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? WHY THE WEATHER ? Mailed April 20, 1927

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WHY SPRING SHOWERS?

Why does the weather turn showery in spring? Why is it not equally showery in autumn? Of course, we recognize in the return of the sun from southern haunts a reason for the renewed heating of the lower air, which always tends to make it unstable, and, therefore, likely to be pushed up by heavier air that has not been so heated. And we remember that this process of convection leads to showers if it goes high enough and if the air is damp enough.

"High enough" and "damp enough" are essential points in the production of local showers. The warmed air will be forced to rise till it has cooled, mostly by expansion, to a temperature lower than the surrounding air. It is obvious that the hotter it is when it starts, and the colder the air above is, the higher it will go. It is just these conditions that occur readily in spring. The sun is high in the sky and is heating the ground and lower air strongly, and it has not been heating the atmosphere so intensely long enough to have raised the free air temperature much yet. Therefore, convection to considerable heights is favored in spring.

How about the vapor for the clouds and rain? Here again spring is generally at an advantage over autumn and, on the plains, at an advantage over summer. For there is a ready source of vapor in the winter soaked ground, and the air temperatures, while rising rapidly, have not reached such high levels that a very large amount of vapor is necessary before the air will be relatively humid enough for the production of showers.

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