

A state of things something like that which Milton here seems to have imagined, is, so far as we know, not mechanically impossible. It might have continued to obtain, if Hot and Cold, and Moist and Dry had not been compelled to "run into their places." It will be hereafter seen, that in the comparatively simple problem of the solar system, a number of very peculiar adjustments were requisite, in order that the system might retain a permanent form, in order that its motions might have their cycles, its perturbations their limits and period. The problem of the continuation of such laws and materials as enter into the constitution of the atmosphere, is one manifestly of much greater complexity, and indeed to us probably of insurmountable difficulty as a mechanical problem. But all that investigation and analogy teach us, tends to show that it will resemble the other problem in the nature of its result; and that certain relations of its data, and of the laws of its elements, are necessary requisites, for securing the stability of its mean condition, and for giving a small and periodical character to its deviations from such a condition.

It would then be probable, from this reflection alone, that in determining the quantity and the law and intensity of the forces, of earth, water, air, and heat, the same regard has been shown to the permanency and stability of the terrestrial system, which may be traced in the adjustment of the masses, distances, positions, and motions of the bodies of the celestial machine.

This permanency appears to be, of itself, a suitable object of contrivance. The purpose for which the world was made could be answered only by its being preserved. But it has appeared, from the preceding part of this and the former chapter, that this permanence is a permanence of a state of things adapted by the most remarkable and multiplied combinations to the well-being of man, of animals, of vegetables. The adjustments and conditions there-