

25° or 30° of north, and not quite so far, or in such abundance in south latitude; with a *comparatively* spotless intermediate belt, of five or six degrees broad between them, answering to our region of equatorial calms. The resemblance is so striking as most strongly to suggest some analogy in the causes of the two phænomena—and it has been suggested that as our trade winds originate in a *greater influx* of heat from without, on and near the equator, than at the poles, combined with the earth's rotation on its axis: so the maculiferous belts of the sun may owe their origin to a *less** equatorial *efflux* of heat, combined with the axial rotation of that luminary.† There is another extremely remarkable feature in the appearance and disappearance of these spots. I have said that they are not *permanent*. Sometimes, indeed, but rarely, one and the same spot lasts long enough, after disappearing at the western edge of the sun, to come round again and reappear at the eastern; and it has happened that a spot has lasted long enough to reappear four or five times; but for the most part this is not the case. But as regards the number of spots which appear on the sun at different times, there is the greatest possible difference. Sometimes it is quite spotless; at others the spots swarm upon it: and as many as fifty or sixty spots or groups, large and small, have been seen at once, arranged in two belts.

(36.) Now, it has lately been ascertained by a careful

* Misprinted *greater* in the original lecture as it appeared in *Good Words*.

† “Results of Astronomical Observations at the Cape of Good Hope,” by the author, p. 434.