

nating from the sun, only 378 on a medium; can penetrate to the surface of the earth at the equator; 228 at the latitude of 45° ; and 110 at the poles; while in cloudy weather, these several proportions are a great deal less.*

At present, our attention is solely directed to the portions of heat and light, which thus make their way to the earth's surface. On those portions retained in the atmosphere, we shall offer a few remarks hereafter.

2. *Of the Distribution of Heat and Light over the Earth's Surface in the latent Form.*—The distribution of heat and light in the *latent* state over the surface of the globe, probably follows laws, nearly similar to those of the distribution of sensible heat and light formerly mentioned; that is to say, the quantity latent, like the quantity sensible, diminishes from the equator toward the poles. On this subject, however, we want the necessary data, even for forming an opinion, much less for determining the amount and the exact law of distribution; all of which must be left for future enquirers. But of the infinite importance of the latency of heat, in the economy of nature, the following brief remarks will serve to convey some notion.

Let us take the familiar instance of water;

* Article CLIMATE in the Encyclopædia Britannica.