

OXFORD UNIVERSITY EXTENSION DELEGACY

SUMMER MEETING, 1901

THE SUN

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LECTURE I.

OF THE SUN IN GENERAL.

THE Importance of the Sun to us cannot be overstated, for we owe all motion and life to its heat. We are indebted to our own atmosphere, however, for the geniality of our climate. The distance of the Sun is about $92\frac{3}{4}$ million of miles, and its size one million times that of the Earth, a fact that has important bearing on the condition of affairs on its surface.

The Temperature prevailing on its surface transcends all earthly furnaces, and thus we can only guess at the state of the matter existing there. The Heat given out by each square foot of the surface has been estimated as sufficient to propel an Atlantic Liner.

The Construction of the Sun is broadly in five parts, two of which form the visible body of the Sun, and the remaining three form its invisible atmosphere. The parts are—

- (1) The central globe, which is certainly the hottest portion; about it our information is indirect.
- (2) The Photosphere or dazzling surface, on which occur Spots and Faculae.
- (3) The Chromosphere, only visible at total eclipse to the unaided eye. To it belong the Prominences.
- (4) The Corona, an ethereal atmosphere of varying dimensions.
- (5) The Zodiacal Light, extending millions of miles from the surface of the Sun.