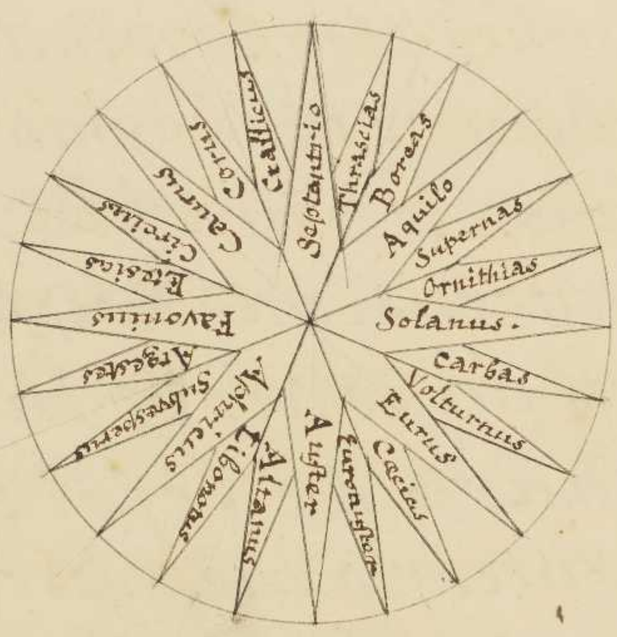
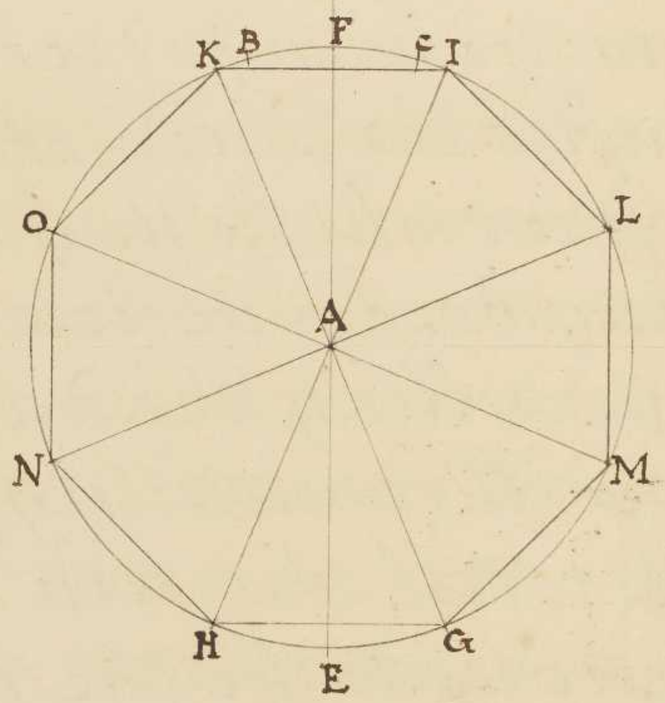
39.

the other, how to lay out the streets, so that none of these winds shall blow directly down any. (f.)





Prepare a true horizontal plane with a very even surface: in the middle of which, as at (A) fix a stile, or pin, exactly perpendicular. And, any time in the morning (suppose about eleven) observe where the shadow terminates, marking it, at (B) Then, from the center (A) make a circle passing through the point (B). And in the afternoon observe again when the shadow comes to touch it, marking it at (C) Then intersect the points (B) and (C) at (D), and draw a line through this intersection at (D), and the center (A), to touch the circle at (E), which shall be a meridian line. Then, take in the compasses, the sixteenth part of the circumference, and set it off from (F), towards (I) and (K), likewise the same from (E), towards (G) and (H), and draw

(f.) This is only a caution to guard against the stormy points; a thing very material in laying out a city: especially in stormy climates. For though, by thus laying out the streets, none of these twenty four winds will blow directly down any: yet the wind, in veering about, will necessarily blow directly down them all. We, dividing the compass into thirty two points, have names for these 32 winds. Namely: NNE. ENE. ESE. SSE. SSW. WSW. WNW. and NNW. All these winds will blow directly down every one of his streets. As appears by the following scheme of the mariners compass. In the middle is the Latin compass. Next the Greek compass. And on the outside, our mariners compass.

In this chapter, may be observed, the ancient account of the measure of the earth: and how careful the antients were in laying out their cities. It likewise teaches the method how to find out a true meridian, from whence all the other points are consequentials.