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? WHY THE WEATHER ?

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THE SUMMER OF 1927

June of 1926 did not have the killing frosts or snows of June, 1816, in northeastern North America, neither can this summer, therefore, be like that summer of "Eighteen-hundred-and-froze-to-death." How about next summer? Logically, we turn to past records if we wish to peer into the future. We have learned that in the course of 50 or 100 years about all the kinds of weather and abnormalities of seasons likely to occur in a region are experienced. Instrumental records go back more than 100 years at several places in the northeastern quarter of North America and for nearly 150 years at some points. Chronicles of the early settlers give us knowledge of the most extreme seasons for 100 to 150 years more at a few places. In all this period of 300 years there has been but one summer, that of 1816, widely snowy or frosty in every month in the region south, roughly, to the Ohio and Potomac rivers. Milhan has shown that at Williamstown, Mass., there have been summer months since 1816 as cold as any in that year, but that in none have three such cold months as occurred in 1816 come in the same summer. Our climatological record then would lead us to expect "a year without a summer" in these latitudes not oftener than an average of once in more than 300 years.

The circumstances surrounding the one occurrence of which we know included a cold period of years, a severe volcanic eruption in April of the preceding year throwing a great dust veil around the earth, considerable solar activity as shown by numerous sunspots, and extraordinarily ice-free conditions in the northeastern Atlantic. Apparently a combination of all these was necessary for the production of such an outstanding cold season here.

How about the present? We are in a warm period of years and no great dust eruption has occurred. But sunspots are numerous, and, of course, an ice-free condition far north in the Spitzbergen region may develop. But sunspots become numerous on the average about every eleven years, and thence about Spitzbergen is always varying. The present situation, therefore, comparing it with that in 1815 makes a "summerless" year in 1927 seem highly improbable.

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