

perature, than that which occupies the regions further *polewards*; and such steam, as it came in contact with the colder vapour of a higher latitude, would be precipitated into the form of water. Hence there would be a perpetual current of steam from the equatorial parts towards each pole, which would be condensed, would fall to the surface, and flow back to the equator in the form of fluid. We should have a circulation which might be regarded as a species of regulated distillation.\* On a globe so constituted, the sky of the equatorial zone would be perpetually cloudless; but in all other latitudes we should have an uninterrupted shroud of clouds, fogs, rains, and, near the poles, a continual fall of snow. This would be balanced by a constant flow of the currents of the ocean from each pole towards the equator. We should have an excessive circulation of moisture, but no sunshine, and probably only minute changes in the intensity and appearances of one eternal drizzle or shower.

It is plain that this state of things would but ill answer the ends of vegetable and animal life: so that even if the lungs of animals and the leaves of plants were so constructed as to breathe steam instead of air, an atmosphere of unmixed steam would deprive those creatures of most of the other external conditions of their well being.

The real state of things which we enjoy, the steam being mixed in our breath and in our sky in a moderate quantity, gives rise to results very different from those which have been described. The machinery by which these results are produced is not a little curious. It is in fact the machinery of the *weather*, and therefore the reader will not be surprised to find it both complex and apparently uncertain in its working. At the same time some of the general principles which govern it seem now to be pretty well made out, and they offer no small evidence of beneficent arrangement.

\* Daniell. Meteor. Ess. p. 56.