

Connecticut, agreeable to the forecast of "decided heat." Many other features of this month conformed to my forecast.

A Chicago man proposes to attempt to reach the North Pole with an air ship next June.

Charleston recorded another earthquake shock on June 19 at Summerville. Concord, N.H., one on June 30th.

Mr. Brandenburg's *Signal Service Report* for May in Minnesota shows the dominant features of that month to have been abnormally high temperatures, and a deficiency of precipitation in the southern counties. The mean barometric pressure was slightly below the normal, the min. being 29.000 at Rochester, and the max. 30.586 at Grand Forks. The mean temperature was high and the max. very high; viz: Sherburne and St. Vincent 96°, Moorhead 95° 5', Spring Valley 95° and Grand Forks 93° on 10. The minimas on 17th were: St. Vincent 24° 8', Moorhead 25° 1' and Grand Forks 26°. Mean for the State, 61° 7', or 2° 8' above May 1886, and 6° 9' above May 1885. Killing frosts occurred on the 2-3 and 16-17. The average precipitation for the State was 1.78 inches.

A marked copy of the *Rural Vermonter* reached me recently. In it is an article headed "Weather Predictions," which I have been asked by a subscriber to answer. My reply is, that governments spend millions of dollars annually to support their weather bureaus; that it would never do to let us private weather men get too much credit; that, in consequence, a stock editorial with certain stock arguments has to appear every now and then showing what puny grovellers we private men are, and what high and mighty things have been done—or will some day be done—by the paid prophets attached to the government bureaus. The whole article is a very antiquated meteorological "chestnut," the result of ignorance, spleen and envy. Such have frequently appeared before and been answered.

A Lunar Rainbow was seen at Montreal on the night of July 6th. How many of my readers have seen one? I missed seeing this, and have not yet been fortunate enough to behold more than a fragment of one. This was several years ago, in England. The phenomenon seems either to be far more rare than the Solar Rainbow, or, owing to less people being out at night, is much less frequently observed. Prognostics of immediate weather—according to Simmonite—may be made from this appearance. He says that the Lunar bow indicates a continuance of unsettled weather, the air being nearly saturated, boisterous weather is about to follow. He instances several cases where Lunar Rainbows having been noticed, long spells of tempestuous weather followed.

Auroras in Summer usually follow or accompany a great change, frequently

a fall in temperature; coming as they do in the hottest spells, after storms and heavy precipitation. They may, in consequence, generally be held to herald a cool spell.

Gen. Banks is a close observer of weather changes. He wrote, June 23, "I have noticed that heated terms generally appear at the beginning of May and about the end of June. I have known in Albany the hottest weather of the whole year early in May, and almost without exception no hotter weather in the year than late in June. From the 19 to 25 your forecasts have been correct and I shall not be surprised to see the last week in June the same, with the usual hot spell." That Gen. Banks as a forecaster of "hot spells" is a success, is now a matter of history.

In another letter he remarks: "I am glad to see that your Association is flourishing, but disgusted to think that there is any difficulty in your getting subscribers for your paper. I am sure, however, that this difficulty must disappear in time. One gets discouraged waiting sometimes. I hope to hear that the subscription list is full before many days. Everyone that I have sent *ASTRONOMY AND METEOROLOGY* to is pleased with it."

#### KEEP COOL.

It is all very well to say "keep cool" but how is it to be done? First keep your mind from thinking about the heat. Do not talk about the height of the mercury more often than you can help, as a great deal depends on the mind. Second, eat little meat, the less the better, as it is heat producing. Third, don't drink too much cold, or iced water, as it only retards digestion and keeps the body in an uncomfortable condition. Instead of drinking when you get hot, bathe as often as you can. A very simple remedy is to let the tap run on one's wrists. Last, but not least, eschew alcoholic liquors in every shape. No one can be cool who "drinks." I see this verified in the plainest manner every day. Sunstroke statistics also prove that it is the drinker of stimulants that first succumbs.

#### HOLIDAYS.

Summer vacations are a necessity, especially to those who are herded in cities the rest of the year where the rush, hurry, excitement and fever of life and competition wear men and women out faster in ten days than their grandfathers and grandmothers were worn out in five hundred. But the Summer vacation must be judiciously chosen, or it were perhaps as well let alone. There are many people who do not know where or how to spend a vacation when they get the opportunity. Some work harder than ever, and come home "all broken up" instead of having "renewed their

strength like the eagle." Some are not happy on mountain, sea beach, lake or hillside unless all the cumbersome appliances of civilization are there too! This is a great mistake. It is a radical change that is wanted. The accountant should not only leave his figures and calculations behind, but should not even question if two and two make four. The author should shun books and newspapers as if they were poison and read from nothing but nature's volume. The public speaker must not talk above a whisper, else the fish will not bite or the game will escape. The man used to toil with his hands should exercise his legs—let him go on a walking or bicycle tour—and he who is continually emptying the chambers of the "golden bowl" of his brain, should stop thinking and take to rowing, mountain climbing, horseback exercise; why two or three weeks' farm labor, if he does not work too hard, may have the effect of adding five years to his life.

#### SOUTH CAROLINA NOTES.

South Carolina has, it seems, much to be thankful for this year. Not but what it is time things took a turn, because, less than a year ago, repeated and disastrous earthquakes did untold damage there. This summer, all the crops have done better than for the past five years; corn, oats, wheat, rice, sorghum, potatoes, cucumbers and tomatoes being reported far ahead in yield. Farmers and truck growers are, in consequence, jubilant at the prospect, and not disposed to complain even of the extreme heat which has visited them. The promised temperatures of over 100° in the shade for July and August, which I spoke of as likely in my summer forecast, do not, in consequence, trouble the farmers there, especially as they have already touched three figures and survived. In Charleston, on June 10th, the mercury rose to 97°, and a short way out, at Mr. Moore's, it reached 100°. The three previous days had been very hot, with shade temperature from 92° up. In July, 1883, Charleston recorded 104° one day and will likely do as much this year before the Summer is over. The recent heat was followed by cloudy, cool weather—just like Fall—on 11-12. At Columbia, S.C., it was the hottest for three years, the mercury touching 97° in the shade, and that in a draught. The mean temperature of the 10th at Charleston, Augusta, Pensacola and Galveston was 80°. Another hot wave was recorded from the 17 to 20. At Columbia it was 97° on 17; 99½° on 18, and 100½° on 19. In some houses the mercury touched 105° and foliage in places was scorched as by fire. "There will not only be hot waves, but seas, oceans of heat," read my Summer forecast printed last April. Latest reports are to the effect that a streak of heavy rainfall has struck this State.