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? WHY THE WEATHER ?

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AIR

"Out of sight, out of mind". Seldom do we give thought to the air. To most of us it is simply something we breathe, something that moves the trees, and blows smoke. It also provides the medium of flight, and the pressure that drives windmills and sailing ships, and brings destruction in the gale, hurricane or tornado.

Hold your breath a moment. Why do you want to breathe air? Because you must live, and because to live you must have oxygen for the slow combustion within your body which liberates heat and energy. But air is very impure for this purpose: it is only about one-fifth oxygen. We are better off than fishes, however, for there is a much greater percentage of oxygen in air than in sea water. It seems rather wasteful to warm up five times as much gas as is required for our well-being; we could get along, so far as our immediate breathing requirements are concerned, with simply the oxygen portion of the atmosphere. The air would be thinner, but just as vitalizing.

But if the air were only a fraction of its present density and were of oxygen alone, it would be too thin to fly on with present airplanes, and too thin to push windmills round or drive ships along as now, unless they were given larger vanes and sails. Without the water vapor there would be no rains or clouds; without the carbon dioxide there could be no vegetation; without the nitrogen there could be no life of the sort we have on the earth. So we must accept the gaseous additions to our breathing air as necessities.

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