observed by Scheiner in 1630, which, although it has been quoted by Dr. David Brewster and other writers on optics, it will be necessary to transcribe.

"The diameter of the circle M Q N, next to the sun, was about  $45^{\circ}$ , and that of the circle O R P, was about  $95^{\circ}$ 20'; they were coloured like the primary rainbow, but the red was next the sun, and the other colours in the usual order. The breadths of all the arches were equal to one another, and about a third part less than the diameter of the sun, though I cannot but say that the whitish circle O G P, parallel to the horizon, was rather broader than the rest. The two parhelia, M N, were lively enough, but the other two at O and P were not so brisk. M and N had a purple redness next the sun, and were white in the opposite parts; O and P were all over white. They all differed in their du-



fations, for P, which shone but seldom and faintly, vanished first of all, being covered by a collection of pretty thick clouds. The parhelion O continued constant for a great