

THE GREAT MINE SPRUNG

FLOOD ROCK SHATTERED INTO
COUNTLESS FRAGMENTS.

A GIRL'S HAND UNLOCKING THE
MIGHTY FORCE.

THE GRAND SPECTACLE WHICH A CITY
TURNED OUT TO SEE—A SOLID WALL
OF WATER HANGING TREMBLING IN
MID-AIR—A SHOCK WHICH WAS FELT
FOR MILES IN EVERY DIRECTION—THE
SUCCESSFUL CONCLUSION OF NINE
YEARS OF WORK.

Three hundred thousand pounds of rack-rock and dynamite, the greatest single charge of explosives ever used, thundered yesterday morning in the depths of the East River, and Flood Rock, the great barrier that stood at the entrance of Long Island Sound, was shattered into fragments. The long labor and thoughtful study of Gen. John Newton and his corps of assistants culminated in a momentary but magnificent display of upheaved waters, and another triumph of human skill over the resistance of nature was recorded. The explosion took place within a few minutes of the appointed time without a hitch, without an accident, and without a disappointment to the expectations of those engaged in the work. The calculations of the experts who superintended the labor were verified, for everything happened as they said it would happen. The thousands who went out to see the explosion beheld an inexpressively grand and impressive spectacle, none the less remarkable because it passed like the drawing of a breath, and with little more shock to those who witnessed it.

Over nine acres of obstructing rock formed the barrier which was yesterday destroyed. Just 21,670 feet of tunneling, in galleries whose floors lay from 50 to 64 feet below mean low tide, with walls from 10 to 24 feet thick between them, and supported by 467 columns of rock, each 15 feet square, had been charged with cartridges filled with explosives. In an instant the tremendous convulsion of an explosion reaching through those four miles of galleries tore the solid rocks asunder and hurled them in broken masses into the waters of the river. And when those shattered pieces had been gathered up and taken away by the dredgers Hell Gate will have lost its dangers and the wrinkled front of navigation through the Sound will have been smoothed into an inviting smile. Ocean steamers will find 26 feet of good, clear water over the once treacherous bottom and a new highway will be open for the commerce of the world.

Those who went out to see the Hallett's Point explosion on Sunday, Sept. 24, 1876, and went to see yesterday's looked into one another's faces and said, "Can it be?" For weeks before that upheaval, on a Sabbath day nine years ago, men's minds were haunted by uneasy apprehensions of dread terrors yet unknown. The bursting of so many tons of the most powerful explosives known to human science had never taken place before. Superstitious people said it was wrong, and that nature would not tamely submit to the outrage. The shock of the explosion would cause devastation too terrible to be thought of. And so men went out in the drizzling rain and chill east wind of that September Sunday with blanched faces and palpitating hearts, fearing they knew not what. When the explosion was over and the earth still sailed calmly and contentedly through space, a deep sigh went up and all were thankful. Then a reactionary feeling set in, and men said that they would not object to seeing a little blasting operation like that several times a week and twice on Sundays.

Yesterday everything was different. The convulsion under the waters of the East River was to be six times as great. Instead of some 42,000 pounds of explosives 300,000 pounds were to be used, and instead of an acre and a half of destruction there were to be nine acres. Yet people went to it as if it were to be a yacht race. They laughed and made jokes and were full of good humor and pleasant anticipations of a great treat. Those who wanted to see the explosion got out of bed betimes, and, having fortified themselves with a substantial breakfast, sought the various points from which a good view could be obtained. Before 9 o'clock crowds began to move up town, and seats in upward bound cars were much rarer than Mr. Lowell's rare day in June. The cross streets east of the upper end of Central Park were full of people moving toward the East River. Down town great numbers of people were climbing to the tops of high buildings, for they were sure that they would hear the thunder of the explosion and see the huge sheets of water shooting into the air. All along the East River front every "coign of vantage" was pre-empted early in the day.

The bulk of the crowd, however, assembled on the sides of the abrupt slopes that descend to the river on the New-York side, opposite the scene of the explosion. Men, women, children, dogs, and goats mingled in one broad, variegated mass. There was a background of black made by the sombre garments of the men, and against this were projected the bright colors of the attire of women and children. Hundreds of people gathered on the tops of the big breweries and other tall buildings that loom one above another on the easterly decline of the city. Away up on the tops of chimneys and on the outermost pinnacles of roofs could be seen the irrepressible, never-to-be-left small boy, filled with the American instinct for getting to the top and looking down on the whole business. Trees had their usual load of sightseers and lamp posts were opportunities to be embraced with avidity. Down along the water's edge the masses concentrated into a solid, sinuous wall that wound around among the piers and wharves as far as the eye could reach to north and south.

Those who had gone out prepared to meet the chill of an Autumn day soon laid aside their wraps. Overhead there was a soft, grayish blue sky, flecked here and there with slow moving bits of snowy clouds. Around the horizon ran a bank of yellowish white mist. The sun shone clear and warm. The gentle westerly wind toyed with the flags on the boats that lay about, and just fluttered the folds of one that floated peacefully over the hidden mines in Flood Rock. In weather, as well as in every other way, the day contrasted sharply with that on which the former explosion took place. The faint gray haze of a matchless Autumn morning lay upon the waters and softened into picturesque uncertainty the sharp outlines of the rectangular buildings on the city shore. The tower on the easterly end of Blackwell's Island loomed up dimly in the distance, backed by the subdued tints of the foliage beyond. Leaves were just stirred by the air, and the water of the river broke into glassy ripples around the wharves.

Up in the entrance to the Sound lay a tangle of boats—steamers, yachts, rowboats, fat-hulled coasting schooners, and misshapen barges. In front of them, nodding gently on the little waves, were the trim naval launches, standing as sentinels to prevent a too near approach to the scene of danger. Just above the lower end of Ward's Island another huddle of craft lay waiting for the event of the day. There were tugs, yachts, and steamboats in the background. Clustered around them, like ducklings floating at the feet of their mothers, were scores of rowboats. In front of all was another line of sentinel launches. A big white looper, her canvas flapping idly, came drifting down the Harlem, and, lowering her stained sails, lay alongside the police boat Patrol like a prisoner in charge of a stout officer. Rowboats of all sizes and shapes, from the needle-like single shell to the broad-beamed skiff, glided hither and thither in every

direction and were chased out of the way by the launches, which darted around like huge fish at sport. A tug, pulling two flatboats laden with freight cars, steamed down and lay off the upper end of Blackwell's Island to wait for the explosion. Near her were gathered a hundred or more rowboats, looking in the distance like a line of rocks that would have to be some day removed by Gen. Newton's scientific violence. Peace, perfect in its beauty and broken only occasionally by the hoarse note of a steamboat whistle, rested upon the scene. It was like the silence before the shock of battle.

The crowds of people and boats were ranged in something like a circle around a space about a mile in diameter, in the centre of which lay Great Mill and Little Mill Rocks. People looked at these rugged brown spots with feelings that were deeper than respect, for there the chlorate of potash and dinitro-benzole, harmless enough by themselves, had been brought separately and joined by the Government experts into rack-a-rock, one of the tremendous explosives waiting in the mines to be let loose. Just south of the Mill Rocks, over toward the Astoria shore, was Flood Rock. Beside it lay the flatboat and derrick that were used in the mining operations. The hoisting apparatus stood up, an ugly square skeleton, over the shaft with a flag waving from its easterly side. A little wooden building stood near by, unconscious of the fate in store for it. Men ran about on the rocks. Perhaps they trembled as they thought of what would happen to them if the explosion were premature. Perhaps they had too much confidence in the skill of their chief to doubt for a moment that all would go well. Whatever may have been their feelings, they moved about with celerity, as if they were anxious to finish up their work and fly before the slumbering demons under them waked to their terrific momentary life. The working tug General Humphreys steamed around the rocks in a bustling, busy manner, sometimes landing and again darting away to the Astoria shore. Every time she went away people said: "Now get ready." But the hour had not yet come.

A few minutes after 10 o'clock the steamer Castleton, carrying a large number of invited guests, and the Chester A. Arthur, loaded with Government officers and other dignitaries, came steaming up the East River. The Castleton took a position at the mouth of the Harlem River, just abreast of the lower end of Ward's Island and almost directly north of the Mill Rocks. The Chester A. Arthur lay a little further down, but close to the New-York shore. Gen. Newton's boat, the Runaway, was steaming busily about, running from Flood Rock to the Astoria shore and back. Every one of the spectators who were gathered in such masses now began to look anxiously toward the flag that waved over the shaft. At 10:35 o'clock the General Humphreys took the flatboat with its derrick away from the moorings beside the rocks and towed them over to the Astoria landing. "Now it's going," said the men who knew it all. No, there were figures moving over the surface of the rocks yet. Hither and thither they went, putting the final touches to the great work. Then the Runaway went gliding down to the rocks again. At 10:55 the flag that had been floating over the shaft was hauled down.

The spectators began to breathe fast. There was a little excitement in this thing after all, it didn't look so much like a picnic as it had. A moment later the Humphreys steamed up from Astoria, rounded the west end of the rocks, and went through the middle channel between Flood Rock and the Mill Rocks. That was the last trip made through it before the explosion. The Humphreys landed at the south side of the rock. Men were seen leaving the foot of the hoisting apparatus. At 11:09 the Humphreys and the Runaway steamed out from the rock and glided toward the Astoria landing. The Humphreys blew three long blasts on her whistle. It was her parting salute to Flood Rock as it was. She ran to the landing at Astoria and then moved out a short distance into the stream. People held their breath. Eyes were strained and riveted on the bare brown rock. There was a deathlike silence. No one saw her, but over on the Astoria shore a young girl, the daughter of Gen. Newton, was preparing to free the imprisoned forces. Nine years ago, when but a prattling babe, her tiny finger had performed the same office. Then she could not know what she did. But yesterday what did she think?

Away it flew, that viewless spark, to loose three hundred thousand chained demons buried in darkness and the cold, salt waves under the iron rocks. A deep rumble, then a dull boom, like the smothered bursting of a hundred mighty guns far away beyond the blue horizon, rolled across the yellow river. Up, up, and still up into the frightened air soared a great, ghastly, writhing wall of white and silver and gray. Fifty gigantic geysers, linked together by shivering, twisting masses of spray, soared upward, their shining pinnacles, with dome-like summits, looming like shattered floods of molten silver against the azure sky. Three magnificent monuments of solid water sprang far above the rest of the mass, the most westerly of them still rising after all else had begun to fall, till it towered nearly 200 feet in air. To east and west the waters rose, a long blinding sheet of white. Far and wide the great wall spread, defying the human eye to take in its breadth and height and thickness. The contortion of the wreathed waters was like the dumb agony of some stricken thing.

For a trembling moment the sublimespectacle stood sharp against the sky, like a mighty vision of distant snow-capped mountains. Then down, down, and still down the enormous mass rushed with a wild hissing, as if ten thousand huge steam valves had been opened. The yellow waters of the river were riven and torn into immense boiling masses of white foam. Great waves, ten feet high, rolled outward. Big streaks and spots of deep brown mingled with the white and made ominous shadows under the silver lights. All around the rocks the river swirled and rolled and leaped upward like the whirlpool of Niagara. A dazzling yellow cloud—the pent up gases of that subterrene convulsion—spread over the spot. Then it widened and turned to a brilliant green, then to a faint blue, and floated slowly away toward Astoria. Showers of spray fell like Summer rain through the air and returned to the river. The big hoisting apparatus over the shaft had toppled over and lay broken and smashed on its side. It had not risen into the air. Not a stone was seen to go upward. The wall of ghost-like waters was unbroken. And when the spray had sunk down and the waters of the river filled with brown mud lay boiling around the site of the great explosion, there lay the old rock, torn into myriads of pieces and scattered with debris, a ragged, smoking, dun-brown mass. *Troja fuit.* Flood Rock was.

A hundred steam whistles broke into a shriek of triumph, and cheers were heard on every side. Then the oarsmen in the rowboats bowed their backs and the steamers opened up their valves, and all hands on the water hastened to the scene of the explosion. All around the place the water was turned to a dirty brown by the upheaval of the bottom of the river. The foam was still bubbling, nearly 10 minutes after the explosion. Thousands of pieces of wood, mingled with marine weeds and myriads of dead fish, killed by the shock, were floating down into the East River. Wide sheets of feathery scum, such as may be seen along the seashore after a gale, were lying on the surface of the water. It was all a dingy brown, tinted with the color of the riven rock and earth. Among the foam and scum floated quantities of fine, yellowish powder, which looked like sawdust. It was the material of which the covering of the cartridges was made. As more than 75,000 of them had exploded, the quantity of this powder was not surprising.

The commotion in the river subsided quickly,

and the traces of the wreck, save the shattered rock, were borne slowly away by the waters. The men in the rowboats hurried to the rock. Many of them fastened their boats to pieces of the wreck and ran about on the smoking ruins, prodding them with sticks and examining them with lively curiosity. Industrious and thrifty fishermen, armed with scoop-nets, laded dead fish out of the water into their boats and prepared to make to themselves a feast. The spectators on the various steamboats looked wonderingly on the scene of desolation and thought there was just as much rock as there was before the explosion. Some of them had evidently expected that the rock would disappear. Soon the steamboats glided away, leaving the rowboat crews at their labors. Then the crowds on shore began to dwindle. The great event was over. There was nothing more to see.