

vicissitudes of human life, that man is capable of resisting very great and even sudden alterations of temperature without any serious inconvenience. Thus an atmosphere so cold, as to depress the mercury in Fahrenheit's thermometer to the 52d degree below the freezing point of water, has been borne under the protection of very moderate clothing. And, on the other hand, an atmosphere of a temperature as high as the 200dth degree of Fahrenheit, which is within a few degrees of the boiling point of water, was borne by the late Dr. Fordyce, during ten minutes^d. And it is highly worthy of notice, as connected with the general intention of this Treatise, that, during the same time, a thermometer which had been fixed under his tongue indicated only the 98th degree of Fahrenheit^e: so that the body remained very nearly of its natural temperature, during its exposure to an atmosphere exceeding its own temperature by full 100 degrees^f.

This uniformity of animal temperature, under such circumstances, is in a great measure owing to the process of evaporation, which takes place from the general surface of the body, and from the air-vessels of the lungs: for if animals are confined in a chamber, the atmosphere of which

^d Phil. Trans. 1775. vol. lxxv. p. 117.

^e Ibid. p. 118.

^f For an account of similar experiments carried to a further extent, see p. 484, &c. of the same volume of the Phil. Trans.