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? WHY THE WEATHER ?

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ACTION CENTERS OF WORLD WEATHER

Nowadays when the weather of any part of the world appears to be badly out of joint meteorologists are likely to look for an explanation to the "centers of action." It is a remarkable fact that, although these interesting regulators of weather have been known to science for nearly half a century, they have never acquired popular renown. Their importance in the economy of the atmosphere was first recognized by a French meteorologist, L. Teisserenc de Bort, who was trying to find out why the winter of 1879-80 in central Europe was one of the most severe ever known. He drew charts of the distribution of atmospheric pressure, which showed that the high-pressure area that normally lies near the Azores in winter was shifted to the eastward and lay over France. In consequence of its dislocation the mild southwesterly winds that generally blow from the Atlantic and give much of Europe a mild winter climate were replaced by cold winds of continental origin.

The "Azores high" is one of the centers of action, the "Aleutian low" and the "Iceland low" are others, and there are half a dozen more. They are persistent systems of high or low atmospheric pressure, which, instead of traveling rapidly over the globe after the manner of ordinary cyclones and anticyclones, shift but slightly and slowly from certain locations. Some of them exist throughout the year, others only for a season, and they all undergo changes in size and intensity, with a tendency to offset one another's ups and downs by a sort of "seesaw" process. Anomalies inthe weather of regions far away from the centers themselves can often be traced to their variations.

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