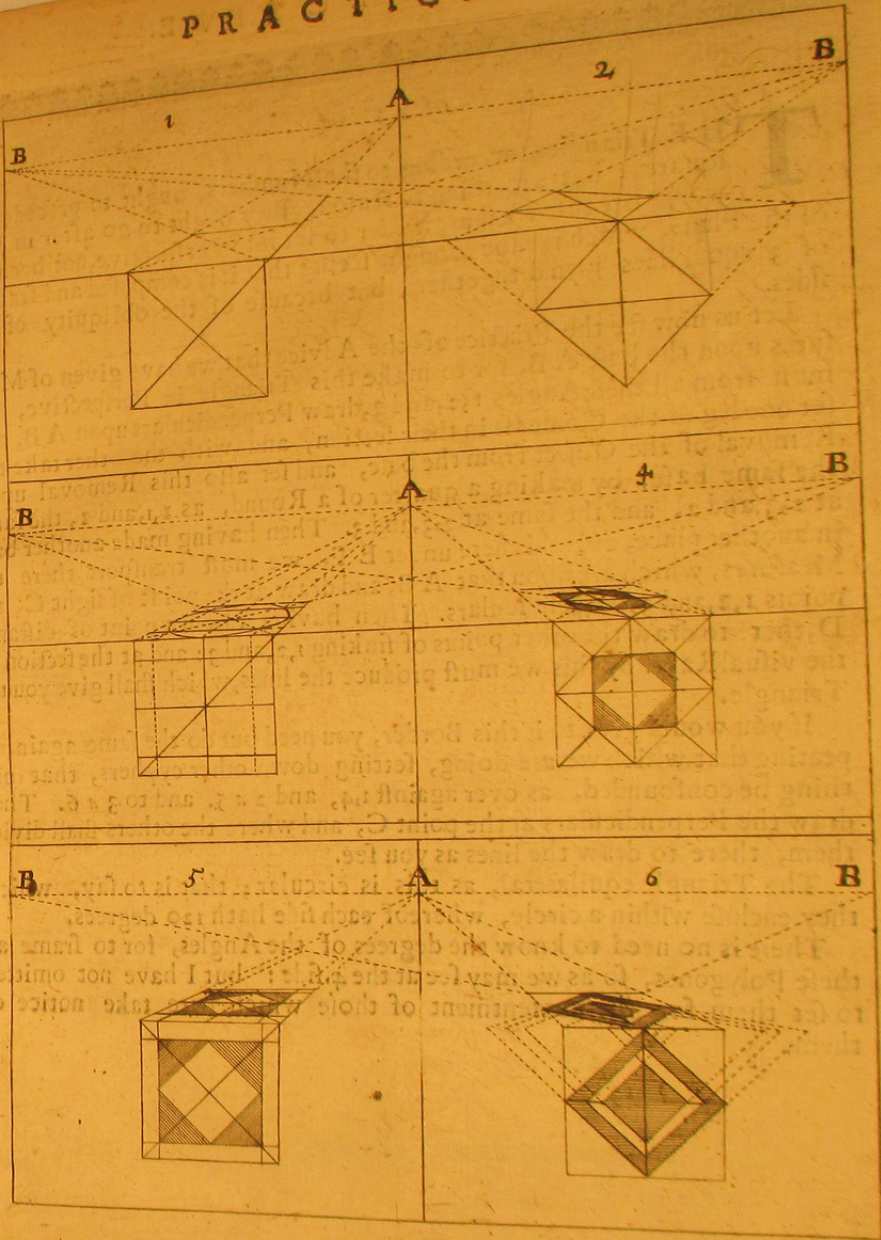
Of a Triangle.

THE Triangles, according to the Numbers, ought to precede the squares: but according to reason, they ought to go after in this work, because they are harder to set into Perspective, not because of the Plane, which is easie enough, seeing that it is composed and framed of 3 equal lines joyn'd together; but because of the obliquity of its sides.

Let us now see the Practice of the Advice that we have given of Measures upon the base A B, for to make this Triangle in Perspective, we must from all these Angles 1,2, and 3, draw Perpendiculars upon A B, and set one leg of the Compass in their section, and with the other take the Removal of the Object from the base, and set also this Removal upon the same base, by making a quarter of a Round, as 1,1, and 1, the same at 2,2, and 2, and the same at 3,3, and 3. Then having made another base in another place, as is this here under E F, we must transport there the Measures, which are upon that A B, and draw at the point of sight C, the points 1,2, and 3, Perpendiculars. Then having taken a point of distance D, there to draw the other points of sinking 1,2, and 3: and at the section of the visual Rays: by this we must produce the lines, which shall give you the Triangle.

If you would give to it this Border, you need but do the same again, repeating that which we are doing, setting down other cyphers, that nothing be confounded, as over against 1,4, and 2 a 5. and to 3 a 6. Then draw the Perpendiculars at the point C, and where the others shall divide them, there to draw the lines as you see.
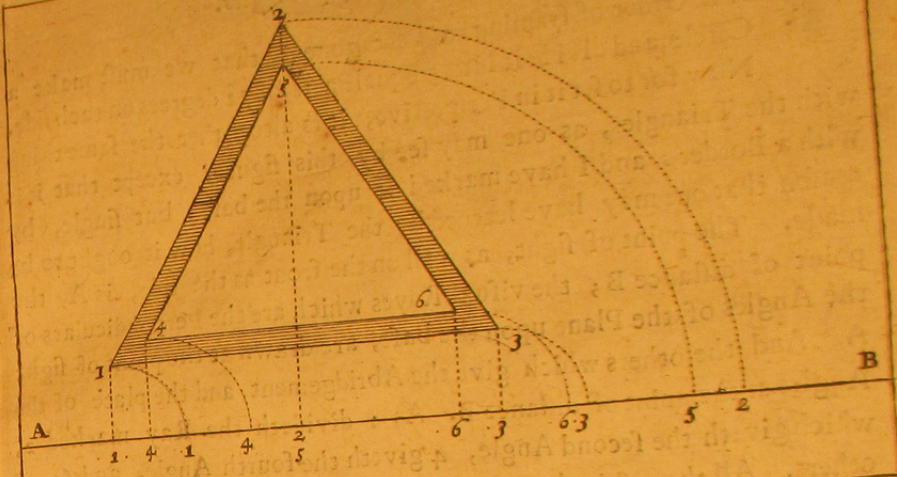
The Triangle equilateral, as this is circular; that is to say, which they enclose within a circle, whereof each side hath 120 degrees.

There is no need to know the degrees of the Angles, for to frame all these Polygones, so as we may see at the 4. side: but I have not omitted to set them for the contentment of those which here take notice of them.

1. **Fig**.

A   B

2. **Fig**.

D   C

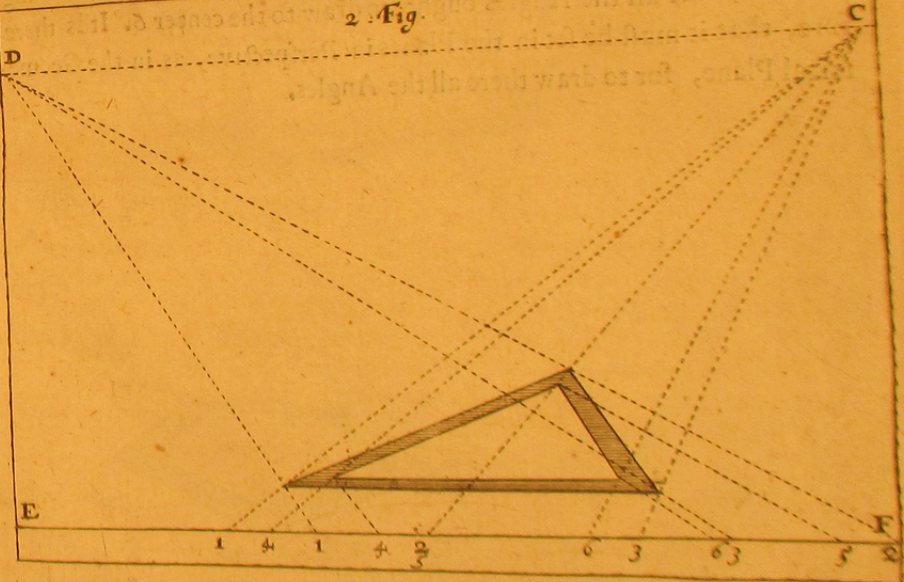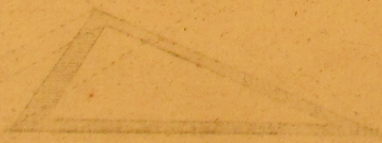E   F

Of the Pentagone or five-Angles.

THE Order of framing a Pentagone is, that we muſt make a Circle, and divide it into 5 equal Parts, of 72 degrees on each ſide. Now for to ſet it in Perſpective, it is altogether the ſame thing with the Triangles, as one may ſee by this figure, except that it is with a Border ; and I have marked it upon the baſe : but ſingle, by reaſon that one may have learned by the Triangle, how it ought to be made. The point of ſight, as well on the front as the ſide, is A, the point of diſtance B ; the viſual Rayes which are the Perpendiculars of the Angles of the Plane upon the baſe, are drawn at the point of ſight A. And the others which give the Abridgement, and the place of the Angles at the point of diſtance B. As 2 divideth the Ray marked 2, which giveth the ſecond Angle, 4 giveth the fourth Angle, and ſo of others. All the reſt is clear enough, we muſt take heed of one thing, which is, that all the Angles ought to draw to the center 6. It is therefore, that it muſt be ſet in the Planes in Perſpective, as in the Geometrical Plane, for to draw there all the Angles.

1. Fig.

2. Fig.

3. Fig.