



THE LEGENDARY
BLIZZARD OF '88

Timothy R. Minnich
Meteorologist

From "The Blizzard of '88" by Mary Cable

- **The 1880's brought astonishing new inventions and discoveries – already benefiting the rich and promising to ease and brighten life for everyone**
- **The great eastern cities now had telephones, steam-heated buildings, and electric lights (on main streets and in wealthy households)**
- **In New York City, anyone with five cents could ride on the elevated railroads, which, by 1888, had been in service for about nine years**
- **All but the very poor were blessed with indoor plumbing**

From "The Blizzard of '88" by Mary Cable

- **The decade brought major medical breakthroughs, such as antiseptic surgery, local anesthesia, and anti-rabies vaccine**
- **Inventions included flatirons, fountain pens, and adding machines**
- **Improvements to earlier technology continued: the modern bicycle (1884), the alternating-current transformer (1885), the Kodak camera (1888), and the electric trolley (not quite ready in 1888 but on its way)**

From "The Blizzard of '88" by Mary Cable

- On the national scene, there seemed nothing much to worry about
- Deep wounds left by the Civil War were slowly healing, and no other wars appeared imminent
- In the West, the last defiant Apaches had been removed to detention camps in Florida, and the frontier was now secure for settlers
- All in all, most Americans in 1888 felt tranquil and hopeful

From "The Blizzard of '88" by Mary Cable

- People who lived in the eastern states were apt to be more smug and self-satisfied than westerners, whom they often looked down upon as rough innocents
- Most arrogant of all were the New Yorkers, who saw themselves as living at the forefront of civilization
- If there had been T-shirts a hundred years ago, they might have read as some do today: "When you leave New York, you ain't goin' nowhere"

From "The Blizzard of '88" by Mary Cable

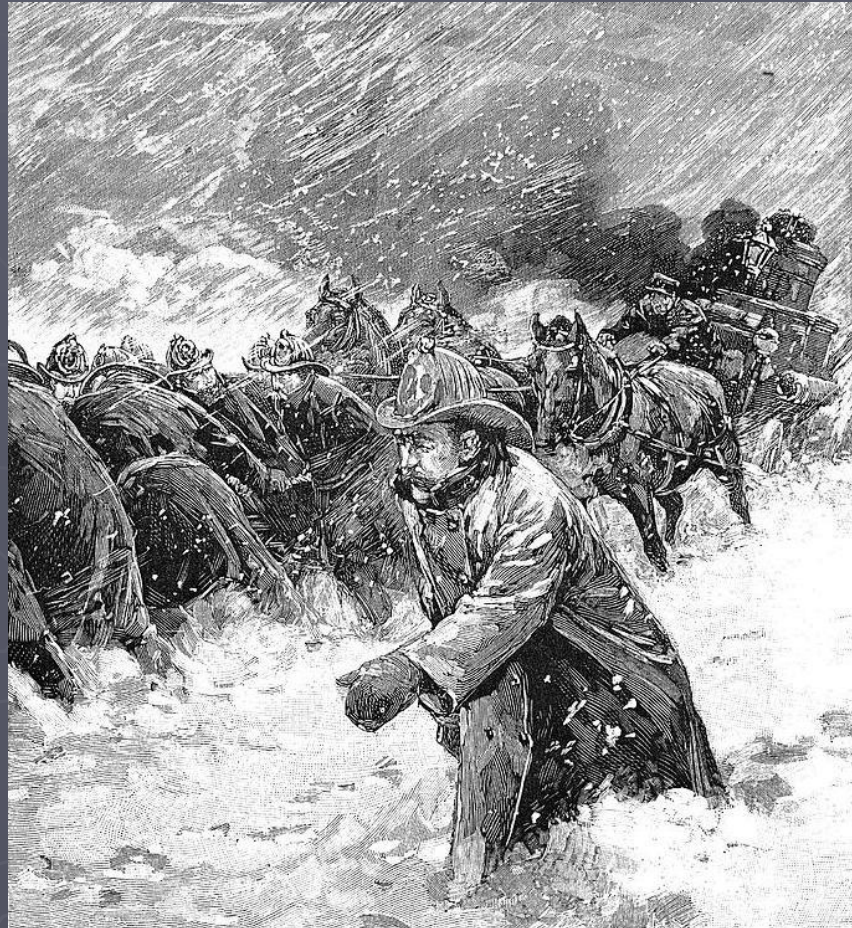
- **Then, suddenly, into that city of technological marvels came the Blizzard of '88 and turned it upside down**
- **While other parts of the Northeast suffered acutely, people were still living a simpler life and had time-honored ways of dealing with storms**
- **They stayed home and turned to supplies laid in during the previous autumn; they didn't miss electricity, or running water, or telephones because they weren't used to them**
- **They looked to no one but themselves and their neighbors to plow the roads; if no help appeared for days, they could wait**
- **They were on an ancient time schedule, while New York City had already anticipated the twentieth century**

Storm Summary

- **Residents from New York to New England were isolated, with reports of drifts covering three-story houses**
- **From the New York Herald, March 14: "Now and then some pale and half-dead wanderer struggled into the mountainous outskirts and told dreadful stories of whole trainloads of passengers imprisoned in the snow, without food or the slightest means of escape."**
- **Horses were employed in dragging away the fallen trees and telegraph poles in New York City**
- **Thousands of abandoned wagons were dug out and dragged by double teams of horses to places of shelter**
- **New York City was ground-zero, as some 200 people lost their lives on the streets and another 200 in the local offshore waters**

Storm Summary

- **Fallen wires and candles set off fires across the snow-clogged city, with many fires impossible to fight**



FIREMEN STRUGGLE TO RESPOND TO A FIVE-ALARM FIRE

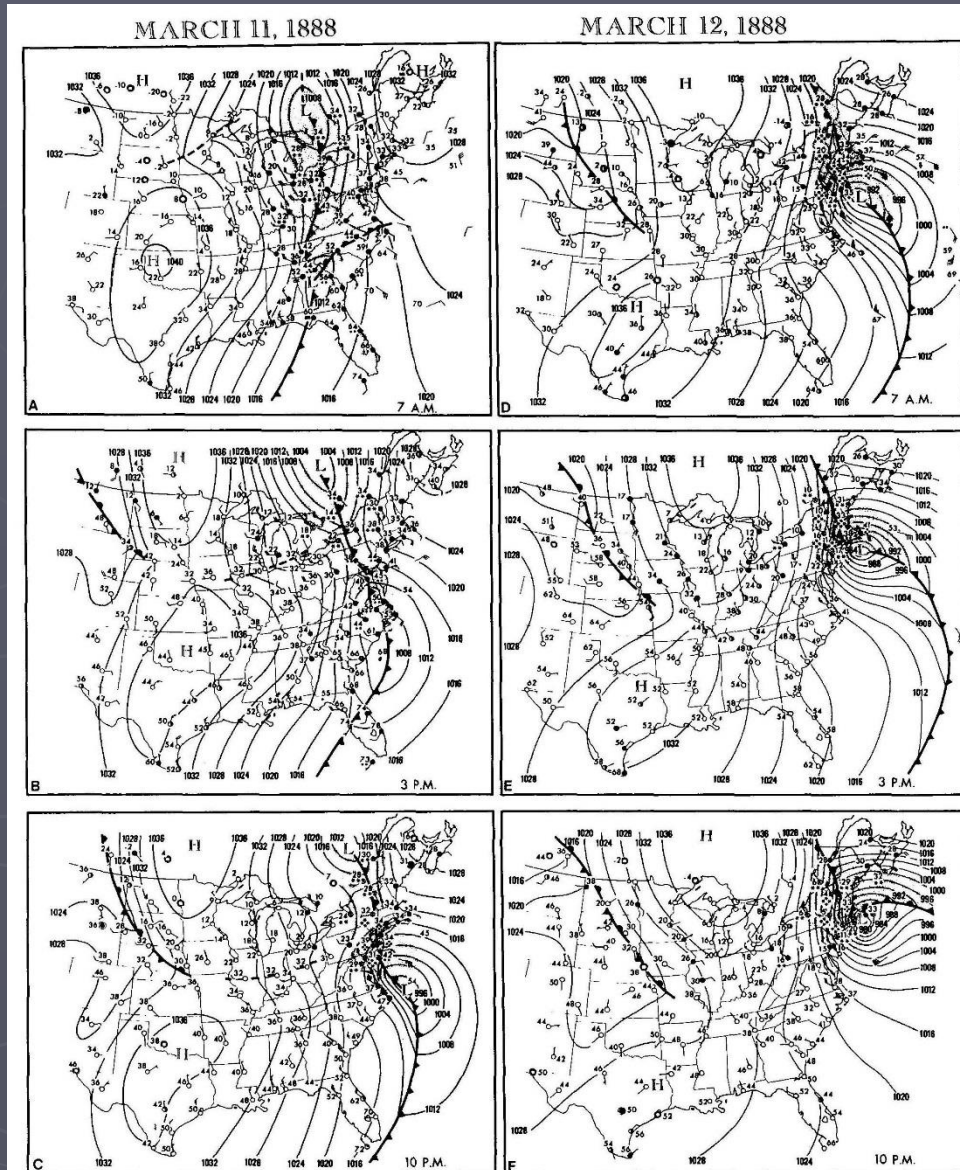
Storm Summary

- **Select Northeast snowfall reports (many still stand today as records)**
 - **58 inches at Saratoga Springs, New York**
 - **48 inches in Albany, New York**
 - **45 inches in New Haven, Connecticut**
 - **38 inches in Keene, New Hampshire**

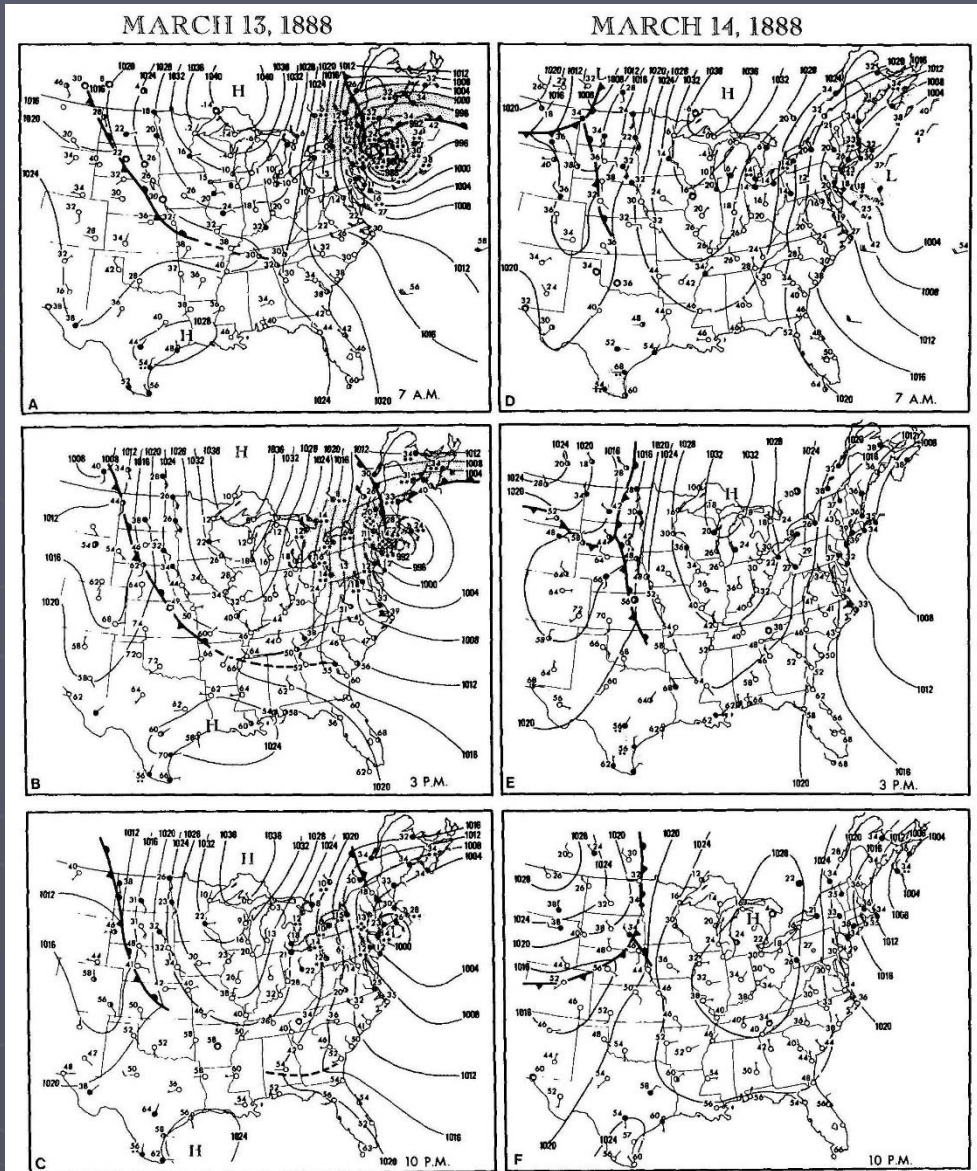


- **To this day, it has never been so cold so late in the winter season (many sub-zero readings throughout the New York – New Jersey area)**

Official Maps - March 11-12 (P. Kocin, BAMS, Nov. 1983)



Official Maps - March 13-14 (P. Kocin, BAMS, Nov. 1983)



The Official Forecast

From the War Department's Signal Service

Washington City, Sunday, March 11, 1888 – 7 A.M.

Indications for 24 hours, commencing at 3 P.M., Sunday, March 11, 1888.

Fresh to brisk easterly winds, with rain, will prevail to-night, followed on Monday by colder brisk westerly winds and fair weather throughout the Atlantic states; colder fresh westerly winds, with fair weather, over the lakes regions, the Ohio and Mississippi valleys; diminishing northerly winds, with slightly colder, fair weather, in the Gulf states; light to fresh variable winds, with higher temperature, in Kansas, Nebraska, and Colorado.

SIGNALS. – **Cautionary** southeast signals are displayed on the Atlantic coast from Norfolk section to Wood's Holl section.

RIVERS. – The rivers will rise slightly.

Thousands Attempted to Go to Work Monday Morning

- People left for work believing the snow and wind would not last



Thousands Attempted to Go to Work Monday Morning

- Most felt they had no choice; times were hard and unions did not yet exist

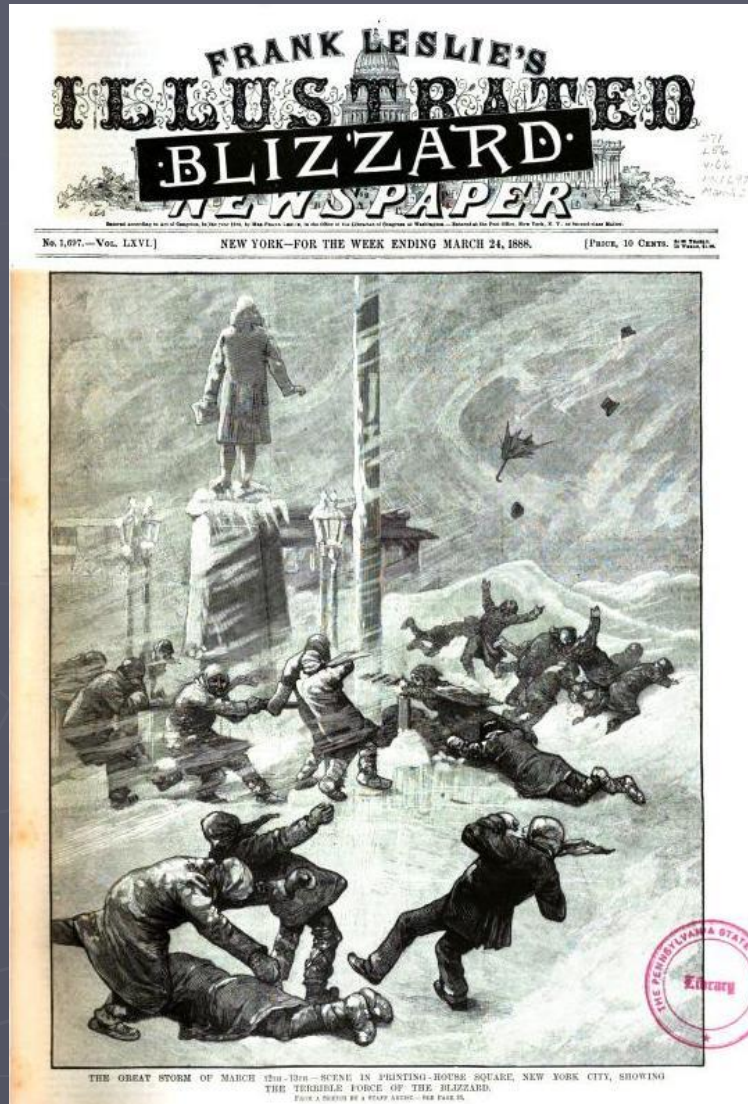


SCENE ON BROADWAY – IMPROVISED PEDESTRIAL HEADDRESSES

Effects Were Disastrous, Especially in New York City

- **The city was entirely cut off for two days, and fears were entertained that a famine would result**
- **Milk was in particular demand; one farmer was selling twenty quarts for \$25 (>\$650 today)**
- **All business was suspended; horse cars and elevated trains (els) ceased running**
- **Property damage in New York City alone was estimated at more than \$25 million (> \$650 million today)**

New York City Newspaper Accounts



New York City Newspaper Accounts

THE BURIED CITY

New York's Dreadful Sepulture
Under Masses of Snow.

A NIGHT OF DEVASTATION.

How the Tempest Howled and Raged
Through the Dark Wil-
derness of Streets.

PERISHING MEN AND WOMEN

Wanderers Found Dead in Snowdrifts and
Families Driven Into the
Storm by Fire.

AND THE TEMPERATURE BELOW ZERO.

THE NEW YORK HERALD, MARCH 14, 1888

New York City Newspaper Accounts

BLIZZARD WAS KING

**The Metropolis Helpless
Under Snow.**

HARDLY A WHEEL TURNS

**Business Knocked Flat as if
by a Panic.**

**PLAYS, TRIALS, FUNERALS,
ALL POSTPONED.**

**Fifty Train Loads of Passengers
Stuck on the Main Lines.**

WHERE THEY ARE, HEAVEN KNOWS.

New York City Newspaper Accounts

A little past 12 o'clock on Sunday night, or Monday morning, the severe rain that had been pelting down since the moment of the opening of the church doors suddenly changed to a sleet storm that plated the sidewalks with ice. Then began the great storm that is to become for years a household word, a symbol of the worst of weathers and the limit of nature's possibilities under normal conditions.

At a quarter past 6 o'clock, when the extremely modified sunlight forced its way to earth, the scene in the two great cities that the bridge unites was remarkably beyond any winter sight remembered by the people. The streets were blocked with snowdrifts. The car tracks were hid, horse cars were not in the range of possibilities, a wind of wild velocity howled between the rows of houses, the air was burdened with soft, wet, clinging snow, only here and there was a wagon to be seen, only here and there a feeble moving man . . .

It was Monday morning, when a day of rest from shopping had depleted the larders in every house, and yet there were no milk carts, no butcher wagons, no basket-laden grocer boys, no bakers' carriers. In great districts, no attempt was made to deliver the morning papers. The cities were paralyzed.

- **The New York Sun, Tuesday, March 13, 1888**

New York City Newspaper Accounts

In looking back on the events of yesterday the most amazing thing to the residents of this great city must be the ease with which the elements were able to overcome the boasted triumph of civilization, particularly in those respects which philosophers and statesmen have contended permanently marked our civilization and distinguished it from the civilization of the old world – our superior means of intercommunication. Before the fury of the great blizzard they all went down, whether propelled by steam or electricity. The elevated trains became useless; so did the telegraph wires, the telephone wires, the wires for conveying the electric lights, the wires for giving the alarms of fire. And, worse than useless, they became dangerous.

- **The New York Times, Tuesday, March 13, 1888**

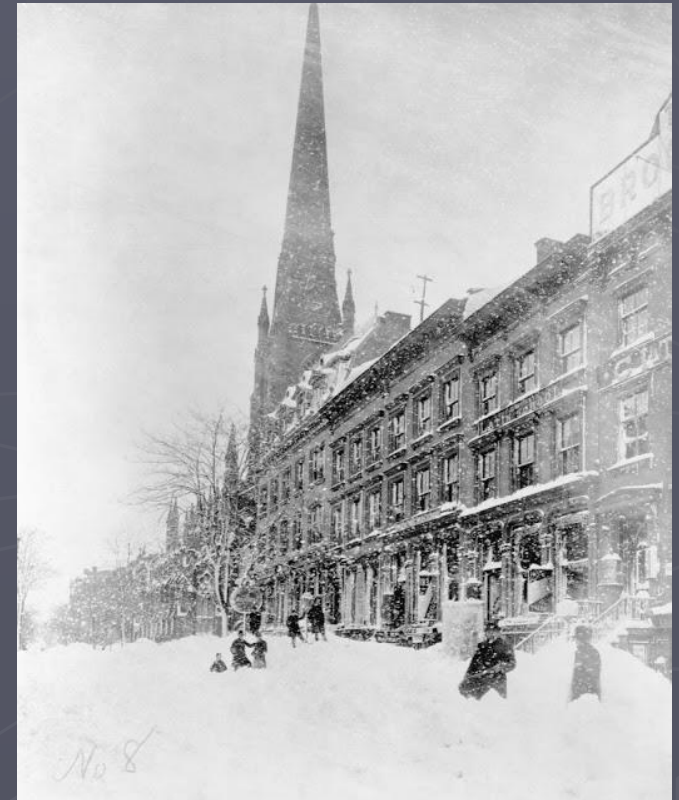
Shortages of Essential Supplies

- Supplies of food, milk, and coal were scarce in the cities, as normal deliveries were completely suspended

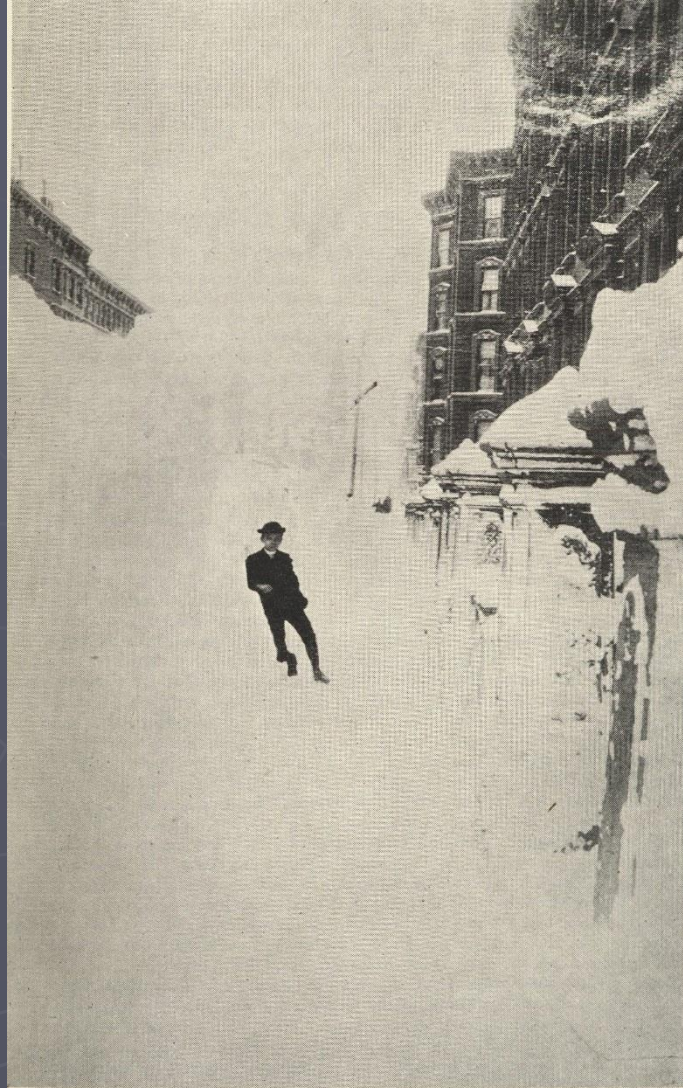


11TH STREET, NEW YORK CITY

A Sea of Snow, Manhattan



Looking North on Madison Avenue, Manhattan



Looking north on Madison Avenue during the March 1888 Blizzard.

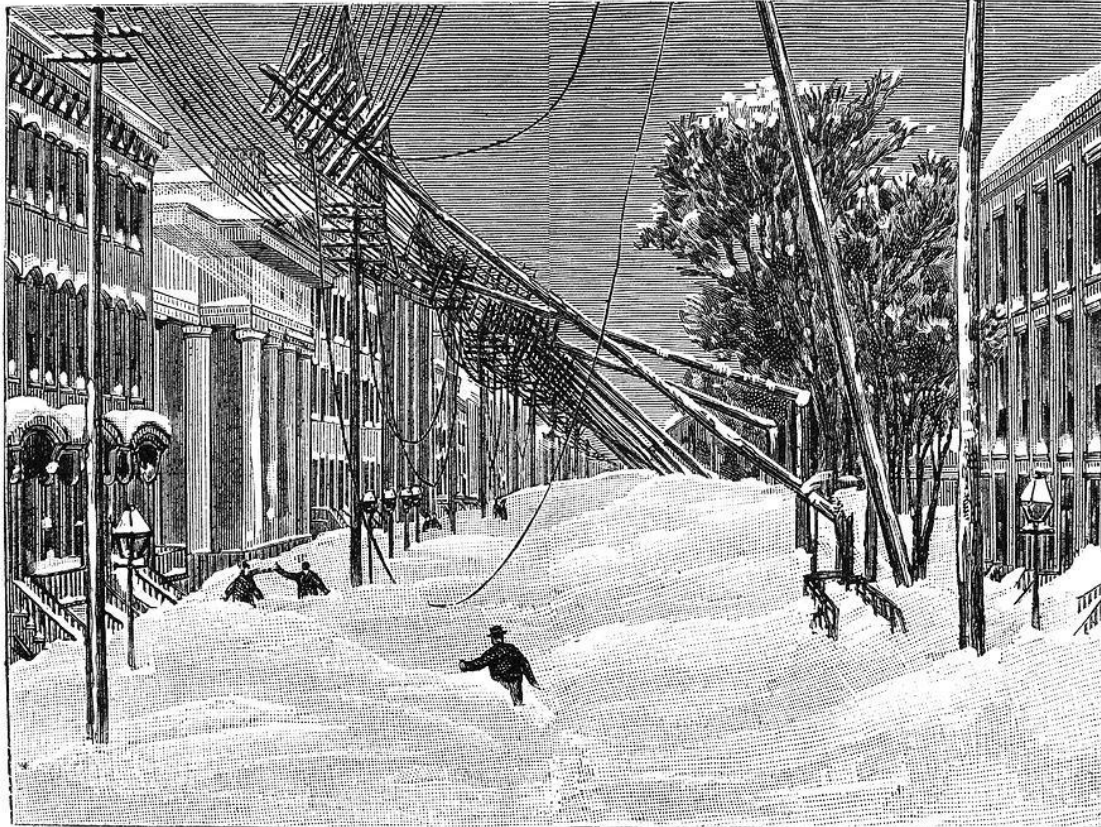
Abandoned Horse Car, University Pl & 9th St, Manhattan



Hotel Martin 17-19 University Place, corner of 9th Street during the March 1888 Blizzard. Abandoned horse-car.

Hundreds of Snapped Telegraph Poles, Manhattan

- Telegraph wires were reduced to tangled webs which caught the feet of horses and human beings alike



BROKEN TELEGRAPH-POLES IN WEST ELEVENTH STREET.



Live Electrical Wires Pose a Huge Hazard, Manhattan



Wall Street Bankers Inspect the Damage, Manhattan



Towering Snow Piles, Manhattan

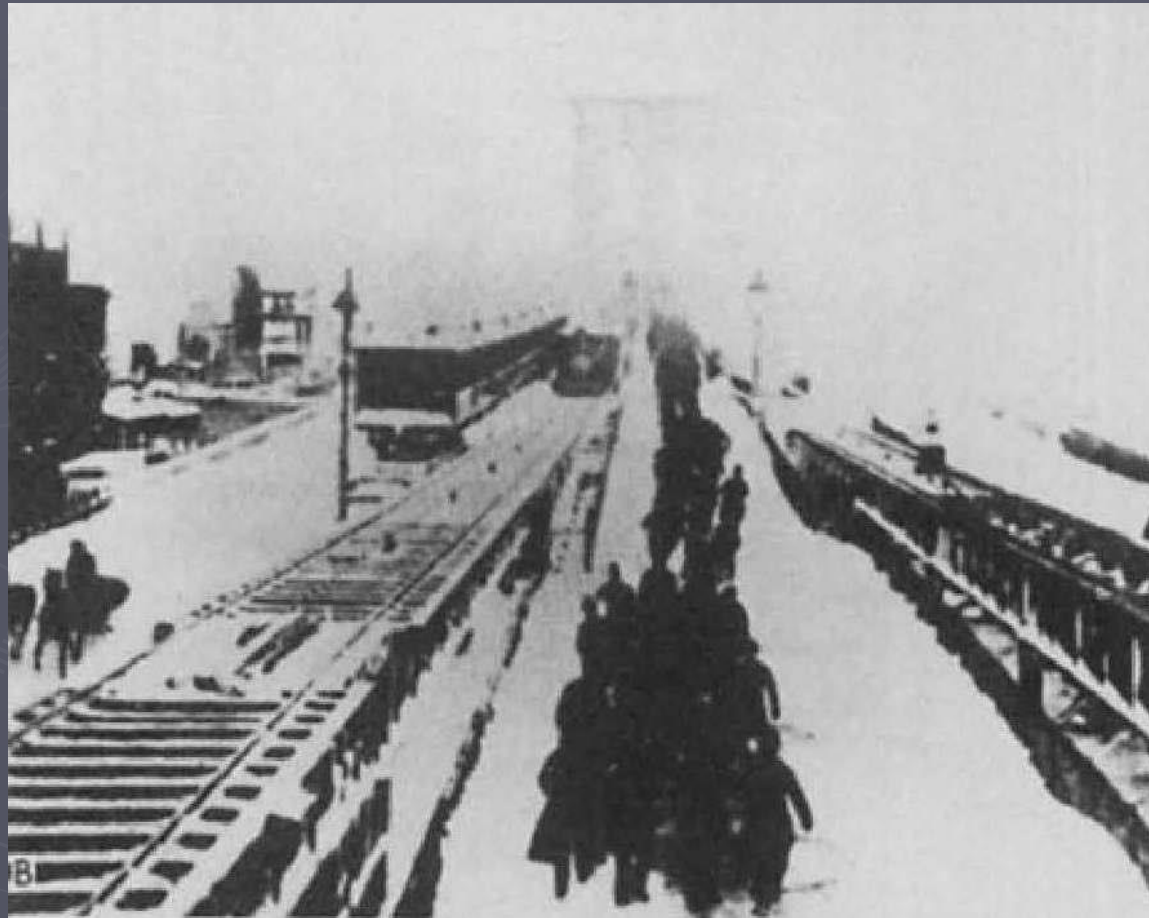


Under the Els, Manhattan



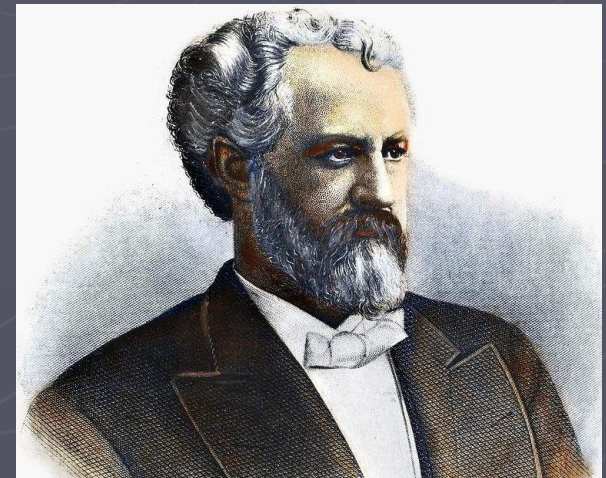
Brooklyn Bridge Fears

- **All transportation across the Brooklyn Bridge was halted, for fear it would collapse under the weight of the snow and the incredible winds high atop the East River**



Victim: New York Senator Roscoe Conkling

- **Imposing Republican kingpin, arguably the most powerful man of his day**
- **President Ulysses S. Grant's right-hand man in the Senate (3 terms); turned down Grant's US Supreme Court Chief Justice offer**
- **Refused to pay \$50 (> \$1,300 today) for 3-mile, horse-drawn cab ride from his Wall Street office to his lavish apartment on 25th Street (near Madison Square)**
- **Made it only to Union Square, collapsed, caught pneumonia, and died 2 weeks later**



Victim: George D. Baremore

- **Trader in hops left West 57th Street home for his office at the Battery**
- **Walked to the Sixth Avenue el, waited for an hour, and then tried to walk to the Ninth Avenue el, but never made it**
- **A day later, a police officer saw a hand sticking out of a drift on Seventh Avenue; Baremore's frozen body was buried there**



FINDING THE BODY OF GEORGE D. BAREMORE IN A SNOWDRIFT ON SEVENTH AVENUE.

Original Horse-Drawn Hearse from 1888 (Brooklyn, NY)



FUNERAL PROCESSION: CARROLL GARDENS TO ST. AUGUSTINE'S RC CHURCH, PARK SLOPE (FEB. 7, 2020)₃₃

Snow Removal at Grand Central Depot, Manhattan



45th Street and Grand Central Depot, New York, Blizzard, March 1888

Ordinary Trains Were No Match for the Blizzard



PASSENGERS WERE TRAPPED FOR DAYS ON SNOW-BOUND TRAINS

Train Wreck at Coleman's Station, North East, NY



Wreck at Coleman's Station, New York & Harlem R. R., March 13, 1888

Harlem Rail Line, Upper Manhattan



MANY PEOPLE DIED TRYING TO CLEAR ENORMOUS DRIFTS FROM THE TRACKS

Digging Out, Manhattan



The Streets of Manhattan



NORTH ON THIRD AVE., BETWEEN 67TH AND 68TH ST.



MADISON AVENUE AT 50TH ST.

Dumping Snow in East River, Manhattan



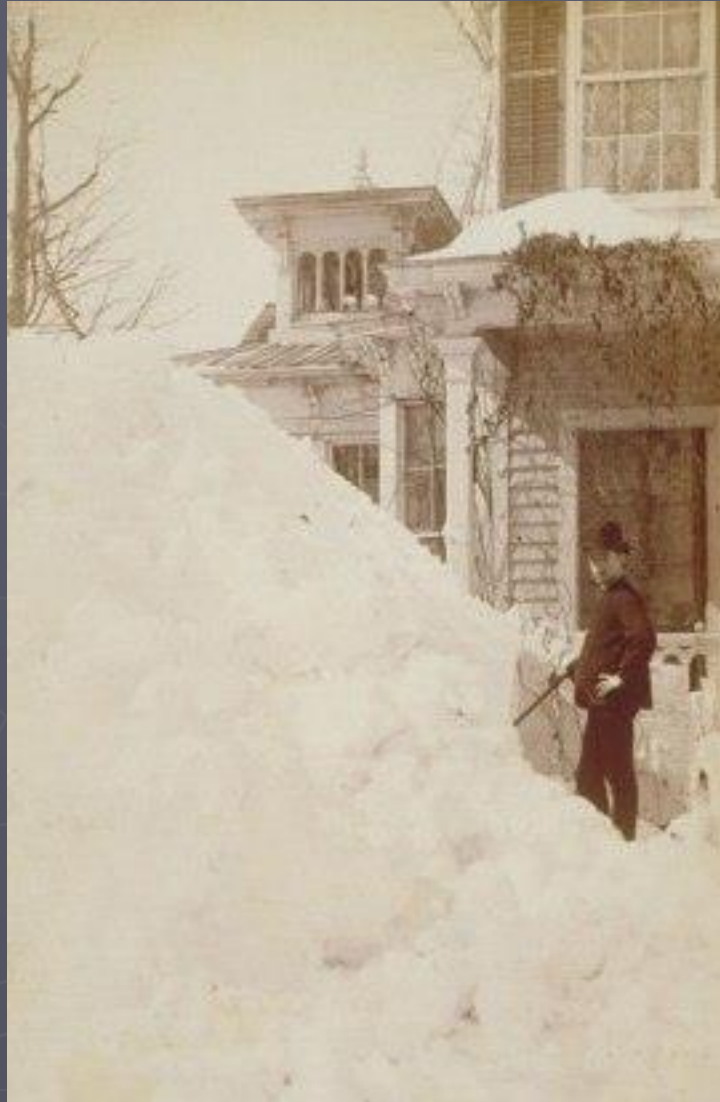
Park Place, Brooklyn, NY



Grand Street, New Britain, CT



Main Street, Danbury, CT



Miss Porter's School, Farmington, CT



Abandoned Horse Cars, Springfield, MA



Main Street, Northampton, MA

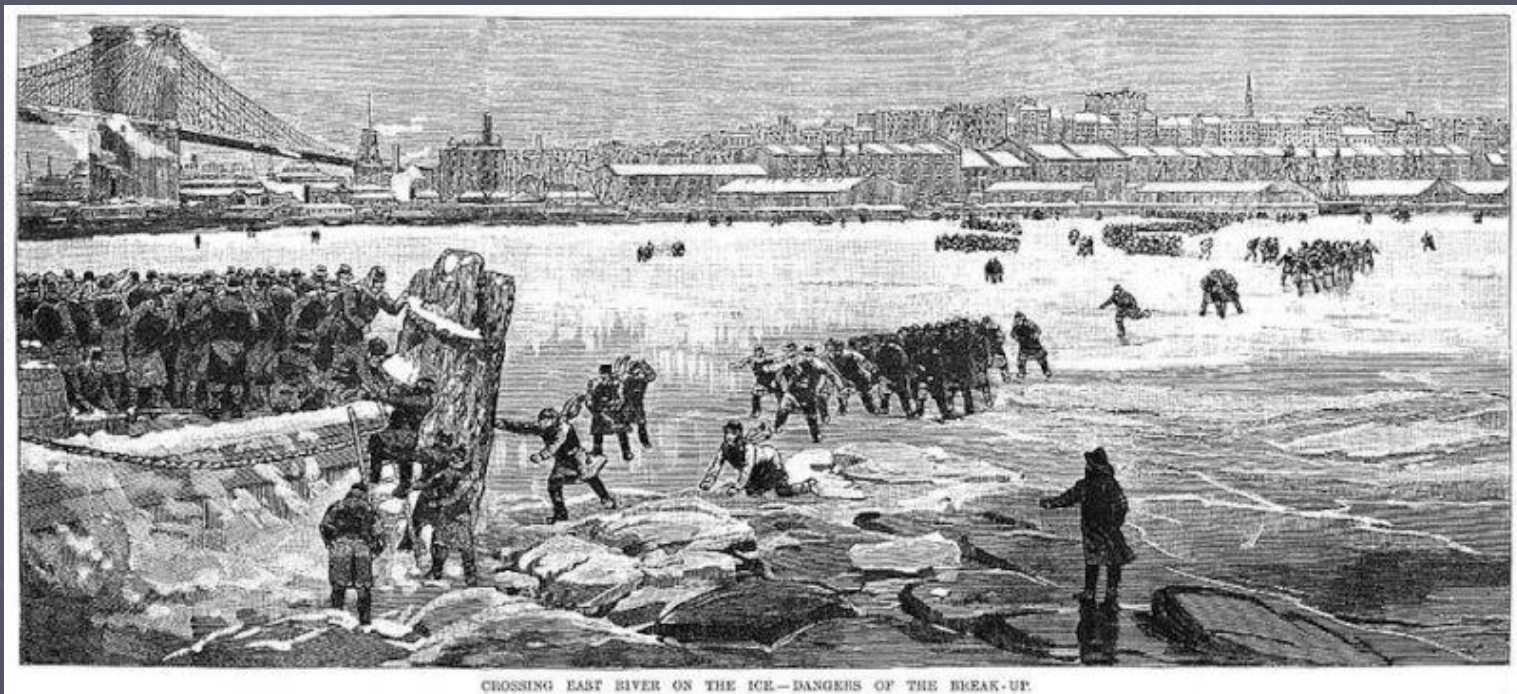


Employees of T.P. Howell & Co., Newark, NJ



Testimonial – Edward H. White, Brooklyn, NY

- While on his way to work on Tuesday, Mr. White saw from the Brooklyn Bridge men walking about the ice. “I made my way to the foot of Beekman Street and going out to the end of a pier, I clambered down and started out. After about fifteen or twenty feet of rather hummocky ice, the rest was as even as a floor, and it was an easy matter to walk.”

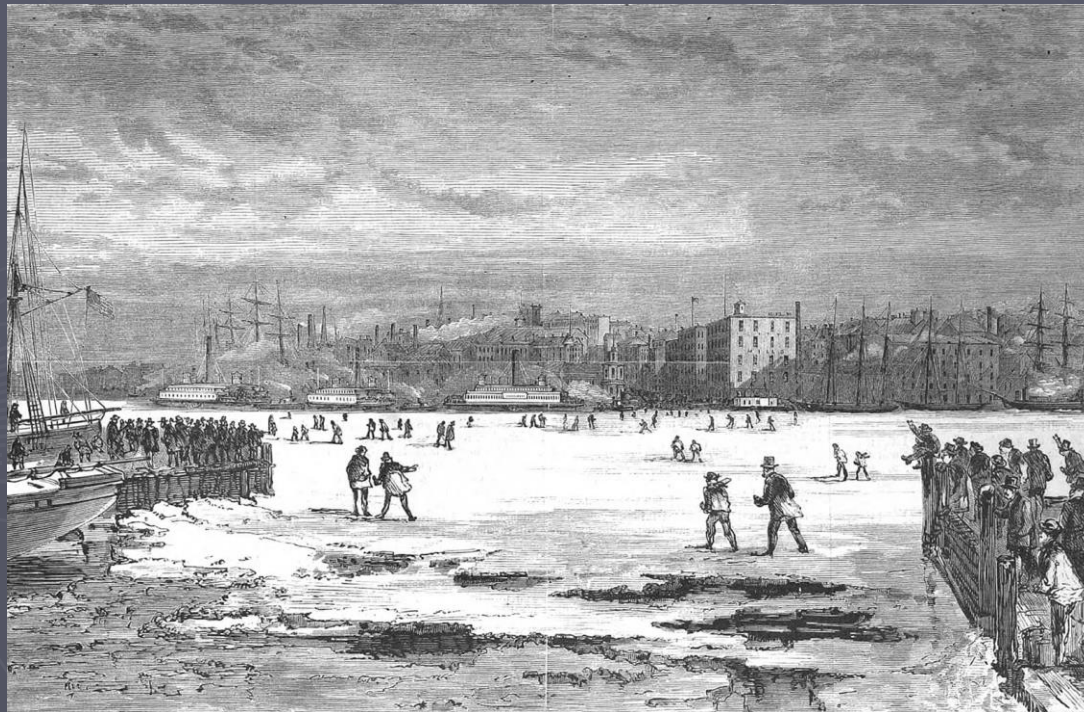


CROSSING EAST RIVER ON THE ICE—DANGERS OF THE BREAK-UP.

MANY RESORTED TO WALKING ACROSS THE FROZEN EAST RIVER BETWEEN BROOKLYN AND MANHATTAN

Testimonial – Fred Smith, New York City

- **“The East River was frozen up the first time to my knowledge. Henry Ward Beecher was the first man to walk across it, then a horse and sled, then a lot of boys played on the ice when the ice broke, and they were carried from Fulton St. Ferry down to Gov. Island where a tug put out from the Battery, forced its way through the ice and rescued them.”**



CHILDREN FROLOCKED ON THE FROZEN EAST RIVER

Testimonial – George J. Steidler, New York City

- **“At the time of the Blizzard I was 13 years old. I lived below Houston Street west of West Broadway.**
- **“Coal delivery stopped with the Blizzard and the grocer's coal bin was soon depleted. There was much suffering for want of coal. Toilets, known as backhouses were in the yards. With water freezing, pipes bursting, tenants dumping their garbage and worse into the hallway sinks, the slops running over, people preferred to stay in during the Blizzard when they should have gone out . . .**
- **“I went to school, a distance of about five blocks from my home. Old Ward School No. 10 in Wooster Street had a learned man named Maguire as principal for the Boys' Grammar Department. About 15 boys out of 300 attended. He praised the boys for braving the storm and told them we were experiencing a rare phenomenon, namely: `A DAKOTA BLIZZARD.'”**

Testimonial – Herbert W. Smith, New York City

- **“About Tuesday or Wednesday we began to run out of certain kinds of food. Especially, I remember, we wanted BREAD. The nearest bread was at the general store, about a mile away . . .”**
- **Mr. Smith, then a youth of 17, “set to work with some thin, tough wood and leather thongs and made a pair of snowshoes . . . After a few trials and the addition of some cleats to prevent slipping backward, they worked, and I walked over the drifts to the crossroads store and returned with supplies for the snowbound family.**
- **“Some of the drifts were very high, but I had no means of knowing just how many feet. I do know, however, that I walked clean over the tops of what I knew to be fairly tall trees.”**

Testimonial – (Unknown), New York City

- **March 14: “You no doubt will read in the newspapers detailed accounts of the terrible storm we have had. It is still snowing. Telegraphic communications from New York are interrupted everywhere, except with Europe. The railroads have stopped running altogether, and a small famine, especially as regards milk, has begun.**
- **“On Monday (March 12th) I could not get down town at all. I was on an elevated train that collided with another, and for a few moments we thought everything was over for us. Then some ladders were brought along, and we climbed down to the street.**
- **“Yesterday morning (March 13th) I drove down town myself in my sleigh, and let the horses wait in Wells Fargo's stables; then I drove up town again along Broadway, but there was no business. Today everything is getting normal again, but unfortunately a number of people lost their lives, or had accidents.”**

Testimonial – Caroline Kleindienst, Cranbury, NJ

- **“Through the long lone hours of that night we were blessed with our eleven pound boy, without nurse or doctor . . .**
- **“Next morning we found we were completely snowed in. My husband started to shovel his way out, through snow as deep as he was tall . . .**
- **“It was three weeks before the roads were cleared and the Doctor then made his first visit to our home and congratulated me on the fine new baby who came into this world unaided and alone in the Big Blizzard of 1888 . . .”**

New Jersey Trains

- **The railroad between Philadelphia and New York City was completely impassable, with no trains running from Monday until Thursday**
- **Hundreds of passengers were left in snowdrifts, with little or no food**
- **Bound Brook Branch – At least six trains were snow-bound at Trenton Junction, with sandwiches selling for 50 cents each (> \$13 today) by local residents**
- **Pennsylvania Branch – At Monmouth Junction, the same exorbitant prices were charged for eatables; a snow-bound citizen of Flemington was compelled to pay 25 cents for a boiled egg**

New Jersey Trains

- **New Jersey Central Branch** – Train after train was stuck and abandoned
- **In some instances only the tops of the cars and the smoke stacks of the locomotives were visible; engines sent to the relief of the stalled trains also became stuck in the drifts, until nearly no engines were left**
- **As soon as the storm abated, an immense force of men was deployed to clear the tracks and trains resumed running by Thursday**



New Jersey Trains

- **Flemington Branch** – The rail line was pretty well snowed in, and it was not until about 10 o'clock Thursday morning that a train was able to get from Lambertville to Flemington
- The first mail to reach Flemington since the preceding Saturday was brought by the train from Lambertville on Thursday evening; its newspapers were eagerly sought after

New Jersey Trains

- **South Branch (Flemington to Somerville)** – Some of the drifts across the tracks were nearly twenty feet deep; no trains ran for the whole week
- An effort was made to get to Flemington on Friday morning, but an engine derailed shortly after leaving Somerville, delaying operations for the day



- On Saturday morning, three engines with a snow plow and a large force of men started out from Somerville, but didn't reach Flemington until 6 pm

Accounts From a Rahway Historian

- **4 feet of snow in Rahway; nearly 5 feet in some parts of the state**
- **The 5:30 am train on March 11 made it to New York, but it took over 6 hours**
- **It took a second train from Rahway 5 hours to reach Newark where it was shut down; passengers were stranded for several days**
- **Many camped out in hotel lobbies while others remained in cold and wet depot rooms; since telegraph lines were down, they had no way to inform families of their plight**
- **One dedicated teacher boarded the 6:05 am train in hope of reaching the east Linden schoolhouse where she was employed; she made it but ended up being “imprisoned” alone in the building until the next day until her relatives could rescue her**

Accounts From a Rahway Historian

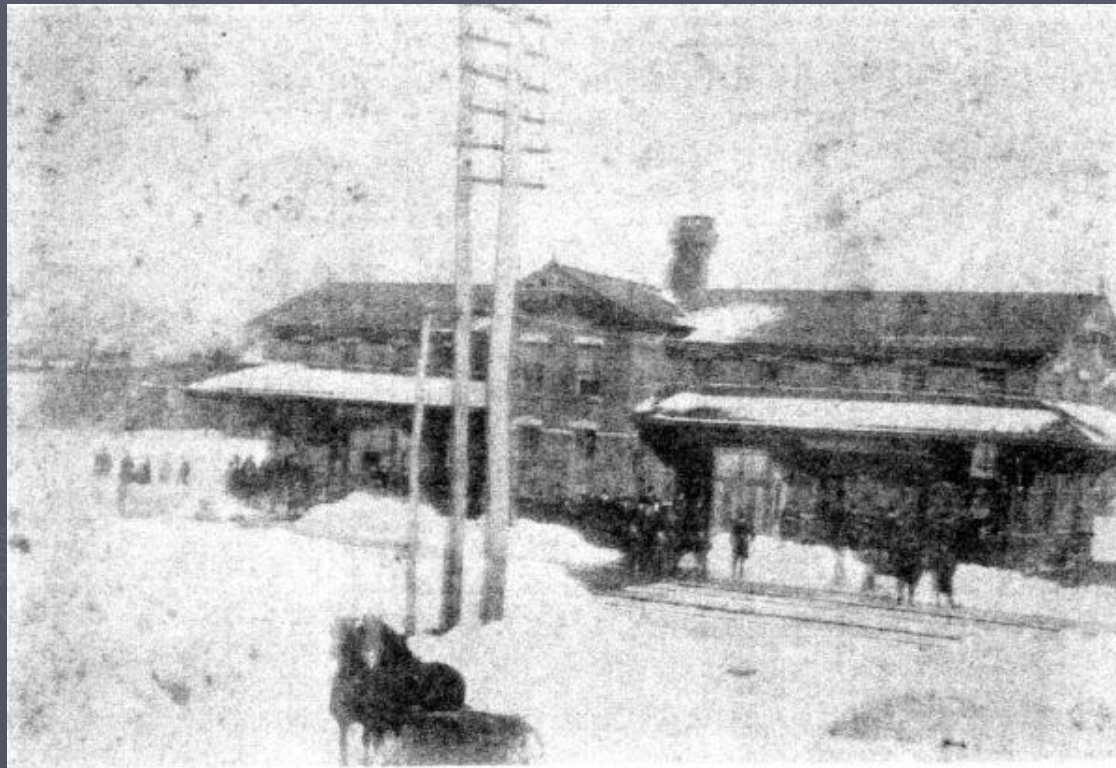
- **The fierce winds snapped the stately Liberty Pole which marked the spot (corner of Milton and St. Georges Avenues) where Rahway's Liberty Tree stood during the Revolutionary War; The Liberty Pole fell across Maple Avenue bringing down the electric wires**
- **A baker whose shop was on Main Street tried to make deliveries Monday morning but got stalled and had to abandon his wagon on Grand Avenue**
- **A well-known bachelor of the city lost one of his dogs and was said to be seen struggling through the teeth of the storm trying to find it**
- **Another family had called their dog to come in for the night on Sunday, but the pet did not return to the safety of the home; it was not until Thursday when the worried owners heard a sound coming from under a drift covered seed shed that the dog was reunited with the family**

Accounts From a Rahway Historian

- **Public schools did not open until Thursday**
- **Bloodgoods Mill (a factory on the Rahway-Clark border which employed many Rahway workers) was unable to open until paths could be made to that remote part of town**
- **Parked on Scott Avenue, fire engine #474 was covered by eight feet of snow**
- **Even a week after the blizzard, roads were still in such rough shape that it was difficult for fire engines to respond to a house fire on Jaques Avenue**
- **It wasn't until Wednesday that a milkman was able to make deliveries, but had to resort to using a team of oxen instead of horses to make his way around town**

Accounts From a Rahway Historian

- The conductor and crew of the 5:30 train that left Rahway Station on Monday morning didn't make it back to Rahway until 4 pm Wednesday



RAHWAY TRAIN STATION DAYS AFTER THE STORM SHOWING WORK TO CLEAR THE TRACKS

Things Were Worse at Sea

- Harbor pilots had the dangerous job of guiding large ships into the New York port
- Pilot boats (schooners) each carrying several harbor pilots would typically leave Sandy Hook the moment the first wispy smoke appeared on the eastern horizon
- Nine or ten pilot boats were in the waters between Atlantic Highlands and Cape May on Sunday afternoon, with each pilot hoping to snag a New York-bound freighter or other large vessel
- At least three pilot boats were lost: The Colt, The Enchantress, and The William H. Starbuck (which collided with a British freighter)
- Detailed Captain's logs were recovered from two surviving pilot boats: The Charles H. Marshall and The Annie M. Small

Things Were Worse at Sea

- **The storm transformed from heavy rain to freezing rain and blinding snow, and hurricane-force winds created enormous waves**
- **Strong winds pushed 35 ships together in Lewes Harbor in Delaware**
- **By the time the storm was over, on March 14th, more than 200 ships had been wrecked or grounded along the coast, with considerable loss of life**

Things Were Worse at Sea

- For instance, at least one hundred oyster sloops (single-mast vessels) were reported wrecked on Chesapeake Bay



TYPICAL OYSTER SLOOP, CHEASPEAKE BAY, 1888

Things Were Worse at Sea

- **The Cythera was one of dozens of schooners and other crafts lost to the storm in the New York harbor**



THE CYTHERA, 1888

Things Were Worse at Sea



DAMAGED SCHOONER, LEWES, DE

Silver Lining for New York City

- **The City Council voted unanimously to place all telegraph and electrical wires underground**
- **On the back-burner for years, construction of the subway system finally began**



SUBWAY CONSTRUCTION (DECEMBER 1900)

Thank you!

Questions?

