

happens that in the course of ages the whole ocean has *not* been transferred by this sort of distillatory process from the tropics to the poles; leaving the former dry, and piling the latter with mountainous accumulations of ice. Were the Polar regions of the globe occupied by land instead of by sea, there is every reason to believe that such *would* be the case. As it is, the contrary arrangement prevails, and the Polar snows fall upon these seas or upon their frozen surfaces, and form floating masses of ice, which are partly broken up and drifted away, and partly melted *in situ* by currents of water perpetually streaming in against and beneath them from warmer regions, and thus become restored to the general ocean.

(17.) But what, it will be asked of course, produces these warm currents? And *how* is the water of which that snow consists, and all the rain which falls and feeds the rivers that restore *it* to the sea, raised into the air, and distributed over the world, and thrown down again indiscriminately over all its surface? Common sense assures us that all the rain, &c., which falls from the skies must have originated in the sea, and must (if the present state of things is to endure) find its way back to it. But how is it done? And, in the first place, where are we to look for the motive power? To this the answer presents itself at once. In the sun's heat. Any of our readers who will take the trouble to refer to Lect. II., § 23, will find that the amount of solar heat which actually reaches the surface of our globe would suffice to melt an inch in thickness of ice in two hours thirteen