

THE SWEEP OF THE COLD WAVE.

Some Results of Observations Concerning the Career of the Great American Blizzard.

As in the case of the tornado, the direct origin of the cold wave is shrouded in mystery. It is known that a majority of cold waves make their appearance in the Northwest east of the Rocky Mountains; and it is also pretty well established that they are due to an inrush of cold air from the regions of perpetual snow and ice at the north. But why that region should be any more hospitable to cold air from the north pole than other sections, where cold waves form less frequently or not at all, is an important problem that has never been solved. Theories have been advanced based upon the vastness of the plains in that region and their capacity for absorbing and giving off heat, but no theory on the subject has been generally accepted, and the greatest meteorological authorities in the country do not attempt to explain the phenomenon in their writings. Cold waves may form at any moment. They seem to depend not at all on the time of day, and but to a limited extent on the season of the year. They do not come and go in cycles but erratically.

Lieut. Thomas M. Woodruff, the officer in charge of the indications office in St. Paul, made something of a study of cold waves which connected with the chief weather office in Washington, and the results of this study are given in a pamphlet in the "Signal Service notes" series, published in 1885. The pamphlet contains the substance of all that is known with reference to this subject, Lieut. Woodruff made his studies from the tri-daily weather charts of the years 1881 to 1884 inclusive. After stating in a general way that a fall of temperature succeeds or follows an area of low barometer; that a rise precedes such an area, and that with respect to an area of high barometer the rise and fall of temperature usually occur in reverse order, he says:

Areas of high and low barometer move almost invariably across the United States from west to east. Most areas of low barometer are formed in the region east of the Rocky Mountains; and as these low areas move easterly, the high moves in and we have a cold wave of more or less intensity as the result.

Then it is shown that in the four years under consideration, 114 of the cold waves observed originated east of the Rocky Mountains, or came down the east side of these mountains from the British Northwest Territory, while 34 other cold waves observed came from the Pacific coast. With but few exceptions, all the cold waves in the Northwest appeared first at Helena, Mont., and these few exceptions were felt first at Bismarck, Dak. "We must conclude," adds Lieut. Woodruff, "that these waves have their origin in the vast regions of ice and snow near the arctic circle, far to the north of our stations."

With respect to their progressive motive, cold waves are divided into three classes:

First—Those that move directly across the country from west to east, and which follow an almost invariable path along the chain of great lakes and across New England. These do not extend to the States south of the Ohio.

Second—Those which move in a southeasterly direction and cover the entire country in their progress.

Third—Those which move southerly from Montana and Dakota to Texas, thence through the Gulf States, and then northeasterly over the Atlantic coast States. It sometimes occurs with this class that the cold wave is first felt in St. Louis and Shreveport before being felt at St. Paul and Chicago, and that then the cold wave takes general movement eastward of the second class.

The second class was the most numerous in the four years observed. The rate of progress was very variable. Considering Helena as the first point of observation, there were six cases in which the cold wave was felt simultaneously at St. Paul and Helena; 19 in which it reached St. Paul 8 hours after its appearance at Helena, 19 in 6 hours, 11 in 24 hours, 12 in 32 hours, 3 in 41 hours, 2 in 48 hours, and 1 in 72 hours. From this it will be seen that all the cold waves that reach St. Paul from Helena, 73 per cent. arrive within twenty-four hours. As a rule, it is found that the maximum effect of a cold wave occurs at each station in a very short time after its occurrence in the Northwest, generally within twenty-four hours, and often at the northern and western stations at once.

There are many other curious facts connected with the progress of cold waves. Many instances occur, says Lieut. Woodruff, where the temperature at a given station, at the time of the appearance of the cold wave in the northwest, is lower than the minimum afterward produced by the cold wave. It often happens that a cold wave sets in from the extreme Northwest, and upon reaching the Mississippi Valley divides a part going northeasterly to the lower lake region and the other part southward to the Gulf States. In either case the intensity appears to be greatly diminished. This action seems generally to be due to the sudden development of a storm somewhere in the southern part of the Missouri valley. Sometimes a storm of slight energy remains in Kansas, Missouri, and the Indian Territory, and has the effect of retarding, or even totally destroying a cold wave. Again, when a cold wave is retarded in this way it seems often to gather force and intensity, and rush rapidly forward and spread over the entire country. Another frequent feature is that after a cold wave commences the temperature continues to fall in the North-west, and another wave is formed entirely distinct from the first, from which it becomes separated by a warm wave. The warm wave is only a narrow belt, but the cold waves are perfectly distinct.

The tables prepared by Lieut. Woodruff show that cold waves are most numerous and most severe in the months of January, February, and March, although some very severe ones do make their appearance in other months of the year. Also it appears that the most decided changes of temperature appear upon the 3 P. M. charts of the Signal Service, and that the most decided and most severe cold waves follow severe storms. The prediction of the progress of a cold wave is attended with a good deal of difficulty, largely on account of the fact that there is no way of determining which of the three paths it will take.

Activity, like zeal, is only valuable as it is applied; but most people bestow their praise on the quality, and give little heed to the purposes to which it is directed.

The King of the Slavers.

When Tippu Tib, the great slave and ivory trader of central Africa, returned to Stanley Falls last spring he was not welcomed by the other Arab and half-caste traders. Some of them are almost as powerful as himself, and though they had for years acknowledged his leadership, they now combined to oppose, and even to fight him. The reason was that Tippu Tib had turned his back upon his old business and his former friends and had engaged in the service of the Congo State, to suppress the slave trade at Stanley Falls. It was hoped that with the large force of men in his service he would be able to cope successfully with the slave merchants if they undertook to carry on their murderous raids in spite of his interdiction. Tippu Tib believed himself that he needed no assistance in the work of asserting his complete authority over the Stanley Falls district.

Tippu Tib overrated his strength. All the traders combined against him and bluntly gave him to understand that if he had sold himself to the enemies of the "trade" he had better take himself off, for the merchants intended to do as they pleased. This was a great disappointment to the old leader of the slave stealers, for he had expected to convince the most powerful among them that their greatest profit in the future was in the direction of the legitimate ivory trade by way of the Congo River.

The next boat down the river carried a report from Tippu Tib to King Leopold, in which he said that before attempting to coerce the slavers into submission, he would await the arrival of ammunition, of a small force of soldiers, and of two or three white officers whose counsel he desired. He had in his camp a considerable force of his own men, and he wished to have them reinforced by only a small body of trained soldiers from the lower river.

Capt. Van de Velde, one of the oldest and best known agents of the Congo State, was accordingly sent from Belgium to the Congo. He organized at Poma his party of less than 200 Houssa soldiers from the Soudan, and accompanied by three white officers he started up the river. His expedition, it is supposed, will reach Stanley Falls this week. This is the first attempt of the whites in the Congo valley to stay the progress of the slave traders with military force.

It is very likely that there will be stirring times at Stanley Falls as soon as an active effort is made to subject the traders to the authority of the Congo State; and it is certain that a harder fight than Gordon's against the Soudanese slavers will be required to stop the traffic of the Zanzibar merchants in the upper part of the Congo basin.

The Governor-Generalship.

The report that was current in the cable dispatches some time ago that Lord Lansdowne, now Governor-General of Canada, was to succeed Lord Dufferin as viceroy of India, and that Lord Stanley, of Preston, brother of, and heir presumptive to, the Earl of Derby, was to reign at Ottawa, has been confirmed. These changes, we presume, are supposed to be based on a system of promotion, but they remind us most forcibly of Mr. James Anthony Froude's remark in his latest book, "The English in the West Indies," that the Home policy, in effect, has come to be a matter of rotation in colonial office. No matter how efficient or inefficient a Governor of any province or colony may have proved himself, when it becomes advisable to remove him elsewhere; the pieces are merely moved on the checker-board. In this instance the changes have been made necessary by the resignation of Lord Dufferin, which some people affect to regard as a surprise, whereas the truth is that he proposed to take this step two or three years ago, when Lord Salisbury first took office, but was persuaded to remain at Calcutta owing to the then critical state of things on the Afghan boundary and in Burmah. Now the situation at both extremes has greatly improved and Lord Dufferin doubtless feels at liberty to carry his original purpose into execution. But what is his lordship going to do? He is notoriously not a rich man and for many years has fed on governorships and viceroyalties until the salaries attached must have become to him more or less of an object. That a man so diplomatic in debate and so astute in policy will be allowed to seek seclusion is out of the question. How, then, will he be employed? The strangest feature as regards answering that is that nobody appears to know how Lord Dufferin stands relative to Home Rule. Some say that he is well affected towards it; others that he is coming to England to denounce Mr. Balfour and to take a prominent part in attacking that gentleman's course in Ireland; others again that he is going to support Lord Londonderry at Dublin Castle, and yet others who believe that he is going to enter the cabinet as foreign minister. To whatever party his lordship allies himself he will undoubtedly lend both strength and influence.

But, of our new governor. Lord Lansdowne cannot be called a bright or a brilliant man, and is no more likely to set the Ganges on fire in India than he has done the St. Lawrence in Canada, but for all that he has a latent force of character that in cases of emergency stands him in good stead, as was shown by his attitude during the O'Brien episode. Moreover he has that necessary adjunct of the modern governor an indisposition for meddling. His successor, Colonel Frederick Arthur Stanley, Baron of Preston, created so in 1886, comes of too staunch a stock to be really the "amiable nonentity" that the *Pall Mall Gazette* declares him. In fact such is the history of the family that in spite of the political instability of the present Earl Derby, it is almost impossible to think of the family without reflecting upon the discovery made by the *London Times* at the death of his father, the Rupert of Debate, that there is but one word in the English language that rhymes with Stanley, and that is—manly. Our coming ruler may not be an orator or a man of letters, but he has had much experience of official life, having been in Parliament for twenty-three years and filled the positions of a Lord of the Admiralty, Financial Secretary to the War Office, Secretary to the Treasury, Secretary of State for War, Secretary of State for the Colonies and President of the Board of Trade, an office he will resign to come to Canada, and is, therefore, well qualified to preside over Ministerial Councils. Moreover, he is described as hospitable, affable and sensible, and what more can be desired of an occupant of Rideau Hall? He is married to Lady Constance Villiers, fourth daughter of the Earl of Clarendon, and is the father of a large family.

WAS IT A MAN'S SOUL?

A Mysterious Incident by the Deathbed of a Chattanooga Man.

The killing of Lewis Owens by James M. Barnes last month will be recalled. But there is one peculiar feature of the case, or rather a feature that grew out of the case, that has just come to the surface, and that is as yet known to but few Chattanoogaans.

A few months ago young Barnes came here from Georgia and formed a partnership with M. J. Nix to engage in the boot and shoe trade. After a few weeks Barnes sold out to Lewis Owens, one of the wealthiest and best-known men in Tennessee. It appears that Barnes and Owens quarrelled over the settlement, and, after being struck in the face, Barnes drew his revolver and shot Owens three times, the third shot being fatal, though not instantly. The wounded man was carried to his house, where everything possible was done, but nothing could save him. However, he fought desperately to beat back the rider of the pale horse, and so gallantly did he struggle that he lived several days. Saturday, Jan. 14, came, and Barnes was for the second time taken before the magistrate, and after a stubbornly fought trial he was released on bail, the magistrate holding that inasmuch as the victim of his shooting was still alive, murder was not yet committed. The next day Owens grew worse, and toward evening sank into a stupor. Those who had been watching by the bedside knew the end was not far off.

Among those who remained through the night was ex-Mayor Sharp. A little after 4 o'clock Monday morning, Mr. Sharp left the room in which the wounded man was lying for a moment, and a circumstance that soon occurred is the feature referred to in the beginning of this story. Mr. Sharp does not like to talk of the matter, but he consented to tell it to your correspondent, and his own words are used.

"I was standing," he said, "with my elbow resting upon the mantelpiece, looking down into the fire. The coals were nearly consumed, and the apparent efforts of the embers to burst again into flames again reminded me of the heroic efforts of my friend to get a fresh and strong hold upon the soul that was surely, though slowly slipping away from him. And I was running over in my mind the vicissitudes of life—how fleet of foot misfortunes are; how sorrow comes across our path at the meridian hour of the brightest day, leaving a shadow by us—when the lines of Horace came to me: 'Pale death with equal tread knocks at the cottage of the poor and the palace of the rich.' The thought was still lingering in my mind when I was aroused by a tap on my shoulder. Supposing some one had entered while I was absorbed in thought, I turned to answer, but no one was there, and the door was still closed. I was startled, and immediately returned to the wounded man's side, where I found the watchers as pale as the watched, and trembling like aspen leaves. They asked me if I had been making any noise, and on assuring them to the contrary they looked at each other in amazement. They said that just before I entered the room a sound as of the moaning of the wind seemed to pervade the room, and peculiarly appalling sounds—not loud, but ominous—were distinctly heard; and that for an instant the lamp, which had been turned low, almost went out, and the little light left seemed to shine as though through a fog. What it was I know not, but it couldn't have been fancy on the part of us all. There were two other watchers beside myself. Besides, I was in a separate room, with the door closed, and I had said nothing to them of the tapping on my shoulder. If I were a Spiritualist I would believe that the soul of Lewis Owens, just starting on its journey home stopped to say good-by to me, for when we went to look at our charge he was still in death."

Mr. Sharp is one of the best-known citizens of Chattanooga, a member of the bar, ex-Mayor of the city, intelligent and fearless. He is so well known and his word is so trustworthy that those who have heard the story cannot but believe that something supernatural attended the flight of Lewis Owens's spirit from its prison home of clay.

Novelty in Dinners.

After the soup had been served, and just prior to serving the next course, the host gave his signal and rose from his seat, as did every other gentleman at the table, all the ladies remaining seated. Each gentleman then moved to the next gentleman's seat to his right. When this was first done the ladies, not being let into the secret, were very much surprised at the unusual conduct of the gentlemen, and could not at once comprehend the meaning of it; but when they gathered its full intent, and the charm there was in it, it was decidedly gratifying to note the merriment and interest with which they received the innovation. Just prior to the commencement of the next course the host gave his signal again, and each gentleman again moved one gentleman's seat to his right, and so on. The entire setting of the courses was so harmoniously arranged that at the close of the dinner each gentleman had visited, for a short space, every lady at the table and had at last returned to her whom he had escorted in to dinner.

A Good Family Clock.

Omaha Jeweler—"Here, sir, is a clock which will, I think, please your esthetic tastes. At precisely 10 o'clock every evening a chime of bells rings and a bird hops out and sings a carol."

Omaha Man—"I will take that if you will make a few changes in it."

"With pleasure."

"I have a daughter and I wish the clock for the parlor where she entertains her company. Fix it so that at 11 o'clock at night a milkman's bell will ring and a newsboy will skip out and yell, 'Morning papers.'"

An Enterprising Postmaster.

In front of the postoffice of Versailles, Mo., there is a placard on which is the following announcement:—

Stamps.....2 cents.
Stamps licked.....3 cents.
Stamps licked and stuck.....4 cents.

"If I might venture to make a suggestion, madame," said the tombstone agent, in a sombre yet respectable manner, "I should say the motto 'He has gone to a better land' would be an appropriate one." "You forget, sir," said the lady in black, with cold dignity, "that he lived in Boston."

The China Tea Trade.

A fact not generally known is that the tea trade with Great Britain is rapidly deserting China and being transferred to India. Heavily taxed China tea cannot compete, it seems, with the duty-free tea of India, and if the taxation is not remitted the tea-trade of China is within measurable distance of extinction. The entire crop of India tea in 1890 will be laid down in London at a cost of 6d. per pound or under, while the average cost of the Poochow Congou this year was 9d. per pound laid down in London, for teas inferior to those of India growth. It is thought to be too late to recover the lost ground, but that timely and vigorous measures may yet enable China to retain a good share in this important trade. Other causes have contributed to the decadence of the China tea trade. Among those mentioned are negligent cultivation, imperfect firing, excessive admixture of dust and stalks, and fraudulent practices on the part of the native tea guilds. Formerly it was the practice among tea growers to trench the ground of the plantations, manure the plants and prune them at least once a year, while every year some were replaced by new shrubs. Now, however, no trenching, manuring, or pruning is done, no new stock is planted, and the worn-out trees are so stripped, that four and even five crops are taken instead of three, and the last crops are torn off with shears or leaf-hooks. Owing to want of sap in the leaf, the teas are so lightly fired that they commence to deteriorate within three or four months of packing. The dust and stalks have lost the continental markets and those of Australia and Canada to the Poochow teas and caused the latter to be replaced by teas from Ceylon.

The loss of the tea trade is undoubtedly a grave blow to China, but its gain by India could be taken as another argument in favor of Imperial federation and fair trade, as showing how thoroughly independent of all outside supplies the British Empire might be made.

Spring in England.

The crocuses and hyacinths are already beginning to push their green points through the bare beds and lawns of our suburban gardens, and more than one morning during this month of January has brought with it a feeling of spring time in the air, giving pleasure to all save the gardeners, who dread a too early budding of tender growths. More indicative still of the mildness of the season is the reawakening of the birds. An observer of natural phenomena reports that in Lancashire the birds, in spite of the great autumnal migrations, are just now everywhere very plentiful. Golden plovers, numerous during the frost, are since the weather grew milder away again to the hills. The flocks of lapwings are reported to be very large, and the frosts have not been sufficiently prolonged to drive them away to the sea-coast to procure food. The same observer has heard the thrush and blackbird singing almost every day this month; but, adds this Lancashire Gilbert White, though there are plenty of skylarks with us, they have not been singing much yet, as there has been little sun.—*London Daily News, Jan. 27.*

He Got His Discharge.

A postmaster in a small village in Mississippi has written to the postmaster general asking him to discontinue the office. He explains that his neighbors, who are wool growers, became distrustful of his rabbit dog, and in consequence, he states "it turned out missing. So I am left here 'without the means of sustenance. So if you expect me to get up nights for the train you will have to forward at once some pork and beans or some other nourishment, or a new postmaster will have to be appointed at this place." He adds in postscript: "Mr. wants me to split him some rails if I can get rid of this office; so hurry up with the grub or the discharge." The office was discontinued in response to his appeal.—*Rochester Democrat.*

A Torontonian in Vancouver.

A former resident of this city, writing from Vancouver, B. C., to a friend here says:—"There is a great demand for bricklayers at \$5 per day, plasterers \$5, carpenters \$3, stonemasons \$5 and painters \$3 per day, and a man can work, with the exception of a few days, all winter. Builder's labourers get \$2.50 per day. With the exception of house rent a family can live here as cheap as in Toronto. House rent here is very high. A house that rents for \$12 in Toronto is \$30 here. Lumber is about 30 per cent. cheaper here than in Toronto and bricks are \$10 per 1,000, so you can build a house here as cheap as in Toronto with the exception of labor."

Brown (to Robinson, who is reading a telegram with a look of anguish on his face)—"What's the matter, old fellow? Somebody dead? Robinson—(crushing the telegram with both hands)—"No; somebody alive! Twins."

In Salt Lake City the houses of the Mormons all have two front doors, even the smallest of them. Some have also two woodsheds and two wells. A house that is begun with only one room is frequently lengthened out room by room and door by door as new wives are taken.

A curious complication has arisen in consequence of the murder of the Woolfolk family by Tom Woolfolk near Macon, Ga., which was one of the most revolting tragedies of this generation. The murderer now lies in goal under sentence of death, and he has been approached by the heirs of both his murdered father and mother. No one but the condemned man knows the particulars of the crime. If he killed his father first, his mother's heirs will come into the property; but, if his mother died first, his two surviving sisters and himself succeed to the property. A full confession from this monster is expected before his execution in order to clear up this point.

A good deal of fault is being found in the United States with the manner in which "Old Probs" at Washington has been doing his work of late. During the past year or so his "indications" are said to have been singularly fallacious and misleading. This winter half a dozen cold waves which never turned up have been predicted for the Eastern States, while no warning was given of the great blizzard in the North-West. It may be that "Old Probs" is losing his grip, and if so the people will have to return to the good old method of spying out weather by means of the goose bone and the ground hog.

HERE AND THERE.

New York horsemen in driving put a few folds of paper across the chest underneath the overcoat as well as at the back, and find effectual protection against the cold winds that prevail at this season. The paper is like a wall in completely protecting the wearer.

An English County Court judge has committed a lawyer to prison for saying that something which fell from his honor's lips was "an unjust remark." Another judge has just come into fame by calling a witness a liar. The witness promptly retorted that the judge himself was "a liar and an impudent old vagabond." This witness did not get committed.

It is stated that a London firm has received an order from the Russian Government for a fleet of balloons for war purposes. Each balloon is to carry a car which will accommodate six men and will cost, with appurtenances, \$2,500. The balloons are being made of a preparation of asbestos which is strictly non-inflammable and they will be filled with rarefied air.

A little Esquimaux woman, who left her native home on the eastern shore of Greenland when 15 years old and has resided in the United States long enough to learn the language and to develop the fact that the Esquimaux are as white as other people when the dirt and grease are washed off, is lecturing to interested audiences in Chicago. Among other things she says the people of her nationality never wash or bathe in all their lives, have no rulers, no form of government, everyone does exactly as he or she pleases, and are all contented with their lot, as they know of nothing better.

A Philadelphia grocer advertised to give every thirteenth customer the amount of his purchase free. The plan seemed a success at first, and business thrived, but one day the boys put up a job on him. Twelve of them walked into the store, and each made a trifling purchase; the whole bill for the dozen was less than a dollar. Then the thirteenth man walked in and ordered a barrel of sugar, ten pounds of tea, ten pounds of coffee and a box of cigars. The grocer faced the music like a man, but at once took down his sign and put up another saying that the offer had been withdrawn.

An Iowa clergyman has challenged the "faith healers," "mind curers" and "Christian scientists" to a test of their powers. The terms of the challenge are that the subjects shall be deaf, blind or afflicted with cancer, and for every cure effected the clergyman agrees to pay \$10 to a missionary fund. A Columbia, Md., healer named Schrader has accepted the offer, agreeing to pay a like sum into the same fund for every failure. The test will take place in Chicago at an early date. Speaking of the challenge the *Chicago News* says:—"No student of the history of medical delusions will expect any practical result from this business. Least of all will he expect the collapse of the 'faith cure' when Mr. Schrader finally confesses his inability to make the deaf hear and the blind see and the cancer-stricken whole."

There seems to be little doubt that the Panama Canal Company is on the verge of bankruptcy, the French Ministry having declined to sanction M. de Lesseps's last device for raising money, the lottery scheme. When the crisis does come the effect will inevitably be disastrous. The *London Standard* says that M. de Lesseps's greatest enemies could have wished his project no worse fate, and that the result of the crash will be appalling to the French people. The company has absorbed nearly \$2,000,000 of the savings of the poorest and most industrious classes of the French peasantry all over the country, and not a cent of this vast sum will ever be returned to the lenders. This is bad enough, but it is not improbable that the Government itself may be seriously involved, if not partially bankrupted. Its loans are obtained through the same financial groups upon whom M. de Lesseps has been leaning, and it is this fact, it is said, which has led Ministry after Ministry to put off disclosure of the real state of the affairs of the Panama scheme. Matters have evidently, however, now reached such a point that the Government feels compelled to face any risk rather than allow the people to sink any more of their savings into the project. The situation is a serious one for France in more ways than one.

The *New York Tribune* gives an account of an organization which is being formed in Kansas to promote an extensive emigration movement amongst the coloured people in the South. Recruits are to be gathered from the American cotton belt, with its outlying tobacco, sugar, and rice fields. The objective point of the migration is South America, especially Brazil and the Argentine Republic. The promoters of the movement claim to have \$2,000,000 of capital pledged to aid them in the work, and expect to be able by the close of the year to offer free transportation to hundreds of thousands of plantation labourers. The latter are said to be disoriented, restless, and anxious to find new homes in some country where they can live in peace. "We are offered a welcome," says the leader of this exodus, "in a country where we can have our homes and not be driven from them, where we can earn our money and not be cheated out of it, and where our votes will be counted when we vote. We have waited in the South until our hearts have failed us." Should the movement be successful on any large scale it would press very heavily upon the chief agricultural industries of the South, which would be threatened with ruin by the loss of the best classes of labourers. The very fact of an attempt being made at such a wholesale migration may, however, react favourably upon their condition at home. It would be turning the tables very effectually if, instead of being longer at the mercy of the planters, the coloured labourers should find themselves in the position of being able to exact better terms from their employers, and a fuller recognition of their rights from the politicians.

The One Thing.

He (with deep passion)—Oh, Geraldine, my darling, I love you so. I love you so. Be mine, dearest, be mine.

She (with suppressed emotion)—Oh, Jack, you are so sudden: I must have time to—

He (unguardedly)—Don't mention it, darling. Time is nothing; money's the thing, and you've got plenty.