

the only difference is, that the dark part of the moon is usually not visible at all.

This doctrine is ascribed to Anaximander. 'Aristotle was fully aware of it.'⁵² It could not well escape the Chaldeans and Egyptians, if they speculated at all about the causes of the appearances in the heavens.

Sect. 11.—Eclipses.

ECLIPSES of the sun and moon were from the earliest times regarded with a peculiar interest. The notions of superhuman influences and relations, which, as we have seen, were associated with the luminaries of the sky, made men look with alarm at any sudden and striking change in those objects; and as the constant and steady course of the celestial revolutions was contemplated with a feeling of admiration and awe, any marked interruption and deviation in this course, was regarded with surprise and terror. This appears to be the case with all nations at an early stage of their civilization.

This impression would cause Eclipses to be noted and remembered; and accordingly we find that the records of Eclipses are the earliest astronomical information which we possess. When men had discovered some of the laws of succession of other astronomical phenomena, for instance, of the usual appearances of the moon and sun, it might then occur to them that these unusual appearances also might probably be governed by some rule.

The search after this rule was successful at an early period. The Chaldeans were able to predict Eclipses of the Moon. This they did, probably, by means of their Cycle of 223 months, or about 18 years; for at the end of this time, the eclipses of the moon begin to return, at the same intervals and in the same order as at the beginning.⁵³ Probably this was the first instance of the prediction of peculiar astronomical phenomena. The Chinese have, indeed, a legend, in which it is related that a solar eclipse happened in the reign of Tchongkang, above 2000 years before Christ, and that the emperor was so much irritated against two great officers of state, who had neglected to predict this eclipse, that he put them to death. But this cannot be accepted as a real event: for, during the next ten centuries, we find no single observation or fact connected with astronomy in the Chinese

⁵² Probl. Cap. xv. Art. 7.

⁵³ The eclipses of the sun are more difficult to calculate; since they depend upon the place of the spectator on the earth.