

is greater in mountainous districts than in plains. Yet, even under these circumstances, they are much subdued, as compared with what takes place between the Tropics; while in the Polar regions electrical phenomena are still less striking.

Notwithstanding, however, that the general distribution of electricity in the atmosphere, evidently follows the general distribution of sensible heat, it is a remarkable fact, that whenever electrical phenomena are more than ordinarily vehement, they are accompanied by some unusual appearance of *cold*. Thus the alarming descents of hail formerly noticed, which occur most generally in temperate climates, have, in nearly every instance, been attendants of violent thunder storms. Snow also is almost always highly electric. These, and many other circumstances connected with the great and sudden production of cold in the higher regions of the atmosphere, during the display of electrical agency, cannot, in the present state of our knowledge, be explained. For example, whence, in the middle of summer, arises that instantaneous development of extreme cold, which occasionally produces the terrific hailstorms above alluded to? At present the answer does not appear. Whether the principles advanced in the present volume be capable of solving the difficulty, time must determine.