

DEADLY STORMS.

Paths of Destruction Left by the Great Hurricanes.

We near the end of the season of the West Indian hurricane. No other atmospheric phenomenon takes so large a toll of human life and destroys so great an amount of property.

A few years ago these vast storms were technically called cyclones, though that term was also and erroneously employed to designate the small, whirling storm born of the little black cloud no bigger than a man's hand.

Originally the term hurricane was applied to storms of the West Indies, just as typhoon was associated with storms of the East Indies and the China Sea.

The hurricane season is from July to October, inclusive. Extensive storms forming or moving over any part of North America at other seasons would be called cyclones, or areas of low pressure, although they might be as severe as most hurricanes.

The West Indian hurricane originates or develops in the southern region of the zone of easterly trade winds, generally east of the Windward Islands, on the border of the Torrid Zone or equatorial belt of calms, which ranges close to ten degrees north latitude.

The formation of West Indian hurricanes is not fully understood. The information at hand, which forms a summary of the study, would show that these storms may be days or even weeks in forming; gathering in excessive moisture over a central region of excessive heat, thus gradually reducing the atmospheric pressure in the vicinity.

Similar storms in the southern hemisphere rotate from left to right. The excessive moisture carried by the upped flow of wind is condensed, the atmospheric pressure reduced, clouds are formed and heavy rain results, thus liberating a great amount of heat used in the process of evaporation.

The billowing currents blow horizontally, with increasing force as they approach the centre, gradually changing to a vertical motion, and, when finally near the centre, to an upward spiral motion. With the increasing force or spiral upward motion at the centre the billowing current at the surface becomes more marked, until a vast region of air is brought under the influence of an embryo hurricane.

Several hours before these phenomena reach the eye of the observer the atmosphere becomes very quiet and the sky is almost a dead calm exists. The barometer begins to rise and all conditions point to a period of fair weather. This is the warning of the storm monster to the unwary shipmaster.

Far about the flying south of the storm, the clouds rise up to the zenith. A sudden breeze springs up, moving in the opposite direction to the flow of the spreading clouds. The breeze is being drawn toward the centre of the impending storm. The wind blows up; the barometer begins to sag and presently black clouds darken the horizon and the hurricane is in sight.

It is not long after the rotary motion of the central column of warm air sets in that the storm moves from its place of formation in a westerly course, contrary to the movement of storms in a more northerly latitude. The westerly movement terminates when the storm centre reaches the neighborhood of twenty five or thirty degrees north latitude and comes within the influence of the prevailing south and west winds. It then recurves to the northeast.

The recurve may bring the centre in the neighborhood of the west Gulf, or possibly to the east of Florida in the Atlantic. The storm centre then follows a course nearly parallel with the Gulf Stream and continues that course northeastward until beyond the region of observation. It is now an enormous whirlpool of wind, moving northward at express train speed, sometimes taking not more than twenty four hours in passing from the Gulf of Mexico into the North Atlantic.

In some cases these storms pass inland over the Gulf States to the Great Lakes and then out the St. Lawrence Valley, losing force in travelling overland. It is seldom that they retain their power if the storm centre passes inland to the west of the Mississippi River. They display their worst elements of wind and rain on or near the coast. They apparently exhaust themselves before passing any great distance inland, and become mere atmospheric depressions until they reach the Lake Regions, where they are supplied with moisture and retain some of their former energy and pass out the St. Lawrence Valley or over the New England States to the Atlantic coast with considerable force.

There is no port on the Atlantic coast that has not its roster of missing ships, victims of these great disturbances.

Hurricanes are characterized by very heavy rainfall and great wind violence. Their greatest force is experienced before they recurve to the northeast. After this they increase in diameter and their force is accordingly diminished, but extends over a larger area. Their progressive motion is somewhat increased by their conformation, being broken in passing over the land. Over the ocean they retain their circular form, but their advance is slightly diminished by a greater rotary force.

Wind velocities in well defined hurricanes may range from fifty to one hundred and fifty miles an hour; the higher velocities generally occurring over the ocean. The diameter of these storms varies from a few hundred miles to fifteen hundred or two thousand miles.

The centre of disturbance or eye of the storm is marked by an extremely low atmospheric pressure. During the passing of the centre the barometer generally shows a slight rise, the atmosphere clears and there is a comparative calm. To all appearances the storm has passed. This condition may last an hour or two, when all of a sudden the wind which has been in this brief period idly shifting from one point to another blows a gale from a southerly quarter, then rapidly shifts to the west, and finally to the northwest.

The storm centre is passed, but the wind will probably blow with greater fury from the latter quarter than it did before the storm centre was reached. This gale from the northwest may last for hours, according to the rapidity with which the barometer rises. The faster it goes up the more severe will be the blow; but the sooner it will be over. Exceedingly heavy rainfall marks the passage of these storms and covers a very wide area of country. The major part of the fall is usually deposited in the Southern States or along the Atlantic Coast.

The time of the autumnal equinox (on or about Sept. 21) occurs in the season of these severe storms, and this has probably led to the belief which has been steadfastly adhered to by many that a storm always occurs at the time of the equinox. Such is not the case. There is no scientific reason that can be assigned for calling any storm an equinoctial storm; nor is there any reason that can be advanced why a storm should be sprung upon us when the sun crosses the imaginary line of the equator any more than when it crosses any other given point going north or south.

It is a scientific fact that storms have no movement over the equator, and nothing but heavy local rain is felt there; again they have never been known to cross the equator, going north or south, but rage with great fury to the north of the boundary line of the belt of calms in the northern hemisphere and to the south of that line in the southern hemisphere.

Besides the danger from the great wind attending the movement of hurricanes there is a secondary element which is equally disastrous along the line of the Atlantic coast. The wind for some time before the storm centre approaches blows from the northeast for a great dis-

Dyspepsia

From foreign words meaning bad cook, has come rather to signify bad stomach; for the most common cause of the disease is a predisposing want of vigor and tone in that organ.

No disease makes life more miserable. Its sufferers certainly do not like to eat, they sometimes wonder if they should eat to live.

W. A. Nugent, Belleville, Ont., was greatly troubled with it for years; and Peter H. Gaare, Eau Claire, Wis., who was so afflicted with it that he was nervous, sleepless, and actually sick most of the time, obtained no relief from medicines professionally prescribed.

They were completely cured, as others have been, by

Hood's Sarsaparilla

according to their own statement unalterably made. This great medicine strengthens the stomach and the whole digestive system. Be sure to get Hood's.

stance over the ocean, banking the water up on the coast to considerable height above the normal, inundating and destroying property and endangering life. These high tides may occur when there is no storm in sight. They have frequently visited the coast, giving the only evidence of a severe storm at sea, too far from land to be detected by instruments.

The serpentine course and erratic movement of hurricanes make them very difficult, even for the most experienced and scientific forecaster, to predict. Accurate earnings to mariners and people living along the Gulf and Atlantic coast lines would be of incalculable value. Commanders of ocean craft cannot exercise too much care in navigating waters within the line of these sea monsters. E. B. DUNN

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The use of Dr. Humphrey's Specific restores the numbed vitality, starts the blood tingling, relieves the congestion; arouses the sluggish liver, permits the system to cleanse itself, and "breaks up" the Cold.

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NEWS OF THE WEEK

York, to give his 3,000 mill operatives at Fall River, Mass., another five per cent raise in wages, may bring about a strike in the other mills.

The board of directors of the Pan American Exposition have decided the final closing of the exposition will be on November 2.

Mrs. Lucia Seriola was horribly murdered early Tuesday evening at Plymouth, Mass., her body being found in the road.

The money and securities returned to the Merchants' Bank, Lowell, Mass., by Albert G. Smith and Lewis H. Swift, through the latter's counsel, touched the million mark. The comptroller of currency at Washington has received a telegram from Alfred Ewer, national bank examiner, reporting that the bank's loss is about \$115,000 that the bank is fully solvent and that there was no run upon it.

John Brown of Toronto, has received word from the war office stating that his son was killed in action at Stettinberg, Cape Colony, on Sept. 12.

Lord Strathcona, Canadian high commissioner, accompanied by Lady Strathcona, Dr. Howard and Hon. Mrs. Howard, will return to London in November.

Mayor Prefontaine of Montreal, refused the utilized invention of Ald Clearhue's claim that an attempt had been made to bribe him in connection with the award to the electric light trust. The Mayor said Clearhue had neglected to make specific charges.

Lord Kitchener has wired to the war office for more mounted men.

The annual report of the Great Northern Railroad Company was given out Monday. The gross earnings for 1891 were \$28,350,689; operating expenses, \$15,843,431; net earnings, \$12,507,268; taxes, \$969,642; income from operation, \$11,537,626. These figures show a falling off in income for this year of \$1,504,786 from the figures of 1890.

The details for the execution of Czolgoz have been practically completed. It is believed the execution will take place before 6 o'clock on the morning of Oct. 28 or if everything cannot be ready on that day, at a similar hour on the 29th.

James D. Wood, who drew the capital prize in the Lewston and district at the El Reno lottery last August and settled a claim valued at nearly \$50,000, is dead of typhoid fever, after a brief illness.

Dr. A.—Why do you always make such particular inquiries as to what your patient's diet is? Does that assist in your diagnosis? Dr. B.—Not much; but it enables me to ascertain their social position and arrange my fees accordingly.

YOUR BEST FRIEND On wash day and every other day is SURPRISE SOAP It will give the best service; is always uniform in quality, always satisfactory. You cannot do better than have Surprise Soap always in your house. SURPRISE is a pure hard Soap.

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Before After Wood's Phosphodine, The Great English Remedy. Sold and recommended by all druggists in Canada. Only reliable medicine discovered. Six packages guaranteed to cure all forms of Sexual Weakness, all effects of abuse or excess, Mental Worry, Excessive use of Tobacco, Opium or Stimulants. Mailed on receipt of price, one package \$1.50, six, \$8. One will please, six will cure. Pamphlets free to any address. The Wood Company, Windsor, Ont.

CANADIAN PACIFIC EXCURSIONS BUFFALO GOING T. 15, 17, 19 AND RETURN O.C. 22, 24, 25 \$17.50 RETURN 15 Days from Oct 8 to 23. Only one Night on Road to Buffalo by Canadian Pacific. MONTREAL GOING O.T. 21, 23, 25 AND RETURN NOV. 6th, 1901 \$10.00 See Ticket Agent or Write to A. J. HEATH, D. P. A., C. P. R. ST. JOHN, N. B.

INTERCOLONIAL RAILWAY. Sale of Unclaimed Goods, There will be a sale of Unclaimed Goods at the Freight Shed at St. John Station on FRIDAY, the 1st November, 1901, commencing at 10 o'clock. Catalogues can be seen at the Railway Stations. D. POTTINGER, General Manager. Railway Office, Moncton, N. B., 11th Sept., 1901. WANTED—A Large Wholesale House intends to establish a branch office in New Brunswick and desires Manager for same. Salary \$150 per month and extra profits. Applicant must furnish good references and have \$1500 to \$2000 cash. Address Superintendent, P. O. Box 1151, Philadelphia Pa.

E. H. Grove This signature is on every box of the genuine Laxative Bromo-Quinine Tablets the remedy that cures a cold in one day. MOOSE MEAT —AND— VENISON. THOS DEAN, City Market.