

and under the influence of the somber skies, that the hurricane appeared to the author as the embodiment of a demon of destruction. These lines written under such circumstances will, perhaps, express the thoughts and feelings of many of our readers. The poetry is good; the meteorology seems to be correct, and therefore we can not refuse a place to these graphic lines.—*C. A.*

THE CYCLONE.

With my heart on fire
With the sun's desire
I arise from my tropic home,
And curl and swirl
With a passionate whirl
To the breast of the temperate zone;
Then my arms I fling
Round the winds and sing
As I fast and faster turn
In my sullen shroud
Of darkening cloud
Through which the lightnings burn.
Around and around
With terrible sound
A living wheel of air,
I circling glide
O'er the ocean's tide
And scatter the ships that are there;
Then close to the shore
I press on and roar
While towns and cities fall,
As my garments swing
In the fatal ring
I destroy them one and all.
And women and men
Proud as gods till then
By the fringe of my skirts are crushed;
With my eyes on high
I can see them die
Like ants by a besom brushed.
What are men to me?
Mere specks on the lea
To a great Elemental Power;
Their prayers are in vain
For naught can restrain
My impulse in that mad hour.
I laugh as I rest
On the waves' white crest
Lashed to foam by the touch of my feet,
As I strew the shore
With their wrecks evermore
Where the land and the waters meet.
I laugh as I crush
Through cities and rush
Over fields of ripening grain,
And I cut my way
Through the forests gray
With a howl of wild disdain.
No pity I show,
No mercy can know,
My course is relentlessly pressed;
Though the winds may howl
And the black waves seowl
And the seagull dash at my breast.
My path can be traced
By the life effaced
Wherever I chance to roam;
Destruction and death
Must follow my breath
From the gulf to the icebergs' home.
I am born of heat
Where earth's passions meet
In the languorous Carib Sea,
And by fate must go
To the land of snow
Where the lakes and mountains be.
On the north's cold breast
I am lulled to rest
By the pine trees' solemn moan;
There, my passion dead
And my spirit fled
I die unseen and alone.

Townsend Allen, in New York Tribune.

METEOROLOGICAL OBSERVATIONS BY TRAVELERS.

Those who are about starting on a journey, and sometimes those who are going to the country for the summer, often express an interest in meteorology and ask whether they can not keep records that would be of interest or value to the Weather Bureau. Instructions for the use of travelers have been published by several scientific organizations, and it has not yet been necessary for the Weather Bureau to duplicate these. It is only when the traveler goes beyond the confines of the numerous well organized meteorological systems that he feels that it devolves upon him to maintain a very complete meteorological record. In general, the record of such a traveler must have at least three different objects in view: (1) to contribute otherwise inaccessible data to the completion of each daily weather map; thus, whether he is at sea or on land, he may greatly extend our knowledge of the daily isobars or isotherms and the movements of high and low areas; if he is on a mountain top he may give us important information as to the upper air conditions. (2) If the traveler remains sufficiently long in one place he may give us mean values of pressure, temperature, rainfall, etc., that are valuable for the study of local climate. (3) There is a large class of special phenomena that is likely to interest the traveler and be of value to meteorology, such, for instance, as the maximum and minimum temperatures, the relative humidity, the movement of the clouds, the occurrence of gales, thunderstorms, auroras, the blue color of the sky, the transparency of the air, the number of particles of dust in the air, the polarization of skylight, the intensity of the heat received from the sun, earthquake motions, etc. If the traveler could always know his altitude above sea, as determined by the spirit level, then, the barometric reading would be desirable. After the traveler has returned, the problem of working up and publishing his results becomes important. Of course, we have before us the examples of the great exploring expeditions, whose volumes of reports give every detail of the work and most of the consequences that can be drawn from it; but for individuals and minor expeditions nothing so expensive can be contemplated. In the recent Harriman expedition to Alaska, we believe that the principal meteorological contribution was by Professor Brewer of Yale in his chapter on the general character of the Alaskan atmosphere. This voyage afforded an almost unique opportunity to observe the directions of motions of the upper clouds in northern latitudes, a matter that, at present, is considered of the highest importance; the observations can easily be made at sea or on land by means of the marine nephoscope. The meteorology of the first Wellman expedition to Spitzbergen is now in the Editor's hands, and will, we hope, appear in the MONTHLY WEATHER REVIEW. The record of a geological expedition, in 1900, to Labrador, by Professors Daly, of Harvard University, and Delabarre, of Brown University, has recently been published by the Geographical Society of Philadelphia. This trip along the coast of Labrador had a special interest to the Editor, because he was so fortunate some years ago as to come into possession of the original manuscript record kept at the old Moravian stations Nain and Okkak during the years 1774-1786 with instruments that had been carefully constructed in England. During the past ten years the German Government has adopted these stations as a part of its own system and their records are now published regularly.

The Brown-Harvard expedition to Labrador, occupied the months of July, August, and September, 1900, with a few days before and after. The published record gives a general summary of winds, temperature, moisture, and pressure. There were about forty-two sailing days and fifty-two days of detention, of which nine were due to the ice. There were 40 per cent of southerly winds; 27 per cent of northerly; 14 per cent of calms; six days of continuous rain; thirty-eight days of fog.

Among the precautions that must always be considered by travelers is the general consideration that the temperature of the air can not possibly be determined satisfactorily except by using either the aspirated psychrometer of Assmann or the portable sling psychrometer; the latter was, we believe, first used by de Saussure and Espy, and is now frequently recommended by the Weather Bureau when the whirled psychrometer in a permanent thermometer shelter is not available. In fact, by using the sling psychrometer, first in the shade, and, then, immediately afterwards in the sunshine, we always have a good check on the accuracy of our work.

It is greatly to be hoped that the wealthy owners of steam yachts and sailing yachts will sometimes consider within themselves whether they can not provide accommodations for a

meteorological observer and thus make it possible for us to investigate the motions of the winds and clouds, and other important phenomena on the ocean, where good observations are so rare and so greatly needed.—C. A.

BACK NUMBERS OF THE MONTHLY WEATHER REVIEW.

Owing to the increased demand for special numbers of the MONTHLY WEATHER REVIEW the Editor would again call attention to the fact that those who do not need to retain their copies will confer a favor by sending word to that effect, whereupon penalty envelopes will be furnished to facilitate their return.

THE WEATHER OF THE MONTH.

By W. B. STOCKMAN, Forecast Official, in charge of Division of Records and Meteorological Data.

CHARACTERISTICS OF THE WEATHER FOR MAY.

On the coast of central and northern California, and over the United States east of the ninety-fifth meridian, except in the extreme western parts of Louisiana and Arkansas and the extreme eastern part of Texas, the pressure was above the normal; elsewhere in the United States it was below the normal, and from northeastern Florida northwestward over eastern Minnesota, and northeastward over Maryland it had increased over that of the preceding month.

From central and western Nebraska southward over north-central and western Texas and New Mexico, in the lower Ohio Valley, northeastern Iowa, northwestern North Dakota and southwestern Wisconsin the precipitation ranged from 2 inches to 7 inches above the normal, while in the districts showing a deficiency in precipitation the departures were not nearly so great.

From northeastern Ohio eastward and northeastward to the Atlantic coast, west of the one hundred and fifteenth meridian, except in western Washington and on the northwestern coast of California, and in western Arizona the temperature was below the normal; elsewhere it was above the normal, and generally markedly so; and, as a rule, the isotherm of maximum temperatures of 90° or higher trends considerably to the north of where it lay in May, 1901.

The occurrence of winds of 50 miles or more per hour was considerably above the average, and was three times greater than that of May, 1901.

The number of thunderstorms during the month was remarkable, being greater than any May since the date of beginning of record in 1894.

PRESSURE.

The distribution of monthly mean pressure is shown graphically on Chart IV and the numerical values are given in Tables I and VI.

The area of relatively high pressure, which was 30 inches or slightly higher, extended from the Great Lakes southward to the Gulf of Mexico and southern Florida and southeastward over the Atlantic coast. Another, but smaller, area overlaid the immediate coast of Oregon and northern and central California. Over the greater portion of the first area the departures from the mean amounted to between +0.05 inch and +0.08 inch, while over the second area they were somewhat less.

From eastern Minnesota southeastward and eastward over northeastern Florida, the Atlantic coast States and New England the pressure increased considerably over April, 1902. In the lower Lake region and the northeastern part of the upper

Lake region the changes ranged from +0.10 inch to +0.13 inch. Over the other districts of the United States the pressure was lower than during the preceding month, and the greatest changes, -0.10 inch to -0.16 inch, occurred in the upper Missouri Valley and the northern Slope regions.

TEMPERATURE OF THE AIR.

The distribution of monthly mean surface temperature, as deduced from the records of about 1,000 stations, is shown on Chart VI.

Over almost the entire United States the mean temperature for the month was above the normal, the only districts where it was below the normal being west of the one hundred and fifteenth meridian and in western Arizona, northeastern Ohio, northern Pennsylvania, New York, and New England. From the northern part of the west Gulf States and the western parts of the Carolinas and West Virginia northwestward over Kansas, Nebraska, and South Dakota the departures ranged from +4° to +8°. In the interior of central and northern California and in central Oregon the departures amounted to from -2° to -4°.

The average temperature for the several geographic districts and the departures from the normal values are shown in the following table:

Average temperatures and departures from normal.

Districts.	Number of stations.	Average temperatures for the current month.	Departures for the current month.	Accumulated departures since January 1.	Average departures since January 1.
New England	8	53.1	-0.4	+ 8.4	+1.7
Middle Atlantic	12	62.0	+0.4	- 0.8	-0.2
South Atlantic	10	72.9	+2.6	- 8.7	-1.7
Florida Peninsula	8	78.2	+2.3	- 6.0	-1.2
East Gulf	9	76.6	+4.0	- 3.6	-1.3
West Gulf	7	70.0	+3.4	+ 0.8	+0.2
Ohio Valley and Tennessee	11	69.1	+3.9	- 5.6	-1.1
Lower Lake	8	56.6	-0.2	+ 3.3	+0.7
Upper Lake	10	53.0	+1.6	+15.7	+3.1
North Dakota	8	56.8	+3.5	+22.1	+4.4
Upper Mississippi Valley	11	65.8	+4.4	+ 7.6	+1.5
Missouri Valley	11	63.4	+5.3	+12.3	+2.5
Northern Slope	7	56.6	+3.1	+14.9	+3.0
Middle Slope	6	66.1	+4.1	+ 8.6	+1.7
Southern Slope	6	70.7	+1.7	+ 5.7	+1.1
Southern Plateau	18	63.0	-1.5	+ 0.6	+0.1
Middle Plateau	9	55.2	-0.8	+ 4.9	+1.0
Northern Plateau	12	54.2	-0.7	+ 6.8	+1.4
North Pacific	7	54.1	-0.3	+ 2.5	+0.5
Middle Pacific	5	56.9	-1.5	- 2.6	-0.5
South Pacific	4	60.3	-1.5	- 2.2	-0.4

Except on the immediate coasts of northern California, Oregon, and Washington, and in a few scattered localities in other sections of the United States, maximum temperatures of 80° or