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? WHY THE WEATHER ?

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KITES AS OBSERVATORIES

One of the picturesque and at times exciting activities of weather services is the flying of great kites. Instead of being made of paper and small rocket sticks, and held by thread or string, these kites are of heavy unbleached muslin, sticks, and metal corners, and are held by steel piano wire. Instead of being wound in by hand, a motor usually does the pulling. A kite 10 or 12 feet high, 6 feet wide and 3 feet through can lift a man off his feet in a strong wind. It can raise a mile of piano wire. In sending up meteorological kites an instrument called a meteorograph, which records temperature, pressure, relative humidity, and wind velocity is attached to the leading kite. Wire is paid out till the kite is perhaps half a mile high. Then another kite is attached to lift the wire and allow the leader to go higher. Two miles high is not an uncommon attainment for the first kite, while four miles is the record. The kite may be maintained at about the same height for many hours and the changes at that height recorded for later comparison with surface conditions and those found at other levels as the kite was going up or as it was coming down.

Approaching thunderstorms, increasing winds, or failing winds are conditions the kite man does not welcome. He tries to get the kites home as fast as they can come. As a thunderstorm draws near, surges of electricity come down the wire, at times making a considerable spark. Sometimes too much of a current, really a flash of lightning down the line melts it into beads and sets the kite loose. On such occasions one or more of those in attendance have been stunned or killed. When the wind increases suddenly, the strain on the wire may reach the breaking point and away will go the kites and wire, a score of miles or more. Calms allow the kites to fall, sometimes in trees or other awkward places.

(Tomorrow: Heating of the Free Air)
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