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? WHY THE WEATHER ?

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MOUNTAIN SICKNESS

We are adjusted to the pressure conditions, and particularly, the oxygen content of the air where we live. Changes in pressure from day to day are not likely to exceed one inch as measured by the barometer. Such a change as this is experienced in a change in elevation of about 1,000 feet. In ascending high mountains, such as Pike's Peak for instance, one is subjected to far greater pressure changes. Yet a study of mountain sickness shows that the discomfort from high altitude is produced not primarily by change in pressure but by reduction in the oxygen breathed. A sudden transition to rarefied air will cause blueness of the lips, breathlessness and rapid pulse. Brief, repeated strains, caused by oxygen deficiency, bring on the aviator's staleness. Most visitors who remain on Pike's Peak but a short time, suffer relatively little disturbance; those who stay over night or longer usually develop mountain sickness on the second day, experiencing headache, nausea, and dizziness. But by staying a few days or a week on the summit, it is possible to become adjusted to the low oxygen content of the air. A condition similar to mountain sickness may be produced by breathing an artificial atmosphere at normal pressure but containing only half the usual amount of oxygen. Conversely, in pure oxygen at 21 per cent. of atmospheric pressure, life goes on in practically the same manner as in air, which contains 21 per cent. of oxygen at the ordinary pressure.

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(Tomorrow: Air Drainage)

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