

VI. *An Extract of a Letter from James Logan, Esq; to Sir Hans Sloane, Bart. R. S. Pr. concerning the crooked and angular Appearance of the Streaks, or Darts of Light'ning in Thunder-Storms.*

*Philadelphia, Sept. 20, 1735.*

I shall crave thy Indulgence further to add, that looking into the Second Volume of that ingenious Gentleman *Stephen Hales's* Staticks, of which I have lately happened to have a cursory View, I observed him to mention that Phenomenon of the Streaks or Darts of Light'ning in Thunder-Storms appearing crooked and angular (I do not remember his Words) as a thing not yet accounted for; and therefore he guessed at a Solution of it\*.

The Clouds are generally distinct Collections of Vapours like Fleeces, and therefore the Rays of Light thro' them must pass thro' very different Densities, and accordingly suffer very great Refractions: From thence therefore, undoubtedly, that Appearance must arise. For it is most highly absurd to imagine, that Fire darted with such a Rapidity, can from any assignable Cause deviate in Fact from a Right Line, in the Manner it appears to us. And this, if duely considered, may probably be found a plenary Solution.

\* See *Steph. Hales's Statical Essays* Vol. 2d. p. 291:

*Obser.*