

# TERRIFIC FORCE

## Grain Dust Explosion Caused Vast Damage.

### Big Elevator in Ruins and Many Houses Wrecked.

Property Loss Estimated at \$500,000, of Which \$301,900 is on Grain Stored in the Mammoth Structure That Was Burned—Four Men Injured, Two of Whom Were Removed to a Hospital—Thousands Visited the Scene Yesterday.



VIEW OF THE FIRE FROM THE RAILROAD CROSSING NEAR CITY SQ.

The mammoth elevator at the Hoosac Tunnel docks on Water st., Charlestown, was destroyed yesterday morning by a fire which originated from the explosion of grain dust. For a time surrounding structures were threatened with demolition, such was the fierce heat and the rapid spread of the flames. The total property loss is approximately \$500,000.

It was 3.30 in the morning when the explosion occurred. The shock was terrific, seemingly rocking the district on its very foundations, and it instantly brought to the minds of great numbers of Charlestown people thoughts of a probable Spanish invasion. Throughout the entire city the explosion was felt to considerable degree, and hundreds were soon hurrying toward the water front.

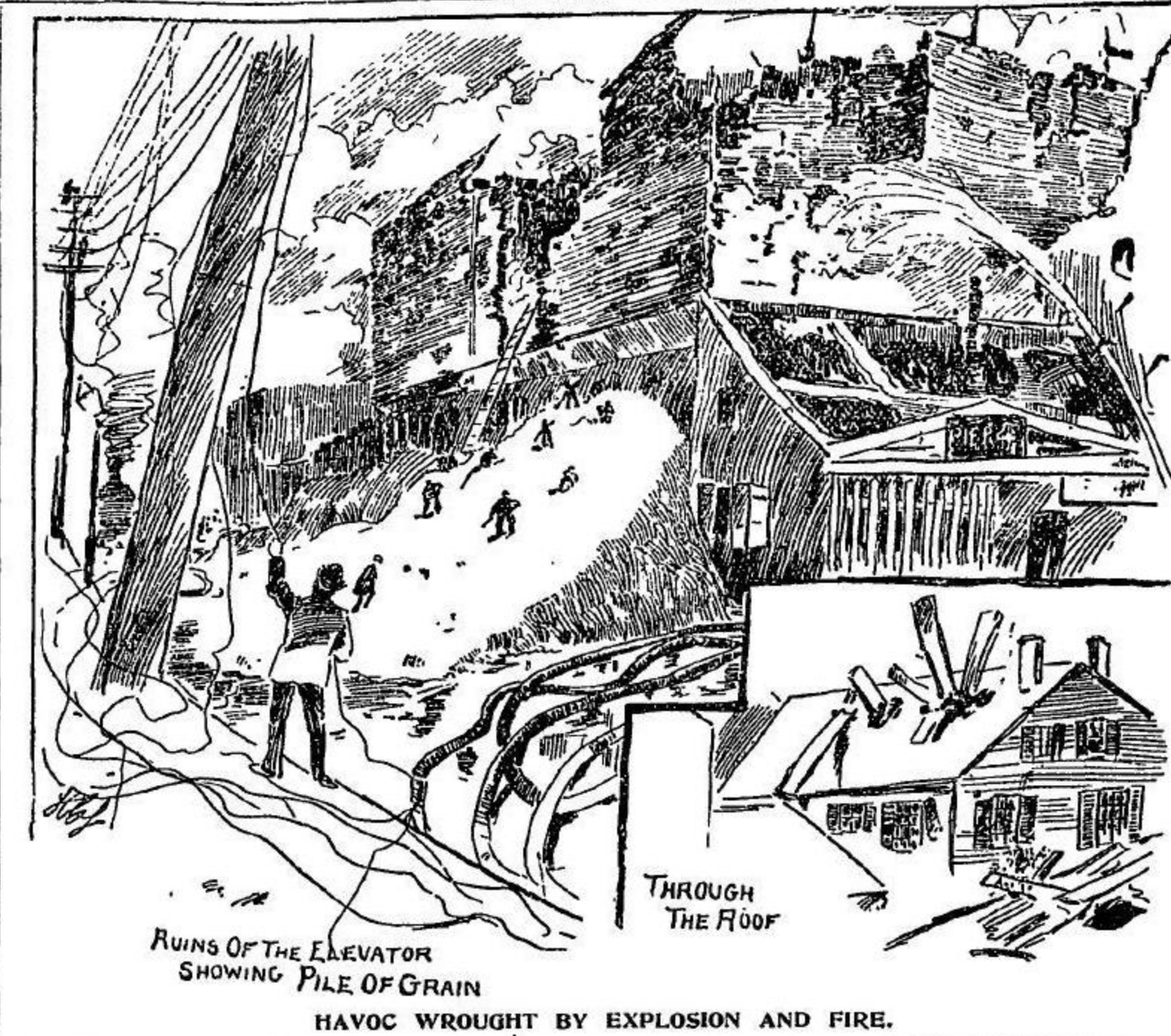
The explosion was caused by grain dust generating gas or hot air. Immediately after the shock flames burst forth from all sides of the big structure, and within a few hours the building, with its contents of 300,000 bushels of grain and five runs of galleries connecting with the great steamship freight sheds, which cost \$40,000 to construct, was in ruins. Beside this the upper story of the Chapin, Trull & Co distillery, on Water and Gray sts., was wrecked, and the roofs and upper floors of 14 tenement houses on Gray, Water, Hudson and Chelsea sts. were badly damaged. Added to this is the lesser destruction of hundreds of windows on Main, Park, Joiner, Chandler and City sts. and all of which were blown in by the tremendous force of the explosion.

#### Alarmed by Explosion.

It was a most sensational fire among fires that are regarded as unusually sensational, by reason of the circumstances which surround their origin or remarkable incidents connected with their progress.

Half the people of Charlestown who awoke to a realization of impending danger in the vicinity of their homes first jumped to the conclusion of the arrival of a hostile fleet, but as they gazed from their windows and viewed the magnificent illumination of the heavens which the conflagration made an explosion at the navy yard was the immediate theory. This was soon dispelled, however, as they hastened toward the government reservation and got a closer view of the wonderful and terrifying spectacle of the great Hoosac Tunnel elevator going to its doom.

The two-story scale house at the top of the 200-foot structure went sailing westward through space by the force of the explosion, carrying timber, slate, ironwork, snow guards and all within it, and landing in a composite heap on the roofs and in the yards of the houses situated on Gray and Hudson sts. A large number of stray pieces of timber and iron found their way to Chapin, Trull & Co's distillery, on the corner of Water and Gray sts and punched great apertures in the roof, fully 25 feet square, and plunging through to the upper floors. An adjoining four-story dwelling on Gray st., owned by P. O'Riordan, was struck with great force by the flying timber and the roof and upper floor were completely wrecked.



RUINS OF THE ELEVATOR SHOWING PILE OF GRAIN

HAVOC WROUGHT BY EXPLOSION AND FIRE.

pers and their immense sheds were going to be consumed.

In these sheds were stored thousands of dollars' worth of general merchandise, including imports and exports. At pier 7 the Wilson-Furness Transatlantic steamship Cambroman laid alongside, and every preparation was made to tow her out into the stream, the hawsers being let loose, and she was temporarily hauled down to the extreme end of the pier.

Two barges filled with cotton were also towed out to a place of safety by a couple of tugs.

These were the only craft at the wharves, although a steamship was expected at the docks today to take a large lot of the grain from the elevator across to Liverpool.

#### Spectacular Blaze.

The elevator was a roaring furnace from the moment of the explosion until practically the last particle of wood resting on the two-story underpinning had been burned away.

The spectacular effect as produced by the conflagration beggars description. From the harbor and the hills about Charlestown a grand sight was obtained, and nothing so brilliant in the way of illumination has been seen in this city for years.

The harbor was almost as light as at noonday, and the reflection of the great, daring tongues of flame in the windows and on the shining tin and metal work of the buildings along the water front was grandly theatrical, and reminded the spectator of some superb nautical feat in which the shore structures played an all-important part.

Tons of water were poured upon the seething, flaming mass within the building, but it was of little avail. The fire simply burned itself out. But it was in preventing a spread of the fire that the department showed its best work, and seldom has a fire been better handled.

The new horseless engine, No. 35, was undoubtedly the greatest factor in keeping the fire confined to the elevator, and next to this in efficiency was the fireboat in preventing the total destruction of the seven big freight sheds of the Fitchburg railroad company and possible communication of the devouring element to the government property at the navy yard.

A powerful stream of water from the horseless engine seemed to force in the thick pine boards of the side of the building, and finally bored an entrance in a number of places in the hoppers below the immense bins, thus releasing thousands of tons of oats, wheat and corn. The grain shot out of the apertures and over the sides of the building into Water st. like so many miniature Niagara's. This continuous stream forced the greater part of the grain out, and was the means of greatly decreasing the extent of the fire as well as saving the product for second or third class use.

Water at present a wonderfully unique appearance after the grain had all emptied into it. The falling slate, which popped off the sides of the building in immediate response to well-directed streams like bullets from a gatling gun, mingled with the small-sized hills of corn, oats, etc., greatly increasing the amount of debris in the street.

Shortly after 4 the flames were spreading toward piers 4, 5, 6 and 7, and it was at this moment that the fireboat got in its work. It looked decidedly as if the firemen could not keep the blaze from extending, but the powerful stream from the boat, reinforced by four smaller ones from various engines, kept the element practically confined to the long runs or galleries, although at one point it fought its way persistently until it reached pier 4, and the streams were necessarily directed on this structure. The damage by water here was considerable.

At 6.20 the fire was under control, but the smoldering embers kept several streams at work the greater part of the day, and the "all out" was not sounded until 7.10 p.m.

#### Praise for Firemen.

There was little damage by fire to the property outside the limits of the Hoosac Tunnel docks and elevator company's plant, which is controlled by the Fitchburg railroad company.

The roof of Chapin, Trull & Co's distillery was covered at times with burning debris, and great apprehensions were entertained, but a stream or two effectively put out the small burning pieces of wood and other material.

The rear of the Hudson st. houses from Nos. 8 to 18 appeared to have been cut downward to the second story as if by one long swath. All these houses are two and one-half story, and were occupied by many families. Much of their household effects were destroyed, and were also those of the families living on Gray st. Nearly everybody brought out this section was in bed when the explosion occurred, and many were thrown to the floor by the shock. None, however, were reported seriously hurt.

Fire Commissioner Russell arrived shortly after the fourth alarm, and was an interested spectator of the work of the firemen. He was greatly pleased with the service performed by the new horseless engine, which on this occasion made its debut at a fire of any proportions.

Another early arrival at the fire was agent Booth of the Loyalist line. He had only words of praise for Chief Wheeler and his men for their manner of fighting the fire, and declared no department could have done better.

So powerfully did the horseless engine work that after four hours' steady draw on the water box at the corner of Chelsea and Gray sts it broke the box, sending the street for some time.

The Hoosac Tunnel elevator was erected in 1882. Its dimensions were as follows: Length 167 feet, height 108 feet, width 89 feet. It had a capacity of 300,000 bushels. In a single day it handled about 1,700,000 bushels, mostly wheat, as was also, that destroyed.

Few men are needed to handle this grain. A superintendent of elevator, foreman and 10 men do all the work inside, and another gang, comprising a foreman and eight men, unload the cars. Three cars were on the tracks near the elevator, and were badly damaged.

There were two hoppers, side by side, in each of the five sections of the elevator, and 88 bins, the largest being 75 feet deep and holding 800 bushels. The smaller ones held about 500 bushels.

#### Loss About \$500,000.

The property loss is variously estimated, but dispatches sent by fire underwriters to their head offices place the total within \$500,000. This is the largest property loss since the great fire of March, 1893.

The loss is practically all covered by insurance, and will fall upon the marine and fire companies alike, for a great deal of grain was insured by the marine companies, who take this and cover it from its receipt here until it arrives at its destination in England.

The loss is divided about as follows: On grain \$301,900, on elevator \$102,000, on the runs, on goods in pier 4, on property of Chapin, Trull & Co and on various tenement house property, \$48,000.

The grain elevator is considered a total loss, while the gallery and belt gallery running to the piers is damaged about 40 percent.

The insurance on the elevator was placed by the representatives of the Liverpool, London and Globe insurance company, which company is at the head of the syndicate that insures the railroads and their various properties.

The loss on grain would have been greater but for the fortunate circumstance that the steamship Cambroman had loaded her full cargo of 3,000 bushels of oats on Saturday. The Johnson boats and others were to take on their cargoes today.

A. Fred Brown of the chamber of commerce said there were in the elevator about 200,000 bushels of Leiter's wheat, 150,000 bushels of corn and 10,000 bushels of oats. The wheat was worth about \$1.20, the corn about 30 cents and the oats about 34 cents per bushel. This makes the loss on cereals at these figures \$301,900. Mr. Brown thought that about \$50,000 will be realized on the wet grain for feed purposes.

The grain is well covered by insurance, much of it placed through the John C. Paige & Co agencies, and a lot of the marine insurance is with Field & Cowles and Frank Gair Macomber marine agencies.

The distillery and bonded warehouse of Chapin, Trull & Co was insured in the agency of Brown, Easton & Co for about \$100,000. The settlement of this loss may bring out an interesting question for underwriters to answer, for the

times as many houses as are in the vicinity.

The people in the houses, especially on Hudson and Gray sts, were a sorry-looking set. They had been up since the explosion, and were sitting on the floor, looking sorrowfully on the piles of debris in the street and watching the falling wreckage from the roof. Many of them were crying, and the morning in this way, scarcely daring to look back into the wreckage of the rooms behind them.

The yards of the houses directly behind Reade's stables were piled from 10 to 15 feet high with broken timbers and twisted iron, from which protruded here and there iron piping of the automatic fire extinguishers.

The nearest house to the stable on Gray st. is numbered 12, and is a three-story building. The upper floors with his family. They were quietly sleeping in the attic rooms when the explosion occurred. The noise awoke them, and they had scarcely time to think of what might be the cause of it when there came a rattling on the roof, followed by a series of crashes.

Mr. Gray was asleep in the rear attic. He had not yet recovered his thoughts when the end of a 20-foot beam struck the roof, and he was hurled through the roof and ceiling at the foot of his bed, going clear through the wall into the next room. He started up to leave the bed, but had hardly made a motion when the end of a two-inch iron pipe crashed through the roof within a foot of his head.

The sound of other missiles striking the roof so scared him that he rushed down the stairs; how, he cannot tell. He found his family in a state of fright, not knowing which way to fly to escape the fusillade that played on all parts of the house. On the floor below where he had been sleeping the ceiling of the front room had fallen, a table had been overturned and pictures had been torn from the walls.

The cries of "fire" coming from the street composed the frightened family somewhat, and they threw open the windows, only to be thrown again into a state of terror by the fiery blast that seemed ready to envelop them.

On the first floor of the house lives Mrs. John Kelley with her two daughters and her son John. The mother and daughters were asleep in the front of the house and the son lay on a lounge in the rear room. The noise of the explosion awoke them, and they were hurled into the air, and when they heard their brother in the rear room shouting they thought that the Spaniards had come to storm the city and that the shells were falling on their home. A large section of the ceiling fell and the room was filled with smoke and they ran to their brother's room.

He had been partially awakened by the explosion when the end of a beam struck the side of the house and his wife, bulging in the wall and forcing him off the lounge. In the meantime pieces of plaster continued to fall and the rear room was broken into splinters. They all ran to the kitchen to escape to the yard, but had only reached the room when the door was wrenched from its hinges. They turned in the other direc-

on Chelsea st., where she was put to bed and given medical treatment.

The worst wrecked houses in the vicinity were in the block on the north side of Hudson st. The entire block suffered, and in some instances it will be impossible to repair the houses so as to make them inhabitable.

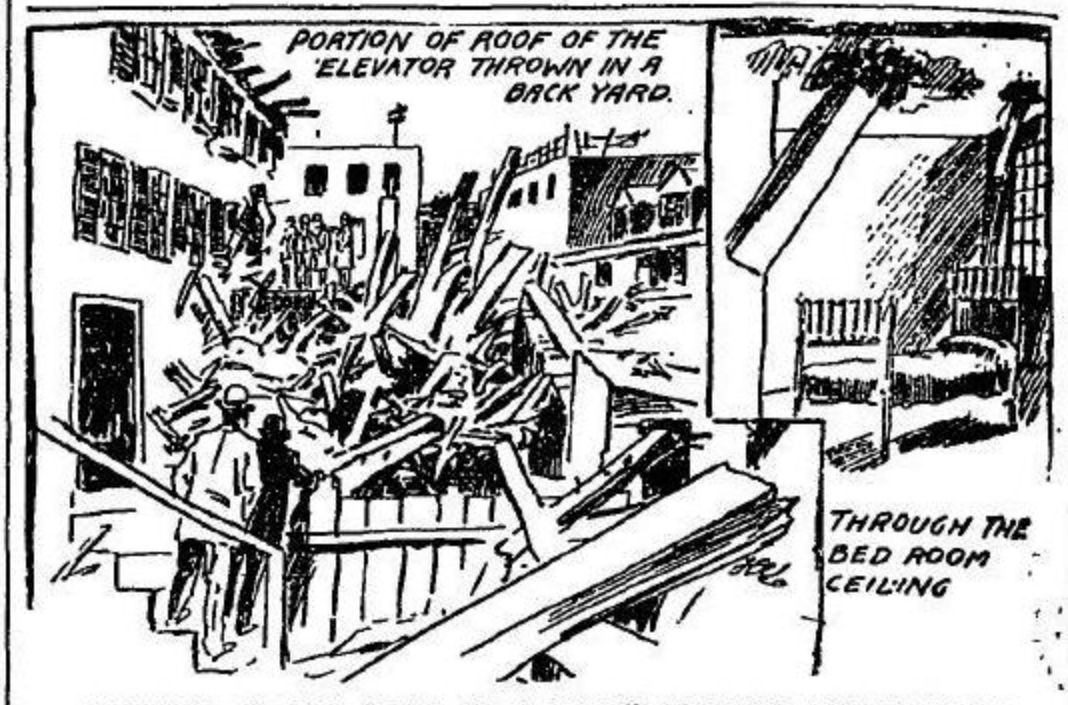
No. 18, owned by Mrs. Mary McCarthy, received the first blow from the falling timbers. They fell on the rear roof, near the edge, and tore it off for fully six feet up from the gutter as cleanly as a carver could have severed it. The upper part of the rear wall came with it, leaving a gaping hole, through which the chambers of the tenants could be seen. Ceilings were broken down, and the plastering of the walls torn off. The upper part of the house is a wreck and cannot be used, while the contents of the floor are covered deep with plaster and debris, so that they will be of little if any use to the owners. The timbers of the house are weakened in such a manner that it seems impossible to strengthen them so as to make the property safe for use.

The whole block, from No. 12 to No. 18, is in the same state of ruin, and the floors shake as one walks over them. Some of the tenants at once moved out their belongings to other quarters. From the openings in the roofs can be had a fine view of the wrecked roof of Reade's stable and the distillery.

opposite the elevator, makes a staircase in regard to the fire which would seem to indicate that it was due to other causes than spontaneous combustion.

He says that about 11.30 Saturday night he went to the window to look out and got a strong smell of smoke, and saw a light in the upper part of the grain elevator. Whether it was from a fire burning in the elevator or only the light of a watchman's lantern he could not say, but the smell of smoke was distinct in the neighborhood.

If this be so it would seem that the fire was burning slowly up to 1.30 in the morning, when the explosion occurred.



FIREWOOD IN THE REAR OF A BLOCK OPPOSITE THE ELEVATOR.

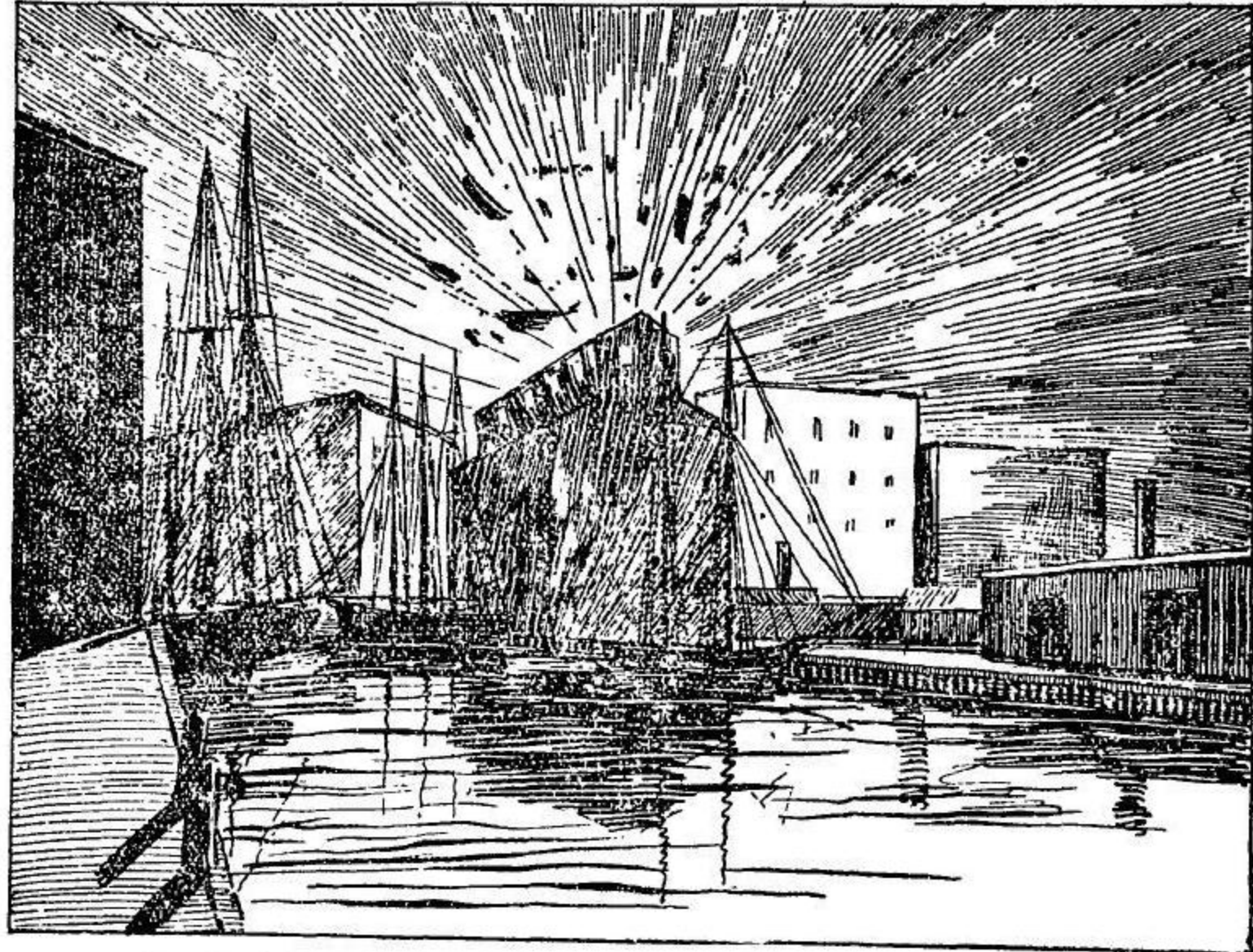
The houses on the other side of Hudson st. were not much damaged, although the occupants were scared almost as badly as those whose houses were partially demolished by the falling timbers.

At the Sailors' haven on Water st., near opposite the elevator, almost all the windows on the Water st. front were broken, and a block of wood two feet square was thrown through the skylight in the rear, over the stage used for preaching on Sundays, carrying a part of the sash, with several squares of the heavy glass, with it. Charles Stowell, who is in charge of the haven, was blown out of bed by the explosion, and was bruised, but not badly hurt. Mrs. Samuel Griffith, formerly matron of the haven, who has been sick for some time, was so frightened and shocked by the explosion and incidents following it that a physician was called, who ordered her removal to a house on Monument av.

The force of the explosion may be judged, as well as the curious freaks that take place on such occasions, by the number of windows demolished by the explosion and the location of them. While in some of the houses in the immediate neighborhood not a pane of glass was broken, in other places a fifth of a mile off several heavy plate glass windows were shattered. Almost all the windows broken at a distance from the fire were on the first floor, although the explosion took place high in the air.

In the Waverley house block, City sq., windows were blown out in the stores of A. Di Prato, the Waverley clothing company and the Waverley Magazine, but no further damage was done on that side of the square. On the west side the glass and sash in a laundry next to the Charlestown Enterprise office was blown to the end of the room.

In the Roughan building, on the Park



EXPLOSION WRECKING UPPER PORTION OF MAMMOTH GRAIN ELEVATOR.

damage was caused as the result of an explosion, no fire ensued, and the damage, it is claimed, was done before the fire had entered in the building in which the fire originated.

The goods on pier 1 were of a miscellaneous nature, and were damaged by water. The loss here was quite large.

#### GLASS BROKEN IN ALL DIRECTIONS.

Tenement Houses Near the Elevator Were Wrecked, and Their Occupants Aroused by Falling Debris.

Charlestown, in the vicinity of the wrecked grain elevator, yesterday morning looked like a city after a siege. Water st. was filled with a litter of broken glass, window frames, slates, splinters and grain. Streams of water poured from the ruined building and ran into the gutters. Gray and Hudson sts were filled from curb to curb for 100 feet from Water st. with the wreck of the roof of the grain elevator, which was carried in that direction when the force of the explosion lifted it from its fastenings.

Crowds of sightseers were gathered at every point from which a view of the smouldering ruins could be had, and kept the police busy driving them off. There had no business in the vicinity outside of the ruins. More persons claimed residence within the roged off streets than could be accommodated in five

tion and reached the street, only to find it filled with twisted timbers.

The homes of both families are ruined, the furniture broken, cut and scattered so as to nearly destroy it. From the rear roof of the house a large, heavy, pointed, their points reaching far into the building. The chimneys have been razed and the house looks as if it had been stormed. The other houses in the block escaped almost untouched except for a few broken windows, and on the roof of No. 13, where a four-inch plank fell and did some damage.

On the other side of the street, at No. 12, live Mr. and Mrs. Andrew Driscoll, Mr. and Mrs. Collins and one other family. Mr. Driscoll occupies the upper tenement, and his chamber is in the front of the house. He says that he had scarcely been awakened by the sound of the explosion when the whole front of the house seemed to fly on to the ceiling. He was badly cut on the legs and feet by the flying glass and slates, and his wife was bruised by the falling plaster. All the windows in the front room were blown out and the southeast corner of the house carried away.

On the floor below the front windows were blown out, sash and all. Mrs. Collins, who is 68, was so overcome by the shock that her daughter had her removed to the home of another daughter.

History is being made at the National Capitol and a visit to Washington at this time is doubly interesting. The next Royal Blue Line personally conducted nine-day tour leaves Friday, April 22, at 10 a.m. Send for itinerary. A. J. Simmons, 21 Washington St., Boston.

side, the glass in the two end windows on the second and third floors was broken in the upper sashes. Further along on the second floor a larger part of the third window was broken and the lower half of the fourth, and on the third floor the upper half of the fifth.

The windows in the hall above, fully 10 feet high, were not broken.

Upon Main st. the locked doors of Thomas' lunch room were blown open, and windows broken in the stores of Antonio V. Carboni and George F. A. and in a barber shop at No. 18. A large plate glass was broken also in the tailoring establishment of John F. Anderson in the Warren institution for savings building.

At the corner of Chelsea and Joiner sts stands a barber shop, with a window facing both streets. The part of the window facing Joiner st. was blown out, the one the other side remaining whole, and another window on the Chelsea st. side, was demolished. In Walter's saloon, cor Wapping and Chelsea, a sash of a mile from the fire, the window facing Wapping st. was cut out as clean as if with a diamond, while not one of the other panes of glass was even cracked.

#### SAW A LIGHT IN ELEVATOR.

Charles Stowell, in Charge of the Sailors' Haven, Also Detected Smoke About 11.30 Saturday Evening.

Charles Stowell, who is in charge of the sailors' haven on Water st., nearly