

these circumstances the circulation of winds, bearing away water vapor from the tropical oceans, is inevitable, and the process is intensified by the high specific heat of water.

The living organism itself is directly favored by this same property of its principal constituent, because a given quantity of heat produces as little change as possible in the temperature of its body. Man is an excellent case in point. An adult weighing 75 kilograms (165 pounds) when at rest produces daily about 2400 great calories, which is an amount of heat actually sufficient to raise the temperature of his body more than 32° centigrade. But if the heat capacity of his body corresponded to that of most substances, the same quantity of heat would be sufficient to raise his temperature between 100° and 150°. In these conditions the elimination of heat would become a matter of far greater difficulty, and the accurate regulation of the temperature of the interior portion of his body, especially during periods of great muscular activity, well-nigh impossible. Extreme constancy of the body temperature is, of course, a matter of vital importance, at least for all highly organized beings, and it is hardly conceivable that it should be otherwise. In