

MONTHLY WEATHER REVIEW,

AUGUST, 1881.

(General Weather Service of the United States.)

WAR DEPARTMENT,

Office of the Chief Signal Officer,

DIVISION OF

TELEGRAMS AND REPORTS FOR THE BENEFIT OF COMMERCE AND AGRICULTURE.

INTRODUCTION.

In preparing this REVIEW the following data, received up to September 20th, have been used, viz: the regular tri-daily weather charts, containing the data of simultaneous observations taken at 133 Signal Service stations and 15 Canadian stations, as telegraphed to this office; 185 monthly journals and 180 monthly means from the former, and 15 monthly means from the latter; 201 monthly registers from Voluntary Observers; 50 monthly registers from United States Army Post Surgeons; Marine Records; International Simultaneous Observations; monthly reports from the local Weather Services of Iowa, Nebraska and Missouri, and of the Central Pacific Railway Co.; reliable newspaper extracts; special reports.

BAROMETRIC PRESSURE.

The distribution of mean atmospheric pressure over the United States and Canada for the month of August, 1881, is shown by isobaric lines (in black) upon chart No. II. The areas of lowest barometric mean cover the Upper Missouri valley, extreme Northwest, Texas, and California. Within these districts the pressure ranges from 29.72 to 29.94. East of the 95th meridian the mean nowhere falls below 29.93, which reading occurred at only one station, Charlottetown, P. E. I. The area of highest mean pressure (30.03 to 30.06) prevails over the lower peninsula of Michigan and thence southeastward to the Atlantic. On the Pacific coast the barometer ranges from 29.83 at Visalia to 30.04 at Roseburg. The following high readings are reported from elevated stations where reduction to sea level is uncertain: Pike's Peak, 30.26; La Mesilla, N. M., 30.25; Fort Davis, Tex., 30.19. Compared with the preceding month the pressure east of the 100th meridian, except along the immediate Gulf coast, is higher, the excess ranging from 0.01 to 0.12 inch. On the Gulf and Pacific coasts and over the Rocky Mountain and Plateau Districts there is a deficiency of from 0.02 to 0.11, inch the greatest change occurring over the Florida peninsula.

Departures from the Normal Values for the Month.—Compared with the means for previous years the mean pressure of the present month is from 0.01 to 0.07 inch below the average in Tennessee, the Gulf and South Atlantic states. Throughout the Missouri valley there is a deficiency of from 0.01 to 0.04 inch. Westward from Denver and Cheyenne along the 40th parallel to California, the deficiency is 0.02 inch. Another area of deficiency, and where the departure ranges from 0.01 to 0.03 inch, prevails along the New England coast. Elsewhere the comparison displays a normal condition, or an excess of 0.01 to 0.08 inch, the greatest variation being found in the Middle Pacific coast and Upper Lake regions. Stations reporting a normal condition are as follows: Boston, Corsicana, Dodge City, Des Moines, Indianapolis, Knoxville, New Orleans, Olympia, Philadelphia, Springfield, Ill., and St. Paul.

Barometric Ranges.—The range of pressure for the month has generally varied from 0.3 to 0.6 inch, and in the extremes from 0.16 inch at Silver City, N. M., to 0.83 inch at Eastport. Throughout the several districts the monthly barometric range varied as follows: New England, 0.71 inch on Mt. Washington to 0.83 at Eastport; Middle Atlantic states, 0.56 at Lynchburg to 0.80 at New York; South Atlantic states, 0.46 at Smithville to 1.05 at Savannah; Eastern Gulf states, 0.31 at New Orleans to 0.52 at Montgomery; Western Gulf states, 0.23 at Denison to 0.44 at Indianola; Rio Grande valley, 0.25 at Eagle Pass to 0.36 at Laredo and Brownsville; Ohio valley and Tennessee, 0.40 at Louisville and Nashville to 0.57 at Morgantown; Lower Lake region, 0.53 at Toledo and Sandusky to 0.67 at Rochester; Upper Lake region, 0.52 at Milwaukee and Grand Haven to 0.74 at Duluth; extreme Northwest, 0.72 at Ft. Buford to 0.82 at Moorhead and St. Vincent; Upper Mississippi valley, 0.41 at Des Moines to 0.62 at St. Paul; Missouri valley, 0.34 at Leavenworth to 0.80 at Ft. Bennett; Northern Slope, 0.41 at Cheyenne to 0.65 at Ft. Assinaboine; Middle Slope, 0.22 at Ft. Elliott to 0.45 at Pike's Peak; Southern Slope, 0.19 at Concho to 0.41 at Jacksboro; Northern Plateau, 0.36 at Eagle Rock to 0.58 at Ft. Missoula; Middle Plateau, 0.29 at Pioche to 0.39 at Winne-mucca; Southern Plateau, 0.16 at Silver City to 0.28 at Phoenix; North Pacific coast, 0.30 at Roseburg to 0.36 at Portland; Middle Pacific coast, 0.42 at San Francisco and Sacramento to 0.43 at Red Bluff; South Pacific coast, 0.23 at Campo to 0.44 at Visalia.

Areas of High Barometer.—Three such areas are described:

No. I.—An area of high barometer appeared over the Northern slope on the morning of the 6th, the barometer having risen 0.40 inch at Moorehead and 0.39 inch at Huron. The winds in the Missouri and Upper Mississippi valleys had shifted to northerly, and the temperature over these regions had fallen from 4° to 9°, and at Huron 19°. Frost occurred at St. Vincent. The area moved eastward during the 6th and 7th, and on the morning of the 8th was central over Lake Erie. It then passed to the south, the pressure diminishing. The pressure remained highest and above the normal in the Gulf states until the 10th. The following minimum temperatures occurred: St. Vincent, 36°; Moorehead, 45°, on 6th; Milwaukee, 52°; Alpena, 48°; Port Huron, 48°; Toledo, 55°; Sandusky 59°, on the 8th.

No. II.—With the pressure over the country below the normal, the barometer began to rise over the Northern slope on the 11th, and continued until the morning of the 13th. Then appeared an area of 30.10 following low area No. III. It was central at Duluth on the morning of the 14th, the barometer at that station being 0.27 inch above the normal. The winds had shifted to north or northwest in the Lake Region, the Middle Atlantic and New England states, with rain in the Lower Lakes on the 13th, and in the Middle Atlantic states on 13th and 14th. On the morning of the 15th it appeared as an area of 30.20 over the Upper Lake region, and during the day moved to the east over Ontario and Quebec. On the afternoon of the 17th it was over New Brunswick, the barometer at Chatham being 0.44 inch above the normal. It then disappeared, the pressure falling below the normal in New Brunswick during the night of the 19th. The following minimum temperatures occurred: Omaha, 59° on the 12th; Bismarck, 49° and Leavenworth 63° on the 13th; Yankton and St. Paul, 52° on the 14th; on the 15th, Duluth and Madison, 52°; Marquette, 41°; Escanaba, 42°; Detroit and Grand Haven, 53°; Champaign and Springfield, Ill., 54°.

No. III.—Following area of low barometer No. V, an area of 30.10 appeared in the Northwest on the 18th, with the highest pressures at St. Paul and St. Vincent. The pressure remained highest in the extreme Northwest until the 20th. An eastward movement commenced on this day. At midnight of the 21st the highest pressure was at Marquette. On the 22d it was at Alpena. On the 23d it extended over the Maritime Provinces and part of New England, and on the 24th it appeared as an area of 30.30 on the New England and Middle Atlantic coasts. Here the pressure remained highest until the 30th, gradually extending into the South Atlantic states after the passage of low area No. VI to the northwest. To the presence of this high area on the Atlantic coast we may attribute the very unusual path of storm No. VI. When the latter area reached the South Atlantic coast there was a low area in the extreme Northwest, with the barometer below the normal at all points between. To the northeast of low area No. VI, the direction in which storms of this class usually move, often recurring, the pressure was high. Under these circumstances, unable to recurve in the usual latitude, the storm was carried off to the northwest with diminished energy, and the Middle Atlantic and New England coasts escaped a cyclone of destructive violence. The following minimum temperatures are noted in connection with this area: Burlington, Vt., 50°, 25th; Eastport, 51°, 25th, 27th; Morgantown, 52°, 24th; Baltimore, 60°, 28th; Lynchburg, 62°, 27th; Charlotte, 64°, 26th; Charleston, 69°, 26th, 27th; Atlanta, 65°, 31st; Key West, 74°, 30th.

Areas of Low Barometer.—Six such areas are described for the month of August, 1881; five of them are charted. No. VI is specially noted for its very unusual path, its energy and the extensive destruction of property and lamentable loss of life caused by it.

No. I.—(Not charted.) High winds accompanied by heavy rain prevailed at intervals, and with variable intensity at the Gulf ports, from Indianola to Pensacola, from the 1st to the 8th. The following is the report of velocities and rainfall: Port Eads, 34 miles on 1st; 29 miles on 2d; 40 miles on the 3d; 27 miles on the 5th. 7.12 inches rain fell between midnight of the 4th and the morning of the 6th. Pensacola, 32 miles on the 2d; 40 miles on the 3d; 28 miles on the 5th. 10.41 inches rainfall on 2d and 3d; 5.54 inches rainfall on 4th and 5th. Mobile, 40 miles on 8th; 6.20 inches rainfall on the 3d, and 6.66 inches on the 4th and 5th. Indianola, 30 miles on the 1st, and 38 miles on the 6th. Signals for this storm were ordered as follows: Port Eads—up, morning of 2d; down, midnight of the 3d; up, morning of the 7th; down, morning of the 8th. Mobile—up, morning, 2d; down, midnight, 3d. Pensacola—up, morning, 2d; down, midnight, 3d. Cedar Keys—up, morning, 2d; down, morning, 3d; Maximum velocity, E. 16 miles. Indianola, up, morning 7th; down, midnight, 8th; velocities, 56 miles on the 7th; 25 miles on the 8th.

No. II.—On the 6th the barometer commenced to fall over the Northern Slope, and the fall continued during the 7th. The morning report of the 8th showed the area to be central near Moorehead. From this date the path of center is charted until it disappeared over New Brunswick, on the 10th. A velocity of 25 miles was reported from Grand Haven on the 8th, and 28 miles on the 9th. There were light rains in the Lower Lake region on the 9th, and general rains in New England, the northern part of the Middle Atlantic states and in the Canadian Maritime Provinces on the night of the same date, followed by clearing and fair weather and cool NW. winds on the 10th.

No. III.—Followed immediately after the high barometer that succeeded No. II. On the afternoon of the 10th when No. II was central and disappearing over New Brunswick, No. III was central near Fort Assinaboine. During the night of the 10th and on the 11th the storm moved as far east as Prince's Landing on Lake Superior, accompanied by rain in the Upper Lake region. Cautionary signals were ordered up at Grand Haven, Milwaukee, Escanaba, Marquette and Duluth on the morning of the 11th. Justified at station, at Grand Haven, S. 28 miles; Marquette, SW., 26 miles, and at Escanaba and Milwaukee, by velocities of over 25 miles within one hundred miles. Duluth not justified. Signals were down on morning of 12th. The storm was central near Rockliffe at midnight of the 12th, and moved off to the NE. over New Brunswick on the 13th. Rain fell in the Lower Lakes, New England and the Maritime Provinces on this date, and in the New England and Middle Atlantic states on the 14th.

No. IV.—A storm, whose path can only be charted for a short distance, passed from the Gulf of Mexico across the southern end of Florida on the 17th. The following velocities are reported: Port Eads, 25 miles on the 16th; Cedar Keys, 27 miles on the 17th; Punta Rassa, 28 miles on the 17th; Key West, 27 S. miles on the 16th, and 28 miles NE. on the 17th. Heavy rain fell at Key West and Punta Rassa.

No. V.—The afternoon reports of the 16th showed an area of low barometer central in the Missouri valley, NW. of Fort Bennett. The barometers at the river stations being from 0.10 to 0.20 inch below the normal. On the morning of the 17th the center was near Yankton. Rain reported from Yankton and Bennett only. On morning of 18th the area was central in western Indiana, and by the morning of 19th had moved into Kentucky, south of Louisville, causing rain in the Upper Lake region, in Illinois, Indiana, Kentucky, Tennessee, and in the South Atlantic states. From this date it cannot be traced as a distinct area.

No. VI.—The following telegram from the Office of the Chief Signal Officer indicates the character of earliest information received by this office concerning the incipient formation of this storm, its probable course, and the effort to forewarn all maritime interests:

OFFICE CHIEF SIGNAL OFFICER, WASHINGTON, D. C.,
August 23d, 10.15 P. M.

To the Press and all Seacoast Stations on the Atlantic Coast:

It is reported to the Chief Signal Officer that a hurricane was central last night a short distance north or northeast of St. Thomas, West Indies, with a maximum hourly wind velocity of 60 miles; wind backing from northwest to southwest; one vessel blown ashore. The information given is insufficient to determine the path of the storm's center, but it will probably move northward, and unless it recurves to the northeast will reach the South At-

lantic coast. While storm signals will not be displayed at present, the Chief Signal Officer considers it advisable to send special warnings to all Atlantic ports and to caution shipping against possible danger from the hurricane for the next two or three days.

HAZEN.

The following collection of data relate to the destructive violence of the storm during its progress from a point north of St. Thomas northwestward to Savannah, Ga. Reports from vessels were very meagre, owing to the delay with which such data is generally obtained. Schooner *W. B. Mackie*, from Wilmington, N. C., for Port au Prince, encountered a terrific storm on the western edge of the Gulf Stream during the night of the 23d, in which she lost her deck load and sprung a leak. Schooner *Lucie Wheatley*, from Jacksonville for Baltimore, experienced from 21st to 24th, in about 32° N. 78° W., heavy cross seas, wind blowing a hurricane; 26th, storm increased in fury, threw over deck load; 27th, noon, vessel full of water, masts swept away, hull wholly under water. Steamer *City of Antonio* from New York for Galveston, experienced violent gales off Jacksonville during night of 27th; iron shutters stove in and saloon flooded. Ship *Sandusky*, in about 32° N. 76° W., experienced during 26th and 27th violent storm; vessel dismasted and all hands but two drowned. Bark *Yupulco*, 27th in $30^{\circ} 35'$ N. $77^{\circ} 26'$ W., violent hurricane from NE.; lost foremast, jibboom, maintopmast, and one seaman. Steamer *Dessong*, from Savannah for New York, night of 27th, 80 miles ESE. of Tybee Island experienced violent northeast hurricane. Steamer *Geo. W. Clyde*, from New York for Charleston, reports: left former port 4 p. m. of the 24th, wind SW., continuing in that direction until 7 p. m., when it shifted to NE. with increasing force. Passed Hatteras 4 a. m. of the 26th, wind now veered to ENE. and increased to moderate gale; 7 p. m. off Cape Fear, wind ENE. blowing with hurricane violence; impossible to run ship before the wind; hove to and headed southeast; hurricane lasted for 24 hours, reaching its height about 10 p. m. of the 26th and continuing until 2 p. m. of the 27th with extraordinary violence. Steamer *Saragossa*, from Baltimore for Savannah, reports: left former port 4 p. m. of the 25th, and on the morning of the 27th, about day break, encountered cyclone off Cape Lookout; wind SE. with a velocity of about 75 miles per hour, causing tremendous seas; no abatement of violence until late at night, when the wind slightly moderated, but the sea was still rough and exceedingly high. Morning of 28th (very early) gale began to subside with fine weather and clearing skies, but still experienced an ugly cross-sea setting in from the eastward; about 8 a. m., while to the southward of Cape Romain, experienced heavy cross-seas with gale from the SE. Schooner *Hannah M. Lallis*, 3 a. m. of 27th, in about 32° N. 78° W., encountered furious NE. to SE. gale and was entirely dismasted; most of the crew drowned. Bark *Brunswick* on 23d, and while over 100 miles east of Tybee Island, encountered a fierce hurricane from the NE. veering to SE.; 26th violence of storm increased, vessel nearly dismasted; 27th, 8 a. m., gale continued with very little abatement; 1 p. m. lee yards under water, gale still very furious; between 5 and 6 p. m. slight lull in tempest followed in a short time by a recurrence of the gale redoubled in fury; 9 p. m. vessel disappeared beneath the waves carrying down all but three of the crew. Bark *Robinson Crusoe*, 27th, in $34^{\circ} 30'$ N. $72^{\circ} 30'$ W., experienced violent hurricane from NE. to SE. Bark *Georgiana*, for Milford, Conn., left Charleston on 21st; on 22d and 23d met fresh gales from the NE. with heavy cross-seas, which continued with increasing violence; on the 24th put back to Charleston, vessel badly damaged. The following reports from West India land stations are of interest: 23d, 10 a. m., St. Kitts, SE., cloudy; Antigua, SE., hazy; Point-a-Pitre, SE., fine; Gaudaloupe, SE., fine; Dominica, rainy; Martinique, cloudy, calm; St. Lucia, fine, calm; St. Vincent, fine; Grenada, fine, calm; Trinidad, rainy; Barbados, barometer 30.12, wind E. 4 p. m., St. Kitts, S.E., cloudy; Antigua, SE., hazy; Point-a-Pitre, calm; Gaudaloupe, calm and very hot; Dominica, very cloudy; Martinique, cloudy and calm; St. Lucia, calm and very hot; St. Vincent, fine and calm; Grenada, fine and calm; Trinidad, fine and calm; Barbados, barometer 30.05, wind E., fine. 24th, 10 a. m., St. Kitts, E., cloudy; Antigua, NE., hazy; Point-a-Pitre, calm; Guadaloupe, calm and hot; Dominica, cloudy; Martinique, fair; St. Lucia, cloudy and hot; St. Vincent, cloudy; Grenada, sky overcast, drizzling; Trinidad, fine; Barbados, barometer 30.14, E., fair. 4 p. m., St. Kitts, S., cloudy; Antigua, E., hazy; Point-a-Pitre, fair; Guadaloupe, calm, extremely hot; Dominica, cloudy, rainy; Martinique, rainy; St. Lucia, calm, hot; St. Vincent, calm; Grenada, calm; Trinidad, calm, hot; Barbados, barometer 30.05, wind W., fine. Reports from islands and other places adjacent to Savannah and along the neighboring coast give the following information concerning disasters: White Bluff, 27th, large number of dwellings, orchards

and fine shade trees destroyed; Bryan Neck, 27th, fearful destruction of property; Dorchester, 27th, severest hurricane ever experienced; six persons and many cattle, sheep and horses killed; houses, fences, trees and crops leveled to the ground; nearly all the churches in the county destroyed; highways completely blocked with *debris*. Beaufort, 27th, violent wind commenced on night of 26th, culminating on the following day in a terrific cyclone, which demolished everything in its course; the water rose above the sea-wall and spread through the streets and into the cellars and basements of many buildings. Fleming, 27th, 9.30 p. m., tremendous gale from ENE., causing great destruction. Colonel's Island, 27th, all buildings of every kind swept away; ten persons drowned; crops washed out of the ground; trees uprooted and thrown about in great confusion, making roads impassable. Half Moon Bluff, 27th, the turpentine farms totally destroyed; houses, fences and trees demolished. Egypt Depot, 26th, tremendous gale, with no abatement until the morning of the 28th, reaching its height about midnight of the 27th; great destruction to cotton crop; fields badly washed. Jessup, 27th, during night violent hurricane; houses, fences and trees demolished; country roads in a deplorable condition, being blocked with trees and badly washed. Liberty Co., Ga., 27th, most terrific storm ever experienced; the extreme violence of the wind and the torrents of rain set in about 9 p. m., and continued till the following day; the destruction of forests was terrible; most of the trees, even the largest, were broken off at the trunks and twisted into splinters; the trunks, from three to five feet in diameter, were split into pieces about the size of rails; the highways everywhere were blockaded by fallen trees, and all communication cut off; buildings were in many instances lifted bodily from the ground and then crushed to pieces; huge pieces of timber were carried long distances by the force of the wind. An interesting peculiarity of the storm developed in this section of the state, which was shown by the destructive force of the wind being confined to wide streaks, running from southeast to northwest; the wind appeared to have bounded and rebounded like the waves of the sea; where the furrow of the air dipped there was a streak of destruction plainly marked for distances, in some instances, of 16 miles; in the interval between the streaks trees and buildings stood firm as though nothing had occurred. Montgomery, N. C., gale reached its height midnight of the 27th, as the wind veered to SE.; tide rose 6 feet above ordinary high-water mark, carrying away several large buildings; trees throughout the town were uprooted or broken off, and houses unroofed and otherwise demolished. Beaulieu 27th, fences, trees, and houses in terrible ruin; roads leading into the country rendered impassable by hundreds of fallen trees, all of which were either torn up by the roots or twisted off at a height of ten to twenty feet above the ground. White Bluff, 27th, all bath houses and boats swept away and several residences destroyed. Burnside Island, 27th, all dwellings and out-buildings unroofed or torn down; island nearly submerged. Shipyard Creek, 27th, everything flooded; nearly all buildings washed away. Wilmington Island, 27th, 11 houses blown down and all crops utterly destroyed; all through the woods and fields there were wrecks of furniture, houses, fencing and boats; dead cattle and hogs frequently found. Cockspur Island, 27th, everything swept away; the loss is terrible and unprecedented. Bonaventure, 27th, streets filled with the *debris* of trees, fences and buildings; in the cemetery several large tombstones were broken in pieces. Long Island, 27th, every building carried away save the light-house; the heavy sea burst open the door of the main portion of the latter, used as a residence, and carried away doors, windows, furniture, clothing and all supplies on hand. Hogg Island, 27th, 15 houses carried away and 25 persons drowned; all crops destroyed. William's Island, 27th, 20 houses carried away and 15 persons drowned; mules, horses and other stock lost; rice crops nearly destroyed. Rabbitt Island, 27th, island nearly submerged; all buildings and crops destroyed. Hutchinson's Island, 27th, 18 persons drowned and all buildings swept away. Fig Island, 27th, 13 persons drowned and every plantation destroyed; all huts on either side of the river carried off by the high water and the occupants drowned. McQueen's Island, 27th, all buildings and crops badly damaged. Charleston, 27th, most violent since the great storm of August, 1874; in eastern and southern parts of city wharves greatly damaged; section of city east of East Bay, including about 14 squares, submerged to a depth of several feet; much property in the southwestern portion of the city under water; roofs, window-shutters, fences, shade trees and gates, generally destroyed; all telegraph wires down; business seriously interfered with loss; variously estimated at from \$200,000 to \$300,000. Sullivan's Island, 27th, storm burst upon the island early in the morning, displaying unexampled fury; miles of fencing were blown down, and from 8 to 10 houses destroyed; entire loss estimated at \$40,000. Port Royal, S. C., 27th, ferry house carried away by the extremely high tide, and from 20 to 40 people drowned; the gale was one of the most violent ever experienced. Tybee Island,

27th, at 6 a. m. wind reached an estimated velocity of 80 miles per hour; whole rows of cottages were destroyed, and the strongest houses were unroofed or crushed in by the terrific force of the hurricane; bathing-houses, pavilions, and various out-buildings were swept clear from the beach and carried in shapeless masses through the woods; the ruins in some instances took fire, causing a frightful loss of life. Bethesda, 27th, storm raged with great fury until 1.30 a. m. of the 28th; ground strewn with the wrecks of trees, fences and buildings; all highways obstructed by huge piles of *debris*; railroad and telegraphic communication cut off. Moorehead City, N. C., 24th, over thirty hours in advance of the storm the skies became blackened with sea birds of every kind, size, color and description, moving rapidly towards the west, as if fleeing from the violence of the coming storm. The strange conduct of the birds was equaled, if not surpassed, by the finny tribe, as shown by the latter's rapid flight up Newport river, a narrow, turbid stream. All through the day the fish, in schools of millions, passed up the stream, followed by great droves of porpoises, so thick that the river looked like a slowly moving stream of ink. 27th, birds slowly returning; at Newport, where the stream is very narrow, the fishes and porpoises were so wedged in that they could not move either up or down. The above incident would appear to give evidence of the possession of a wonderful instinct by birds and fishes. Elba Island, 27th, every house and out-building carried away; all crops destroyed; 15 to 20 persons drowned. Fort Pulaski, 27th, storm raged for six hours with demoniac fury; water rose one foot above the floor of the officers' quarters; all houses on the island, as well as every head of cattle, were swept away. Savannah, 26th, during the day it was blustering and very threatening, barometer rapidly falling, wind NE.; through the night the velocity and violence of the wind increased, direction ENE., tide extremely high; at Tybee Island there was a perfect gale from the NE., veering to SE.; 27th, 6.44 a. m., barometer 29.70; 10.44 a. m., 29.61, N., 32 miles; 2.44 p. m., 29.48, N., 36 miles; 6.44 p. m., 29.30, NNW., 33 miles; 7 p. m., NE., 35 miles; 8 p. m., NNE., 48 miles, rain falling in sheets; 8.45 p. m., fierce gusts of from 60 to 80 miles per hour from the NE., accompanied by a deafening roar and the crash of falling buildings; barometer continued to fall rapidly until, at 9.20 p. m., it reached the minimum of 29.08, where it remained about stationary for 20 minutes; the pressure now began to recover quickly, and at 10.44 p. m., barometer read 29.17, wind SE., about 50 miles per hour; midnight, 29.34, SE., 36 miles per hour; 28th, 2 a. m., 29.49, SE., about 28 miles per hour. Damage to property in the city estimated at \$1,500,000. On the morning following the storm there was presented the most terrible scene of wreck, ruin and death that was ever witnessed within the memory of the oldest inhabitant; the memorable storm of 1854 was not as violent or prolonged; streets everywhere were completely blockaded with large trees, huge piles of tin roofing, bricks and parts of buildings; hardly a building in the city but received more or less injury; in and about the city over 300 negroes were drowned, and 35 white persons killed or drowned; along the immediate coast nearly 100 vessels were wrecked. At Bohanville, in southeastern part of city, 20 houses were unroofed and 12 completely demolished; all shade trees and fences blown down; the force of the wind was sufficiently great to drive the sea water up the Savannah river, far above the city; nearly every house received a copious supply of salt water, causing great inconvenience; all creeks leading inward from the sea rose to a great height and flooded the adjacent low lands. Reports from 47 rice plantations on the Cowbahee, Ashepoo and Edisto rivers, Rantowles creek and the eastern and western branches of Cooper river, state that only three plantations escaped with slight loss, while the remainder were almost or entirely submerged with salt water; loss can hardly be estimated. In advance of this storm cautionary signals, on the morning of the 25th, were ordered for the following stations, and justified by the accompanying maximum velocities: Smithville, E., 50 miles; Wilmington, E., 27; Fort Macon, E., 38; Hatteras, NE., 34; Kitty Hawk, E., 32; Cape Henry, NE., 32; these signals were lowered on the morning of the 28th. At other Atlantic coast stations signals were ordered on the 26th and partly justified, as follows; Cedar Keys, noon, SW., 27 miles; Jacksonville, a. m., SW., 37; Savannah, a. m., NE., 60; Charleston, NE., 54; Norfolk, p. m., E., 14; Baltimore, midnight, S., 9; Chincoteague, p. m., SE., 22; Delaware Breakwater, p. m., E., 16; Cape May, midnight, SE., 17; Atlantic City, midnight, E., 10; Barnegat, midnight, SE., 13; Sandy Hook, midnight, SE., 24. All of these signals were lowered on the morning of the 28th, except at Cedar Keys, which remained up until p. m. of 29th, owing to damage to telegraph lines, but was ordered down p. m. of the 28th. By the morning of the 28th the storm had moved westward into central Georgia with diminished violence. On the morning of 29th the center was near Memphis, the barometer at that station being 0.35 inch below the normal; heavy rain had fallen along the path of storm. The next morning the center had moved into Iowa, and thence passed off to the north and east.