

of New England and Nova Scotia, a storm of considerable strength was central between the Azores and the Banks of Newfoundland, the pressure was low north and northwest of the British Isles, and west to north gales of force 10 to 11 were encountered west of the 50th meridian. By the 2d the storm over the western part of the ocean had advanced to the Grand Banks, and the storm which occupied mid-ocean had moved northward, with pressure falling below 29.00 (736) and northwesterly gales of force 8 to 9. By the 3d these storms had disappeared north of the region of observation. The severest storms of the month over the western part of the ocean attended the passage of low area II from the North Carolina coast to the Banks of Newfoundland during the 4th and 5th. The morning of the 4th this storm was central off the North Carolina coast, with pressure below 29.20 (742). During that date the storm-center moved slowly northeastward, with pressure below 28.80 (731), and northwesterly gales of hurricane force west of the 65th meridian, and by the morning of the 5th had crossed the trans-Atlantic steamship routes and reached the Banks of Newfoundland without an apparent loss of energy. By the morning of the 6th this disturbance had disappeared north of the Banks of Newfoundland. The afternoon of the 9th low area IV moved off the New Jersey coast. During the 10th this storm moved southeastward in the direction of Bermuda, its passage being unattended by noteworthy features.

From the 11th to the 16th the pressure continued low over and near the British Isles. A barometric depression apparently occupied the ocean west of the British Isles from the 11th to the 14th, passed over Great Britain during the 15th, and reached the North Sea by the 16th. During the 13th and 14th low area V occupied the ocean south of Nova Scotia. The morning of the 15th low area VI was central on the New England coast, with pressure below 29.40 (747), and during that date passed northeastward over New Brunswick, with pressure falling below 29.30 (744), and west to north gales of force 8 to 10 west of the 65th meridian. During the 16th this storm disappeared north of Newfoundland. During the 17th low area VII passed off the south Atlantic coast, and the morning of the 18th was central about midway between Bermuda and Nova Scotia.

During the 18th the storm-center moved northeastward over the trans-Atlantic steamship routes, with pressure below 29.00 (736) and gales of hurricane force, and during the 19th passed over the Banks of Newfoundland, with an apparent loss of energy. From the 20th to the 25th this storm occupied mid-ocean, and on the 21st and 22d was attended by gales of hurricane force north of the Azores. By the 26th the center of disturbance had apparently passed southeast of the Azores. On the 25th low area IX passed eastward over northern Newfoundland. During the 26th and 27th this

storm moved southeastward over mid-ocean, and by the 28th had disappeared in the direction of the Spanish Peninsula. The night of the 26th low area X advanced from the Gulf of Mexico over the Florida Peninsula, passed thence northeastward over the Grand Banks by the morning of the 29th, and thence eastward to the British Isles by the close of the month.

OCEAN ICE IN MARCH.

The following table shows the southern and eastern limits of the region within which icebergs or field ice were reported for March during the last 12 years:

Southern limit.			Eastern limit.		
Month.	Lat. N.	Long. W.	Month.	Lat. N.	Long. W.
March, 1882.....	42 30	50 00	March, 1882.....	46 30	46 00
March, 1883.....	41 46	49 48	March, 1883.....	48 40	43 03
March, 1884.....	41 20	54 06	March, 1884.....	45 00	40 15
March, 1885.....	40 55	49 04	March, 1885.....	45 57	43 15
March, 1886.....	40 20	49 02	March, 1886.....	47 20	44 40
March, 1887.....	41 00	49 07	March, 1887.....	45 31	42 56
March, 1888.....	42 30	50 37	March, 1888.....	47 23	46 56
March, 1889.....	44 20	53 00	March, 1889.....	44 20	53 00
March, 1890.....	41 01	50 54	March, 1890.....	46 40	39 50
March, 1891.....	42 25	50 30	March, 1891.....	49 00	43 44
March, 1892.....	43 58	48 15	March, 1892.....	43 58	48 15
March, 1893.....	44 35	50 13	March, 1893.....	45 55	46 56
Mean.....	42 14	50 23	Mean.....	46 22	44 55

The limits of the region within which icebergs or field ice were reported for March, 1893, are shown on Chart I by ruled shading. The southernmost ice reported, a small, rounded iceberg, noted on the 30th, was about $2\frac{1}{2}^{\circ}$ north of the average southern limit, and the easternmost ice observed, a lump of ice noted on the 17th in the position given in the table, was about 2° west of the average eastern limit of ice for March. Icebergs were reported near the east edge of the Banks of Newfoundland on the 2d, 27th, and 30th. Field ice was encountered over or near the northeastern part of the Grand Banks on the 9th, 13th, 17th, 18th, 19th, 28th, and 29th. Field ice was noted near Cape Breton Island and eastern Nova Scotia on the 5th, 8th, 19th, 22d, 24th, and 30th.

OCEAN FOG FOR MARCH.

The limits of fog belts west of the 40th meridian, as reported by shipmasters, are shown on Chart I by dotted shading. East of the 55th meridian fog was reported on 7 dates; between the 55th and 65th meridians on 10 dates; and west of the 65th meridian on 8 dates. Compared with the corresponding month of the last 5 years the dates of occurrence of fog east of the 55th meridian numbered 2 greater than usual; and west of the 55th meridian 3 greater than usual. The fog reported was generally noted in the east quadrants of general storms.

TEMPERATURE OF THE AIR (expressed in degrees Fahrenheit).

The distribution of mean temperature over the United States and Canada for March, 1893, is exhibited on Chart II by dotted isotherms. In the table of miscellaneous meteorological data the monthly mean temperature and the departure from the normal are given for regular stations of the Weather Bureau. The figures opposite the names of the geographical districts in the columns for mean temperature and departure from the normal show, respectively, the averages for the several districts. The normal for any district may be found by adding the departure to the current mean when the temperature is below the normal and subtracting when above. The monthly mean temperature for regular stations of the Weather Bureau represents the mean of the maximum and minimum temperatures.

The mean temperature was highest over the extreme southern part of the Florida Peninsula, where it was above 70. The mean temperature was above 60 over the entire Florida Peninsula, along the middle Gulf coast, in Texas south of the 30th parallel, and in the Gila and lower Colorado valleys. The mean temperature was lowest in the British Northwest Territory north of North Dakota and eastern Montana, where it was below 10. In the mountains of central Colorado the mean values were below 20. In central and northern New England, and north of a line traced from east-central New York over the southern lake region and the extreme upper Mississippi valley to northeastern Wyoming, thence to north-central New Mexico, and thence irregularly northwestward to northwestern Montana the mean temperature was below 30.