

solstice] and then turns to Virgo, and after he has past through the sign of Virgo he then casts his shadows towards the north. And thus there is never so great an elongation¹ of the sun as to admit of cold, and there are not two seasons. Or as I have said before there is no winter or cold season.

“As regards the length of the day and the night I have tried to determine them by such measures and indications as I could. I have observed that at the two epochs before mentioned, when the sun’s rays strike perpendicularly without casting any shadow, the day is fifteen hours long, and the night nine. And when the sun is at the solstice of Cancer, the day is a little less than fourteen hours long, and the night is a little more than ten, perhaps by a quarter of an hour. But when the sun is in the solstice of Capricorn, that is to say in the month of December, the day has a length of eleven hours and the night of thirteen. For the sun’s elongation is somewhat greater when it is in Capricorn than when it is in Cancer.

“Moreover, the star which we call the Pole-star is there so depressed, i.e. so low, that it can scarcely be seen. And methought that if I had been on a lofty point I could have seen the other Pole-star which is in the opposite quarter.³ I looked many a time for a sight of it, and I saw several constellations which moved round about it, from observing which I gathered that they were exceedingly near to it.⁴

¹ The transcript made for me gives *congiungimento*, but Professor Kunstmann’s has *elongamento*.

² I am afraid we cannot throw the blame of these extraordinary statements on anybody but Friar John himself. He considers that at a given north latitude within the tropic the day is at its longest when the sun passes towards the north, and *diminishes* up to midsummer day, increases again till it repasses the given latitude, and then diminishes till midwinter.

³ “*L'altra tramontana la quale è posta in contrario.*”

⁴ This runs “*Molto guardai di vederla e vidi più segni che gl' andavano intorno per li quai li conovi et parvemi ch' elli fusseno vicini veramente perchè le fumosità vi sono continue chontra quella parte si tene per li calori e per li venti ella è molto al disotto non me ne potei certificare.*”