

(34.) But here comes the strange part of their history. These spots are not permanent marks on the sun's surface. They come and go. They begin as small dim specks; grow to be great blotches; and then dwindle away. Sometimes they are large enough to be seen without a telescope, when the sun is near setting or just risen, so as to have its dazzling splendour mitigated by the vapours of the horizon, and admit of being looked at steadily. Many instances of such appearances are recorded, some very remarkable ones, long before the invention of the telescope. Two were so seen by my son, Mr A. Herschel, in London, in November, 1861, who sent me a drawing of them, which I found verified on comparison with a drawing taken from the telescope on the same day, by a very assiduous observer in my immediate neighbourhood.

(35.) Ever since the first discovery of the solar spots, they have been watched with great interest, and it has been ascertained that they do not make their appearance indiscriminately upon every part of the globe of the sun. At or near either of its poles they never appear; and very rarely indeed on its equator, or on any part of its body beyond the 40th degree of latitude—understanding that term on the sun in the same acceptation which geographers attach to it on our own globe. They mainly frequent two zones or belts parallel to its equator; bearing very nearly the same relation to that great circle of its sphere which the regions on our own globe in which the trade winds prevail, bear to the equatorial region of the earth—extending, that is to say, to some