

Meteorology.

[To make the meteorological section of *ASTRONOMY AND METEOROLOGY* yet more complete, subscribers on all parts of the continent are invited to send notes on local weather and temperature. These should reach me not less often than once every month. Such notes will almost always be utilized.]

Ten thousand people, it is said, suffered from the Michigan forest fires this May.

On May 15-16 in the Northern portion of the Red River Valley, heavy frosts were reported, which cut down the new Spring wheat and damaged garden crops.

The hay crop in Quebec will, it is thought, be a light one.

The past Winter in Montana Terr. is said to have been the severest experienced for twenty-five years.

The amount of ice on the Cape Breton Coast at the end of May this year was unprecedented. One vessel was five days making fifty miles.

The Navy Department at Washington, owing to the number of abandoned vessels left floating around in the Atlantic, proposes that an International Convention be called and each country assigned a certain portion of the Ocean, which its vessels would patrol in order to destroy all floating obstacles.

Mr. Rodman reports that April in his section of Illinois (Casey) was a fine month for farming, attended as it was, with good rains. These, however, were not heavy, but there was more downfall than during any previous month this year. The max. ther. at noon was 94° on 13, the min. at sunrise 24° on 5. The noon temp. on 12 was 90° and on 14, 88°. My forecast read, "Fine, seasonable, some warm days." On the 4th the min. ther. was 34° and the same on 6. Clouds and strong winds occurred during this period. My forecast read: "Frosts N." "High winds, unsettled," &c. The rest of the month appears to have tallied just as closely with my calculations.

Mr. Birt's April record sent me from Utica, N.Y., gives the max. ther. as 73°; min. 15°, and mean 36° 14'. The max. bar. was 30.12; min. 28.62, mean 29.49. The greatest heat occurred on 10, and greatest cold on 8. His record for May states that the month was phenomenal, the warmest for the past 13 years. Max. ther. 88°; min. 57°; mean 62° 87'. Max. barom. 29.74; min. 29.13; mean 29.50. Furious electric storm, with heavy rain, on 24th.

In the North Atlantic, the first part of the month of May was characterized by strong gales from N.N.W. to S.W., extending all across the Atlantic, north

of latitude 36°. The latter part was less windy with frequent heavy fogs north of lat. 40°.

At Montreal, for May 1887, the mean temperature was 61°.06', the greatest for the month of May in thirteen years. The max. temperature was 85°.5' on 10; minimum 40°.1' on 1, a range of 45°.4'. The minimum temperature was 3° higher than any previous record for May. Rain fell on 6 days to the extent of only 1.26 inches, as compared with a mean rainfall of 2.92 inches. The maximum barometer reading was 30.351 on 14, minimum 29.554 on 26, or a range of 0.797 inches.

At Toronto, Ont., the mean temperature of May was 58°.51 or 6°.51 above the average of the past 47 years. It was 5°.31 higher than May 1886. The rainfall was but 0.805 inches, or 2.292 inches below the average. It was the warmest May on record, the highest mean temperature previously on record having been 58°.10 in May, 1881. It was the driest also, if we except May, 1850, when 0.545 inches fell.

San Francisco, Cal., recorded its "hottest day for 15 years" on May 28. The thermometer at noon that day registered 97° in the shade; the previous hottest being 95° in June, 1883. A hot wind blew over the central parts of the state for two days, injuring wheat, strawberries and other things.

Slight earthquakes were reported from South Carolina, Nevada, and Northern California, on June 3rd. Murray Bay and Les Eboulements, Que., also reported the most severe shocks since 1870. Great rocks were hurled down, and trees levelled on the south shore of the St. Lawrence in L'Islet County. On June 4 a second shock was felt at Baie St. Paul, Que.

Wheat was being harvested in parts of Kentucky and Tennessee during the last days of May.

Correspondence.

[All letters should be addressed:—"Walter H. Smith, 21 Arcade Street, Montreal, Canada." For a personal reply, enclose stamp.]

A SIGNAL SERVICE OFFICER'S OPINION.

[15.] I have received two copies of that very valuable scientific journal, *ASTRONOMY AND METEOROLOGY*. Your predictions for April were *very* accurate, and up to this date (15) for May, have "hit the nail on the head" every time. Wishing you abundant success.

(Lieut.) W. H. I.
Virginia. Signal Corps, U. S. A.

SCIENTISTS SHOULD GIVE IT SUPPORT.

[16.] Your *ASTRONOMY AND METEOROLOGY* has been reaching me regularly. I am well pleased with it. The general

get up of the paper is such as should command the attention and support of all students of the particular branches of science it so ably sets forth.

Virginia. L. J. H.

HEIGHT OF THE SNOW LINE.

[17.] What is the height of the perpetual snow line? Does it vary?

TRAVELLER.

Ans.—It varies considerably according to proximity to the equator, etc. Reliable estimates make it as follows:—Bolivia, 18,520 feet; Northern Himalayas, 16,620; Andes, at equator, 15,980; Mexico, 14,760; Himalayas, South side, 12,980; Chili, 12,780; Caucasus, 11,000; Pyrenees, 8,950; Alps, south side, 8,800; Alps, north side, 8,000; Alaska, 5,500; Kamschatka, 5,200; Norway, central portion, 5,000, and Northern extremity, 2,300 feet.

CAN'T YOU DO LIKEWISE?

[18.] Enclosed find postal order for \$10 and subscribers' names. Have not been able to get any more yet, but will try hard. Wishing you every success.

Charleston, S.C. Y.

Ans.—If only *ten* more friends would do as much for *ASTRONOMY AND METEOROLOGY*, it would pay cost. Who will send for sample copies and try? One hundred more new subscribers could, I am sure, be easily obtained by ten of my friends in different sections getting to work in good earnest.

LIKES HIS PAPER.—THIS SUMMER'S WEATHER.

[19.] Your May number of *ASTRONOMY AND METEOROLOGY* is an admirable one, an improvement on No. 1. Your weather forecast for May has been *scarcely true*. The oppressive and unseasonable heat commenced on the 15th as predicted. The hail storm arrived in time on the 26th, since which we have had steady precipitation of 1½ inches up to now (May 29). The weather this summer for this locality, judging from the past, will be noted for sudden and severe changes, with periods of extreme heat. The long, heated and unseasonable term we have already had, I count in, as so much heat to be exempted from what is to come. The past winter was unprecedented here. Although we had over 100 days fair sleighing, there was no continued cold. After 3 or 4 days a sudden change would ensue, and *vice versa*. I did not mean to say as much when I commenced. I intended only to congratulate you on your work and wish it more publicity.

Albany, N.Y. R. L. BANKS, A.M.A.

Ans.—Your conclusions are scientific, and it will doubtless be as you expect. Accept thanks for kind congratulations.