LIGHT.

It has been shown in the earlier part of this work that the angular velocity of a planet is in simple inverse proportion to the distance of that planet from the sun; and it, therefore, follows that the distance is inversely proportional to the angular velocity. Herein, assuming that the correct distance of the earth from the sun has been obtained and that the synodic periods of the planets have been correctly observed, we have a simple and reliable means whereby to compute the distance of any given planet from the sun.

To apply this method to the case of the planet Venus we have

1. The distance of the earth from the sun.....	=	95 million miles.
2. The synodic period, namely, the time ascertained by observation to elapse from one conjunction to the next *similar* conjunction.....	=	584 days.

Since the earth requires 365 days to complete one revolution, or, in other words, to revolve through 360° of orbit; 584 days will represent a revolution through 576° of orbit. The question, in the first place, is, therefore, how many degrees of orbital revolution of Venus are represented by the same period of time. Since the orbit of Venus is within that of the earth, its angular velocity must be greater, and, therefore, in the time required by the earth to complete a revolution, more than a complete revolution will have been made by Venus. But, as the distance of Venus from the sun is known to be certainly greater than half that of the earth, the planet's angular velocity will be less than two revolutions